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What's for Lunch?

Food in American Life

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Susan R. Chandler and David A. Poirier

What's for Lunch?

State and regional identities are a complex tapestry of sensory impressions. To many, "New England" conjures a certain image. Physical and cultural landscapes provide the form and context for this perspective. The rugged coastlines of Maine, pine-shrouded mountains of New Hampshire, rolling farmlands of Vermont, ostentatious architecture of Newport, old world charm of Boston, and the safe harbors of Connecticut all coalesce to create a vivid mental impression. But a "place," naturally, is more than what is seen. It is sound and smell. And it is touch and taste. By any standard, New England is a mouthful.

The devotion to and appreciation for particular foods uniquely define us, as well as our notions and expectations of specific locations. Some scholars and popular observers believe that the world, and America in particular, stands at a major gastronomic crossroads. A corporate food culture that promotes sameness is now thoroughly entrenched in both the countryside and urban block. We consume billions and billions of burgers, fries, and other fast food cousins, cooked to time-and-motion perfection by high school-aged "chefs." The boxed, frozen, canned, and prepared food sections of the supermarket are often substantively larger than the fresh meats, seafood, and produce departments. With few exceptions, the foodstuffs found in markets in Rockport and Rapid City, Bangor and Butte, Kennebunk and Kansas City, Lowell and Lubbock, Marblehead and Minneapolis, Tewksbury and Tucson are, regardless of the season, exactly the same. We "cook" our meals in the microwave and "dine" in front of the television.

How and what we eat is being increasingly discussed and debated in the media. Eric Schlosser's recently published exposé, *Fast Food Nation,* illustrates, in frightening terms, how the industry has transformed America. Whether or not this account will capture the public's attention and become a rallying call of any sort is unclear. However, the philosophical approach of Slow Food, an organization which promotes the preservation of traditional foods and the pleasures of the table, is gaining appeal worldwide. Concerns regarding the genetic engineering of crops, unexplained fish kills in both fresh and salt waters, and the emergence of mad cow disease along with the resurgence of foot and mouth disease are making headlines almost daily. We are reminded that food, in every way, is the cornerstone of life.

"What's for lunch?," whether asked (or answered) by a life-long resident or passing traveler, provides a window to the cultural identify of a community. For example, to most Americans, Connecticut brings to mind a rather generic New England maritime identity. Seafood from its coastal waters, ranging from lobsters, crabs, shellfish, and fresh-caught ocean fish, is abundant. Connecticut's saltwater food reputation is well deserved. Indeed, the state is blessed with many outstanding seafood restaurants whose ambiance is enhanced with waters-edge dining or vistas of Long Island Sound. Visitors to Connecticut's renown Mystic Seaport Museum, Mystic Aquarium, or the nearby Mashantucket Pequot and Mohegan casinos are within easy reach of the area's best whole belly clams, steamed lobsters, and clam chowders. Seafood and maritime heritage are indeed mainstays of Connecticut's and New England's cultural identity.

However, there is more to the state's cuisine than seafood. Connecticut pizza is an exalted creation that, at the very least, equals most other regions' contributions to this American staple. Generations of Yale students continue to argue the relative merits of various New Haven pizzerias. Thin-crusted white pizza (no tomato sauce) with fresh clams is a simple, but elegant dish that deserves genuine culinary acclaim. For the carnivore, New Haven also boasts that Louie's Lunch is the "home" of the first hamburger, which traditionally is vertically grilled and served on toast. A beloved institution, this small restaurant and its original building have been relocated by the City of New Haven several times within the downtown area to avoid its demolition. Explore beyond the surface of a region's culinary reputation and there is often a fascinating cultural surprise.

Clearly, what we like to eat influences what we produce and how we produce it. Much of the story of man's manipulation of the natural environment is a result of hunger and the desire to satisfy it according to cultural preferences. Native Americans certainly embrace subsistence and feasting as a cultural continuum. Subsequently colonized by meat and bread eating (and alcohol drinking) peoples, America's historic landscape reflects this farm-based practice as does our architecture. Fields and mills for grain, pens and smokehouses for livestock, and house kitchens with open-hearths for roasting and ovens for baking all became the American way of life.

Food motivates man to action and invention. Even beyond the need for subsistence, it holds great emotional power. It was a highly-prized beverage, after all, that discontented colonists chose to throw into Boston Harbor on that fateful night in 1773. A symbol so strong and so universal that no one could fail to appreciate it.

Changing tastes, literally, affect material culture in forms both small and large. From the design of 19th century cooking appliances to the development of entirely new global industries, food is an enormous source of creativity in the marketplace. As automobile travel became popular, restaurants were one of the first businesses to successfully capitalize on the trend by inventing "fast" food to better accommodate the social and cultural needs of the time.

What and how we will eat tomorrow is anyone's guess. Will we give up on 1,000 calorie hamburgers for fear of wasting away? Shun cheese, gelatin salad, and ice cream for good measure? Enthusiastically embrace (farm-raised) fish, bones and all? Will the (thoroughly cooked) egg return to favor and the chicken reign supreme? Will we devour turkey dogs at the ball park? Beans and rice at the drive-through? Could there be more barbequed tofu in our future? New census data confirms that the face of America is changing and with it the traditional shape, and perhaps the flavor, of our world. Only time will tell.

We, as all cultures truly are—forever have been and always will be—what we eat. Culinary historians continue to research and study local and regional foodstuffs, food preparation techniques and technologies, and pertinent customs, traditions and taboos, hoping to discern the inevitable forks in our road.

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Native Seeds/SEARCH's Conservation Farm about mid-July 2000 looking west toward the Santa Rita mountains. Plants include Tarahumara pepo squash and Tohono O'odham yellow-meated watermelon. The line of boxes are 6'x 6'x 6' isolation cages used to prevent cross-pollination between individual chile varieties. Photo courtesy Native Seeds/SEARCH. See article, p. 23.

Susan E. Smead and Marc C. Wagner

Evolution of the Ice Cream Stand

Ice cream stands developed as a particular building type as the American public's enthusiasm for travel by car grew in the middle decades of the 20th century. One of the nation's favorite foods, ice cream was readily adaptable to "fast food" service, which became increasingly favored by the average consumer during the last century. Carl's Frozen Custard, an ice cream stand built in Fredericksburg, Virginia, in 1953, and recently placed on the Virginia Landmarks Register, is a classic mid-20th-century example of this unique building type. Ice cream stands such as Carl's reflect distinctly American historical developments and architectural innovations. The ready accessibility of ice cream and the fashion for enjoying it on the road, "fast food" style, evolved in America because of technological innovations in ice cream production, changes in social structure and habits, and the automobile's impact on life in America.

Ice Cream in the United States

Ice cream was introduced in America in the 18th century, during the late colonial period. While frozen desserts first appeared as ices made from fruit juice or sometimes wine, ice cream relying on eggs and cream as essential ingredients was soon developed. Ice cream became fashionable as a delicacy enjoyed by the wealthy as the ice required to make the dessert was generally not available and the process of making the dish was quite laborious. During the late 18th century, George Washington was among the elite who enjoyed ice cream, spending about $200 on it during the summer of 1790. Thomas Jefferson developed a fondness for ice cream while serving as Minister to France in 1785-1789, and brought recipes back with him to Monticello. While president, Jefferson served the dessert at White House dinners, a practice continued by Dolly Madison during her years as first lady. In 1846, the hand-cranked ice cream maker was invented by Nancy Johnson thereby making the frozen treat more accessible to the middle classes. The ice cream manufacturing industry began in the United States in 1851.

Until the mid-19th century, restaurants were relatively rare in the United States. Before this time, travelers could find a meal at a tavern or ordinary, and many hotel and boarding house dining rooms catered to both guests and the public. Other than the patrons of coffee houses and oyster houses, which were popular gathering places and eateries during this period, few Americans dined out purely for enjoyment. As America became more industrialized and the country's urban centers grew, businesses offering light fare and quick service gained in appeal. Soda fountains appeared in the 19th century following the development of the beverage in 1839. With the nationwide advent of Prohibition in 1919, soda fountains grew increasingly popular, dispensing soft drinks as an alternative to alcohol. Coincidentally, just after the turn of the century, soda fountain design began to emulate the typical saloon prototype, with a counter fronted by stools standing before a high-back bar area that often featured an oversized mirror on the wall above. To augment soda-based concoctions, many soda fountains began to offer light meals to their customers in the late 19th century.

Ice Cream Meets Roadside

In the 1930s and 1940s, as automobile travel rose in popularity and road touring became a recreational pursuit, eateries appeared with increasing frequency along American highways. The forms that these establishments took ranged from the distinctive, modern diner to the idiosyncratic, hand-built roadside stand which often lacked any aesthetic pretensions. Ice cream,

Carl's Frozen Custard, Fredericksburg, Virginia.

perennially popular and long available at recreational establishments such as amusement parks and resorts, was a logical choice for roadside sale. The ice cream cone, developed in the late 1890s and patented in 1903, allowed the "take away" sale of ice cream and thereby added to the marketability of the product.

An alternative to conventional ice cream, "soft serve" ice cream was invented in the 1930s and became the foundation of the Dairy Queen® chain of ice cream stands. The Tastee-Freez® chain emerged in the late 1940s and also offered the soft form of ice cream. Many small regional operations and independently owned stands followed suit, selling the new and novel "soft serve" or "frozen custard" ice cream. Various recipes for these ice creams were developed, but essentially soft ice cream is the consistency of the dessert taken directly from the freezer before hardening, while frozen custard is created by adding eggs to soft ice cream and cooking the mixture to a custard state before it is frozen.

Structures adapted for use as roadside ice cream stands varied from simple, one-of-a-kind buildings that housed "mom and pop" operations to fairly sophisticated designs that frequently became emblematic of specific commercial chains. However, by the mid-20th century there were common characteristics found in the typical ice cream stand and its setting, which included proximity to the road for ready visibility and accessibility for passing motorists, ample parking immediately adjacent to and usually in front of the building, prominently placed service windows, and large expanses of plate glass in the facade and the front portions of the side walls. Many, including Dairy Queen® stands, had flat-topped roofs surmounted with prominent and eye-catching signage, often employing bright florescent and neon lights. Some of the roadside ice cream stands took on more dramatic lines with façades that featured forward-leaning walls. Independent ice cream stands occasionally sported decorative, futuristic-looking elements, such as side fins or other architectural elaborations, and sometimes employed large-scale figurative signage, often depicting a giant ice cream cone. Two smaller chains designed their prototypical stands in emblematic forms, employing programmatic architecture to catch the customer's eye. Mowrer's Ice Cream Company of Pennsylvania used stands that looked like giant Lily Tulip cups, a typical ice cream container of the 1930s, while the Parker Ice Cream Company of West Virginia operated Big Cone stands designed to appear as giant inverted ice cream cones.

Through the 20th century, the attraction of the ice cream stand reached its peak and then declined somewhat, as other fast-food restaurants serving a variety of quick meals came into vogue. Also, the number of chain operations with standardized building designs increased in relation to the percentage of individually-run, uniquely-designed ice cream stands. These buildings, which often borrowed motifs from chain ice cream stands, are architecturally quite fragile and are frequently threatened by commercial competition, by highways superseding secondary roads as favored transportation routes, by insensitive modernization, and by neglect. Those that stand close to communities on well-traveled roads generally have faired better.

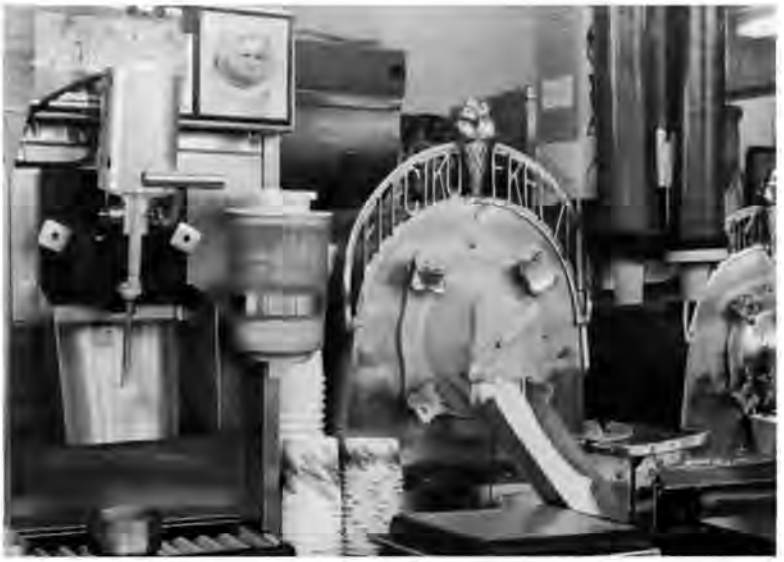
Carl's Frozen Custard Stand

Carl's is an especially good example of a family-run, independent ice cream stand that possesses architectural character and has retained its design integrity. The recent listing of Carl's on the Virginia Landmarks Register makes it the first ice cream stand to attain such notable recognition in Virginia.

The historic context for ice cream stands in Virginia follows the national example with few exceptions. Although there is no exhaustive survey of ice cream stands in Virginia, Carl's appears to be an excellent representative of ice cream stands that were once moderately common along the Virginia roadside during the 1940s and 1950s.

Virginia's historic ice cream-related establishments survive in very modest numbers. During the 1930s and 1940s, ice cream sales were often tied closely to the local major dairy processing plant. The growth of dairy operations around the major urban nodes in Virginia also follows the same model as the national example. The largest processing plants were situated in the more sizable towns and cities. In the 1940s, some of the major dairy plants opened restaurants that featured their own line of freshly made ice cream. Often these restaurants were literally attached, or adjacent, to the dairy processing plants. In Front Royal, the National Register-eligible Royal Dairy, opened in the late 1940s, still operates as a restaurant, despite the closing of the dairy plant operations. A fine neon-lit Moderne style build-

Electro Free® machines dating to the 1940s.



ing with exterior clad in tan colored tile, Royal Dairy retains a high degree of integrity. Especially notable is the original circular plan center counter that dominates the interior space with lime green enamel partitions. In Richmond, the Curles Neck Dairy opened a similar facility which has been remodeled since the 1940s. While a primary outlet for plant-produced ice cream, these were eat-in restaurants that served a full menu of food.

Popular American ice cream stores appeared across the state in the 1940s with increasingly greater numbers in the 1950s. Today, Dairy Queen,® Baskin-Robbins,® and a handfull of Tastee Freeze® stores dot the Virginia landscape. Before ice cream was available in supermarkets, ice cream stands and downtown ice cream parlors were the best outlets for frozen ice cream or custard treats.

