## Banding of juvenile Whooping Cranes on the breeding range in the Northwest Territories, Canada

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Despite the vast attention given the Whooping Crane (Grus americana) in its recovery from near extinction, there is still much to be learned about this magnificent bird.

Colour banding can be a useful technique and sightings of marked cranes eventually will provide needed information about breeding biology, population dynamics, summer location of nonbreeding birds, and location and importance of habitat used during migration.

Techniques for capturing and colour marking of Greater Sandhill Cranes (*Grus canadensis tabida*) and their foster offspring Whooping Cranes have already been successfully devised at Grays Lake National Wildlife Refuge, Idaho (Drewien and Bizeau 1974, 1978).

Colour bands used in this study were provided by the Idaho Cooperative Wildlife Research Unit and the Northern Prairie Wildlife Research Center (U.S. Fish and Wildlife Service), Jamestown, North Dakota.

Bands are made of Lynnply plastic, are 80 mm (3.25 in.) high and have the same diameter as standard No. 9 aluminum bands. Band colours were described earlier (Kuyt, 1978).

Prior to capturing and banding, it is necessary to locate the juvenile whoopers. That is usually not too difficult as the crane families' territories are well known due to previous experience in the area (Kuyt, 1976).

Juvenile Whooping Cranes are captured and banded at about 60-65 days of age and they weigh about 4000-4200 grams (about 9 lbs.). Crane families are located on the day before capture and their locations plotted on aerial photographs. Both a helicopter (four-seat Alouette II) and a fixed wing aircraft (Cessna 185) are used in the actual catching operation: the helicopter transports the catching team, and the fixed wing aircraft crew assists in spotting cranes and in monitoring movements and behavior of cranes. Radio communication is maintained between the two aircraft. After a family with juvenile whooper has been located, the helicopter approaches within 300 metres (depending on terrain conditions) and drops off one catcher, armed with a long-handled net.

Whooping Cranes are reluctant to approach the hovering helicopter and, when the catcher approaches, the adult cranes first run and then fly off. The young bird can often be captured rather easily. In some instances, however, a second catcher has to assist the first one, particularly when the young bird proves to be strong and agile and able to elude the pursuer. Eventually the crane is cornered and the net placed over the bird to subdue it. After the crane has been netted, it is grasped by the tibia, removed from the net, and lifted up so that only the bird's back rests on the ground. The crane then is measured, banded, and weighed. Special precautions are taken to avoid the crane's sharp, strong bill and dangerous toes. Catching young whoopers in this terrain without the use of a helicopter would be practically impossible because the nesting habitat is marshy and difficult to traverse on foot.

On 29 and 30 July 1977, nine young whoopers were banded along the Sass, Klewi, and Nyarling Rivers in northern Wood Buffalo National Park by a team composed of W.J.D. Stephen and E. Kuyt of the Canadian Wildlife Service (CWS) and R.C. Drewien of the Idaho Cooperative Wildlife Research Unit. B.E. Johnson (CWS) directed the fixed wing aircraft. On 8 August 1978 Drewien, Johnson, and Kuyt, assisted by E. Broughton (CWS) on the catching team, banded eight young whoopers in the same area as in 1977.

Although the banding program is only in its infancy, it already has begun to pay dividends. Several sightings of banded birds were made in Saskatchewan and in states in the central flyway. All but one of the banded young wintered safely on Aransas National Wildlife Refuge. The missing young bird was observed in Kansas the following spring, obviously having wintered in an area other than Aransas.

During the summer of 1978 we re-sighted seven of nine Whooping Cranes banded as juveniles in 1977. The birds were observed in a 14 km by 5 km area between the Sass and Klewi rivers near the principal Whooping Crane nesting range. The habitat utilized by the yearlings is an area where I have frequently seen whoopers but where I have found only two or three nests from 1969-1970. Now we know what we have long suspected, that this area is chiefly used by non-breeding birds, and the summer location of yearling whoopers is a secret no longer. It is expected that the continuation of the colour marking project will enable us to learn additional interesting and essential facts about the biology of this great white bird, needed in the fight to safeguard its future.

## Literature cited

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