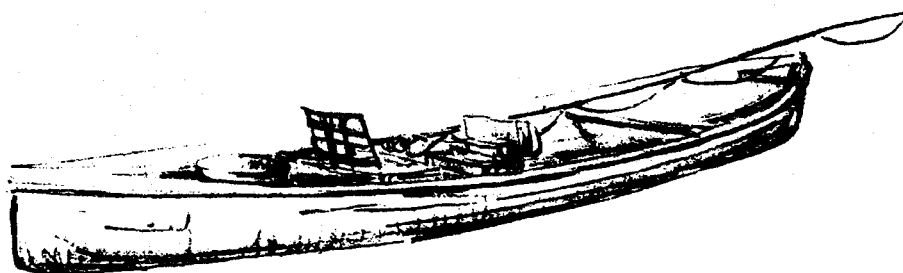


Final Report

**Traditional Use Study:
Barataria Preserve
Jean Lafitte National Historical Park and Preserve**



Submitted to:
**Jean Lafitte National Historical Park & Preserve
365 Canal Street, Suite 2400
New Orleans, Louisiana 70130-1142**

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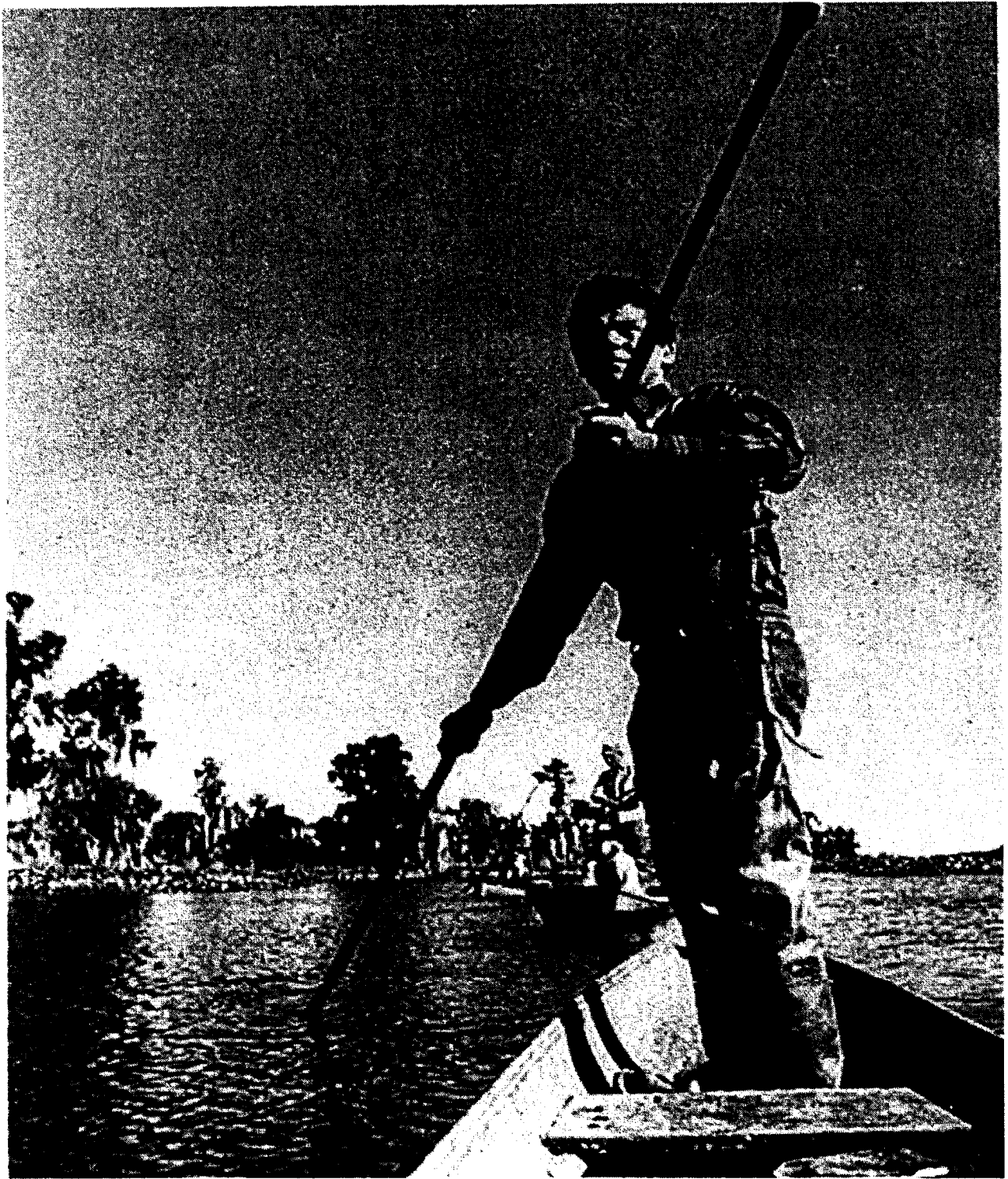
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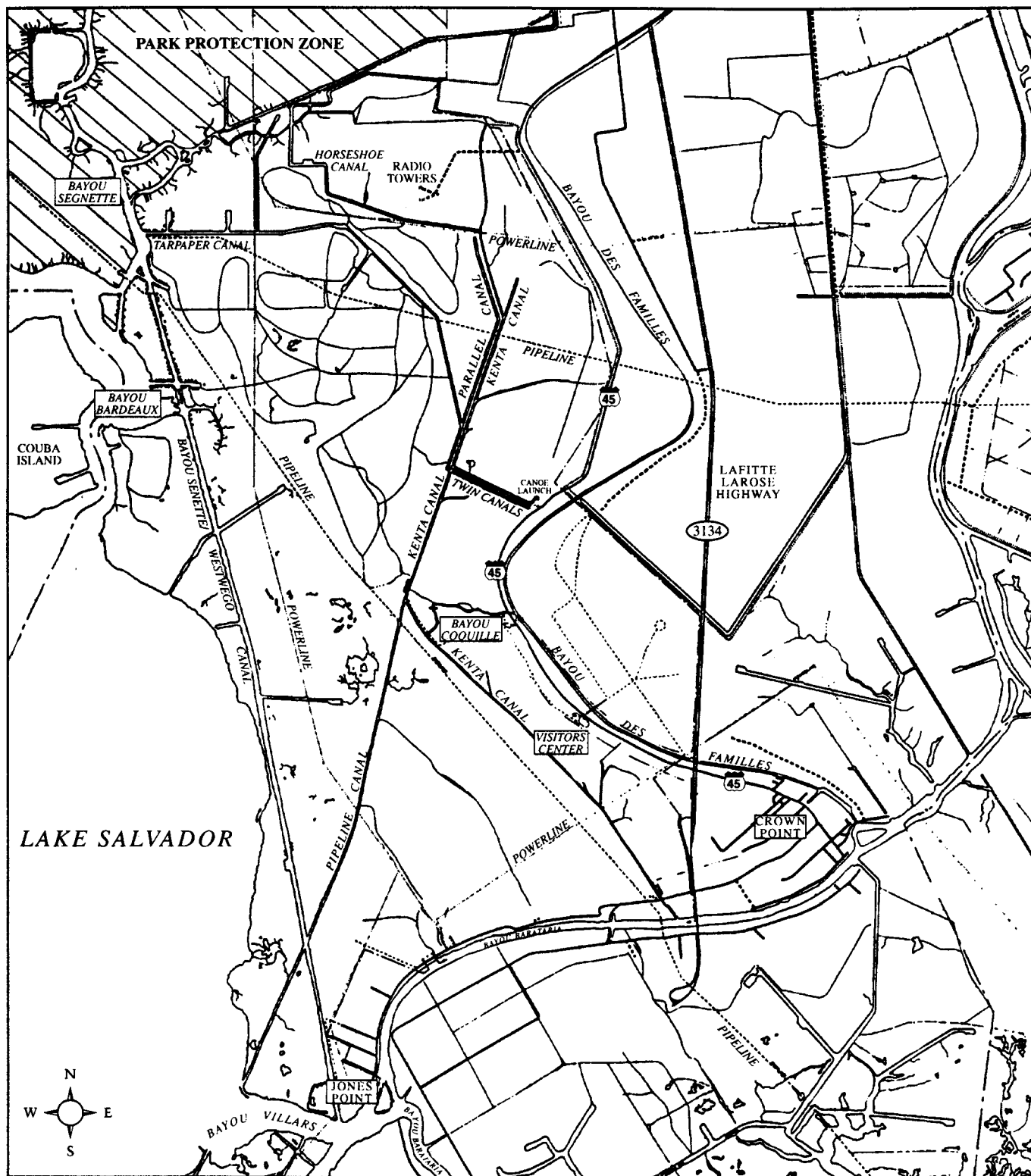
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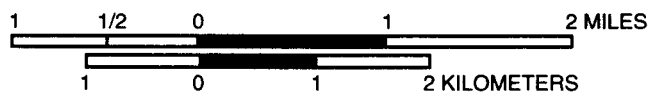


BARATARIA UNIT: POLING A PIROGUE
(Source: Frank Ehret, National Park Service Files)



BASE MAP SOURCE: NPS 1989 (FROM USGS AND USC&GS DATA)

CARTOGRAPHY COURTESY OF KEA ENVIRONMENTAL, INC.



JEAN LAFITTE NATIONAL HISTORICAL PARK AND PRESERVE BARATARIA PRESERVE LOUISIANA

Acknowledgments

The people of the communities near the Barataria Preserve gave generously of their time and knowledge to enable this report to go forward. There were several families and individuals who went out of their way to make the researcher feel welcome in their homes, and more like visiting kin than a guest. For that I am truly thankful, and singling out one or two individuals or families for recognition would be to slight the others who also contributed substantively to this project. I thank you all, and would note that the reputation for hospitality in this area is well deserved.

The drawing on the cover of this report (and also used at the start of each chapter) is by Fred Fuller, Ranger at the Barataria Preserve. It is adapted from an early-mid 20th c. Cajun dugout/pirogue on exhibit in the Barataria Preserve Visitor Center (gift of Frank Ehret). Mr. Fuller also provided the drawings that are used in the footers on the pages of the this report and the end of each chapter. Allison Peña, Park Anthropologist for the Jean Lafitte National Historical Park and Preserve, was involved throughout the research process, and I am grateful for her active support of this effort. John S. Petterson, Ph.D., President of Impact Assessment, Inc., provided the flexibility and support to see this project through as well.

Document Preparers

This report was prepared by Michael A. Downs, Ph.D., Betsy R. Strick, Ph.D., and John C. Russell, Ph.D., of Impact Assessment, Inc. and Deborah M. Tootle, Ph.D., of the Louisiana Population Data Center, Department of Sociology and Rural Sociology at Louisiana State University. Michael Downs served as the Principal Investigator and Project Manager, conducted the fieldwork and analysis for the contemporary traditional use section, and bore overall responsibility for the research effort. Deborah Tootle was responsible for the literature review and annotated bibliography. Betsy Strick was responsible for the socioeconomic profiles of the adjacent communities and parishes. John C. Russell, Ph.D., was centrally involved with the design of the project from the outset and contributed to the critical early stages of the field effort as well as to this report.

Dedication

This report is dedicated to the law enforcement officers of the National Park Service, those men and women whose job has become increasing difficult through time, and whose dedication and service are required to protect the resources and the people who use our Parks and Preserves now more than ever.

Michael Downs
San Diego, California

1.0 INTRODUCTION



This section of the report provides a background of the study process, a brief summary of the methodology used, and a non-technical summary of the main findings of the research effort.

1.1 BACKGROUND

This project is an ethnographic study which addresses traditional uses of cultural and natural resources in the Barataria Preserve, a unit of Jean Lafitte National Historical Park and Preserve which is part of the national park system. The National Park Service (NPS) is committed to planning and implementing programs that protect cultural and natural resources in an effective, culturally informed manner. In doing so, the NPS wishes to identify and respond to the concerns of contemporary peoples and potential cooperators who have traditional associations with parks. This requires the collection and analysis of ethnographic information about the nature and extent of associated peoples' ties to, and customary uses of, the resources of specific parks.

According to the scope of work that provided the framework for this study (NPS [RFP] 1996:1-2), ethnographic information on resource uses and their cultural contexts will help park planners recognize community needs and identify geographic, natural, and material features of the landscape that require special treatment as they formulate development proposals and alternatives. These features are called ethnographic resources. Knowledge about the traditional forms and varieties of resources that associated people define as significant is essential for addressing the impacts park management may have on traditional cultural systems, and the impacts of traditional use on the diversity and sustainability of natural resources. Data are also needed to help park managers understand community needs and address community requirements for access to park areas, for example, for religious, subsistence, occupational or other traditional reasons. In addition, park interpreters have an interest in ethnographic information in order to accurately represent cultural systems to the public. This study provides ethnographic and ethnohistorical information to assist the NPS in ensuring that their plans and actions reflect contemporary knowledge about the cultural context of ethnographic resources, per the 1988 Management Policies (5:12).

This study pertains to Jean Lafitte National Historical Park and Preserve which was established in 1978 to preserve significant examples of natural and historical resources and to interpret them in such manner as to portray the development of cultural diversity in the Mississippi Delta Region. The park is comprised of four units. One unit is the Barataria Preserve, the focus of this study, 12 miles south of New Orleans. Another is Chalmette, six miles downriver, and the third is the New Orleans unit located in the French Quarter. Finally, there is the Acadian Unit centered in Lafayette, approximately 150 miles west of New Orleans, with other sites including the Wetlands Acadian Cultural Center in Thibodaux and the Prairie Acadian Cultural Center in Eunice. The Barataria Preserve unit consists of about 20,000 acres in the upper freshwater zone of the Barataria Basin, one of the most productive estuarine wetlands of North America. It contains a portion of an abandoned



deltaic lobe of the Mississippi River and associated ecological zones, including natural levee hardwood forest, baldcypress swamp forest, and the eastern end of one of the largest floating freshwater marsh systems in the world. Associated with each of these zones are rich communities of characteristic plants and wildlife. This fertile estuarine system has provided a rich matrix for human beings throughout its short geologic existence. Cultural resources include hundreds of archaeological sites marking a progression of prehistoric and historic habitations within the Mississippi Delta, a ditch system excavated by trappers, and 20th century oil and gas exploration roads and canals. Land use patterns from a succession of historical occupations overlay the natural landscape and provide a matrix for interpretation of the interrelationship between environment and culture. Historic sites dating back to the late 18th century include agricultural remains, and a turn-of-the-century commercial swamp-logging canal system. In addition to these known resources, the contemporary human communities of the basin have a rich store of knowledge about wetlands flora, fauna, and their habitat and ecology; about the changing habitat; about places of legendary importance; and about the cultural contexts of resource uses. (NPS [RFP] 1996:2-3).

In general, this study focuses on the Barataria Preserve and the communities associated with it in the Barataria Basin. Overall goals of the study included: (1) identifying cultural and natural resource, and ethnographic resources, of significance to customary users of the area now encompassed by the Preserve; (2) identifying the patterns of traditional resource uses and resource management regimes, and the relationships between resource uses and settlement pattern, in addition to other social and cultural dimensions of the Barataria community; (3) tracing changes in continuities in those patterns that have occurred historically and within the memory of living community members or traditional resource users; and, (4) providing input for a consultation plan for gaining the effective interest and involvement of concerned groups. (NPS [RFP] 1996:4).

This work was funded through the Archeology and Ethnography Program of the National Center for Cultural Resources, Stewardship and Partnerships, Washington, D.C., through the Division of Resource Management, Jean Lafitte National Historical Park and Preserve of the National Park Service. Muriel Crespi, Chief Ethnographer for the National Park Service was involved with this study; day-to-day management was performed by Allison Peña, Park Anthropologist, Jean Lafitte National Historical Park and Preserve, who served as the Contracting Officer's Technical Representative for this project.

The information contained in this study is intended to inform both management and interpretation of traditional cultural and natural resource uses. The area that is now the Barataria Preserve of the Jean Lafitte National Historical Park and Preserve has seen many types of uses over the years. A recent listing provided by the National Park Service (NPS [RFP] 1996:5) enumerated the following array of resource-based activities in the area:



- logging
- farming (e.g., small scale subsistence to plantation)
- ranching
- hunting
- alligator harvesting
- poaching
- trapping
- fishing
- crabbing and softshell crabbing
- shrimping
- crawfishing
- oystering
- gathering and collecting of wild foods and products
- mining occupations associated with clamshell dredging
- mining occupations associated with petroleum exploration and production
- seafood processing
- turtle harvesting
- guiding

Among these activities, some have been carried forward in the form of contemporary traditional use on the Barataria Preserve. This report involved the collection and analysis of ethnographic information about the nature and extent of associated peoples' ties to, and customary uses of, the resources of the Barataria Preserve.

1.2 METHODOLOGY

The methodology utilized in this research effort was detailed in an earlier submitted Field Plan, and is summarized in this section. The primary methods utilized were secondary source review, individual interviews with cultural consultants, focus groups, site visit interviews, mapping, and oral history interviews.

The secondary source review was a key event in the overall research since its purpose was to review existing information about types of resources, traditional users, patterns of use, and the sociocultural context of the traditional users of the Preserve. The results of this review appear in Section 2.0 of this document. Beyond being an effort directed at producing a literature review and annotated bibliography (which is presented in Section 6.0 of this document), the secondary materials research effort was used to guide that portion of the research process that relied on primary research (interview) techniques.

Individual interviews with local community residents were used to develop data about: (1) types of traditional users; (2) Preserve resources; (3) types and patterns of uses; (4) subsistence uses; and (4)



interactions of users with the National Park Service. Open ended interview protocols were used to guide these interviews rather than survey type questionnaires. Individual interviews took place primarily in interviewee's homes. Focus group interviews were also conducted in Isle Bonne and Lafitte. These interviews were designed to develop the same categories of information as addressed by individual interviews. Focus groups proved useful for collecting new data and for checking data collected during individual interviews and other data collection activities. For most interviews, maps were used during the interview process as an aid to prompt individuals to discuss resource use in different parts of the Preserve (though relatively little information was gained on the site specific resource use because, as will be developed later, relatively little traditional use of the Preserve is taking place).

Site visit interviews and participant observation activities were used to collect information about what people say and what they do regarding their use of Preserve resources. Site visit interviews consisted of conducting an interview with a Preserve user while in their company on the Preserve. These interviews were opportunities to visit the Preserve with individuals knowledgeable about a particular topic (e.g. hunting, traditional plant use, etc.). The same topic areas used in the individual interviews and focus groups also were addressed during site visit interviews. Participant observation activities were focused on interacting with traditional users as they engaged in traditional use or other activities on or off the Preserve, and were occasions to observe and interview persons about current and past traditional uses and practices within the Preserve. Site visit and participant observation interviews for this project included the Principal Investigator conducting multiple interviews with persons at camps in the Preserve area, accompanying hunters in the Preserve to examine hunting areas, accompanying individuals on a frogging trip on the Preserve at midnight on the opening night of the season, traversing the Twin Canals/Kenta Canal/Bayou Coquille/Bayou des Familles loop of the Preserve via pirogue with an area user, accompanying Park Rangers on both day and night canoe treks in the Preserve area, canoeing a separate section of the Kenta Canal in the Preserve with a traditional use hunter and fisher, accompanying a local family on a walk on Preserve trails, accompanying Preserve staff on motorized vessels in the Preserve, accompanying a local resident on his commercial 'swamp tour' adjacent to the Preserve, and walking all of the developed trails in the Preserve.

Oral history types of interviews were used to develop specific information about past and present conditions and changes in the following topic areas: resource types and availability; ranges and types of resources used; effects on resources of past and present use; and, relationships with the National Park Service. Where appropriate, agreeable to the interviewee, and technically feasible, interviews were tape recorded, and the tapes were selectively transcribed to help produce this report.

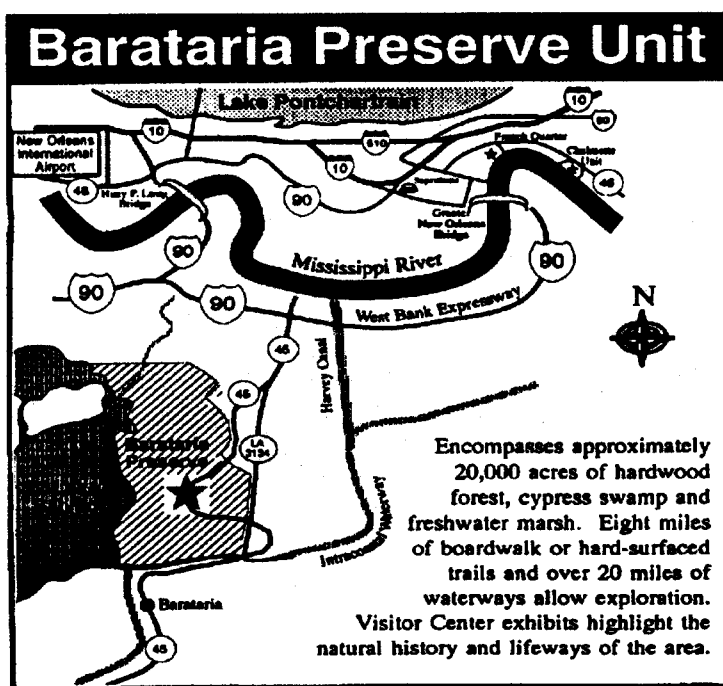
Potential traditional users of the Barataria Preserve area (and other relevant individuals) were identified through a 'snowball' sampling or network sampling technique, beginning with known users in the communities. Preserve staff was extremely helpful in providing the names of Preserve users as well as other contact information that was critical in getting the research off to a good start. As interviews were conducted, each interviewee was in turn asked about other individuals to contact, and rather quickly an adequate sample was obtained. Given the time and resource constraints, as well as a particular research focus, statistically valid sampling of users of the Preserve was not a goal



of this research. Rather, the primary goal was to obtain adequate coverage, particularly among families who had been residents of the area for multiple generations, to describe and analyze the range of traditional uses of the Preserve. Given the known constraints, it was planned to conduct between 20 and 25 individual interviews, 15 to 20 site visit and participation interviews, two to four focus groups, and five to 10 oral history interviews, for a total target of 40 to 55 interviews. Target ranges were achieved for each of these categories, and exceeded for most. A total of 48 individuals participated substantively in the research as interviewees. Several of these were interviewed on more than one occasion (and for more than one type of interview, e.g., site visit interviews typically followed a prior individual interview with the same person). Additionally, interviews were conducted with Preserve staff who contributed substantively in this work (but these contacts are not included in the total). Further, numerous family members of 'primary' interviewees contributed to the study, as they were often present during the interviews, and contributed their own information to greater or lesser degrees.

1.3 SUMMARY

Section 4.0 of this report provides an extended discussion on contemporary traditional use of the Barataria Preserve area. This section summarizes some of the main points of that discussion.



As shown in the adjacent graphic (source: NPS, nd), the Barataria Preserve is located within an easy commute of the downtown New Orleans area, and only a few miles away from the urbanized Westbank section of the metropolitan area. Despite this close geographic relationship, the Barataria Preserve represents a set of resources and a landscape that have provided for, and continue to provide for, traditional uses of natural resources by the residents of the communities near the Preserve.

It should be clearly noted from the outset, however, that there are no traditional uses that occur on the Preserve today that are unchanged

from generations ago, or even from the era before the Preserve was established in the late 1970s with, perhaps, a few minor exceptions. Further, the landscape of the Preserve is shaped in many ways by the human activities that have taken place there. In the words of one project participant, "Barataria is a cultural landscape, not a wilderness."



The definition of contemporary 'traditional use' is not straightforward. That is, one can come up with definitions of what is traditional and what is not (and these definitions are discussed at some length in Section 4.0 of this report) but, as life is lived in the area, the distinctions between traditional use and other types of use of local resources, such as 'sport' use, 'personal' use, 'subsistence' use, or other types of use are not always clear. One of the features of life in the area that has changed over the years is that, in general, people are less dependent on the harvest of a wide variety of local resources. While a good part of the foundation of the local economy may still depend on local (or nearby) resource extraction (e.g., commercial fishing), these uses have tended to become specialized. Though defining traditional use with respect to 'dependency' on resources is problematic in itself, it is without question that the nature of such dependency has changed with respect to the Preserve area itself as well as the surrounding area.

To some degree, there is an inherent conflict between the concepts of 'preserve' and 'traditional use' as applied to the Barataria Preserve. If traditional use is taken to mean, at least in part, those activities that were common prior to the creation of the Preserve, it is precisely because of the adverse environmental consequences of some of those uses that the Preserve itself was created. As managed today, the Preserve excludes the use of, or has significantly altered the use of, some traditionally used resources.

In terms of the Barataria Preserve being a 'unique' area or landscape, or a special place in the perception of local residents, interview data would suggest that the Preserve is not seen as all that different from other lands in the area. Significantly, however, the lands around the Preserve have changed in recent years with increasing area population growth and development, such that the Preserve is becoming more unlike the surrounding area as time passes.

There are a number of contemporary extractive uses of the Barataria Preserve that have a continuity with the past, such that they may be considered traditional uses. Trapping, perhaps the quintessential traditional use thought of when people were asked about traditional uses of the area that is now the Preserve, did not take place on the Preserve during the 1996-1997 trapping season. While it has taken place in the very recent past, the nature of trapping has changed over the years such that the trapping which has recently taken place bears little resemblance to the type of trapping practiced a generation or two ago. On the other hand, hunting is still actively pursued on the Barataria Preserve. In terms of continuity of use, however, hunting as pursued today differs markedly from the hunting on the same land in the pre-Preserve days. These changes include: the areas that are hunted (parts of the Preserve that were formerly hunted are now closed to hunting); the species hunted (the species hunted today are a limited subset of those species hunted in the past); and the seasons hunted (with restricted seasons now consistently enforced). It is important to keep in mind, however, that these activities were not open to unrestricted use prior to the area becoming a Preserve. The land that is now the Preserve was not open, in theory or in practice, to all users, so the Preserve itself has facilitated as well as restricted some types of use by various individuals.

Fishing is another traditional use activity that is pursued on the Barataria Preserve, but this too has changed over time. These changes have been brought about, in part, by changes in motorized access policy, restrictions on other resource use (e.g., the restriction on taking wax myrtle from the Preserve



for use in soft shell crabbing), and the changing nature of commercial fishing in the area and its relationship to non-commercial fishing. In general, it does not appear that the Barataria Preserve is a prime location for traditional use fishing.

Plants and plant materials are still taken from the Barataria Preserve in ways similar to those practiced years ago. However, there would appear to be a very low level of 'traditional use' of plant materials from the Preserve by families with multi-generation ties to the communities of the immediately adjacent area. There are exceptions to this generality, but would seem to apply to only a few species of plants. For example, berry picking is still reported to be common along the roadsides within the Preserve, but those long term residents who reported using a range of wild plants for food or medicinal uses reported that they did not collect plants from the Preserve area, because of misunderstandings regarding what is and is not permitted with respect to plant collection in the Preserve, a reluctance to interact with Preserve 'bureaucracy,' or merely because the same types of materials are available in locations more convenient to them. Based on data from interviews with Preserve staff, it would appear that there is currently a level of use of plant materials on the Preserve that is higher than that reported by those contacted for this study; the people engaged in these activities may be from areas more distant from the Preserve (and who do not have as many harvest area options).

Modes of access for traditional use activities have changed over the years as well. In the past, off-road parts of the Preserve were accessed by horseback and by motorized vehicle, but this is no longer the case. The types of vessels used for waterway access have changed as well, making much larger areas more easily accessible than in generations past. With Preserve regulations, however, have come the closure of some waterways to motorized vessel access, and this has become an issue of contention for some traditional users. Today, the Preserve is accessed in a number of 'new' ways, such as use of developed trails, canoeing, and through school excursions and these means of access, while not traditional use activities, have been used to pass on traditional knowledge about the area and its uses both formally and informally.

Seasonal or part-time settlement on the Barataria Preserve, in the form of camps, still continues, though at lower level than in the even recent past. Further, the types of uses to which camps are put have changed. Whereas in the past, trappers camped seasonally in the area that is now the Preserve in order to facilitate making a living from trapping, the camps of today are primarily either recreational camps utilized on weekends by persons with other types of employment or as more-or-less full time residences by retired persons. As of 1997, there were ten recreational camps on the Preserve proper, but there are dozens of camps located on City of New Orleans property immediately adjacent to the Preserve. The number of camps on the Preserve itself has followed a downward trend since the creation of the Preserve, as it is management policy to not discourage the continuation of existing leases, but not to issue new leases when current camp leasees are no longer interested in retaining their camps.

Putting the traditional use of the Preserve area into the greater context of the local community attributes and activities, the typical way of making a living over the years for local community residents has been to 'piece together' a living through an annual round of natural resource related

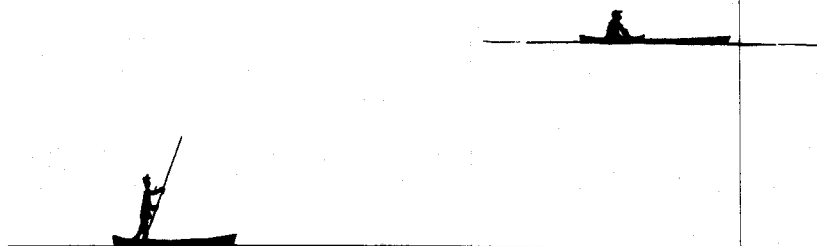


activities. Of course, there have for generations been economic opportunities in the area unrelated to this type of natural cycle and movement between extractive activities, but still today variation of the annual round has an influence in the local communities. There has been a drastic change in this annual round over the past generation or two, and this change has had an influence on traditional use activities, both on and off the Barataria Preserve. While access to, and use of, natural resources remains an important attribute to the local way of life (and 'quality of life') the variety and intensity of traditional use of resources has declined substantially. On the other hand, the Barataria Preserve is seen as reinforcing some traditional ways of life in the communities to the south of the Preserve. The Preserve, by way of blocking the urban and suburban sprawl of the development to the north of the Preserve, has allowed some aspects of community life in Crown Point, Lafitte, and Barataria to remain unchanged, or changed to a lesser degree than would be the case were contiguous development of the area to have occurred. In this way the Preserve is seen as a kind of 'social transition zone' between different communities and ways of life, at least as seen by residents in the communities to the south of the Preserve.

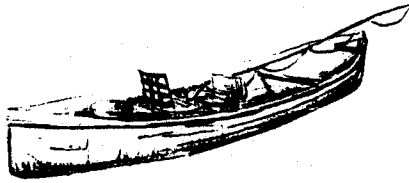
The tourism that has accompanied the formation and management of the Barataria Preserve has had an impact on traditional use of the area. Information on, and interpretation of, traditional ways of life (including traditional resource use) in the area has itself become a draw for tourism. Tourists also utilize the Preserve in ways that may or may not conflict with traditional uses of the same area. There has also been a 'spillover' of tourism from the Preserve such that visitors drawn to the area by the presence of the Preserve serve to support private enterprises that are more-or-less directly related to the Preserve or its resources.

In terms of American Indian traditional use of the Barataria Preserve, there are a number of families of Houma descent who live both adjacent to the Preserve and scattered throughout the general area. These families include some of the more active traditional users of resources in the area. For the Houma as a group, however, there appears to be little use of the Preserve for traditional uses beyond that represented by the individual families in the area.

While there is some evidence of continuing ritualistic or ceremonial use of the Preserve according to Preserve staff, these uses would appear to be pursued by individuals or groups outside of the immediate area. Residents of the local communities did, however, comment on the value of the Barataria Preserve as a place to 'get away' from the rigors of everyday life, and to the extent that this is a spiritually related use for some individuals, such uses can be said to be occurring.



2.0 REVIEW OF THE LITERATURE: TRADITIONAL USE OF THE BARATARIA PRESERVE AREA



This section presents a review of the published and readily available unpublished literature on the relevant identified communities, and documents ethnohistoric and ethnographic communities associated with the Barataria Preserve and the surrounding area. In particular, relationships between different ethnic/sociocultural groups and the Barataria Preserve area and its resources are discussed.

2.1 INTRODUCTION AND OVERVIEW

It is a place that seems often unable to make up its mind whether it will be earth or water, and so it compromises. The result is that much of moist Louisiana belongs to neither element. The line of demarcation is vague and changing. The distinction between degrees of well-soaked ground is academic except to one who steps upon what looks like soil but finds it is something less (Kane, 1943:3).

Harnett Kane was speaking of the lower bayou lands of Louisiana when he wrote the above passage, but he could not describe the Barataria Basin area any better, either literally or metaphorically. It is a place that cannot make up its mind, so *it compromises*. The Barataria region compromises over time and space. Barataria's inhabitants today continue practicing many of the activities of their predecessors. Geographically wedged between New Orleans and Acadian Louisiana, Barataria accommodates social, historic and economic influences from both.

That is not to say that Barataria was without dynamic and multiple cultural influences prior to the settlement of New Orleans or the later Acadian settlements along Bayou Lafourche. The aboriginal and historic Indian tribes of the area left a rich legacy of living off the land that has been adopted to some degree by all of the various groups of people who have lived there since. The Basin area provides an abundance of natural resources and as Kane continues:

From the bayou and its land comes rich produce of the thick black soil, the warm air, and the dormant waters themselves -- a varied life on stem, on paw, on wing, on gill, that is sometimes overwhelming in range, in teeming numbers, and in lush variety. Nature is in a free-handed mood . . . Fauna that live normally a thousand miles apart pass each other in the marsh. Birds whose usual habitats are separated by a continent fly together over the swamp. And the soil produces three crops a year -- some localities boast of four (Kane, 1943:8).

The natural environment, to a large extent, shapes the cultures of the people who have lived in the Basin. However, it is also shaped, to a large extent, by these very same people by the way they use



the land and its resources. Throughout its historic occupation, large and small land holders have lived in or used the rich soils and resources of Barataria. The large land holders initially practiced extensive agriculture and resource extraction, shifting priorities with time and economic development. The smallholders, on the other hand, have always practiced some form of traditional subsistence activities. Thus, the Barataria region is modernized, but not completely. It supports a traditional culture, but not entirely. Economically and socially, Barataria *compromises*.

The following sections document the ethnohistoric and ethnographic communities associated with the Barataria Preserve of the Jean Lafitte National Historical Park and Preserve and the surrounding areas. The review focuses in particular on the historical and contemporary American Indian, Euro-American, African-American, Isleño, and Acadian affiliations in the Barataria region. It also includes some discussion of other ethnic groups that are peripheral to the region, but who have exerted some influence on the culture at some point in time. The review also covers the historical and contemporary occupational and subsistence use of the Barataria Preserve, as well as legendary and religious activities associated with the Preserve area. This review includes a discussion of the impacts of resource use in the Preserve area today. It concludes with a brief discussion of the interrelationship between environment and culture in the Barataria region.

Existing literature on the Basin area is far from comprehensive. Most of the literature pertains to coastal Louisiana in general, or to the region broadly defined as Barataria -- that is, the land lying between the Mississippi River and Bayou Lafourche, and extending from directly below New Orleans to the Gulf of Mexico. Much of the relevant literature is found in obscure sources and has to be pieced together. In addition, there are numerous gaps in the available literature. The prehistoric and historic occupation of American Indians, in general, is pretty well-documented. However, current literature on the Chitimacha Indians is sparse. The colonial occupations of the Barataria area are well documented and a fair amount of information on the economic activities of the large landholders is available. Unfortunately, there is relatively little literature and documentation on the smallholders in Barataria. There is also very little literature on African-American occupation and use of the Basin. Literature on twentieth century immigration and its affects on the Basin is likewise difficult to find. However, there are a few good overviews which are cited quite frequently in this review. The works by Betsy Swanson (1975; 1991) and Barbara Holmes (1986) are particularly comprehensive and well-documented.

2.2 ETHNOGRAPHIC AND ETHNOHISTORIC COMMUNITIES OF THE BARATARIA BASIN

2.2.1 Prehistoric Occupation

Tchefuncte, Marksville and Troyville Occupations (500 B.C.- A.D. 700)

Excavation and examination of prehistoric sites suggest that the aboriginal inhabitants of the Barataria Basin area date back to approximately 500 BC. The earliest people to move into the Basin area, the Tchefuncte culture, arrived during the building of the des Familles Barataria Lobe. These



people left little evidence of their culture; artifacts consist primarily of a few sherds found on the surface of sites dating to later periods (Holmes, 1986; Swanson, 1975). Holmes (1986) interprets this paucity of artifacts to mean that either the Tchefuncte culture used the Basin area on an occasional, or seasonal basis, or that subsequent cultures (i.e., Marksville, Troyville, Coles Creek and Plaquemines) occupied the same sites and decimated most evidence of earlier occupations. As these people later evolved into the Marksville and Troyville cultures, more evidence of habitation surfaced. Marksville potsherds have been found in middens at the confluence of Bayou des Familles and Bayou Coquille, and at the present Berthoud Cemetery, located in present day Barataria (Swanson, 1975). The Coquilles site in particular, which was a large village surrounded by smaller sites on both bayous, appeared to be a significant social and ceremonial location (Holmes, 1986).

Holmes (1986) identifies three types of settlements in which these hunter-gatherers and semi-nomadic people lived: (1) villages along the confluences of Bayous des Familles and Coquille, and Bayous Barataria and Villars, (2) individual and clusters of houses up and down Bayous des Familles and Barataria from the villages, and (3) campsites along smaller, sluggish bayous and lakes, and in the swamps and marshes. The villages were largely social and ceremonial centers. Members of the Tchefuncte, Marksville and Troyville cultures constructed shell and earth mounds in the villages for temples, dwelling places for their leaders, and burial grounds.

Houses were scattered up and down from these villages along the levees of Bayous des Familles and Barataria. These earliest inhabitants of the Barataria Basin subsisted on the resources available in any given season. During the summer and fall, they lived mostly along the levees, fishing and hunting small mammals (opossums, racoons, rabbits, muskrats) and deer. They gathered fruits and nuts from sassafras, honey locust, magnolias, persimmons, live oak, black walnut, pecan, mulberry, hackberry, and hickory trees. They also gathered palmettos, wild millet, and white pond lilies for food (Holmes, 1986; Le Page du Pratz, 1975; Usner, 1983). They dumped their trash around the houses along the levees and in the process, made these sites higher and drier than other locations. As a consequence, old house sites were preferred for the location of later dwellings, lending credence to the belief that archeological evidence of the Tchefuncte people may have been obliterated by later inhabitants (Holmes, 1986; Swanson, 1975).

During the winter, a much less abundant season, people dispersed through the Basin, camping along lake shores and smaller bayous, where they collected shellfish from brackish waters and hunted for migratory birds and black bear. Large numbers of shells from clams are found at these sites. Foods were either consumed in the camps, or prepared and taken back to the villages (Beavers, 1977, Holmes, 1986). It is likely that during the spring floods the Tchefuncte and Marksville inhabitants of the Coquille site would leave the levees and migrate to the hills north of Lake Pontchartrain for hunting (Holmes, 1986; Usner, 1983).

Occupation During Later Cultural Periods (A.D. 700-1700)

The Troyville culture evolved into the Coles Creek (A.D. 700-1100) and Plaquemines (A.D. 1100-1700) cultures. During the Coles Creek Period, the number of people living in the Basin increased



significantly. However, the population declined again during the Plaquemines Period. These cultures, like those preceding them, remained largely hunter-gatherer societies. Although agriculture had been practiced in the upper reaches of the Mississippi River Delta for about a century, there is some question as to how much agriculture the prehistoric inhabitants of the Basin practiced. Holmes (1986) suggests that the populations living in the Basin area were slow to adopt agricultural practices, but that their subsistence activities probably included some agriculture. Swanson (1975) likewise suggests that these inhabitants practiced at least a primitive form of agriculture.

Archeological evidence indicates that these later cultures built upon sites inhabited by the earlier cultures. Along Bayou Barataria at its junction with Bayou des Oies (now the site of the Lafitte Cemetery), sites indicate habitation by both Troysville and Coles Creek cultures. Mounds at Bayou Barataria and Bayou Villars date back to Plaquemines and Coles Creek Periods. Evidence of the Marksville, Coles Creek and Plaquemines Periods are found in the shell and earth mounds at Berthoud Cemetery. However, there are relatively few cultural remains of the Indians from the Plaquemines Period in Jefferson Parish. Historians attribute this to the decline in the Indian population at that time. During his explorations here in the sixteenth century, De Soto encountered the Indians from the Plaquemines period and entered into trade with them. What remains exist often contain European goods (Swanson, 1975).

2.2.2 Historic Occupations

North American native populations began to decline precipitously during the sixteenth century. The decimation of the aboriginal population, or the sixteenth century depopulation of America, is attributed largely to disease and military force brought in by the early Europeans (Snipp, 1991). Depopulation caused large-scale reorganization of settlement patterns (Snipp, 1991). By the time relatively large numbers of French settlers moved into Louisiana in the early 1700s, there were few American Indian tribes remaining in or around the Barataria Basin area. Records from the French indicate the presence of the (1) Chitimachas who lived along the edges of the Basin, (2) Ouachas (Washa) who lived along the west bank of the Mississippi and camped, fished and hunted in the Basin, and (3) Tchaouachas (Chawashas) along the east coast toward the Mississippi River. Of these, only the Chitimachas constituted a significant number of American Indians. Choctaws that settled north of Lake Pontchartrain occasionally camped in the Basin when they traveled to New Orleans to trade (Holmes, 1986; Swanson, 1975).

The Chitimachas differed significantly from the aboriginal Indians that had lived before them. Unlike the aboriginal Indians in the Basin, the Chitimachas practiced a mixed economy, which included cultivation, in addition to hunting and gathering. They raised corn, pumpkins, sweet potatoes, wheat and turnips. Holmes (1986) suggest that it is likely that the Ouachas and Tchouachas engaged in similar agricultural practices.