Given the narrowing market for ice cream stands in the late 20th century, the survival of Carl's is rather unusual. Primarily significant for its highly intact and noteworthy design, Carl's gained status in the market place for its consistently high quality product. The decision to maintain the structure's historic appearance was primarily due to the owner and his family's hands-on role in developing the original design and the superb signage. As a result, they felt strongly about maintaining the historic appearance of their business.

Photos by Sabrina Carlson, 1999.

Carl Sponseller, the original owner, left the family's Oxford, Pennsylvania, truck farm in 1935 and eventually settled in Washington, DC. While working for Beck's Frozen Custard, Sponseller noticed that a considerable portion of the clientele came from Virginia. By April 1947, Carl and Margaret Sponseller had relocated to Fredericksburg and opened their own frozen custard store in a former gas station. The choice of Fredericksburg was a deliberate and important business strategy. Princess Anne Street, one of the main avenues through the downtown, was also U.S. Route 1, and as such, was perhaps the busiest north-south travel route in the eastern United States at the time (predating the country's Interstate system). The street was a natural corridor for diners, gas stations, and overnight accommodations.

A local contractor constructed a relatively simple building to house Carl's ice cream business. The design was based on a similar structure that the Sponseller's brothers had built in Falls Church. Constructed of concrete block with a stucco finish, the one-story building has a flat roof and a projecting overhang at the front. While the rear of the building is unadorned, the façade is moderately sophisticated. The overhanging roof is actually wider at the front than at the rear. The service area consists of a projecting wide band of windows with walk-up counter at center. The counter is skirted with green plastic laminate panels. The area above the walk-up is surmounted by large free-standing letters that spell out "Thick Shakes-Quarts-Pints- Shakes-Sundaes-Milk Shakes." The underside of the overhang has a slight cove transitioning between the vertical and horizontal surfaces. Florescent tube lights surround the outer edge of the soffit. When lit, the effect on the bright white paint and the smooth stucco, back lighting the free standing stylized script letters, is an added enhancement to the distinct roof signage. The roof design was developed by Carl Sponseller. Carl's roof-mounted sign is V-shaped in plan and features a forward tilted ice cream cone and two panels. Two neon lit roof signs read "Carl's" in free standing letters with a smaller line underneath proclaiming "Creme-Shakes-Sundaes."

If the design seems familiar, it's because it was probably adapted from Dairy Queen's® prototype design. Dairy Queen® used the forwarded tilted cone, free standing letters under the overhang, and exhibited a flat roof profile. A Dairy Queen® stand had opened on Princess Anne Street in 1950, and this may have been one of the

direct influences on the eventual design for Carl's. Sponseller clearly modified the basic, simple and flatter concept by deepening the architectural dimensions and adding more elaborate signage. In the 1960s, most Dairy Queen® operations converted to the red-roofed gambrel barn design and away from the "modern" look in an effort to relate their buildings to a traditional rural architectural form, a reminder of the dairy barn origins of their product. Carl's harkens back to the aspirations of non-referential modernism, a design that was meant to be new, clean, and inviting.

The interior of Carl's is functional and little altered. It consists of the front service area, a work area at the rear, and a small office. One of the more unusual features, and believed to be a reason for the quality of Carl's frozen custard, are the two 1940s Electro Freeze® machines that feature wonderful freestanding "Electro Freeze®" lettered crowns with central motifs depicting a small cone and scoops.

Several important issues required resolution in the professional evaluation of this resource. Because of the relatively recent construction date of the building (only 48 years old) and the scarcity of comparative research on ice cream stands and the ice cream industry, the Virginia Department of Historic Resources undertook additional investigations with regard to the rarity and integrity of Carl's Frozen Custard Stand.

The Virginia Department of Historic Resources was able to successfully assess the significance of Carl's based upon both the general rarity of historic ice cream stands in Virginia and the unusual architectural integrity of this particular structure. The fact that Carl's is still seasonally operated and uses some of its original frozen custard-making equipment underlines its uniqueness and importance. It was fortuitous that two recent publications offer new insights on restaurants and roadside establishments. Philip Langdon's *Orange Roofs, Golden Arches: The Architecture of American Chain Restaurants* (1986) contains superb information on roadside design and corporate history. Likewise, *Fast Food: Roadside Restaurants in the Automobile Age*, written by John A. Jakle and Keith A. Sculle, is a definitive source for understanding the ice cream industry and the roadside stand. These publications are useful resources for evaluating the potential significance of ice cream stands and placing them in a comparative context. Additional site-specific information may be gleaned from local records and local oral histories. Since many of these structures date to the late 1940s and early 1950s, original owners and/or their extended families are sometimes still available.

Carl's is still operated by members of the Sponseller family. As is traditional with most ice cream stands, Carl's operates during the warm months of the year from spring to early fall. Carl's continues to draw a faithful clientele and new customers alike supporting a thriving business while surviving as a rare and fine example of the mid-20th century ice cream stand.

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John H. Ferry

Food for Thought

A View Toward a Richer Interpretation of the House Museum Kitchen

Over the past 25 years, a growing effort to interpret domestic life at house museums has awakened visitors to the rich tapestry of intertwined and evolving relationships that is a house, and us. In site after site for more than a century, kitchens and related spaces were misunderstood, viewed as unimportant, put to administrative or service uses, or shaped into preconceived forms. At Monticello, Thomas Jefferson's first kitchen became a public restroom, while his show-stopper 1809 kitchen served as a post office and gift shop until it was re-invented in the 1940s as a pastiche of the Colonial Revival kitchen and filled with wood-ware that had no connection to Jefferson or his sophisticated, French-influenced kitchen. Monticello was not an isolated example. After Mount Vernon's kitchen was gutted and the physical evidence of its past glories were obliterated during the 1890s, it was fitted with the iconic down-hearth fireplace, pot crane, and clock jack. Shortly after Hampton National Historic Site in Towson, Maryland, was awarded historic designation in 1948, the kitchen wing was converted to a tea room run by an independent contractor under a 50-year lease. For decades, visitors to the recreated Governor's Palace kitchen at Colonial Williamsburg were treated to a charming vision of a costumed black cook seated by a roaring fire, the table beside her cluttered with quaint accouterments of the kitchen. Above her hung innumerable bouquets of herbs, while off in the corner stood a spinning wheel. These are easy images to have fun with today. To be fair, though, as Kenneth L. Ames pointed out in *The Colonial Revival in America*, interpretation is as much about now as it is about then. The men and women who altered these spaces, assembled these tableaux, and wrote of the past did so to the best of their ability.

Our challenge is to review the evidence and attempt to interpret kitchen spaces with new clarity. Staff at Colonial Williamsburg, Monticello, The Octagon in Washington, DC, and the Hermann-Grimma House in New Orleans, are among those who have begun this process. Each of these sites has spent considerable time, money, and effort to piece together evidence of the historic form of long-demolished 18th- and 19th-century kitchens and to understand something of who cooked there and what they cooked. Each has reconstructed or is planning to reconstruct, at considerable expense, a kitchen with iron range and stew stove, cooking technology long ignored because it did not mesh with the Colonial Revival insistence on the cozy down-hearth fireplace.

Staff at these sites might well envy staff at Hampton, one of the few houses in the nation where the kitchen survives much as it did in the early 19th century. The cooking range was removed and the fireplace was fitted with a pot crane and cauldron to provide colonial ambiance for the tearoom, and the early bake oven was mis-

The recently restored kitchen at The Octagon illustrates the classic stew stove-roasting range-bake oven arrangement. The range is cleverly represented by an illustration since its actual historic form remains obscure.

Hampton's stew stove and roaster offer many possibilities for interpreting the kitchen and those who labored there.

takenly identified as a mid-19th century summer kitchen and demolished, but the stew stove and the Rumford-style roaster built into the side of the fireplace were retained, so that when the lease on the tea room expired in 1998, and the National Park Service gained control of the kitchen spaces, these vestiges of Hampton's once grand kitchen remained.

Kitchens such as these help counter the Colonial Revival mystique and shed new light on forgotten foodways as well as stimulate the re-examination of the role of the kitchen within the interpretative plan. While ignoring the kitchen or displaying it as a quaint anachronism, house museums commonly showcase the beautifully restored dining room and the many parties held there. They generally fail, however, to draw visitors into the fecund web of supporting activities that made these parties a pleasure to attend. Re-interpreting the dining room along with the kitchen and other supporting structures, and describing how the food got to table and who raised and prepared it, would give visitors a more complete and compelling view of the intertwined and evolving relationships within—and outside—the household. Such an interpretative approach would end, not begin, in the dining room.

Hampton is a good site for such interpretation and helps illustrate how this approach might be implemented. Not only could its kitchen provide a focus for interpreting cooking technology and the people who worked there, but its dining room and many supporting structures are intact or have been restored, and a significant documentary record exists to support a rich interpretation. If Hampton's kitchen, dining room, Home Farm, dairy, smoke house, ice house, kitchen garden, orangery, and butler's pantry were linked through interpretation, the intertwined and evolving relationships of French émigrés, indentured servants, slaves, freed African Americans, and the Ridgely family from the estate's earliest days to the post-Civil War period could be presented to visitors in a compelling and insightful manner.

House in the Forest

Through a combination of business acumen, forceful personality, and a continuing personal involvement in all aspects of his business enterprises, Captain Charles Ridgely (1733-1790) parlayed a modest inheritance into a large fortune and agricultural/industrial/commercial conglomerate at Hampton. By the time of his death, he owned more than 24,000 acres of land. His expanding affluence and position allowed him and his descendants to live among the symbols of his accomplishment, the most enduring of which was Hampton Hall, his "house in the forest" begun in 1783 and finished in 1790. Upon the captain's death, his nephew Charles Ridgely Carnan (1760-1829) inherited Hampton by taking the Ridgely name. It was the Ridgelys' intent from the start to make the house a show place where they could entertain in high style, so it was essential that the kitchen contain a stew stove, roasting range, and bake oven to enable the French chef and his staff to create the many and varied dishes for which the house became renowned.

The kitchen at Hampton is located in a square, two-and-one-half story building connected to the east side of the main house by a hyphen that Charles Carnan Ridgely expanded about 1815 to include a spacious butler's pantry. In 1829, John Ridgely (1790-1867) inherited the house and an outmoded kitchen; and in 1830, set about updating it. He added the Rumford-style roaster and, by 1852, had installed a cooking range. This range may have been used for decades, but was probably replaced by a later one that may have remained in place until 1948.

Thoughts on Interpretation

By the time the range was installed at Hampton, the stew stove was no longer essential but could still be pressed into service, and the roaster never lost its usefulness. The re-insertion of a c. 1852 cooking range in the kitchen fireplace at Hampton would set the stage for interpretation from the 1790s into the 1870s when that particular range was likely still in use. Interpreters could demonstrate the evolving technology and use of stew stove, roasting oven, and cookstove, a history interpreted at no other single site in America.

Before reaching the kitchen, however, visitors would explore the Home Farm. Here they would learn who tended the cows and who grew the crops, what they raised, and how they processed produce before sending it to the kitchen. On a hot day, they could revel in the coolness of the dairy where, in the mid-19th century, a French dairymaid prepared milk products destined for the Ridgely's table or the commercial market. They could experience the cramped quarters where slave husbandmen lived, and learn of the indentured servants who worked the fields before them. This is also a good opportunity for discussion about what workers at Hampton ate.

Leaving the farm, visitors would walk to the kitchen yard and explore the smoke house, ice house, orangery, and kitchen garden, tracing the intricate processes workers mastered to preserve meats and raise succulent fruits and vegetables for the Ridgely table. Visitors would then examine the site where the bake oven and its accompanying shed stood on the east wall of the kitchen. Here, slaves and hired workers not only baked bread and pastries, but washed vegetables and completed other tasks essential to readying food for cooking.

Entering the kitchen through the bake yard door, visitors would see a fine mid-19th century kitchen, replete with large iron cooking range, roaster, and stew stove. There is cabinetry on the walls and a large work table in the center of the room where the chef performed magic and called out orders to staff, white and black. Slave Anne Williams perhaps worked here, for she was a cook and nurse.

Moving on, visitors would enter the chef's room, his sanctum sanctorum, both bedroom and storage area for the valuable kitchen items under his charge, equipment, spices and such. They would next proceed to the butler's pantry, the link between the back and front of the house. Here the various plates of food to be placed on the table were made up in the kitchen, then carried through this room into the dining room. By the second half of the 19th century, the plates of food received a final garnishing here. The butler's pantry was the hub of a well-run household. In the English tradition, the butler or steward was the top ranking male servant—in the best of circumstances a good chef was just his equal. Glassware, silver, and china were stored in the butler's pantry, and here the finer items were washed and polished. The butler oversaw the setting up and serving in the dining room. He trained the waiters and made certain they placed the dishes and poured the wine just so for the Ridgely's and their guests. The histories of actual people involved in these activities would be threaded throughout the tour.

Visitors to Hampton and other sites that initiated a similar course of interpretation would be fortunate indeed for, upon walking from the butler's pantry and entering the dining room, they would have an understanding of the lavish table before them that no house museum tour in America offers today. By leading visitors through the process of food production and introducing those who made the dinner parties possible, house museums can tell a clearer story not only about kitchens and cooking technology, but about all who lived and worked there.

Cooking Technology

Stew stoves, roasters and, ultimately, cooking ranges allowed cooks to create sophisticated dishes nearly impossible to prepare on an open, down-hearth fireplace. The kitchen of any American household whose inhabitants ate fine cuisine almost certainly contained at least one of these appliances from the 1750s onward.

The stew stove, also called a potager, stew hole, or stewing stove, was built into kitchens from Canada to Louisiana until it was supplanted by the first practical cooking range in the early 19th century.* It performed a function akin to the modern cook-top. A masonry mass with at least one well where embers, or small fires, could be placed beneath a cooking container to provide the cook with a controlled concentration of heat and a counter-height working surface. The stew stove enabled a chef to create the sophisticated style of food preparation known as haute cuisine.

A mode of preparation and presentation developed in Paris and the French courts of the 17th and 18th centuries, haute cuisine was embraced by the English gentry and brought to America by both the English and the French. This cuisine is characterized by artfully arranged plates of food and composed sauces that emphasize flavor and appearance. Its emergence signaled a fundamental shift in cooking technique. Prior

to this, there was little difference between French and English cuisine. Both relied on large fireplaces in which most food was either roasted or boiled, and large pots and cauldrons served as single cooking receptacles, as in cooking a boiled dinner of corned beef and cabbage. In haute cuisine, ingredients were cooked in several separate pans upon the stew stove and natural juices were reduced to create sauces, much as we do today. By the mid-18th century a further refinement was introduced—liaison (thickening). This thickening, or binding, of the sauce was the final step in a complex process, the successful results of which were the crowning touch to the finished dish. Production of such sauces was made easier by the introduction of the stew stove in France, a technology the English embraced to satisfy their French and French-trained chefs. Large stew stoves could contain a dozen wells, allowing for slow cooking, rapid cooking, or keeping preparations warm over low heat.

