MIGRATION OF RADIO-MARKED WHOOPING CRANES FROM THE ARANSAS-WOOD BUFFALO POPULATION: PATTERNS OF HABITAT USE, BEHAVIOR, AND SURVIVAL

MARSHALL A. HOWE, 1989, U.S. Dept. Interior Fish & Wildlife Ser. Tech. Report 21. 33 pp.

AERIAL RADIO-TRACKING OF WHOOPING CRANES MIGRATING BETWEEN WOOD BUFFALO NATIONAL PARK AND ARANSAS NATIONAL WILDLIFE REFUGE, 1981-1984

E. KYUT, 1992. Canadian Wildlife Service. Occasional Paper 74. 50 pp.

The discovery of the Whooping Crane's breeding grounds in Wood Buffalo National Park in 1954, by a Canadian forester on fire-fighting duty, was an historic event, which triggered a recovery and monitoring program which continues to this date. Since then, diligent surveillance of the Whooping Crane has allowed a gradual population increase, along with ever-increasing knowledge of its life history.

The above-noted publications describe Whooping Crane migration routes from Wood Buffalo National Park (WBNP), Northwest Territories, to Aransas National Wildlife Refuge (ANWR) in Texas during the fall, and the return flight in spring. Both studies monitored radio-transmitted birds over a three-year period.

Both studies emphasize Whooping Crane departure from WBNP between mid-September (non-breeders) and mid-October (family groups). Birds travel alone, as family groups, or as small groups (three-five individuals) of unrelated individuals. In about two days they arrive in central Saskatchewan, and remain for several weeks, feeding on grain crops and roosting in wetlands. Once leaving Saskatchewan the flight to their winter range in ANWR is usually rapid (5 to 15 days). Whooping Cranes rely heavily on favourable northerly winds for the southward journey. In spring, birds depart ANWR on southerly winds between late March (breeders) and mid-April (usually non-breeders). During spring migration Kansas and Nebraska are heavily used states as stop-over sites, while in fall South Dakota, Oklahoma and Texas are heavily used. No specific wetland sites were chosen during migration, and stop-overs appear random, although Saskatchewan accounted for 43% of the crane-use days during fall migration. Wetland sites appear to be picked randomly in most cases, and may account for this bird being overlooked during migration.

All roost sites were associated with, or adjacent to, wetlands and devoid of vegetation, or with vegetation only along the margins. Feeding sites were wheat and barley stubble in Canada and wheat and milo stubble in the United States. Interactions with other species of birds were infrequent, although sometimes Sandhill Cranes foraged or migrated with Whooping Cranes. The maximum number of cranes observed together during migration was seven.

Both studies provide important

information on mortality of Whooping Cranes. Of some 12 deaths of radio-marked birds, six happened at WBNP before fledging, and occurred during two drought years, when wolves had easy access to many breeding territories. Golden Eagles are a potential predator of juvenile cranes, whereas Bald Eagles are not considered a threat. Both studies indicated that most serious losses of migrating Whooping Cranes were due to collisions with power lines.

Prior to the above studies, little was known about the ecology of migrating Whooping Cranes, including habitat use, flight pattern, behaviour and predation. Anyone interested in this magnificent bird, and the future of this endangered species will welcome these two important studies. Every effort should be made to inform the general public that these birds are endangered and protected by federal, provincial and state laws.

Both publications can be obtained by writing (1) Publications Unit, U.S. Fish & Wildlife Service, 18th and C Street N.W., Mail Stop 1111, Arlington Square Building, Room 130, Washington, D. C. 20240, or (2) Publications Department, Canadian Wildlife Service, Environment Canada, Ottawa, Ontario, K1A 0H3.

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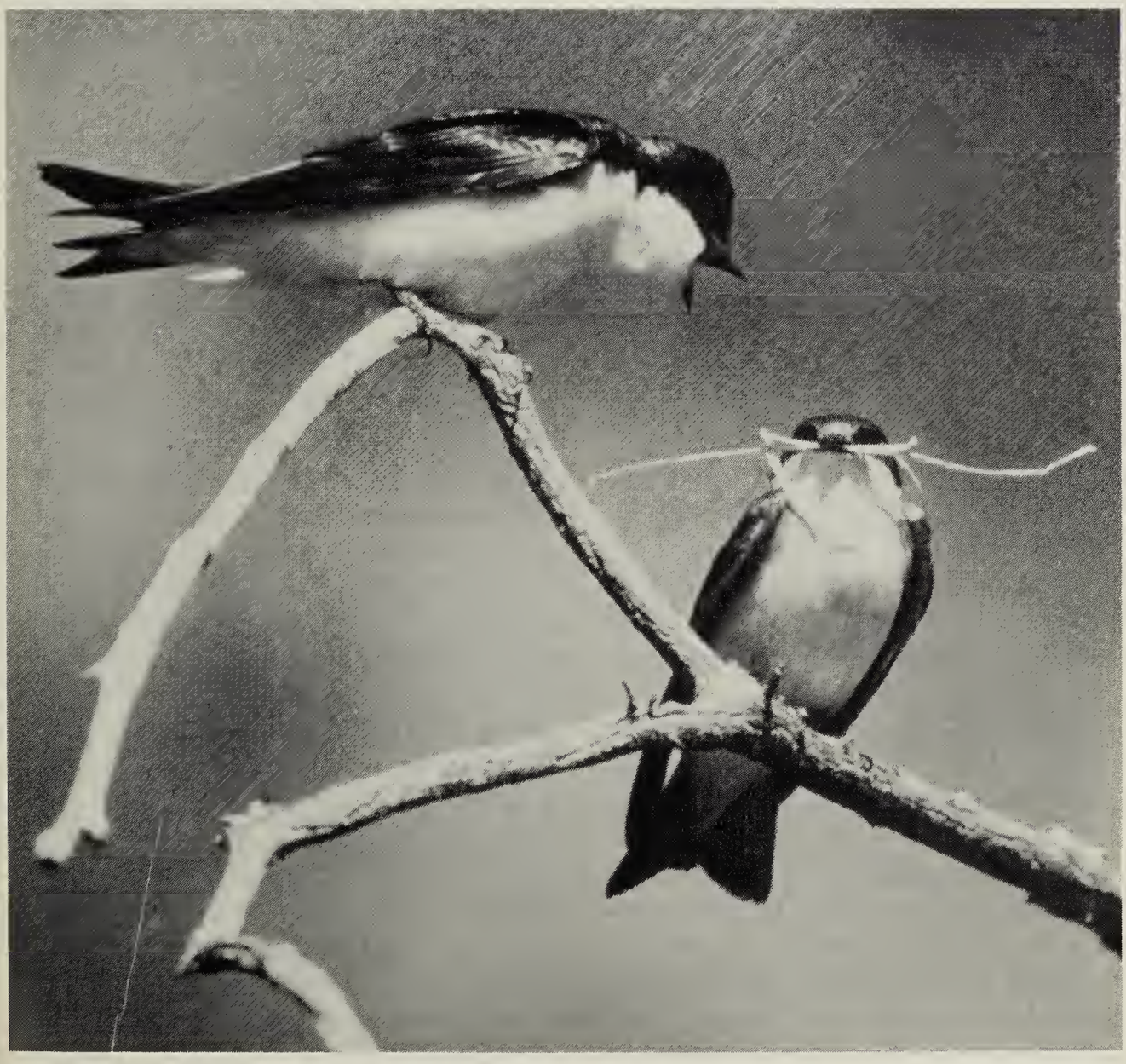

Tree Swallows *Wayne Lynch*