The specific location of American Indian settlements in the Basin is unclear. According to Holmes (1986), there is little to no evidence of American Indian villages along the Bayous Barataria and des Familles sites where they would be expected to build upon earlier settlements. The Chitimachas'



main villages appear to have been close to the mouth of Bayou Lafourche and along Bayou Teche, which is west of the Basin (Holmes, 1986; Swanson, 1975). There is some evidence that the Ouachas lived in the area close to Lakes Salvador and Cataouatche, but apparently the evidence is not conclusive (see Holmes, 1986:31; and Swanton, 1911). Settlement locations changed frequently during the 1700s. This was due in part to French and American Indian conflicts and trade relations which provoked Bienville, during his tenure as governor, to relocate American Indian tribes.

Although relationships between the French and the Chitimachas were originally harmonious, these relationships deteriorated over the years and the French and their allies waged war on the Chitimachas. Many of the Chitimachas ended up enslaved. Others escaped into the Atchafalaya Basin. Swanton (1911) reports that finally, as part of a peace treaty in 1718, the Chitimachas abandoned their village(s) on Bayou Lafourche (Brassieur, 1980; Holmes, 1986).

Much later, in the early 1900's, Swanton (1911) reported the presence of two large Chitimacha settlements in the Atchafalaya Basin area at Charenton and Plaquemine. In 1935, the 265 acre Chitimacha Indian Reservation was established near Charenton by the Federal Government (Workers of the Writers' Program of the WPA, 1941). Today, the Jean Lafitte National Historical Park and Preserve has a cooperative agreement with the Chitimacha Tribe of Louisiana which is a cooperative venture between the tribe and the National Park Service wherein the Park operates and staffs the visitor center in Charenton, and in coming years the more direct NPS involvement will be phased out and the tribe will assume all operational responsibility for the center.

2.2.3 Euro-American Occupation

French Settlement

The European colonization of Louisiana is well documented in the historical literature. European presence in Louisiana began officially in 1683, when LaSalle, erecting a cross and a column in the land close to what is now Venice, Louisiana, claimed the Mississippi Valley for the French monarch, Louis XIV (Allain, 1995). However, colonization of the Mississippi Valley was a low priority for the Crown. Although settlements on the Louisiana coast had value as strategic outposts against the Spanish to the south and west, and the British to the north and east, they held marginal economic value for France. Consequently, early settlers received little assistance from France. They found the natural environment so hostile that their survival in those early years depended in large part on the goodwill of the Indians populating the area.

However, when faced with the threat of losing strategic outposts, the French government tried numerous strategies to colonize the area, including the use of commercial companies (such as John Law's Company of the West) to further develop and exploit the economic resources of Louisiana (Brasseaux, 1996). John Law resorted to forced emigration of social outcasts, including orphans and convicts (Hardy, 1996, Giraud, 1996), and an initially successful public relations campaign to attract more industrious settlers (Brasseaux, 1995). The French government granted liberal land concessions to the more influential and entrepreneurial developers and colonists. John Law's



Company of the West, originally chartered in 1717 and reorganized as the Company of the Indies in 1719, held a large concession. Eventually, efforts on the part of France and John Law's companies brought French, German, Alsatian and Swiss colonists to Louisiana (Brasseaux, 1996).

Knowledge of the land use of the Barataria Basin for this time period is somewhat sketchy. New Orleans was founded in 1718. It is likely that the French were exploring and using the Barataria Basin area shortly after the founding of New Orleans (Swanson, 1975). Swanson (1991) reports that according to a French map of 1723, the mouth of Bayou Barataria was discovered about four years later. At that time, the bayou was referred to as Bayou Ouachas, named after the Ouachas Indians who inhabited the area. The French were attracted, in part, to the Barataria Basin area and its wide array of natural resources that offered ample opportunity for "entrepreneurial exploitation" (Holmes, 1986: 49). However, the bayous and waterways of the Basin also provided access to commercial activities. According to Swanson (1975), Barataria Bay was being used as a harbor at this time, and the Basin area was used by trappers, traders, fishermen and smugglers as a route from the Bay to the New Orleans settlement. A decade later, though, the French began to use the land more extensively, logging oaks and cypress for ship construction (Swanson, 1975).

Although information on the earliest French use of the sparsely populated basin is limited, historical documents provide much more information about the land use associated with land grants and large land holders. The first French land grants in the Barataria area were awarded in 1726 to partners Jean-Baptiste Massy, Jean-Baptiste Bourbeau and Charles Frederic de Merveilleaux. The Company of the Indies conceded each partner 40 arpents (an arpent is approximately 192 feet) along both sides of Bayou Ouachas (today's Bayou Barataria). The properties extended back away from each side of the Bayou as far as the marshes. Massy's property spanned the confluence of the present-day Bayou Barataria and Bayou des Familles. The partners, under contract to the Company of the Indies, cut timber and dragged it to the waterways for the Company. Massy, a successful entrepreneur, also constructed drainage ditches and roads on his property, cultivating a vast plantation where he grew tobacco, cotton and produce, and raised cattle (Swanson, 1991).

The number of large land holders in Barataria increased as Massy's property was eventually passed on to his heirs and as others petitioned for and received land grants (Swanson, 1991). The agricultural development of the Basin area continued and expanded with new land owners experimenting with sugar cane and perhaps indigo (Holmes, 1986). Claude Joseph Dubreuil, who had numerous land holdings along the Mississippi and throughout the Basin, planted wax myrtle on his Mississippi plantation and may have also done so in the Basin, where it grows naturally in the swamps. Wax myrtle was used for producing candle wax. The colonists also started vacheries or cattle ranches; the terrain of Barataria, with its elevated alluvial ridges and land masses surrounded by water, was well-suited for ranching as the configuration of the environment provided for natural confinement and forage was plentiful (Swanson, 1991).

The extraction of resources, however, remained an important commercial activity. Logging continued as the colonists cleared more land for agricultural purposes, and as they became more adept in removing the logs from the swamps. Holmes (1986) describes the process by which colonists would cut the cypress in the fall when water levels were low, and then float them out to the



bayous and rivers when the water levels were higher in the spring. To facilitate his logging activities, Dubreuil constructed a canal on his Mississippi River plantation that ran from the River to a branch of Bayou Barataria. In constructing this canal, Dubreuil also provided the first direct water route from the Basin to New Orleans (Holmes, 1986).

Toward the end of the French colonial period in the Basin, the large landowners were diversifying their activities in Barataria. Plantation owners set up sawmills, and some, like Dubreuil, engaged in large scale construction activities. In addition to timber, the French also removed large quantities of shells from the prehistoric shell mounds in the Basin. The shells were used for extracting lime, which was used in building New Orleans (Holmes, 1986; Swanson, 1991). Many of the larger landowners had multiple parcels of land in the Basin, and as Holmes (1986) explains, diversifying their holdings is how they often diversified their operations. Lands towards the top of the Basin, generally higher and with wider levees, were more suitable for planting and lumber operations. Concessions toward the South, on the other hand, were lower and far more suitable for ranching.

However, although the literature documents the activities of the larger land holders in the Barataria area, there is little information available about yeoman farmers and smaller land holders, or others that lived in the Basin. With the exception of ranching, the plantation operations were obviously labor intensive and required large numbers of skilled and unskilled workers, and slaves. Moreover, many of the plantation owners lived, at least part of the time, in New Orleans or on their plantations farther up the Mississippi River and employed managers to oversee the day-to-day activities on the plantations. Records from the plantations confirm the availability of housing for slaves and for at least some of the other workers on site. Hunters, trappers, and fishermen also used and lived in the Basin, if only on a seasonal basis. It is likely that many of these people practiced a mixture of wage labor and subsistence.

Isleño Settlement

Despite the activity around the plantations, when Louisiana was transferred to Spain (officially) in 1763 under the Treaty of Paris, the Basin area remained relatively uninhabited and remote. In an effort to protect the new territory from encroachment by the English, who were ceded the French settlements east of the River (with the exception of New Orleans), Spain attempted to populate the Basin area with military recruits and their families (Din, 1972; 1986; Swanson, 1991; Writers Program, 1941). According to Din (1972; 1986), in 1777, the Spanish Crown authorized the transfer of military recruits and civilians from the Canary Islands to the colony, with the expectations that they would farm and settle in Louisiana permanently. The Canary Islanders, motivated by famine and overpopulation in their homelands, had been settling in the New World in large numbers (Swanson, 1991). By 1783, approximately 2,000 Canary Islanders (Isleños) arrived in Louisiana. A number of these remained in New Orleans; the remainder were settled by the colonial government in four other locations. Galvez, the Spanish governor of Louisiana selected sites (1) at the juncture of Bayou Lafourche and the Mississippi River (today's Donaldsonville), (2) at the junction of Bayou Manchac with the Amite River, (3) on the east bank of the Mississippi river below New Orleans (Bayou Terre-aux-Boeufs), and (4) on the west side of the Mississippi, on the edge of Lake Barataria



and slightly above the confluence of Bayous Barataria and des Familles. However, these sites were selected for strategic purposes, rather than for their suitability for agricultural activities. All four of the sites, on tributaries of the Mississippi River, were prone to flooding (Holmes, 1986; Swanson, 1991).

The Barataria grant was in a strategic location to prevent an invasion of New Orleans from the sea via Bayou Barataria. The Spanish government established the community as a "poblacion," or a loose grouping of ranches and farms. The government laid out farm plots, dividing the land according to a method used in Northwestern France in which land was partitioned in long, narrow strips fronting along the bayou for two to four arpents, and extending 40 arpents into the swamps. This linear division of the land allowed for the maximum use of the natural environment. Each household had access to water, arable land, and rich harvestable resources of the swamp lands. The government also built homes and provided the settlers with farm implements, firearms, livestock, clothing, rations and money (Swanson, 1991).

Apparently little other documentation on the Isleño settlement in Barataria has survived. What information has survived, however, indicates that the settlement fared poorly in the face of hurricanes and flooding and the subsequent loss of their crops and livestock. Most of the settlers transferred to the Isleño settlement at Bayou Terre-aux-Boeufs in 1782 in present St. Bernard Parish. Those that remained, lived off the land and ranched (Din, 1986). A census of the Pueblo of Barataria indicates that in 1788, the population consisted of "... 9 white females, 16 white males, 11 free male mulattos and Negroes, 1 female mulatto or Negro slave, and 3 male mulatto or Negro slaves" (Swanson, 1991). Swanson reports, though, that after the flooding that occurred with the crevasse of 1802-4, most of the remaining families were relocated to Bayou Terre-aux-Boeufs. By the time the United States acquired Louisiana, there were only two Isleño families still living along Bayou des Familles. When settlers abandoned their plots, ownership of the land reverted back to former owners or the government.

Acadian Settlement

In the mid-eighteenth century, after their expulsion from Nova Scotia by the British, the Acadians began to arrive in Louisiana. The early Acadians, predecessors of today's "Cajuns," settled along the Mississippi River above New Orleans at the St. Jacques de Cabonecy area, in what is now St. James Parish, with the blessing of the French authorities. By the end of the century, nearly 4,000 Acadians would enter Louisiana through this "Acadian Coast" gateway (Rushton, 1979). However, when Louisiana was ceded to Spain, the Spanish government, incorporating the Acadian settlers into their strategic program to defend the colony, began a settlement program for the Acadians.

According to Brasseaux (1987) settlement patterns of the Acadians are often misrepresented in published work, even among historians, as Francophone groups in general are often incorrectly identified as "Cajun." Therefore (and despite the existence of historical land and conveyance records) not all Acadian settlement patterns are well documented. There appears to be no documentation of this settlement in either the literature on the Basin or the Acadian settlement of



Louisiana. The extensive histories of the Barataria area compiled by Barbara Holmes and Betsy Swanson do not mention any Acadian settlements in the Basin area.

Brasseaux (1987), however, in an attempt to reduce the confusion over settlement patterns, traces the arrival and subsequent settlement of each Acadian group arriving between 1765 and 1786 and in doing so provides some insight into Acadian settlement patterns in the Barataria Basin. According to his account, the earliest Acadian pioneers settled to the west of the Atchafalaya River, close to present day St. Martinville. Other Acadians were settled by the Spanish government in strategic locations along the Mississippi River and Bayou Lafourche in the eastern portion of the State. In both the western and eastern settlements, as population pressures and conflicts with existing populations increased and the availability of arable land decreased, they gradually moved into adjacent areas. In the western settlements, the Acadians moved into the Opelousas and Attakapas (present day Lafayette) areas. Those Acadians living along navigable Bayou Lafourche, which represents the western boundary of Barataria basin (Holmes, 1986) moved out away from the bayou into the alluvial lands along its distributaries. Most of this movement appears to have taken place towards the west, along Bayous Terrebonne and Bayou Boeuf and at a relatively slow pace. According to Brasseaux, most of the River and upper Lafourche Acadians remained on their original homesites until the 1790s. Reluctance to move eastward into the Basin area may reflect the Acadians' desire for isolation, as well as cultural and economic independence from the Anglo-Americans and others already colonizing the Basin. These settlements remained fairly static until the 1900s (Brasseaux, 1987). However, today, the Acadian population is reported as dense along Bayou Lafourche and in upper Lafourche and Jefferson Parishes, and light in the lower portion of these parishes (Edwards, Kniffen and Pitre, 1991), suggesting that a considerable amount of migration has taken place in the last century. Din (1988) writes that the Acadians, who easily outnumbered the Isleños in the area by the early 1800s, had an enormous impact on the area, both economically and culturally, as the Canary Islanders and their descendants were assimilated into the Acadian cultures. Isleños adopted not only the French language, but the "house types, settlement patterns, recreation and cuisine" (Din, 1988: 202).

African American Settlement

The plantation systems along the Mississippi River and Bayou des Familles depended on large numbers of slaves. Written records from these plantations often document large number of slaves on each plantation. In addition, Jean Lafitte, who settled into Barataria Bay in 1805, carried on a lively slave trade, quite openly smuggling and auctioning slaves in Barataria (Holmes, 1986; Thompson, 1943). Apparently, many of these slaves escaped and lived in the Basin area. Din (1980) and Swanson (1991) write about the presence of runaway slaves, or "cimarrones," living in large bands and surviving through whatever means they could, as early as the 1780s. African American presence in the Basin area is mentioned (but not well developed) in conjunction with the history of the cypress industry. Hall (1992) discusses how sawmill owners during this time depended on the labor of these runaway slaves as "they cut and squared cypress logs, dragged them to the sawmills and were paid for each log delivered" (Hall, 1992: 207). Swanson mentions the presence of African American squatters who lived in the Basin and practiced subsistence strategies



in the early 1900s. They made their livings trapping, hunting, fishing, picking moss, and logging. According to Swanson's sources, they felled cypress trees to cut railroad cross ties, fence posts and pickets for a local market. It is not clear from Swanson's account whether these operations involved the use of sawmill machinery or were hand operations. However, given the expense of sawmill machinery (Norgess, 1947), it is likely that most of the work was performed with axes and animal power. Yet, other than these few pieces of information, there is relatively little written about African Americans or the economic contributions they've made in the Basin.

Other Ethnic Groups

There are at least two other ethnic groups which settled into the Barataria Basin area that have had an impact on the economy and perhaps on the cultural practices in the Basin. However, and probably because these groups settled on the periphery of what is considered to be the Barataria Basin (like the Acadians), they are seldom mentioned in the literature on the Barataria Preserve. One of these groups consists of various Asians that were introduced into the area as laborers. Some of the Asians were brought into the area to take the place of slave labor in the sugar plantations after the Civil War (Swanson, 1991). Chinese and Filipino laborers were brought to Louisiana in the late nineteenth century to build a shrimp export business. In the early 1900s, shrimp villages, such as Manila Village which were built on stilts and platforms over the water, abounded along the Gulf Coast, between the Mississippi River and Bayou Lafourche (Rushton, 1979; Holmes, 1986; Kane, 1943; Swanson, 1979). Since that time, the Asians that remained in the area have intermarried and been absorbed into the multiracial populations of Terrebonne Parish (Rushton, 1979). The shrimping villages no longer remain. Most were destroyed by hurricanes in the mid-1900s.

The other group that settled into the area and had a significant economic impact was the Yugoslavians who settled along the Mississippi River, at the eastern edge of the Basin area. The Yugoslavs began arriving in the New Orleans area in the mid nineteenth century. Not being able to find work in New Orleans, many migrated to lower Plaquemines Parish where they could make their livings farming and fishing. The Dalmatian fishermen among them are credited with the development of the oyster industry along the Gulf Coast (Vujnovich, 1974).

2.3 OCCUPATIONAL AND SUBSISTENCE USE OF THE BARATARIA BASIN

Examinations of the shell middens in the study area indicate that the aboriginal inhabitants of the Basin area survived primarily through hunting, fishing, and gathering. During this time, these inhabitants were migratory. Later on (about 1500 years ago), they adopted primitive forms of agriculture and developed farming villages along the Mississippi River, and Bayous Barataria and des Familles. However, as arable land was relatively scarce, they continued at least a semi-nomadic life. When the Europeans arrived in the 1700s, the Indian populations in the Barataria area farmed in the summer, harvested in the fall, and hunted fall and winter (Swanson, 1975).



Like the American Indians whom they encountered, the Europeans settling the area also depended on local resource based activities. Like the Indians, the Europeans hunted, fished, trapped and farmed. However, the Europeans were initially more interested in developing permanent settlements for defending their territories from rival empires. They consequently placed a greater emphasis on extractive and agriculturally based industries, such as logging and lumber production, large scale (as opposed to subsistence) agriculture and lime production, and thereby initiated a major transformation in the local economy. The new economy was not only based on different means of production, the social relations underlying the means of production were different, too.

The system for the allocation of land grants during Barataria's 100 years of French and Spanish rule resulted in a highly stratified social order in which the more affluent and powerful settlers were granted large (and usually higher elevation) tracts of land (and therefore greater access to the means of production) by the French and Spanish governments. On their vast plantations, these land holders logged and milled the great stands of cypress and oak, dug ditches and drained the land, and developed large commercial agricultural enterprises. On the highest and most arable land, they cultivated crops such as indigo and cotton, and on the lower, less desirable lands, they raised livestock (Holmes, 1986; Swanson, 1991).

However, other settlers living in Barataria had far less access to the means of production and were more likely to engage in a wide range of economic activities, including subsistence use (hunting, trapping, fishing, gathering), the cultivation of subsistence crops (rice and corn), and raising livestock. Some of these other settlers were the small land holders, such as the Isleños who were recruited from the Canary Islands to populate and farm strategic settlements. Another group of settlers included laborers and caretakers associated with the plantations. The large plantations were labor intensive and required large numbers of professionals, skilled and unskilled wage workers, and slaves to function. Some of the labor for the plantations may have also been provided by some of the small land holders, who would work part-time or part-year to augment their meager livelihoods. The settlers who were not land owners probably lived on property owned by absentee owners. Toward the end of the colonial period, some commercial activity outside of the plantations was also in progress. Much of it was small-scale and took place among those engaging in subsistence activities (Holmes, 1986; Swanson, 1991).

By the time of the Louisiana Purchase (1803) the market for sugar in Europe expanded, the technology for producing sugar became widely available, and sugar became a profitable export crop. Many of the plantation owners began to switch from indigo to sugar. However, sugar cultivation and production was costly and the uncertainty associated with land titles which had developed under Spanish rule (with the abandonment of the Isleño settlements) left some of the land holders reluctant to invest seriously in the producing sugar. Holmes (1986) notes that the growth of sugar plantations was gradual, with the larger, more economically secure plantations cultivating sugar cane before the smaller ones followed suit.

Sugar plantations along the levees bordering Bayous des Familles and Barataria were particularly slow to develop. Shortly after Louisiana was purchased by the United States, John McDonogh, a wealthy speculator from Baltimore who was living in New Orleans, purchased nearly 30,000 acres



of land in Barataria. Much of this land was located on Bayous des Familles and Barataria. Because he purchased the land primarily for resale, he did little to develop the land during his ownership. It was not until after 1860, when his estate was settled and the property sold, that a strong sugar economy in the Basin emerged.

Holmes (1986) points out, though, that the smallholder economy may have benefitted from slow development of the sugar cane production. Sugar cultivation and production claimed most of the arable land in the Basin, but the smallholder economy and settlement patterns seen in the colonial period continued to persist, especially between the large land holdings. Had the sugar economy peaked earlier, the small holders and non-land owning residents may have been pushed off their lands by the large land holders.

After the Louisiana Purchase, the Basin became home to other non-agricultural commercial activities as well. In the early 1800s, Jean Lafitte assembled a considerable commercial enterprise in Barataria. Headquartered at Grand Terre, at the opening of Barataria Bay into the Gulf of Mexico, Lafitte and his men, smuggled confiscated goods from merchant ships into New Orleans and quite openly sold contraband slaves.

As the plantation economy grew stronger toward the mid-nineteenth century, the population also grew. A census from 1850 counted 1,176 Baratarians. Among these were 504 slaves (428 or 79% were owned by plantations, and lived on those plantations), 15 free people of color, and 657 whites. Over half (51%) of the adult free males living in Barataria at that time worked full or part-time on the plantations, and 65% of the total population lived on or near the plantations. Of the 49% who did not work on the plantations, 25% claimed they earned their livings hunting, 8% farming and 9% fishing. Holmes (1986) speculates that those who did not live on the plantations were active in a full range of subsistence activities.

Two major plantations, the Christmas and Kenta Plantations, were located in the Barataria Preserve area. Activity on the Christmas Plantation, is particularly well-documented (see Swanson, 1991). However, the success of these sugar plantations, like most others in Barataria, was relatively short-lived. Toward the end of the nineteenth century, the great sugar plantations and the sugar economy in the Basin began to falter. The demand for sugar in the United States was at an unprecedented high, but sugar cane cultivation at that time was labor intensive and after the collapse of the slavery and the plantation labor system, the Barataria plantations were unable to find suitable and affordable labor. Some plantations tried unsuccessfully to use Chinese laborers (Cohen, 1996; Sitterson, 1996). New technology reduced the need for hand labor, but equipment and machines were expensive and their purchase plunged many sugar cane growers into serious debt. Plantation owners experimented with other labor-reducing strategies, such as share cropping, tenant farming, and land leasing (Holmes, 1986; Swanson, 1991). Years of poor cultivation techniques, exploitive land use and disease compounded the growers' problems. Sugar plantations in the United States were also facing stiff competition from the sugar cane growers in Cuba and the sugar beet growers in Europe (Ferleger, 1982). Some of the plantations, like the Christmas Plantation, were able to switch their focus to rice. Others collapsed. The smaller sugar plantations were the first to fold, but by the end of the century, sugar cane cultivation in Barataria was all but nonexistent (Holmes, 1986). The



plantations that were unable to survive were eventually subdivided and sold as plots to small farmers (Swanson, 1991).

At the beginning of the twentieth century, land ownership patterns in the Basin remained much the same as they were during the colonial and plantation periods. Ownership was well stratified with large, and often absentee, land holders controlling large portions of the Basin area, and smallholders who used a variety of entrepreneurial and subsistence strategies to eke out their livings. Relying on the cash market in New Orleans, the small holders farmed, hunted, trapped and fished (Holmes, 1986).

The change in land use patterns, on the other hand, was substantial. As the sugar plantations succumbed to economic pressures, land holding companies and speculators bought up the plantations and large tracts of swamp and marsh lands. The holding companies subdivided some of the land and sold lots for housing development on the higher grounds in the communities of Crown Point, Barataria and Lafitte.

However, these land holding companies sat on the remainder of the land and leased it to others. They leased much of the land that was previously cultivated for sugar cane to farmers for small crop production and grazing cattle. They leased swamp lands for timber production and marshes for hunting, trapping and oil production. And they leased canal frontage for fishing camps (Holmes, 1986). The new land use patterns shaped the occupational and subsistence use of the basin for the rest of twentieth century.

2.3.1 Farming

Over the years, residents of the Basin area realized that for the most part, large scale agricultural production was impractical because of the difficulties of maintaining drained land. However, small scale production on the levees was feasible and small farmers continued to cultivate truck gardens for either subsistence use or the cash market in New Orleans. Cattlemen, like the early colonists and smallholders of the plantation periods, grazed their cattle on undeveloped land. Typically farming is a part-time occupation (Holmes, 1986).

2.3.2 Timber Production

Although logging and other timber-related activity (milling, construction) had been an important industry in the Basin since the colonial period, in the late nineteenth and early twentieth centuries, the industry experienced rapid and expansive growth. Holmes (1986) attributes this exceptional growth to several factors: (1) timber leases and the increased access to timber; (2) a growing demand for cypress; (3) railroad transportation; and, (4) a surplus of labor. The lumbering industry operated out of camps located in the swamps. However, after World War II, the cypress logging industry in the Basin began to wane. The decline was due in part to a slowing demand for cypress. It was also due to the depletion of the resource.



2.3.3 Hunting and Trapping

Very few, if any, of the residents in Barataria today depend on hunting and trapping as a means for earning a living. The hunting of game (waterfowl, deer, alligators) in the Basin has long been a practice primarily associated with home consumption, although there is some commercial value associated with alligator hides. Trapping, on the other hand, is a market driven activity and in the heyday of trapping muskrat and other fur-bearing mammals in the Barataria area in the 1920s, many trappers saw more money in a few months than they had in their entire lives (Kane, 1943). Today, with the uncertain market for fur, fewer people try to make a living trapping. Furthermore, hunting and trapping have always been seasonal activities and nearly all hunters and trappers combine these activities with other economic activities (Rushton, 1979).

2.3.4 Oil Production

Although oil was discovered in Louisiana in 1901, it wasn't found in the Barataria Preserve area until about 1960. Oil exploration and production introduced many changes in the communities and the physical environment of the Preserve area (Swanson, 1991). However, there is very little literature to document the effects of the oil industry in the Preserve area or Barataria overall. In general, the immigration of oil industry professionals and workers into the geographically and culturally isolated communities of the Louisiana Gulf Coast hastened modernization by exposing residents to new ideas and lifestyles, and ushering in new infrastructural developments (such as roads and canals). It also attracted transient workers, and placed an exhausting demand on the existing physical and institutional infrastructure. The demand for community services exceeded the capacity of local tax bases to supply necessary services (Gramling, 1996).

According to Holmes, workers commuted from Crown Point, Lafitte and Barataria, or lived in oil field camps or houseboats. Although most of the migrants were likely to move out after the downturn in oil activity in the mid-1980s, a significant number may have also remained in the area. Many of the workers who lost their jobs during the bust subsequently tried to earn a living through fishing and other informal means (Deseran, 1996).

Oil leases in the Basin enabled oil production companies and their subcontractors to conduct exploration and production activities in the marshlands. Much of this activity involved building oil field road beds for temporary roads, cutting canals and constructing pipelines across the marsh. The road beds, which were designed to be removed after the oil activity at a site ended, were not always removed and are a prominent feature of the Barataria Preserve today. The canals have a significant effect on the physical environment and local hydrology as they have encouraged salt water intrusion and erosion of the banks (Gramling, 1996). Oil crews also constructed a variety of structures within the area, the remains of which are still standing in some sites. Drill sites have also been left uncleared and assorted oil field debris and oilfield waste pits remain at some of these sites. There are numerous shallow depressions, now filled with water, in the Barataria Preserve area that were probably the result of early seismic activity. Seismic activity, which is employed to determine probable sites of oil, involves the use of explosives and leaves shallow holes in the terrain (Swanson, 1991).



2.3.5 Fishing

The Basin area supports a combination of commercial and non-commercial finfish and shellfish (brown and white shrimp, oysters, crabs, crawfish). Both estuarine and fresh-water species are harvested in the area (Perrett and Melancon, 1991). The shrimping industry, which was initially developed by Asians for the Asian market, has been important to the Basin area since the late 1800s (Kane, 1943; Rushton, 1979). At the beginning of the twentieth century though, the shrimping industry was dominated by the seafood processors. Durrenberger (1996:27) writes that many of the shrimp fishers and factory workers were from what he calls "French Louisiana," but that the processors actively recruited other laborers from Europe or the northeast coast of the United States. These recruits included Germans, Austrians, Yugoslavs, Slavonians, Bohemians and Poles. Interestingly, today, Asians are again assuming a major role in shrimp fishing, as fishing and shrimping are becoming major sources of employment for the Vietnamese in Louisiana (Bankston, 1996). The oyster industry, which was developed by the Dalmatian Yugoslavs settling along the Mississippi River is still dominated by the Yugoslavians living in Plaquemines Parish (Vujnovich, 1974).

Most of the commercial fishing activity takes place either in Barataria Bay or in the Gulf of Mexico and appears to be peripheral to the economic activity in the direct vicinity of the Barataria Preserve. Non-commercial fishing is scattered throughout the Basin. In all probability, the vast majority of non-commercial fishing in the Basin area is recreational fishing. However, during the downturn of the oil and gas industry in the mid 1980s, many former oil and gas workers turned to small-scale bay shrimping and oyster fishing. Others began to catch crabs and crawfish, which can be harvested much further inland (Deseran, 1996; Mumphrey, et.al., 1978).

2.4 LEGENDARY AND RELIGIOUS ACTIVITIES ASSOCIATED WITH THE BARATARIA PRESERVE

Literature on legendary and religious activities associated with the Barataria Preserve appears to be all but non-existent. What is available consists of historical accounts and some documentation in the folk literature. Most of the legends associated with the Barataria area in general concentrate on the actual and fictional activities of Jean Lafitte as a privateer and pirate, and the gold that is presumed to have been buried by Lafitte and his men. The "land of Lafitte," as one book calls Barataria is "the bayouland where Jean Lafitte and his smugglers created a chapter in American folklore as romantic as Robinhood and his merry men in England" (Thompson, 1943: Intro.). Like most accounts of Lafitte, Thompson's version is highly romanticized. Other accounts, less romanticized, but nonetheless dogmatic, represent Lafitte as an "infamous criminal" (Pitre). Holmes (1986) provides a more balanced perspective. She describes Lafitte as a smuggler and an opportunistic entrepreneur.

During the first two decades of the nineteenth century, Jean Lafitte assembled a considerable commercial enterprise in Barataria. Brothers Jean and Pierre Lafitte smuggled confiscated goods from merchant ships into New Orleans and quite openly sold contraband slaves. In 1811, Lafitte



organized "smugglers and pirates" (Workers of the Writers Program, 1941: 418-419) who were operating in Barataria, into a band of privateers. Headquartered at Grand Terre, at the opening of Barataria Bay into the Gulf of Mexico, and operating about a half dozen ships under the flag of the Republic of Cartagena, Lafitte and his men looted merchant ships and sold their smuggled goods to planters and merchants in New Orleans.

According to legend, they also amassed vast fortunes in gold, doubloons and jewels. These treasures are supposed to be buried throughout the bayous of South Louisiana and throughout time, legends have instigated uncountable numbers of treasure hunts, especially on Grand Isle. Accompanying these tales of treasures, however, are also legends of ghosts that guard the spoils. Lafitte's ghost appears often (Saxon, 1945), but at other times different ghosts appear to guard his treasure. As one old-timer explained:

All buried treasure has got spirits watching over it. Like Lafitte. You know how he used to do? He would take five or six men along to hide his stuff, and he would tell them all but one who he was gonna have kilt. The one he picked was the one that would be the spirit to watch his treasure forever. After they buried the gold and silver and jools, Lafitte would say very quiet 'Now who's gonna guard my stuff?' and the man who didn't know no better would want to shine with his boss and he'd say, 'I will.' Then he would get kilt (Saxon, 1945: 258).

Lafitte's company of privateers (the "Baratarians") probably engaged as many as a few hundred men, which according to some counts (Holmes, 1986) exceeded the number of all other Basin residents at that time. According to most accounts, Lafitte's corsairs were French, Spanish, Portuguese and Filipino (Workers of the Writers Project, 1941). Most historians believe that after the fall of Lafitte's empire, a large number of his Baratarians settled in New Orleans and the Barataria area (Saxon, 1950). Early twentieth century residents of Grand Isle were presumed to be the descendants of the privateers, and as recent as 1940's were reported to speak a French-Spanish patois (Workers of the Writers Project, 1941). Over the years, especially in the early part of the 1900s, much of the folklore identified many of the small wood frame houses on Grand Isle as houses that were constructed and lived in by Lafitte's privateers (Workers of the Writers Project, 1941). Later works contest these assertions (Evans, Stielow and Swanson, 1979).

There is another curious legend in the Barataria area concerning Jean Lafitte. Local lore dictates that Jean Lafitte, John Paul Jones and Napoleon Bonaparte are buried alongside of one another at Lafitte Cemetery on Bayou Barataria. Lafitte is alleged to have rescued Napoleon from St. Helena. Napoleon, according to the legend, died en route to Louisiana and was buried on the bayou. Lafitte was supposed to have been buried there by his corsairs after he died. There doesn't seem to be any explanation as to how Jones, who died when Lafitte was barely in his teens, was buried there (Saxon, 1945, Swanson, 1975). Historians today are really not sure where Lafitte was buried, although some accounts have him dying of yellow fever and being buried in the Yucatan (Thompson, 1943).

The little documentation on religious practices that may pertain to the Barataria Preserve and its surrounding area focuses on mortuary traditions associated with All Saints Day and practiced in



cemeteries. These practices appear to reflect Canary Island folk traditions and Isleño occupation (Saxon, 1954; Swanson, 1975, 1991). As Swanson explains, floral decoration of burial sites and offerings to the dead, as well as the burning of candles for the souls of the dead are folk practices that are found in the Canary Islands, Barataria and St. Bernard Parish. Some of these practices are fairly common in other parts of South Louisiana. Tombs are often adorned with floral arrangements of various natural and man-made compositions, and some are adorned with trinkets for the dead. Situated next to some graves are small, usually wooden, glass fronted boxes. These boxes were placed next to the graves to hold mementos of, or offerings to, the dead. These practices are common to most of South Louisiana, although the offerings to the dead are becoming somewhat more unusual. Traditionally, tombs and grave sites all prepared with great care for All Saints Day (November 1); this care includes cleaning the site, whitewashing the tomb and decorating it with flowers. This practice, like that of adorning graves, is commonly practiced in South Louisiana. What does appear to be unique to this particular area in Louisiana (although it is a practice common to many Roman Catholic countries) is a long-standing tradition that has been practiced in the area at least as recently as the mid 1970s (Swanson, 1975). This tradition involves the burning of candles for the souls of the dead. In Barataria cemeteries, on the night of All Saints Day (the Eve of All Souls Day, November 2) families would gather, light candles on the graves and hold vigils for the dead (Holmes, 1991; Swanson, 1975). This tradition is still practiced today.

2.5 CONTEMPORARY RESOURCE USE AND IMPACTS

Contemporary uses are treated to a much greater extent in the section of this report that deals with traditional use per se, as developed through interviews with contemporary area residents. Contemporary use and the articulation with local economies is also touched upon in the section of this report that focuses on parish and community socioeconomic profiles. From the literature specifically, it is clear that today the Barataria area continues to support a combination of commercial, recreational and subsistence activities. However, contemporary land use patterns have changed dramatically in the twentieth century and agriculture and logging, although still practiced, no longer dominate the Baratarian economy. The traditional activities for the most part, have been replaced by modern industries and technology. Oil companies have replaced plantations and logging camps. Traditional fishing has been replaced by modern techniques such as oyster cultivation and sophisticated shrimp and finfish netting. Subsistence activity has been replaced largely by wage labor. And use of the traditional family hunting and fishing camps has changed from seasonal occupation to occasional recreational use (Holmes, 1986).

Family camps have been important throughout the twentieth century. Unlike large-scale camps associated with logging or shrimping, family camps were originally small and organized around extended family life. Camps were either houseboats or crude, minimally functional houses built over water on stilt pilings. Many were, and still are, only accessible by boat, and may not have modern "conveniences" such as electricity and sewer systems. At one time, camps were important for pursuing the natural resource based activities that provided subsistence for so many families. Typically, families left their homes for the camps during specific harvesting seasons (for example,



during the trapping season) and remained there until their work was done. Today, camps are used primarily for recreational hunting and fishing (Holmes, 1986).

Human use of the Barataria Basin area has left an impact on the natural environment and resources. From the beginning of European occupation in the late 1600s to as recently as the 1960s, commitments to the practices of widespread leveeing, draining, dredging, logging and cultivation have taken a serious toll on the local environment (Condrey, et. al., 1995).

Management practices since that time may have corrected some of the earlier abuses of the environment, but today's use still has a significant impact on the natural resource base in the Basin area. A recent report from the Barataria-Terrebonne National Estuary Program (Laska, 1994) identifies seven priority problem areas and the activities leading to these problems: (1) hydrological modifications; (2) reduced sediment flows; (3) habitat loss/modification; (4) changes in living resources; (5) eutrophication; (6) pathogen contamination of shellfish; and, (7) toxic substances. These problems can be attributed to three major sources. The first and most frequently listed source is industrial and commercial activities. These include mineral exploration, leveeing, draining, dredging and agricultural practices. A second source of environmental problems is urbanization and residential use of the Basin. Residential use of the Basin contributes to toxic and bacterial contamination from septic tanks, sewage treatment, and urban runoff. The third source of environmental problems is recreational use of the Basin. Although recreational use of the Basin is likely to cause far fewer problems than either industrial or residential use, careless recreational use does deplete or damage natural resources. Recreational hunting and fishing can result in the over harvesting of some game species and fishery resources. Recreational boats also contribute to bank erosion. Unsewered hunting and fishing camps create or compound existing contamination problems and contribute to general pollution of the waters (Laska, 1994).

2.6 SUMMARY: THE LOCAL NEXUS OF ENVIRONMENT AND CULTURE

Throughout the history of human habitation in the Basin, the human inhabitants have taken advantage of its abundant natural resources. Over time, as modernization occurred, individuals and groups have generally depended less on harvesting the natural resources and more on controlling the resources for their use. And as they controlled the resources, their activities began to exert greater impact on the environment. None-the-less, throughout history, the environment of the Barataria Basin has shaped land use patterns of the occupants.

The aboriginal and historic Indians were nomadic and semi-nomadic, variously living along the levees and swamps. Historians believe these residential patterns were based on the need to obtain food and to avoid the annual floods occurring along the major bayous and tributaries of the Mississippi River. The Indians survived by hunting, gathering, fishing and trapping. They also practiced at least a primitive form of agriculture. They left behind vast shell middens and elevated burial mounds to mark their tenure in the Barataria Preserve.



The Europeans arrived and settled into the most desirable high locations, those where Indian settlements or intensive use areas had existed prior to European colonization. The colonials adapted the burial sites originally used by the Indians for their own cemeteries. They constructed levees, logged the heavily forested swamps, drained the land, and farmed. Although the European settlements were more permanent than those of the Indians, they were still subject to the rigors of the environment. Most of the Isleños abandoned their settlements in Barataria because of the devastating flooding along the Bayou. Both the French and Spanish governments allocated land in similar fashions, that is, in long, narrow ribbon farms, two to four arpents wide and 40 arpents deep, extending from the Bayou into the hardwood swamps (Rushton, 1979). This allowed each family use of all possible natural resources. Although the French and Spanish depended on farming far more than the Indians did, they still hunted, trapped, fished and gathered like the Indians.

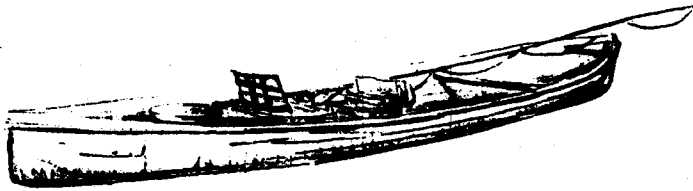
During the colonial and plantation eras, the Barataria economy was dominated by large land holders and market driven resource based industries such as the cultivation and production of indigo and sugar cane, and timber production. Traces of their agricultural practices remain in the Barataria Preserve today in the shape of drainage and transportation canals, ruins of sugar mills and other structures, and vegetative patterns reflecting earlier cultivation. New cypress growth identifies the locations in where intensive logging was practiced. During this time, the smallholders continued to practice subsistence based activities: small scale farming, hunting, fishing and trapping. They also combined these economic strategies with wage labor on the plantations when necessary.

The twentieth century ushered in a new era of land use practices in which lands owned by private land holding corporations were leased to users for the traditional economic activities of farming, logging, hunting, and trapping, as well as new industrial development, such as oil exploration. Once again, the environment dramatically affected the local culture as the oil industry moved into Barataria and previously geographically and culturally isolated communities were exposed to modernization at an unprecedented pace. To a far greater extent than before, wage labor took the place of subsistence activities.

The literature on the Barataria Basin suggests that the current residents of the Basin continue to practice those resource based activities that have traditionally been associated with subsistence, but that most of these subsistence activities are relegated to recreational activities and economic strategies to rely upon during hard times. During the severe economic downturns the Gulf Coast experienced during the decline of the oil economy in the mid 1980s, many unemployed Baratarians turned back to earning a living from the natural environment. This activity was most pronounced in oyster fishing and crabbing, where the entry costs are low. Some of the literature (Holmes, 1986) also suggests that the resource based subsistence activities may continue to be an important economic strategy for lower income people, including retirees.



3.0 SOCIOECONOMIC PROFILES: ADJACENT PARISHES AND COMMUNITIES



The socioeconomic profiles presented in this section were constructed as a basis for understanding the relationship of traditional users to the socioeconomic context of the surrounding communities. These profiles concentrate on Jefferson and surrounding parishes. These compare Jefferson Parish, and

specifically the Barataria portion of the parish, with the socioeconomic conditions in nearby parishes. The data sources for these profiles were: (1) parish planning documents; (2) compiled parish socioeconomic data from the State of Louisiana; and (3) U.S. Census and other parish population estimates and projections. These profiles summarize the employment, economic, education, housing, and demographic characteristics of Jefferson, Plaquemines, St. Charles, and Lafourche parishes. This background information provides a basis for comparing the socioeconomic conditions of traditional users with a profile of residents in Jefferson Parish and environs.