The range originated in the 16th century as a raised, iron fire-basket used for roasting, a form that had, by the early-18th century, evolved into a series of horizontal wrought iron bars mounted between vertical iron posts set into the fireplace. Throughout the 18th century, modifications and improvements were made as the roasting range was put to multiple uses. At century's end, it had grown to enormous size and was provided with cast-iron face-plates, ovens and wrought-iron back-boilers to produce both hot water and steam for the kitchen. Though the addition of ovens was an advancement, their capacity was relatively small and because they were placed to the right or left of the fire, they provided uneven heat.

In 1805, Benjamin Thompson, Count Rumford, published the results of his years of experimentation with designs for cooking apparatus. A Massachusetts native, knighted by George III and made a Count of the Holy Roman Empire by Carl Theodore, Rumford published a total of 64 papers and essays, a number of those on the nature of heat and light still considered seminal works. His 1805 treatise included plans for stew stoves and an innovative roaster far superior to the roasting range. His roaster was a compact unit consisting of a sheet iron drum above a small firebox with ashpit, all set into the masonry mass of the fireplace chimney. This arrangement distributed heat around the roaster, resulting in more even cooking. Rumford provided his roasters with a moisture-venting tube and blowpipes, signature innovations that created a dry-heat condition which aided browning. Two blowpipes ran under the roaster and through the fire. One end of each pipe opened into the room, where it was stoppered; the other end opened at the bottom rear of the roaster. To brown meat, one stoked the fire, opened the vent and removed the stopper, causing a rush of super-heated air to pass through the oven. The roaster could also serve as a small, fine bake oven. Rumford's roasters became popular alternatives to the roasting range at the start of the 19th century.

The Rumford roaster was, however, soon eclipsed by the next evolution of the roasting range, the closed-fire cooking range. English advances in the manufacture of cast iron enabled the first practical version to be introduced in 1802. This cooking range, set into the fireplace, established the tripartite form of side-by-side oven-firebox-boiler. From a central fire grate, the hot air and flames passed underneath the hotplate that spanned the top of the range, then circulated around the oven, underneath the ash pit, past the bottom and sides of the boiler, and up the chimney. This arrangement provided almost everything the cook required in one relatively simple, compact, and convenient unit. The door to the firebox could be opened at the front for roasting, the oven provided even heat for baking, there was a constant source of hot water from the boiler, and pans could boil and stew upon the hotplate. Early cooking ranges were costly, but their price dropped rapidly so that by the time the first known cooking range was installed at Hampton National Historic Site in 1852, the cookstove—as it came to be called—had made its way into kitchens throughout America, giving cooks everywhere the option of preparing fine and delicate sauces.

Note

* A similar structure known as a boiler or set kettle can be confused with a stew stove. It, too, was of masonry construction, but contained large, semi-permanent kettles made of iron or copper. The boiler was commonly found in the laundry and brew house.

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Foodways in 18th Century Connecticut

In 1999 and 2000, Public Archaeology Survey Team, Inc (PAST) completed archeological investigations of three 18th-century homestead sites in Connecticut. These archeological sites were found hidden under cultivated fields during archeological reconnaissance surveys which preceded road improvements proposed by the Connecticut Department of Transportation. The two excavated sites include the Sprague Homestead in Andover and the Goodsell Homestead in North Branford, which are still undergoing inventory and analysis. The Daniels Homestead in Waterford is about to undergo excavation this fall. By combining thorough archeological excavation and recovery methods with in-depth documentary research, these sites are providing rare and important opportunities to better understand many facets of everyday rural life in 18th-century Connecticut, especially foodways.

The Sprague site, located in rural Andover, represents one of the first European homesteads in what was then the newly incorporated town of Lebanon. Nestled in the Hop River Valley, the property was settled by Captain Ephraim Sprague of Duxbury, Massachusetts, in 1705, at which time Lebanon was part of an extensive insular frontier in the Connecticut colony's northeast uplands. Along with his farming activities, Sprague was elected to the position of captain in Lebanon's North Parish train band in 1724 and served in the Northhampton, Massachusetts, region during Grey Lock's (Lovewell's) War in 1724-1725. At various times, Sprague was also a Lebanon selectman, represented the town in Connecticut's General Assembly, and served as a deacon in Eleazor Wheelock's North Society Church.

Storage pits discovered in the floor of the main cellar of the Sprague Homestead in Andover, Connecticut. Photo courtesy PAST Inc.

The excavation of the Sprague site uncovered numerous features, including a deep, dry-laid stone-lined main cellar with an outside stone-step entrance. Excavation of the lower strata of the cellar revealed concentrations of charred timbers, artifacts, and food remains indicating that the house had burned down sometime in the mid-18th century. Within the sand floor of the cellar were found eight subterranean storage pits, with one pit open and in use at the time the house burned; the remaining pits had been backfilled with sand. Other important discoveries include a large rectangular, ash-filled feature north of the cellar, perhaps representing the location of a large hearth and a second large cellar to the north of the ash feature at the opposite end of the house. The lack of any archeological evidence for subsurface foundation footings at the site indicates that the house sills likely sat on laid stone pads or very low foundation walls that were obliterated by plowing. A well and several small outside open-air hearths were also found. The plan of the Sprague site suggests that the main structure was of the "long house" tradition common in the western uplands of England, Wales, Scotland, and Ireland and which had originated from earlier Celtic dwelling forms. The Sprague house was approximately 15' x 60' in size, a 4:1 ratio. Although no intact standing long house structures remain in North America today, sites of this post-medieval house form have been excavated in the Duxbury-Plymouth region of Massachusetts, in Maine, and in Virginia (Deetz 1977; Bradley 1989). A similar form of long house is further illustrated in a 1699 drawing of the Saco Fort and has been reconstructed from probate inventories (Candee 1987; St. George 1986). Ephraim Sprague moved to Connecticut from Duxbury; the Sprague family originated

from the West Country uplands of England, which had a predominant long house tradition. Interestingly, Captain Sprague, a third-generation American, appears to have continued an "old world" building tradition.

Because the entire house burned and the contents were left behind as fill in the two cellars, information on foodways from the Sprague homestead site is extensive. The fire preserved botanical and faunal evidence through carbonization and the heavy ash filtration changed the normal acidic soil to alkaline, which promoted extraordinary organic preservation. Faunal evidence includes the bones of cow, pig, sheep, deer, and birds; eggshells; fish bones and scales; saltwater and freshwater shells; and antler. Carbonized botanical food remains recovered include barley, oats, corn, beans, and hickory nuts. The botanical and faunal evidence indicates an extensive blending of old and new world foods in the Spragues' diet. The recovery of a beaver incisor from the main cellar floor suggests that beaver were still being taken from the region despite the extensive trapping and fur-trading activities during the 17th century. A cache of antler with the tines sawn off, plus worked antler and other homemade tools, demonstrate Sprague's frontier skills at catching and converting game into food, tools, and perhaps other items as well.

Foodways-related material culture includes a scythe handle, a sickle, a shovel blade, gun flints, ball and shot of varying sizes, and a fishhook. Various earthenware pans, bowls, and pots were recovered, as were table knives and forks, drinking glass and liquor bottle fragments, and virtually an entire English white salt-glazed stoneware tea set. Captain Sprague's will and probate inventory indicate that at the end of his life in November/December of 1754, 69 years old, he was maintaining only a few animals including a cow and 13 sheep and that he had stored up "corn of all sorts, meat, sauces of all sorts, with two swine now a-fatting." The picture of Sprague, only just emerging as the botanical, faunal, and artifact analysis progress, is one of a man who spanned several worlds. He lived in an old-style house, kept domesticated animals but also hunted, and enjoyed a fine tea set but still made his own tools of antler and cut-up brass kettles. He was a representative to Connecticut's assembly, yet fought alongside Native Americans in a colonial and Indian war. Sprague, with his fine cufflinks and large quantity of trade beads, moved easily between roles. The archeological remains of his burned house will permit detailed reconstruction of the foodways of a frontiersman in southern New England, something which has never been done.

The homestead site investigated in North Branford was purchased and settled by Samuel Goodsell of East Haven c. 1735. In 1752, Samuel was accidentally "killed by a log at a sawmill" of which he was part owner. Following Samuel Goodsell's untimely death, the farm was thereafter occupied by his widow Lydia and their daughter Martha. Martha died in 1792 and her mother died c. 1797. At this time, the house was abandoned and the land was sold off by the surviving Goodsell children. Like the Sprague site, archeological and documentary research of the Goodsell homestead offers important opportunities for better understanding lifeways of the period, with a particular focus on the lives of the women who resided there alone for 45 of the house's 62 years of occupancy. The excavation of the site uncovered two cellars, a well, and other smaller features. Like the Sprague site, the Goodsell house sills were likely laid on surface level stone pads and not on subsurface foundations.

Faunal remains recovered from the Goodsell homestead include cow, pig, sheep, deer, bird, fish, and eggshells, as well as considerable quantities of saltwater shellfish such as soft-shelled clam, quahog, oyster, and whelk. Many charred botanical remains such as corn were also recovered in flotation samples and will be analyzed in the near future. The 1752 probate inventory of Samuel Goodsell provides detailed information regarding the Goodsells' farm and household economy. Along with a three-acre apple orchard, the Goodsells had a cider mill, various barrels, funnels and bottles, and barrels of cider in varying stages of processing including raw, boiled and apple beer. A bottle glass fragment with the initials "MG" was recovered from the site, presumably representing the initials of the daughter Martha Goodsell. The Goodsells also had stores of oats, rye, barley, wheat and maslin (mixed grains), beehives, and numerous cows, pigs, and sheep. Farming tools mentioned in the probate include a plow, harrow, threshing flail, hoes, forks, shovels, scythes, and other implements. Other important subsistence-related items named in the probate include a set of oyster tongs and a

Faunal remains being excavated from Feature 19, a hearth locus, at the Sprague Homestead in Andover, Connecticut. Photo courtesy PAST Inc.

cockle riddle (strainer) for gathering shellfish, a pigeon net, and a gun.

Subsistence-related artifacts recovered during the excavation of the Goodsell homestead include table knives and forks, gun flints, lead ball and shot of varying sizes, glass liquor bottle and tumbler fragments, cast-iron kettle fragments, and pewter spoons. A very diverse range of ceramics were recovered during the excavation and include English slipware and slip-decorated red earthenware plates and dishes and matching English white salt-glazed stoneware and creamware plates in the "Royal" pattern.

The Daniels homestead in Waterford is another important 18th-century Connecticut archeological site. Thomas and Hannah Daniels came to the area c.1713 and appear to have been farmers of the middling sort. Thomas Daniels' probate of 1735 indicates that the homestead was comprised of approximately 67 acres of land with cattle, sheep, pigs, and three teams of oxen. At the time of his death, Daniels was well equipped with the necessary farming implements of the time such as stubbing and broad hoes and plow irons, as well as the basic food preparation items such as kettles, pots and hooks, a trammel, pewter spoons, earthenware, wooden dishes, and the like. The Daniels family also had an orchard. Hannah's probate inventory, recorded 10 years later in 1745, depicts a widow with few possessions, the animals included only a cow and calf, a hog, and two geese and nine goslings.

The archeological assemblage from a small sample of the site has produced a wide range of materials consistent with the occupation of the area during the first half of the 18th century. Some of the items include red earthenware, German blue and gray stoneware, delftware, kaolin pipe fragments, glass liquor bottle fragments, hand-forged nails, window glass, shell mortar, and significant amounts of shell and bone, particularly cow. A full-scale archeological excavation began during winter 2000 and will continue through spring 2001.

Although only in the initial stages of analysis, these three archeological sites are providing new and significant insights into the lifeways of rural colonial Connecticut. In 18th-century New England, the harvesting, collecting, and processing of material culture and food storage were undergoing important changes in technology, strategies, and experimentation (McMahon 1994). Together, these sites will contribute to the creation of more meaningful regional cultural patterns of rural 18th-century life. Importantly, these three archeological homesteads illustrate the everyday lives of people who were the vast majority of the colonial Connecticut's population.

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Stephen Cook

The Art of the Feast

Decoration of Native American Food-Related Utensils

The Mashantucket Pequot Museum and Research Center, located on the Mashantucket Pequot tribal reservation in Ledyard, Connecticut, recently opened its first staff-generated exhibit entitled *Gifts of the Forest: Native Traditions in Wood and Bark,* which was on display from October 5, 2000, through March 4, 2001, and then will travel nationally. *Gifts of the Forest* showcases over 100 different works from bowls and spoons to birchbark canoes and bows made by Native American artists throughout the eastern portion of North America from the 17th century to the present day. The exhibit presents Native American art from a more holistic perspective than has typically been the case with similar exhibits. Rather than highlight a single category of artwork, *Gifts of the Forest* adopts as its focal point the significant relationship that links Native people in the eastern United States and trees, a primary aspect of their natural environment. The exhibit is supported with extensive programming that emphasized related themes through native story tellers, artists demonstrations, lectures, and a special exhibit-related dinner.

Effigy bowl, 19th century, northeastern woodlands. Photo courtesy Mashantucket Pequot Museum and Research Center.

For thousands of years, Native people in the eastern woodlands have been using wood and bark for housing, medicine, food, dyes, utensils, tools, and transportation. The trees that provide these materials play a prominent role in spiritual beliefs throughout the area, from the Abenaki and Leni-Lenape creation to the Iroquois Great Tree of Peace. The themes of strength, protection, thanksgiving, creation, and renewal associated with the great forests of the eastern woodlands are as important today as they were in the distant past and continue to inspire contemporary artists.

Many of the exhibited pieces were intended to be used in the preparation and consumption of food. Wood and bark were used extensively throughout the eastern woodlands to manufacture spoons, bowls, dishes, and food storage containers. Even the fibrous inner bark of some trees such as cedar and basswood was used to weave bags for storing wild rice and other dried foods. In fact, wood was the preferred medium for serving and consuming food, being mentioned in some of the earliest European accounts as well as having been discovered archeologically on numerous early historic sites. Individuals usually possessed their own wooden bowl and spoon and were expected to provide these at important feasts and ceremonies where food was served from larger, communal wooden vessels. Highly decorated wooden spoons, bowls, and stirring paddles are well represented in the material culture of eastern woodland societies and are an important reflection on cultural values associated with food and eating.

