## RESULTS OF 1985 DUSKY CANADA GOOSE PRODUCTION STUDIES

by

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## Abstract

Conditions for nesting were poor on the Copper River Delta in 1985. Cold wet weather delayed spring phenology 2-3 weeks. Nest initiation was the latest recorded since 1971 with peak initiation occurring during May 27-June. While a calculated nest density on the Alaganik Slough study plots of 97 nests per mile was similar to the 1980-84 average of 99 nests per mile, average clutch size and nesting success were the lowest ever recorded. Clutches averaged 4.4 eggs per nest and only 8.9 percent of the nests were successful.

The primary cause of poor nesting success and low production was nest predation. Nearly 80% of the nests were destroyed by predators. Brown bears were responsible for 48 percent of the destruction followed by 21 percent by canids, 18 percent by avian predators, and 12 percent by unknown predators. A survey of more than 13,000 geese in July indicated that the population was comprised of only 3.7 percent young, the lowest ever recorded.

The second year of a 3-year study of the impacts of brown bears on nesting geese was completed in 1985. Preliminary results of this investigation, which is cooperatively funded by the Alaska Department of Fish and Game, Oregon Department of Fish and Wildlife and the USDA Forest Service, indicate that bears move onto the west Copper River Delta from denning areas in the Heney Range and foothills of the Chugach Mountains in early-mid May. Thirty-three to 34 bears were active on the west delta at sometime during the period when geese were nesting in 1984 and 1985. The age composition of 30 of these bears was 60 percent immature (less than 5 yrs. old) and 40 percent adults. Fidelity of marked brown bears to the delta is high and home ranges during the period when geese were nesting averaged about 60 mi in 1984 and 50 mi in 1985.

Distribution of bears on the west delta during May-July is apparently related to age and reproductive condition. Females with cubs and immature bears are generally found within 2-3 miles of the coast while adult, breeding bears are usually active in more inland areas. This distribution is reflected in habitat use. Adult breeding bears were typically observed in inland tall shrub habitat types while females with cubs and immature bears were often observed in coastal shrub and sedge marsh habitat types.

No management recommendations will be made until completion of the study in 1987.

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