



FINAL RESULTS
of the
SECOND ANNUAL
MIDWINTER BALD EAGLE SURVEY

Sponsored by:
Raptor Information Center
National Wildlife Federation

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INTRODUCTION

The numbers and distribution of wintering bald eagles, like many raptor species, are difficult to assess over broad geographic areas. This has been exemplified by the lack of such information for many areas of the lower 48 States. Migrant bald eagles are highly mobile during the winter, their movements influenced to a great degree by regional climatic factors. They exhibit opportunistic feeding habits which enable them to occupy a variety of habitats in which they may occur as individuals, in small groups, or in large aggregations.

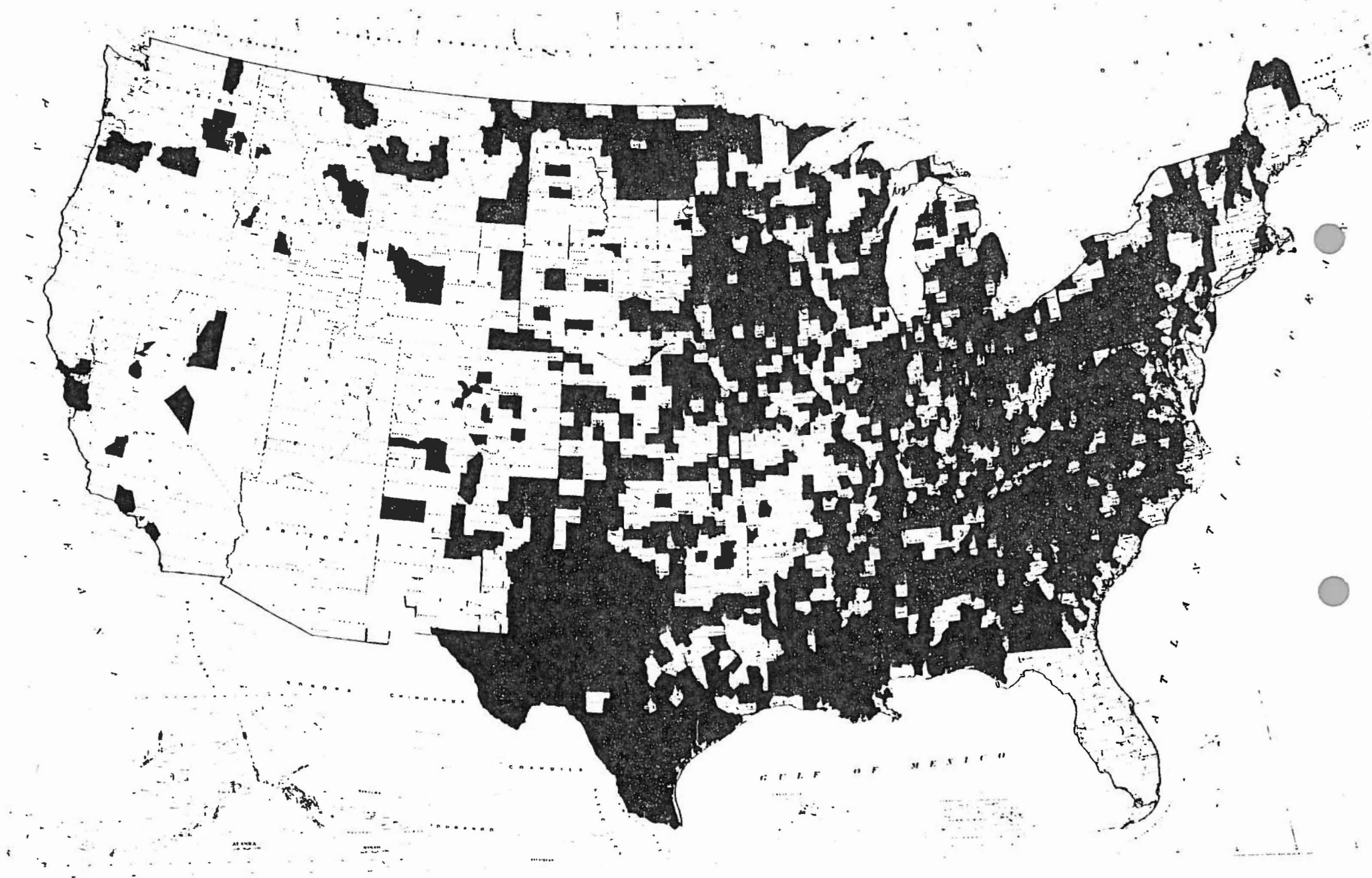
The need for better information on winter eagle populations has increased in recent years. The five appointed Bald Eagle Recovery Teams must identify important wintering locales within their designated areas to write effective recovery plans for the species. In addition, many State and Federal agencies are currently attempting to identify bald eagle use areas under their stewardship for proper management and for input into environmental impact assessment.

In January 1979, the National Wildlife Federation sponsored a multi-agency cooperative count of wintering bald eagles throughout the lower 48 States and portions of Canada, the most comprehensive survey of the species to date. The final tally indicated 9,282 bald eagles counted throughout the major portion of their wintering range. This represented the highest number of wintering eagles ever recorded in a survey.