Gifts of the Forest focuses the visitor's attention on the complex cultural-social-aesthetic relationship that exists between artist, culture, and object as reflected by the design and decoration of these wood and bark utensils. Nowhere is this relationship clearer than in the creation of spoons, ladles, and bowls. These objects were

Bear effigy ladle, 19th century, northeastern woodlands. Photo courtesy Mashantucket Pequot Museum and Research Center.

originally made to be utilized for eating-related activities, not to be viewed solely as works of art, and their decoration is meant as a complement to the integrity of the whole piece. This concept of combining art and utility is found throughout the eastern woodlands and is different from western European traditions which often separate fine art from "craft" or decorative arts. Native people view art as inseparable from the rest of human endeavor. Art, spirituality, and utility are one and the same. This concept extends to the way in which Native people interact with the world around them and how they re-interpret that relationship in their art.

Native artists created wood and bark spoons, bowls, and ladles with a variety of two and three dimensional forms. Ultimately, all of these items were limited in their basic form by their intended function. However, it is through the decoration of these objects that the artist expresses the connection between artistic vision and social or spiritual life. This relationship is illustrated in two fundamental ways, realistic and abstract. The first and most recognizable can be termed "realistic essentialism" where the artist renders naturalistic images of people, plants, animals, and spirit beings. On wooden utensils, these are often carved in the round, are characterized as effigies, and are typically carved to offer the viewer an impression or essence of various animals, birds, people, and/or spirit beings. Details of hair, fur, feathers, and facial expression are often simplified in order to convey a more powerful and symbolic image. The artist carves the effigy as if it were emerging from the handle of a spoon or ladle or rising above the rim of a bowl. The effect is one of quiet power and balance between the formal and functional aspects that create a sense of immediacy between the viewer and the object.

Effigies are never carved solely for decorative purposes. On the contrary, they represent personal or clan totems and have important spiritual symbolism. For instance, many of the human effigies illustrate the main actions of participants in important feasts and ceremonies either engaged in eating, drinking, or other specialized activities. In essence, these carvings mirror the thoughts and actions of the user creating a double image of the feast for all the participants to view. At the same time, they honor and invoke the personification of the spiritual powers that are represented, thereby uniting the spiritual, functional, and aesthetic in a single object.

The second decorative form can be termed "abstract representation," which includes all manner of less recognizable depictions including carved and/or engraved linear and geometric designs. These designs are no less symbolic for their abstraction, representing animal tracks, natural phenomenon, spirit beings, and medicinal plants. Often these abstract representations are arranged to help fill and elaborate the negative space created by the more recognizable naturalistic depictions of people and animals. In this way, they reflect the artist's concern for balance and harmony between human beings and non-human entities. They help to ground the artwork in a cultural "reality" where people are an integral part of the world around them.

The inspiration for all of the carved designs, particularly effigy figures, derives from two interrelated sources, dreams or visions and community aesthetics. While the specific animal, person, or spirit being depicted originated through a dream or vision, the artist, as a member of a tribal community, draws on shared ideas of representation and symbolism in order to transform the dream image into the physical world and thereby, make it "real." In this way, designs and effigies carved, engraved, or painted on a variety of different objects could be understood and shared in their essence by all tribal members. The act of eating, especially at communal feasts, involved many layers of participation, from the smell and taste of the food to the visual reminder of clans, ancestors, and sacred ideologies carved into the utensils. The decoration and use of these objects became an important method for transmitting cultural values, histories, and traditions during the turbulent and dangerous centuries of European colonization.

Gifts of the Forest was supported by extensive programming which helped to realize the exhibit's holistic theme. These programs included a number of special events, workshops, and demonstrations. Many of the contemporary artists featured in *Gifts of the Forests* were brought into the gallery to discuss and demonstrate their skills as basket makers and woodcarvers. Exhibit programming also featured traditional native stories of the eastern woodlands.

In addition, a curator-led gallery tour and special dinner complemented the exhibit. The dinner was the first in what has evolved into a very popular series of themed dinners. The *Gifts of the Forest* dinner featured a menu that re-interpreted traditional woodland foods such as, caribou, elk, wild mushrooms, maple syrup, and smoked trout in a modern museum setting. The museum chefs coordinated closely with the curation and research staff to develop a menu which included traditional foods while allowing for creativity in presentation. An important aspect of the dinner was the opportunity for guests to tour the exhibit with the curator who provided a "behind the scenes" perspective.

Although *Gifts of the Forest* included a wide variety of Native American art derived from wood and bark materials, a significant number of exhibit objects were food-related. The key concept of unifying cultural, social, and aesthetic components from a Native American perspective relates directly to the interpretation of how food was viewed. Meals and feasts were a complete sensory and emotional experience, where the physical act of eating played only a small part. Carved and decorated spoons, bowls, and other vessels were a constant reminder of important cultural values associated with the spiritual forces that surround the community. In order to more fully appreciate Native American objects, it is necessary to understand them in a holistic context that recognizes art as a sociocultural construct. The same can be said for all human action, regardless of time, place, or circumstance.

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Sandra Oliver

A Fine Kettle of Fish

Historically, fish has been a problem food in America. We have serious and persistent objections to eating it, which the fisheries industry has always had to overcome in order to market its supply successfully. Technological advances in both fishing and the production and distribution of fish products developed more quickly during the 19th century than the average consumer's desire to eat it. By 1900, the fishing industry caught a great deal more fish than anyone wanted.

The origins of America's difficulty with fish are both technical and cultural. The technical objections to fish are based on its lightness, perishability, boniness, and the delicacy of its flesh. The cultural conflict arose because fish was often associated with poverty and Roman Catholicism, and that fish (and fishermen) were perceived as undomesticated.

Objections to eating fish seem deeply seated in northern European culture and are probably rationalizations for other deeper fears. Are we troubled, for example, by something that breathes and bleeds as we do, but lives in an element where we cannot? Is a fish too ambiguous a creature, neither one thing nor another? We know fish isn't meat, but as one 19th-century seafarer asked, "What are fish? Are they wegetables or wot?"

The Lightness of Fish

"As a food fish ranks between meat on the one hand and vegetables on the other. It is not so nutritious as the former...and it is thought that a diet in which fish predominates produces deficient vitality," said Todd Goodeholme. In his *Domestic Cyclopedia* (1885), Goodeholme further cites the authority of Dr. Edward Smith who wrote, "It is not desirable, that fish should be the sole kind of animal food eaten by any nation; and even if milk and eggs be added thereto, the vigor of such people will not be equal to that of flesh-eating nations."[1]

Generations of Europeans ate fish when they fasted. Consuming meat was considered pleasurable and promoted carnality, while fish

was suitable for mortifying human flesh because consumers believed it was light, boring, or even unpalatable unless richly sauced. Throughout the 19th century, it was generally understood that fish was best for people who wished to be economical, wanted to keep their weight down, were of nervous disposition, or who did "brainwork." Sarah Hale, editor of the popular *Godys' Ladies Book,* even stated that fish was not as nutritious a flesh.[2]

By the 20th century, nutritional science acknowledged that meat and fish compared favorably with respect to relative nutritive value. Yet in 1914, Dr. Harvey Wiley wrote, "Fish as a continued diet would soon pall upon every appetite. It, therefore, should not be used at every dinner," lest the cook overstep the bounds of "gustatory propriety."[3] Fortunately, the undesirable lightness of fish could be overcome by high calorie cookery. In New England, for example, salt pork scraps and fat were poured over codfish and rich butter and egg sauces accompanied salmon.

Perishability

The most intimidating thing about cooking and eating fish was knowing how to discern freshness. Fish and shellfish spoil more quickly and dangerously than other animal foods. The story of market fish in the 19th century is dominated by strategies for resolving the freshness quandary. There were three traditional solutions: selling fish alive, selling fish promptly, and preserving fish by a variety of methods.

Consumers could make a live purchase by selecting from fish swimming in a tank. These fish were often transported to markets in specially-designed live-well vessels. Today, high-value lobster is usually sold live and upscale supermarkets may offer tanks of live trout.

Customers could also select from an array of recently caught, but certainly dead and gutted fish. The buyer was then responsible for consuming this product as quickly as possible. Cookbooks in the 18th and 19th century offered advice to housewives for identifying the freshness of fish and cautioned against tricks used by unscrupulous fishmongers to foist off less-than-fresh products. Such warnings fostered the idea that fish was a dangerous and unpredictable food. Even fish product distributors played on the public's fear of tainted fish. For instance, Frank E. Davis, when listing reasons for buying his canned and salted fish products explained, "The fish you see in a dealer's store has probably been dead some time, exposed to the air, to germs, to flies, and other contaminating influences," and, he further asserted, "fish, more quickly than anything else, transmits poison into your system if it is in any way tainted..."[4] A marketing approach that was hardly reassuring to an already dubious public.

Most fresh market fish were caught inshore, that is, within a day's sail of the market. Consumers in coastal towns had access to the freshest fish. Nineteenth-century New Englanders living in urban centers learned that buying fish on Friday was a good idea because sellers made every effort to respond to the demand of Catholic immigrants who refrained from eating meat on that day. With increased supply, many Protestant New Englanders, who a century before had switched to a Saturday consumption of salt fish, switched back to eating fresh fish on Friday. Railroads and artificial refrigeration helped promote sales considerably in the 1800s, matching an effort at sea to develop fast vessels which took the catch to port rapidly, thereby fetching a higher price.

Icing fish, resisted at first by a suspicious public, expanded the market fishery to off-shore grounds, i.e., further than a day's sail, into territory once monopolized by the salt fishery industry. This broadened the range of product available in the market at any given time and diminished somewhat seasonal differences in fish availability. It was only a small jump from icing fish to actually freezing them, the principle of which was understood long before there was a technology to implement it cost-effectively.

Developed by 1900, artificial freezing met the usual consumer resistance to innovation. Some concerns were justified. In 1898, Charles Stevenson observed that some producers tended to freeze fish only after they noticed signs of decomposition.[5] Icing fish kept them safe and edible for only eight to ten days. Prompt freezing extended that time. By the 1880s, refrigerated train cars carried frozen fish to the nation's interior with as few as ten days passing from ocean to a family's table in Kansas. Fifty years later, there was minimal difference between the fresh and frozen fish businesses. "For all practical purposes fresh and frozen products are interchangeable on distant markets, and access to a freezer has become indispensable."[6]

However, as was typical of the period, Maria Parloa in her *Kitchen Companion* (1887),

cautioned that the flavor of frozen food did not compare to fresh and that the homemaker should buy it only "when it is impossible to obtain anything better."[7] Treating frozen fish as a choice of last resort certainly did not inspire confidence in the product.

For centuries, salting was the standard method used for preserving fish. New England's colonial economy was built on the salt cod fishery which conveyed great quantities to Europe and the West Indies to feed Catholics and slaves. Other preservation methods included pickling, smoking, cooking, and canning. In the early 20th century, the popularity of canned tuna fish and salmon created a highly successful fishery on the West Coast. The Pacific Ocean industry gave Gloucester and the other New England seaports quite a run for their money. Since consumers preferred canned tuna to salt cod, Gloucester expanded and diversified with canned chowder, codfish cakes, and frozen fish sticks in order to save its fish-dependent economy. Fish sticks brings us to another of fish's problems—numerous, small, dangerous bones.

Bonyness

One solution adopted by fearful consumers was to prefer fish with big identifiable bones, for example, halibut or salmon, or those with exterior bones, such as sturgeon. Nineteenth-century cookbooks usually provided instruction on how to remove bones before sending a fish to table; one described it as being like taking pins from a strip of paper, all lined up in a row. True filleting, done domestically, often created waste as much flesh stuck to the bones as an inexperienced cook drew the knife down the back and ribs.

Boneless salt cod products rescued the salt cod fishery from extinction in the face of iced and frozen fish. Boned cod, packed in wooden boxes, appeared as early as 1869. Pre-picked cod chunks and fluff ready to be dunked in hot water and blended with potatoes followed shortly. The fish was white, sanitarily produced, and cleverly marketed. Shute and Merchant's line of Absolutely Boneless Brands of Fish were named Diamond Wedge, Gold Wedge, Silver Wedge and Wedge. There was also Swan's Down Tid Bits, Barberry Brand Threaded Fish for Fish Balls, and Cream of Fish–No Cooking, No Odor, No Waste, Heliotrope Fibered Codfish, and the frankly labeled, Not-a-Choke.[8]

Bonelessness became a necessity around 1900 when the Bay State Fishing Company built a new fleet of steam powered otter trawlers and created for themselves an alarming marketing dilemma. It was now possible to catch many more fish than Americans wanted to eat. What the fishing industry perceived as essentially a problem of "under-consumption" by the general public soon led to a particularly creative solution to the bone phobia, that is, the marketing of precut fillets.[9]

Bay State is credited with being the innovator who made "fillet" a household word and with "supplying those living inland with fish of sufficiently high quality to make it popular on menus more than a hundred or so miles from salt water." Bay State's Forty Fathom Fish was boneless, touted to retailers and homemakers as wasteless as well as "sweet and odorless." The fillets were shipped wrapped in parchment paper, placed in tin containers, which in turn are packed in wooden boxes with ice surrounding the tins. With this marketing resourcefulness, Forty Fathom Fish company not only solved the fear of bones, but also the freshness problem.[10]

Prepared fillets paved the way for Clarence Birdseye and his quick-freezing process to develop fish sticks as the ultimate solution to the fish dilemma. Fish sticks were fresh, breaded for frying to give them caloric punch, were odorless (and largely flavorless, which was probably an advantage), convenient, and boneless.

Finally, and perhaps most importantly, filleting made fish look like other meat products from the butcher's shop. A fish in the round looked like the creature it was and virtually no other meat in America's market resembled the animal from which it was derived. As the 20th century progressed, with very few exceptions, the public preferred it that way.

Cultural Objections

Social prejudice was close to the surface in 19th-century America. Historical research indicates that many New Englanders associated fish eating with Catholics, immigrants, and/or the poor. Occasionally all these traits could be found in one population group, such as the Irish, but clearly others as well, particularly as wave after wave of Europeans moved to New England to work in its industrial cities.

Roman Catholics ate fish. Before the Reformation, many days in the year were designated for fasting on which only fish or dairy products could be eaten for protein. In addition, each Friday was traditionally a meatless day.

Puritans in New England continued this once-a-week habit of eating fish as a standard practice and thereby provided variety in the weekly menu. But the Puritans and their descendants, in order to avoid identification with their Roman Catholic past and persecutors, shifted their custom to a different day in the week, often Saturday.

