Ocean Alaska Science and Learning Center
Research Project Summary Spring/Summer 2003

Black Oystercatcher Project

The Question: *Is human activity along the Kenai Fjords National Park coastline having a negative impact on the Black Oystercatcher population?*

Increasing recreational use of the Kenai Fjords coast has raised concerns about the sensitivity of nesting shorebirds, such as the Black Oystercatcher. Nesting habitat is limited, and pairs tend to nest on the same beaches where people enjoy camping. Human disturbance may pose a threat to breeding oystercatchers and other shorebirds. Previous studies indicate that the birds may abandon nests, refrain from nesting, or completely abandon an area when confronted with frequent human disturbance.

Black Oystercatchers typically lay their eggs in small "scrapes" on the same beaches that kayakers favor as camping spots in Kenai Fjords National Park.

The Project: *Observe and record Black Oystercatcher nesting success, then look for a correlation with human activity.*

Park biologists, in association with the University of Alaska Fairbanks and the U.S. Geological Survey, have been conducting research in Aialik Bay and Northwestern Fjord to learn more about the breeding behavior and reproductive success of Black Oystercatchers in the Park. Since 1999, biologists have been tracking pairs throughout the breeding season (mid- May to early August) and recording data like how many eggs are laid, when they are laid, whether chicks are hatched, and whether these chicks survive to fly away on their own. Resource managers correlate this data to many different factors, such as whether the nest is on an island or the mainland or if the nest is near a popular camping spot.

Preliminary Results: *Black Oystercatcher nesting success is low in Kenai Fjords National Park, but human acitivity does not appear to be strongly linked with nest failure.*

A researcher examines a failed Black Oystercatcher nest in Aialik Bay. Park scientists want to know why so many nests in the Park fail to produce chicks.

Researchers have discovered that Black Oystercatcher reproductive success is low in Kenai Fjords when compared with other areas of Southcentral Alaska. Is this low breeding success a result of park visitors or other factors, which include natural predation, inclement weather, and poor habitat? Preliminary analysis does not reveal a strong connection between human activity on beaches and nest failure or success. It will take many more years of research to determine if the low rates are normal for this area and to discover the cause. However, managers are already taking some steps to ensure that birds can nest undisturbed along park shores. Campers are informed of nesting locations and encouraged to avoid these areas. Dogs, which can have devastating impacts on nesting birds and other wildlife, are prohibited from most of the park. In 2003, scientists plan to put identifying bands on some of the Black Oystercatchers to determine if the same pairs are returning year after year. This will help determine if success is associated with individual birds and their skills more than nest location.