The National Wildlife Federation, through its Raptor Information Center (RIC), sponsored the Second Annual Midwinter Bald Eagle Survey between 2-20 January 1980. The objectives of this annual count are:

- 1) To establish a conservative minimum number for the wintering bald eagle population within the lower 48 States.
- 2) To record winter eagle distribution in order to document important wintering areas.

As in most population surveys of highly mobile, wide ranging raptor species during the non-breeding season, the actual number of birds tallied represents a conservative minimum number. Many climatic as well as biological factors affect not only the presence of wintering eagles, but also their visibility and chance of being observed. Therefore, repeated surveys are necessary for proper interpretation of these numbers as an index to the actual wintering population. Also, because the distribution of wintering eagles changes markedly with significant climatic and biotic



changes from year to year, several years of survey data will be needed to provide accurate evaluation of potentially important eagle habitat. Consequently, the RIC is planning to conduct this annual survey on a long-term basis.

METHODS

The RIC provided nationwide organization of the survey and coordinated the overall activities. Regional Coordinators were enlisted to organize eagle survey activities on a State or Provincial basis. The RIC encouraged the State wildlife agency to provide a biologist with eagle or raptor expertise for this important role. If a state biologist could not assume this position, then biologists from other agencies or organizations with eagle or raptor expertise were queried. Regional Coordinators were invaluable in organizing the survey coverage and timing of the field teams within their respective State or Province. Their efforts insured maximum coverage while minimizing duplicate sightings. Cooperating agencies and organizations were contacted by the Regional Coordinators and the RIC to plan the actual field effort.

Coordinated efforts to count eagles were carried out throughout the lower 48 States (and adjacent areas of extreme southeast Canada) between 2-20 January 1980. This survey period was earlier and of longer duration than that followed for the 1979 survey (13-27 January 1979). Changes in the survey period were made in order to utilize data gathered from the annual Waterfowl/Eagle Inventory conducted nationwide by the U.S. Fish and Wildlife Service in cooperation with State agencies. "Target dates" of 11-12 January were established and the RIC encouraged that survey activities be planned around and as close to these dates as possible. By centralizing survey activities around the target dates, duplicate counting of individual birds due to local movements was minimized. The target dates represent one weekday (for agency personnel) and one weekend day (for the private sector) which allowed full participation by all survey cooperators. Aerial (fixed wing and helicopter), boat and ground (count route and fixed point) techniques were used in tallying eagles according to the discretion of the coordinator.

The RIC provided standard field forms to all survey cooperators (Appendix I). Bald and golden eagle sightings were recorded according to county, location, 10' latitude-longitude block, date and time. Areas surveyed in which no eagles were recorded were also reported in this manner.

State summaries of the 1980 data were submitted to the RIC by each Regional Coordinator. In most cases, the Regional Coordinator analyzed the data and helped to identify duplicate surveys. The

RIC completed this task and identified duplication of survey effort between States. For each location surveyed, the highest count tallied during the survey period was used in the final total. However, distances and days elapsed between geographically adjacent surveys were considered in deciding which survey reports to retain in the final total as unduplicated. Thus, double counting of birds was minimized while insuring inclusion of the maximum number of birds present at a location during the survey period.

RESULTS

Fifty-one individuals contributed their time and expertise in serving as Regional Coordinators. Forty-six State and three Provincial wildlife agencies, seven Federal agencies, 138 local conservation organizations and numerous private individuals contributed the field effort on the 1980 survey. Overall, approximately 3,000 individuals were involved in the survey.

Surveys were conducted in 1,244 counties in the lower 48 States (Figure 1). The extent of coverage within each county varied considerably. The number of eagles observed in each county was totaled for all States except Florida, where precise data are not available concerning the locations where birds were seen. Thus, the total number of counties for which specific data are available is 1,187.

Winter eagle surveys in Canada for 1980 were limited to the Maritimes and along areas of the Great Lakes and St. Lawrence River. Reports were received from Regional Coordinators in New Brunswick, Nova Scotia, Ontario and Quebec.

Table 1 presents the results of the 1980 survey by State/Province. The Mississippi River is treated as a separate category in the table; this region has been the focus of long-term winter surveys by Elton Fawks. A total of 12,340 bald eagles were tallied in the lower 48 States. Of these, 7,867 were adults, 4,414 were immature and 59 were of unknown age. Bald eagles were tallied in all States except Rhode Island, Vermont and West Virginia. An additional 131 eagles were counted in eastern Canada for an overall total of 12,471 bald eagles.

The RIC has developed individual State listings which represent the data by county, locations within counties and 10' latitude-longitude blocks within locations. These data will be computer stored for future analysis. Copies of these listings have been sent to all Regional Coordinators, cooperating agencies and Recovery Team leaders. Additional copies are available to survey cooperators by writing the RIC.

. Figure 1. 1980 bald eagle survey coverage by county.
Survey activity was conducted in all counties
designated in white.