3.1 SUMMARY OF PARISH PROFILES

3.1.1 Demographic Comparisons

Jefferson Parish has the largest population of the four Parishes, followed by Lafourche and St. Charles, and Plaquemines has the fewest people. A modest population increase is predicted in all four Parishes, with the largest increase in St. Charles Parish. There is higher population density in Jefferson, which has about 1,465 persons per square mile of land, than in Plaquemines, which averages 30.26 people per square mile. In between are St. Charles, with 148.4 people per square mile, and Lafourche, averaging 79.1 people per square mile. The measured land area changes somewhat at each census, but in the 1990 Census, Lafourche had the most land of the four Parishes, with 1,085 square miles; the second largest was Plaquemines, with 845 square miles (down from 1,035 in the 1980 Census), then Jefferson, with 306 square miles of land, and St. Charles with 284 square miles of land. However, water also contributes to the total Parish area, and in Jefferson Parish 43% of the Parish jurisdiction is water area. (Note: the 1990 Census figures for land area in Jefferson are lower than those in the 1990 Census Review prepared by GCR & Associates in conjunction with the Jefferson Parish Planning Department). Collectively, the four Parishes represent about 6% of Louisiana's land area.



Population 1990 and 1996 Four Parishes			
Parish	1990 Census	1996 Estimate*	Percent Change
Jefferson	448,306	455,714	1.65%
Lafourche	85,860	87,852	2.32%
Plaquemines	25,575	25,719	0.56%
St. Charles	42,437	46,275	9.04%
All Louisiana	4,219,973	N.A.	N.A.
*NLU Center for Business and Economic Research			

The racial and ethnic composition of the populations varies among the four Parishes. Lafourche has the highest proportion of whites and the lowest proportion of blacks; it has the greatest population of American Indian heritage, and the lowest percentage of people identifying themselves as Hispanic. The language spoken in the homes in Lafourche is English-only, or French/French Creole (i.e., the local variation of French; the term 'creole' is used in this report only in its linguistic sense), with relatively few residents speaking other languages in the homes. In short, the Lafourche Parish population appears to be relatively homogeneous, with a population of white speakers of English or French/French Creole. St. Charles is homogeneous in another way, its population is either white or black, with very few of other races, and with English the exclusive language in the great majority (93.2%) of homes (French, the second most common language, is spoken in 4% of St. Charles homes). Jefferson, with the largest population of the four Parishes, is the most ethnically diverse of the four Parishes. Jefferson and Plaquemines have the highest proportion of people identifying themselves as racially Asian, around 2% and 1.9% of the population respectively, and Vietnamese and Chinese are languages spoken in Jefferson Parish homes. Jefferson and Plaquemines also have the highest proportions (5.9% and 3.45%) of people of Hispanic heritage (followed by St. Charles), and Jefferson has the most people speaking Spanish/Spanish Creole in the home (5.1% of those over age five), with Plaquemines (1.8% of those over age five) and St. Charles (2% of those over age five) nearly tied. St. Charles has the highest proportion of blacks, 24.2%, followed by Plaquemines (23.2%), and Jefferson (17%).

1993 figures from the National Center for Health Statistics show the rate of natural population increase. St. Charles has the highest birth rate and lowest death rate, compared to the four other Parishes. In 1993 Plaquemines had the lowest birth rate, and Jefferson Parish had the highest death rate in the four Parishes. To provide further comparison, in 1990, the birth rate in Louisiana was 17.1 per thousand residents, the infant death rate was 11 per 1,000 live births, and the death rate was 8.9 per thousand residents, and each of these numbers is higher than any of the Parish figures below (NLU Center for Business and Economic Research, Statistical Abstract of Louisiana).



1993 Birth Rate, Death Rate, and Infant Death Rate in Four Parishes*			
Parish	Births per 1,000 Residents	Infant Deaths per 1,000 Live Births	Deaths per 1,000 Residents
Jefferson	14.9	8.5	8.0
Lafourche	15.5	8.9	7.3
Plaquemines	5.9	5.0	6.6
St. Charles	16.3	6.8	5.7
*Source: US Bureau of the Census, USA Counties 1996 CD-ROM, using figures from the National Center for Health Statistics			

3.1.2 Population: Urban and Rural

Jefferson has the most urban population of the four Parishes, and Lafourche is the most rural. St. Charles has the second highest urban population among the four Parishes.

Urban and Rural Population Four Parishes, 1990 Census					
Parish	Urban Population		Rural Population		Total Population
	Number	Percent	Number	Percent	
Jefferson	441,663	98.5%	6,673	1.5%	448,306
Lafourche	44,528	51.9%	41,332	48.1%	85,860
Plaquemines	21,134	82.6%	4,441	17.4%	25,575
St. Charles	37,820	89.1%	4,617	10.9%	42,437
Louisiana	2,872,038	68.06%	1,347,935	31.94%	4,219,973

3.1.3 Farming: Population, Farms, and Farmland (Mixed Years)

Lafourche and Plaquemines, the largest Parishes in land area, also have the largest farm populations and the most farms. However St. Charles, which is the smallest of the four Parishes, has 13% of its land devoted to farming, second only to Lafourche with 19% of Parish land as farmland.



Farming: Population, Number of Farms, and Farmland 1990 or 1992					
Parish	Farm Population* 1990			Number of Farms** 1992	Farmland: Percentage of Parish Land** 1992
	#	% of rural	% of parish		
Jefferson	47	.7	.01	58	2%
Lafourche	677	1.6	.78	412	19%
Plaquemines	247	5.6	.96	126	8%
St. Charles	18	.39	.05	67	13%
Louisiana	40,103	2.97	.95	30,000***	9 million acres***
*NLU Center for Business and Economic Research, from 1990 Census ** US Bureau of the Census, USA Counties 1996 CD-ROM, 1992 data from US Bureau of the Census *** NLU Center for Business and Economic Research, Statistical Abstract of Louisiana					

3.1.4 Housing

Jefferson, with the largest urban population of the four Parishes, has the most rented (as opposed to owner-occupied) housing units, and the fewest people per household.

Housing: Persons per Household and Housing Occupancy Four Parishes*					
Parish	Persons per Household*		Housing Occupancy**		
	Median	Average	Housing Units	Percent Occupied	Percent of Occupied Units that are Owner-Occupied
Jefferson	2.37	2.69	185,072	89.9%	--62.9%
Lafourche	2.69	2.98	31,332	92%	--75.5%
Plaquemines	2.82	3.11	9,432	87.1%	--75.9%
St. Charles	2.75	2.96	16,061	89.5%	--78.9%
*NLU Center for Business and Economic Research ** US Bureau of the Census, USA Counties 1996 CD-ROM					



3.1.5 Education

Lafourche has the highest percentage (in the four Parishes) of people over age 25 who have not achieved a ninth grade education, while the education level in Jefferson is the highest in the four Parishes, and is higher than the State as a whole.

Educational Attainment: Percent of Those Age 25 and Older Four Parishes, 1990 Census					
Parish	< 9th Grade	< High School Diploma	≥ High School Diploma	≥ Bachelor's Degree	Graduate or Professional
Jefferson	10.6%	24%	76%	18.8%	5.9%
Lafourche	26.9%	43.8%	56.2%	10%	3.8%
Plaquemines	22.3%	42%	58%	7.5%	1.96%
St. Charles	10.6%	25.9%	74.1%	14.8%	3.3%
Louisiana	14.7%	31.7%	68.3%	16.1%	5.6%

3.1.6 Income

Jefferson and St. Charles Parishes had the highest median household and per capita incomes in the years indicated below (among the four Parishes), but Plaquemines has shown the greatest increase in per capita income between 1989 and 1993. As described later in this document, income levels are not uniform within Jefferson Parish, and the urban areas in the north of the Parish show higher income levels than do the rural communities neighboring the Barataria Preserve, and further south.

Income: Median and Per Capita 1989, 1993 Four Parishes				
Parish	Median Household Income	Per Capita Income		
	1989*	1989*	1993**	Percent Increase 1989-1993
Jefferson	\$27,916	\$12,845	\$19,100	48.7%
Lafourche	\$21,416	\$9,250	\$13,919	50.5%
Plaquemines	\$24,076	\$9,500	\$15,845	66.8%
St. Charles	\$31,777	\$11,901	\$17,999	51.2%
Louisiana	\$21,949	\$10,635	\$17,183	61.6%
*1990 Census				
**US Bureau of the Census, USA Counties 1996 CD-ROM, figures from the Bureau of Economic Analysis				



3.1.7 Employment

The following table presents basic information on labor force and unemployment for each of the four parishes.

Labor Force and Unemployment, 1994 and 1995 Four Parishes				
Parish	1994 Bureau of Labor Statistics		1995 Louisiana Department of Economic Development	
	Civilian Labor Force	Percent Unemployed	Estimated Labor Force	Unemployment Rate
Jefferson	232,501	6.4%	230,100	5.3%
Lafourche	37,553	7%	38,000	4.9%
Plaquemines	10,433	8.2%	10,200	6.8%
St. Charles	20,758	7.9%	20,758	6.6%

3.1.8 Employers

One of the most descriptive ways of comparing the economies of the four Parishes is to list the major non-governmental employers. The following list suggests the importance of the local natural resources in the area economy, though this approach misses smaller business sectors which can contribute significantly to the character of a region. With the exception of the employers preceded by an asterisk (*), all the employers listed here are non-union. The Parish School Board is the major governmental employer in all four Parishes.



**Product or Service of Largest Private Employers,
Comparison of Four Parishes, listed by Number of Employees
(adapted from Louisiana Dept. of Economic Development, 1995)**

Jefferson	Lafourche	Plaquemines	St. Charles
Construction (14,600)	Offshore labor (560)	*Lube oil additives (394)	Refinery (1,766)
*Marine construct. (6,000)	Shipbuilding/repair (500)	Gasoline/heating oil (376)	*Chemical co. (1,634)
Groceries (5,396)	Boat rental (500)	*Fish meal/oil (330 seasnl)	Chemicals (1,251)
Medical (4,448)	Shipbuilding (370)	Buildings, mod units (200)	Nuclear power (942)
Medical (4,380)	Shipbuilding (350)	Shipbuilding/repair (200)	Chemicals (623)
Medical (3,007)	Farm equipment (300)	*Metals recovery (170)	Chemicals (294)
Medical (2,086)	Medical (230)	Control systems (150)	*Grain (151)
Security (2,000)	Offshore services (172)	Work boats (130)	Chemicals (137)
Medical (1,711)	Crude oil pipeline (159)	Electric motor coils (85)	Veg. oil/petrochems. (132)
Trucking (1,580)	*Paper (150)	Oil field contractor (50)	Bulk grain (101)
Medical (1,250)	Telephone service (130)	Sulphur (50)	Storage terminal (74)
Groceries (1,200)	Sugar (100-249)	Oil field equipment (40)	Plastics (68)
Auto dealership (1,200)	Raw sugar (100-249)	--	Fertilizer (51)
Milk products (1,000)	Medical (100)	--	--
Fast food ch. (1,000-2,499)	--	--	--
Department store (949)	--	--	--
Fast food chain (850-935)	--	--	--
Realty (900)	--	--	--
Personnel services (900)	--	--	--
Oil properties (840)	--	--	--
Medical (795)	--	--	--
Electrical contractors (700)	--	--	--
Industrial machinery (700)	--	--	--
Retail (610-635)	--	--	--
Electric utility (526)	--	--	--



3.1.9 Occupation

The top three occupations are similar in the Parishes, though found in varying proportions.

Top Three Occupations in Four Parishes, 1990 Census		
Parish	Occupation and Census Category Code	Percent of Occupations
Jefferson	- Administrative support, including clerical (303-402)	19.2%
	- Sales occupations (243-302)	15.2%
	- Professional specialty occupations (043-202)	14.0%
Lafourche	- Precision production, craft, and repair (503-702)	18.9%
	- Administrative support, including clerical (303-402)	12.2%
	- Professional specialty occupations (043-202)	11.5%
Plaquemines	- Precision production, craft, and repair (503-702)	16.7%
	- Administrative support, including clerical (303-402)	13.1%
	- Sales occupations (243-302)	9.7%
St. Charles	- Administrative support, including clerical (303-402)	17.9%
	- Precision production, craft, and repair (503-702)	16.2%
	- Professional specialty occupations (043-202)	12.3%

A small percentage of the occupations are in farming, forestry, and fishing, and Jefferson Parish has the most people in these occupations, while Plaquemines has the highest proportion of its workforce in these jobs.

Farming, Forestry and Fishing Occupations Four Parishes, 1990 Census		
Parish	Number of Persons Occupied	Percent of Parish Workforce
Jefferson	2,030	0.97%
Lafourche	1,030	3.2%
Plaquemines	714	7.7%
St. Charles	142	0.8%



3.1.10 License Sales

Sales of hunting and fishing licenses in 1993-1994 indicate that hunting and fishing are popular activities.

Fishing and Hunting License Sales Four Parishes, July '93-June '94*				
Parish	Population 1990 Census	Fishing License Sales July '93-June '94*	Hunting License Sales July '93- June '94*	All Hunting and Fishing License Sales July '93- June '94*
Jefferson	448,306	107,413	24,688	132,101
Lafourche	85,860	56,478	14,563	71,041
Plaquemines	25,575	16,979	2,045	19,024
St. Charles	42,437	10,530	3,078	13,608
Louisiana	4,219,973	864,915	547,545	1,412,460
*Source: "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26 March 1996				

3.2 PARISH PROFILES

Detailed profiles of four Louisiana Parishes neighboring the Barataria Preserve of the Jean Lafitte National Historical Park and Preserve are presented in Appendix A. The four Parishes are Jefferson, Lafourche, Plaquemines, and St. Charles, and they are described in terms of demographic, housing, educational, occupational, and economic characteristics.

3.3 JEFFERSON PARISH: COMMUNITIES AND CENSUS TRACTS ADJACENT TO THE BARATARIA PRESERVE

A comparison of regions inside Jefferson Parish provides more information on the population around the Barataria Preserve. The next two sections consider the towns, cities and communities around the Barataria Preserve, and then looks at some of the census tracts neighboring the Preserve.



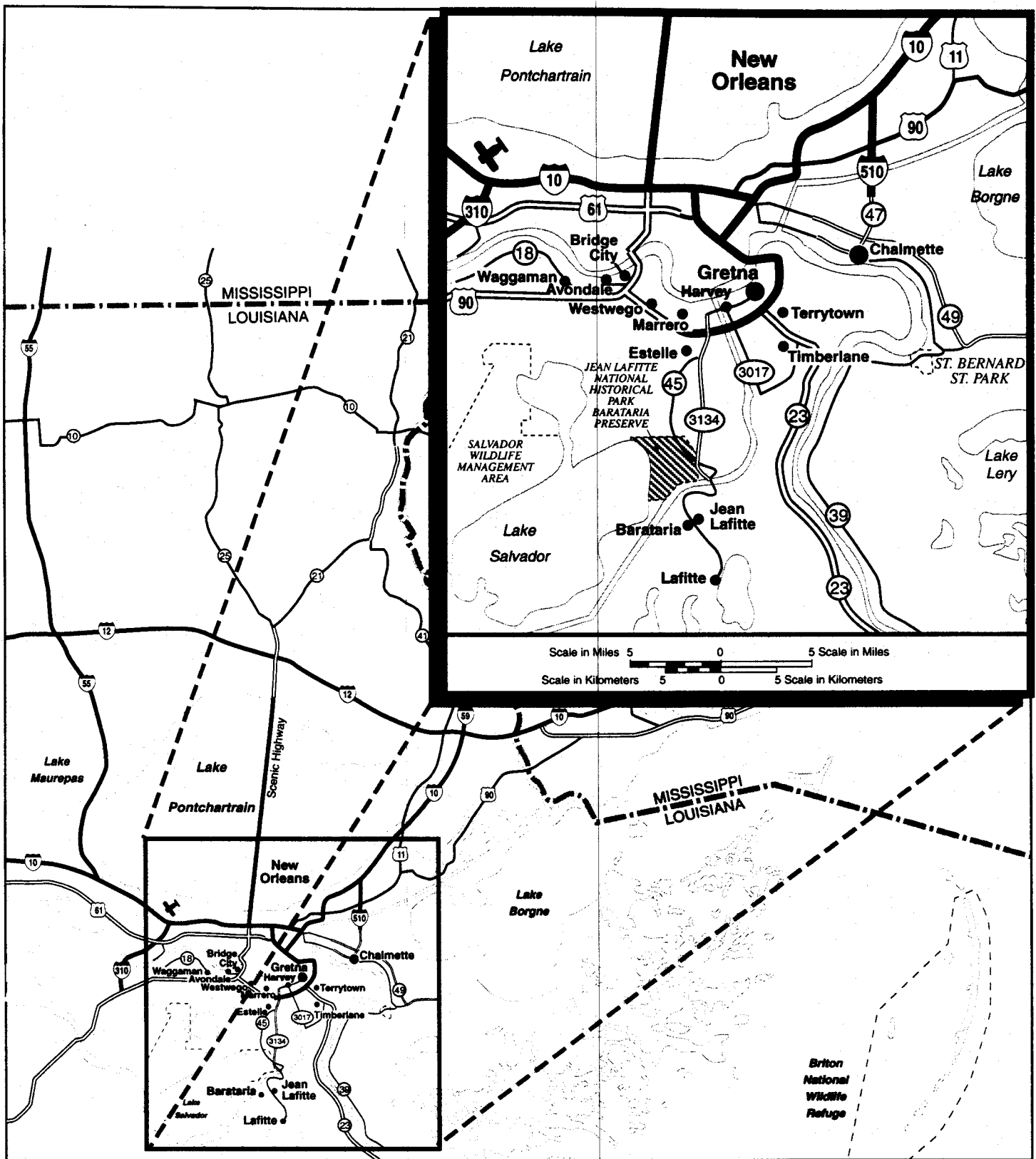
3.3.1 Cities and Towns in Jefferson Parish

This section compares some of the communities within Jefferson Parish, bordering the Barataria Preserve of the Jean Lafitte National Historical Park and Preserve. In the north of the Parish is an area called West Bank Jefferson; it is the most urbanized and populous area in the Parish, and is distinct from the Barataria region of the Parish, which is located to the south of the Barataria Preserve of the Park. Some of the communities bordering the Preserve (and Park Protection Zone) in these two regions are compared here: Included are the communities of Lafitte, Jean Lafitte and Barataria, in the Barataria section of Jefferson Parish, and the communities of Marrero, Harvey, Westwego, Estelle in the West Bank area of the Parish. For further comparison, the other West Bank Jefferson communities, Terrytown, Timberlane, Waggaman, Avondale, and Bridge City are also included. (A map showing the relative locations of these communities is provided on the next page.) Some of the differences between these regions can be seen in the table below.

We can see in the table that Barataria is all rural while West Bank is all urban, and that the population is much larger in the West Bank than in Barataria. Also, the per capita income is (on average) higher in the West Bank than in Barataria; within West Bank Jefferson, per capita income is higher in the area further from the Barataria Preserve. While 27% of all Lafitte residents fell below the poverty level in 1989 (US Census), and 19.5% in Jean Lafitte and 19.7% in Barataria also fell below the poverty level, only 12.6% of Estelle's residents were below the poverty level; however, Estelle also has among the highest per capita and median household incomes in this sample. Westwego, Marrero and Gretna, in the West Bank of the Parish have either a lower per capita income or lower household income than the town of Barataria in the Barataria Parish.

The languages spoken in the homes also suggests differences in the ethnic and cultural composition of the regions. The communities in the Barataria region of the Parish are more homogenous. The languages in the homes in Lafitte and Barataria were English, or English and French/French Creole, while Jean Lafitte was similar, but also had some Vietnamese speaking residents. In all the West Bank communities listed above, there were also a number of residents who speak Spanish/Spanish Creole in the homes, and many other languages are spoken in these cities and towns as well. While residents in these three Barataria communities were predominately white, the West Bank communities were, with the exception of Estelle, more racially diverse.



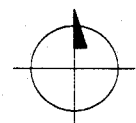


BASE MAP SOURCE: LOUISIANA/MISSISSIPPI MAP, AAA
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CARTOGRAPHY COURTESY OF KEA ENVIRONMENTAL, INC.

JEAN LAFITTE NATIONAL HISTORICAL PARK AND PRESERVE BARATARIA PRESERVE LOUISIANA

Scale in Miles 10 0 10 20 30 40 Scale in Miles
Scale in Kilometers 10 0 10 20 30 40 Scale in Kilometers



Comparison of Regions within Jefferson Parish: Population, Percent Urban/Rural, Per Capita Income, Median Household Income From 1990 Census					
Regions of Jefferson Parish Bordering Jean Lafitte Park	City, Town, or Census Designated Place	Population 1990 Census	Percent Urban/Rural population	Per Capita Income 1989	Median Household Income 1989
Barataria Region of Jefferson Parish	Lafitte	1,507	100% rural 1.73% farm	7,435	16,985
	Jean Lafitte	1,469	100% rural, non- farm	8,311	29,423
	Barataria	1,160	100% rural, non- farm	8,864	22,966
	Total	4,136	All rural	avg. 8,203	N.A.
West Bank Jefferson (near/adjacent to Unit or Protection Zone)	Marrero	36,671	100% urban	8,442	22,074
	Harvey	21,222	100% urban	9,772	22,490
	Westwego	11,218	100% urban	8,262	18,095
	Gretna	17,208	100% urban	8,836	17,344
	Estelle	14,091	100% urban	9,920	30,681
West Bank Jefferson (farther from Unit)	Terrytown	23,787	100% urban	12,207	29,818
	Timberlane	12,614	100% urban	15,087	32,980
	Waggaman	9,405	100% urban	8,283	26,821
	Avondale	5,813	100% urban	8,826	26,940
	Bridge City	8,327	100% urban	6,992	18,654
West Bank	Total	100,410 59,946 =160,356	urban	avg. 9,046.4 avg. 10,279 = avg. 9,662.7	N.A.

There are also differences in the occupations held by residents in the Barataria region of Jefferson Parish, and the West Bank region of the Parish.

Jefferson Parish: Barataria and West Bank Occupational Categories Held by 10% or More of the Population, 1990 Census			
Region of Jefferson Parish	City, Town, or Census Designated Place	Census Occupation Title, and Category Codes	% of Residents
Barataria Region of Jefferson Parish	Lafitte	- Precision production, craft, and repair (503-702)	17.8%
		- Administrative support occupations (303-402)	11.7%
		- Service, except protective and household (433-472)	11.7%
		- Farming, forestry, fishing occupations (473-502)	10%
		- Handlers, equipment cleaners, helpers, laborers (864-902)	10%
	Jean Lafitte	- Precision production, craft, and repair (503-702)	19%
		- Transportation and material moving occupations (803-863)	13.7%
		- Administrative support, and clerical occupations (303-402)	11.9%
		- Sales occupations (243-302)	10.7%
	Barataria	- Farming, forestry, fishing occupations (473-502)	23%
		- Precision production, craft, and repair (503-702)	14.8%
		- Handlers, equipment cleaners, helpers, laborers (864-902)	13%



Jefferson Parish: Barataria and West Bank Occupational Categories Held by 10% or More of the Population, 1990 Census			
Region of Jefferson Parish	City, Town, or Census Designated Place	Census Occupation Title, and Category Codes	% of Residents
West Bank Jefferson (areas near/adjacent to Unit or Protection Zone)	Marrero	- Administrative support, and clerical (303-402) - Precision production, craft, and repair (503-702) - Service, except protective and household (433-472) - Sales occupations (243-302)	20% 14.9% 13% 11%
	Harvey	- Administrative support, and clerical (303-402) - Sales occupations (243-302) - Service, except protective and household (433-472) - Precision production, craft, and repair (503-702) - Executive, administrative, and managerial (000-042) - Professional specialty occupations (043-202)	16% 14% 12% 12.5% 11% 10.5%
	Westwego	- Administrative support, and clerical (303-402) - Precision production, craft, and repair (503-702) - Sales occupations (243-302)	19.9% 18% 11%
	Gretna	- Administrative support, and clerical (303-402) - Service, except protective and household (433-472) - Precision production, craft, and repair (503-702) - Sales occupations (243-302)	19.5% 16% 12% 11.9%
	Estelle	- Administrative support, and clerical (303-402) - Precision production, craft, and repair (503-702) - Executive, administrative and managerial (000-042)	19.5% 16% 10%

Jefferson Parish: Barataria and West Bank Occupational Categories Held by 10% or More of the Population, 1990 Census			
Region of Jefferson Parish	City, Town, or Census Designated Place	Census Occupation Title, and Category Codes	% of Residents
West Bank Jefferson (areas further from Park)	Terrytown	- Administrative support, and clerical (303-402)	19.9%
		- Sales occupations (243-302)	15.2%
		- Professional specialty occupations (043-202)	13.7%
		- Executive, administrative and managerial (000-042)	12.2%
		- Precision production, craft, and repair (503-702)	11.9%
	Timberlane	- Professional specialty occupations (043-202)	17.8%
		- Administrative support, and clerical (303-402)	16.2%
		- Sales occupations (243-302)	14.7%
		- Executive, administrative, and managerial (000-042)	11.6%
		- Precision production, craft, and repair (503-702)	10.5%
	Waggaman	- Administrative support, and clerical (303-402)	15%
		- Precision production, craft, and repair (503-702)	13%
		- Service, except protective and household (433-472)	12.1%
		- Sales occupations (243-302)	11.8%
		- Professional specialty occupations (043-202)	10.4%
	Avondale	- Precision production, craft, and repair (503-702)	20.7%
		- Administrative support, and clerical (303-402)	18.8%
		- Sales occupations (243-302)	10.4%
	Bridge City	- Precision production, craft, and repair (503-702)	17.4%
		- Administrative support, and clerical (303-402)	14.6%
		- Service, except protective and household (433-472)	13%
		- Sales occupations (243-302)	12.3%

As seen in the table above, there are differences between the commonly-held occupations in the West Bank Jefferson of Jefferson Parish, and the Barataria region of Jefferson Parish. Farming and fishing occupations were more common in the Barataria Region communities than in West Bank Jefferson. Administrative support, executive/administrative, professional, and service occupations are more common in West Bank Jefferson than in the Barataria Region adjacent to the Barataria Preserve. While administrative support is the most common occupation in West Bank areas adjacent to the Preserve, those West Bank areas further from the Barataria Preserve have either precision production, administrative support, or professional specialty occupations as most common.



3.3.2 Comparison of Five Jefferson Parish Census Tracts

The five census tracts profiled here are within Jefferson Parish and border the Barataria Preserve of the Jean Lafitte National Historical Park and Preserve. The census tracts capture areas outside the towns named above: An example is Crown Point, which is not a Census Designated Place, but is considered a distinct community by Jefferson Parish residents, and is part of one census tract. In some cases the five census tracts include parts of the communities described above, and thus the information presented in these two sections overlaps, and is described in terms of different boundaries.

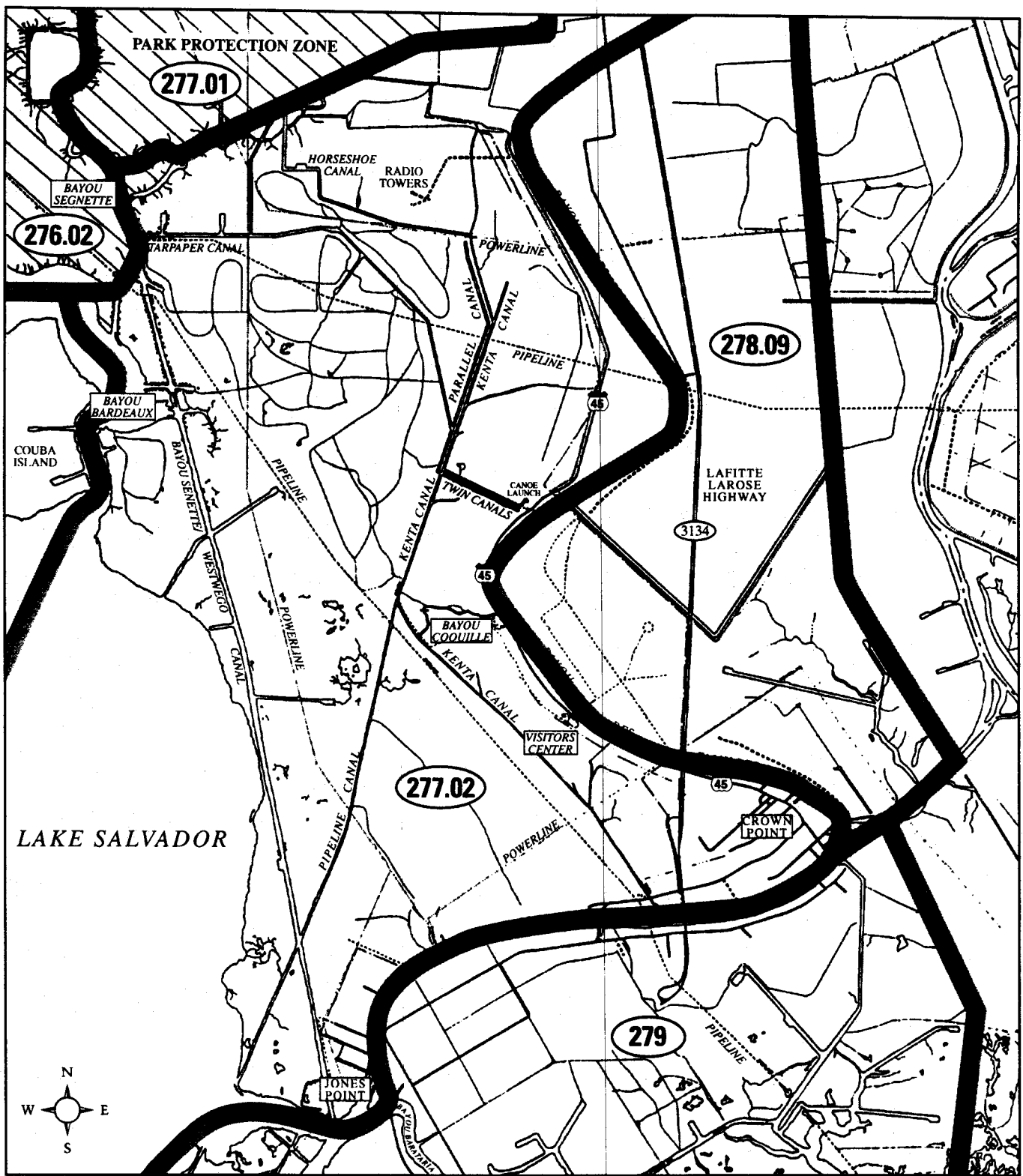
Census tract 277.02 is bordered on the north by Bayou Boeuf-Milladoon Canal, on the East by Bayou des Famille, Bayou Segnette, Bardeaux and Lake Salvador shoreline, and on the south by Bayou Barataria. It encompasses Crown Point, Isle Bonne, and most of the swamp and marshland area of Barataria. The land area of this tract is 54,958 square kilometers (21,219 square miles), with a water area of 28,960 square kilometers (11,181 square miles).

Census tract 278.09 includes area east of Bayou des Famille, south of Pritchard Road/Canal, west of Pipeline Canal and north of Bayou Barataria. It includes a portion of the Barataria Preserve, such as the upland area and the Plantation Loop Trail, as well as some of the subdivisions in the north. It has a land area of 24,141 square kilometers (9,321 square miles), and a water area of 391 square kilometers (151 square miles).

Census tract 279 is bordered on the north by Bayou Barataria and Bayou Villars, on the east by the Plaquemines-Jefferson Parish boundary, on the south by Grand Isle and the Gulf of Mexico, and on the west by Lafourche Parish. This is the largest of the three main census tracts, and has a land area of 373,893 square kilometers (144,360 square miles) with an even larger water area of 488,933 square kilometers (188,777 square miles).

Census tracts 277.01 and 276.02 include portions of the Park Protection Zone, and the northern portion of these tracts includes residential areas of West Bank Jefferson. Tract 277.01 has a land area of 18,912 square kilometers (7,302 square miles) and a water area of 531 square kilometers (205 square miles); tract 276.02 has a land area of 32,911 square kilometers (12,707 square miles) and a water area of 9,568 square kilometers (3,694 square miles).



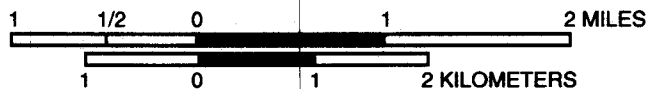


BASE MAP SOURCE: NPS 1989 (FROM USGS AND USC&GS DATA)

CARTOGRAPHY COURTESY OF KEA ENVIRONMENTAL, INC.



1990 CENSUS TRACTS



JEAN LAFITTE NATIONAL HISTORICAL PARK AND PRESERVE BARATARIA PRESERVE LOUISIANA

Comparison of Select Variables in Five Jefferson Parish Census Tracts Bordering the Barataria Preserve					
Census Tract	Land Area kilometers	Water Area kilometers	Population	Number of Households	Median HH Income
276.02	32,911	9,568	4,204	1,304	17,433
277.01	18,912	531	6,139	1,622	23,433
277.02	54,958	28,960	8,215	2,436	29,566
278.09	24,141	391	5,707	1,660	29,577
279	373,893	488,933	5,586	1,943	19,844
Total 5 tracts	504,815	528,383	29,851	8,965	N.A.
Jefferson Parish	792,350	871,529	448,306	166,398	27,916

Service occupations, administrative support, and precision production are among the most common occupations, and not surprisingly, the two census tracts with a higher percentage of people in executive and professional specialty occupations also have a higher median household income.

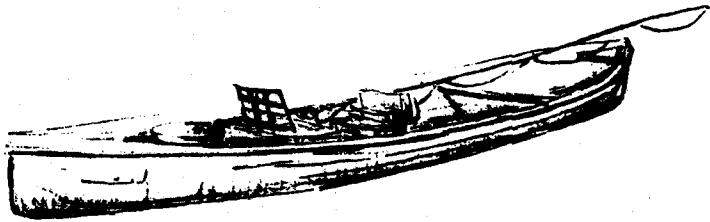
Occupations with 10% or More of Tract's Employees Comparison of Five Census Tracts in Jefferson Parish Bordering Barataria Preserve			
Census Tract	Occupation	Number of Employees	% of Employees in Tract
276.02	-Service occupations, except protective and household	269	17.5%
	- Administrative support, including clerical	238	15.5%
	- Precision production, craft, and repair	219	14.3%
	- Sales occupations	170	11.1%
	- Machine operators, assemblers, inspectors	165	10.7%
277.01	- Administrative support, including clerical	449	19.7%
	- Service, except protective and household	395	12.8%
	- Precision production, craft and repair	247	10.8%
277.02	- Administrative support, including clerical	608	19.7%
	- Precision production, craft, and repair	519	16.8%
	- Professional specialty occupations	332	10.8%
	- Machine operators, assemblers, inspectors	314	10.2%
278.09	- Administrative support, including clerical	457	18.2%
	- Precision production, craft, repair	448	17.9%
	- Sales occupations	319	12.7%
	- Executive, administrative, managerial	252	10.0%
279	- Precision production, craft, repair	336	16.3%
	- Handlers, equipment cleaners, helpers, laborers	236	11.5%
	- Administrative support, including clerical	221	10.7%
	- Farming, forestry and fishing	220	10.7%



Census tract 279, which stretches all the way to the Gulf of Mexico, has the most people in farming, forestry and fishing occupations.

Farming, Forestry, and Fishing Occupations: Comparison of Five Jefferson Parish Census Tracts			
Jefferson Parish Census Tract	Number of People in all Occupations	Number of People in Farming, Forestry and Fishing Occupations	Percent of Tract Population in Farming, Forestry and Fishing Occupations
276.02	1532	13	0.85%
277.01	2280	49	2.1%
277.02	3079	31	1.01%
278.09	2505	12	0.48%
279	2056	220	10.7%
Total	11,452	325	2.84%

4.0 CONTEMPORARY TRADITIONAL USE OF THE BARATARIA PRESERVE



In this section, contemporary traditional uses of the Barataria Preserve are described and analyzed. The topics covered in this section include: (1) an overview of contemporary traditional use in the Preserve; (2) inherent conflicts between the concepts of 'preserve' and 'traditional use' as applied to the Barataria Preserve

context; (3) information on landscapes and local perceptions of the Preserve; (4) contemporary extractive traditional uses of the Preserve; (5) access and occupation issues associated with traditional use; (6) traditional use in the context of other community attributes and activities; (7) the relationship between tourism and traditional use in the Barataria Preserve; (8) contemporary American Indian use of the Preserve; (9) ceremonial or religious traditional use; and (10) public input recommendations.

4.1 OVERVIEW: TRADITIONAL USE IN THE BARATARIA PRESERVE

The Barataria Preserve, unlike some other parts of the National Park system, was not a 'pristine' environment at the time it came under the management of the National Park Service. That is, the area was not set aside as a Preserve to keep the landscape from being altered by human activity. As noted in the review of the literature on the area, the landscape of the Preserve today is shaped, to a large degree, by the human activities that have taken place on that landscape, including logging and oil related activities, each of which had canals dug to facilitate the resource extraction, and various agricultural uses including the raising of various crops and the grazing of cattle (which changed the landscape in other ways), to name a few. As noted in the summary of this document, this situation was summed up by one person contacted for this project who noted that, in their words, "Barataria is a cultural landscape, not a wilderness."

One of the pitfalls to be avoided in a study of traditional use is a tendency found in both the literature and 'live' sources (e.g., during some interviews) to romanticize some types of past use over others, or to include some uses to the exclusion of others. As stated earlier, the Barataria Preserve was the site of many types of resource based activities over time, only a small subset of which are carried on today. Among the array of past uses that have taken place on the Preserve, some of those uses have been carried forward under NPS stewardship in the form of traditional use activities.

In a way, the present management of the area as a preserve is but the latest in a series of uses, each with a different strategy or set of goals and purposes. In the words of one interviewee: "there are thousands of cultural features in the [Barataria Preserve] unit . . . there have been a lot of different land uses over the years. The park [Preserve] is just the latest chapter." It is important to recognize



that management of the area that is now the Barataria Preserve under the Park Service is not management by 'turning back the clock' to any particular point in the history (or prehistory) of the area but, rather, brings with it a set of ideas and expectations along with its Park Service affiliation. This makes the analysis of contemporary traditional use within the Preserve a complex undertaking. Indeed, as will be discussed, the Barataria Preserve, as it is managed, is neither restoring a set of traditional uses of the past, nor is it preserving unchanged traditional uses that were in place at the time of its formation. (Indeed, one of the primary reasons behind the formation of the Preserve was to put a stop to some existing, i.e., in a sense 'traditional,' land uses, in addition to preventing further development of the area.) 'Traditional use' is a dynamic set of human-resource interactions that have changed through time and continue to do so.

Though definitions vary, for the purposes of this report, traditional use in the Barataria Preserve may usefully be thought of as contemporary use that features a continuity with the past in one or two ways:

- Sociocultural continuity
- Activity continuity

Sociocultural Continuity may be thought of as those uses that have continued through time that are identifiable with specific groups of people and distinct cultural systems. This aspect is implicit in the definition of traditional use when multi-generational depth of traditional use is discussed, and in which the Park Service has shown particular interest.

Activity Continuity may be thought of as uses of the area that have continued through time that may or may not be associated with specific groups of people and distinct cultural systems. For example, there may be individuals or families who are 'doing' the same things as others (engaged in the same activities in the same place – such as deer hunting, to take a specific example) but who may not have the same local generational 'depth' as members of other families.

There are several other difficult issues to deal with regarding the 'meaning' of traditional use on the Barataria Preserve. While one can draw precise (and legal) distinctions between recreational and non-recreational uses, in life as lived in the area, this distinction is not always clear. That is, non-recreational, or 'traditional' or 'customary' or 'personal use' or 'subsistence' use of resources tends to blur with 'recreational' use of resources when examined on an individual case basis. For example, an individual may take deer from the Barataria Preserve under sport hunting regulations and thus this is a 'recreational' activity by definition, however, the ultimate 'meaning' of the actions have to do with how the knowledge of the landscape and the game used in the hunt were obtained, the uses to which the harvested animal is put, and so on. While there is a body of literature on this subject, and the issue is far too complex to be fully explicated in this report, it is important to note early on that whether or not an activity is considered a 'traditional use' or a 'recreational' activity (by locals) is not always directly related to the regulatory distinctions between the two.



Further, the notion of 'traditional use' for consumptive resources being linked to 'dependence' upon those resources is a relationship inherent in some discussions of traditional use, but may have little relationship to contemporary traditional use. That is, in discussing traditional use with both preserve staff and local residents, a number of individuals entirely dismissed the idea of traditional use as a viable way of thinking about activities that take place within the Preserve today, as there are few, if any people, dependent upon those resources, or the proportional contribution of those resources, to their 'making a living.' Others felt that the idea of dependence should have little to do with any analysis of traditional use for, in their minds, the 'tradition' of traditional use has more to do with the ability (or exercising the ability) to engage in such activities, independent of dietary or economic dependence upon such activities. Again, there is no 'right' answer to what traditional use is in terms of dependence. Here it is important to note that interviews suggest that few, if any, individuals or families are dependent upon the resources that are taken from the Preserve; on the other hand, there is evidence that the tradition of having access to those resources (both on and off the Preserve) is indeed very important to the way local residents think about their way of life and their relationship to their immediate environment and heritage.

Additionally, it is important to recognize that there are activities on lands within the Preserve, but not owned by the NPS, that have an impact on the Preserve itself. For example, there is a dense clustering of camps on City of New Orleans lands in the Preserve from which people access Preserve resources. It is also important to recognize that while the focus of attention on traditional use of the area that is now the Preserve tends to be clustered around the small communities to the south of the Preserve (i.e., Crown Point, Lafitte, and Barataria), the area was also regularly used by residents of the communities to the north, or those known as 'up front' in local terminology (e.g., Westwego, Harvey, Gretna, and Marrero). It is perhaps because these latter communities are now seen as part of the sprawl of the 'Westbank' portion of the greater New Orleans area that they are less associated with traditional use of the Preserve than the former communities. Along this same line, it is interesting to note that the Preserve itself has helped the communities to the south retain their own identities and 'separateness' from the urban and suburban sprawl, as will be developed in a later section, and is seen by some residents of those communities as being an integral part of those communities maintaining their traditions and ways of life.