New Englanders strongly resisted popish ideas. Many Calvinists associated the Catholic Church with the celebration of Christmas, finding aspects of the holiday disturbing. Yankees eventually softened their attitude toward Christmas, but they did not lessen their attitude toward Catholics, especially as that population increased. The prevailing Puritan, and eventually Yankee, prejudice against Roman Catholics was subtly extended to fish. In her preface to the *New Cook Book* (1857), Sarah Josepha Hale wrote, "A greater variety of receipts, for preparing Fish, Vegetables, and Soups, is given here, than can be found in any other book of the kind; these preparations, having reference to the large and increasing class of persons in our country who abstain from flesh meats during Lent, will be found excellent; and useful also to all families during the hot season."[11]

Another common 19th-century perception was that fish, especially salted, was the food of the poor. Since the product was little esteemed for its nutritive abilities, it had a low market value. Eating fish was what you did when you could do no better, and in the popular mind it was associated with fasting and penance.

Timothy Dwight, describing Newport in the late 1700s and early 1800s, said "The poor people catch fish for their sustenance, and lounge and saunter for their pleasure." And "The men of wealth live by loaning their money without entering in any great degree into active, useful business... (T)he poor catch fish. This state of things is unnecessary and unhappy."[12]

Even the perceived character of the men who caught fish affected the reputation of the product. The fisheries workers in early New England were, as Daniel Vickers has called them, a "peripheral" group of people.[13] Early settlers tried unsuccessfully to recruit fishermen into community life. Some colonists engaged in the fisheries business used it as a springboard to merchant life, rather than making it their life's work. The farmer-fisherman generally caught seasonally for a family supply with little left for market. Full-time fishermen were usually itinerants and often Catholics. They eschewed the Puritan church, community, and a settled family life, and were considered more likely to indulge in a rough existence of drinking, carousing, and violence. Colony leaders tolerated them in order to populate the fishing fleet. Similarly, the fishermen who settled in Maine, beyond the reach of Massachusetts society, were by reputation a rough, irreligious group, described by one as "a dull and heavy moulded sort of people" without "either skill or courage to kill anything but fish."[14]

The nature of fishing itself mitigated against its respectability. Catching fish was seasonal, market-oriented work, an affront to Puritans who believed "work was pleasing to God only when performed in a regular and disciplined manner" and that the "alternation of frantic activity and idleness to be rooted in moral failing."[15] By the end of the 18th century, many fishermen did settle down in communities and have families, but since they were still largely unable to capitalize their own voyages, a fisherman's life was characterized by chronic indebtedness to vessel owners and merchants and economic marginalism.[16]

In the 19th century, the fisheries worked to increase their productivity and their standing in the community. Efforts to extend the working season helped. Vessels were refitted seasonally for different fisheries and were idle only in winter. Some fishermen continued to labor through the winter, either by risking weather in the north or going south to work in the red snapper fishery. By the end of the century, fishing was more mechanized, even industrialized, and more of a real "job." Even so, fishing was dangerous hard work and many New Englanders discouraged their sons from making it their lifework. However, itinerant fishermen from Newfoundland and Nova Scotia, following a century-old pattern, continued to toil at sea. Other immigrants, particularly Portuguese and Italians, entered the New England fisheries, often owning their own vessels and hiring men from their own communities.

George Brown Goode, in his government-sponsored study on fisheries of the United States, drew detailed comparisons between the industrious modern fishermen of Gloucester and the tradition-bound fishermen of Maine. The Maine fishermen, he said, were victimized complainers, had little access to credit, were poorly educated,

and generally lacked enterprise, either in fishing or taking care of their homes and gardens both of which usually showed neglect. "A larger return than common from selling fish is usually spent as fancy may first dictate or serves as a reason for deferring, as long as possible, the next fishing expedition." Their families, he said "subsist, for the most part, upon the products of the sea—fish, lobsters, and clams—and upon the vegetables from their gardens."[17] From his point of view, the late 19th-century mariners from Maine weren't very different from itinerant fishermen a century and a half earlier.

By contrast, Goode reported that most New England fishermen from Gloucester or Cape Cod were educated; well-read, even dipped into Shakespeare and Dickens, and lived in neat, comfortable homes. Though not religious, "a high tone of morality prevails" among fishermen and in most fishing towns, and while profanity was prevalent "in other respects moralists would in general find little to criticize,"[18] particularly in light of the effect of temperance reform after 1876.[19]

The identification of fish eating with fishermen may have exerted some influence on people's choice of fish as food. During the colonial period, fish was a food produced outside the New England landowning and agricultural norms of a population who were members of church and community. Going fishing was seasonal work which did not require the diligence and discipline of farming. Fishing, like hunting, was opportunistic, something farmers did for sport. It was dangerous work, required risking life and limb, and frequently unsuccessful. All anyone got for the effort was fish, simply not valued as food in proportion to the effort required to obtain it. Conversely, beef was the benchmark of landbound agriculture and stability and, additionally, was a satisfying meal. Fish were slippery, elusive, and had to be caught with cunning in dangerous conditions. Preparing and eating an "insubstantial" fish supper was a bothersome affair.

Overcoming all these objections to fish as a food staple required creative marketing to convince American consumers to regard fish more highly. Consumption spiked twice in the 20th century during wartime rationing, but our eating habits have continued to show a strong preference to meat. Not until the 1970s and 1980s, with growing concern for a heart healthy diet and curiosity for ethnic fare (where fish is often featured in new and delicious ways), did fish finally get the respect it deserves.

Notes

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Sandra Oliver is a food historian and author of Saltwater Foodways: New Englanders and Their Food at Sea and Ashore in the 19th Century. *She consults and lectures on food history topics and is the editor and publisher of* Food History News.

Todd Horst

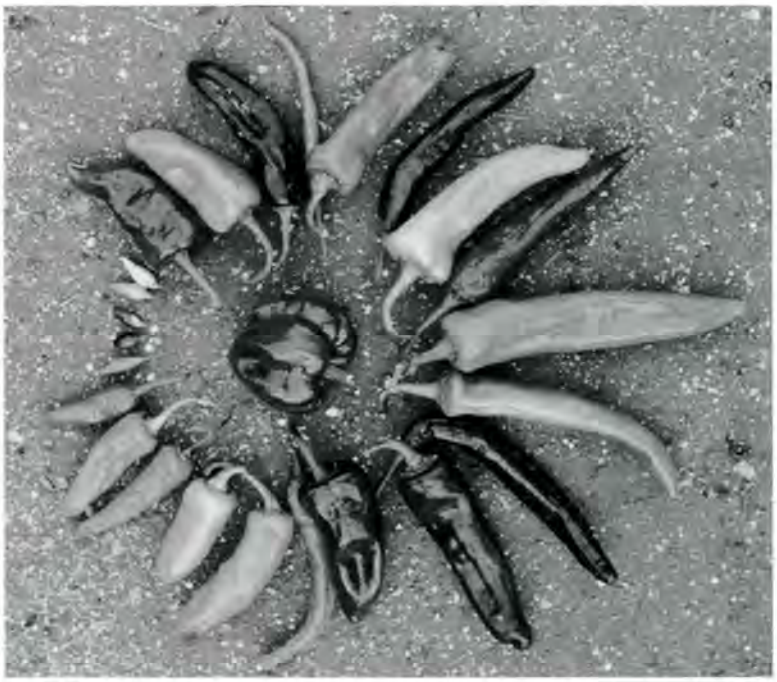
Native Seeds/SEARCH
Tradition and Conservation

Native Seeds/SEARCH (NS/S) is a non-profit conservation organization located in Tucson, Arizona, which was founded as a regional seed bank and conservator of heirloom crops and traditional agricultural techniques of the greater Southwest. The organization serves as steward of a precious resource entrusted to our care by hundreds of Native American families and individuals from the arid Southwest and northwest Mexico. Our primary function is to return benefits in the form of seeds and plant-related information to traditional communities in our region. Additionally, we contribute to the preservation of genetic diversity and make this wonderful variety of delicious foods available to home gardeners worldwide.

For untold generations, Native American farmers of southwestern United States and northwestern Mexico produced a great diversity of food despite the region's marginal growing conditions. After centuries of environmental destruction, cultural change, and land transfers, these farming systems have survived, but just barely. As late as 1925, the Tohono O'odham people of southern Arizona cultivated 10,000 acres with traditional floodwater methods, relying on the gift of summer rains. Today, a few scattered plots remain in cultivation.

Crop loss means an inevitable reduction in genetic diversity, with thousands of years of evolution gone forever. The loss in human terms is equally severe. Traditional farmers are a stabilizing force in many Native American communities. They conserve historic seeds adapted to local conditions, keep traditional agriculture and culinary practices alive, donate crops for ceremonies and feast days, and feed extended families from their fields. If peoples sustained by agriculture lose those traditions, their survival as a culture may also be at risk. Native Seeds/SEARCH is as concerned about the loss of ecological relationships, the traditions of cultures and plants evolving together, as we are about the extinction of single species. For many Native American tribes in the American Southwest and northern Mexico, these relationships are being severed and destroyed. Mexico, the ancestral home of corn and beans, now imports these crops. Shifts away from traditional crops and the activities associated with them often have consequences for nutrition and health. Among the Tohono O'odham, the switch to a western diet has resulted in a dramatic increase of adult onset diabetes.

Native Seeds/SEARCH grew out of the nexus of crop loss, nutritional need, and cultural longing. In the early 1980s, NS/S co-founders Mahina Drees and Gary Nabhan worked for Meals for Millions. As part of a gardening project to improve diet and nutrition among the Tohono O'odham in southern Arizona, they distributed



Variety of chiles from the Summer 2000 growout at the Conservation Farm.

Mission Statement

Native Seeds/SEARCH conserves, distributes and documents the adapted and diverse varieties of agricultural seeds, their wild relatives and the role these seeds play in cultures of the American Southwest and northwest Mexico.

standard vegetable varieties from seed catalogs to local gardeners. Co-founder Barney Burns recalls O'odham telling them, "It's real nice of you folks to offer us radishes and broccoli, but what we're really looking for are the plants that our grandparents used to grow." By asking around the reservation and searching during trips in northwestern Mexico, Nabhan and Drees developed a small collection of seeds, grew out larger quantities, and began returning them to the O'odham. The collection soon outgrew the space available. In 1983, Nabhan, Drees, Burns, and Karen Reichhart founded Native Seeds/SEARCH. Today the collection numbers some 2,000 accessions across 99 species of crops from 18 tribal groups. Our collecting region is the arid southwest ranging from Durango in Chihuahua, Mexico, to Durango, Colorado, and from eastern California to eastern New Mexico. Many of the accessions are rare or endangered; more than 90% of these crops are not being systematically preserved elsewhere.

Half of our collection consists of varieties of the "three sisters." Corn, beans, and squash are the main crops in traditional Native American agriculture. When planted together, each crop benefits and is enhanced by the others. Corn stalks provide a trellis for the climbing beans planted around them. Beans are legumes and fix atmospheric nitrogen into forms useable by the corn. Squash, with its large leaves and spreading vines, forms a living mulch which shades the ground, keeping it cool and moist. Our collection contains 550 accessions of corn (*Zea mays*), stunning in diversity of size, shape, color, and use. In our freezers, small cigar-shaped ears of Sonoran chapalote with chocolate-colored kernels sleep near 12-inch cobs of multicolored kernels from New Mexico pueblos. Two hundred and seventy-five accessions of beans (*Phaseolus vulgaris*) provide some idea of the abundance and diversity which was available before the current dominance of the pinto bean. During a tour of our seed bank, an Akimel O'odham elder asked if we had a spotted bean she had not seen since her youth. A staff member brought out a jar of Gila River Mottled Lima Beans. The elder was visibly taken aback and delighted with the packet of seeds she could take home and grow again. Two hundred and twenty accessions of squash (*Cucurbita ssp.*), mostly hubbard, cushaw, big cheese, and pumpkin, complete the traditional trio.

Other unique and often rare crop varieties are preserved in the Native Seeds/SEARCH seed bank. Red-seeded amaranth is used as a dye by the Hopi; Sonoran panic grass, once thought extinct, is again available for grain or forage; chia is an important source of protein, oil, and fiber for the O'odham; and, yellow-meated watermelons are the best you'll ever eat! Besides the expected drought tolerance of desert plants, many of these crops may have resistance to rusts, insects, chemical toxicity, and other stresses.

Ex situ seed banking, the maintenance of viable populations of genetically pure seed, often far from their indigenous locale, requires long-term storage and occasional regeneration. Freezers provide the storage; seed banking can be done at home. However, regeneration at the 10-year standard for protection of viability is more demanding. Many of our varieties will cross pollinate and must be grown widely separated or in isolation cages. The Native Seeds/SEARCH Conservation Farm was acquired in 1997. In Patagonia, Arizona, 60 miles south of Tucson, NS/S purchased 60 acres of rich farm land alongside Sonoita creek, a riparian corridor owned by the Nature Conservancy. The Conservation Farm allows staff to have greater control over growing conditions and to demonstrate the potential of ecologically safe and sustainable agriculture. The

The "Planting Man" logo of Native Seeds/SEARCH is especially apt in that the seeds in the collection will not survive without human interaction.

Native American petroglyph and traditional squash, cowpea, common bean, and corn seeds.

farm's size will help ensure the survival of the 2,000 accessions in our seed bank and allow us to make larger quantities of seed available for distribution to Native American and home gardeners.

Illustrations courtesy Native Seeds/SEARCH.

These seeds produce richly flavorful foods. Sequalca squash, deep gold and sweet, makes soups and pies that delight. Different varieties of tepary beans are nutty, earthy, or sweet. Punta banda tomatoes survive desert heat to bear delicious half-dollar-sized fruit. In the fall of 2000, NS/S staff roasted and sampled 40 varieties of chiles grown at our Conservation Farm. Tastes ran the gamut from delicate and bell-pepper sweet to flame throwers whose fierceness could be quelled only by chocolate!

These crops are valued as food, dye stuff, and craft fibers. Some are indispensable in traditional ceremony to the cultures that nurture them. All are inextricably linked to their human partners, few will grow "wild" without the care of people. At her departure, a NS/S staff member of many years reminded the current staff of their important obligation saying, "We protect these seeds while they are far from their homes. They miss their ceremonies and the people who nurtured them. Treat them and each other with respect."

The cultural and historic context of our collection is an equally important part of our stewardship. Our Cultural Memory Bank Project is designed to collect, record, and organize the cultural and historical data about crop varieties in our seed bank. A CD-ROM will hold stories, recipes, planting and harvesting information, and oral histories collected from the people who developed these crops. The initial focus of the Cultural Memory Bank Project is on Navajo crops and traditions and will be used in Navajo Nation schools.