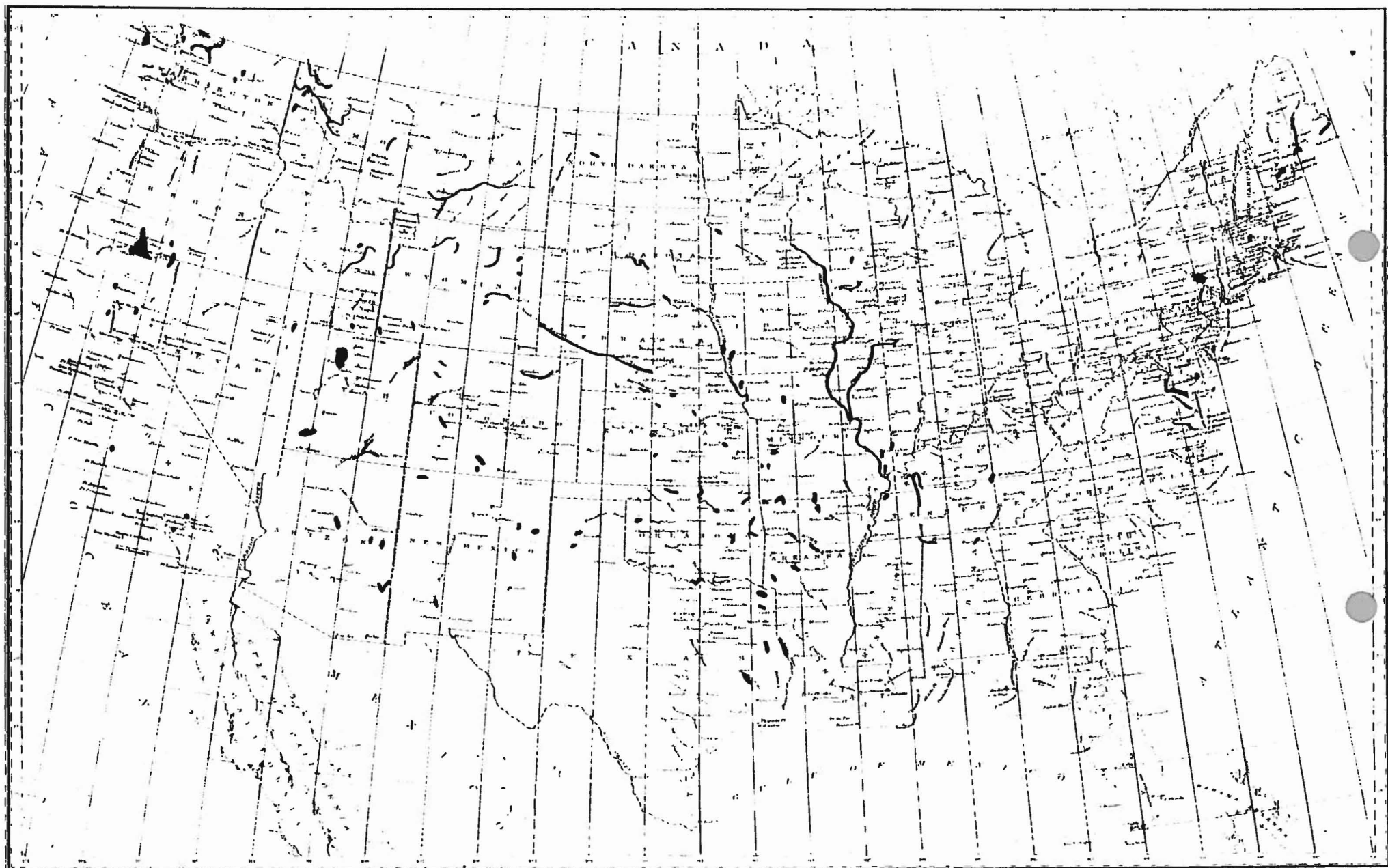


Table 1. Final results of the 1980 Midwinter Bald Eagle Survey

The Lower 48 States

<u>State/Region</u>	<u>Regional Coordinator</u>	Adult ^a <u>B.E.</u>	Immature <u>B.E.</u>	Unknown <u>B.E.</u>	Total <u>B.E.</u>	Adult ^b <u>G.E.</u>	Immature <u>G.E.</u>	Total <u>G.E.</u>	Other ^c <u></u>
Alabama	Fred Bagley, USF&WS	14	21	0	35	2	0	2	0
Arizona	Richard Todd, AZ Game & Fish	73	48	0	121	33	5	38	9
Arkansas	Fred Bagley, USF&WS	274	189	8	471	20	7	27	22
California	Phil Detrich, USFS	517	255	0	772	113	50	163	30
Colorado	Patsy Goodman, CO Div. of Wildlife	347	248	0	595	97	41	138	22
Connecticut	Thomas Hoehn, CT Dept. of Environmental Protection	6	5	0	11	0	0	0	0
Delaware	Paul Burns, DE Div. of Fish and Wildlife	7	0	0	7	1	0	1	0
Florida	Steve Nesbitt, FL Game and Freshwater Fish Commission	55	46	0	101	0	0	0	0

a) Bald eagle

b) Golden eagle

c) Species not discernable (golden or bald)

(KEY: USF&WS - U.S. Fish and Wildlife Service, USFS - U.S. Forest Service, BLM - Bureau of Land Management)

