

Brown/grizzly studies seek BEAR FACTS

By Leland P. Glenn
Game Biologist
Anchorage

CONTRARY TO REPORTS in nation-wide news media, Alaska's brown/grizzly bears aren't becoming extinct. Except in urban and industrial areas where human population growth has displaced bears, the species still occupies its ancestral Alaska range. While there is no practical method of censusing bears, there are indirect ways of estimating their status. Observations in the field by experienced game biologists provide the most reliable means of determining general bear abundance. Additionally, in some game management units, aerial bear surveys are conducted when bears are concentrated on salmon spawning streams.

Counts obtained on these surveys provide information on minimum numbers, a measure of abundance (bears seen per hour) and composition.

RESEARCH WORK — An immobilized 6-month-old female brown cub. Cubs normally remain with the sow for two and one-half years. When weaned, they may weigh as much as 200 pounds.



PROTECTED — Two family groups consisting of two sows and five yearling offspring. The hunting season may be open but all of these bears are protected by a regulation which prohibits the taking of cubs or females accompanied by cubs.

HELICOPTER SCALE — (below) Weighing an immobilized brown bear during spring research activities.



Most important in management of Alaska's brown/grizzly bear population is the study of the annual harvest. Study of harvest data enables game managers to assess the harvest by game management unit, and to set seasons and regulations on the basis of harvest characteristics. Factors such as area of kill, sex, age and size composition of bears taken, pelt quality and chronology of kill provide valuable management data. Additionally, the department is engaged in an active brown/grizzly bear research program designed to develop new techniques which will allow greater management precision. Research studies are being conducted by the Department of Fish and Game on the North Slope, the Alaska Peninsula and in Southeast Alaska.

The Alaska Peninsula investigation is of particular interest because about 160 bears or one fourth of the statewide brown/grizzly bear harvest are taken here. The study area located south of Port Heiden is small (one million acres) compared to the total Peninsula (more than 10 million acres). This area receives heavy hunting pressure and 30 per cent of the peninsula harvest is taken within the study area boundary. A tagging program was initiated here in the spring of 1970. Objectives of the study are to identify seasonal distribution and movements of bears subsequent to determining population size and rate of turnover. The study is also providing valuable life history (growth rates, survival of young, production, etc.) information which will improve the department's ability to manage bears.

More than 200 brown bears have been captured, tagged and released in the study area since the program began. Preliminary findings indicate that sport hunting has not depressed the bear population. However, hunting has changed the adult sex ratio so that there are more females. This is normal in most hunted big game populations where females receive total or partial protection (it is illegal to kill cubs or sows accompanied by cubs). Since most sows keep their young for two and one half years, only a small percentage of the bear population is legal to hunt. In the study area, for example, about 25 per cent of the bears are single bears over two years old (legal to hunt; the remainder are sows (25 per cent) accompanied by young (50 per cent) which are protected.

BIG BOAR — One of the largest bears captured, tagged and released on the Alaska Peninsula was 975-pound, 13-year-old male. By fall this bear will have added 150 to 200 additional pounds.



Leland Glenn photo

Preliminary findings show that some bears travel the entire width of the peninsula (approximately 40 miles). The average movement, however, is restricted to a radius of less than 15 miles. In the spring, a large segment of the population moves out of the mountains and onto the coastal plain. Sows with new born cubs and large boars are the last to appear. By the first of July, bears begin to concentrate along streams to feed on salmon which are returning to spawn. By midsummer the bears are dispersing and changing to a berry diet. Fall and winter movements await further investigation.

Of interest is the growth of

brown bears. During a three-year period, for example, an 18-month-old male grew 20 inches in length, 16 inches in height and gained 240 pounds. It is unlikely that hunters abiding by present management regulations can overexploit Alaska's brown/grizzly bear population. Game managers are directing more and more of their time and energies to industrial activities which conflict with the well-being of bears. It is not surprising that the game division staff is heavily involved with state, private and federal land controlling agencies in an attempt to develop better land use practices. ■

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