The traditional foods of this region are high in fiber and mucilage which slow digestion. These foods can help maintain stable blood sugar levels. The Desert Foods for Diabetes Project works to promote the production and consumption of traditional desert foods to combat diabetes, a major health problem among Native Americans. From 1990-2000, NS/S diabetes outreach staff gave hundreds of presentations, reaching people on reservations and schools. We have reached thousands more through distribution of educational brochures, recipe sheets, and the *Healthy Traditions Cookbook*.

The Wild Chile Botanical Area in Rock Corral Canyon near Tumacacori, Arizona, was developed in collaboration with the U.S. Forest Service. In 1999, 2,500 acres were designated as a special management area within the Coronado National Forest. Home of the northern-most known habitat of wild chiltepines, the fiery hot "Mother of Chiles," this is the first genetic reserve in North America dedicated to the preservation of wild relatives of domesticated crops.

In 1992, Native Seeds/SEARCH helped to convene the Traditional Native American Farmers

Tarahumara Maiz Rojo, *an incredible red corn.*

Association, a mutual support network for indigenous farmers. This active association is constantly developing solutions to problems that are common to indigenous, traditional farmers. These include engaging the interest of youth in their cultural traditions, finding profitable strategies to market agricultural goods, and creating effective ways to share equipment and knowledge. In 1996, fiscal sponsorship for the Traditional Native American Farmers Association was transferred to the Seventh Generation Fund, a Native American organization specializing in bringing other Native American groups to nonprofit status.

In 1991, NS/S initiated the Arizona Regis-Tree program, which is designed to recognize and protect outstanding heirloom perennial plants. Heirloom trees and other perennials in nearly 100 locations around the state are now registered through the program. Registrations include fruit trees, olives, and historically important native plants such as yucca, pinon, agave, and mesquite. The program is now operated by Prescott College.

Native Seeds/SEARCH has grown to 4,400 members and a catalog mailing list of 13,000 families. Membership is open to all with minimum annual dues of $25. Native Americans of the Southwest may join free. Since our inception we have distributed seeds to Native American and home gardeners by mail order. In 1997, we opened a retail outlet in Tucson and established a web site. In 2000, we distributed more than 20,000 seed packets, a quarter of which were distributed free to southwestern Native Americans. We are grateful for the generous support of members, donors, and foundations which makes this work possible.

Todd Horst is the Operations Coordinator for Native Seeds/SEARCH. He appreciates and acknowledges the numerous Native Seeds/SEARCH staff who provided assistance with this overview of Native Seeds/SEARCH's history and programs.

For more information on Native Seeds/SEARCH or to request a copy of our Seedlisting catalog, please visit our web site <www.nativeseeds.org>; email us at <info@nativeseeds.org>, or contact us at Native Seeds/SEARCH, 526 N. Fourth Avenue, Tucson, AZ 85705.

Barbara Corson

How to Bring a Cow into the Kitchen

Imagine trying to learn about the history of food if you had never used an open-hearth fire, smelled wood smoke, or felt the textures of stoneware, cast-iron, and pewter? We may "know" that people cooked over fires in the past, but this knowledge assumes importance only if we are able to relate to it through a personal point of reference. In addition, learning about animal-related history is more difficult—and less fun—without benefit of some kind of first-hand experience.

We are obviously aware that direct contact with animals was a fundamental part of food production in the past. Domestic animals were essential for power, food, and many other products in the days before electricity, plastics, and gasoline engines. Until the early 20th century, working with animals was both a necessary technology and a meaningful component of everyday life for the average person. However, as our society becomes more urban, it is increasingly difficult for people to identify with this significant aspect of our history, just as the typical museum visitor relates less and less to historic agriculture when small farms continue to disappear from the contemporary landscape and are replaced by large-scale agribusinesses.

Learning about animals and traditional agriculture requires conscious effort for most of us, but the effort is worthwhile. I would like to encourage historians and museum interpreters to explore the interesting range and diversity of functions that domestic animals played in America's food history. As an example, this paper provides an overview of some of the roles played in food production by *Bos taurus* and offers some ideas of how museum staff can figuratively "bring the cow into the kitchen."

Ruby, two weeks old. Photo by the author.

Cattle were domesticated around 4000 B.C. and have been an important part of food production on every continent except Antarctica. Although we tend to think of cows in association with meat and milk, the most significant contribution of cattle to food production has been arguably as a source of agricultural power. By pulling the first plows, cattle transformed human societies from "digging stick" cultures to agricultural communities capable of raising crops like cereal grains, fiber plants, and vegetables. Subsistence food production is possible without draft animals. However, when only human power is available, the crop production is so limited that hunting must remain a primary source of food and other necessities. The first task of early settlers (as opposed to traders and trappers) in North America was to hack fields and pastures out of the native forests, and in this work cattle were of fundamental importance.

Cattle used for draft purposes are commonly called oxen. In Europe and North America, oxen are usually castrated males since bulls are too unpredictable and cows have other important things to do with their energy, e.g., making milk and calves. To produce oxen, male calves not needed for breeding are castrated and trained to respond to voice commands. Because of their conformation, oxen are stronger than horses for their size and because of their temperament, they provide a slow, steady power which is well-suited for tough jobs like plowing ground full of rocks and tree roots. Without oxen to do the initial heaviest work, it is unlikely that wheat would have become a significant crop in North America by the second half of the 18th century. In addition to preparing a seedbed for cereal grains and other crops, oxen often provided power to transport the crops to mills or markets. Oxen also occasionally provided the muscle power for threshing, milling, or other food processing, e.g., crushing sorghum for syrup. In the late 18th century, the fertilizing power of manure was recognized. Applications of cow manure and limestone were credited with increasing wheat yields from 8 to over 30 bushels per acre in some areas. As a given area became more settled, horses gradually replaced oxen as the primary source of agricultural power. However, it is important to note that, worldwide, cattle still provide more power than tractors or any other animal. In this country, oxen are, for the most part, the great unsung heroes of the past, and deserve to be better remembered.

A museum doesn't need 40 acres of ground and a skilled team to demonstrate the role of oxen in food production. With even a few square feet of dirt and a shovel a historic site can illustrate several activities effectively, including turning the soil—which is important if you're going to plant seeds. It is valuable for the visitor to recognize that turning over even a little dirt is a hard task, especially if the ground has never been previously worked and is full of rocks and tree roots. If you compare digging in a rock pile to digging mellow garden soil, you will appreciate why the patient endurance of the ox was a historic advantage in plowing the rocky hills of New England.

If a house museum is fortunate to possess adequate acreage, having an ox on site—either as a permanent resident or a visitor for a plowing demonstration—is a tremendous opportunity for interpreting this part of historic food production. (And it helps us all remember that wheat doesn't grow in cereal boxes!) Training a team and working with oxen takes time and patience, but is not as expensive or dangerous as working with horses.

One of the more obvious signs of the domestic cow in the historic kitchen is the presence of milk, cream, butter, and cheese. Until the late 19th century, the average woman's summer workday revolved around dairy products. She started her day by milking a cow, spent part of the day processing the milk and caring for the animals, and ended her day by milking again. For our grandmothers and great-great-grandmothers, the skills needed to produce wholesome food with the help of a family cow were an essential component of running a well-fed household. Although the cow is recognized as a symbol of the "country life," most 21st-century Americans

get no closer to cows than the picture on a milk carton or cheese wrapper (or the pattern on a computer box). Since relatively little archival material about the "hands on" day-to-day dairying experience exists, it is unfortunately easy to ignore the cow when studying historic foodways. Luckily, animal biology is one of the few things that hasn't changed drastically in the past 300 years. Although great-great-great grandmother may not have written much in her journal about what it was like to get up early to milk the cow in 1790, museum staff and visitors can still experience what it was like by milking a cow (by hand, of course) today!

Learning about cow biology in general is an excellent way to bring *Bos taurus* into museum-related interpretations of historic foodways. Understanding that a cow has a calf every year in order to produce milk, that her gestation lasts nine months, and that cows were bred to bear their calves in the spring should affect the way farm and family journals, inventories, and receipts are interpreted. Of course, actually keeping a milking cow is a big commitment of time and energy—and not everyone will find the investment worthwhile. However, having a live-in cow is not the only way to teach about historic dairying techniques. With some searching, it may be possible to find a local dairy farmer willing (with the cow's gracious cooperation) to participate in a workshop for selected attendees or in a program, even if only as a "visual aide." With a creative approach, there are dozens of ways to remember the cow in the kitchen.

Butchering

The process of turning a living animal into edible meat and other useful products is clearly an interpretative area that many people today would find unpleasant. There is reason to believe that our ancestors found it equally unpleasant, but they lacked the option of distancing themselves from their meals by buying meat neatly wrapped in Styrofoam and plastic. Butchering animals was part of day-to-day life in the past. Obviously, it continues in this century, albeit unseen by most of us.

Historians and museum professionals have a unique and important educational role to play in this regard. The field of animal agriculture faces many important issues today. And though it's a cliché, our understanding of the past (or lack thereof) determines our future. If we can encourage people to examine the history of animal agriculture, there is hope that as a society we can more clearly understand our present situation and participate in a better future. The challenge is to encourage examination of these issues, while avoiding confrontation.

Demonstrations or workshops on butchering techniques may be appropriate for selected audiences such as a group of museum interpreters with experience in animal husbandry. But questions of ethics, aesthetics, and sheer logistics render the actual process of turning a 2,000 pound ox into 800 pounds of meat, 200 pounds of tallow, 500 pounds of viscera, 200 pounds of blood, and 300 pounds of hide, horns and hooves as an "educational program" open to the public an inappropriate option for most historic sites. Yet, this is not a reason to ignore the subject of butchering entirely. Less dramatic demonstrations, such as using sides or quarters of beef from local butcher shops or even illustrative drawings that relate cuts of meat to animal anatomy, might be considered. Here again, a knowledge of animal biology will help interpreters keep to the rational, moderate path—exploring an important aspect of food history while at the same time respecting the differing sensitivities and cultural perspectives that a diverse museum audience represents.

Responsible animal husbandry requires providing domestic animals with what they need to thrive, which presupposes an understanding of animal physiology and behavior. Naturally, first-hand knowledge of animal husbandry and biology will also assist interpreters in examining their own feelings on butchering and domestication. It is difficult to educate the public about using animals for food if staff are not comfortable with the concept.

Everyone who works with animals in public view can relate experiences, sometimes humorous, which illustrate the ignorance of the general populace on the subjects of animal physiology and behavior. Because animals are so profoundly important in our cultural heritage, learning more about these creatures and sharing that knowledge with others can help us understand and "experience" the past—and the present—in new ways. This, I think, is what "Living History" is all about.

Barbara Corson is a veterinary pathologist and amateur historian. She lives on a small historic farm in southeastern Pennsylvania, which she shares with a large variety of friends, both feathered and furry. Through her freelance interpretation service Hoofprints, she offers workshops and presentations on the skills required to work with cattle, horses, sheep, poultry, and other domestic animals.

Nicholas F. Bellantoni and Collin Harty

The Eastern Oyster

Changing Uses from an Archeological Perspective

How humans use their environment provides a window into their cultural values. From the archeologist's perspective, artifacts and eco-facts surviving from the past often reveal a constantly changing relationship toward natural resources. The discarded food refuse which many times makes up the archeological record testifies to cultural differences in utilizing specific natural resources. The eastern oyster (*Crassastrea virginica*) has been recovered from a number of different archeological contexts and time periods in Connecticut. Analysis of the diverse archeological contexts for this mollusk provides an important example of how changing uses reflect different cultural values.

Native Americans of southern New England harvested oysters as early as 4,000 years ago, evidenced by assemblages of discarded food products recovered from shell middens located along the region's shoreline. When shellfish decompose within the soil, they leach out calcium carbonates which neutralize soil acidity and enhance the organic preservation of bone and wood in the midden matrix. As a result, shell midden sites often include significant archeological features where unusual preservation factors reveal the overall subsistence pattern of the people involved. These sites indicate that native peoples possessed an extensive knowledge of their natural world and knew how to exploit a wide range of resources for subsistence purposes. While shell middens are sometimes remarkable in overall size and approach depths of 10 feet, oysters and most other shellfish do not provide high caloric and protein requirements and were probably never more than supplements for diets which consisted mostly of vegetables and meats. Nonetheless, extensive harvesting, primarily the role of native women, is suggested by stratigraphic differences in oyster size recovered from midden sites.

By the time Europeans arrived in the New World, population pressures had long since overwhelmed the natural resources of their home continent. In southern New England, colonists applied a tradition of farming techniques that maximized the yield of a minimal plot of land. For example, archeologists often find oyster shell spread throughout 18th-century farm sites. In addition to reducing soil acidity and improving the short-term productivity of the land, seashells

Left, Native Americans harvested oysters as early as 4000 years ago, evidenced by assemblages of discarded food products, called middens.

Right, after 1880, oysters changed from being a natural resource harvested by individuals for local use to a national market commodity.

also served as a source of lye for their fields. From the European perspective, nature was not just something to use, but something to be improved. Thus, for colonial Connecticut, oysters were more highly prized as a fertilizing agent than as a table food.

The Industrial Revolution gave rise to commercial fertilizers and improved agricultural knowledge leading to increased soil productivity. Likewise, the harvesting, processing, packaging, and transporting oysters became more sophisticated. Prior to 1840, oysters and other shellfish were transported up the Connecticut River housed in their shells, hence archeologists have excavated colonial and early-19th-century homestead kitchen middens with occasional oyster shell refuse. After 1840, shucking operations were established along the coast with the oyster meat packaged in tins and bottles for transport up river. For that reason, the archeologists recover bottles and cans from kitchen trash middens dating from this period instead of shell fragments. As a result of intensive population growth and a changing economic structure, the Connecticut oyster industry expanded rapidly after 1880. Coincidentally, oysters evolved into a dietary "delicacy" and as a result, oysters changed from being natural resources harvested by individuals for local use to a national market commodity driven by the abstract forces of supply and demand. This evolution illustrates the 19th-century cultural success for harnessing nature as a potent fuel for economic growth.

However by 1930, the oyster population fell victim to the success of over-consumption and pollution. Today, with the assistance of scientific research, we are learning the benefits of managing and cultivating natural resources instead of simply exhausting them. If we want oysters, we must ensure healthy ecosystems. Fortunately, American consumers are becoming more sophisticated and selective about the foods they eat. In response, the marketplace incentive is now to acquire more extensive knowledge of our natural world, especially organic evolution and ecology, and to successfully manage these resources. Connecticut oysters are now more abundant than they have been in over a century.

The different cultural uses of and appreciation for the eastern oyster was the educational theme of Connecticut's Archaeological Awareness Week 1999 poster.

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Collin Harty is the Exhibit Planner for the Connecticut State Museum of Natural History at the University of Connecticut. He is the design expertise behind Connecticut's Archaeological Awareness Week posters.