<u>State/Region</u>	<u>Regional Coordinator</u>	<u>Adult B.E.</u>	<u>Immature B.E.</u>	<u>Unknown B.E.</u>	<u>Total B.E.</u>	<u>Adult G.E.</u>	<u>Immature G.E.</u>	<u>Total G.E.</u>	<u>Other</u>
Georgia	Ron Odum, GA Game & Fish Div.	5	5	0	10	0	0	0	0
Idaho	Karen Steenhof, BLM	302	131	0	433	73	26	99	9
Illinois ^d	Carl Becker, IL Dept. of Conservation	387	212	0	599	1	1	2	11
Indiana	Robert Feldt, IN Div. of Fish and Wildlife	3	2	0	5	0	0	0	1
Iowa ^d	Richard Bishop, IA Conservation Commission	93	35	0	128	0	0	0	13
Kansas	Marvin Schwilling, KS Fish and Game	197	127	0	324	29	5	34	4
Kentucky ^d	Jim Durell, KY Dept. of Fish and Wildlife	34	30	0	64	9	1	10	0
Louisiana	Fred Bagley, USF&WS	7	3	0	10	0	0	0	8
Maine	Charles Todd, Univ. of Maine	83	24	0	107	0	0	0	0
Maryland	Ken D'Loughy, MD Wildlife Administration	45	21	0	66	1	5	6	0
Massachusetts	John Swedberg, MA Div. of Fisheries and Wildlife	14	11	0	25	1	0	1	1
Michigan	John Lerg, MI Dept. of Natural Resources	33	4	0	37	0	1	1	0
Minnesota ^d	Carroll Henderson, MN Dept. of Natural Resources	7	9	0	16	1	0	1	0

d) Excluding Mississippi River (separate category)

<u>State/Region</u>	<u>Regional Coordinator</u>	<u>Adult B.E.</u>	<u>Immature B.E.</u>	<u>Unknown B.E.</u>	<u>Total B.E.</u>	<u>Adult G.E.</u>	<u>Immature G.E.</u>	<u>Total G.E.</u>	<u>Other</u>
Mississippi	Fred Bagley, USF&WS	7	6	0	13	0	0	0	7
Mississippi R. (source to Hickman, KY)	Elton Fawks	728	217	0	945	4	2	6	46
Missouri ^d	Jim Wilson, MO Dept. of Conservation	537	411	0	948	11	4	15	2
Montana	Chris Servheen, MT Coop. Wildlife Research Unit	319	108	0	427	22	7	29	4
Nebraska	Greg Wingfield, NE Game and Parks Commission	288	154	0	442	11	7	18	0
Nevada	Gary Herron, NV Dept. of Game and Fish	23	30	0	53	14	7	21	0
New Hampshire	Carol Smith, Audubon Society of NH	1	2	0	3	0	0	0	0
New Jersey	Paul McLain, NJ Div. of Fish, Game and Shellfisheries	5	8	0	13	1	1	2	0
New Mexico	John Hubbard, NM Dept. of Game and Fish	66	63	6	135	25	16	41	
New York	Pete Nye, NY Dept. of Environmental Conservation	25	11	0	36	0	0	0	0
North Carolina	Frank Barrick, NC Wildlife Resources Commission	2	3	0	5	0	0	0	0

<u>State/Region</u>	<u>Regional Coordinator</u>	<u>Adult B.E.</u>	<u>Immature B.E.</u>	<u>Unknown B.E.</u>	<u>Total B.E.</u>	<u>Adult G.E.</u>	<u>Immature G.E.</u>	<u>Total G.E.</u>	<u>Other</u>
North Dakota	Stan Kohn, ND Game and Fish Department	35	5	0	40	28	3	31	1
Ohio	Denis Case, OH Div. of Wildlife	5	2	0	7	0	0	0	0
Oklahoma	James Lish and John Ault, OK Cooperative Wildlife Research Unit	323	231	15	569	12	2	14	0
Oregon	Ralph Opp, OR Dept. of Fish and Wildlife	430	178	2	610	130	53	183	22
Pennsylvania	Mike Puglisi, PA Game Comm.	8	3	0	11	0	4	4	0
Rhode Island	Jim Myers, RI Div. of Fish and Wildlife	0	0	0	0	0	0	0	0
South Carolina	Tom Murphy, SC Wildlife and Marine Resources	0	5	0	5	0	0	0	0
South Dakota	Ron Fowler, SD Dept. of Game, Fish and Parks	385	22	0	407	128	69	197	114
Tennessee	Bill Yambert, TN Wildlife Resources Agency	144	128	0	272	4	3	7	0
Texas	Bob Benson, TX A&M Univ.	215	276	0	491	7	1	8	7
Utah	Phil Wagner, UT Div. of Wildlife Resources	407	242	12	661	187	42	229	15
Vermont	James Stewart, VT Dept. of Fish and Game	0	0	0	0	1	0	1	0

