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# Alaska Department of Fish and Game State Wildlife Grant

Grant Number: W-52-R	Segment Number:
Project Number:	
Project Title: Economic Importance of Wildlife to Alaska	
Project Duration: July 15, 2011 to June 30, 2015	
Report Due Date: September 28, 2015	
Principle Investigator: Maria Gladziszewski, DWC Assistant Director	
Project Location: Statewide	
Partner:	

# I. PROBLEM OR NEED THAT PROMPTED THIS RESEARCH

The broad objective of this project was to gain a better understanding of the economic importance of wildlife to Alaska. The economic significance of hunting, viewing, wildlife-based recreation, and other wildlife-related or dependent programs/activities in Alaska is an important consideration for natural resource managers, regulatory and policy decision-makers, businesses, and the public. Existing data and analyses have not provided adequate information to meet the state's needs.

The Department contracted with EcoNorthwest to develop a more in-depth understanding of the economic contribution of wildlife at the statewide and regional level. Additionally, the firm was asked to compare the results with prior relevant Alaska studies and develop a survey/interview method that could be used by ADF&G in the future to better understand trends over time.

# II. REVIEW OF PRIOR RESEARCH AND STUDIES IN PROGRESS ON THE PROBLEM OR NEED

Statewide estimates of some wildlife-related expenditures are available every 5-7 years as part of the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, these economic estimates are based upon a relatively small sample of Alaska households. The national survey does not provide the frequency or depth of assessment desired by the Department, including estimates of economic contribution at the regional level.

Various studies measuring aspects of wildlife's economic importance have been done over the years but are dated or too narrow in scope. The most relevant was a series of surveys conducted in 1994 that measured Alaska and non-resident hunters for their attitudes towards wildlife; hunting trip characteristics and economics; wildlife related trip characteristics and economics as well as Alaska nonresident visitors' attitudes towards wildlife and wildlife-related trip characteristics and economics. Other relevant studies included a 1998 survey of attitudes toward and relative value of Alaska brown bears towards to hunters and a 1987 report on subsistence economies. A more complete list of research reports and studies, with citations, is available upon request.

# III. APPROACHES USED AND FINDINGS RELATED TO THE OBJECTIVES AND TO PROBLEM OR NEED

OBJECTIVE 1: Report the results of survey questions that asked Alaskans about the extent to which wildlife contributes to their quality of life and influences their decision to live in Alaska: Most Alaskans believe wildlife makes a "very important" or "extremely important" contribution to the quality of their lives. Wildlife influences Alaskans' decisions to live in Alaska and is one of the main reasons people visit Alaska.

OBJECTIVE 2: Measure resident and non-resident participation in wildlife relatedactivities such as tourism, recreation, viewing, hunting and trapping, education, research and management. Identify number and percentages of residents and nonresidents, statewide and by geographic region. Almost 1 million households—residents and visitors—took at least one trip in 2011 to hunt or view wildlife in Alaska. Of those, more than 110,000 households, 86 percent of them Alaska residents, went hunting. More than 868,000 households, 77 percent of them visitors, went wildlife viewing. The greatest share of spending occurred in Southcentral Alaska (29%), the least amount was in Northern Alaska (3%).

OBJECTIVE 3: *Estimate the expenditures associated with hunting and viewing trips and their effects on economic activity in Alaska:* Residents and visitors spent \$3.4 billion in Alaska on hunting and viewing activities in 2011. Residents spent about \$2 billion of that, spread equally between hunting and viewing. Visitors spent about \$150 million on hunting and \$1.2 billion on wildlife viewing. This spending supported about 8 percent of Alaska's total economic output, 6 percent of its total employment and 5 percent of the earnings of all workers. It supported about \$343 million in revenue for local and state governments.

OBJECTIVE 4: Describe the economic value of the goods and services derived from wildlife, focusing primarily on those associated with hunting and wildlife-viewing trips residents and visitors took in 2011, and the extent to which participants in these trips experienced an improvement in their economic well-being: Trip expenditures include the total amount of money residents and visitors spent in-state and out-of-state before, during, and after their trip. They also include spending on trips that respondents said would have occurred even if they didn't hunt or view wildlife during the trip. Given these factors, the average gross economic value per hunting trip was about \$1,700 for residents and \$11,100 for visitors; the average for viewing trips was about \$1,300 for residents and \$7,100 for visitors.