Photos from Connecticut's Archaeological Awareness Week, 1999 poster. Photos by Drew Harty.

Don't Forget the Beer. . .

Archeology undertaken as part of the Adriaen's Landing redevelopment project in Hartford, Connecticut, recently documented some lengthy stretches of brownstone foundations associated with the Charter Oak brewery, built by Irish immigrants Ann Shannon and Michael McCann in 1874 in an area of workingclass tenements and saloons. Reflecting the ethnicity of its proprietors, the brewery produced porters and ales, the dark bitter brews favored in the British Isles. From 1892 to 1922, English-born Edgar L. Ropkins operated the brewery, modernizing it with improved equipment and a bottling plant. Ropkins successfully competed with the German lagers that had taken over the major part of the American beer market, but he could not weather Prohibition. Apparently there were few takers for the non-alcoholic version he marketed under the name "Bunny Ale."

Bruce Clouette
Public Archaeology Survey Team, Inc.

Fragment of Ropkins ale bottle, recovered at the site of a farm laborer's house (occupied c. 1860-c. 1940) in East Granby, Connecticut. Photo courtesy Public Archaeology Survey Team, Inc.

Erika Lesser

Slow Food

Preserving Traditional Foods and the Heritage of Taste

Slow food. As in the opposite of fast food? Sort of. But what makes a food "slow" anyway? Sour pickles that soak in cold brine for three months; raw milk cheeses that age in caves for a year of more; a whole barbecued hog that cooks to sublime tenderness over a low flame for two days—all of these are literal examples of slow foods. But to truly understand—and experience—the essence of slowness is to more than simply taste the product of a slowly rendered preserving or cooking process.

Born out of a quixotic protest over the arrival of a McDonald's fast-food restaurant at the Spanish Steps in Rome, Slow Food has evolved beyond its early years as a gastronomic society into an international movement whose purpose is broader than the mere exultation of culinary ideals. Slow Food has adopted a complex cultural, educational, charitable, and scientific mission. Its focus is to better understand and preserve the connection between gastronomy and ecology; that is, the food we eat, the land it comes from, and all of the steps that bridge the two.

Understanding this connection is not an esoteric academic exercise. The industrialization and standardization of food production, packaging, and marketing serves to distance us, physically, intellectually, and emotionally, from our meals and their origin. With every day, it becomes more apparent that this distancing has already had disastrous consequences (and may continue to spawn more), as food-borne illness from *e coli* to mad cow disease, both "new" health problems that evolved from industrialized farming methods, pose increasing threats to human and animal well-being.

Slow Food chooses not to dwell on the negative, such as lamenting the loss of regional food diversity or the safety of our food supply. Instead, we encourage reviving the pleasures of the table, celebrating food traditions, and embracing a slower, more harmonious rhythm of life, primarily by allowing our sense of taste to be our guide. Slow Food's mission is embodied by our convivia (local chapters), events and publications, and especially through unique projects like the Ark of Taste (inspired by Noah's Ark), which seeks to identify, promote, and protect foods that are in danger of extinction.

Ark USA is safeguarding an ever-growing collection of high quality and culturally significant food, such as the Delaware Bay Oyster, Aged Dry Jack Cheese, and the Sun Crest Peach. The Ark USA project is particularly concerned about gastronomic resources that reflect the history and culture of a region and that are endangered by industrial-agricultural standardization. In addition, Slow Food devotes priority to foodstuffs that are produced organically on a small scale. Ark USA's purpose is to document and promote these traditional American products and to creatively assist growers and producers in establishing and enhancing markets for their specialty foodstuffs as a means of preservation. In this fashion, the Ark program works to protect biodiversity, support sustainable practices in agriculture, and champion a broader appreciation for foods, particularly among children.

An especially complex and illuminating example of the argument for saving historic foodstuffs is naturally grown, hand-parched wild rice

Gathering organic apples. Dario Dalmasso, along with his father, mother, and uncle, grows old varieties of apples and corn in Serravalle di Piasco, a small town outside of Turin, Italy. Photo by Les Meyers, courtesy Slow Food USA.

from the upper Great Lakes region. Wild rice is, in fact, not rice at all. It is an annual aquatic grass that produces an edible and highly nutritious seed. According to recent findings by researchers at the University of Minnesota, the genetic make-up of *Zizania aquatica* is closely related to Asian rice. Wild rice now grows only in a limited area of Minnesota, Wisconsin, and Canada. For several thousand years, it flourished beyond the Great Lakes region including much of the eastern United States. The draining of large areas of wetlands for farming and the creation of reservoirs have unfortunately destroyed much of the plant's natural habitat. In addition, current threats include pollution, recreational boating, and additional clearing by land-owners. In order to thrive, wild rice requires very specific conditions. It will only grow in cold, slow-moving water of a certain depth. If the water is too deep, sunlight will fail to reach and mature the plant. Water too shallow produces weak stems. Once the grass becomes tall enough to break the surface of the water, it sends out float leaves for support while the stalk continues to grow and develop. The plant can be uprooted if the water rises or if it is subject to winds or currents. Adapting to its environment, wild rice has evolved such that it produces a series of seeds that mature at different times to ensure the plant's survival. Seeds on a single stalk will ripen over the course of 10-14 days. Because the rice ripens gradually, each stand of grass can be harvested repeatedly throughout the season, which usually occurs during the months of August and September.

For thousands of years, wild rice was harvested as a staple and sacred food by Native Americans who shaped their cultures around it. The abundance of the grass in the wild created a reliable food source that could be stored over the long winter. Harvesting, in the traditional manner, is done by canoe. Using a pole, the driver powers the canoe through the water while the harvester uses two long beater sticks (called "knockers") to strike the ripe grain from the stalks of grass into the boat. In this manner, the long large grains of rice remain unbroken. After the harvest, the green rice, by Native American custom, is cured and then parched over a wood fire in order to dry the hulls and separate them from the grain, which is then hulled and winnowed.

Parching over wood dramatically affects the color and taste of the rice. Unlike industrialized wild rice which is nearly black in color, hand-processed rice can be various shades of smoky gray or beige with dark flecks. Hand-picked, hand-parched rice cooks evenly and has appealing nutty, toasted, tea-like aromas and flavors. The cooking time for the traditionally-produced grain is significantly less than for cultivated, machine-processed varieties.

Both Minnesota and Wisconsin have instituted a number of laws which regulate the harvest, purchase, and sale of wild rice. Several private and public organizations are working to restore wetlands as wild rice habitats. It is problematic that several types and grades of grain are currently sold under the name of "wild rice." Some of these are not wild at all, but a cultivated grain grown in paddies in the Great Lakes and California. The main categories of commercially-available wild rice, in order of decreasing mechanization are: paddy rice, a commercially-cultivated, hybrid grain which is always harvested and processed by machine; lake rice, which is machine or hand-harvested and machine-parched and processed; and Native American harvested and processed lake and river rice which is gathered and parched entirely by hand.

Authentic, traditionally harvested and parched wild rice suffers from very limited production and distribution. Few people outside the upper Midwest have ever tasted this product, which is an important part of the economy for several groups of Native Americans. Slow Food's Ark USA Committee has identified three Minnesota facilities that process the rice by hand parching. By inducting wild rice into the Ark program, Slow Food hopes to showcase this endangered resource and promote the preservation of a Native American cultural tradition.

Erika Lesser is Director of Programming for Slow Food USA. *She is indebted to Barbara Bowman, Chair of the Ark Selection Committee, and to Marcia and Chuck Lavine for their research and written submission of wild rice to Ark USA.*

Slow Food USA is a non-profit organization with 5,000 members and 56 convivia (chapters). There are over 60, 000 members and 500 chapters of Slow Food worldwide. For more information on Slow Food, visit our web site <www.slowfood.com> or contact us at Slow Food USA, P.O. Box 1737, New York, NY 10021 and at 212-988-5146.

Harold D. Juli and Nicholas F. Bellantoni

The Mystic Seaport Bone Circle

In 1996 and 1997, Connecticut College and Mystic Seaport Museum conducted an archeological investigation of two 19th-century domestic houselots located on the museum's grounds. The Seaport, which is situated on the Mystic River off Long Island Sound, is an internationally-renown maritime heritage center. These structures and their associated landscapes are part of the museum's architectural collection and were scheduled for restoration and interpretation. The museum's staff was interested in an archeological perspective concerning changes that occurred to these domestic landscapes as they evolved from 1820 to the mid-1900s, when these structures were no longer privately occupied. A testing and excavation program with a strong public-oriented component that featured participation by Seaport staff and members of the local community was carried out over a period of two summers.

In the course of archeological excavations, a highly unusual bone assemblage was discovered at a depth of some 15 inches below the current lawn surface in the side yard of the George Greenman House, a Greek Revival structure built in 1839. George was one of three Greenman brothers who operated the historic shipbuilding yard on the grounds now occupied by the museum. The bones, predominately *Bos taurus* inner horn cores, were carefully excavated to reveal an almost circular configuration, situated beneath a rich organic soil horizon that contained late-19th-century domestic refuse, especially whiteware ceramics and assorted household materials such as nails, bottle glass, metal, and window glass.

Faunal analysis clearly indicates that the distribution of bone horn cores and associated cranial elements was a non-food-related assemblage. The majority of the bones were horns and cranial elements representing a single domestic species, *Bos taurus.* The deposit lacked evidence of fish bones, which were present at another trash midden associated with the property, and which would have been expected if the bone circle deposit represented a kitchen midden in light of the house's proximity to the Mystic River and Long Island Sound. The horn and cranial elements possess a low nutritional value and the deposit's archaeological context indicates its creation prior to the construction of the Greenman House. These circumstances indicate that care

Greenman Site bone deposit.

Detail of Greenman Site bone deposit.

should be taken to avoid a pro forma food-related interpretation for dense middens of domestic bones at seemingly obvious historic settings.

Since the refuse midden did not contain domestic food bones (these were located in a deposit at the rear of the house near the kitchen door) and dated to the period after the house was constructed, it was assumed that the bone assemblage pre-dated the house and resulted from earlier activities. Archeological evidence supporting this premise includes clay pipe stem fragments, dating from 1790-1810, which were unearthed beneath the bone deposit and the 19th-century artifacts, including a 1834 coin, located in strata above this distinctive feature.

Photos by Jennifer Stitch, Mystic Seaport Museum.

The faunal deposit was an almost circular arrangement of *Bos taurus* osteological remains, specifically the discarded inner bone cores of mature cow horns. The total assemblage consisted of 1,182 discrete bones. In the 19th century, cow horn, specifically the outer keratinous layer, was used in several small New England industries as a raw material for the manufacturing of buttons, combs, and other commodities such as cups, ink wells, and needle cases.

Thus, we feel that the horn processing activity represented by the deposit is well bracketed chronologically to the first 30 years of the 19th century, a time before the Greenman house was constructed. The pre-1830s date further suggests an itinerant craft industry prior to the inception of button-making machines.

The deposit consisted of a circle of horn cores which possessed a diameter of 15.25 feet and a typical width of 2.5 feet. Osteological analysis of the bones included identification of species [*Bos taurus* (99.4%) and *Gallus gullus* (0.6%)], minimum number of individuals (intact horn cores represented, at a minimum, the butchering of 12 cows), determination of age at death (10 of 12 cows were mature adults), as well as evidence relating to butchering techniques, and the spatial arrangement of the bones. Of the *Bos taurus* remains, 98% of the bone fragments represent head and horn elements. Numerous bones exhibit cuts and other marks representing the use of knives, saws, and axes.

The reason for the circular pattern of the discarded horn cores remains difficult to understand, particularly in the absence of comparative material. As far as can be determined, the Mystic Seaport bone circle may be a unique deposit. Information from craftsmen who currently extract cow horn suggests that a circular pit could have been dug and the horns buried and composted with manure to encourage a chemical reaction that hastened the separation of the horn from the bone core. A second idea suggests that troughs for soaking cow horns in lye or similar caustic liquid were arranged in a circular pattern. When the horn were removed from the troughs and separated from the inner bone core, the bone core refuse may have been placed next to each trough as it was removed, thus replicating the circular pattern of the troughs. This latter explanation is partially supported by several spaces or breaks in the circle that may correspond to the position of the troughs.

While we continue to seek plausible explanations for the bone circle's unique configuration, it is clear that such research must include information from both archival and archeological sources. Such a comprehensive approach will hopefully enable us to better understand and interpret this unusual archeological feature as well as similar historic faunal assemblages that are unrelated to food consumption patterns.

Harold D. Juli is Professor of Anthropology at Connecticut College. He has investigated Connecticut prehistoric and historic archeological resources for 20 years and is currently vice-chairman of the Connecticut Historical Commission.

Nicholas F. Bellantoni serves as the Connecticut State Archaeologist with the Connecticut State Museum of Natural History at the University of Connecticut. He is co-editor of In Remembrance: Archaeology and Death *with David A. Poirier.*

Sandra Oliver

About *Food History News*

Over the years, *Food History News* has been described as idiosyncratic, wonderful, and terribly serious depending on the reviewer. For the last 12 years, the newsletter has addressed the ridiculous—including 18th- and 19th-century food humor; the sublime—a comprehensive history of apple pies; and the truly esoteric—why blue plate specials are so-called. *Food History News* is now read by modern chefs, distinguished scholars, food writers, museum professionals, and best of all, the general public.

Dedicated largely to the food history of North America, the newsletter was inaugurated in June 1989, the result of an enduring personal fascination which developed many years earlier when I created a fireplace cooking program at the Mystic Seaport Museum, an internationally renowned maritime history center in Connecticut. In the fall of 1988, I attended a symposium co-sponsored by the American Folklore Society and the Culinary Historians of Boston, which celebrated their 10th anniversary that year. A multi-disciplinary blend of academics, independent scholars, and research staff from living history museums participated. It was there that I realized how most living history and house museum professionals could benefit from knowledge about and access to the diverse research that many scholars were undertaking regarding historic foodways. Likewise, these researchers, many of whom it was clear had never actually done historic food preparation, would benefit from the practical experience of living history cooks. This insight was one of several that eventually resulted in development of *Food History News.* The first issue was distributed free at the Association for Living Historical Farms and Agriculture Museums 1989 annual conference in Indiana.

Museum professionals formed the initial core subscribership with other interested readers gradually joining over time. Of the two original targeted markets, academic-based subscribers remain in the minority and seem to benefit less from the practice of historic cooking. However, many others have joined in the conversation and their questions and contributions enrich the coverage of historic foodways.