<u>State/Region</u>	<u>Regional Coordinator</u>	<u>Adult B.E.</u>	<u>Immature B.E.</u>	<u>Unknown B.E.</u>	<u>Total B.E.</u>	<u>Adult G.E.</u>	<u>Immature G.E.</u>	<u>Total G.E.</u>	<u>Other</u>
Virginia	Dr. Mitchell Byrd, College of William & Mary	101	64	0	165	0	0	0	0
Washington	Rick Knight, WA Dept. of Game	932	671	16	1619	29	5	34	3
West Virginia	Jim Ruckel, WV Dept. of Natural Resources	0	0	0	0	0	0	0	0
Wisconsin ^d	Terrence Ingram, Eagle Valley Environmentalists, Inc.	52	18	0	70	0	0	0	
Wyoming	Bob Oakleaf, WY Game & Fish Department	<u>326</u>	<u>130</u>	<u>0</u>	<u>456</u>	<u>78</u>	<u>53</u>	<u>131</u>	<u>30</u>
<u>TOTAL</u>		7867	4414	59	12340	1073	421	1494	381
<u>Canada</u>									
<u>Province</u>									
New Brunswick	Rudy Stocek, Maritime Forest Ranger School	14	6	0	20	1	0	1	4
Nova Scotia	Peter Austin-Smith, Nova Scotia Dept. of Lands & Forests	52	54	0	106	0	0	0	0
Ontario	J.D. Roseborough, Ontario Ministry of Nat. Resources	5	0	0	5	0	0	0	0
Quebec	Dr. David Bird, MacDonald Raptor Research Centre, McGill Univ., Montreal	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>TOTAL</u>		71	59	0	131	1	0	1	4
<u>GRAND TOTAL</u>		<u>7938</u>	<u>4474</u>	<u>59</u>	<u>12471</u>	<u>1074</u>	<u>421</u>	<u>1496</u>	<u>385</u>

DISCUSSION

The Second Annual Midwinter Bald Eagle Survey tallied the highest number of wintering bald eagles ever recorded in a survey effort encompassing all of the lower 48 States. However, in light of the care used in removing duplicate counts, the final total represents a very conservative minimum number for the wintering population of bald eagles in the contiguous lower 48 States.

The 1980 survey recorded 3,225 more birds than tallied during the 1979 survey. Overall coverage in the lower 48 States during the 1980 survey was significantly better than in 1979. This factor probably contributed most to the increase in total numbers of eagles counted. Coverage in a few States was increased through inclusion of data generated from the Waterfowl/Eagle Inventory. In addition, Regional Coordinators provided better organization and generated increased survey interest among cooperators which also contributed to more thorough coverage in most States.

Above normal temperatures in many regions of the country apparently resulted in eagles generally being more dispersed during the 1980 survey as opposed to conditions during 1979's efforts. Also, the earlier survey period used in 1980 undoubtedly contributed to significant changes in distribution, favoring those locations where migrant eagle numbers traditionally peak early in the winter. In interpreting the survey results regarding distribution shifts between years (Figure 2), these factors, as well as changes in survey coverage from State to State, must all be taken into account. Because the effects of any of these factors are difficult to assess, direct comparisons of local or regional survey results between years should be done with caution.

In the 1980 survey, bald eagles were observed in most of the general habitat types that were surveyed in the lower 48 States. Of the 1,187 counties in which survey data are available, bald eagles were tallied in 752 (63%). A large proportion of the eagles that were counted, however, tended to occur in moderate to large concentrations. These aggregations, in some areas, occurred in proximity so that 25% of all observations occurred in only 14 counties.

A more meaningful picture of winter eagle dispersion can be gained by plotting concentration areas and studying their geographic relationship. Figure 3 depicts the locations where significant numbers of bald eagles were counted in relationship to a much broader geographic region in which winter eagle densities, as determined by the survey, were fairly consistent. Regions of high wintering eagle density occurred in the upper Mississippi River Valley (including the Illinois River), the Pacific Northwest (including northern California), sections of the Missouri and