It should also be noted that specific community 'identity' in this area has not been fixed through time. For example, according to interview data, the name Lafitte was a generation or two ago commonly applied to the settlement in the area to the south of present location of Goose Bayou bridge; the area which now includes the incorporated town of Jean Lafitte was known as Barataria. Today, the area commonly referred to as Barataria is across the bayou from the town of Jean Lafitte. Depending on who is talking, and the situation, the settlement along Isle Bonne road may be lumped with or differentiated from the larger settlement cluster in the Crown Point area. In the words of one resident,



As for community identity, down here it is like one community. If you are up in New Orleans, you say you are from Lafitte. If you are down here, you are more specific . . . There really aren't rivalries between Lafitte, Barataria and Crown Point . . . People are all related down here in the different communities . . . The rivalry is between Lafitte and 'up front.' People from 'up front' come down here, and think they can tell us what to do. There is [a specific] bar [where] there are fights between people from up front and people from Lafitte because of the attitudes.

One resident of the Isle Bonne area noted with some humor that "here we have a Marrero address, a Lafitte phone number, and we live in Crown Point." It may be inferred from interview data that the 'distinctness' of Crown Point, Barataria, and Lafitte have grown to be of lesser importance through time, and that people have come to see the area and its various settlement clusters as having more in common than they do differences (although, clearly, recognized differences remain). This would appear to be a function of the changes in ease of access through time, homogenization of the economic base, and a common school system, among other factors.

In terms of political organization, the area south of the Barataria Preserve encompassing Crown Point, Lafitte, and Barataria is part of the Sixth Ward of Jefferson Parish, and there is a watchdog agency/civic association for the area known as SWAP -- the Sixth Ward Association for Progress. This group was formed, in part, to lobby for the area at the Parish level because, in the words of one interviewee, the Lafitte area is considered 'the stepchild of Jefferson Parish.' Another unifying entity for the area is the local volunteer fire company which has stations in Crown Point, Lower Lafitte, the Village, and Barataria.

There are environmental differences between the different settlement areas, and the different areas have grown at different rates over the years. Barataria has seen a distinct spurt of growth in recent years, as has the area of Lafitte closest to the Preserve along Bayou Barataria. During interviews, individuals noted differences in the suitability of different areas for development and noted that some areas perhaps should not have been developed because of the type of land upon which housing was constructed and the location of development with relation to an adequate levee system. It is interesting to note, from the perspective of traditional use analysis, that there was evidence from a specific interview of differences in attitudes toward different landscapes between persons from the different communities based on environmental differences. During one interview, a woman characterized Crown Point, where she grew up, as a 'dry woods' area, and this was the reason that she did not 'take to' or enjoy utilizing the swamp and marsh areas when she subsequently moved to the Isle Bonne area. How widely shared this type of distinction is -- varying comfort levels with the different environments of the region based on where one grew up in a relatively bounded area -- is unknown.



4.2 INHERENT CONFLICT BETWEEN 'PRESERVE' AND 'TRADITIONAL USE'

If 'traditional use' is taken as meaning, in part, use as practiced at the time the area became the Barataria Preserve, then there is an inherent conflict between those uses and the goals of the Preserve. That is to say, according to interview data, one of the very reasons the Preserve was created was the perceived overuse or abuse of the natural resources in the area that is now the Preserve, and the desire to bring about change to reverse some of the damage caused by the existing patterns of use.

In numerous interviews, local residents mentioned that one of the things they most valued about the area having become a Preserve was the fact that the area was 'cleaned up' and was now well maintained. According to interview data, the area pre-Preserve was not infrequently used as a dumping ground (typically blamed on people from outside the immediate area), and even as a place for the disposal of evidence of criminal activities -- including, even, the bodies of crime victims themselves. While this is an extreme example, it was cited by people as being among the changes brought about by having the area declared a Preserve and having NPS resources devoted to enforcing both criminal law and to maintaining the environment. While many of the changes are seen as positive, there are also changes that have been negatively perceived.

It was also clear from interviews with Preserve staff, as well as from interviews with members of the public, that there have been differences of opinion over the years on the part of Preserve staff with respect to the desirability of the continuation of at least some traditional use practices within the Preserve. As an example, in interviews it became clear some staff have personal opinions that it would be desirable to have the Preserve be a no-take area, more consistent with other parts of the National Park system. Also from interviews, there are members of the public who hold the idea that consumptive use of resources is inconsistent with what should be the overall goals of the Preserve, and specifically raised the issue of hunting in combination both with other uses of the Preserve (e.g., for the safety of those who come to the Preserve to see wildlife) and with respect to the overall 'purpose' of a Preserve as they see it (e.g., to preserve the area in as 'natural' a state as possible, without the influence, or continuing influence, of direct human resource use in the area).

This inherent tension between 'Preserve' and 'Traditional Use' also finds expression in the discussion of what constitutes the 'tradition' in traditional use. There are those who stated during interviews that use of motorized vessels and modern firearms for hunting is not a 'traditional' use (that is, their definition of traditional would be more akin to 'pre-industrial technologies' use than is utilized under current interpretations). There are others, at the other end of the continuum of traditional use definition, who see 'tradition' as being whatever was in place before the Preserve area came under NPS auspices (with, perhaps, some exceptions -- but the main point being what is 'traditional' is what was practiced, not what is linked to a particular ideology of appropriateness of various levels of technology of resource use). To some degree this is a confounding of the notions of 'traditional' uses as defined by the Park Service (uses that have endured for at least two generations) and 'customary' uses (uses that may have been common, but lack intergenerational depth), but the debate is not limited to that dimension, as 'modern' (and, to some, 'non-traditional') technology has been used for at least two generations. This debate is not unique to the Barataria Preserve, or even to the



National Park Service as a whole but, rather, is being played out in various resource management agencies throughout the country. Carried to its logical extreme on the one side of the argument, customary or existing uses prior to NPS oversight is one of the very reasons the Preserve was created -- existing conditions, including multi-generational practices, were creating a deteriorating environment (and planned uses reportedly included large scale development and dramatic environmental alteration in some areas).

It should also be recognized that there is an organizational culture within the National Park Service that influences staff perspectives with relation to local uses. That is, guidelines explicitly permit hunting and other consumptive uses in preserves, and some activities, such as fishing, in parks. Indeed, about 150 NPS units -- parks, seashores, preserves, recreational areas -- have fisheries that support recreational fishing; fishing might also contribute to subsistence in some rural and urban parks (Crespi 1998: personal communication). During interviews with staff, however, several individuals noted that some consumptive uses, and hunting in particular, was, from their individual perspective and previous service experience, seemingly somewhat at odds with the other management goals for the preserve. (How wide-spread such views were was not explored, and although an ideology of non-consumptive use might tend to characterize natural resource management, the actual NPS practices often diverge from that view.) As individual staff members come to be assigned to the Barataria Preserve from other parts of the National Park Service, attitudes and understandings at odds with the local desirability of continuing traditional consumptive uses may come with them. During interviews, some local residents made comments to the effect that staff rotates in from elsewhere and, after staying for several years and coming to learn the ways of the area, rotate out again. While this may be an inherent feature of federal employment (at least for some types of positions), there were also some interviewees who felt that it would be more appropriate to have local individuals in management positions in the Preserve. Again, this type of sentiment is not unique either to the Barataria Preserve, or the Park Service as a federal land/resource management entity, where there is a balance to be struck between the recognition that the natural resources that are under national stewardship also have a place in the local sociocultural/socioeconomic system, and that the local communities have a special relationship to those 'national' resources based on traditional and continuing associations.

4.3 THE LOCAL CONTEXT OF THE PRESERVE: LANDSCAPES AND PERCEPTION OF THE PRESERVE

The landscape of the Barataria Preserve, while striking, is not all that different from other undeveloped land around it, according to local residents interviewed, in the sense of having unique types of features. That these are concentrated in one area, of course, is important, but interview data suggest that having the area become part of the National Park system in and of itself caused some local residents to think differently about the landscape. In the words of one lifelong resident:



The landscape in the park is about the same as around [elsewhere around] here. Everybody sees it. It's just that when somebody thought enough of it to make it into a national park, you start going 'oh, I have that in my yard and it's really important?' It makes it easy to teach the people from around here -- and believe me, it is hard . . . It is good for people to see. They needed to learn about it a long time ago, but at least now they are waking up to it.

It is also critical to note that while the Preserve may not contain landscapes that local residents consider particularly unique, there is the recognition that similar natural landscapes in the area are disappearing, through continuing development. In other words, the Barataria Preserve may not be recognized as terribly important for the uniqueness of particular features, at least in the minds of many locals interviewed, it is clearly valued as a seemingly stable part of a changing landscape. Of course, the landscape within the Preserve is not stable, with lands being lost to erosion at an alarming rate along Lake Salvador, and more subtle changes are taking place as well, but the notion of stability is a relative one, and in relation to changes seen on other lands in the area, the Barataria Preserve represents a piece of the landscape on a different trajectory than areas around it due to Park Service stewardship.

Many people during interviews noted how much more attractive the Barataria Preserve area has become since the creation of the Preserve. With this clean-up has come enforcement, which for the people living adjacent to the Preserve, is seen as a double edged sword. On the whole, however, law enforcement resources associated with the Preserve are credited by local residents with improving the quality of life in the area, which is not to say there are not frictions with individual residents who have not established good relationships with Preserve personnel for whatever reason. For some residents, the law enforcement side of the Preserve is an irritant, as they do not feel, for example, that it should be the role of Park Rangers to issue traffic citations to local residents. The relationship of this type of interaction to traditional use issues is that general relations with Preserve personnel spill over into attitudes regarding resource utilization specifically. That is, during interviews there were some local residents who stated that they specifically did not use resources from within the Preserve simply because they did not want to deal with Preserve 'bureaucracy.' It should be unambiguously stated that there are Preserve personnel who have established good relationships with local residents and are well respected for their efforts. One complicating factor in local relationships is the fact that, as part of the National Park Service, the personnel who staff the Preserve may be, and often are, from other parts of the country. This feeds into the sentiment held by some local residents that the Preserve is managed by outsiders for outsiders (tourists/visitors). (Some interviewees even expressed this in North-South rhetorical terms; distinctions based on the Civil War [or, as some locals would prefer, the War Between the States] have not faded entirely in this area. In the words of one older resident: "[I] wish the Park would go away, and those people would go back up North . . . [the] park is not for us, it is for people from up North.")

One other factor noted during the interviews with respect to the impact of the Preserve on the landscape of the area was the role of the Preserve in the health of the wildlife populations of the area. According to interviews, it is not uncommon to see more wildlife now in the Preserve area than before it was a Preserve, and this has a positive 'spillover' onto adjacent lands. That is, the health



of the wildlife populations based in the Preserve are perceived as having a positive impact on wildlife in the area in general.

4.4 CONTEMPORARY EXTRACTIVE TRADITIONAL USES OF THE BARATARIA PRESERVE

There are a number of contemporary (or very recent) traditional uses of the Barataria Preserve that involve the 'extractive' use of resources. These uses include consumptive uses of edible resources, and non-consumptive use of resources for economic gain (e.g., trapping for furs) or a variety of other activities (e.g. use of plant materials for fabrication of a variety of items). Today, consumptive use of resources would appear to be the most common of the extractive uses, based on interview data. Among the current (or very recent) extractive resource uses in the Preserve would be:

- trapping
- hunting
- fishing
- plant gathering

Each of these will be discussed in turn. It is important to note early on, however, that although there are a number of 'resource extractive' traditional uses of the Barataria Preserve that continue today, none have remained unchanged since prior to the formation of the Preserve. This is true for a number of reasons. These include: changes that accompanied the formation of the Preserve itself; changes that have come about regarding resource management in general more or less independent of the Preserve status of the specific area; and, changes in the place of local resource use in the lives of local residents in general.

The context of the local resource use, including the natural environment of the area and the human population of the area, has not been without change. People engaged in traditional use on the Preserve area have combined these activities with other ways of making a living, or piecing together a way of life, that includes the use of local resources, and ways of life have changed for a variety of reasons. Where traditional use has involved the extractive use of resources, regulatory and management change within the Preserve has not taken place in isolation either -- the regulatory and management environment has changed within the Preserve as well as outside of it. Where resource use intersects with the commercial economy, broad economic changes have changed specific local uses. All of this is to say, by way of introduction, that traditional use is not an unchanging aspect of local life. As will be developed in this section, some traditional use still occurs on the Barataria Preserve, but the content of that use has seen dramatic change over time that may or may not be related to Park Service stewardship of the area, depending upon the type of use and the time period involved. There are also those long time local residents who feel that although regulatory intent is not to discourage traditional uses, the actual consequences of regulation have channeled resource use away from traditional use methods and more toward a 'sport' take of resources. This idea will also be developed in this section. In the words of one older man who used to trap in the Preserve area: "The Park [Preserve] benefits the younger generation -- not the older people with the old ways."



4.4.1 Trapping

Trapping is perhaps the quintessential 'traditional use' thought of when persons were asked about traditional uses of the area that is now the Barataria Preserve. At the time of the fieldwork for this report (1996-1997), however, there was no trapping taking place in the Preserve. While this was a common use of the area in decades past, there were two primary and several secondary reasons cited during interviews regarding why there is no current use. The first of the main reasons was the price of fur. This was by far the most common reason cited -- that the demand and price for fur had dropped to the point that trapping was no longer a worthwhile undertaking. The second reason cited for the Preserve specifically was that some individuals felt there was too much 'red tape' or restrictions placed on trapping within the Preserve compared to other areas. This was not a common observation, but was put forward by more than one individual. Clearly the economics of trapping were much more important in individual's decision making processes, but it does provide perhaps some insight on why at least some level of trapping is taking place on other lands but not within the Preserve itself.

Secondary reasons given during interviews for the lack of trapping on the Barataria Preserve at present include the availability of alternate employment, the physical rigors of trapping, and the uncertainty of income associated with trapping. A number of individuals noted that one of the reasons that trapping was pursued in this area years ago was that there was a lack of other ways to make a living for people in the area. They noted that trapping is hard work, and with an uncertain economic outcome, so when other work is available, there are easier and more predictable ways of making a living. It was noted by several interviewees, though not in so many words, that there was an inverse relationship between trapping and education, in a couple of ways. First, when families trapped (and lived out in the trapping areas), children did not receive a formal education as they did not attend school during the trapping season, and it was not uncommon for such children to not complete their education. Second, trapping was a way that a person without a formal education or vocational training could make a living, so that individuals who may have found themselves at a competitive disadvantage for what few job opportunities may have existing in the area still could support themselves and/or their families.

Accompanying the change in trapping has been a change in related uses of the landscape within the Preserve. According to interview data, trappers altered the landscape in two primary ways: through the digging of trenasses, or small access waterways, to and through trapping areas, and by means of annual burns of plant materials on the 'prairie' (a local term for grassy marsh area; also pronounced 'plarie') section of what is now the Preserve in the belief that this made for better habitat for the desired species. Both of these activities have ceased on the Preserve (though the Park Service itself has cleared at least one trenass for canoeing). In terms of traditional use practices of trapping, Park Service stewardship has changed the landscape from those alterations created, and perpetuated, by traditional use. Local long term residents who utilize, or used to utilize, the Preserve for a variety of purposes often did not feel neutral about the cessation of these trapping related activities. While people who trapped the area felt that burns rejuvenated the marsh and brought this up during interviews, more people brought up the subject of the waterways, including the trenasses, that have



been allowed to fill in. Trenasses were used by hunters as well as trappers, and a number of individuals felt that allowing parts of the network of waterways within the Preserve to clog effectively cut off use (either 'traditional' or 'recreational' use) of some areas, or at least has made access difficult.

According to interview data, there are only two surviving individuals who lived full time, and made a living as adults (economically supporting their families), off of the land that is now encompassed by the Barataria Preserve. Both of these individuals were interviewed for this study. Their lives have spanned the era of exclusive economic dependence upon trapping within the Preserve area to an era of no trapping whatsoever. Today, trapping is regulated, but not prohibited within the Preserve. In fact, a level of trapping is desired for wildlife management purposes, particularly for nutria, a non-indigenous animal that is considered both a competitor to native fauna species and destructive to the native flora of the area. That the Park Service could not locate any individual willing to trap the Preserve during 1996-1997 is an indicator of just how much the place of trapping has changed in the local economy and way of life.

According to interviews, how people fared trapping varied widely over the years. Some years, people made more money trapping than they did trawling (the other main economic activity for many individuals in an era when varying activities with the seasons was essential for 'piecing together' a living, and today an activity that is many, many orders of magnitude more economically important than trapping). But although conditions could feature a season, or even a number of years when trappers could be relatively well-off from their pursuits, a common feature of trapping was that trappers were not land owners -- the land owners received a percentage of the income from the furs that were trapped on the land. In the words of one person who spent part of his childhood each year in a trapping camp:

You see what they used to do, the people that owned the most land used . . . to trap off percentage. They used to set them [the trappers] up with a little camp . . . and let them trap for them. Hell, they [the trappers] had no land. They had no food. So they used to go for that. And the man that owned the land, the landowner used to make the money. The poor man that was trapping and working and had make [a living to support] three or four kids, maybe six kids. When the season was over, he's no further ahead and when the season starts, he was in the same boat. No matter how much [musk]rats he caught because if the percentage was so little, you know.

According to other interviews, people could also get themselves behind by 'being advanced' supplies for the trapping season by the land owner, and then if the season were poor, be stuck with an unfavorable balance between trapping income and what was owed for the supplies (similar to situations in other parts of the country where miners could end up owing the 'company store' more than they made in wages). In sum, trapping was not only hard work with returns subject to the volatility of the fur market, there were other aspects of the arrangement that often worked against the economic interests of the trapper in terms of risk taking versus investment. Percentage arrangements between landowners and trappers are still apparently common in those areas outside



the Preserve that are still trapped today, although straightforward leasing is also practiced (and apparently was in the past as well by individuals who could afford to enter in such arrangements).

For the purposes of traditional use analysis for the Barataria Preserve area, it is simply important to note that traditionally trapping in the area involved a dynamic between trappers and landowners that is quite different from the arrangements that would be the case if trapping were pursued on the Preserve today. That is, while it may appear that recent trapping activities on the Preserve represent a continuity in activity to the past, the sociocultural context of trapping on the Preserve has changed to the point where it departs markedly from 'traditional' arrangements and relationships between participants.

There is at least one individual in the area who lives in a camp just outside of the Preserve area and still traps as a part of a 'subsistence' lifestyle, combining trapping for both food and income with other wage employment. While this individual does not currently trap the Preserve, this person has done so in the recent past. This individual appears to be an exception, if not a singular exception, to the changes seen in trapping in recent years. This individual noted that it is getting ever harder to trap the Preserve, because of the landscape changing with the filling in of the trenasses (which, to a degree, would appear to have shifted the focus of trapping away from trenasses, which require active maintenance, to levees, which do not):

[There are areas] you can't use motorized vehicles. So, what I would have to do is run my boat up on [a] levee -- I would bring my pirogue and work the trenasses, but then the trenasses started getting clogged up and you can't work them and can't get in them. So, more or less, I started -- instead of going further out, started working just the levee, inland. You only walk out so far and you can work and then you have to drag your nutrias back. You can't skin them in the field and leave the carcasses. You have to drag them all the way out and skin them. So, when you start getting four and five big nutrias -- I used to put them in my fingers and you drag them, then you start going down. Then, if I jumped trenasses, I've got to throw them over the trenass and then I've got to jump the trenass. So, it's more and more work.

In sum, the nature of trapping on the Preserve, when it was recently pursued, has changed to the point of it being a significant departure from traditional use. (As developed in the discussion of 'camps' in a later section, the seasonal migration cycle has also changed in the area, with there no longer being a need to live as close to the resources being harvested in the past.) Further, changes in the way the landscape is now managed would appear to be pushing 'traditional' trapping further into the past.

4.4.2 Hunting

Hunting takes place on the Barataria Preserve, though the species hunted, the locations hunted, and the seasons hunted, all vary to greater or lesser degrees from times past. In terms of traditional use, hunting is an area where the line between 'traditional' and 'recreational' is not all that clear in a



number of cases. If the traditional use aspect of hunting is dependent, at least in part, on a distinction from sport hunting, based on a notion of 'dependence' upon game, then Preserve management itself has changed the position of hunting within the Preserve area along that continuum. That is, management under Park Service auspices has changed the way the area that is now the Barataria Preserve is hunted, and one could characterize the shift as being toward 'sport' type hunting and away from 'subsistence' type of hunting, at least along some dimensions. Among the changes have been: (1) the areas hunted; (2) the species hunted; and, (3) the seasons hunted. These will be discussed in turn, following a discussion of the level of hunting effort seen in the Preserve.

Hunting Effort

In terms of overall numbers of hunters as a measure of hunting effort, the Park database shows some fluctuation in the number of permits issued recent years, as displayed in the following table. For example, during the period 1991-92 through 1997-98, there is a 43% difference in effort (as measured by the number of permits issued) between the year with the fewest hunters (1994-95) and the year with the most hunters (1991-92). However, there is not a clear directional trend over time.

Number of Hunting Permits Issued, Barataria Preserve 1991-92 through 1997-98							
Year	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
Permits	415	354	379	290	384	413	391
Source: Jean Lafitte National Historical Park & Preserve hunting database.							

The utility of these numbers is limited, however, due to the fact that 'intensity' of hunting varies widely between hunters (i.e., some hunt vigorously over the course of a season, while others hunt only sporadically). Total hunter days (that is, the cumulative number of days hunters actually hunted in the Preserve, as measured by daily registration) have been calculated for a few recent years. From 1993-94 this figure increased from 667 hunter days, to 821 hunter days in 1994-95, to 907 hunter days in 1995-96. This would indicate an increase in effort, by this measure, of 36% over this three year span. This roughly parallels the proportional increase in the number of permits issued over those same years.

The following table presents data on the number of deer harvested in the Barataria Preserve for the period 1985-86 through 1997-98. While these data show that there has been a general increase in the harvest over the period covered (e.g., the reported take for 1997-98 is over five times the take seen in 1985-86), success in harvest is not directly proportional to hunting effort. For example, in 1994-95, there was one deer harvested for every 8.5 permits; in 1997-98 there was one deer harvested for every 9.5 permits.



Number of Deer Harvested, Barataria Preserve 1985-86 through 1997-98													
Year	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98
Deer	8	6	7	8	20	12	40	18	22	34	32	45	41
Source: Jean Lafitte National Historical Park & Preserve summary harvest table for years 1985-86 through 1995-96, 1996-97 and 1997-98 taken from Jean Lafitte National Historical Park & Preserve hunting database.													

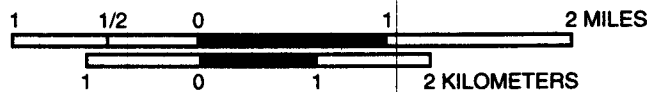
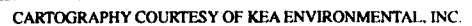
The individuals who obtain permits to hunt the Preserve come from a wide area, but there are marked concentrations of individuals from communities near the Preserve. In looking at the data from 1996-97, the most recent year for which hunter residence is available in the database, all hunters were from Louisiana. The following table provides a distribution by community.

Barataria Preserve Hunters, 1996-1997 Community of Residence			
Community	Number of Hunters	Community	Number of Hunters
Marrero	168	Metairie	8
Westwego	42	Luling	7
Lafitte	36	Waggaman	7
Gretna	35	New Orleans	6
Harvey	29	Avondale	5
Belle Chase	16	Kenner	5
Barataria	13	Terrytown	5
Bridge City	8	Other*	23
*No other communities had more than 2 hunters listed. Communities with 2 hunters listed included: Boutte, Chalmette, Des Allemands, and River Ridge. Communities with one hunter listed include: Alexandria, Ama, Boothville, Folsom, Franklin, Harahan, Houma, Jefferson, Larose, Morgan City, Port Sulfur, Slidell, and Venice. No community of residence was listed for 2 hunters. Total hunters = 413. Source: Jean Lafitte National Historical Park & Preserve hunter database.			

Areas Hunted

Today, the areas that are hunted within the Preserve are limited and well known (and designated on the map on the following page). This has had an impact on who hunts and how hunts are conducted.





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While one of the important points that came out in many interviews was that the overall vitality of the wildlife populations within the area of the Preserve had improved under Park Service stewardship, this is not to imply that the open areas are easily hunted. In the words of one long-time hunter of the Preserve area:

Now the hunting is good there [in the Preserve]. For deer hunting, it can be a lot of work. Some places you have to paddle for an hour, and then walk in on the flotant. It is different walking on that. In the woods, you walk where the plants aren't. On the flotant, you have to walk on the plants. If your foot subconsciously goes where the plants aren't, then you can get wet fast.

One long term resident noted that the landscape features tend to separate out local residents from non-local hunters. In his words:

You have a lot of local people that do hunt the park, but [others] come from all over the place. They come from Texas . . . [and other parts of] Louisiana . . . A lot of your marsh areas and wet areas where you allow the hunting is mostly your local people. In the wooded areas you will have foreigners -- I say foreigners, but [I mean] people from out of the district will come and hunt deer . . . They can't handle the marsh area -- the walking in the marsh like we can. We were born and raised in it so we know how to walk the areas -- how to walk on a piece of floating marsh to where you don't disappear, or you don't fall through it. It's got a lot of different things that you do when you walk through the marsh. It's like if its got a lot of grass areas, what you do is you put your foot sideways and you kind of push the grass as you walk to give you footing. You just don't walk straight ahead because you just go straight down. Just learning how to walk in it, [is] just like learning anything else.

There is also apparently some differentiation in hunting areas based on local knowledge of access. For example, there is some high ground in the Preserve 'behind' the developed area along Isle Bonne road (along Bayou Barataria, at the south end of the Preserve, north of Jones Point), and there is walk-in access to ground that is hunted there via trails that are known to locals but that do not appear on Preserve maps. At least some local hunters access this area via obtaining permission to park on private land in that area, and then walk in to hunt the public land.

Areas that are open for hunting are so designated, in part, due to safety considerations for other users of the Preserve. While this excludes hunting from certain areas, it is also important to keep in mind that the area that is now the Barataria was not open, unrestricted access to traditional users prior to the area becoming a Preserve. While hunting went on in areas that are now closed, parts of this land were hunted by persons trespassing on private property, and part was hunted on lands that were controlled by a hunt club (i.e., hunting was controlled by a membership based organization). In other words, the transition to a Preserve management regime did not unilaterally exclude private individuals from hunting what was open to them in the past; on the other hand, increased enforcement with the Preserve, and the designation of specific hunting zones has fundamentally changed the way the area is hunted.



One resident, recalling the way the part of the area that was controlled by hunt clubs, expressed his sentiments in the following way:

most of the deer hunting that was done [on what is now the Preserve] -- big deer hunting, was in these deer hunting clubs. And they would come in and take a bunch of dogs -- and that was the big thing they used to do every year. And people in this area didn't like [it] . . . the people from Harvey, Gretna, Marrero, they got the feeling that this was open land, before it was a national park, and they could come down here and do anything they wanted . . . But the deer hunting down here [by locals] -- like in back of Flemings [land] they used to do some deer hunting, and you had some outlaws, okay, that would deer hunt at night with lights. But the people here didn't hunt as much for sport. It was more traditional, you know, they hunted for the food. . . So, there aren't that many in this area that hunted for sport. They were from somewhere else back when the problem started -- when the sport hunters started coming here. Mainly, in other words, people from down here were, I guess, give the animal a sporting chance, too. The deer or whatever, you might get up in a tree and wait or make a stand in a tree and wait -- find a deer track, you hunting him and he's trying to avoid you. When you put a line of dogs, 20 or 30 dogs, that deer ain't got a chance because they are going to put people on the other end. And sooner or later, that deer is going to get to them. That was not the culture in this area. That was started by people from out of the area -- New Orleans, Marrero, Gretna, Harvey. They go, 'okay, we are going to go out this weekend and we are going to get a deer' because they were going to put them dogs out. And it was no challenge.

This quote serves to illustrate the point that existing conditions at the time of the creation of the Barataria Preserve were not such that the Preserve displaced 'traditional' hunting practices in the sense of a romanticized way of life with a natural system in equilibrium. It should also be noted that the use of dogs for various types of hunting was 'traditionally' practiced on the area that is now the Preserve, and all such uses, not just the type of mass hunting with dogs described above, is no longer allowed by regulation. One example of this is racoon hunting which does not take place on the Preserve (and in this example, it is against park regulations in several ways: it is practiced at night, and night hunting is not permitted; it involves the use of dogs, which is not permitted; and, racoons are not among the species open to hunting on the Preserve).

One individual who lives in a camp adjacent to the Preserve noted that the present regulations governing the deer hunt, with a daily check-in required at the Visitor Center, make it logistically difficult to hunt the Preserve for those who live on the water (i.e., in camps) at the northern end of the Preserve. It involves taking a boat to a dock, getting in a vehicle to drive to the check in point and then back to the boat, and then back by boat to the deer hunting area before dawn. According to this individual, there are others who have decided that because of the location of their camps, this effort is not worth it to be able to hunt in the Preserve.



Species Hunted

The species that may legally be hunted within the Barataria Preserve (deer, rabbit, squirrel [and sometimes wild hog -- a non-indigenous species that has been the target of a local eradication program]) are a subset of those species that were hunted in the past. In addition to the species that may be legally hunted in the Preserve, there are pragmatic considerations as to which species are actually hunted. In an example cited in several interviews with hunters, the imposition of no-hunting buffer zones around trails within the Preserve effectively closes off most of the uplands area of the Preserve to hunting. One traditional hunting use mentioned in interviews was walking the woods in the area that now contains the trail system and hunting for small game. This is a traditional use that has been closed off, at least on a subarea basis, with the effect being a change in the mix (or emphasis on the mix) of species hunted. According to one knowledgeable staff person, there are perhaps only two or three rabbit hunters per year at present, while squirrel hunting is more popular (one staff member estimated that perhaps 150 or so of the 400 some odd hunters hunt squirrel; interviews with long term residents suggest that the number of people from local families that take squirrel on the Preserve is much, much lower than that total). Given the trail buffer restrictions, there is only a relatively small habitat margin area where squirrels may be legally taken. According to one group of hunters interviewed, while you can legally hunt squirrels and rabbits in the Preserve, there are 'easier and better' places in the area to do so. The following table presents comparative data on species harvested for the most recent five years.

Comparison of Species Harvested, Barataria Preserve 1993-94 through 1997-98					
Species	Number Harvested by Year				
	1993-94	1994-95	1995-96	1996-97	1997-98
Deer	22	34	32	45	41
Squirrel	12	19	17	38	21
Rabbit	0	5	1	11	0
Source: Jean Lafitte National Historical Park & Preserve summary harvest table for deer harvest for 1993-94 through 1995-96. Other years and other species data taken from Jean Lafitte National Historical Park & Preserve hunting database.					

Deer hunting would appear to be, by far, the most popular hunting use of the Preserve, both by local residents, as judged from interview data, and by overall Preserve users as judged by discussions with Preserve staff. As popular as deer hunting is, however, there are perceived drawbacks in hunting the Preserve. None of the local resident hunters interviewed who hunted deer in the Preserve did so exclusively -- all hunted other areas as well. According to one avid deer hunter who normally hunts the Preserve several times during the season, he did not hunt it last year because "the [tree] stands



were too close together -- there were not too many people, but they set up too close to you." This points out a change in the way that deer are hunted on the Preserve as opposed to private lands. On private lands, one typically knows who else is hunting the land, and coordination is common. On the Preserve, however, according to some hunters, people do not always follow the local 'etiquette' of hunting, and impinge on the firing lanes of other hunters, or position their blinds in such a way as to intercept deer along runs identified by others (based on their prior stand placement) before they get to the stands of other hunters. Essentially this boils down to the differences between hunting with friends and hunting with others, in addition to having different understandings regarding what is proper field behavior.

From the perspective of traditional use, deer, then, are not hunted in the same way as they were before the area became a Preserve. In addition to changes in the way hunters interact with each other, it was not uncommon in the past to hunt deer at night, according to interview data, a practice now not permitted. As it was put in one focus group interview:

mostly it was night hunting before the park . . . [there] wasn't a season -- [it was a] subsistence hunt. [People] didn't hunt the area during the day. Day, that was traps [i.e., people trapped during the day and hunted at night].

In several interviews, people reported that individuals usually did not hunt in their trapping areas at all, as this would tend to scare off the animals that they were trying to trap. With regulation have also come bag limits, which were not observed in the past, according to interviews.

With the change in regulations, and more of an orientation toward 'sport' hunting, hunting patterns have changed in yet another way. According to one active hunter from a family that has been resident in the area for several generations, his father never shot a deer with antlers (a buck) because the meat is tougher and "you can't eat horns." Today there are designated 'antlered' and 'antlerless' deer seasons, with the antlerless season being a small subset of the antlered season (e.g., for shotgun hunting, antlerless season is open a single day, whereas antlered season lasts for approximately six weeks, spread across three different open periods).

It should also be noted that with Park Service management has come an archery deer season, which is somewhat of a paradox in terms of local traditional use. Archery, though a style of 'primitive' hunting [grouped in that category with black powder/muzzle loader hunting in sporting circles, both of which are gaining popularity across the country], is not a 'traditional use' type of hunting locally -- it was not commonly practiced over the past several generations. It is a relatively new addition to the hunting repertoire of the area, and is more of a 'sport' hunt (i.e., the goal of 'traditional use' or 'subsistence' type hunting normally is to efficiently provide for the taking of local wild resources -- that is, to put food on the table -- and does not typically include artificially disadvantaging the hunter through the intentional use of less efficient harvest technologies). While archery hunting may appear to be a 'traditional' type of activity, that resemblance is more apparent than real, both through a lack of continuity with past use and the fact that today's 'high tech' bows bear little resemblance to the type of tools used in the distant past. (It should perhaps be noted, however, that some individuals who consider themselves primarily 'meat' hunters rather than 'sport' hunters do archery



hunt, with archery being the only option for legally expanding their hunting season and thereby increasing their overall hunting effort. This would allow archery then to fit into the 'subsistence' view of hunting, but would still seem to fall short of a 'traditional' use in most senses of the term.)

Among the species commonly mentioned during interviews as being formerly hunted on the land that is now the Preserve are ducks and alligators. Both were taken prior to the area becoming a Preserve, and the taking of both are now prohibited. A number of local resident interviewees thought that the complete protection of alligators on the Preserve was no longer warranted because of the health of the local population, and the perception that there are healthy alligator populations elsewhere in the area. The prohibition on ducks is viewed with more ambivalence. In the words of one avid hunter:

There are a lot of wood ducks in the park. Priest [Kenta] Canal is on the flight path. They eat the acorns that fall into the water from the oak trees. You don't have migratory hunting in the park. Maybe that is good, because it would be OK if a few people did it, but if everybody did it, you might have a problem. It is probably good because you don't have enough ducks.

Others mentioned several other species of ducks that were also taken in the Preserve in former times. The crux of the problem, from a management perspective, is that if anyone is permitted to take a particular specie that others are not allowed to take, then you have opened up an exceptionally difficult enforcement situation. Turtles were also mentioned during interviews as a species that were taken in the past, and would be taken from the Preserve today, were it permissible to do so.

Seasons Hunted

Hunting within the Preserve is limited by season, with all hunting clustered into the period between late October and late January. Hunting is not continuously open during this time; shotgun season for deer does not begin until November; and, firearms hunting is only permitted during morning hours. For seasons where compiled data are available, hunting effort, as measured in hunter days, is highest at the start of the season and trails off in subsequent months. There are exceptions to this generality in the data for some years, but the overall pattern is consistent. (It is also interesting to note that for the years for which summary data have been compiled, the hunting effort on Saturdays is twice the effort on Sundays, and Sundays see approximately twice the effort of any weekday.)

According to interview data, prior to the area becoming a preserve, hunting seasons were not consistently observed, and there was a significant amount of poaching. Clearly, there is still poaching going on the Preserve (based on interviews with local residents, Preserve staff, and personal observation), but based on information from all sources, the level of poaching has decreased dramatically. (Ironically, some local residents thought that poaching, from the perspective of getting caught, was less serious on the Preserve than on private land, in that one could be in danger of personal harm from an outraged land owner, whereas the Preserve had professional enforcement staff.) According to a number of interviews, there is much more wildlife now than when the



preserve was created, simply because of better enforcement of hunting laws (in addition to the imposition of new restrictions). One hunter offered the opinion that if the area were managed under state rather than federal regulations, there would be a lot more hunting in the Preserve, such as hunting in the evening, and also perhaps on those few holidays when the Preserve is closed.

In putting the hunting within the Barataria Preserve into context, it is important to recognize that the changes in hunting that have occurred over the years on the Preserve have not been taking place in a vacuum. That is, there have been overall changes in the hunting in the area with changing land use patterns in the area around the Preserve. Interviews with hunters indicate that there is less land available for hunting now than in the past, due to several factors, among which are increasing residential development of former hunting land, and through the acquisition of hunting privileges on private lands by hunting clubs, to the exclusion of non-members who may have been able to arrange individual permission with landowners in the past.

One of the changes that may be anticipated to have taken place with the transition of the land from the private to the public domain with the creation of the Barataria Preserve would be an influx of hunters from outside of the area who would have a new entre to hunt public land. This, theoretically, could create competition between traditional users of the area and recreational users from outside of the area. According to interviews with local hunters, however, this does not appear to be the case. Rather, when the land was in private hands prior to it becoming part of the Preserve, portions of the land were less accessible to local residents than is presently the case. That is, having the land become public opened it up for both local and more distant users. One long time resident offered the following observation that having the Preserve in place actually cut down on the number of non-locals hunting the areas around the Preserve:

When my children were younger we couldn't keep a squirrel in the yard. People would come in from other places and shoot the squirrel. It wasn't the people in the area. So, [having the Preserve has] helped in that respect. We don't have to worry about people driving in from outside. And they don't know . . . where the park ends, and because of the restrictions, the hunters don't come in the way they did. We used to have rabbit hunters that would just come in with their dogs, back up in your backyard, drop their dogs off and start hunting . . . I mean, it's like this was land anybody could do anything with, that somebody didn't own it or whatever.

In any event, it is the impression of local hunters interviewed that those who hunt the Preserve area are primarily from communities immediately around the Preserve, whether from those south or north of the Preserve and not from far afield. [Preserve records are not organized in such a way that this assertion could be verified without a very labor intensive effort.] This is not to say that there is uniform agreement on this point, nor that the distinction between the Westbank communities to the north and the Crown Point/Lafitte/Barataria area communities to the south is an unimportant one to local residents. In the words of one long-time Crown Point resident:



There is a few people, I would say, that in fact I don't know anybody from right here in this area that actually -- like when they got the deer season or the squirrel season or whatever -- that I know of right here in Crown Point that uses the park [Barataria Preserve] at all for that reason [hunting]. There might be a couple of them on up on Isle Bonne road I don't know of, but not many people do because of -- some of the people in this area don't like the fancy, whatever you call it, restrictions, they put on them. They told them they had to do this and they had to do that. When the park first started, I mean, they came down here and they just said 'this is our rules and this is our regulations and this is the way you are going to do it and if you don't do it that way you're not gonna [do it at all]' -- in other words, they didn't get no input or ask the people -- 'say, look what can we do to work with the people? How did you all live? How do you all hunt? How did you all do this? Then put that together and work with the people. They didn't do that.

This type of sentiment is counterbalanced by other long term residents who have seen the long-term value and results of Preserve management. For example, one long term resident drew a distinction between different pre-Preserve eras. In his words:

[The hunting in the Preserve is good and] it's getting that way because for awhile they kept it closed and -- because it was really being scavaged and hunted bad by poachers, you know, they just went in there at night and hunted everything they wanted to hunt. They killed everything off. You got people like that you know. If it was the last buck or doe out there on the levee, they'd shoot if they got the chance. But, yeah, there's a lot of deer in the park area. Some of the areas are hard to get to, but it's fair, the rules are fair. You have to go along with their rules though. I've seen more deer on this park in the last five years than we've seen in the last twenty years. On account of -- also conservation work with the park rangers and they keep the populations to where nobody can go in there and just ruin it for everybody. Thirty-five years ago . . . [that area] was loaded with deer. Back then there was no park. You could do what you wanted. You could hunt alligator. You could hunt deer. You could hunt anything you want. When the poachers moved in, they ruined it for everybody. They just shot everything they could see. Some people are just like that. I'll be real honest with you. I think the hunting rules are a little strict at times, but, I guess, it has to be.

In sum, traditional use hunting has changed markedly over the years, to the point where it could be argued whether the hunting that takes place in the Preserve today is technically 'traditional' use or not. On the balance, however, local residents felt the hunting of today is much better than the conditions that existed for hunting in the years immediately prior to the area becoming a Preserve. It is also generally recognized that, however individuals may feel about the Preserve and its impact on their personal use, that in the long run all hunting opportunities for locals would have been lost without the Preserve. In the words of one local resident:



If it wasn't for the park [Preserve], the area would have been pumped out and developed . . . there were poachers in there [who had taken over] -- it was a loose, wild [uncontrolled] area.

In terms of opening up more areas to hunting, local residents also saw a downside to this:

If the park opened anything else up, it would not benefit the people here. It would benefit outsiders, not the locals -- cannot manage it better for locals.

This is not to imply that there is not frustration with Preserve management, but there is a general recognition that the clock cannot be turned back, and the area reopened for nearly unrestricted hunting. Local residents interviewed generally considered hunting an important part of the local way of life, and the ability to hunt is a valued opportunity. Changes in the way hunting is conducted on the Preserve suggest that it is a traditional use in the sense of it being a 'continuity of activity,' but the sociocultural context of hunting and the way it is pursued today mark a significant departure from those aspects of traditional use. On the other hand, hunting opportunities on the Preserve may become all the more important to the local 'way of life' through time. This is because of the continuing loss of hunting opportunities on other lands in the area through development, and the apparent trend of the acquisition of hunting rights on private lands by private hunting organizations.

4.4.3 Fishing

According to Preserve enforcement personnel, commercial fishing in national parks is explicitly prohibited by federal law, except where, as in the enabling legislation for Jean Lafitte National Historical Park and Preserve, it is specifically allowed. The situation for the Preserve is ambiguous, because no specific regulations for permitting commercial use have been promulgated at this time. At present, it is the impression of Preserve staff that some sporadic and small scale commercial fishing does take place in the Preserve, however, no specific requests have been made for permission to engage in commercial fishing and no permit system is in place. This is another area where the line between commercial, traditional, and sport use of wild resources is not always clear.

