

Black Bear - Human Interaction Project

The Question: *Is increasing human activity affecting the behavior of black bears along the Park's coastline?*

Black bears (*Ursus americanus*) are abundant along the Kenai Fjords National Park coastline. In the springtime, when much of the land is still buried under snow, black bears leave their winter dens and rely heavily on the intertidal zone and nearshore meadows, where vegetation emerges the earliest, for food. The same beaches and meadows are becoming increasingly popular with kayak campers and other Park visitors. How critical are these meadows to the bears? Does human presence affect the bears' use of these areas?

The Project: *Observe and document how bears use coastal beaches and meadows. Record their reactions to humans approaching on foot, by boat, or camping in these areas.*

Researchers from the U.S. Geological Survey, Biological Resources Division, have teamed up with National Park Service biologists to observe black bear behavior along the Park's coastline using a number of methods. One method is to point video cameras at meadows known to be favored by bears and take time-lapse images for days at a time. Later, they set up and occupy a small camp in the same meadow while shooting more time-lapse footage. These video tapes will be compared to see if and how the pattern of use by bears is affected by the presence of the camp. Another method of study is to slowly and steadily approach a feeding black bear on foot, by kayak or by motorboat and record changes in the bear's behavior, such as when it first notices the approaching humans, whether it stops feeding, and what at what distance it finally leaves the area.



Black bears are frequent visitors to the beaches of Kenai Fjords National Park, especially in the spring when much of the uplands are still buried under snow.

Preliminary Results: *Black bears do use coastal beaches and meadows heavily in the springtime and generally appear to be undisturbed until people approach within 100 meters. More study is needed to understand the effects of camping in these areas.*



National Park Service researchers intentionally approach a black bear and record its reactions on a beach in North Arm.

Though the data indicates that bears typically flee when approached within 100 meters, researchers caution that all of the data has not been analyzed yet. Vegetation sample collected along the coast should shed light on the nutritional value of coastal meadows and their importance in the springtime diets of bears. The effect of camping in these meadows is still undetermined but should become clearer once researchers analyze the data gathered this summer. Such data will help Park managers set clear guidelines for camping along the coast so that visitors can enjoy the Park without disturbing bears. The Park already requires use of bear-resistant food containers when camping in Kenai Fjords and even provides food lockers on the most popular beaches.