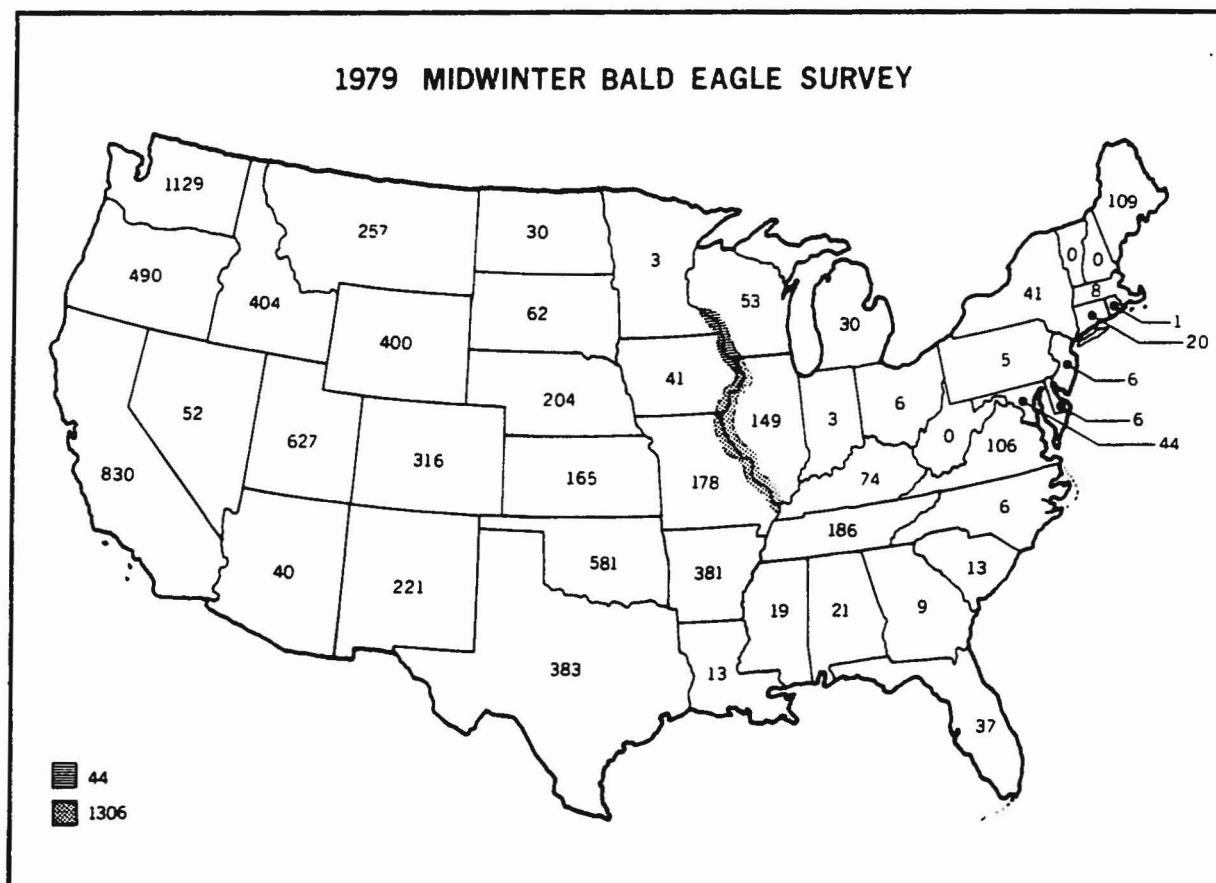
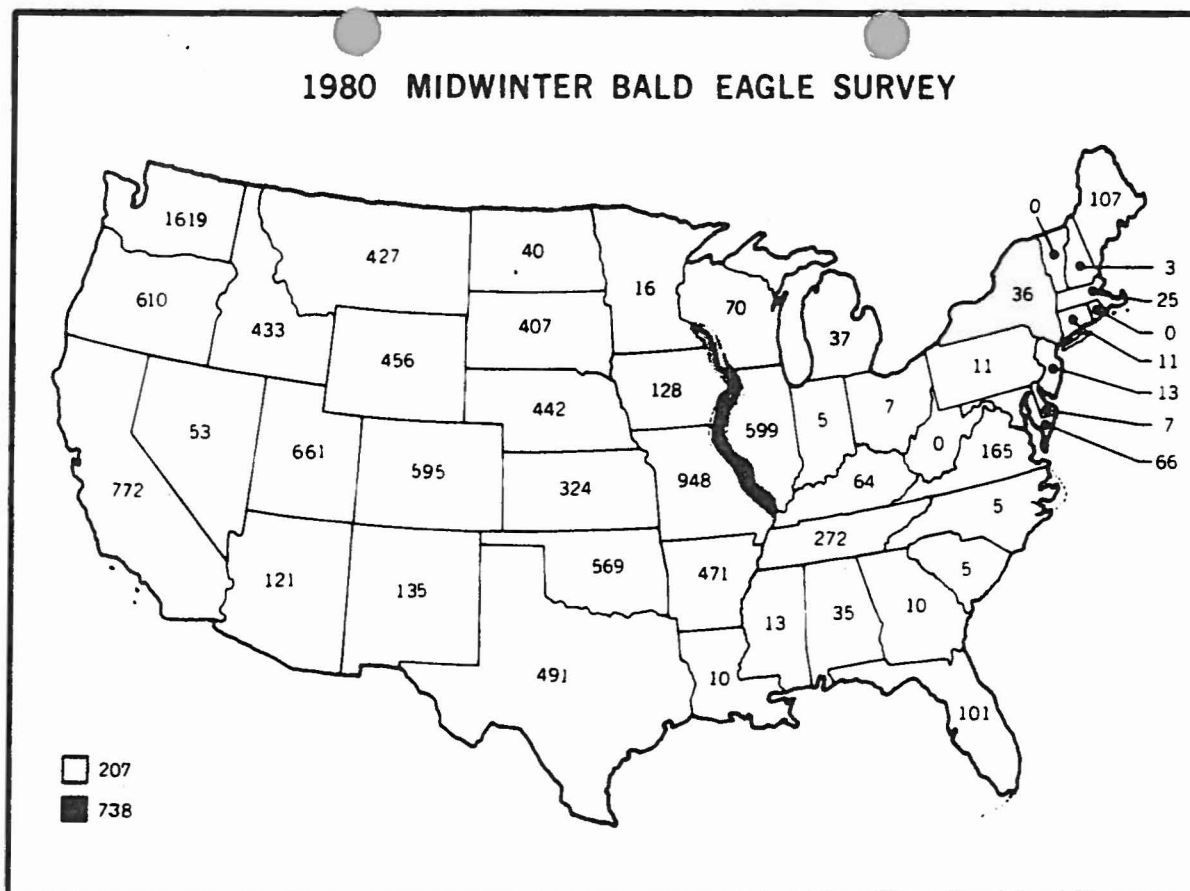


Figure 2. Comparison of the number of wintering bald eagles counted within each state during January 1979 and January 1980.

Figure 3. Concentration areas of wintering bald eagles
in 1980.