As to the species fished in the Barataria Preserve, the following quote is typical of responses received during interviews:

You're lookin' at what we call a large mouth bass and maybe blue gill perch. You have several different kinds of perches . . . and in the wintertime we have . . . [some] people call it a white fish or crappie. [Local names used for common fish here] are choupic and sac-au-lait . . . That's a lot of fun to fish and a lot of good eatin.' Also, in the canals you have a lot of gar, alligator gar fish, plus you got the alligators and everything. You got to kind of fish along with the alligators. Sometimes you get a little three or four foot alligator, he wants to play with you . . . you got to get away from there because he's not going to leave you alone. You got to move on. They'll allow you to do frogging in the park. Frogging is good. The frog season is closed



April and May and the other ten months out of the year it's open to the public. You're allowed to go out there and hunt frogs. They designate areas. They won't let you do it just anywhere. All you have to do is go down to the park center and they'll give you a map that shows you exactly where the hunting and fishing or anything that they'll allow you to do in the park. They'll map it out for you and tell you this is the areas.

In addition to the species mentioned by the individual quoted above, other individuals mentioned fishing for catfish within the Preserve as well. A favored technique is to bait lines hanging from floating jugs (typically empty liter size plastic soft drink bottles or the like) and let them drift during the day, to be retrieved later in the afternoon. According to interviews, catfish are a species that will 'stay hooked' so this technique is productive, whereas for other species it would not be.

According to at least a couple of interviews, there has been some drop in fishing effort in the Preserve area because at least some people are uncomfortable with the size of the alligators in the Preserve (i.e., having been protected, there are more large alligators within the Preserve than in other areas that could be fished). This would seem to apply more to pirogue-based fishing than other, larger watercraft, but this issue was not systematically pursued in interviews.

Another form of 'traditional use' fishing that took place within the Preserve prior to its becoming a Preserve was soft shell crabbing. This use has changed with Preserve management, in that a favored technique used to catch the crab is to cut branches from wax myrtle (*Myrica cerifera*) and hang groups of these in the water strung along a line. When the crabs molted, they congregated on the branches, which were then retrieved by the fishers. Today, the removal of branches, according to interview data, is not permitted within the Preserve. In the words of one resident:

People used to use [wax myrtle] bushes to catch soft shelled crab. You'd break off a branch and hang it in the water. But in the park, they don't want you breaking the plants. You are not supposed to harm the bush, so people don't do that anymore.

This is a way that traditional use patterns have changed through alteration in technique due to management practices. However, most people attributed the relatively low level of 'traditional' fishing on the Preserve to the accessibility of better fishing elsewhere. In the words of one long time resident:

Well, what we do, we don't fish too much on the park [Preserve] areas because of we have access to other places where fishing is a lot better. Some of the park areas -- it gets crowded out sometimes. From time to time, we fish once in awhile in the park. I got two boys and I bring them out there and let them fish a little bit. They have mostly freshwater fish in the park, it's not too much salt water.

According to interviews, crawfishing used to be practiced by local residents in the area that is now the Preserve, but that is no longer the case. By regulation, crawfishing is permitted within the Barataria Preserve along the highway (Highway 45) running through the Preserve. While this



opportunity may be pursued by some individuals, no local residents interviewed did so or stated that they personally knew of anyone who did.

One of the unique fishing opportunities within the Preserve is for bank fishing (i.e., fishing from the banks of the waterway as opposed to fishing from a boat). In the words of one lifetime area resident:

[In] the Barataria country, but there's no place where a family can take their children and do any bank fishing because everything is privately owned land . . . There is no place to do bank fishing. And then [with] the park, we got about a mile and a half of bank fishing.

While this is yet another area where the definitional line between 'sport' and 'traditional use' blurs, it is important to note that the bank fishing opportunities are used by a wide range of individuals from throughout the area. Interview data (and limited field observations) indicate that while some bank fishing is done by residents of the Lafitte area (particularly with their children), a significant portion of bank fishing activity would appear to involve individuals and families from the communities to the north of the Preserve.

One person during interviews also drew a distinction between the type of boats that one sees fishing in the Preserve, and the adjacent waters, based whether one is from 'up front' or the Lafitte area. In her words:

. . . the big fiberglass skiffs you see a lot of in Lafitte, but you don't see them on our end [the north end of the Preserve closer to Westwego]. Our end is more like sport fishermen . . . come out and zoom out there and throw their rod a couple of times and then zoom across the lake and do it again. I call it a hot rod boat. They call them bass boats, but you see more bass boats on our end than when you get closer to Lafitte -- then you see a lot of skiffs and stuff like that. So, we're hot rodders; they're old fashioned skiffers.

In sum, fishing has changed somewhat in the Preserve area as a result of Park Service management, and where people fish is somewhat limited by restrictions on motorized access in specific areas. Overall, however, it does not appear as if the Preserve area is heavily used by long term area residents for traditional use type fishing. (Changes in the area of commercial fishing in particular are discussed in another section.)

4.4.4 Use of Plants

There are a number of plant resources that are collected by individuals within the Preserve for personal use. Preserve staff were able to provide information on the most common plants harvested, as well as the most common locations and general information on the seasons. From a 'traditional use' perspective, however, it would appear that there is very little gathering of plant materials from within the Preserve. Interview data suggest that long time and multi-generational local residents



who do utilize wild resources in general choose not to take them specifically from the Preserve area for two primary reasons: a lack of understanding that such uses are permitted within the Preserve and the ability to harvest plants of interest elsewhere (i.e., the Barataria Preserve does not represent a unique opportunity for plant harvest).

One of the traditional uses of plant materials noted in the literature on the area, and in interviews, was the use of particular species for medicinal purposes. During the course of interviews, a recently deceased individual was repeatedly noted as an acknowledged and respected "traiteur" or healer. While this individual has passed on, subsequent references were made to an individual who had learned from this more widely known individual, and this individual was interviewed. According to this interview, and others with individuals seen as particularly knowledgeable about plant use in the area, there are no longer any traditional healers in the Lafitte/Barataria area. While some wild plants are still used for the pharmacological properties attributed to them, there were people in the past who were considered knowledgeable about these properties and who prayed over and performed healing rituals for sick individuals for whom they provided care. It is this constellation of knowledge of plant properties in combination with the ceremonial or ritual knowledge that went along with being a 'healer' that has apparently died out. While there are some individuals, particularly several interviewed, thought to be knowledgeable about such use of plants, none reported any active healers and, more significantly for the purposes of the research at hand, none reported collecting plant materials from the Barataria Preserve. This is not to say that such collecting does not occur, only that if it does, it is apparently being done by individuals from outside of the communities nearest the Preserve (or by individuals not commonly known to others).

In general, use of the Preserve for gathering plants by local residents for food in what could be termed a 'traditional use' manner would appear low. In interviews regarding the use of wild plants for foods, as was the case of the collection of plants for medicinal purposes, there is a general misimpression on the part of many people that plant material collection is not permitted within the Preserve. To take an example, in the words of one lifetime area resident:

It's a little more rigid now than it used to be because people used to pick wild onions. And you cannot do that anymore. They won't even give you a permit for that type of stuff. The first couple of years it was open, it made me laugh because some people didn't realize. So they went in there and they were digging up in wild onions like they do from year to year. So the park ranger got on their case left and right, and believe me, they didn't realize they're were going something that was against the law. They'd been doing it for generation to generation. Wild onions is the thing to go get. Blackberries too. Now, I never hear of anybody getting reprimanded for picking blackberries or something. But I guess after wild onions deal they got, hey, man you're not supposed to do anything in that park.

It is perhaps not surprising how such an idea could be fostered or reinforced. Individuals have their own interpretation of what a 'preserve' is, and there have been incidents where individuals did have run-ins with law enforcement personnel from the Park Service regarding collection of some materials from the Preserve. In spite of the specifics of these cases (which, according to staff, were apparently



violations for collection in excess of what was permitted for personal use), once the idea spread that one could get penalized for collecting materials in the Preserve, again various individuals had their own interpretations of what the significance of the issues were. One individual interviewed, who utilizes the Preserve for a variety of purposes on a regular basis, noted that he used to not take things from the Preserve, but that he subsequently saw a sign that said not to take anything, but which also noted the exception for personal consumption or medicinal use. Because of that sign, he took it to mean that it was permitted to take mushrooms and berries, and he will now stop in the Preserve and take those. The fact that an otherwise well-informed local resident (and regular Preserve user) was unaware of the personal consumption/ medicinal use policy just serves to underscore the level of misunderstanding regarding that policy.

Clearly, it is not in the best interest of the Preserve to widely advertise that resources can be taken from the Preserve and thereby 'encourage' increased harvests; on the other hand, allowing individuals who clearly have the ability to take resources under current regulations to continue to believe that they cannot take any resources seems contrary to the intent of allowing traditional use within the Preserve. It is a double edged sword for management, and not a problem easily addressed. Add to this the fact that materials prepared for different 'audiences' would appear to give different messages, and there is a problem in getting accurate information out to potential traditional users. For example, the current guide pamphlet to Barataria Trails issued at the visitor center unambiguously states:

Please be aware that in this natural area, *all plants and animals are protected by the law* . . . Do not gather wildflowers, palmetto fronds, Spanish moss, or any other plant materials; plants are an important part of any ecosystem, and receive the same legal protection here as wild animals. (NPS 1993, emphasis in original)

It is easy to understand how local individuals could get hold of such information and, taking it at face value, believe that no plant gathering is permitted under any circumstances. There is also a Preserve rule that leaving the trails requires the permission of the Unit Manager; however this is intended to prevent people from leaving the trails in large numbers and creating 'volunteer trails.' The rule is not enforced for individuals leaving the trails for traditional use purposes, nor is it enforced for individuals engaged in trapping and hunting as, by nature, leaving the trail system is required for those activities.

Under the Superintendent's orders, a number of natural products may be taken from the Preserve, including dewberries and blackberries, muscadine and other wild grapes, persimmons, elderberries, mulberries, pecans, maypops, thistle, edible wild herbs and edible mushrooms. According to interview data, the most common plants for local residents to utilize from the Preserve for consumptive purposes are blackberries and muscadine. Oyster mushrooms, specifically those that grow on willow trees only, were also mentioned in multiple interviews. Overall, traditional use of plant materials by long-term local residents from the Preserve area would have to be described as very low, based on information obtained in interviews. The following quote is typical in its description of those individuals who do use the Preserve area for traditional use plant gathering:



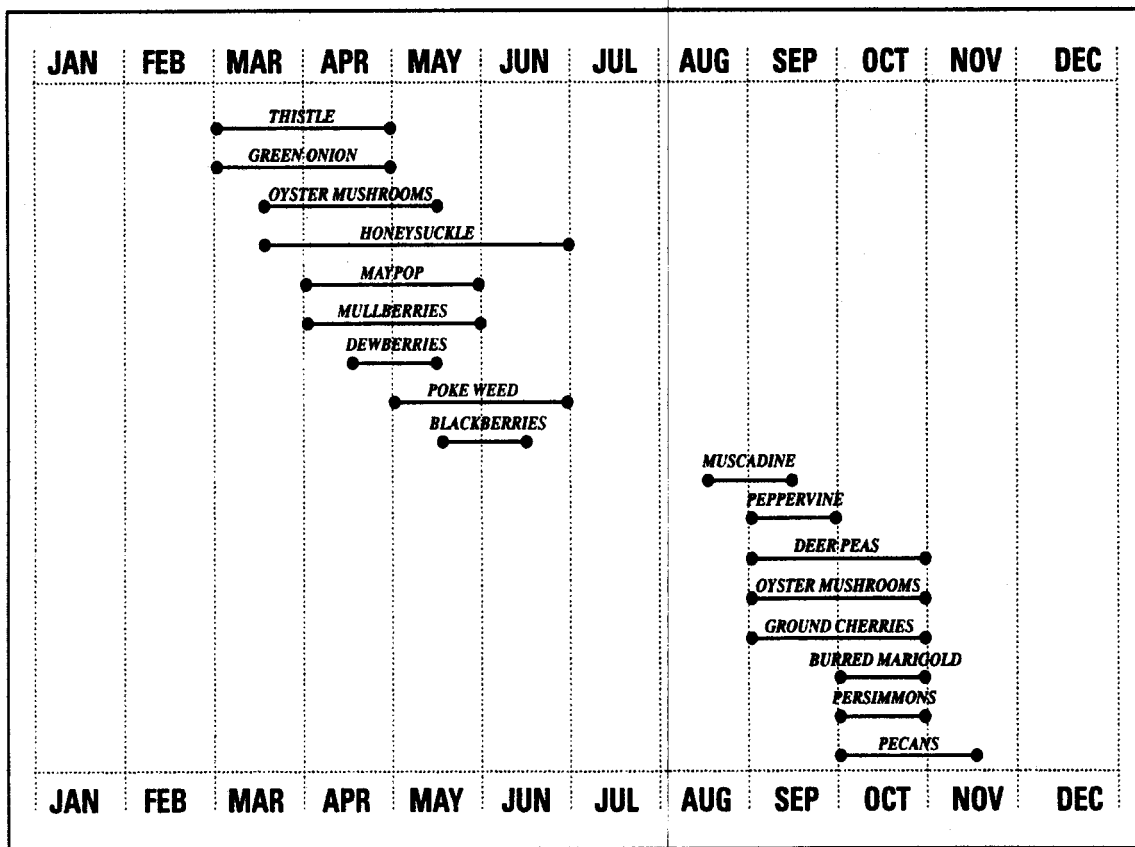
they'll let you go there [in the Preserver] and pick up your vegetation like you want. Like I said, we got a wild mushroom that grows there. We have wild grapes grow there. They have wild mustard, you might have heard about that. They got a few pecans and pecan trees in some areas. As long as you don't tear up no vegetation or break any branches off trees, you know, it's okay . . .

Based on observations of the Preserve staff, which includes observations of overall use, not just use of the local residents or traditional use by long term residents, among the plant materials taken from the Preserve, the following would appear to be the most common (with most common harvest areas and approximate seasons noted):

- Dew berries (*Rubus trivialis*) (disturbed areas around Coquille and Visitor Center parking lots, the picnic area, and along the Coquille trail; mid-April to mid-May)
- Blackberries (disturbed areas near parking lots; mid-May to mid-June)
- Mulberries (*Morus rubra*) (Jones Point area and the Big Woods trail areas; early April through the end of May)
- Oyster Mushrooms (Plantation, Rig Levee, and Coquille trail areas [only taken when growing on willows]; mid-March through mid-May and again from early September through the end of October are the most common times, but also after heavy rains in mid-summer)
- Pokeweed (*Phytolacca americana*) (disturbed area of 'old' parking lot by Education Center; early May through the end of June)
- Maypop (*Passiflora incarnata*) (Bigwoods area; early April through the end of May)
- Thistle (*Cirsium horridulum*) (roadside areas and along the Coquille trail; early March through the end of April)
- Green Onions (*Allium canadense*) (roadside areas and disturbed areas around parking lots; early March through the end of April)
- Honeysuckle (roadsides, disturbed areas near parking lots, and along the Coquille trail [plant material also used for weaving baskets]; mid-March through late June)
- Muscadine (*Vitis rotundifolia*) (roadside areas; mid-August through mid-September)
- Burred Marigold (swamp and marsh areas [used as salve]; October)
- Pecans (*Carya illinoensis*) (Pecan Grove, picnic area, Christmas road; early October through mid-November)
- Persimmons (*Diospyros virginiana*) (near end of Coquille trail, Pecan area, and Big Woods area; October)
- Deer Peas (*Vigna luteola*) (water's edge, Coquille trail and into marsh; early September through late October)
- Ground Cherries (roadsides and marsh areas; early September through late October)
- Pepper-Vine (*Ampelopsis arborea*) (roadsides; September)



These may be graphically depicted as follows:



APPROXIMATE HARVEST SEASONS
 MOST COMMON 'TRADITIONAL USE' PLANTS
 JEAN LAFITTE NATIONAL HISTORICAL PARK AND PRESERVE
 BARATARIA PRESERVE UNIT
 LOUISIANA



Taken as a whole, these observations show a general clustering of plant use around Highway 45 (generally in the area between where the Preserve spans both sides of the road north of Twin Canals to the southeast edge of the Preserve near the Visitor Center and intersection of Highways 45 and 3134), with some additional use along Preserve lands along the trails in the vicinity of the Visitor Center and the disturbed areas associated with Preserve facilities for the majority of plants used. Some use also occurs along the stretch of road where Highway 45 merges with 301, and at the Jones Point end of Highway 301 (Isle Bonne). It should also be remembered that as far as traditional use is concerned, the area that is now the Preserve featured agricultural operations in the past, so there were a number of crops planted, and non-indigenous plants harvested in the area.

One long term resident noted that the use of wild plants in general was declining in the area, and that the knowledge of plant use was dying off with the older generation. According to this individual, the only plants that his family now takes from the Preserve are blackberries and thistle, but he noted that

The older people who knew a lot about the herbs and how things like that were used and maybe came [and used some] from the park area have died off . . . Some of the older people collect elderberry and elderberry leaves. We did use elderberry leaves for our daughter's diaper rash when nothing else worked. [We had] heard they used to do that, [we] tried it, and it worked . . . [but most of that type of knowledge has gone, and] this generation has grown up on store bought food.

In sum, plant use within the Barataria Preserve by families that have lived in the area for multiple generations appears to be very low and, for most people, restricted to a few species. This would appear to have much more to do with the passing of traditions associated with plant use than with any particular aspects or features of the Preserve, although Preserve management and a generalized misunderstanding of Preserve regulation among some residents, would appear to lessen potential traditional use.

4.5 TRADITIONAL USE IN THE BARATARIA PRESERVE: ACCESS AND 'SETTLEMENT/OCCUPATION'

In this section, two primary topics will be developed regarding the traditional use of the Barataria Preserve. These are the means of access to the Preserve, and how these means have ties to traditional use, and the instances of individuals and/or families living or staying within the Preserve while engaged in traditional use activities.



4.5.1 Modes of Access

Today, the Barataria Preserve is accessed by traditional users and others by a variety of means. Some types of access that were traditional are no longer practiced, such as accessing the area that is now the Preserve by horseback. Additionally, there were at least some parts of the uplands parts of what is now the Preserve that were accessed by off-road motorized vehicles by some local residents for various purposes, some of which could be construed as 'traditional use' (under the 'existing conditions' end of the traditional use definitional continuum).

Besides the people walking the trail system, today much of the Preserve is accessed by small watercraft, both motorized and 'human powered.' As noted elsewhere, as part of the Park Service management strategy, parts of the Barataria Preserve are closed to motorized vessel traffic. To the extent that motorized vessels were used in 'traditional use,' this has served to change the nature (and location) of that use. Getting back to the ranging 'working definitions' of 'traditional use,' there are those who were interviewed who felt that motorized watercraft were not consistent with traditional use (i.e., those individuals for whom traditional use meant, essentially, pre-industrial technology type of use). For individuals whose families have lived in the area for generations, however, there were a number of interviewees who felt that closure of some waterways to motorized vessels was the equivalent of closing those waterways (and the areas accessed therefrom) to traditional use (as they had known and practiced it). One older individual made the point that while he understood the Park Service's desire to limit the potential damage caused to the environment from the byproducts of gasoline engines, he did not see the rationale behind banning non-polluting electric trolling motors from these areas as well. In his opinion, this was especially a problem in that it equated to older (or physically impaired, or just less physically fit) people from the area being denied access to areas that they would otherwise be able to use.

Perhaps emblematic of the 'traditional' water access to many parts of the Preserve area is the pirogue. Not only is it a 'traditional' craft in the sense of being non-mechanized, it is a design for small watercraft that has been in use in the area for generations, and continues to be used today. It is emblematic because of both its longstanding use, its association with the particular area, and the fact that it represents a 'non-controversial' traditional use -- a type of traditional use that most, if not all, agree is in fact 'traditional' (i.e., non-mechanized, small-scale, non-commercial or family-scale commercial undertaking, utilized for 'subsistence' or 'customary' use, and so on). (Of course, even the use of pirogues as a 'pure' traditional use may be more apparent than real, as they may have been hauled to a launch or use site in or near the Preserve by another motorized conveyance, but that would seem a fine distinction in most people's minds.)

One of the tourist activities in the Preserve that bears some resemblance to traditional use is the use of canoes in the Preserve. Two or three businesses near the south end of the Preserve rent canoes for use in the area, including the Preserve. That is, canoes are rented off-site, but used within the Preserve itself. According to an interview with one of the original individuals who began renting small watercraft for use within the Preserve, they originally rented pirogues, and advertised pirogue rentals. Unfortunately for their business, people from outside of the area didn't know what pirogues were. When they added canoe rentals, however, business picked up as tourists were familiar with



canoes, and interested in seeing and experiencing the Preserve and its varying environments from the water.

Pirogues are still used by some local residents, and represent a traditional technology whose use has continued through time, though the content of the activities engaging in may have changed over the years. It is a style of vessel with mode of propulsion (poling in addition to paddling) particularly adapted to the environmental conditions of the Barataria Preserve, and is especially useful in areas of heavier vegetation and within the narrow trenasses. Wood pirogues are still made by hand in the area, but the number of people who build them is declining. According to an interview with one widely respected boat builder, there are only five or so people still building them in the Lafitte area (but this was not confirmed through other interviews). This builder noted that there has been a change in traditional vessel construction with the advent of fiberglass:

The hunters today [are the ones who use pirogues]. Yeah, the pirogue's a big deal today. Fiberglass. They don't want no wood because it's too much upkeep. They [haven't] got . . . time to fool with it. In other words, they go on their jobs, they got off, they grab that pirogue and throw it in the marsh and they go and make a blind and they hunt. They don't want the paint, they don't want to fix the leaks, they don't want to do nothing. All they want to do is go . . . before, the only way you could get a pirogue is if you got one going into the making [i.e., crafted it from wood by hand]. Then the [fiber]glass took over. Now everybody is [able to] make a pirogue. I can take you outside and give you one of my molds and say 'okay, this is how you do it' and you could make it. You never made one in your life, but you may after that. But you still needed that wood [mold] to do it. Without that wood you couldn't make it. It's just like tea. Without a cup you can't drink it, you know, hot tea. Pour the cup and you drink it. Anybody can pour tea in that cup. It's just like the mold, it works the same way. Anybody can make a pirogue from a mold, but ain't nothing can make -- you ain't got nobody off the street to make a [wooden] pirogue like the one you're looking at [here in my shop]. And as the generation's gone, they don't need no wood, they got that glass mold. Hell, I could make thousands like this the way they do. The art is gone . . . they got about maybe 500 people along this bayou that could make it. But they got the molds. They make them out of glass. You get up in there and you spray your gel coat, lay it up, wipe it out and there you go, you're on your way. Put the mold in it, bring it up. It ain't going to be as good as the [traditional] pirogue, but you could get by with it. But the woodcraft of where it started and where it went, you can't find some of it. The old ones have died off and then [there are a few] like myself . . . We could build boats. We learned that from the old are people . . . when we was a kid, they was building boats. And like me, I was interested in it and every chance I get I was there [learning].



In sum, traditional use access has changed over the years. Traditional vessels themselves have changed. Parts of the Preserve that used to be accessed by motorized vessels for 'traditional' use purposes are now closed to those types of vessels, changing, to some degree, the composition of the user group that accesses those parts of the Preserve.

Traditional Use and Waterway Access Issues

One of the issues that surfaced during interviews regarding how the use of the Preserve had changed over the years was that of waterway access. Under Park Service management, a number of waterways, or portions thereof, within the Barataria Preserve are closed to motorized vessels. While there were some local residents who saw value in this policy, there were two main points, in terms of traditional use, made by those who opposed this policy. One point was that this policy, in effect, discriminates against (denies access to) parts of the Preserve to older users who may be traditional users of that area. That is, this older individuals will not or can not make the physical effort required to access areas of the Preserve they may have formerly used for traditional use purposes. (Of course, elders could perhaps arrange to be taken to areas by younger, more physically capable individuals, but the point being made was that banning motorized use was likely to provide the strongest disincentive to use to precisely those persons likely to have the most traditional use knowledge of the area.)

The other main point of contention regarding access is what happens to the smaller waterways in the absence of motorized vessel traffic. It was argued that the water movement generated by the propeller wash and motion of the motorized vessel keep the waterways passable both by clearing lanes through the encroaching vegetation, and by keeping the waterway from becoming too shallow for passage by keeping a flow going where it would otherwise be eventually filled in by sediment. In other words, by not allowing motorized traffic in some areas, it was thought that these areas would eventually become inaccessible to persons wishing to utilize those areas, including traditional users. Without debating the merits of the arguments of the efficacy of motorized vessels for keeping waterways open, it is clear that the non-motorized areas management strategy (or, more accurately, the particular vegetation management strategy being pursued in combination with the non-motorized public access strategy) has the potential for changing traditional use patterns.

Traditional Use by Non-Traditional Means of Access

During interviews, there were several types of use of the Barataria Preserve discussed that did not fit into what one would normally consider 'traditional use' categories, but which did involve the transmission of traditional use knowledge, or knowledge about historical uses and natural resources that could be or are used for traditional use purposes. These include the use of Park Service maintained trails, canoeing within the Preserve, and use of the Preserve as an educational setting by local schools, and are briefly summarized in this section.



Use of Trails as a 'Traditional Use'

While not typically thought of as a traditional use, several interviewees remarked on how well they liked the trails that have been developed and maintained within the Preserve (the map on the following page depicts trail locations). One of the reasons cited was the ability to take children out and show them the different types of environments or ecosystems of the area. In this sense, the Preserve is facilitating the passing of local environmental knowledge from one generation to the next among local residents. The trails are unique in the area in that there are no other similar areas on public land where wildlife and the different wooded upland, swamp, and marsh landscapes can be viewed easily. During the field research for this project, the researcher accompanied one local family on the Coquille-Marsh Overlook trail system while the children pointed out different species of wildlife. Again, this is not a 'traditional use' of the area, but clearly is an important way for at least some local families to pass on local natural history knowledge. Similarly, several interviewees noted how much easier it is to spot wildlife since the Preserve has been in place, and that is something that is valued, both for themselves, and as a chance for their children to see the wildlife of the area. In the words of one lifetime resident:

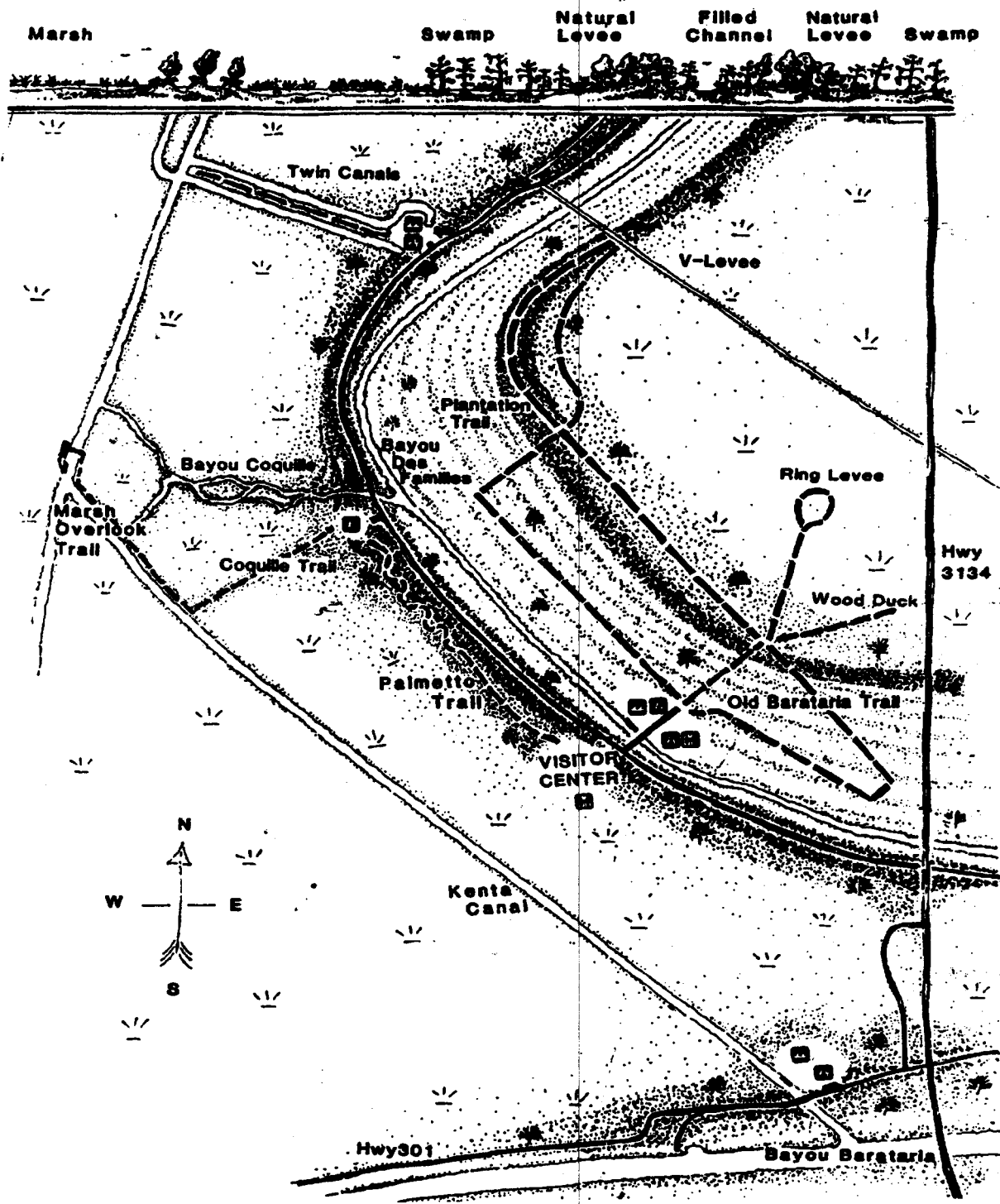
The area of the park [Barataria Preserve] is thick with deer because of the areas there that you can't hunt. That is great. Now [you] see 4-5-6-7 deer from the road sometimes . . . [It isn't like that other places] . . . [Our] kids really get a kick out of seeing that.

In the words of another long term resident, while the landscape of the Preserve itself is not unique, the trail system is, and the Preserve is valued for that by locals:

Your local people down here -- well, like I say, a lot of your local people have everything that the park has in it because we are surrounded with just about the same type of property and area. What the local people like about it down here, the older people go on the walking trails and all. It's kept clean. They can walk the walking trails. They get their exercise and all. It would be like walking in a shopping center somewhere. They'll take this and walk throughout the park because it's available to them and they like it.

While a number of interviewees who were long time residents dismissed the idea of using the trails themselves, and felt the trails were for outsiders, others took advantage of the trails when they had relatives or guests visiting from out of the area, using the trail system as a way of acquainting (or reacquainting) their visitors with the area.





Source: NPS 1993

Canoeing

Canoeing, or use of pirogues, in the Preserve is a traditional use that has both historical and new dimensions to it. Pirogues, for example, are used for fishing and hunting access to areas of the Preserve where motorized watercraft are not permitted. A non-traditional use of the Preserve is canoe touring, which is discussed in a separate section. A few interviewees who were long term residents of the area discussed use of canoes or pirogues in the Preserve just to show their children the area, and as a fun family outing. Again, like the use of trails, this type of 'touring' is not a traditional use in the sense of it being directly related to extractive uses normally thought of as traditional uses of what is now the Preserve area, but it is another means by which (or learning context within which) local traditional knowledge of the environment and its wildlife is being passed on to younger generations.

Schools

A number of interviewees noted that a number of local residents come into contact with the Preserve through educational programs run through the schools. In the words of one long time resident:

The majority of local use [of the Barataria Preserve], use by local residents, is through the schools. The schools take the kids there. And when the kids go with the schools, the parents are involved with the schools, so they go too. That is the way that people get involved and go to the park, through the schools.

Though not a traditional use, the use of the Preserve by the school system is another means by which knowledge of the area, both its natural history and traditions, are passed on.

In summary, there are several 'new' ways that traditional knowledge, or information about traditional use is being passed on within, and by the use of, the Barataria Preserve. While these uses are not traditional uses in and of themselves, the value of the Preserve as learning context for traditional knowledge is understood and appreciated by a number of the local residents interviewed.

4.5.2 Traditional Use 'Settlement' or 'Occupation' of the Preserve: Camps

One of the traditional uses of the Preserve has been as a 'camp' site, where the camps were permanent or semi-permanent structures used as a base for various traditional use activities. In the past, camps were used seasonally during the trapping season, or as a shore base/transfer point for small scale commercial fishing operations. Today, there are basically two types of camps in and around the Preserve: those that are used as primary residences, and those that are primarily used for recreational purposes during vacation times or on weekends (neither of which correspond to the 'traditional' seasonal camp use pattern).



At the time the Barataria Preserve was created, there were a number of camps within the area that became the Preserve. These camps were typically buildings owned by their occupants, but situated on land leased from the private property owners whose lands became part of the Preserve (i.e., they were not camps occupied by the owners of the land). At the time of the transfer of the land, the Park Service became, in essence, the landlord for these camps, and leases were written to provide for their continued use. Over the long term, however, the effective trend is for the gradual decline of camps within the Preserve itself. When an individual tenant is no longer interested in keeping the property, can no longer make the lease payments, or the camp falls into permanent disrepair, it is removed from the Preserve and no new leases/permits for camps are issued. While this is clearly a benign policy toward present lease holders, and in practice the Park Service by no means has a 'get tough' policy with individuals who may fall behind on their leases, it was noted by some individuals during interviews for this project that it is somewhat ironic that the Park Service is interested in understanding traditional uses of the Preserve, while at the same time appears to be eliminating one of those traditional uses -- having camps in the Preserve area. In the words of one local resident:

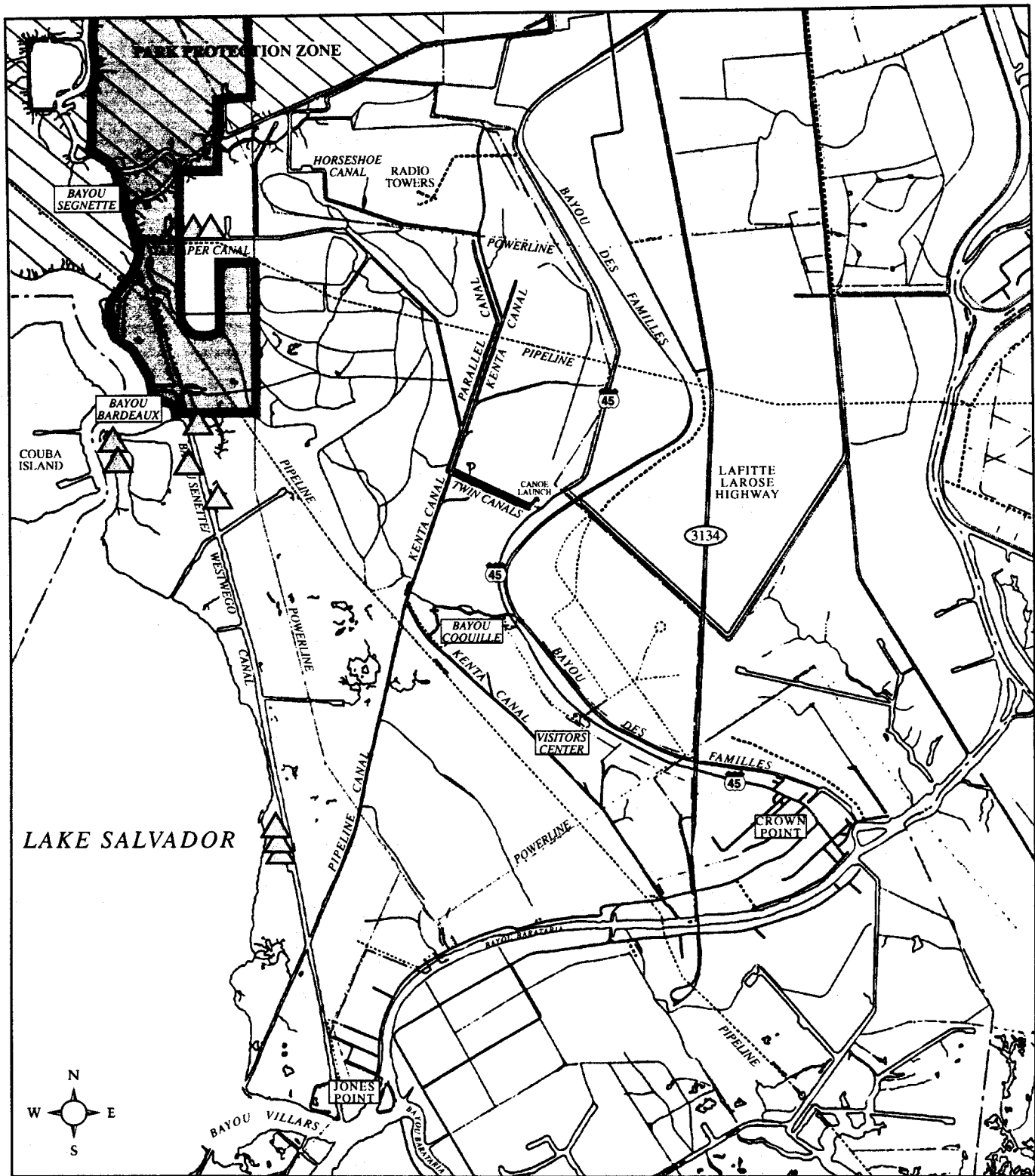
But that was another big controversy right there -- right off the bat [in the early days of the Preserve]. They told them when certain ones died off, they'd take the camp, burn it down -- tear it down or get rid of it. To me, that's getting rid of the culture of the people. They're getting rid of what this place really was and trying to change it to be something else that it's not.

This is, of course, a complex issue with respect to traditional use and access rights. While camps may be a traditional use, they clearly 'privatize' what is otherwise now a public resource (or, more accurately, effectively limit other public access to, and uses of, public resources). Further, there would appear to be no way to equitably permit new camps under the present land status.

During 1997, according to Preserve records, there a total of ten (10) active "recreational camps" within the Preserve itself. Of these camps, all but one are registered to owners from the Westbank area (and of these, only one is outside of either Marrero or Westwego). No camps are registered to owners from the Lafitte/Barataria area. Camp locations are depicted on the map on the next page.

Of the active camps located within the Preserve itself, two are located on Tarpaper Canal (within approximately 1/4 mile of the cluster of camps on New Orleans land) and two are located on Bayou Bardeaux (also not far from the densely 'developed' New Orleans land). The remaining six are located along the Bayou Segnette (on the portion that is actually a canal, and known to many locals as the Westwego Canal). Of these, three are located within approximately 1/2 mile of the 'developed' New Orleans land, and the remaining three are clustered together approximately 1/2 mile north of the point where the Pipeline Canal intersects Bayou Segnette. Currently (1997), the Special Use Permit annual fee for the camps is \$250 per year, a figure arrived at in an attempt to standardize rates and make fees more or less equivalent to market value (rents on nearby New Orleans land are currently \$300 per year). In 1997, there were an estimated 10 abandoned camps on Park Service property in various states of disrepair.

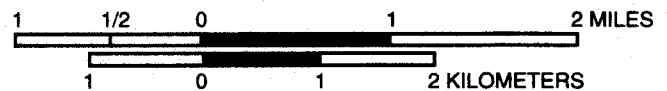




BASE MAP SOURCE: NPS 1989 (FROM USGS AND USC&GS DATA)

CARTOGRAPHY COURTESY OF KEA ENVIRONMENTAL, INC.

-  RECREATIONAL CAMP
WITHIN THE PRESERVE
-  CITY OF NEW ORLEANS LAND (Includes
Numerous Camps; Boundary Approximate)



JEAN LAFITTE NATIONAL HISTORICAL PARK AND PRESERVE BARATARIA PRESERVE LOUISIANA

The net loss of the camps, and the change in the nature of the use of the camps to a lesser degree, imply a change in the relationship of the people to the land in terms of traditional use. The net loss of camps (and, following the present trend, all things being equal, the continuing reduction of camps within the Preserve through attrition) represents a change in the cycle of land use and the relationship of families to the land that is now in the Preserve.

It is also important to note that, irrespective of Preserve policy, the nature of camps has changed over time, particularly for the people of the Lafitte area. As noted earlier, there is an area of dense concentration of camps on City of New Orleans land (this is land that was given to the City in 1914; managed by the Wisner Foundation, income from the land is used to support charities) adjacent to the northwestern edge of the Barataria Preserve (and encompassed by the Park Protection Zone). Of the residents of these camps, the overwhelming majority are not from the smaller communities south of the Preserve (i.e., the Lafitte area). According to one lifetime resident, people from the Crown Point/Lafitte/Barataria area do not now have camps in the area of the Preserve because the reason to have camps has changed, as have the camps themselves. In his words:

[the camp residents are] mostly from Marrero, Westwego, and all the [Westbank] areas, stuff like that. I'm trying to think of anyone from Lafitte. I don't think anyone from Lafitte has a camp here, that I know of. And it's not no wonder because you see the people who has camps there they're like -- it's really [a place for] a city dweller. [It is like I am now] living in the camp. I'm right on the bayou. And a lot of people that has camps out in the lake and stuff is not from Lafitte also. The only way we put camps which were for hunting and trapping [was] if we wanted to stay overnight. You know, you could eat fish or cook you some ducks or something like that. It's relaxing to have a camp. But it's also hectic to have a camp. . . [Today] it's just a place to get away from the city and it's close . . . [years ago, people from the Lafitte area would go out to camp] for trapping season and for hunting season. That was about basically why they would camp. My gramps used to camp back out on the canal . . . and it was for trapping season. You got out there and you trap, you skin your nutrias or your muskrat or your otters or minks, whatever you had and take care of all of that right out there. You come back once a week [to] get supplies and bring in your furs or whatever. And then the reason they used to camp, too, years ago, was because they didn't have the boats that they have right now. You had a slow boat and take for instance, my grandfather's camp . . . The type of boat they had, it would take them about two hours to get to where his land was at. And then, gasoline was precious. And when you are going through these bayous and stuff . . . you don't see many people and you would break down and stuff. In other words, that's basically the camp situation -- at that time [there were camps] because of the distance of some of the trapping lines . . . The people that stays out at the camps right now is mostly recreational type people. Where years ago -- when I say years ago, I'm talking about into I'd say the 40's or the early 50's -- [it] was a different situation . . . Some people kept camps out there and stayed out there periodically. But they always came back to Lafitte as a residence. And they would go out there and stay out there for a month, two months. My wife's grandmother would stay like right by the park [Preserve] .