A lot has happened in the field of food history since *Food History News* initiated publication. Many people, with more diverse interests, have discovered the topic. For example in 1989, only three culinary historian organizations located in Boston, Ann Arbor, and New York existed in the United States. Currently, there are at least 10 food history-related organizations, plus a few less formal aggregations of interested people who gather from time to time to hear a speaker or present papers on food history topics. In 1989, few colleges or universities offered courses in food history. Occasionally, anthropology or folklore professors would address food and culture from a historic perspective. Less than half a dozen universities grudgingly allowed graduate students to focus on food history as part of a masters or doctoral program. Today, there are many schools where one can study food history within established history, anthropology, ethnology, or folklore departments. It is now even possible to take a food history course via the Internet.

Food History News has watched, reported on, and possibly fostered the increase in food history research and publications. University presses now reprint early cook books and older volumes on historic foodways. Mainstream publishers regularly promote new books on food history topics. Current cookbooks often include historical information in the recipe head notes; food magazines also frequently print stories based on food his-

Gervase Markham, in the *English Housewife*, 1615, says this about seasoning: "when a broth is too sweet, sharpen it with verjuice; when too tart, sweeten it with sugar; when flat and wallowish, to quicken it with oranges and lemons; and when too bitter, to make it pleasant with herbs and spices." Who decides what to do about the flavor, Markham notes, is "according to the fancy of the cook, or the will of the householder."

A list of the most essential seasonings for 17th century cookery:

HERBS

Parsley	Savory
Marjoram	Sorrel
Rosemary	Spinach
Sage	
Thyme	
Spices	
Cinnamon	Mace
Cloves	Nutmeg
Ginger	Pepper
Saffron	
Others:	
Salt	
Sugar	
Verjuice	
Lemon juice, peels, fruit	
Orange juice, peels, fruit	
Vinegar	
Rosewater	

The following items also appear, but with less frequent mention:

Anchovies	Garlic
Anise seeds	Hyssop
Bay leaves	
Marigold flowers	
Borage	Mint
Burnet	Mustard
Capers	
Orange-flower water	
Chervil	Scallions
Coriander seeds	
Spearmint	
Fennel	Tarragon
Strawberry leaves	
Sweet Woodruff	
Violet leaves and flowers	

Illustrations from Food History News.

tory. Conferences and symposia on this topic are now hardly the rare event they were when *Food History News* first appeared.

Irregularly published but appearing four times a year, *Food History News* has expanded from an average of 8 pages to 12 or 14. The newsletter has shifted its focus from the museum professional to a more general readership. A popular series in *Food History News* has been the "old saws." Common myths and folklore about food history are deconstructed, such as the poisonous tomatoes myth or the historic use of spices to cover up spoiled meat. Assumed truisms, like women catching their skirts on fire in the hearth, are also examined. Future issues will continue to examine persistent "myth-takes" including Marco Polo bringing pasta back from the Orient, the origin of Anadama bread, and George Washington and pepperpot soup.

Food History News also contains a regular column entitled the "Joy of Historical Cooking" which traces the chronology and evolution of a particular recipe or food stuff. We frequently tackle the hard stuff, such as the complexities of chemical leavenings. A future issue will feature historic information about samp and hominy. Headline stories might report on recent conferences, symposia, the state of food history publishing, great ideas for food heritage vacations, or profiles of food historians and their work. Research on faux food-making is underway and a fall vacation trip to the Hudson River valley is being planned. In every issue, there is a section dedicated to military-related food history. Our directory, "People, Places, and Things," provides sources for culinary reproductions, organizations, libraries, hard-to-find foods, booksellers, and many other things of interest to food historians. "Reader's Exchange" is a forum for subscribers to pose questions, announce events and publications, and trade information. Occasionally, an entire issue of *Food History News* has been dedicated to a unifying theme, such as crackers and hardtack. Another thematic newsletter will focus upon the history and use of apples.

Food History News is developing a web site and an electronic version of the newsletter, including a special "On This Day in Food History" feature. Electronic subscription sign-up or renewal service will also be provided.

Food History News offers flexible internships for students and other interested individuals who are considering work in the field of food history. Inquiries concerning internships, subscriptions, back issues, or other pertinent information should be directed to Sandy Oliver, Publisher/Editor, *Food History News*, 1061 Main Road, Islesboro, ME 04848 (telephone: 207-734-8140, e-mail: sandyo@mint.net).

Sandra Oliver is a food historian and author of Saltwater Foodways: New Englanders and Their Food at Sea and Ashore in the 19th Century. *She consults and lectures on food history topics and is the editor and publisher of* Food History News.

Philip F. Mooney

A (Soda) Pop Culture and Fifty Years of Advertising

To celebrate its 50th anniversary of television advertising and the Library of Congress' Bicentennial Gifts to the Nation program, The Coca-Cola Company is donating a major collection of television commercials to the American people. These advertisements will serve as a multi-media archive to researchers and historians by providing a glimpse into the development of popular culture.

The gift eventually will encompass more than 20,000 television ads from across the globe and will be representative of the company's portfolio of brands. These will include products such as Sprite, Fanta, and diet Coke that are universally recognized, as well as lesser-known brands that are available only in specific countries, such as Japan's Georgia Coffee. The Library of Congress web site <www.loc.gov> currently includes a preview description of the collection with pertinent historical information and several examples of the ads. This donation to the world's largest library recognizes not just five decades of television advertising, but also a business history that mirrors changing innovations and developments in marketing over the last 115 years.

A Brief History

In 1886, John Pemberton created Coca-Cola in Atlanta, Georgia, and sold it at a local pharmacy. His partner and bookkeeper, Frank Robinson, named the product and drew the famous flowing Coca-Cola script. Atlanta entrepreneur Asa G. Candler realized the business potential of the soft drink and acquired complete ownership of the Coca-Cola business for $2,300 by 1891. Within four years, Candler's merchandising flair, including the use of coupons, helped expand consumption of Coca-Cola to every corner of the United States.

Until 1899, Coca-Cola was only sold as an over-the-counter fountain drink. Dubious about portable packaging, Candler sold the bottling rights in 1899 for one dollar. The first two bottling plants were located in Chattanooga and Atlanta. The success of the operations was quickly realized and by 1929, 27 countries had bottling facilities. The 1916 introduction of the patented contour bottle made Coca-Cola instantly recognizable from imitators by taste, sight, and touch. The contour bottle was granted trademark registration in 1977, a recognition awarded few other package designs.

In 1919, the Candlers sold the company for $25 million to an investment group, led by Atlanta banker Ernest Woodruff, which soon sold stock to the public at $40 a share. Ernest brought his son Robert aboard to run the company in 1923. Robert W. Woodruff's leadership, over six decades, took the business to unrivaled heights of commercial success and transformed Coca-Cola into an international institution.

Strong corporate leadership continued through the years and in 1981, Roberto C. Goizueta was elected chairman and chief executive officer. During his tenure, an independent worldwide survey in 1988 found that Coca-Cola

The evolution of the glass bottle for Coca-Cola from the Hutchinson-style bottle to the 20-ounce plastic contour bottle introduced in 1994.

was the best known and most admired trademark in the world. After selling, on average, a mere nine drinks a day in 1886, overall daily sales of Coca-Cola and other company products exceeded one billion per day a little over 100 years later.

Packaging and Product Innovations

Until the mid-1950s, the contour bottle and bell-shaped fountain glass defined packaging for Coca-Cola. But as the American consumer demanded a wider variety of choices, the company responded with innovative packaging, new technology, and new products. In 1955, king-size and family-size glass bottles were introduced with immediate success, followed by cans in the U. S. market in 1960. The company then accomplished several innovations within the soft-drink industry with the development and introduction of lift-top cans and bottles with lift-top crowns in 1964, and a 24-unit "Cluster-Pak" of cans and steel cans without tin coating in 1969. Also, in 1985, after more than $250,000 in development costs and rigorous testing by NASA, the "Coke Space Can" was accepted for its first mission in outer space. By 2000, the company had introduced a new generation to the famous contour bottl— first with the 20-ounce plastic version (1993) and later with an 8-ounce embossed contour bottle (2000).

In recent decades, The Coca-Cola Company has created new beverages to meet the changing desires of consumers, starting with Fanta in 1960. Sprite was launched in 1961, followed by TAB, the company's first low-calorie drink in 1963. The debut of diet Coke in 1982 marked the first extension of the Coca-Cola trademark to another product. These new products continue today, adding to the company's portfolio of more than 230 brands worldwide.

Advertising Through the Years

Throughout its history, The Coca-Cola Company has attempted to capture the spirit of the times through its advertising. From the first promotional calendars produced in the 1890s, the company linked itself to the popular styles and attitudes of the era. The company initially used the work of the top artists of the day, including Norman Rockwell and N.C. Wyeth, to illustrate calendars and magazine and newspaper ads. In a series of Coca-Cola Christmas paintings from the 1930s to the 1960s, Haddon Sundblom helped transform the modern image of Santa Claus.

By 1950, the company was ready to advertise on television. Sponsorship of particular programs allowed the company to expand its relationships with performers from radio programming. The first television commercial for Coca-Cola was created for an Edgar Bergen and Charlie McCarthy special on Thanksgiving Day in 1950. That was quickly followed by Walt Disney's television premiere, *One Hour in Wonderland*, on Christmas Day the same year. The company also sponsored *The Adventures of Kit Carson* and *Coke Time* with Eddie Fisher over the next three years.

Commercials from the "The Sign of Good Taste" and "Be Really Refreshed" advertising campaigns of the 1950s used techniques such as animation and featured notable performers such as the McGuire Sisters, Connie Francis, Emmett Kelly, Anita Bryant, and the Brothers Four. When the "Things Go Better With Coke" slogan was introduced in 1963, it was adapted for the international market and translated into numerous languages. A number of popular singers, such as the Supremes, the Moody Blues, Jan and Dean, Roy Orbison, Petula Clark and Ray Charles, recorded music for this campaign.

Throughout the 1960s, advertising for Coca-Cola echoed the changing forces within American society. The 1969 "It's the Real Thing"

The company's 1971 "Hilltop" advertisement, featuring the song I'd Like to Buy the World a Coke, *celebrated the world's diverse cultures.*

In October 1979, the Coca-Cola commercial featuring professional football player "Mean Joe" Greene and 12-year-old Tommy Okon made its debut.

campaign featured one of the most popular advertisements ever created. Known as "Hilltop," this television advertisement encouraged the world to sing and to celebrate the planet's diverse cultures.

The advertisement's song, *I'd Like to Buy the World a Coke*, was originally introduced unsuccessfully on the radio. The idea for this song was developed after one of the songwriters noticed weary travelers laughing and sharing stories over bottles of Coca-Cola, which inspired him to see Coke as more than just a soft drink. In early 1971, the radio ad was shipped to stations around America, but the few times it was played, the public paid no attention.

The company decided that the campaign needed a visual stimulus to be effective. However, producing this television spot turned out to be a star-crossed project, including three separate filming attempts in two countries, numerous recasts of the chorus, and what was at the time one of the largest budgets devoted to a commercial. "Hilltop" was released in the United States in July 1971, and by November, the company and its bottlers had received more than 100,000 letters of praise. Two new versions of the song were created for radio play and at one point both were on the pop charts. The sheet music continues to sell today and the ad consistently has been voted one of the best of all time.

During the mid-1970s, as the nation questioned its direction and values, Coca-Cola promoted positive values in the "Look Up, America" campaign. Coke advertisements showed typically American scenes from football players to a cattle herder to country singers. The patriotic phrase "from sea to shining sea" was used in the voice over. The central message of the ad was, "no matter what you're doing or where you are, look up for the real things" (like Coca-Cola).

A few years later, the company's "Have a Coke and a Smile" marketing theme introduced a commercial that captivated audiences almost to the extent that "Hilltop" had eight years earlier. This ad, featuring Charles E. "Mean Joe" Greene, a defensive lineman from the Pittsburgh Steelers professional football team, and 12-year-old Tommy Okon, debuted in October 1979.

The ad in which a young boy talks to his hero, offers him a Coke, and is rewarded with the player's jersey was filmed over three days at a stadium in New York. Greene and Okon performed countless retakes, with Greene consuming 18 bottles of Coca-Cola the final day alone. The campaign was immensely popular and continued its life as a 1981 made-for-television movie. The company repeated the ad's concept in Brazil, Argentina, and Thailand, following the same plot but starring renowned soccer players.

In 1985, after 99 years, Coca-Cola had become part of the tapestry of American life. When the company introduced a new taste for Coca-Cola in North America that year, television played an important advertising role. After the public demanded the return of the original Coca-Cola, the company brought it back as Coca-Cola classic. As a result, two distinct ad campaigns were created for the marketplace—one for the new taste of Coca-Cola and another for Coca-Cola classic.

The "Red, White and You" campaign for Coca-Cola classic celebrated the modern American spirit and featured recognizable landmarks, such as the Golden Gate Bridge and the Coca-Cola neon sign in New York's Times Square. In surveys, 75% of respondents said they considered Coca-Cola classic a symbol of America, so this campaign was a natural fit. In contrast, the "Catch the Wave" campaign for the new taste of Coke was youthful, leading edge, and competitive. To appeal to young America, The Coca-Cola Company enlisted an unusual

"spokesman"—Max Headroom, a computerized character with a synthesized voice.

In 1993, the "Always Coca-Cola" campaign marked a dramatic shift in the company's advertising. The campaign, which ran for seven years, took a variety of approaches, using humor, music, animation, and even Shakespearean parody, to build on the product's connection with the public. The ads ran around the world and included innovative technical approaches, such as computer animation.

One commercial in this series, "Northern Lights," introduced what would become one of the most popular symbols of Coca-Cola advertising, an animated polar bear. The bear appeared in six commercials for Coca-Cola, including two spots for the 1994 Olympic Games and a holiday ad with the bear's family. Another ad, "Charity," featured the Muslim fasting month of Ramadan and promoted the spiritual aspects of love, charity, and forgiveness.

In January 2000, The Coca-Cola Company launched its latest ad campaign. Using the slogan "Coca-Cola. Enjoy," the campaign was designed to show people around the world how Coca-Cola adds a tiny bit of magic to the special moments in their lives. One of the spots, "First Experience," follows a boy anticipating what a Coca-Cola will taste like, comparing it to a kiss. While "Coca-Cola. Enjoy" was a worldwide theme, local countries created individual commercials relevant to local tastes and cultures. For example, the melody developed with the campaign is adaptable to a wide range of musical styles. Even as the campaign began, there were 140 versions of the tune in 40 languages.

For the past 115 years, through its multimedia advertisements, packaging innovations, and the introduction of new products to fit the tastes of consumers wherever they may be, whatever they may be doing, Coca-Cola has become a part of the lives of people around the world. The new partnership between The Coca-Cola Company and the Library of Congress will ensure preservation and public accessibility to this corporate advertising history.

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