Platte Rivers and nearby reservoirs, and the eastern Great Basin (including southeast Idaho, western Wyoming, Utah, and western and south-central Colorado). Regions of moderate wintering eagle density occurred along sections of the Arkansas River, major reservoirs ranging from southern Missouri and Oklahoma to southeastern Texas, northwestern Montana and northern Idaho, and the northwestern portions of the Great Plains in Montana and Wyoming. Elsewhere, eagle numbers were consistently low. The number of eagles represented at individual locations designated on the map range from small groups of approximately 15 birds (in regions of low wintering eagle numbers) to large aggregations of over 250 birds (in regions of high wintering eagle numbers). In total, the marked areas of Figure 3 account for 8,165 bald eagles or 67% of the total observed in the lower 48 States.

The importance of any specific eagle wintering area must initially be measured by relating the number of birds occurring at the location to the overall density of wintering eagles in that general region of the country. For example, Quabbin Reservoir in central Massachusetts, where approximately 25 eagles were counted in 1980, is one of the most important bald eagle wintering areas in the northeastern U.S. (where wintering eagles are uncommon). In northwestern Washington State, however, where wintering bald eagles are plentiful, concentrations of 25 or more eagles occur at many locations throughout the State and the importance of any one of these locations is dwarfed by nearby larger aggregations of 100+ birds. Therefore, Figure 3 shows wintering locations that are important relative to the magnitude of the wintering population in the general region within which that location occurs. Data from future surveys will help discern the truly important wintering areas by documenting their consistent high use by eagles.

FINAL COMMENTS

This final section is meant to address special problems in the survey procedures as well as in the data reporting which all survey participants should be aware of. The purpose of the following discussion is two-fold: 1) to caution the reader of the potential shortcomings of the data because of certain inherent biases in the survey design and data collecting, and 2) to make survey participants aware of these biases in hopes that they can be minimized in future surveys.

Strict standardization of survey methodology has not been practical in this annual survey to date. The scope of the survey and limited manpower and funds have required subjective decisions, in many cases, of where to place the majority of the survey effort. Survey coverage and level of survey intensity, then, has necessarily been quite variable from area to area. Still, the Regional Coordinators have been very effective in guiding the survey effort to those areas most likely to support wintering eagles.

Because the results of this survey are based on one-time observations accomplished without strict standardized procedures, several biases are potentially inherent. If a particular location is surveyed prior to the arrival of the majority of the wintering population, then the resultant count will, of course, underestimate not only the local population but also the importance of that particular location to wintering eagles. Many states/regions are currently conducting regular regional winter counts throughout the winter which will help determine the dynamics of migrant populations. However, even at peak population levels, the number of eagles present can be severely underestimated. Because roosting and feeding areas for some birds can be at a distance (over 1 mile), the time of day that the survey is conducted is often important in documenting the actual number of birds using that location. On the Yampa River in northwestern Colorado, bald eagles roost in the cottonwoods along the river but hunt the uplands away from the river by day. When surveyed by day, this population was underestimated by as much as a factor of four (Nancy Green, personal communication). Another significant factor in winter eagle surveys is visibility bias. Most observers, especially in aerial surveys, miss a greater proportion of dark immature eagles than the white-headed adults. This problem is compounded by what can be termed "observer bias". The skill and experience of the observer in aerial surveys is critical in conducting an accurate survey. However, even with equal observer skill, significant differences in survey results can occur. In Colorado, observers of relatively equal skill discovered they had reverse visibility bias. In surveying the same area by fixed wing aircraft, one observer undercounted adults while the other observer undercounted immatures. Conscious effort at correcting this bias by the observers resulted in more similar results (Nancy Green, personal communication).

Another set of problems have developed regarding data reporting. Most of these problems result from survey cooperators failing to fill out the field form properly. The most serious oversight is the proper designation of location parameters. In many cases, data from a single survey taken over several 10' blocks (and often, several locations and counties) is reported as a single figure and not broken down by location and 10' block. Other survey reports still do not describe locations surveyed where no birds were observed. Other parameters are often left blank. Ignoring this aspect creates an inordinate amount of work for the Regional Coordinators as well as the RIC. The field form was designed to be completed by the surveyor. Often, data must be subjectively determined by the Coordinator, introducing another source of error. Still, the Regional Coordinators are to be commended for their time and effort in helping to complete this task. All participants are urged to follow the reporting instructions properly.

A final area of concern is the length of time it has taken for data to arrive at the RIC. The data has been very slow in

arriving to both the Regional Coordinators and the RIC. Some reports were not received at the RIC until December 1980. To produce a more timely report, all cooperators and Regional Coordinators are urged to be more prompt in handling the data.

For the 1981 survey, the field form was altered to facilitate computer entry of the 1981 survey data. The potential will exist for retrieving survey data on a county, location or 10' latitude-longitude block basis. Preliminary results of the 1981 survey should be available this summer.

ACKNOWLEDGEMENTS

In addition to the Regional Coordinators, the success of the 1980 survey effort resulted from the cooperation of the agencies listed below. We would like to acknowledge their support.