... and she lived only maybe four miles from my house [in Lafitte]. It was easier to stay at the camp with her five kids than to commute everyday back and forth. And when your husband is trapping all day long, that's what happened... When he comes in you got to wash clothes for five kids. You got to take care of five kids. When he comes in you got to have food ready for this man. And then the both of you, not just one person, but both of you must skin muskrat and nutrias and whatever they had.

In sum, the 'camps' of today typically have modern amenities (including electricity on the New Orleans and immediately adjacent land), so are not all that different from homes that are along the bayous elsewhere, and are quite different from the seasonal camps of the trapping days. In terms of resource access, particularly with the advent of efficient outboard engines, people living in homes along the bayous farther away from the Preserve proper have nearly as immediate access to resources within the Preserve as those living within camps 'on the doorstep' of the Preserve. This, in combination with the decline in trapping in particular, changed the nature of the need for (and the use of) camps. Several interviewees cited this or similar lines of reasoning when asked about the near absence of representation of Lafitte area residents among the camps in the Preserve area or immediately adjacent areas.

In interviews with several of the individuals who presently live (or recently lived) full time, or nearly so, at the camps adjacent to the Preserve, one feature of living in the area that stood out was the existence of an informal system of barter of wild resources. While this was not systematically explored (as it took place outside the Preserve), there were examples of this type of exchange cited between full time residents as well as between full time residents and recreational or part time residents. One of the reasons cited for this type of exchange being relatively common was the logistical difficulty in getting supplies to camp -- hauling things from the store, to the car, to the boat, to the camp, etc. Additionally, at least some of the full time residents make some supplemental income by maintaining the camps of less frequent users. In other words, there are people in the area who would appear to be living a kind of 'subsistence' type of lifestyle, but in all cases it would seem that there is today, by necessity, wage employment or retirement income providing a basic underpinning to the life in the camps. There is currently one trapping lease, an alligator lease, on the City of New Orleans land that contains the dense cluster of camps adjacent to the Preserve area, and this is worked by a local (Isle Bonne area) resident (who does have a camp in the area). According to interview data, there has been no other trapping on the New Orleans land for the past five years, and deer hunting is not permitted on the land due to the density of the housing there.

One issue that surfaced several times during interviews was the impact that the camps immediately adjacent to the Preserve were having on the Preserve itself. According to information supplied by the Edward Wisner Donation Advisory Committee, there are 172 camps recorded on this land (but it is known that this is not a complete inventory, as there has been some squatting and illegal construction over the past several years). These camps have an impact on the Preserve in several ways, but among the most commonly mentioned were: (a) as a source of persons using Preserve (i.e., camps were used as 'jumping off' points from which people accessed the Preserve for various activities); and, (b) as a source of environmental degradation (because of untreated sewage from the



camps that entered the Preserve). As for direct use of the Preserve, it would appear that this is highly variable by camp and, in general, the use of camp residents would be much more of a recreational than a traditional use nature. Based on interviews, it would appear that fishing is the predominant use, with little other extractive use made of the Preserve with a few notable exceptions (e.g., the most recently active trapper on the Preserve itself lives in one of these camps). In terms of impacts to water quality, many of these camps apparently have grossly inadequate means of sewage disposal, and the sewage ends up in waters immediately adjacent to (and then is carried into) the Preserve. While this has been a problem that has been recognized and discussed for years, no easy or rapid solution appears forthcoming.

It is interesting to note, from a traditional use perspective, the location of camps that are active today. Most camps are located along canals that were put in for 'non-traditional' uses. For example, the highest concentration of camps in the Preserve area is found along the Westwego Canal portion of Bayou Segnette (better known officially as the Bayou Segnette Waterway). That is, these camps are located on high ground that was created by non-traditional technology for non-traditional pursuits. There are other camps that are located on naturally occurring higher ground, but these are in the minority. This is one more example of the tangled nature of defining 'traditional' use in an area that has seen many, many changes brought about by different waves of activity over the years.

4.6 TRADITIONAL USE IN THE CONTEXT OF OTHER COMMUNITY ATTRIBUTES AND ACTIVITIES

Traditional uses within the Barataria Preserve have fit into the fabric of social life and the economy of the area over the years, and the nature of this 'fit' has changed over time. Many people during interviews described the typical household economy of the area as being a matter of 'piecing together' a living by doing different things during different seasons of the year. Of course, this is a somewhat simplified picture of life in the area, because for generations there been economic activities in the area that are less subject than others to seasonal variation. Nevertheless, it is important to understand the traditional use of natural resources within the Preserve in the context of the overall patterns of natural resource use in the area. A second idea regarding the 'fit' between the communities and the Preserve developed in this section is that the Barataria Preserve itself has had an impact on the social fabric of the communities to the south of the Preserve. That is, the fact that the Preserve was created and exists today has concrete implications for the way the communities of Crown Point, Lafitte, and Barataria have developed. Interview data suggest that the Barataria Preserve plays a part in retaining a way of life that would have been different had the Preserve not been created.



4.6.1 The "Traditional" Local Economy: Piecing Together a Living

According to interview data, one of the common attributes of living in the area of the Barataria Preserve, particularly in the communities to the south of the Preserve, was the need to 'piece together' a living by doing a variety of things that varied by season. Speaking of how people got by in the area in the not-too-distant past, one resident noted:

They pieced together a living. In the winter they trapped. In the spring they trawled. In the summer they fished hard crab. You went along -- each season brought a different thing that you did to feed your family. The only credit you lived on was the credit Herb [the local storekeeper] would give you at the grocery store.

Into this pattern fit traditional use activities in the area that is now the Barataria Preserve. Over the years, the overall patterns of making a living have changed, and along with it the traditional uses of the area that is now the Preserve. Ways of life have changed, as has the ability, or availability, of individuals to pursue traditional resource uses. Time and effort put into various activities have to 'make sense' in relation to other activities, either in economic and/or subsistence terms and in overall lifestyle terms. The graphic on the following page portrays changes in the annual round through time.

As noted in the annual round graphic, trapping and fishing made up a large part of the annual cycle over the years. As earlier noted, trapping in the area overall has declined greatly, and for the Preserve itself trapping is no longer pursued (although it may be again in the future if economic conditions change). Fishing has changed dramatically in recent years, and with it the composition of the fleet. While a detailed treatment of changes in local commercial fishing outside of the Preserve is far beyond the scope of this work, it is important to note that changes in these 'outside' activities do have ramifications for traditional use activities both on and off the Preserve. As fisheries change with the availability of particular species (and the economics of pursuing them), so do they change with changes in the regulatory environment (which, of course, responds in turn to changes caused by resource availability, technological efficiency, and economically driven effort). In the words of one resident:

Commercial fishing has declined in the area. With each new regulation, and there have been a number of them, you lose more fishermen . . . What happens is that there is always a range of fishermen -- some guys are doing well, and some guys are barely making it. When you have new regulations, the guys who were barely making it can no longer make it, so every time you lose some guys . . . One of the things that has happened [recently] is the outlawing of gillnets. For some people, that was their sole source of income -- nets are not bad if you fish them right. There were turtle excluder devices, now there are fish excluder devices that are designed to increase the population of small red snappers, and bottom release them. The problem with red snappers is not the bycatch -- it is the demand that was created with blackened fish . . . I know about 20 guys from right around here [Lafitte area] who used to trawl who now work in the refineries.



It was also noted how oilfield related employment would fit into the annual cycle, and permit continued involvement in a variety of other activities:

When the oil was good, there were people who used to work 7 [days] on and 7 [days] off . . . they would still trawl, or gillnet, or crab on their off time. Oil was their 'steady money' as we called it. Same with guys working '14 and 7' schedules.

With the decline of local oil development related employment, so have the number of people declined who have the flexibility or availability to invest significant amounts of time in secondary activities (i.e., non-primary employment activities), including traditional use activities, according to interviews.

Most of the economy of the area is commuting to the city and fishing. Fishing is the main local employment. Oil and gas is making a comeback in the area. That will take some of the pressure off the fisheries [i.e., more people will go into that for employment].

One long time resident summed up the changes in the annual cycle in the following extended quote. In it he notes the difficulties involved in having to put together a living by a number of different means, and the changes that have come with time:

Well, they have to commute to different places [from here] to make their living because like this is . . . what we call our May season, which is our brown shrimp season right now, and the shrimps are not too good in this area. They catch a few shrimp, but not enough to make expenses or it may be a little better later on, but at this time it's bad. They go to different areas and people are taking jobs in . . . shipyards, they're taking jobs in offshore oil fields, because they can't do what they used to do. You take your one type of a crab fisherman, during the wintertime when the crabs are really doing good he had his crab traps or his crab lines out. When crab season was done, then alligator season would kick in. So, all the month of September you would fish alligators. You could go out there, you didn't have to have so many acres of property, tags, and all that [like the regulations require now]. You could just go out there and hunt them. Then, when they was out, you had your trappers came in, you had your muskrats, your nutria rats, you had your 'coons, and minks, and everything that you could catch and make a living with. People that very first came down here, like our grandfathers and grandmothers, and great-grandfathers came down here, that's the way they made their living. They fished crabs. They fished alligators. They fished catfish to make a living . . . they did it all. Everything fell right in line. Like when you finished one season, something else was starting off. Today it's not like that. If a guy goes out and he goes fishing, he is just strictly a shrimper. You know, he don't know anything about fishing crabs, or fishing catfish, or hunting alligator -- he can't hunt alligator, because he has to have so much property to hunt alligator. But that forces a lot of your younger generations into shipyards, truck lines, you name it, a lot of them moved out of the state because they



couldn't make a decent living here. Our oil fields are just [now] starting to come back a little bit. Back in the early '70s, our oil fields started out as nothing. It was rock bottom for us here. Our younger generations [had to] venture out, you know, way out. They loved being here, but there is just nothing to make a living at.

This same individual also articulated the difficulties involved in having to take work that kept him away from home, and make particular reference to how this had an impact on spending time with his children, and the ability to engage in traditional use type of activities with them.

My wife . . . raised [our first two children] because I wasn't home long enough. I was offshore working 14, 20 days, sometimes 50 days at a time before I would get home. I worked the local oil fields down here which you still stayed off a week or two weeks. I worked captain on boats. That wasn't any better -- work two, three, four weeks before we got [any time] off. So, I quit all that and went to work in the shipyard . . . and I was able to come home everyday. That's about after 20 something years, after the first part of my family was raised. Well, my wife raised them. I got to raise [my other child] because [it] was about ten years later [when] he came along. And I had a job that I was working everyday and was home every day. That made a big difference, being with your family and all. It's a whole lot you are missing when you are not with your family. You miss out on a whole bunch of things. You don't get to see them graduate. You don't get to see them go to school . . . you don't get to take them out hunting and fishing because you don't have time. You just miss out altogether. Our grandparents, they had it better because . . . there wasn't a lot of money made. . . [but] they were home. Wherever they made their home was home. They had something to do to keep them busy year-round. Different seasons for different things like, you know, they was out there doing it all. There wasn't no such thing as being a crab fisherman. That crab fisherman hunted alligators, he fished catfish, you know, he shrimped during shrimping season. He would do in a good shrimp season, say, ah let's go back 20, 25 years, the shrimp were so plentiful, nobody would give you any money for them. So, we were still in bad shape. It was like we made more money during -- I'd say, well, four seasons . . . You didn't get rich on it. You just made money to where you could get along. It's like, say you was a fisherman, and you added your money up at the end of the year, you were better off working for somebody. It was just, I guess, the independence of working for yourself felt real good. You didn't have to punch any clocks. But yet we don't have no eight hour days, we have 16-hour days or 20-hour days. You just had to do it, when the shrimp was good, you had to be there and you had to catch them. It's like anything else, fishing, trapping, cat fishing, crabbing, you out there and you got to do the best thing you can because sometimes it ain't going to be for long.

Some individuals were able to combine types of wage/industrial employment with natural resource harvest related employment, and this also was a part of the annual round. In the words of one long time resident:



Springtime is when [you] catfish until your shrimp season opens up. A lot of people fish catfish and they put out trot lines and go out and catch a bunch of catfish. And then a lot of them, [got] just little odd ball jobs, you know, they might went out hired on at a shipyard for three or four months, or a barge line, a barge company, or a welding shop. They understood, that guy is a shrimper, he is only going to be here for three months, maybe two months and then he's going back shrimping when the shrimp season opens up, or [leave when] alligator season opens up. He's going back to that because that's his livelihood.

One individual made a distinction between working for different types of companies, and how this had an impact on what one was able to do, or needed to do, in the way of combining offshore employment with traditional resource use.

If the fishermen went to work for a big oil company, like if he went to work for Texaco or Chevron or Shell Oil company, which is what we call a major oil company, they make pretty good money. Now if they work for a subcontractor, where they didn't make too much, well, yeah, on their days off, all your boats captains and your oil field workers and everything, when they have their time off they go back to their fishing and trying to pick up a few extra dollars here and there. But I have two [relatives], one that works for Chevron and one works for Shell Oil Company offshore . . . seven days on, seven days off. And [now] they're both retired. They worked 30 years with these companies. That's all they did. They didn't try to fish. They had a good income coming in. But if you worked for a subcontractor, you might have worked out there just for four or five dollars an hour, that wasn't any money. You had to come in and make up for it. You had to do something. Besides that wouldn't pay the bills, wouldn't put enough groceries on the table.

One other thing that has changed over the years that was noted in the interviews with respect to the annual round is the number of individuals who are part-time fishers. In several interviews with full-time fishers, they noted that retired people get into fishing, as well as people who have regular full-time jobs who take vacation to make the various season openings. This competition has made it increasingly difficult for those who exclusively rely on fishing for their income. This situation is certainly not unique to the local area, or even to the Gulf region. It is, however, one more example cited of how the growth of the area and ease of access has changed the annual round and the role of extractive use of natural resources in that round.

Another change noted with changes in technology and technique is that, according to interviews, it takes less skill to be a commercial fisherman than in the past. That is, according to fishers who have been fishing their whole lives, the technology and gear available today allows relatively new entrants into the commercial fishery to compete with people who have been fishing for a lifetime, such that traditional knowledge associated with fishing, which would have to be gained over a long period of association with experienced fishers, is of less value than in the past. While the changes to commercial fishing in the area are, in some ways, tangential to the traditional use issues associated



with the Barataria Preserve per se, they are changes to the way of life in the area that have implications for traditional knowledge and use in the area as a whole.

More than one individual interviewed traced the changes in the commercial fishery through the changes in the types of vessels used. Whereas with the 'lugger' type of fishing boat, people in years past would spend days on the fishing grounds, with the advent of the 'Lafitte skiff' design, people could run out to and back from the fishing grounds in the same day. Now, with the use of butterfly nets and skimmers, people are again spending more time on the grounds but, according to interviewees, this increased efficiency has had detrimental impacts on the resources.

At the time of fieldwork (1997), there were three seafood companies located in the Lafitte area that bought and processed product from local fishers: two that specialized in peeling and packing shrimp and one that provided a wider range of processing, including shucking oysters. Additionally, again according to interviews, there were three or four docks in the area where people bought catch from the local fishers and trucked it to processors. In addition to strictly commercial fishing, in years past, according to interview data, fishers used to more frequently engage in bartering than is the case now. As an example of this, one individual noted that you would catch other species, such as flounder, incidental to shrimp (i.e., the target species). You could barter your flounder, but under the present regulatory regime, you cannot keep bycatch, so this traditional type of exchange has fallen by the wayside. In other words, the articulation of commercial and subsistence style fishing (or, more accurately, the differential treatment of portions of the catch for commercial and personal/traditional use purposes) has changed with changes in the regulation and composition of the fishery. One longtime resident summed up the situation as follows:

Things have changed, but you can still do things your grandfather did -- you just can't make a living at it.

This is an especially challenging time for the area whose traditions and economy are based to a large degree on commercial fishing. Another long time resident noted that:

[The fishing industry is still big locally] but . . . it's really a fading industry for a number of reasons. I know there is no fishermen in the bayou that I know now who really want their sons to do this. Uh, they want to do it, and you know they let 'em do it, but they really don't want their sons to do this because it is really, really difficult.

Through increased population, increased participation in fishing, increased pressure on a wide variety of natural resources, and increased regulation, a way of life that has always included 'traditional use' in combination with other natural resource extractive activities is changing. While still a viable industry for some, interviewees were nearly universal in their worries about the future of fishing in the area. The other renewable resource related economic activity that served as an underpinning for many in the area over the years, trapping, has fallen by the wayside. The contemporary traditional use activities on the Barataria Preserve have changed in accordance with,



and in response to, the larger changes in those aspects of the way of life in the area that are dependent upon local resource utilization.

4.6.2 Barataria Preserve as a 'Social Transition Zone' for a 'Traditional' Way of Life

During interviews, a number of individuals mentioned that the Barataria Preserve was, in essence, important to the 'way of life' or 'quality of life' for those communities to the south of the Preserve in the sense of allowing those communities to maintain a degree of insulation from change brought about by population growth and land development. Notwithstanding that the Lafitte area has seen considerable growth in recent years (as discussed in the community profiles section), interviewees often drew a sharp contrast between ways of life in the smaller communities south of the Preserve and the urban/suburban sprawl to the north of the Preserve. In this sense, whatever the actual resource use is on the Barataria Preserve itself, the Preserve is seen as helping to maintain a way of life and a heritage in the communities to the south of the Preserve. Another way of expressing this is to say that the Preserve is helping to maintain a more traditional way of life for residents south of the Preserve than would be the case were the Preserve not there. In the words of one long time resident "the park [Preserve] is real instrumental to everybody here in that it offers us a buffer so that we can maintain our culture, and nobody can get through there." This interviewee's response captures some of the sense of contrast between ways of life north and south of the Preserve, at least as perceived by those south of the Preserve.

There have clearly been 'growing pains' associated with the development that has occurred in recent years in the Lafitte area. According to interview data, there are three main 'types' of individuals who have moved into the area in recent years, accounting for the area's growth. These are: (a) people who have moved back to the area after being gone for some period of time; (b) commuters who have discovered the area and the fact that it is not too difficult of a drive from the city; and, (c) retirees who are looking for a safe, more rural environment in which to retire. Like many other rural areas near large cities, the Lafitte area could be said to be going through a process of 'gentrification,' where land prices are being driven up, the average price of newer homes is much higher than existing homes, and many subtle changes are taking place as a result of (and in tandem with) growth.

In the past, growth of the Lafitte area was limited, to a degree, by the availability of land, or lack thereof. According to one long time resident of the area:

People have come back because of the road, and because the land has opened up. Up until a few years ago, there just wasn't any land for people to buy. Until the Fleming land [one of the area plantations] went on the market, there was basically nothing you could do, unless your family had land and they were willing to give you a piece of it -- mom and dad lived in the house, and you lived in the trailer and so did your brother, that was pretty much the only thing that was here.

The fact that the land is now so popular is somewhat ironic considering comments from interviewees on how they used to be viewed by people from 'up front.' Whereas now the land is at a premium



and the area is considered to be an idyllic setting, it was not that many years ago that, in the words of one local resident, locals were considered "hicks in the boondocks." In the words of another long time resident:

It's like a completely different world from here to just eight miles up the road [the other side of the Preserve]. It's completely different. We don't have the drug traffic like they do -- in the schools and up there in the New Orleans area . . . New Orleans is actually, by the way the crow flies, only twelve miles from here. We have our swamps and our lakes for fishing, we teach our children to fish and hunt. That keeps them off the streets. That's mostly what we do around here. We have the shrimp season. We are about five or ten minutes away from fresh water or salt water fishing, so that makes it nice. It's pretty good out here on the bayou, as long as it don't get too crowded.

In sum, the overall way of life in the communities adjacent to the Barataria Preserve strongly influences the traditional uses that are pursued on the Preserve itself. Use of, and attitudes toward, that particular area and the set of resources associated therewith, do not occur in isolation to what is happening around it. Conversely, the Preserve itself influences the way of life in the communities to the south of the Barataria Preserve by helping to maintain a degree of separation from the greater New Orleans area, and with that separation comes a sense of community identity and tradition that would not be the same without the Preserve.

4.7 TOURISM, TRADITIONAL USE, AND THE BARATARIA PRESERVE

'Tourism' and 'traditional use' intersect within the Barataria Preserve in a number of different ways, but for the purposes of this section, there are two that stand out: (1) traditional use (or, information about traditional use) as a draw for tourism; and (2) use of the Preserve by tourists that may or may not conflict with use by traditional users. These will be considered briefly in turn.

4.7.1 Traditional Use Interpretation and Tourism

Traditional use, or information about traditional use, is a draw for tourists to the Preserve, as can be seen through the interpretive displays at the Visitor Center and information provided to visitors by Preserve staff. That is, in addition to the natural features, flora, and fauna of the area, visitors are interested in the historical and traditional uses of the area, and the cultures of the people who have utilized the area that is now the Barataria Preserve over the course of time. Like any interpretive program, decisions have to be made regarding the summation and presentation of complex materials, and the resulting content of the interpretive materials on traditional use is not without its critics, who span the range from professional researchers to local residents. One researcher contacted commented, for example, that



Park [Barataria Preserve] interpretation is false by omission . . . [the] focus on traditional use is simplistic and misleading. [The] visitor center is built on sugar cane land . . . agricultural lands were an important use of the park area; what is now swamp was agricultural land . . . If you go to the Parish archives and look at the records for the 19th century on Bayou Barataria, the land use was like [that] along the Mississippi. People were raising cows, pigs, horses, crops -- those were the traditional uses.

This individual also pointed out that in the interpretive materials there is little mention of women. Additionally, it was noted that 'piracy and smuggling' were 'traditional uses.' On the other side of the coin, a number of local residents interviewed thought there should be more interpretive materials at the Preserve directed toward what is thought of by some (and perhaps particularly by researchers) as the 'romanticized' version of traditional use. One such suggestion, made in more than one interview, was for there to be a re-creation of a trapper's shack at the visitor center that would show more of the camp life and contain more information about the 'culture' of the local people. From a historical perspective, of course, these issues are complex, with decisions regarding what is 'center' and what is 'margin' depending to a great extent on the perspective chosen. If illustration of continuities with regard to the uses of the area by the multi-generational area resident families is a central focus, interpretation of traditional use yields one set of information; if major land uses by entities whose geographic locus is not important (e.g., activities by 'outside' oil companies) then another set of information becomes relevant. In the 'real world,' of course, past uses of the area that is now the Barataria Preserve resulted from a combination of local and non-local influences, and what constitutes the 'tradition' in 'traditional use' is a matter of interpretation based on explicit or implicit decisions to simplify a complex historical succession. Interestingly, different viewpoints use the same data points in entirely different ways: one comment received was "the park [Preserve] tends to highlight moss gathering, alligator harvest, and so on -- the colorful stuff for the tourists, not the everyday life as it was really lived"; one the flip side, other people interviewed suggested that this was the very type of information not displayed prominently enough -- the information that described those aspects of life that made local living different from that experienced elsewhere. What for one person is a 'romanticized Cajun in the swamp' interpretation may be precisely what some locals would like to see as far as a celebration of local life (glossing over, to a large degree, the hardships associated with such a life and the fact that many 'ways of life' were being pursued in the area simultaneously).

4.7.2 Tourist Use and Traditional Use

The second 'intersection' of tourism and traditional use in the Preserve is in the direct use of the Preserve area. That is, there are areas of the Preserve that are now used by visitors that were formerly and, in some cases, continue to be used by traditional users of the Preserve area. Some of these uses are mutually exclusive; others are not. Perhaps the most obvious example of mutually exclusive use (or, more accurately, simply exclusive use) is in the area of hunting. Visitors have use of a well-developed trail system within the Preserve; regulations prohibit hunting within 500 feet of designated trails (as well as roadways, waterways, or buildings), effectively excluding hunting



from a relatively large portion of the Preserve that can be accessed by foot (and most of upland area as well, or at least those portions that are easily accessible by the public).

A more subtle distinction is in the area of conflicting use between traditional users and 'visitors' is in the area of access. Whereas trail use versus hunting use as a land use conflict could occur between local residents (i.e., trail users and hunters alike could be local), another issue is the fact that because of the 'open to the public' status of the Barataria Preserve, persons from outside of the area theoretically could be accessing the area to the 'detriment' of traditional users. Based on data gathered through interviews, this does not appear to be a significant issue, for a few reasons. First, prior to the area becoming a Preserve, local residents did not have unlimited access to those lands that were in private ownership (although actual use may have varied somewhat in practice from legally permitted use). Second, there would appear to be little traditional use of the Preserve by local residents for a variety of reasons as detailed in this report, such that direct use by tourists would only account for a small portion of any decline in traditional use attributed to the Preserve area. Third, as noted elsewhere, the area that is now the Preserve was not standing idle at the time of the creation of the Preserve. For example, among other uses, agriculture was commonly practiced on a portion of the Preserve, while in another area a hunt club had use of the property. When the area became a Preserve, opportunities were opened both for local traditional users as well as for outside visitors.

It should also be noted that tourism associated with the Preserve has helped to diversify the local economy to a degree, and more specifically has helped to underpin those sectors of the economy that are dependent upon a visiting customer base in general. There have also been additional tourist-oriented opportunities for traditional users. While this activity to date has been quite limited, there are individuals in the area who have taken up guiding for hunting and fishing for income, which represents (to a degree) a conversion of traditional use skills to entrepreneurial undertakings. While these activities take place off of the Preserve, the Barataria Preserve acts as a type of indirect support base for this type of business by attracting visitors to the area (and being a relatively productive part of the overall natural resource base upon which such activities are ultimately based).

Another point worth making is that just as there are those in the administration of the National Park Service who feel that, at some level, traditional use and, in particular, consumptive traditional use of wild resources, is philosophically incompatible with the management goals of the Preserve within the National Park system, there are members of the public who feel the same way. This came out in two different ways during interviews. First, some interviewees felt that allowing hunting within the Barataria Preserve was incompatible with other uses of the Preserve, based on safety considerations. In the words of one interviewee:

[I] question the wisdom of allowing any hunting in the park [the Barataria Preserve] when there are so many other activities there . . . other uses and other people in the park. It is scary to hear the shots when you are in there . . . The population is growing too.

One interviewee went so far as to suggest that it will simply take a particularly tragic (and, in their mind, inevitable) accident involving the shooting of a non-hunter before a way is found to



discontinue hunting in the Preserve, despite the language of the enabling legislation. (Several interviewees offered the personal opinion that they thought the Park Service would like to find a way to discontinue hunting within the Preserve if a politically acceptable way could be found to do so.) Along a second line of argument, some other interviewees suggested that the good health of the wildlife populations within the Preserve, and the increased pressure on wildlife populations outside of the Preserve (through population growth and habitat loss, among other factors), should be enough to make the Park Service think about making the Barataria Preserve a no-take zone.

During one of the focus group interviews, a point was brought up that the Preserve, simply through the publication of maps of the area (such as the trail guide) has opened up the area to outsiders who would not have otherwise ventured into the landscape. The same is true of the canoe routes. While no conflicts were seen arising from this, the simple act of information dissemination has enabled a shift in use patterns.

Perhaps a final point to make in this area is that, perhaps inevitably, there were some local residents among the interviewees who felt that the Barataria Preserve was managed exclusively, or nearly exclusively, for the benefit of 'outsiders.' That is, although the 'right' of traditional use is secured in the enabling legislation for the Preserve, they felt that the Preserve is managed in such a way as to maximize benefits for non-local residents as opposed to striking a balance that recognizes the unique relationship between local residents and the resources and area of the Preserve. Obviously, this is not a problem unique to the management of the Barataria Preserve, or even the National Park Service as a whole, where 'national' resources are also viewed as 'local' resources by local residents.

4.7.3 Preserve Tourism and 'Spillover': Traditional Use Associated Activities Adjacent to the Preserve

To a degree, the Barataria Preserve has fostered tourism in the area, and some of the tourism associated with the Preserve has 'spilled over' into the adjacent communities in ways that interact with traditional use, traditional use associated knowledge, or the interpretation of traditional use. These topics are summarized in this section.

Natural Resource Related Tourism: Swamp Tours

One of the types of tourist oriented businesses that has grown near the park in recent years is the 'swamp tour' industry segment. At the present time, none of these businesses operate within the Barataria Preserve itself, according to senior park staff. Other interview data suggest that at least one tour operator sometimes enters the southern end of the Preserve. In any event, swamp tour companies do use the area on the external boundary of the Preserve. While these are not traditional uses of the area, they are clearly using traditional use themes in their business undertakings. For example, on one tour accompanied during the research for this project, the operator discussed camp life, trapping, and how the area was utilized over the past several generations, along with the general history and natural history of the area. This highlights not only the tourist interest in the ecological



systems of the area, but also interest in the history, traditional uses, and culture of the area. The fact that the Barataria Preserve is a National Park (as opposed to a state or local park) is a recognized draw for tourists, and the Preserve also acts as supplier of wildlife to adjacent areas that tourism oriented businesses capitalize upon.

One of the larger draws of the swamp tours are alligators (which are featured prominently in their advertisements), and there was some concern expressed regarding the impact these tours may have on the habits of the alligators with respect to interactions with traditional users of the Barataria Preserve. One individual noted during an interview that swamp tour operators feed the alligators, and the alligators may come to associate humans with food sources, which was a source of concern for him as he typically fished from a small boat or pirogue. How 'realistic' such concerns are is an open question; what is apparent is that the presence of the Preserve is part of a larger pattern of a changing relationship between the local economy and the local resource base adjacent to the Preserve wherein traditional uses are being supplemented (or replaced or displaced) by tourism oriented uses.

Other Tourism and the General Impact of the Preserve on the Local Communities

The Barataria Preserve is seen as integral to the growth of the tourist industry in the area. According to an officer of the local tourist commission: "The park is unique in that it is going to be there . . . the wildlife and the way it looks is the reason that we are able to have a tourist industry that is growing by leaps and bounds." In other words, the fact that the area is 'traditional looking' is seen as the primary draw for tourism that is based in large part on the features and history of the area.

It is a perfect scenario for tourism here, because you've got the wide section road that goes to Crown Point, where people can get there real easily . . . and you have businesses that require a lot of people, but as you funnel on down across the bridge, you have smaller businesses that are dependent on exactly the opposite -- it not growing too big.

It is not lost on the local people that they are part of the attraction of the Preserve. In the words of one long time resident:

The park is the number one thing for the tourism. The fact that it is named 'Jean Lafitte' is important -- for the emphasis on the area [part of the name of the political geography, therefore there is identification with Lafitte and the town of Jean Lafitte], and the emphasis on the cultural aspects of the park -- the heritage of the local people . . . people come to see the swamp, alligators, flowers, Cajuns, birds -- people are a part of what the outside people are interested in.

In sum, the impact of the Barataria Preserve on the communities near it, and the relationship of those communities and the local resource base, is not confined to the area of the Preserve and the activities that take place on the Preserve itself. The Preserve represents an opportunity to the community through helping to supply both consumers and resources for the tourism industry, and thereby is part



of the pattern of change with respect to the relationship of these communities to the local resource base, both on and off the Preserve.

4.8 CONTEMPORARY AMERICAN INDIAN TRADITIONAL USE

At present, the American Indian entity with the most visible presence in the area around the Barataria Preserve is the United Houma Nation. The Houma, while a state recognized entity, are not a federally recognized tribe, though they have sought, and continue to seek, such recognition (Curry 1979). Various documentary sources note that there are Houma descendants in the Crown Point and Barataria area (e.g., Spitzer n.d.), though this is not a central concentration of Houma peoples. Additionally, there are reportedly families of Houma descent living in the Westbank communities to the north of the Barataria Preserve (such as Westwego, Gretna, Marrero, and Harvey [Spitzer n.d.:208]). In the process of preparing this report, a meeting of the United Houma Tribal Council was attended, with input from the Council on traditional use of the Barataria Preserve sought as a specific agenda item.

The Houma Tribal Council, spanning five parishes (Terrebone, Jefferson, Lafource, St. Mary, and Plaquemines) further subdivides those parishes into districts or seats for representation at the council level. Under the current organization, the area of the Barataria Preserve is within Jefferson Parish District 2 (which covers Lafitte and Marrero, south of Lapalco). In addition to being the American Indian entity whose present geopolitical organization encompasses the Preserve area, the Houma were considered important to consult with for this study for two reasons: (1) previous public input on Barataria Preserve issues unrelated to the present study; and (2) a disproportionate number of residents of Houma descent living immediately adjacent to the Barataria Preserve.

One relatively recent set of public hearings related to the Barataria Preserve highlighted the fact that individuals of Houma descent, or the Houma as a group, may have different perspectives on Preserve management, based on their tribal affiliation. Specifically, when public hearings were held regarding possible expansion of the Barataria Preserve through the acquisition of adjacent privately held lands, the issue of Houma affiliation came to light regarding lands at the southern end of the Preserve near Isle Bonne road. This area, a mostly undeveloped wetland, a part of which was studied for its suitability for inclusion within Preserve, is home to a number of families of Houma descent. Opposition by landowners to inclusion of this land within the Preserve was strong. As noted elsewhere, lands in this area are often held in one family, or by extended or related families, for generations. In general, the residents were upset at the prospect of losing land to which they have a long connection, and specifically a multi-generational connection. It would appear that in this case, the issue was about families who were of Houma descent concerned about individually owned pieces of land (and the lands owned by their neighbors and relatives) rather than concern over specific sites being important to the Houma as a group or tribal entity.

A second issue to consider regarding the relationship of the Houma to the Barataria Preserve is the fact that while there are individuals and families of Houma descent in the communities near the Preserve, there is a particular concentration of persons of Houma descent immediately adjacent to



the Preserve, along Isle Bonne road. According to interview data, this settlement pattern derives primarily from the migration of an extended family during the early years of this century, not from continuous occupation from precontact times. While Houma peoples are found throughout the general region, such concentrations of several generations of extended families living in close proximity to each other, but somewhat removed from other Houma families, is apparently not uncommon, according to a tribal official. According to several interviews, differential education segregation practices between areas and parishes were not an uncommon reason for individual and extended family Houma moves earlier in this century. Apparently, while some parishes provided for separate education for Euro-American and African-American children, they did not allow American Indian children to attend school (as late as the early 1960s), while in others, as was the case near the Barataria Preserve, American Indian children were permitted to attend school (although, according to interviews, such attendance was by no means without incident). As a result of these practices, some families moved to areas where their children could receive educations.

In any event, the fact that Houma families live adjacent to the Preserve suggest the possibility of differential use of Preserve resources. Interview data, however, suggest that this is not the case. For example, there are individuals in the area who are of Houma descent who are particularly knowledgeable about the use of wild plants both as foods and medicines. During interviews, quite a number of plants were named that were could be used for treatment of various maladies or injuries, such as fever or colds (citronel), burns (banana leaves), stings and swelling (elderberry leaves), blunt trauma (plantain leaves), diarrhea (blackberry roots), skin problems (marigold salve), liver problems (dock root), and ulcers (cattail), among others. Information from interviews with individuals recognized by others as the most knowledgeable in the local communities suggest that none of the resource collection associated with these types of uses take place within the Barataria Preserve, for a variety of reasons. These reasons include having the same plants available at more accessible sites, and a general avoidance of collecting materials within the Preserve, due to either a reluctance to deal with Preserve personnel and/or regulations or a mistaken belief that no collecting is permitted within the Preserve. This is not to say that such uses do not occur (some families may do so unbeknownst to the families contacted), or that they may not occur in the future, but clearly the Barataria Preserve is not seen as an important medicinal/food plant resource location for local, multi-generation families, and for Houma families in particular, at the present time. (It may also be the case that such uses are made of plants on the Preserve by individuals outside of the communities to the south of the Preserve.) Some interviewees noted that while such uses are still known to some, this knowledge is fading quickly as the older generation passes away. In the words of one individual, referring to the traditional knowledge about and the consumption of wild resources: "foods are dying like the [local use of the] French language."

While it is important to note that not all Isle Bonne residents are of Houma descent, nor are all those of Houma descent in the region located in the Isle Bonne area, Isle Bonne does have a particular relationship with the Preserve that is different from the other communities or settlement concentrations in the area. In the Isle Bonne area there is a limited amount of private land effectively boxed in by the Barataria Preserve and Bayou Barataria. The other side of the bayou, directly across from Isle Bonne, has been the location of some of the most dramatic growth and change in the area (following the breakup of one of the plantations in the area). Isle Bonne residents, because of the



their proximity to the Preserve, are perhaps the people who could be most directly impacted by Preserve management decisions, yet they are, perhaps ironically, precisely the area whose character could be most 'preserved' by the Preserve by the physical hemming in, because there is not the adjacent private land that exists in other places and that can be developed. In other words, the way of life of Isle Bonne residents depends upon Preserve management decisions in a most direct way. In the words of one individual from Isle Bonne whose home is on the bayou (and whose family is partially Houma):

Yes, I'm glad that the park came in, like I said, [and] all the subdivisions didn't take over. At one time, they [the Park Service] were trying to buy us out here [i.e., the Park Service was studying potential boundary expansion in the area]. Buy the residents out over here. I didn't like that. Of course, all the people got together and fought against it. They [the Preserve] didn't need this area, it wasn't feasible at this time. So, they put us back. We didn't have to leave. This is what we call a piece of heaven here. We don't want to leave. How could you replace something like this with anything else? It's hard to find a place like this. When you leave New Orleans or even the Westbank of Marrero, Harvey or Gretna and come down here it's like being in a different world. Our schools are different, you know, our living is different down here. It's just, you know, you don't have all the trouble that's in these cities and these other places that are populated, heavy populated areas. This is what we love down here. We love our area down here. We would like to see the park work in conjunction with us and just keep it the way it is. We understand it's one of the world's smallest national parks. But we'd like to see the people fit in with it.

While no direct associations between the Houma as a group and the Barataria Preserve in terms of traditional use were uncovered during the course of the work for this report (save for the individual family associations already noted), prior consultations with the Houma did reveal several types of potential associations (Peña 1994). These associations included: seasonal migration to the area; a sense of kinship to the land; during the World War II era, ceremonies and prayers were conducted in this area for their people; members felt that they had always been involved with the Park since its inception and were part of the planning process; and, members feel stewardship for mounds on Park property even though in probability they are not direct Houma ancestors. This latter point, that Houma tribal members may feel stewardship for American Indian sites on Barataria Preserve lands, independent of knowledge, or lack thereof, of direct ancestral associations, is an important consideration to bear in mind in the Preserve planning process.

One category of potential resource use within the Preserve that was brought up during an interview with a person of Houma descent was the possibility of obtaining feathers from the Preserve for use in ceremonial dress. This individual did not indicate that the area that is now the Preserve was or was not utilized for obtaining feathers in the past but, rather, made an inquiry as to whether or not feathers could be obtained from Preserve authorities that were found in the Preserve as a the result of roadkill or other means. Senior Preserve staff indicated that this is a type of request that is not possible to fulfill, given the inability to screen for individuals who might make such requests, and



then finding themselves in the position of having to say 'no' to some requests, having said 'yes' to others.

4.9 CEREMONIAL OR RELIGIOUS TRADITIONAL USE

According to interviews with Preserve staff, there is some use of Barataria Preserve for ritualistic or ceremonial purposes. These uses are not documented as to their content nor the participants involved, but are believed to be more associated with individuals and groups in the New Orleans urban area than residents of the smaller local communities, or local affiliates of American Indian tribes.

Correspondence from Park Service files from the early days of the Barataria Preserve indicate that the Houma Tribe was invited to participate in what would appear to be a ceremonial dedication or recognition of the importance of the Preserve area, but little is known about the background or content of this event. There apparently was a 'pipe ceremony' to which the Houma were invited in 1978 by the first Superintendent of the Park who, according to internal NPS documents was instrumental in involving the Houma in dialog about the management of the Barataria Preserve. During interviews, no religious, ceremonial, or ritual uses of specific sites within the Preserve were mentioned by any interviewee. This is not to say that there are no such uses, nor is it appropriate to state that no American Indian groups are or could be interested in the Barataria Preserve based on past use or current affiliations. Indeed, based on present geographic areas of representation, the Houma would likely be interested in finds of significant Native American cultural resources on the Preserve.

4.10 PUBLIC INPUT RECOMMENDATIONS: TRADITIONAL USE ISSUES

During the course of the interviews, individuals were asked for their input regarding recommendations for the management of the Barataria Preserve, and were specifically asked for input regarding traditional use issues. The body of this chapter on traditional use contains many issues to which local residents spoke regarding Park Service management. Specific recommendations beyond those already discussed in this chapter are summarized in this subsection.

In general, local residents thought that the Park Service was doing a good job at communicating with the local communities, though there were numerous exceptions to this perspective. Perhaps the most fundamental lesson learned out of a recent boundary study controversy was the value in communicating with local residents about potential management direction and overall strategies prior to the dissemination of seemingly completed plans for public comment.

One long time resident, when asked about recommendations for improving communications between the park and local residents, noted that the Park Service actions are not seen as independent of other federal actions in the area, and had this general piece of advice to offer regarding the 'style' of interaction with the public:



In public meetings [they] should not have park people in uniforms. Some people down here not only have a problem with the park, they have a problem with any kind of authority -- we were pirates, goddamn it. We don't like authority. That is what the base of what this community is about. In the past 10 years, the federal government has knocked us around like crazy with the trawling [regulations], and all that, so of course they hate anybody associated with the federal government . . . The park really needs to figure out how to run a meeting so it looks like they were listening. Sit around the table in regular clothes -- not in front of the room in uniform.