OBJECTIVE 5: Describe participants' willingness to pay to conserve wildlife and habitat, and viewers' willingness to pay for management activities that would have enhanced their viewing experience: Not all respondents indicated they would be willing to pay more but, on average, visitors indicated they would have been willing to pay an additional \$400 per household, and residents indicated a willingness to pay an additional \$150 per household. These numbers, when extrapolated to all trips by visitor and resident households who participated in wildlife-viewing activities in 2011, indicate an overall willingness to pay more than an additional \$1 billion to visit an area in Alaska specifically managed to ensure they would have viewed one or more wildlife species particularly important to them.

# IV. MANAGEMENT IMPLICATIONS

At the most basic level of use, the information from this study can be used to help those unfamiliar with its significance understand wildlife's overall economic importance. The results of this study provide wildlife managers and the public with insights into the nature of the wildlife-economy relationship and the potential consequences of changes in it. For example, most Alaskans and visitors who took a wildlife-related trip were very satisfied with their experience, however, a significant number saw room for improvement in areas related to regulations and cost and ease of access to sites.

The study also showed the differences in net economic benefits between residents and visitors. Every household took each of its hunting or viewing trips with the expectation that the value of the trip would outweigh its actual cost. Visitors, however, incurred greater costs than residents, particularly for transportation, and these additional costs diminished their net economic benefit. By living closer to wildlife, residents incurred lower transportation costs and, hence enjoyed greater net economic benefits from their hunting and viewing trips.

The research results also provide other insights into the importance of actions that would enhance the economic benefits from wildlife or, alternatively, the economic loss that would result if the wildlife-economy relationship were diminished. Significantly, survey respondents, both residents and visitors, indicated that, if sufficient funding were not otherwise available, they would be willing to pay into a conservation fund to conserve wildlife and its benefits at current levels.

# V. SUMMARY OF WORK COMPLETED ON JOBS

JOB/ACTIVITY : <u>Determine Levels of Participation in Wildlife-related Activities:</u> ECONorthwest delivered the results of their survey to ADF&G in 2014.

JOB/ACTIVITY : <u>Identify Direct Economic Impacts of Participation</u>, by Sector and <u>Residency</u>: Results were delivered to ADFG and published in 2014.

JOB/ACTIVITY : <u>Determine Indirect and Induced Economic Impacts of Participation</u>, by <u>Sector and Geographic Region</u>: Results were delivered to ADFG and published in 2014.

JOB/ACTIVITY : <u>Determine and Describe Nonmarket Values</u>: Results were delivered to ADFG and published in 2014.

JOB/ACTIVITY : <u>Recommend Future Data Collection Approaches</u>: Results were delivered to ADFG and published in 2014.

JOB/ACTIVITY : <u>Assess Potential Wildlife Economics Input to Future Policy Decisions:</u> Results were delivered to ADFG and published in 2014.

JOB/ACTIVITY : <u>Identify Future Trends and Their Implications</u> Results were delivered to ADFG and published in 2014.

JOB/ACTIVITY : <u>Communicate Results to the Public:</u> Results presented to the Board of Game in March 2014. Final report distributed to interested parties and posted on the web.

## VI. ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT None

### VII. PUBLICATIONS

ECONorthwest. The economic importance of Alaska's wildlife in 2011. Final report to the Alaska Department of Fish and Game, Division of Wildlife Conservation, contract IHP-12-053, Portland, Oregon.

ECONorthwest. 2014. The Economic Importance of Alaska's Wildlife in 2011. Summary report to the Alaska Department of Fish and Game, Division of Wildlife Conservation, contract IHP-12-053, Portland, Oregon.

VIII. APPENDIX Web link to PDFs of the final report and summary and related materials for The Economic Importance of Alaska's Wildlife in 2011:. http://www.adfg.alaska.gov/index.cfm?adfg=ongoingissues.economicstudy

### IX. SIGNIFICANT DEVIATIONS: if any

None

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