Federal agencies

Army Corps of Engineers	U.S. Fish and Wildlife Service
Bureau of Land Management	U.S. Forest Service
National Park Service	Water and Power Resources Service
Tennessee Valley Authority	

State agencies

Alabama Department of Conservation and Natural Resources
Arizona Game and Fish Department
Arkansas Game and Fish Commission
California Department of Fish and Game
Colorado Division of Wildlife
Connecticut Department of Environmental Protection
Delaware Division of Fish and Wildlife
Florida Game and Fresh Water Fish Commission
Georgia Game and Fish Division
Idaho Fish and Game Department
Illinois Department of Conservation
Indiana Division of Fish and Wildlife
Iowa Conservation Commission
Kansas Forestry, Fish and Game Commission
Kentucky Department of Fish and Wildlife Resources
Maine Department of Inland Fisheries and Wildlife
Maryland Wildlife Administration
Massachusetts Division of Fisheries and Wildlife
Michigan Department of Natural Resources
Minnesota Department of Natural Resources
Mississippi Game and Fish Commission
Missouri Department of Conservation
Montana Department of Fish, Wildlife and Parks
Nebraska Game and Parks Commission
Nevada Department of Fish and Game
New Hampshire Fish and Game Department
New Jersey Division of Fish, Game and Shellfisheries
New Mexico Game and Fish Department
New York Department of Environmental Conservation
North Carolina Wildlife Resources Commission
North Dakota Game and Fish Department
Ohio Division of Wildlife
Oklahoma Department of Wildlife Conservation
Oregon Department of Fish and Wildlife
Pennsylvania Game Commission

Rhode Island Division of Fish and Wildlife
South Carolina Wildlife and Marine Resources Department
South Dakota Department of Game, Fish and Parks
Tennessee Wildlife Resources Agency
Utah Division of Wildlife Resources
Vermont Fish and Game Department
Virginia Commission of Game and Inland Fisheries
Washington Department of Game
West Virginia Division of Wildlife Resources
Wisconsin Department of Natural Resources
Wyoming Game and Fish Department

Provincial agencies

New Brunswick Department of Natural Resources
Nova Scotia Department of Lands and Forests
Ontario Ministry of Natural Resources

We would also like to acknowledge the contributions of approximately 150 private organizations and university-affiliated research projects as well as the efforts of numerous volunteers. Their part in the survey proved invaluable in assuring as complete a coverage as possible and rendered the overall survey a truly cooperative undertaking. I would like to thank Bill Clark, Maurice LeFranc and Nancy Green for their critical review of this manuscript.

Appendix 1. 1980 Midwinter Bald Eagle Survey Field Form

For office use

Survey type (circle): Fixed Wing Helicopter Boat Count Route (Auto) Fixed Point
 Name of Recorder: _____ Affiliation: _____
 Address and Phone: _____ No. of observers: _____
 Weather: Visibility(mi.) _____ Temp. (°F) _____ Precipitation? _____
 Wind (speed/direction) _____ Freeze condition¹ _____
 Describe survey route² _____

Estimated mileage or area censused (linear or sq.mi.) _____ Bands or Markers seen? ³ _____
Was this count coordinated through the Regional Coordinator? _____

Location ⁴	Lat/Long ⁵	Time	Adult B.E.*	Imm. B.E.	Total B.E.	Adult G.E.**	Imm. G.E.	Other Eagles ⁶	Roost ⁷
GRAND TOTALS									-----

Comments⁸

(All superscripts explained on reverse side)

*Bald Eagles
**Golden Eagles

INSTRUCTIONS
(PLEASE READ BEFORE ENTERING DATA)

General

This is the only type of field form to be used in reporting data to the Regional Coordinator (RC). Your effort in completing this form fully and accurately greatly increases the survey's value and decreases the workload of the compilers. One individual should serve as recorder for a survey party. All recorders should submit completed forms to their respective Regional Coordinators no later than 27 January (one week after the end of the "official" count period).

Superscripts

- 1) Estimate the percentage of lakes, rivers, reservoirs, etc. in your survey area that are frozen over.
- 2) Briefly describe and include a detailed map outlining the route (including survey start and termination points) taken by the survey team in conducting the survey. Use extra sheet if necessary.
- 3) Attach extra sheet describing in detail any bands and color markers observed on any eagles.
- 4) List each survey location specifically, such as, "3 miles NE of (recognizable landmark or town)", a specific reservoir, dam, canyon or stretch of river. List all locations surveyed, including those in which no eagles were observed.
- 5) This entry is a seven digit code corresponding to the SE corner of the 10 minute block of each location. This is how bird banding locations are reported. Example: a roost located at 39°08' latitude, 77°33' longitude is within the 10 minute block defined by 39°00' latitude and 77°30' longitude (the coordinates of the SE corner) and coded "390-0773", or, the first 3 digits of latitude - the first 4 digits of longitude. A reference "grid" may be made handy for field use by outlining such 10' blocks on an appropriately scaled topographic map, or this data may be entered on the form when out of the field. Do not use legal descriptions. Also code areas where no eagles were observed. (We request that this data be fully completed by each survey participant. Its omission creates an inordinate amount of work for the Regional Coordinators and/or the RIC in compiling the data.)
- 6) Those eagles not identifiable as balds or goldens.
- 7) Indicate whether or not a night roost occurs at this location and give the number of eagles present during its observation.
- 8) Comment particularly on: a) the abundance and types of available food resources in the survey area (comment especially on relative waterfowl numbers during the survey period), b) the degree of movement of eagles within the general locality during the survey period, and c) any apparent man-related developments which may affect the area as winter eagle habitat.