

DISTRIBUTION AND DENSITY OF THE FOUR COMMON PASSERINES IN WEST GREENLAND

Quantitative analyses of songbird distribution, influence of boulders and depressions of numbers near Peregrine Falcon (*Falco peregrinus*) eyries have not been previously reported for inland west Greenland. In the present study passerine distribution, habitat utilization, density and response to nesting Peregrine Falcons were determined by conducting line transects near eyries and on the open tundra. Passerine distribution is strongly influenced by habitat and presence of boulders. A marked depression in passerine numbers was recorded within 400 m of active peregrine eyries. Densities were estimated as 0.23 - 0.38 birds/ha. Density estimates are lower than those reported from several Arctic areas. — **Meese, Robert J. 1984. M.S. Thesis, Brigham Young University, Provo, Utah.**

A PHENOLOGY OF WINTERING BALD EAGLES IN THE CHILKAT VALLEY, ALASKA

Communal winter feeding and roosting Bald Eagles, (*Haliaeetus leucocephalus alascanus*), between September and March, 1977-78 and 1978-79. During this period 110 censuses were conducted. Twenty-one environmental, population and habitat use variables were quantified; these data were analyzed using bivariate and univariate statistical procedures to ascertain the effects of environmental variation on the population dynamics and habitat use of Bald Eagles wintering in an undisturbed communal roost.

Immigration of Bald Eagles into the Chilkat Valley began the first week of October. The major influxes of eagles occurred between the second week of October and the second week of November. A peak number of 2,578 eagles was recorded in 1977 on 8 November and in 1978 a peak number of 2,254 was recorded on 24 December. Emigration from the area was completed in the last week of March in 1978 and the third week of February in 1979. The percentage of juvenile eagles in the population decreased from the second week of October to March. Eagles were distributed throughout the valley during autumn. In the second week of November they concentrated in the ice-free area where spawned-out salmon were available. Intense feeding activity was significantly correlated with above-freezing temperatures that accompanied severe wind chill conditions froze the salmon carcasses. During these periods the eagles would abandon the feeding areas and utilization of trees for shelter increased significantly. The number of eagles observed decreased by approximately 30% when cold, clear weather persisted, but increased with the return of warmer, overcast weather. — **Waste, Stephen McIntosh. 1985. M.Sc. Thesis, Humboldt State University, Arcata, California. 86 pp.**

BEHAVIOR AND HABITAT USE OF BREEDING NORTHERN HARRIERS IN SOUTHWESTERN IDAHO

Radiotelemetric and visual monitoring of 4 breeding Northern Harrier (*Circus cyaneus*) pairs in predominantly sagebrush (*Artemisia* sp.) habitat of the Snake River Bird of Prey Study Area, Idaho, indicated that harriers used riparian and cultivated habitats disproportionately. Males were observed in an apparent habitat and prey shift, changing from Meadow Voles (*Microtus pennsylvanicus*) in alfalfa (*Medicago sativa*) fields as growth approached 46 cm, to Whip-tailed Lizards (*Cnemidophorus tigris*) in open sagebrush habitat. Home ranges of males were estimated at 15.7 km², while those of females were estimated at 1.13 km². Males were far ranging and were observed at distances of 9.5 km from the nest. Male hunting activities were highest in the second week post-hatching. Most of the time both males and females were observed resting or preening less than 0.5 km from the nest. — **Martin, John W. 1984. M.S. Thesis, Brigham Young University, Provo, Utah.**

RAPTOR INVENTORY AND FERRUGINOUS HAWK BREEDING BIOLOGY IN SOUTHEASTERN OREGON

Raptor inventories were conducted in southeastern Oregon in 1979 and 1980 on extensive study areas, and on randomly selected 10.4-km² study units. Overall raptor densities ranged from 10-23 pair/100 km². Estimates of Golden Eagle (*Aquila chrysaetos*) densities are 2-4 and 4-5 pair/100 km², respectively. An important nesting area for Ferruginous Hawk (*Buteo lagopus*) and Prairie Falcon was discovered near Vale, Oregon. In 1980, 32 nesting pairs of Ferruginous Hawks were located on a 312 km² study area. Clutch size averaged 3.9, and 3.2 young fledged/nesting attempt. This is one of the densest and most productive populations of Ferruginous Hawks ever reported. Ferruginous Hawks nested on the ground, on outcrops and on cliffs. They preyed upon Townsend Ground Squirrel (*Spermophilus townsendii*) almost exclusively. Ground squirrel distribution is related to soil characteristics. Soils with shallow duripans or clay appear to be unfavorable ground squirrel habitats. Vegetation parameters account for 28 percent of the observed variability in ground squirrel hole counts along transects. Crested wheatgrass seedlings are occupied by ground squirrels and are compatible with Ferruginous Hawk management in the study area. The over-riding influence of soil type on ground squirrel distribution suggests that soil maps may be an effective way of locating areas with a high potential for raptor nesting concentrations. A survey of Oregon wildlife biologists determined that 100 active Ferruginous Hawk nests have been identified in Oregon. — **Lardy, Michael Edward. 1980. M.S. Thesis, University of Idaho, Moscow.**