Others offered more specific types of input or noted more specific areas of concern. These may be summarized as follows:

- Loss of land (marsh) through erosion was cited as something that the Preserve needs to contend with. While this is hardly a problem of which Preserve management is unaware, and has been attempting to address (e.g., through the placement of barrier materials along the eastern shoreline of Lake Salvador where erosion was destroying the area between the lake shore and the Bayou Segnette/Westwego Canal), it is a long-term concern of people who use the Preserve in general, and specifically for those people who live closest to the most threatened areas (Isle Bonne area residents).
- Water quality was noted as a big issue for the Preserve to contend with, and no easy solutions are in sight. Concerns over water quality were expressed in regarding specific sources of pollution (e.g., camps), pollution entering the Preserve via current or proposed freshwater sources (e.g., pollution from the Westbank area or proposed freshwater diversion projects), and long-term changes brought about by the construction of canals and waterways that have an impact on the process of saltwater intrusion.
- Input was received regarding management of the area at the end of the road (Highway 301) in Preserve land at the southern end of the Isle Bonne settlement area. In the words of one long-time resident:

"There is now a problem with the dead end part of the road in Isle Bonne. They should gate that area off at night, like other day use areas. There are people back there that drink and do drugs, steal cars and boats, all kinds of things. The park could make that area nice, put some picnic tables back there, but gate it off and night, open it in the morning, and then there wouldn't be the trouble. People drive from a long way away to get to the end of the road. There are kids from the Westbank that come down."

This is an issue that local residents thought should be given priority, because it got to the heart of the type of question that some people asked -- a question to the effect of 'why is the Preserve interested in acquiring more land, when they have trouble keeping up with what they have?' Given that this is adjacent to an area that was most strongly opposed to Preserve



boundary expansion, and is an area of the Preserve immediately adjacent to a residential area, this concern is logical.

- Several persons noted that there is no easy way that they knew of to get hold of Barataria Preserve enforcement personnel after hours for poaching enforcement, and expressed frustration at knowing that poaching was taking place and that they were not able to do anything about it in a timely fashion. (This too is not a straightforward issue, as there are resource constraints within which the Preserve staff has to work, but local concern may be gauged by the fact that it was an issue that was brought up more than once.)
- A number of persons remarked that the canoe trails in the Preserve could be better marked. (This is, of course, not a straightforward issue, as placing signs in the Preserve detracts from the natural ambiance of the setting, and the type of 'wilderness' experience many people who canoe the Preserve area seeking, but in interviews, some people mentioned the problems that were incurred by non-residents getting turned around in the area.)
- Several interviewees suggested that they would like to see a display at the visitors center of muskrat and mink trapping, to show people what it was like. The more ambitious of these suggestions included having a reproduction of a trapper's camp, showing the various implements of everyday life, and fleshing out the story of daily camp life. Others suggested have a live, on-the-premises demonstration, showing people doing the things associated with trapping. (As noted in the body of the text of this section, this type of suggestion involves interpretive decisions regarding a balanced treatment of the history of the area; public input would suggest that from a long term, local resident perspective, showing the cultural history of the past several generations as they were involved in non-industrial resource extraction on the Preserve would be a source of pride for the community.)
- Other suggestions for interpretation regarding traditional use on the Barataria Preserve included having an individual at the visitor center "showing how trawl nets are made and mended, how the people do that . . . same with crab traps -- the people here make their own even now." (Like any interpretive activity, such 'live' displays would consume considerable resources and have to be of a planned duration to maximize their benefit -- but that such suggestions were offered is indicative of the interest of the local residents in having the Preserve 'tell the story' of those aspects of recent and contemporary life that are particular to the area.)
- One suggestion received regarding traditional use documentation on the Preserve would be to have the Preserve get more involved with the schools in a program to have children interview their older relatives in the area and assemble traditional use interpretative materials based on these interviews and whatever photographic or documentary materials families may have. The advantages to this approach as noted by the people making the suggestion were the active involvement of the children in learning about their heritage as well as the discovery of information or materials previously unknown to Preserve personnel (and getting the Preserve personnel more actively involved with the community).



- One individual suggested that a beneficial activity for the Preserve education center would be to have French lessons given there. This individual noted that her "grandmother did not speak English until [she] was 12 years old . . . No one speaks French here anymore, except for the oldest people -- some of the younger ones understand some, but do not speak it. [They] could have Cajun French lessons here to refresh the local culture, and have them at the education center."
- Another suggestion to have the community more involved with the Preserve was to "have a Lafitte day at the park" where local families would be encouraged to come and participate in activities on the Preserve. While the specifics of such an event were unclear, the intent was to have an annual event that recognized the special relationship of the Preserve to the communities to the south of the Preserve, and to have a chance for people to understand what was going on in a fun context.
- It was also suggested that the Preserve staff maintain coordination with the local tourist commission, as they represent businesses in the area that are, in part, dependent upon the tourism generated by the Preserve, and that are impacted by Preserve management decisions.

In sum, there were few concrete suggestions regarding Preserve management and traditional use, per se, beyond those issues of concern mentioned in the body of this chapter. The suggestions that were received showed an interest in having the Preserve actively involved with documenting and helping to pass on traditional knowledge of the area. Local residents are also concerned with the long term management of resources in the area, upon which traditional use (and other) activities depend, and which are threatened by sources of change beyond the boundaries of the Preserve.



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6.0 ANNOTATED BIBLIOGRAPHY



This section consists of an annotated bibliography that focuses on the major published and readily accessible unpublished sources on the identified traditional communities, as well as the Barataria Preserve area in general, that are relevant to the Traditional Use study at hand.

Acadiana Planning and Development District. 1976. *The Comprehensive Plan for the Chitimacha Tribe of Louisiana.*

This document consists of a recent land use study for the Chitimacha Indians living on the Chitimacha Indian Reservation in the Atchafalaya Basin in Charenton, Louisiana. When the Chitimachas were removed from French territory during the French colonial period, many fled to this Charenton area. The land use study also provides some descriptive information about the Reservation and the contemporary Chitimachas living there.

Allain, Mathe. 1995. "Colbert's policy crumbles LaSalle's voyages." Pp. 31-47 in Glenn R. Conrad (ed.) *The French Experience in Louisiana: Volume 1 of The Louisiana Purchase Bicentennial Series in Louisiana History.* Lafayette, LA: Center for Louisiana Studies, University of Southwestern Louisiana.

This article provides an overview of early French exploration and settlement in Louisiana. It explains French colonial policy and highlights the importance of settlements in Louisiana as strategic outposts against the advances of Spain. Although it has little relevance to contemporary land use patterns, it is important background information for understanding historical land use patterns and the locations of colonial settlements.

Ancelet, Barry Jean, Jay D. Edwards and Glen Pitre. 1991. *Cajun Country.* Jackson, MS: University Press of Mississippi.

This volume is part of the Folklife in the South Series. It is a broad overview of Acadian or "Cajun" (which is the term used by the authors) folkways and includes a few chapters on history and settlement patterns. This book is helpful for developing an understanding of the extent of Acadian influence in the Barataria Basin area.



Barataria-Terrebonne National Estuary Program. 1995. *Saving Our Good Earth: Call to Action. Barataria-Terrebonne National Estuary Program Characterization Report.* Thibodaux, LA.

As a snapshot of the Barataria and Terrebonne Basins, this booklet is quite useful. It provides an introduction and overview of the two basin areas in terms of natural resources and livelihoods of the residents. Some of the more relevant social topics discussed are the declining dependence on natural resources and traditional livelihoods, the ever increasing importance of the oil and gas industry, and the expanding population. This small publication also devotes space to an explanation of the importance of the marsh and the ecological problems, some of which are man-made, that are facing the basins today.

Barataria-Terrebonne National Estuary Program. 1995. *Land Use and Socioeconomic Status and Trends in the Barataria-Terrebonne Estuary System. Report #23.*

Discusses current socioeconomic and demographic trends and conditions for parishes in the region. The information places the region in socioeconomic perspective by describing rural and urban shifts in population, gentrification, land density, population density, income, per capita income, and poverty status.

Barataria-Terrebonne National Estuary Program. 1991. *Scientific-Technical Committee Data Inventory Workshop Proceedings.* Thibodaux, LA: BTNEP Publication.

The Scientific Technical Committee is one of five committees convened by the Barataria-Terrebonne National Estuary Program to identify major problem areas in the Barataria and Terrebonne Basins. This workshop was held to develop a better understanding of the seven priority problem areas: hydrological modification, loss of sediment availability, changes in living resources, habitat modification, eutrophication, pathogen contamination, and toxic substances. This report consists of the papers presented at the workshop, and is organized according to each of the priority areas. This is a very useful publication for understanding the effects of human use of the basins.

Beavers, Richard C. 1982. *Archeological Site Inventory of the Barataria Marsh Unit Core Area - Jean Lafitte National Historical Park, Jefferson Parish, Louisiana National Park Service: Jean Lafitte National Historic Park and Preserve.*

Although a traditional archeological site inventory of a specific locale within the Barataria Preserve, this work has relevance for examination of traditional uses. Their areas of special interest are: (1) a description of settlement patterns and land use within the Barataria Basin; (2) a listing of plant resources used in historic times; (3) discussion of prehistoric American Indian settlement locations; and (4) a discussion of American Indian hunting practices and technology.



Beavers, Richard C. 1982. *Determination of Degree of Adverse Impact on Known Cultural Resources by Proposed Public Access Facilities at the Barataria Marsh Unit Core Area, Jean Lafitte National Historic Park and Preserve. National Park Service.*

The focus of this site specific archeological assessment is an area in the Preserve near the confluence of Bayou des Familles and Bayou Coquille. There is an extended discussion of prehistoric shell middens and ceramic resources at this and other sites in the region. This work is likely to have minimal relevance for assessments of present-day traditional use of the Preserve, but is essential background archeology.

Becnel, Thomas A. 1989. *The Barrow Family and the Barataria and Lafourche Canal: The Transportation Revolution in Louisiana, 1829-1925. Baton Rouge, LA: Louisiana State University Press.*

This book chronicles the economic activities of two generations of a family of planters, the Barrows, in the Barataria region. In the process, Becnel provides a thoughtful analysis of the regional political economy. For about 100 years, the Barrows, like many other farmers in the region, struggled with the economy realities of large scale agriculture. Like the others, the Barrows cultivated cotton and sugar cane. And like many of the others, the Barrows dug canals for transportation. This book provides an excellent discussion of the dependence of early Baratarians on water transportation.

Brasseaux, Carl A. 1987. *The Founding of New Acadia: The Beginnings of Acadian Life in Louisiana, 1765-1803. Baton Rouge, LA: Louisiana State University Press.*

The emphasis in this book is the early history and settlement patterns of the Acadian dispersal along the Middle Atlantic Colonies and in Louisiana. This is perhaps one of the most detailed accounts of early Acadian history published, yet it provides sketchy detail on the eastern Louisiana settlement patterns of the Acadians. Nonetheless, it provides a very careful and exacting interpretation of historical events and demographic trends in Louisiana.

Brasseaux, Carl A. 1995. "The image of Louisiana and the failure of voluntary French emigration, 1683-1731. Pp. 153-162 in Glenn R. Conrad (ed.) *The French Experience in Louisiana: Volume I in the Louisiana Purchase Bicentennial Series in Louisiana History. Lafayette, LA: Center for Louisiana Studies: University of Southwestern Louisiana.*

This is an interesting background article that provides information on how France struggled to populate Louisiana and the efforts made to encourage immigration. The image of Louisiana was so negative, that to develop a stable agrarian base in the colony, France had to resort to propaganda campaigns and forced emigration. This article provides a better understanding of the ethnic identities of those who settled in Louisiana during French rule.



Brasseaux, Carl A. 1996. "La Delaissee: Louisiana during the reign of the Louis XIV, 1699-1715." Pp. 13-23 in Carl A. Brasseaux (ed.) *A Refuge for All Ages: Immigration in Louisiana History: Volume X in The Louisiana Purchase Bicentennial Series in Louisiana History*. Lafayette, LA: Center for Louisiana Studies: University of Southwestern Louisiana.

This is another good background article that not only details the politics of the French government in settling Louisiana, it details the problems that France, and the colonies encountered in trying to settle. This piece emphasizes how the Louisiana colony was of low priority to the French Crown and the necessity of entrepreneurial development of Louisiana. This article provides insight into subsequent patterns of land ownership in the colony.

Brassieur, Charles R. 1980. *A Preliminary Ethnographic Survey of the Atchafalaya Basin Area*. Unpublished Master's Thesis. Louisiana State University.

Although Brassieur's master's thesis focuses on the Atchafalaya Basin, it is a useful document to the study. Ethnically speaking, the lines of demarcation between the Atchafalaya Basin and the Barataria region are blurred. A major focus of this work is culturally distinctive lifestyles and practices.

Cohen, Lucy M. 1996. "Entry of the Chinese to the lower South: policy dilemmas." Pp. 524-551 in Carl A. Brasseaux (ed.) *A Refuge for All Ages: Immigration in Louisiana History: Volume X in The Louisiana Purchase Bicentennial Series in Louisiana History*. Lafayette, LA: Center for Louisiana Studies: University of Southwestern Louisiana.

This is one of the few pieces written that details the introduction of the Chinese in Louisiana for working on the sugar plantations. It documents the labor problems that planters in South Louisiana were experiencing. Although it does not contribute to an understanding of contemporary land use patterns in the Barataria Preserve itself, it provides background information on historical labor problems in the general area and ethnic development.

Condrey, R., P. Kemp, J. Visser, J. Gosselink, D. Lindstedt, E. Melancon, G. Peterson and B. Thompson. 1995. *Status, Trends and Probable Causes of Change in Living Resources in the Barataria and Terrebonne Estuarine Systems*. BTNEP Publ. No. 21, Barataria-Terrebonne National Estuary Program, Thibodaux, Louisiana, 434 pp.

This publication documents contemporary resource use in the Barataria-Terrebonne Estuarine System, a system that consists of both the Barataria and Terrebonne Basins. The report is extremely detailed and provides an executive summary and detailed information about resource use (including harvest) and impact on invertebrates, finfish, birds and mammals in the system.



Conrad, Glenn R. 1970. *The First Families of Louisiana*. Baton Rouge, LA: Claitors.

This document consists of records of the European immigration to Louisiana from 1717 to 1731 from the Archives Nationales in Paris. Records include the French, German, Bohemian, English and Irish immigrants that settled in and around New Orleans. These records are from ship passenger lists and censuses for the area around New Orleans. Although they do not pertain specifically to the Barataria area, they are useful in determining historical land use patterns for the French settlement in general as they include information on settlers occupations.

Davis, Dave P. 1984. *Perspectives on Gulf Coast Prehistory*. Gainesville, FL: University of Florida Press.

This edited volume, which developed from a Gulf coast archeology conference held at Avery Island, Louisiana, contains chapters on prehistoric and historic occupation of the Northern Gulf Coast, with a particular emphasis on the Louisiana and Texas gulf coast areas. A major impetus for the conference was the significance of the coastal location to cultural developments. Its relevance to the project lies in its detailed discussions of the relationships between humans and the physical environment, the social organization of prehistoric inhabitants and the locations of American Indian villages in the late seventeenth and early eighteenth centuries.

Din, Gilbert C. c. 1980. *A History of the Isleños in Southern Louisiana to 1945: A Report for the Jean Lafitte National Historical Park, James L. Isenogle, Superintendent*. Manuscript in the library of Jean Lafitte National Historical Park and Preserve.

The major value of this work of relevance to Barataria is the overall discussion of Isleños and their culture. Chapter 4 specifically discusses New Orleans and St. Bernard Parishes with some specific references to Barataria. Details of pre- 1800 population and demography are relevant to Barataria, but the post-1800 discussion is less developed. Although this work does not develop details about modern Isleños and Barataria, it is solid background that is relevant to understanding the historical context of the relationship of Isleños to the Barataria region.

Din, Gilbert. 1972. "Early Spanish colonization efforts in Louisiana." *Louisiana Studies* 11(1): 31-49. Natchitoches, LA: Southern Studies Institute, Northwestern State University.

This article provides an brief, but detailed overview of Spanish colonization efforts in Louisiana. Although it is detailed, and provides some information about the Baratarian settlement, it is mostly useful to this study as background information.



Din, Gilbert C. 1980. "Cimarrones and the San Malo Band in Spanish Louisiana." *Louisiana History* 21(3):237-262. Natchitoches, LA: Southern Studies Institute, Northwestern State University.

This article is important as a background piece. Very little, if anything, had been written on the African American influence in the Barataria area. Unfortunately, this article only touches upon the cimarrones (runaway slaves) that lived and operated in the Barataria area.

Din, Gilbert C. 1988. *The Canary Islanders of Louisiana*. Baton Rouge, LA: Louisiana State University Press.

This book provides a complete and detailed history of the Canary Islanders in Louisiana as well as a great deal of information about the location and status of their descendants, and their impact on present-day Louisiana life and culture. It begins with the origins of the Canary Islanders and progresses through World War II until the late 1970s. Din covers historical and modern conflicts with other cultural and ethnic groups in Louisiana. The book contains an appendix covering the passenger lists of Canary Islanders sailing to Louisiana between 1778 and 1783 making the book useful to genealogists as well as those interested in history.

Din, Gilbert C. 1996. "The Canary Islander Settlements of Spanish Louisiana: an overview." Pp. 209-226 in Carl A. Brasseaux (ed.) *A Refuge for All Ages: Immigration in Louisiana History: Volume X in The Louisiana Purchase Bicentennial Series in Louisiana History*. Lafayette, LA: Center for Louisiana Studies: University of Southwestern Louisiana.

This article provides an overview of the Isleño settlements of Spanish Louisiana. Din points out that the Isleño settlements have received very little attention in the historical literature and that most of the accounts mention only three settlement locations, ignoring the Barataria settlements. This is due in part to the lack of documentation of the Barataria settlement, and the fact that it was abandoned shortly after it was established. Because of the lack of documentation, Din's account of the Barataria settlement is short, but it is more information than other writers have provided.

Dreschel, E. J. And H. Makuakane-Dreschel. 1982. *An Ethnohistory of the 19th Century Louisiana Indians*. Unpublished Manuscript, National Park Service, New Orleans. Jean Lafitte National Historical Park and Preserve.

This is an ethnohistory that focuses on identifying relevant historic periods for Louisiana American Indians. This work applies an "ecological approach" that groups American Indians according to their use of particular resources. This has some use for assessing traditional use, but its specific value for those interested in Barataria is the discussion of Chitimacha and Houma American Indians.



Duplantier, Stephen. 1981. *An Essay on Lower Louisiana; An Ethnohistory of 12,000 Years of Life on the Brink*. National Park Service, Jean Lafitte National Historical Park and Preserve.

Although not specific to Barataria, this work is a useful overview of ethnic groups in Southern Louisiana. There is some description of patterns of traditional use, but it is superficially developed.

Durrenberger, E. Paul. 1996. *Gulf Coast Soundings: People and Policy in the Mississippi Shrimp Industry*. Lawrence, KS: University Press of Kansas.

This book documents the twentieth century development of the shrimp industry along the Gulf Coast area. As an anthropological account, it is useful because it provides a basic understanding of shrimping, the lifestyles associated with shrimping and the shrimping economy.

du Pratz, A. Le Page. 1774. *The History of Louisiana*. New Orleans, LA: The Pelican Press, Inc.

This is obviously a reprint of the original account by du Pratz. It is cited by numerous contemporary studies on Barataria for the details it gives on colonial lifestyles and the natural environment encountered by colonists. It provides insight into how subsequent occupations have changed the environment.

Evans, Sally K., Frederick Stielow and Betsy Swanson. 1979. *Grand Isle on the Gulf: An Early History*. Metairie, LA: Jefferson Parish Historical Commission.

This book provides a brief overview of the history of Grand Isle from early French exploration to the late plantation era, in which time Grand Isle became known as a resort area. Grande Isle's value as a resort, until only recently, was greatly diminished by the hurricane of 1893. The book provides a good discussion of the inhabitants from 1860-1893, including occupational information from the 1880 Census.

Ferleger, Louis. 1982. "Farm mechanization in the Southern sugar sector after the Civil War." *Louisiana History* 23(1):21-34.

This is a rather detailed article detailing mechanization of sugar production at the end of the nineteenth century. Although it is not about the Barataria sugar producers specifically, it has some relevance to the study in that it provides an understanding of the dynamics underlying the decline of sugar cane production in the region. The fall of the sugar plantations set the stage for major changes in land ownership patterns.



Franks, Herschel A., Jill-Karen Yakubik and Marco J. Giardino. 1990. *Archeological Survey in 65 Acres of Land Adjacent to Bayou des Familles*. Southwest Cultural Resources Center Professional Papers, No. 26. National Park Service, Santa Fe, New Mexico.

The resource describes the cultural and archeological resources and the environmental context of these resources, adjacent to Bayou des Familles. The substance of the source is a report on a survey of sites immediately adjacent to the Bayou, including discussion of aboriginal ceramics and plantation foundations. There is also limited discussion of sites along Bayou Coquille.

Fuller, R. S. 1990. *Identification and Analysis of Artifacts from Thirteen Sites in and Adjacent to the Barataria Unit of the Jean Lafitte National Historical Park, Jefferson Parish, Louisiana*. Manuscript in Jean Lafitte National Historical Park and Preserve Library, Contract No. PX 7530-0-0387.

The major focus of this work is an analysis of pottery and some other artifacts. Both aboriginal and other pottery artifacts are described, but there is limited usefulness in this discussion for those interested in traditional uses by American Indian and non-American Indian traditional users.

Gagliano, S., R. A. Weinstein, E. Burden, K. Brooks, and W. Gladner. 1978. *Cultural Resources Survey of the Barataria, Segnette and Regional Waterways*. Jefferson Parish, LA. New Orleans: New Orleans District Army Corps of Engineers.

This work is a broad overview of the archeological and historic resources in the region and their relationship to changing physiographic features of the Barataria region. While not excessively detailed, this work provides sufficient information to be useful for those interested in the Barataria Preserve and it is particularly useful background for identifying sites that may be of significance to traditional users.

Gatscht, Albert S. n.d. *The Shetimasha Indians of St. Mary's Parish, Southern Louisiana*.

This manuscript, which was probably written in the 1880s, documents the living conditions of the American Indians that are now referred to as the Chitimacha Indians. Gatscht describes the Chitimachas as taking part in a variety of subsistence and wage activities which included subsistence and market gardening, logging, basket and cooking utensil manufacturing and working for wages on the sugar plantations. He also lists settlement locations circa 1700.

Gendel, P.A. 1984. *Archeological Survey of a Back Country Trail Right-of-Way Along the Kenta Canal, Barataria Unit, Jean Lafitte National Historic Park and Preserve*. R.C. Goodwin and Associates, Inc. for the National Park Service.

Details about the history and cultural resources of the Kenta Canal are not well-developed in this work. As a reference for those interested in traditional uses of this specific area, this source of limited value. For those with general interests in the archeology of the Barataria Preserve this work may have some value.



Giardino, Marco J. 1985. *Overview of the Archeology of the Coquille Site, Barataria Unit, Jean Lafitte National Historic Park and Preserve*. New Orleans: National Park Service.

The emphasis of this work is on interpreting the prehistoric archeological resources at the Coquille site. It has some usefulness as an indicator of the prehistoric use of subsistence resources by Native peoples. There is limited usefulness for assessment of present-day traditional use, but it is necessary background information about past human use of natural resources.

Goodwin and Associates, Inc. 1985. *A Cultural Resources Survey of the Proposed Barataria Trail System, Jean Lafitte National Historic Park and Preserve*. National Park Service.

This is a site focused archeological report that should be consulted for its relevance in assessing the relationship between past and present-day use of trails in the Barataria Preserve. The information relevant to this assessment is sketchy, but there is discussion of the deposits of shell and other back-fill along trails that is interpreted as deriving from past hunting and fishing activity. Again, the relevance of this material is primarily focused on assessment of past trail use in the Preserve.

Goodwin and Associates, Inc. 1985. *Preserving the Past for the Future: A Comprehensive Archeological and Historic Site Inventory of Jefferson Parish, Louisiana*. (Volumes 1-3). New Orleans: R.C. Goodwin and Associates.

This work represents an extended discussion of the archeological and historic resources within Jefferson Parish. Volume 1 has a useful historic overview and a discussion of historic sites within the Parish, with a useful topology of the later resources. Volume 2 presents information about site records and resources and Volume 3 has useful maps of the Parish. This should be considered primarily as background work for those interested in traditional uses of the Barataria Preserve.

Goodwin and Associates, Inc. 1986. *Archeological Assessment of the Barataria Unit, Jean Lafitte National Historical Park and Preserve*. Southwest Region, National Park Service.

This is a broad overview of the archeological resources of the Barataria Preserve. The main relevance of this work for those interested in traditional use and attachment to place is the charting and description of the cycles of traditional activity in historic times. There is a thorough bibliography that is relevant for studies of traditional use and it also has an extensive list of reference materials regarding archeology of the Preserve.



Goodwin and Associates, Inc. 1987. *Historic Overview of Jones Point, Barataria Unit, Jean Lafitte National Historical Park and Preserve*. For the National Park Service.

This is a relatively brief overview of the historical periods that can be used to discuss the Jones Point area. These periods can also apply to the region as a whole. The periods presented are: indigenous occupation, European contact, French colonial (1718-1763), Spanish colonial (1763-1803), Nineteenth Century American, Sugar Plantations, Lumber and Shipping Industries, Twentieth Century. The discussion here is not as complete as that of Holmes or Swanson, but it is useful because it is a brief overview for the reader who wants a broader picture of the historical background of the region.

Goodwin and Associates, Inc. 1987. *Level II Archeological Survey, Big Woods Development Area, Environmental Educational Center, Barataria Unit, Jean Lafitte National Historic Park and Preserve, Jefferson Parish, Louisiana*.

This is a site focused archeological survey that has some relevance for assessment of the potential places of significance to residents adjacent to the Barataria Preserve. This survey focuses on post-civil war settlement patterns and describes man-made structures, roads, and other effects of human activity in the area. Beyond the archeological evidence presented in this work, its main significance for those interested in traditional use and attachments to place is as background to understanding artifacts and historic effects of humans on the landscape.

Gramling, Robert. 1996. *Oil on the Edge: Offshore Oil Development, Conflict, Gridlock*. New York: State University of New York Press.

Twentieth century land use in the Barataria region includes oil and gas exploration and production. Gramling's informative book is useful to the study in that it provides background and contributes to an understanding of the oil industry along the Louisiana Gulf Coast. The epilogue is particularly relevant as Gramling raises concerns about alterations to the environment stemming from oil and gas development.

Green, Melissa Mood. 1982. *An Historical Map Survey of Tribal Locations of Six South Louisiana Tribes*. Unpublished Master's Thesis. Northwestern University.

The focus of this work is mapping the locations of historic tribal peoples in Southern Louisiana. There is some value in the demarcation of the traditional areas of the Chitimacha and Houma tribes, but otherwise the primary value of the work is as a background piece regarding the locations of American Indian territories in Southern Louisiana.



Hall, Gwendolyn Midlo. 1992. *Africans in Colonial Louisiana: The Development of Afro-Creole Culture in the Eighteenth Century*. Baton Rouge, LA: Louisiana State University Press.

In this book, Hall focuses on how African-Americans affected social and economic development in colonial Louisiana. Although she does not dwell specifically on the Barataria area, her work provides a broad understanding of African-American influence on Southern history. The appendices in this book cover topics such as slave trade voyages, the origin of slaves in Point Coupee parish and the survival of slave names in American culture.

Holmes, Barbara. 1986. *Historic Resources Study: The Barataria Unit of Jean Lafitte National Historical Park*. Santa Fe, NM: Southwest Cultural Resources Center. Professional Papers No. 5.

This is an excellent piece. Along with the works by Betsy Swanson (cited below), this is one of the most comprehensive and useful pieces of work on the Barataria region. Holmes describes the prehistorical, historical and current occupations and land uses of the Barataria region and the Barataria Preserve, detailing economic strategies used by past and contemporary residents where possible. The last chapter is particularly important as she provides a much needed overview of twentieth century development. Her work is well written and well documented.

Holmes, Jack D.L. 1970. *A Guide to Spanish Louisiana: 1762-1806*. New Orleans: Louisiana Collection Series of Books and Documents on Colonial Louisiana.

This brief book is an attempt to redress what Holmes sees as a paucity of historical documentation on the Spanish colonial period in Louisiana. Holmes provides an outline of history in Spanish Louisiana, highlighting the most important events. The book provides an extensive bibliography of other pertinent works.

Kane, Harnett T. 1943. *The Bayous of Louisiana*. New York: William Morrow and Co.

Harnett Kane is a well-know Louisiana writer. This book is a travel book. It is a journalist's account of life along the bayous of Louisiana during the first part of the twentieth century. Although Kane includes the entire Gulf Coast of Louisiana in his travels, part of the journey is through the Barataria area. Kane records everyday lives and livelihoods of people living along the bayous in great detail. This work, although not an academic volume, provides valuable information about practices which still persist, as well as about practices which have been forgotten as well. It is a wealth of information on traditional lifestyles and culture and includes much information on twentieth century Louisiana residents, natives and immigrants as well, who lived by hunting, fishing and trapping.



Kane, Harnett T. 1944. *Deep Delta Country*. New York: Duell, Sloan and Pearce.

What Harnett Kane describes as the Mississippi River's Deep Delta includes all the land and waterways from New Orleans to the Gulf of Mexico. It is "a region in some ways like no other in the world" (p. vii). At the time this book was written, the area was relatively isolated from the rest of the United States, and Kane's documentary is valuable as a richly detailed social history of the area and its inhabitants. Although most of the lifestyles that Kane describes are not practiced to the extent as they were in the first part of the century, many (such as hunting alligators and barging cattle down river) are still practiced to some degree. This book also provides some interesting insights in the history of the development of many modern occupations that residents of Barataria depend on today.

Laska, Shirley. 1994. *Inventory of Programs and Projects and Base Programs Actions Plan*. BTNEP Publ. 12. Barataria-Terrebonne National Estuary Program. Thibodaux, Louisiana.

This document was written to provide members of the Barataria-Terrebonne Estuarine Conference with information for writing action plans for the Estuarine System. It is useful for this particular study because it sheds light on the impacts of human use on the Estuarine System. The authors itemize issues of immediate concern, and the specific human agents and causes of these problems.

McLeister, Kathleen. 1985. *History and Analysis of Louisiana Patterns of Trade, Migration and Cultural Exchange with Settlements in the Caribbean and Gulf of Mexico During the Colonial Period*. National Park Service.

This work addresses trading patterns between Louisiana and the Caribbean from the 16th through 18th centuries. There is an extensive discussion of the slave trade that affected all of Louisiana as well as a more general discussion of the demands for trade items such as indigo and other material resources. The discussions are not specific to the Barataria area, but this is useful work for understanding some of the market forces that may have influenced local economic activity in Southern Louisiana.

McKenzie, L.S. III, M.W. Wascom, W.R. Kiethly, R.E. Emmer, W.H. Hudnall, M.T.C. Johnson, F. Niami, and B.A. Touchet. 1995. *Land use and Socioeconomic Status and Trends in the Barataria-Terrebonne Estuarine System*. BTNEP Publ. No. 23, Barataria-Terrebonne National Estuary Program, Thibodaux, Louisiana, 184 pp. plus Appendix.

This publication discusses current socioeconomic and demographic trends and conditions for parishes in the region. The information places the region in socioeconomic perspective by describing rural and urban shifts in population, gentrification, land density, population density, income, per capita income and poverty status.



Pitre, Glenn. n.d. *Haunted Waters, Fragile Lands: Oh What Tales to Tell*. A Cote Blanche Production in co-production with Louisiana Public Broadcasting and WYES-TV/New Orleans for the Barataria-Terrebonne National Estuary Program.

This video provides a broad overview, historic, cultural and environmental, of the Barataria-Terrebonne estuary area. It is informative and gives the viewer a good basic understanding of the fragility of the area.. It focuses largely on the effects of human activity on the estuary and the changing environment.

Pitre, Glenn. n.d. *Rescuing the Treasure*. A Cote Blanche Production in co-production with WYES-TV/New Orleans for the Barataria-Terrebonne National Estuary Program.

This video could be described as a sequel to *Haunted Waters, Fragile Lands: Oh What Tales to Tell*. It focuses much less on the historical use of the estuary and more on coastal erosion and the efforts made to preserve the area.

Ramsey, Carolyn. 1957. *Cajuns on the Bayou*. New York: Hastings House Publishers.

This is a gem of a reference work regarding the lifestyles and cultural traditions that apply to traditional practices of Louisiana residents. There are extended discussions of hunting, fishing, trapping, shrimping techniques, and some information about seasonal rounds. Although this work is not specific to Barataria, it provides some important historic and contemporary information about traditional hunting, fishing and gathering.

Reeves, William D. 1996. *Westwego: From Cheniere to Canal*. From interviews and photographs compiled by Daniel Alario, Sr. with the assistance of Pat Legendre. Jefferson Parish Historical Series, Monograph XIV. Published by Mr. and Mrs. Daniel Alario, Sr., Westwego, LA.

This source was located via newspaper coverage during the final compilation of this report. It contains excellent sources and photographs.

Rushton, William Faulkner. 1979. *The Cajuns: From Acadia to Louisiana*. New York: The Noonday Press.

Although "Cajun" is a widely used concept, it is a concept that is frequently used incorrectly. This book is probably one of the better works on a poorly understood ethnic group. Rushton provides both a detailed history of the Acadian immigration to Louisiana and an overview of true Cajun culture. The book does not focus on the Barataria region specifically, but it is helpful in developing an understanding of traditional culture, values and lifestyle among many of the people living along the Louisiana Gulf Coast. However, since the Acadian settlements appear to be somewhat peripheral to the Barataria Preserve itself, it is valuable primarily in setting context.



Saxon, Lyle. 1945. *Gumbo Ya-Ya: Folk Tales of Louisiana*. Gretna, LA: Pelican Press.

As a volume of Louisiana folklore, this book is invaluable. Despite all the archeological and historical works pertaining to the Barataria region, there are few works dealing with folk lore, ceremonies and rituals associated with the area. Most of the folktales and stories in this volume have been passed on through time in the oral tradition. They were collected and recorded by members of the Writers Program of the Work Projects Administration in Louisiana. Only a few of the tales pertain to the Barataria region. However, because they are probably not recorded in many other locations, this work is of significance to the study.

Sitterson, J. Carlyle. 1996. "Importation of Chinese and European Labourers, 1869-1874." Pp. 521-523 in Carl A. Brasseaux (ed.) *A Refuge for All Ages: Immigration in Louisiana History: Volume X in The Louisiana Purchase Bicentennial Series in Louisiana History*. Lafayette, LA: Center for Louisiana Studies: University of Southwestern Louisiana.

This is a brief article documenting the labor problems on the sugar plantations in Southern Louisiana and the Civil War, and the attempts to rectify these problems. It describes briefly the movement to import Chinese, then German and other European (Spain, Portugal and Italy) laborers to Southern Louisiana. It's value is in demonstrating the presence of different ethnic groups in the sugar regions of Louisiana.

Stouff, Emile. 1986. *Chitimacha Notebook: Writings of Emile Stouff - A Chitimacha Chief*. Edited by Marcia Gaudet. Lafayette, LA. Lafayette Natural History Museum and Planetarium.

This small booklet provides an early (and sketchy) history of the Chitimacha Indians in Louisiana. This version of the history was handed down in the oral tradition and recorded by Emile Stouff. It was not published until after his death. What is particularly interesting in this account surrounds the murder of a French priest in the French colonial period, an event on which the Chitimachas forceful removal from French territory was blamed. The version recounted by Stouff is quite different than that in French documents. While the information in this book is not directly relevant to contemporary land use, it provides additional background for understanding historical land use patterns.

Swanson, Betsy. 1975. *Historic Jefferson Parish: From Shore to Shore*. Gretna, LA: Pelican Publishing Co.

Swanson's book is an excellent overview of the history of Jefferson Parish. This book contains a specific section on Barataria. Although most of the information in this section is expanded on in great detail in her 1991 manuscript *Terre Haute de Barataria*, this source hits the highlights of Barataria history and provides the reader with a broad historical overview.



Swanson, Betsy. 1987. *Historic Land Use Study of a Portion of the Barataria Unit of the Jean Lafitte National Historical Park and Preserve*. New Orleans: National Park Service.

This work has a useful discussion of the natural resources of the Terre Haute area of the Barataria region as well as a thorough discussion of historic land use. The land use discussion is based on an 1855 land survey. Consequently, the details of this discussion are of historical value, but for those interested in land use issues, this is essential information.

Swanson, Betsy. 1991. *Terre haute de Barataria: A Historic Upland on an Old River Tributary Overtaken by Forest in the Barataria Unit of the Jean Lafitte National Historical Park and Preserve*. Harahan, LA: Jefferson Parish Historical Commission.

This work is clearly one of the most comprehensive pieces written on the Barataria region and the Barataria Preserve area. It expands on the chapter in the 1975 work. This work details historic patterns of land use and ownership and the resulting alterations to the natural environment which can be observed in the Preserve today. Swanson provides an excellent discussion of the historic biophysical characteristics of the region, with specifics about flora and fauna that are useful for assessing change. There is detailed discussion of historic periods and cultural resources for the region. Especially useful information includes discussion of Isleño history, French and Spanish colonial period sites, roads in the region, nineteenth century plantations, early twentieth century development, and oil activity in the Barataria Preserve. The historic and biophysical information is especially useful for assessment of place names, special places, discussions of current traditional uses, cultural and archeological resources, and the effects of human use on the historic and current landscape. This work is particularly well-documented.

Swanton, John R. 1911. *Indian tribes of the lower Mississippi Valley and the adjacent coast of the Gulf of Mexico*. Bureau of American Ethnology. Bulletin No. 43. Washington: Government Printing Office.

This volume, which is cited often, contains a detailed treatment of the Chitimacha Indians. Much of this information the author collected himself from a Chitimacha chief who served as an informant. Other information is collected from historical documents. The work describes Chitimacha culture, subsistence and commercial activities.

Thompson, E. 1972. *Brief History of Jean Lafitte and the Baratarians*. Jean Lafitte National Historical Park and Preserve. National Park Service.

Jean Lafitte and his band of Baratarians are associated with a number of sites of historical and archeological significance. This work documents some of the sites and specific structures associated with Lafitte and his followers. Otherwise, this work is a brief introduction to the stories about Lafitte, his recruitment of the Baratarians, and their activities.



Thompson, Ray M. 1943. *Land of Lafitte the Pirate*. U.S.A. Jefferson Parish Yearly Review.

This is an interesting piece. It is ostensibly about Jean Lafitte and his Baratarians, but it chronicles some interesting features of life in Barataria, such as some of the cemetery ceremonies practiced locally. The book is simply written, but fairly detailed in its historical presentation.

Vijnovich, Milos M. 1974. *Yugoslavians In Louisiana*. Gretna, LA: Pelican Publishing Co.

This is one of the few books written about the experience of the Yugoslavians in Louisiana. Although the Yugoslavians are somewhat peripheral to the Barataria region and the Barataria Preserve, as they've settled primarily in Plaquemines Parish, this work has some value for this study. It provides a detailed history of an ethnic group that is largely responsible for developing the oyster industry along the Louisiana Gulf Coast. The Slavs have played an important role in the economic development of much of the territory below New Orleans and to the east of the Basin region. They also have been quite influential in Louisiana politics. Moreover, the Slavs which settled in Plaquemines Parish introduced a distinct culture and social life to Louisiana, elements of which may or may not be found in other parts of the Basin region.

Workers of the Writers' Program in the Work Projects Administration in the State of Louisiana. 1941. *Louisiana: A Guide to the State*. New York: Hastings House.

Written as one of a series of state and city guides by workers on the Louisiana Writers's Project this book is an excellent source of information on early twentieth century Louisiana. Not only does it document the status of the State at the time of writing (1930s), it preserves many interesting bits of cultural information that would have otherwise been lost in time. It provides a fairly detailed history of the State, as well as an overview of agriculture, commerce and industry, social life, recreation and racial/ethnic composition of the State. What is particular useful is that much of the information is tied to specific locations. Thus, while there is not an entire section devoted to the Barataria region, there are references to it throughout the book.

Yakubik, Jill-Karen, Herschel A. Franks and Marco J. Giardino. 1989. *Archeological Investigations of Six Spanish Colonial Period Sites Barataria Unit, Jean Lafitte National Historical Park and Preserve*. Southwest Cultural Resources Center Professional Papers. No. 22. Santa Fe, NM: National Park Service.

This is a companion volume to Franks and Yakubik (1988). It describes archeological investigations of six sites in the Barataria Preserve area that were part of the Canarian (Isleño) settlement. It provides an overview of the environmental setting, a brief history of Canary Island settlement and details of the archeological methodology used in the study. What is particularly interesting is evidence that the Isleños were trading with local American Indians.



Yakubik, Jill-Karen, Benjamin Maygarden, Tristram R. Kidder, Shannon Dawdy, Kenneth Jones, Roger T. Saucier, Gayle Fritz, Allen Saltus and Charlene Keck. 1996. *Archeological Data Recovery of the Camino Site (16JE223), A Spanish Colonial Period Site Near New Orleans, Louisiana.* Earth Search, Inc. for the U.S. Army Corps of Engineers, New Orleans District.

This report documents recent archeological investigation of the Camino site, which is found in Jefferson Parish, Louisiana within the Bayou des Familles distributary ridge. It documents in great detail prehistoric, late eighteenth and early nineteenth century occupations. The late eighteenth century occupation is believed to be associated with the Bayou des Familles occupation by Isleños. Of particular interest is the account found in Chapter 6 of Canary Island emigration to Louisiana and subsequent settlement of the Barataria area. This account includes information on demographic and occupational breakdown of the Isleño recruits, settlement patterns, cultivation efforts and their interactions with American Indians and cimarrones living in the area. This report also contains an excellent set of references.



APPENDIX A: PARISH PROFILES

This appendix provides detailed profiles of four Louisiana Parishes neighboring the Barataria Preserve of the Jean Lafitte National Historical Park and Preserve. The four Parishes are Jefferson, Lafourche, Plaquemines, and St. Charles, and they are described in terms of demographic, housing, educational, occupational, and economic characteristics.

