## MONITORING, REOCCUPANCY, AND INTER-YEAR MOVEMENTS OF ADULT NORTHERN GOSHAWKS ON THE TONGASS NATIONAL FOREST

Titus, Kimberly, Richard E. Lowell, (Alaska Dep. Fish and Game, Box 240020, Douglas, AK 99824), and Craig J. Flatten, ADF&G, 2030 Sea Level Drive, Ketchikan, AK 99901)

ADF&G and the US Forest Service began cooperative studies of goshawks in 1991 to understand their ecology in an old-growth temperate forest ecosystem. As part of these efforts we have been monitoring goshawk nest sites and nest stands with the aid of radiotelemetry. We have captured 135 goshawks, and a total of 51 adults have been fitted with radiotags to track inter-year movements. Between 1992 and 1998, 9 adult female goshawks moved to different nesting territories (mean = 34km; range 3.2 - 152 km) a total of 11 times and nested with different mates. None of 26 adult male goshawks have moved to a new nesting territory. Results suggest that annual monitoring of nest stands and checking old nest sites for occupancy by goshawks can provide misleading information. Depending on how the monitoring is actually designed, one could conclude that a raptor nesting population is declining simply because of inter-year movements by nesting adults to sites that are unknown. This is especially true for studies in dense forests where complete censuses of all nesting pairs are impossible. Our results also indicate that some home ranges are occupied by non-nesting goshawks, and that some pairs move 2-3 km to different nests between years, while maintaining the same home range as previous years. Hence it would be improper to suggest that these territories are 'unoccupied', based simply on the documented activity status of known nests.

## EIGHTH ALASKA BIRD CONFERENCE

## **BOREAL PARTNERS IN FLIGHT**

## ALASKA CHAPTER OF THE WILDLIFE SOCIETY



28 FEBRUARY - 3 MARCH 2000 SITKA, ALASKA