

BIRD STUDY NUMBER 9

Study Title: Assessment of Injury to Waterbirds Based On the Population and Breeding Success of Pigeon Guillemots in Prince William Sound

Lead Agency: USFWS

PROJECT JUSTIFICATION

Following the Exxon Valdez oil spill, the pigeon guillemot population of Naked, Peak, and Storey islands, located in the center of Prince William Sound, was studied to determine the effects of the spill. The guillemot population has been previously studied, thus pre-spill data was available for comparison. The objectives of the study include: determine if the total number of guillemots attending the colonies following the oil spill were significantly different; monitor nesting success and chick growth rates; monitor abundance and type of prey fed to chicks; determine if petroleum hydrocarbons were present in adults, unhatched eggs, dead chicks, and prey items; and identify potential restoration strategies.

Preliminary data analysis suggests that the number of pigeon guillemots attending colonies in the Naked Island area was significantly lower following the oil spill. To what extent this decline was due to an overall decline of the Prince William Sound pigeon guillemot population or to the oil spill is unknown; further analysis is required. However, the most heavily oiled areas at Naked Island were the areas with the largest declines in numbers. Reproduction appeared to be similar to previous years; however, sample size was too small to estimate the rate of successful nesting.

A preliminary report of results has been prepared for this study but comprehensive data synthesis and analysis have not been completed and, in some cases, have not been initiated. Data analysis and the preparation of a final report will be essential for understanding the injuries the spill caused to pigeon guillemots. If this information is not clearly and completely available to those responsible for restoration, it will not be possible to adequately address the restoration needs of the resource.

BUDGET (\$K)

Salaries	\$ 15.7
Travel	0.0
Contractual	0.0
Commodities	0.0
Equipment	0.0
Other Non-Contractual	0.0
Subtotal	<u>\$ 15.7</u>
General Administration	2.3
Total	<u>\$ 18.0</u>