

Bald Eagle Research Needs and Opportunities in Southeast Alaska

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The Bald Eagle, symbol of our nation, has had serious difficulties coping with the increase of human activity throughout its range. If the Bald Eagle is to survive, wild and free and abundant, as human populations double and, double again we must learn a great deal more about the needs and capabilities of this magnificent bird. There is no better place to focus this research than in Southeast Alaska, where Bald Eagles remain more abundant than anywhere else in the nation and where human activity is still outweighed by large expanses of untouched wilderness.



Scott Gende prepares to measure the growth of this nestling Bald Eagle. Note the new flight feathers. Photo USFWS.

Bald Eagle research is needed in two main areas: basic biological requirements and relationship with humanity. Research opportunities in Southeast Alaska can be further subdivided

under three habitat types: wilderness settings, areas of resource exploitation by humans and urban settings. Combining the two subject areas of research with the three habitat types gives us six divisions that cover major research needs:

Biology/Wilderness Sites: Bald Eagles evolved in a wilderness setting and that is where they are best adapted. We need to know a great deal more about their life history when they are undisturbed by humans. Subjects that need more investigation include: feeding habits under optimum and adverse conditions, selection and defense of nesting territories through the life span, comparison of nest sites (ground, cottonwood, hemlock, spruce), pair fidelity, daily movements, seasonal migration, rearing young, young learning to forage on their own, longevity, mortality factors, competitors, disease and parasites.

Biology/Resource Exploitation Sites: As Alaskans develop natural resources we must identify and accommodate eagle needs that are affected by development. Areas of research should include: fluctuations and changes in fish stocks on which eagles depend, what happens after removal of large trees suitable for nesting, disturbances caused by road traffic, tourist activity and boats and rafts; attraction of eagles to dumps and other sites where they may pick up poisons.

Biology/Urban Sites: In the early 1900s, when fish canning and fur farming were primary industries in Southeast Alaska, the Bald Eagle was considered a nuisance, a competitor and a threat to these enterprises. Eagles were destroyed wherever practical and exterminated in the vicinity of towns. In the second half of the century, with legal protection and a more enlightened public attitude, eagle numbers are rebuilding.

Territorial pressures within the eagle population are forcing more birds to seek feeding sources and nesting sites within urban settings. Eagles that elect an urban life are subject to a number of problems not faced by their rural relatives. Trees large enough for nesting may be scarce and farther from the water, food sources may occupy places also used by people, power lines and other structures may pose a threat, dumps may mix poisons with food sources, moving vehicles are a danger and all sorts of disturbances can occur. Research could lead to reducing dangers and providing necessities so that eagles can thrive in the urban setting.

Relations With People/Wilderness Sites: Interaction between eagles and people in a wilderness setting is minimal. Research is needed as per above. Research is also needed to ensure that visitors, photographers, perhaps researchers themselves and other people do not interfere with the natural conditions important to eagles. Managers of the national parks, national forests and national monuments must have a better understanding of the interaction between eagles and people if they are to fulfill their environmental and legal mandate to protect the portion of this wilderness wildlife population under their jurisdiction in perpetuity.

Relations With People/Resource Development Sites: The greatest need for research perhaps exists in this category, where resources are being exploited, but where there is plenty of room for eagles and they have prospered in the past. The Chilkat Valley above

Haines may be the best place in the world to do such research. The fishing, timber, mining, transportation and tourism industries, as well as development of private land, all impact a high density of nesting eagles and the greatest fall feeding concentration of Bald Eagles in the world. All these human activities are increasing and are often interdependent. How much timber and fish can be removed, how much more highway and river traffic can be accommodated and how much development of private land can occur are vital questions that must be addressed if the eagles are to prosper in the area? Detailed observations of how eagles are coping and review of development plans are imperative now.

Removal of old-growth timber along beaches throughout Southeast Alaska and the existing programs to protect eagle nest trees are two areas that need scientific review. Are the small protected areas around nest trees attracting people or other creatures to the detriment of eagles? Do the large trees so protected eventually blow down? Will removal of a portion of the beach fringe where no nest is present now ultimately limit nesting and the eagle population to a level below what the food source has sustained in the past? Can nest structures be provided in areas where nest site trees have been eliminated? Is protection comparable and adequate on federal, state, borough and private lands?

Relations With People/Urban Sites: In the past wildlife was unceremoniously destroyed in cities. Today we are a little more tolerant and we have enacted laws for protection of wildlife. As a result, we are finding that some species can do well in an urban setting. In Southeast Alaska, Bald Eagle populations are still increasing after having been reduced earlier in the century and they are reinvading the towns from which they were exterminated. It turns out that a good many residents and tourists are excited about having eagles as part of the urban scene.

Urban eagles have some problems their country cousins avoid and they cause some problems for people. If Bald Eagles continue to increase in the Lower 48 states, eventually there will be urban populations in much larger cities and problems may become more serious. The relatively small cities of Southeast Alaska, particularly Juneau, would be a very good place to research the management of Bald Eagles in an urban setting.

Some aspects needing investigation in this regard are: identification and modification of structures such as power lines, where eagles have accidents and cause public expense, methods of moving eagles that try to nest in places where they are a nuisance, methods of attracting eagles to nesting sites where they might be an asset, artificial nesting structures that could be built where nesting trees have been removed, urban food resources for eagles, including the possibility of establishing fish sources, investigation into how much space eagles need and how they interact with other urban wildlife and domestic animal life.

The rehabilitation and accommodation of eagles that become sick or injured is another area that enjoys popular support and requires research. Maintenance of eagles that cannot be returned to the wild and their use for display, education or research is an almost

untouched field.

Urban governments should have management plans for eagles that can be incorporated into comprehensive plans and enforced by ordinances. Perhaps new federal legislation could be designed to encourage such planning. The whole arena of the legal standing of eagles needs review and adjustment in accord with current public values.

Conclusion

Bald Eagle research is needed to collect the information necessary to properly manage and protect the species. It offers exciting opportunities and challenges. Southeast Alaska is the best place to do it. The American public will enthusiastically support it and it will lead to perpetual abundance of our national symbol-living free but in close association with our people.