A.2.1 Jefferson Parish

Jefferson Parish, located in southeastern Louisiana, covers 415,360 acres, with just over half of the area land, and the rest water, including lakes, rivers, bayous and bays. The Parish seat in Gretna is eleven miles from New Orleans. Eight municipal areas are part of Jefferson Parish, including the six incorporated areas of Grand Isle, Gretna, Harahan, Lafitte, Kenner, and Westwego, and the unincorporated urban areas of Harvey, an industrial area on the Westbank of the Parish, and Metairie, on the east bank of the Mississippi. The Parish has four populated regions: 'East Bank Jefferson', the 'Gulf region', and the two areas adjacent to the Barataria Preserve of the Jean Lafitte National Historical Park and Preserve, an urbanized region called 'West Bank Jefferson' to the north of the Barataria Preserve, and a more rural area called 'Barataria region' to the south of the Preserve. Some specific comparisons between the West Bank and Barataria regions are presented after the descriptions of the four Parishes.

Demography

Jefferson has the largest population of the four Parishes near the Barataria Preserve.

Jefferson Parish Population		
1990 Census	1996 Estimate*	Percent Estimated Change 1990-1996
448,306	455,714	1.65%
*Source: Center for Business and Economic Research		

In 1993 there were 6,816 births in Jefferson Parish (14.9 births per thousand residents), and 14.4% of births in 1993 were to mothers under age twenty. The death rate was 8 per thousand residents, and there were 8.5 infant deaths per 1,000 live births (from: US Bureau of the Census, USA Counties 1996 CD-ROM, using data from National Center for Health Statistics). This is the lowest birthrate, and highest death rate, among the four Parishes.



Age, Jefferson Parish Source: 1990 Census			
Age		Number	Percent
Children	under 1 - 11	81,214	18.1%
	12 - 18	44,999	10.0%
Adults	19 - 64	276,665	61.7%
	65 and older	45,428	10.1%
Total		448,306	99.9%

Ethnic identification within the Parish can be described using the census categories of race, Hispanic origin, and language spoken in the home. Over three-quarters of the Jefferson Parish population identified themselves as white in the 1990 Census, and the Parish had a higher proportion of 'whites' than two (of the four) Parishes. Of the four Parishes, Jefferson has the greatest number, and the highest proportion, of Asians/Pacific Islanders.

Jefferson Parish Population, By Race 1990 Census		
Race	Population	
	Number	Percent
White	351,243	78.35%
Black	78,903	17.6%
American Indian, Eskimo, or Aleut	1,702	0.38%
Asian or Pacific Islander	9,939	2.22%
Other Race	6,519	1.45%
Total	448,306	99.99%

In Jefferson Parish, most of the Asian or Pacific Islanders were Asian, and most Asians were of Vietnamese, Chinese, Asian Indian, and Filipino heritage. Hispanics represented 5.9% of the population (26,373 people), and included those of "other Hispanic", Honduran, Mexican, and Cuban heritage.

The language spoken in the home was, for the majority of Jefferson Parish residents over age five, English only (369,751 of those over age five). Spanish or Spanish Creole (for 21,265), and French or French Creole (for 11,816 of those over five) were the two other main languages spoken in the home.



Jefferson is the most urban of the four Parishes described here. The most urban section of the Parish is to the North of the Barataria Preserve of Jean Lafitte National Historical Park and Preserve, while rural residences and several urban areas are to the south.

Urban and Rural Residence, Jefferson Parish (LEAP, from 1990 Census)		
Residence	Number of People	Percent of Parish Population
Urban	441,633	98.5%
Rural	6,673	1.5%
Total Population	448,306	100%

The farm population in the 1990 Census was 47 persons, which was .7% of the rural population, and .01% of the total Jefferson Parish population. In 1992 there were 58 farms in the Parish, and farmland was 2% of the Parish land (Bureau of the Census, USA Counties 1996 CD-ROM).

Housing

There were 185, 072 total housing units in Jefferson in 1990, and 166,398 (89.9%) were occupied units. 62.9% of the occupied units were owner-occupied (Bureau of the Census, USA Counties 1996 CD-ROM). As seen in the table below, most of the housing was built in the 1960's and 1970's; since then, new housing construction has decreased, with most of the decrease occurring in the last half of the 1980's.

Year Housing Structures Built, Jefferson Parish 1990 Census		
Year	Number of Units Built	Percent of Total Units
1980 - March 1990	32,389	17.5%
1970 - 1979	57,371	31%
1960 - 1969	47,463	25.64%
1950 - 1959	27,808	15.02%
1940 and earlier	20,041	10.82%
Total	185,072	99.98%



According to the 1990 Census, within the Parish as a whole only 6.1% of the housing units lacked complete kitchen facilities, and only a fraction of a percent lacked complete plumbing. A fraction of a percent of the occupied units used no heating fuel, and about one percent of these homes used bottled tank or LP gas, fuel oil or kerosene, wood, and other fuels, while the bulk of homes had utility gas, or electricity. 90.34% of the occupied homes had one or more motor vehicles.

Housing costs as a percentage of household income in 1989 was reported by the NLU Center for Business and Economic Research (based on 1990 Census data). For owners in Jefferson Parish, selected monthly housing costs were less than 20% of household income for 56.5% of the households surveyed. Only 13.9% percent of homeowners surveyed spent more than 34% of household income on the selected housing costs. According to these measures, renters' costs were higher. Gross rent was less than 20% of household income for 30.5% of those surveyed, while 30.8% of renters surveyed spent more than 34% of their household income on housing.

Education

Over three quarters of the Jefferson Parish population had a high school diploma or better, and 18.8% had a Bachelor's degree or better. Compared to the other three Parishes, Jefferson had the lowest proportion (10.6%) of those achieving less than a ninth grade education, and the greatest proportion of those with Bachelor's degrees and graduate or professional degrees.

Jefferson Parish Educational Attainment, Persons 25 Years and Older 1990 Census			
Educational Attainment		Number	Percent
Less than 9th Grade		29,921	10.6%
9th to 12th Grade, No Diploma		38,036	13.4%
High School Graduate		90,204	31.9%
Some College, No Degree		58,866	20.8%
Associates Degree		12,844	4.5%
Bachelor's Degree		36,122	12.7%
Graduate or Professional Degree		16,970	5.9%
Total		283,003	99.8%

In 1995 there were (according to the Louisiana Department of Economic Development) 55 elementary schools (grades K-6) serving 26,589 students, 14 junior high schools (grades 7-8) serving 8,727 students, eight high schools (grades 9-12) with 14,782 students, and 53 K-12 private schools with 21,132 students. Two technical-vocational schools and eleven colleges or universities are in the region that includes the Parish. There are 17 public libraries in the Parish.



Employment, Occupation, and Income

The per capita income has risen from \$12,845 in 1989 (1990 Census), to \$19,100 in 1993 (US Census USA Counties 1996 CD-ROM, from Bureau of Economic Analysis). (The NLU Center for Business and Economic Research gives two different figures for 1994 per capita income in their online sources). The US Census lists the 1989 median household income as \$27,916. In the 1990 Census, 69.1% of those age sixteen and older had worked during 1989 (the Census includes persons 16 years and older in employment calculations). A higher proportion of males (78.41%) than females (60.83%) had been employed in that year. Almost half of the work force (46%) worked for private, for-profit entities.

The following table includes industry employees, as measured in mid-March of 1994, and provides a snapshot of employment at that time, rather than the overall annual summary of all employment offered by the Census. Services, retail trade, and manufacturing are the major employment sectors of industry.

Employees, by Industry Sectors in Jefferson Parish, in Mid-March 1994 from County Business Patterns (Center for Business and Economic Research)		
Industry	Number	Percent
Agricultural	628	0.32%
Mining	1995	1.0%
Construction	11,240	5.7%
Manufacturing	22,520	11.35%
Transportation	15,507	7.8%
Wholesale Trade	16,848	8.5%
Retail Trade	49,484	24.95%
Finance, Insurance	11,313	5.7%
Services	68,637	34.6%
Unclassified	160	0.08%
Total	198,332	100%

The 1990 Census figures (which includes all yearly employment, and reflects an annual rather than a seasonal pattern) indicate that most of the manufacturing was in durable goods. Health industries employed over 27% of the service employees in Jefferson Parish, with 22% in education, 19% in professional services, and 16% in business and repair services, with the remainder in entertainment, recreational and personal services.



Louisiana is a 'right to work' state, and most of the major employers in Jefferson Parish are non-union. According to the Bureau of Labor Statistics, the civilian labor force in 1994 was 232,501, and 6.4% were unemployed (from US Bureau of the Census, USA Counties 1996 CD-ROM, using figures from the Bureau of Labor Statistics; these figures for the labor force include 2,401 more people than the 'estimated labor force' used in the Jefferson Parish Profile written by the Louisiana Department of Economic Development). The unemployment rate in 1995 was 5.3% (source: Jefferson Parish Profile, 1995, Louisiana Department of Economic Development). The major private employers (those with 900 or more employees) include those in the businesses of construction, marine construction, groceries, medical, security, trucking, auto dealership, milk products, a fast food chain, realty, and personnel services, and the major public employer is the Parish School Board, and a city government (Jefferson Parish Profile, Louisiana Dept. of Economic Development).

Occupations provide another way of looking at the Jefferson Parish economy. Managerial and professional occupations comprise near a fourth of the Parish occupations. Administrative support, sales, and precision production also occupy more than 10% of the workforce. Farming, forestry and fishing occupations are only a small fraction of the Parish occupations, but these occupations are more numerous in Jefferson Parish than in the other three Parishes.

Occupation, Jefferson Parish 1990 Census			
Occupation, and Census Category Code		Number	Percent
Executive, administrative, managerial occupations (000-042)		25,798	12.4%
Professional specialty occupations (043-202)		29,015	14%
Technicians and related support occupations (203-242)		8,297	3.9%
Sales occupations (243-302)		31,557	15.2%
Administrative support, including clerical (303-402)		39,748	19.2%
Service, private household occupations (403-412)		697	0.33%
Protective service occupations (413-432)		4,548	2.2%
Service, except protective and household (433-472)		19,464	9.4%
Farming, forestry, and fishing occupations (473-502)		2,030	0.97%
Precision production, craft, and repair occupations (503-702)		23,000	11.1%
Machine operators, assemblers, and inspectors (703-802)		7,436	3.5%
Transportation and material moving occupations (803-863)		9,138	4.4%
Handlers, equipment cleaners, helpers and laborers (864-902)		6,751	3.4%
Total		207,479	100%



While only a small portion of the Jefferson Parish population claims farming, fishing, and forestry as their occupation, a larger number are active fishers and hunters, as seen in the sales of fishing and hunting licenses.

Fishing License Sales Jefferson Parish July 1993-June 1994*			
Basic (Freshwater) License	Additional (Saltwater) License	Other	Total
54,200	52,270	943	107,413
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996			

Hunting License Sales Jefferson Parish, July 1993-June 1994*				
Resident Hunting	Resident Big Game	Resident Waterfowl	Other	All Types
11,956	6,225	4,621	1,886	24,688
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996				

The following table includes only wild fish, and not farm fisheries. In 1994 there were more pounds produced by wild freshwater fisheries than by farm freshwater fisheries, while in 1995 the reported poundage was from farm fisheries, and in 1996 the wild freshwater fisheries had all the reported poundage.

Value of Fishing Landings (wild fisheries only) Jefferson Parish, 1994*		
Freshwater Landings	Saltwater Landings	Total
\$39,118	\$30,135,751	30,174,869
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996		

The next table shows the fisheries and wildlife production in Jefferson Parish in 1994 and 1996, and includes both wild and farm fisheries.



Fisheries and Wildlife Production Jefferson Parish, 1994 and 1996*				
Fisheries and Wildlife		Units of Measure	1994	1996
Freshwater Fisheries	Crawfish (farm)	pounds	36,000	
	Catfish (farm)	pounds sold		
	Alligators (farm)			
	Catfish (wild)	pounds	78,236	118,792
	Soft-shell crab		55,434	40,741
	Buffalo			384
	Gar			47,687
Marine Fisheries	Shrimp	pounds	14,859,909	14,132,544
	Oyster	sacks	84,237	87,579
	Crab	pounds	2,075,778	1,720,672
	Commercial finfish	pounds	1,182,540	1,064,286
Fur Animals	Pelts	pelts	7,455	7,696
	Meat	pounds	17,240	20,744
Alligators	Alligators			4,635
	Wild skins	hides	554	
	Wild meat	pounds	18,282	
	Farm skins	pounds		
	Farm meat	pounds		
Honey	Honey	pounds	177	400
* Note: Empty cells in table were also empty in original source material. Source: NLU Center for Business and Economic Research, from primary source the "Louisiana Summary of Agriculture and Natural Resources"				



A.2.2 Lafourche Parish

Lafourche Parish includes the communities of Thibodaux, LaRose, Raceland, Cut Off, Galliano, Lockport, and Golden Meadow. The Parish seat is in Thibodaux.

Demography

The Lafourche Parish population is less than a quarter of the size of the Jefferson Parish population, but it is estimated to be growing more quickly.

Population, Lafourche Parish		
1990 Census	1996 Estimate*	Percent Estimated Change 1990 - 1996
85,860	87,852	2.32%
*Source: Center for Business and Economic Research		

There were 1,347 births in 1993, representing 15.5 births per 1,000 residents, with mothers under age 20 having 16.8% of the births in that year. The death rate was 7.3 per 1,000 residents. There were 8.9 infant deaths per 1,000 live births, and this is the highest infant death rate in the four Parishes.

Age, Lafourche Parish 1990 Census				
Age		Number	Percent	Percent
Children under 1 - 18	under 1 - 11	17,448	20.3%	31.6%
	12 - 18	9,722	11.7%	
Adults 19 and over	19 - 64	50,713	59.1%	68.4%
	65 and older	7,977	9.3%	
Total		85,860	100%	100%

In the 1990 Census, almost 85% of Lafourche Parish residents identified their race as 'white'. Lafourche had a higher proportion of whites than the other three Parishes, and a smaller proportion of blacks. Lafourche had more people (a larger number and higher percent) in the America Indian/ Eskimo/ Aleut category than did the other three Parishes.



Race, Lafourche Parish 1990 Census			
Race		Population	
		Number	Percent
White		72,669	84.63%
Black		10,602	12.348%
American Indian, Eskimo, or Aleut		1,864	2.171%
Asian or Pacific Islander		471	0.548%
Other Race		254	0.295%
Total		85,860	99.992%

Of the 1,296 Hispanic residents of Lafourche Parish (1.51% of the Lafourche population), the majority identified themselves as 'other Hispanic' or as Mexican. The language spoken in the homes in Lafourche is generally English (for 75.5% of those over age five) or French and French Creole (26.173% of those over age five). Other languages spoken in the homes are Spanish or Spanish Creole (.696% of those over age five, representing 535 persons), and Vietnamese (.46% of Lafourche residents over age five).

Lafourche is the most rural of the three Parishes, with almost half of its population in rural areas. However, very little of the rural population lives on farms.

Urban and Rural Residence, Lafourche Parish (LEAP, from 1990 Census)			
Residence		Number of People	Percent of Parish Population
Urban		44,528	51.9%
Rural		41,332	48.1%
Total		85,860	100%

The farm population was 667 in the 1990 Census, representing 1.6% of the rural population, and for 0.78% of the total Lafourche population (source NLU Center for Business and Economic Research, using 1990 Census data from the STF-3 Report). There were 412 farms in 1992, and farmland was 19% of the Parish land (US Bureau of the Census USA Counties 1996 CD-ROM).



Housing

Lafourche Parish had 31,332 housing units in 1990, and 28,835 (92%) of them were occupied (source: Center for Business and Economic Research, from US Census Data). Of the occupied units, 75.5% were owner-occupied (US Bureau of the Census, USA Counties 1996 CD-ROM). The 1970's was the decade of greatest housing growth. Two-bedroom and three-bedroom units were the norm in Lafourche. The water source in the great majority of the housing units was from a public system or private company, and sewage disposal was most often a septic tank or cesspool. Utility gas and electricity were the most common heating sources.

Selected monthly owner costs of housing in 1989, as a percentage of household income (according to the NLU Center for Business and Economic Research) were less than 20% for 64.4% of the householders surveyed. Monthly ownership costs were over 34% of household income for 11.3% of home-owners surveyed. Rental costs were less than 20% of household income for 29% of renter units surveyed, and these costs were over 34% for 25.8% of renter households surveyed.

Education

Over a fourth of the adults (over age 24) in Lafourche Parish have achieved less than a ninth grade education. A third of Lafourche adults over age twenty-four have a high school diploma, and 56.2% have a high school diploma or better. A greater proportion of Lafourche citizens (10%) have a Bachelor's or professional degree than do residents of Plaquemines Parish.

Lafourche Parish (US Census) Educational Attainment, Persons 25 Years and Older		
Educational Attainment	Number	Percent
Less than 9th Grade	13,393	26.9%
9th to 12th Grade, No Diploma	8,394	16.9%
High School Graduate	16,588	33.4%
Some College, No Degree	5,009	10.1%
Associates Degree	1,363	2.7%
Bachelor's Degree	3,071	6.2%
Graduate or Professional Degree	1,906	3.8%
Total	49,724	100%



In 1995 Lafourche Parish had eighteen elementary schools (grades K-6) for 7,320 students, six junior high schools (grades 7-8) serving 2,540 students, three high schools (grade levels 9-12) with 4,181 students, and seven private K-12 schools had 2,237 students (source: Louisiana Department of Economic Development). A technical-vocational school, and a University are in the area. There were seven public libraries in Lafourche Parish in 1995.

Employment, Occupation, and Income

The per capita income in Lafourche Parish has risen from \$9,250 in 1989 (1990 Census) to \$13,919 in 1993 (US Bureau of the Census USA Counties 1996 CD-ROM, data from the Bureau of Economic Analysis), to a 1994 figure of \$14,912 (source: LEAP, NLU Center for Business and Economic Research). The US Census lists 1989 median household income as \$21,416.

In 1994 the Lafourche Parish labor force was 37,553, and 7% were unemployed (US Bureau of the Census USA Counties 1996 CD-ROM, data from the Bureau of Labor Statistics). The unemployment rate in the Parish was 4.9% in 1995, and the estimated labor force was 38,000 (1995 Parish Profile, Louisiana Department of Economic Development).

In March of 1994, the industry sectors with the most employees were services, retail, transportation, and manufacturing. The following table reflects figures for March, rather than an annual summary.

Employees, by Industry Sectors in Lafourche Parish Mid-March 1994 (Center for Business and Economic Research)		
Industry	Number	Percent
Agricultural	93	0.49%
Mining	244	1.3%
Construction	970	5.1%
Manufacturing	2,047	10.76%
Transportation	3,019	15.86%
Wholesale Trade	877	4.61%
Retail Trade	4,555	23.94%
Finance, Insurance	877	4.6%
Services	6,343	33.34%
Unclassified	1	0
Total	19,026	100%



Private companies with over a hundred employees include companies in offshore labor, shipbuilding/repair, boat rental, shipbuilding, farm equipment, medical, offshore services, paper, telephone service, sugar, and raw sugar; the main governmental employer was the Parish School Board (1995 Parish Profile, Louisiana Department of Economic Development).

Occupations in Lafourche Parish show a fairly even spread across the occupational titles, though precision production and administrative support have the highest percentage of workers.

Occupation, Lafourche Parish 1990 Census		
Occupation, and Census Category Code	Number	Percent
Executive, administrative, managerial occupations (000-042)	2,428	7.5%
Professional specialty occupations (043-202)	3,707	11.5%
Technicians and related support occupations (203-242)	929	2.9%
Sales occupations (243-302)	3,268	10.2%
Administrative support, including clerical (303-402)	3,939	12.2%
Service, private household occupations (403-412)	139	0.43%
Protective service occupations (413-432)	342	1.1%
Service, except protective and household (433-472)	3,272	10.2%
Farming, forestry, and fishing occupations (473-502)	1,030	3.2%
Precision production, craft, and repair occupations (503-702)	6,097	18.9%
Machine operators, assemblers, and inspectors (703-802)	2,251	6.9%
Transportation and material moving occupations (803-863)	3,178	9.9%
Handlers, equipment cleaners, helpers and laborers (864-902)	1,588	4.9%
Total	32,168	99.8%

There are fewer people occupied in farming, forestry, and fisheries in Lafourche than in Jefferson Parish, but those in Lafourche represent a greater proportion of the Parish workforce.

Fishing license and hunting license sales indicate that many more people take part in these traditional activities than those people represented in the workforce.



Fishing License Sales Lafourche Parish July 1993-June 1994*				
Basic (freshwater) License	Additional (saltwater) License		Other	Total
27,652	27,351		1,275	56,478
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996				

Some of the wildlife species hunted in State Wildlife Management Areas of Lafourche Parish include deer, rabbit, waterfowl, and snipe.

Hunting License Sales Lafourche Parish, July 1993-June 1994*				
Resident Hunting	Resident Big Game	Resident Waterfowl	Other	Hunting Licenses Sold (all types)
6,741	3,808	2,803	1,211	14,563
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996				

As seen in the following table, fisheries and wildlife produce a substantial yield in Lafourche Parish.



Fisheries and Wildlife Production Lafourche Parish, 1994 and 1996*				
Fisheries and Wildlife		Units of Measure	1994	1996
Freshwater Fisheries	Crawfish (farm)	pounds sold	2,617,606	1,926,777
	Catfish (farm)	pounds sold	30,000	29,070
	Fishbait	pounds		1,667
	Alligators (farm)	feet		41,121
	Oysters	sacks	110,101	161,694
	Soft-shell crab	dozens	14,264	9,885
	Other Species	pounds	172,500	179,238
	Crawfish (wild)	pounds	82,575	10,850
	Catfish (wild)	pounds	42,625	52,511
	Gar	pounds	51,000	5,868
	Other finfish	pounds		282,487
Marine Fisheries	Shrimp	pounds	9,999,048	12,921,119
	Crabs	pounds	5,973,659	2,688,435
	Commercial finfish	pounds	2,861,491	2,070,510
Fur Animals	Pelts	pelts	44,917	46,369
	Meat	pounds	51,720	62,232
Alligators	Alligators	feet		26,227
	Pelts	pelts		
	Meat	pounds		
	Wild skins	hides	3,376	
	Wild meat	pounds	111,111	
	Farm skins	hides	8,054	
	Farm meat	pounds	36,243	
Honey	Honey	pounds		6,240

* Note: Empty cells in table were also empty in original source material.
Source: NLU Center for Business and Economic Research, from primary source the "Louisiana Summary of Agriculture and Natural Resources"



A.2.3 Plaquemines Parish

Plaquemines Parish includes the communities of Belle Chasse, Buras Triumph, Port Sulphur, Boothville Venice, Empire, and District 1-Point a la Hache. The Parish Seat is in Point a la Hache.

Demography

Plaquemines Parish has the smallest population of the four Parishes, and there is very little estimated increase between 1990 and 1996.

Population, Plaquemines Parish			
1990 Census	1996 Estimate*		Percent Change
25,575	25,719		0.56%
*Source: Center for Business and Economic Research			

There were 1,347 births in 1993, with 15.9 births per thousand residents. Mothers under age twenty had 21.1% of the births in that year. There were 6.6 deaths per thousand residents in 1993, and there were 5 infant deaths per 1,000 live births (US Bureau of the Census USA Counties 1996 CD-ROM).

Age, Plaquemines Parish 1990 Census				
Age		Number	Percent	Percent
Children	under 1 - 11	5,476	21.4%	32.7%
	12 - 18	2,895	11.3%	
Adults	19 - 64	15,219	59.5%	67.3%
	65 and older	1,985	7.8%	
Total		25,575	100%	100%

In 1990, just under three quarters of the Plaquemines Parish population was white, less than a quarter was black, and a small proportion was American Indian, Asian/Pacific Islander, or 'other'.



Plaquemines Parish, by Race 1990 Census		
Race	Population	
	Number	Percent
White	18,525	72.4%
Black	5,941	23.2%
American Indian, Eskimo, or Aleut	439	1.7%
Asian or Pacific Islander	482	1.9%
Other Race	188	0.7%
Total	25,575	99.9%

Only 3.45% of the Plaquemines Parish population in the 1990 Census identified themselves as Hispanic, and most were of Mexican, 'other Hispanic' or Puerto Rican origin. The languages spoken in the homes (counted for those over five years of age) are English (89.19%), French or French Creole (6.13%), Spanish or Spanish Creole (1.8%), Vietnamese (1.34%) and South Slavic languages (.72%).

Over 80% of the Plaquemines Parish population lives in urban areas. Plaquemines has a lower proportion of urban residents than do Jefferson or St. Charles Parish, and Plaquemines is more urban than is Lafourche Parish.

Urban and Rural Residence, Plaquemines Parish (LEAP, from 1990 Census)		
Residence	Number of People	Percent of Parish Population
Urban	21,134	82.6%
Rural	4,441	17.4%
Total	25,575	100%

The Plaquemines Parish farm population is 247, which is 5.56% of the rural population, and .96% of the total Parish population. This is the highest proportion of farm residents among the four Parishes (NLU Center for Business and Economic Research, 'Social Characteristics' 1990 Census data from STF-3 Report). In 1992 there were 126 farms, and farmland was 8% of Parish land (US Bureau of the Census USA Counties 1996 CD-ROM).



Housing

Plaquemines Parish had 9,432 housing units in 1990, and 8,213 (87.1%) of them were occupied (source: NLU Center for Business and Economic Research). Of the occupied units, 75.9% were owner occupied in 1990 (US Bureau of the Census USA Counties 1996 CD-ROM). Two-bedroom and three-bedroom houses were the norm, and the 1960's and 1970's were the decades of greatest housing growth and provided most of the existing housing. The water source in the great majority of homes was a public system or private company, and sewage disposal was generally through a public sewer, though septic tanks and cesspools were also fairly common. Utility gas and electricity provided most of the heating.

Housing costs as a percentage of household income in 1989 was reported by the NLU Center for Business and Economic Research, based on 1990 Census data. For owners, monthly costs were less than 20% of household income for 61% of the households surveyed. Only sixteen percent of homeowners surveyed spent more than 34% of household income on the selected housing costs. For renters, rent was less than 20% of household income for 31% of those surveyed. 22% of renters surveyed spent more than 34% of their household income on rent.

Education

Over 20% of Plaquemines Parish residents aged 25 and older have less than a ninth grade education. 58% of those 25 and older have a high school education or better, and 7.5% have a Bachelor's degree or better.

Plaquemines Parish Educational Attainment, Persons 25 Years and Older			
Educational Attainment		Number	Percent
Less than 9th Grade		3,326	22.34%
9th to 12th Grade, No Diploma		2,932	19.77%
High School Graduate		4,798	32.2%
Some College, No Degree		2,224	14.9%
Associates Degree		487	3.27%
Bachelor's Degree		829	5.56%
Graduate or Professional Degree		292	1.96%
Total		14,888	100%



According to the Louisiana Department of Economic Development, in 1995 Plaquemines Parish had one public elementary school (grades K-6 with 625 students), two public junior high schools (grades 7-8 for the 798 students), three public high schools (grades 9-12, serving 3,668 students), and four private schools with grades K-12 (500 students). A technical-vocational school, and eleven colleges or universities are located in the region that includes Plaquemines Parish. There are three public libraries in Plaquemines Parish.

Employment, Occupation, and Income

Per capita personal income in Plaquemines Parish has increased from \$9,500 in 1989 (1990 Census) to \$15,845 in 1993 (US Bureau of the Census USA Counties 1996 CD-ROM, figures from the Bureau of Economic Analysis), to \$16,831 in 1994 (NLU Center for Business and Economic Research). According to the US Census, in 1989 median household income was \$24,076. In 1994 the civilian labor force was 10,433, and 8.2% were unemployed (US Bureau of the Census USA Counties 1996 CD-ROM, figures from Bureau of Labor Statistics). In 1995, the estimated labor force was 10,200, and the unemployment rate in the Parish was 6.8% (source: Plaquemines Parish Profile 1995, Louisiana Department of Economic Development).

The following table indicates private industry employment recorded in mid-March of 1994, and does not include annual employment patterns. Services, manufacturing, transportation, and construction industries provided most of the employment.

Employees by Industry Sector, Plaquemines Parish Mid-March 1994 (Center for Business and Economic Research)		
Industry	Number	Percent
Agriculture	68	0.59%
Mining	942	8.17%
Construction	1,564	13.56%
Manufacturing	2,146	18.6%
Transportation	2,080	18.03%
Wholesale Trade	794	6.49%
Retail Trade	1,107	9.6%
Finance, Insurance	271	2.35%
Services	2,560	22.2%
Unclassified	2	0.02%
Total	11,534	99.7%

Major private employers, those with 40 or more employees, include a wide array of business types. These include businesses that produce or refine lube oil additives, gasoline/heating oil, fish meal/oil, and sulphur, construct buildings and modular units, control systems, work boats, and electric motor coils, and provide services such as shipbuilding/repair, metals recovery, oil field contracting, and oil field equipment fabrication and supply (source: Louisiana Department of Economic Development).

Precision production and administrative support are the main Plaquemines Parish occupational categories in the 1990 Census. A larger proportion of Plaquemines residents had occupations in farming, forestry, and fishing than did the other Parishes considered here, though the number of participants was lower than in Jefferson and Lafourche Parishes.

Occupation, Plaquemines Parish 1990 Census			
Occupation, and Census Category Code		Number	Percent
Executive, administrative, managerial occupations (000-042)		878	9.5%
Professional specialty occupations (043-202)		798	8.6%
Technicians and related support occupations (203-242)		400	4.3%
Sales occupations (243-302)		899	9.7%
Administrative support, including clerical (303-402)		1,204	13.1%
Service, private household occupations (403-412)		69	0.8%
Protective service occupations (413-432)		210	2.3%
Service, except protective and household (433-472)		810	8.8%
Farming, forestry, and fishing occupations (473-502)		714	7.7%
Precision production, craft, and repair occupations (503-702)		1,536	16.7%
Machine operators, assemblers, and inspectors (703-802)		381	4.1%
Transportation and material moving occupations (803-863)		722	7.8%
Handlers, equipment cleaners, helpers and laborers (864-902)		596	6.5%
Total		9,217	99.9%

In Plaquemines Parish, as in Jefferson and Lafourche, there are more sales of fishing and hunting licenses than there are people who claim farming, forestry and fishing as their occupation. The following tables show the number of fishing and hunting licenses sold in 1993-94.



Fishing License Sales Plaquemines Parish July 1993-June 1994*			
Basic (freshwater) License	Additional (saltwater) License	Other	Total
7,899	8,202	878	16,979
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996			

The wildlife species hunted in the State Wildlife Management Areas in Plaquemines include rabbit, waterfowl, and snipe.

Hunting License Sales Plaquemines Parish, July 1993-June 1994*				
Resident Hunting	Resident Big Game	Resident Waterfowl	Other	Hunting Licenses Sold (all types)
1,084	337	498	126	2,045
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996				



Fisheries and Wildlife Production Plaquemines Parish 1994 and 1996*				
Fisheries and Wildlife		Units of Measure	1994	1996
Freshwater Fisheries	Crawfish (farm)	pounds sold	223,100	220,000
	Alligators (farm)	pounds		226
	Catfish (wild)	pounds	101,300	165,341
	Shrimp	pounds	8,528,000	11,312,031
	Menhaden	pounds	295,800,000	289,333,000
	Oysters	sacks	810,500	856,293
	Crabs	pounds	1,450,200	2,973,500
	Commercial finfish	pounds	11,500,000	17,629,191
	Gar	pounds	130,500	219,962
	Other finfish	pounds		14,423
	Soft-shell crabs	dozens sold	1,200	2,000
Fur Animals	pelts	pelts	5,277	5,447
	meat	pounds		
Alligators	Alligators	feet		9,307
	Wild skins	hides	1,016	
	Wild meat	pounds	33,528	
	Farm skins	hides	162	
	Farm meat	pounds	729	
* Note: Empty cells in table were also empty in original source material. Source: NLU Center for Business and Economic Research, from primary source the "Louisiana Summary of Agriculture and Natural Resources"				



A.2.4 St. Charles Parish

St. Charles Parish includes the communities of Destrehan, St. Rose, Mimosa Park, Norco, New Sarpy, and Luling, and the Parish Seat in Hahnville.

Demography

The population increase that is estimated for St. Charles Parish between 1990 and 1996 is the largest percent increase among the four Parishes.

Population, St. Charles Parish		
1990 Census	1996 Estimate*	Percent Change
42,437	46,275	9.04%
*Source: Center for Business and Economic Research		

There were 732 births in 1993, with 16.3 births per 1,000 residents. This is the highest birthrate among the four Parishes. Mothers under age twenty had 14.8 percent of the births. There were 5.7 deaths per thousand residents in 1993 (the lowest death rate among the four Parishes), and there were 6.8 infant deaths per 1,000 live births (US Census USA Counties 1996 CD-ROM, from National Center for Health Statistics).

Age, St. Charles Parish 1990 Census				
Age		Number	Percent	Percent
Children	under 1 - 11	9,413	22.2%	32.8%
	12 - 18	4,520	10.6%	
Adults	19 - 64	27,447	60%	67.2%
	65 and older	3,057	7.2%	
Total		42,437	100%	100%

The ratio of white to black residents is near 75/25, and very few St. Charles residents are American Indian, Asian/Pacific Islander, or of 'other' races.



St. Charles Parish, by Race 1990 Census		
Race	Population	
	Number	Race
White	31,754	74.83%
Black	10,281	24.23%
American Indian, Eskimo, or Aleut	44	0.10%
Asian or Pacific Islander	145	0.34%
Other Race	213	0.5%
Total	42,437	100%

Only 2.25% of the St. Charles population are of Hispanic origin, and among the Hispanics, most are of 'other Hispanic,' Mexican, Honduran, and Puerto Rican origin. The languages spoken in the homes (counted for those persons over age five) are English (93.22%), French or French Creole (4%), Spanish or Spanish Creole (2.05%), and German (.12%).

Most of the St. Charles population is urban, and St. Charles is second only to Jefferson Parish in the high proportion of urban residents.

Urban and Rural Residence, St. Charles Parish (LEAP, from 1990 Census)		
Residence	Number of People	Percentage of Population
Urban	37,820	89.1%
Rural	4,617	10.9%
Total	42,437	100%

Farms provide residences for 18 people, which is 0.39% of the rural population, and for 0.05% of all St. Charles Parish residents (NLU Center for Business and Economic Research from 1990 Census data, STF-3 Report). In 1992 there were 67 farms, and farmland was 13% of the Parish land (US Bureau of the Census USA Counties 1996 CD-ROM).



Housing

St. Charles Parish had 16,016 housing units in 1990, and 14,333 (89.5%) were occupied units. Owner-occupied units were the majority (78.9%) of the occupied units. Three-bedroom homes were the most common, and many structures had been built in the 1970's. The great majority of housing units used water from the public system or a private company, and most had access to a public sewer, and were provided with utility gas or electricity as the heating source.

Housing costs as a percentage of household income in 1989 was reported by the NLU Center for Business and Economic Research, based on 1990 Census data. For owners in St. Charles Parish, selected monthly costs were less than 20% of household income for 58.8% of the households surveyed. Only 12.9% percent of home-owners surveyed spent more than 34% of household income on the selected housing costs. Renters' costs were higher. Gross rent was less than 20% of household income for 32.8% of those surveyed, and 23% of renters surveyed spent more than 34% of their household income on housing.

Education

Almost three-quarters of St. Charles Parish residents over age 24 have a high school diploma or better, and nearly 15% have a bachelor's degree or better. Around 11% of those over 24 have less than a ninth grade education.

St. Charles Parish Educational Attainment, Persons 25 Years and Older		
Educational Attainment	Number	Percent
Less than 9th Grade	2,709	10.6%
9th to 12th Grade, No Diploma	3,897	15.3%
High School Graduate	9,116	35.8%
Some College, No Degree	4,912	19.3%
Associates Degree	1,055	4.2%
Bachelor's Degree	2,925	11.5%
Graduate or Professional Degree	828	3.3%
Total	25,444	100%

In 1995, St. Charles Parish had 12 K-12 elementary schools that served 4,320 students, 4 junior high schools (grades 7-8) for 1,556 students, 2 high schools (grades 9-12) with 2,861 students, and 4



private K-12 schools with 591 students. Two technical-vocational schools, and eleven colleges and universities are in the region that includes St. Charles Parish. In 1995 there were four public libraries in the Parish. (Source: Louisiana Department of Economic Development)

Employment, Occupation, and Income

In 1989, per capita income in St. Charles Parish was \$11,901 (US Census), and it increased to \$17,999 in 1993 (US Bureau of the Census, USA Counties 1996 CD-ROM, using figures from the Bureau of Economic Analysis), and to \$18,669 in 1994 (Center for Business and Economic Research). According to the US Census, in 1989 the median household income was \$31,777. In 1994 the civilian labor force was 20,758, with 7.9% unemployed (US Bureau of the Census, USA Counties 1996 CD-ROM, data from the Bureau of Labor Statistics). The unemployment rate in 1995 was 6.6%, with an estimated labor force of 20,758 (Louisiana Department of Economic Development).

Total personal income in St. Charles Parish was \$854,081,000 in 1994 (Center for Business and Economic Research). Income from government employment (in Federal, State, and Local Government), accounted for 9.1% of the total personal income earned in St. Charles Parish in 1994. Industry employment accounted for the remainder of earnings, with income from agriculture accounting for .95%, mining income was .49%, construction income was 11.16%, manufacturing (mostly non durable goods) was the largest income category with 37.57%, transportation had 13.91%, wholesale comprised 7.4%, with retail at 3.28%, finance at .98% and services had 7.75% of the income earned in the Parish.

The manufacturing, services, and transportation sectors of industry accounted for the most employees in March of 1994.



Employees in Industry Sectors, St. Charles Parish Mid-March 1994 (Center for Business and Economic Research)		
Industry Sector	Number of Employees	Percent of Employees
Agriculture	37	0.23%
Mining	51	0.32%
Construction	1,523	9.43%
Manufacturing	4,509	27.93%
Transportation	2,378	14.73%
Wholesale Trade	1,527	9.46%
Retail Trade	1,795	11.12%
Finance, Insurance	352	2.18%
Services	3,969	24.59%
Unclassified	0	
Total	16,141	99.99%

As described in a yearly measure of total income, agriculture, which is only a small fraction of the economy, mainly consists of agricultural services and fisheries. Oil and gas extraction is the main income category within 'mining', and heavy construction contractors represent most of the income in the 'construction' category. Manufacturing is dominated by 'chemicals and allied products' and 'petroleum and coal products', with less income from food manufacturing. The total income from 'durable manufacturing goods' is lower than the income from food manufacturing, and from fabricated metal products and machinery/computer equipment. Transportation income consisted mainly of 'trucking and warehousing' and 'water transportation'. Food stores have the most retail income, and business services and health services have the most income within the services category. Some of the major companies in the Parish include a refinery, chemical companies, nuclear power, grain, vegetable oil/petrochemicals, bulk grain, storage terminal, plastics, and fertilizer company. (source: NLU Center for Business and Economic Research).

The most common occupations in St. Charles Parish were administrative support, precision production, executive and professional occupations, and sales.



Occupation, St. Charles Parish 1990 Census			
Occupation, and Census Category Code		Number	Percent
Executive, administrative, managerial occupations (000-042)		2,064	11.6%
Professional specialty occupations (043-202)		2,196	12.3%
Technicians and related support occupations (203-242)		854	4.8%
Sales occupations (243-302)		1,972	11.1%
Administrative support, including clerical (303-402)		3,197	17.9%
Service, private household occupations (403-412)		41	0.2%
Protective service occupations (413-432)		354	1.9%
Service, except protective and household (433-472)		1,591	8.9%
Farming, forestry, and fishing occupations (473-502)		142	0.8%
Precision production, craft, and repair occupations (503-702)		2,882	16.2%
Machine operators, assemblers, and inspectors (703-802)		920	5.2%
Transportation and material moving occupations (803-863)		889	4.9%
Handlers, equipment cleaners, helpers and laborers (864-902)		700	3.9%
Total		17,802	99.7%

As seen in the two tables below, fishing and hunting license sales indicate a wider use of the natural resources.

Fishing License Sales St. Charles Parish July 1993-June 1994*			
Basic (freshwater) License	Additional (saltwater) License	Other	Total
5,798	4,362	370	10,530
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996			

The species hunted in the State Wildlife Management Areas of St. Charles Parish include deer, rabbit, waterfowl and snipe.



Hunting License Sales St. Charles Parish July 1993-June 1994*				
Resident Hunting	Resident Big Game	Resident Waterfowl	Other	Licenses Sold (all types)
1,862	957	577	312	3,708
*Table adapted from "Economic Value Assessment for the Barataria-Terrebonne Estuarine System" Barataria-Terrebonne National Estuary Program, BTNEP-26, March 1996				

Fisheries and wildlife production in St. Charles Parish is substantial, as seen in the next table.

Fisheries and Wildlife Production St. Charles Parish 1994 and 1996*				
Fisheries and Wildlife		Units of Measure	1994	1996
Freshwater Fisheries	Crawfish (farm)	pounds	130,800	28,800
	Alligators (farm)	feet		
	Soft-shell crab	dozens sold	26,663	23,315
	Crawfish (wild)	pounds	18,000	17,820
	Catfish (wild)	pounds	454,968	511,839
	Buffalo	pounds		500
	Gar	pounds		17,309
	Other finfish	pounds	1,614,696	1,232,521
	Shrimp	pounds	78,021	142,254
	Crabs	pounds	1,239,389	1,862,530
	Commercial finfish	pounds	216,058	97,223
Fur Animals	Pelts	pelts	1,951	2,014
	Meat	pounds		
Alligators	Alligators	feet		5,692
	Wild Skins	hides	847	
	Wild meat	pounds	27,951	
	Farm skins	hides	4,590	
	Farm meat	pounds	20,655	
Honey	Honey	pounds	10,030	8,600
* Note: Empty cells in table were also empty in original source material. Source: NLU Center for Business and Economic Research, from primary source the "Louisiana Summary of Agriculture and Natural Resources"				

