## The Triumph of the Other Egg

The whooping crane's name derives from the bugle-like note it sounds when, among other times, it is warning other cranes away from its nesting turf.

Whoopers were never as plentiful as pigeons, or even as sandhill cranes, their only North American cousins. By 1850 there were probably only 1,500, nesting over a wide area from the southern end of Lake Michigan to the Peace River country of Alberta. A few ventured up the Mackenzie River to the Arctic. They all wintered at the southern end of the continent, ranging from northern Mexico, through Texas, to the Louisiana coast.

Some were shot by hunters: they are among the most conspicuous and beautiful of birds — white with long necks, dark pointed bills, long thin black legs and caps of crimson, standing four and a half feet tall with a wingspan of six feet or more. However, it was not the hunters who were most responsible for their decline, but the farmers, the homesteaders and even, to a considerable degree, the egg collectors. Each nesting pair requires over 400 acres of shallow water or marsh, with sedges, grasses, bulrushes and abundant water animals and insects. As man moved in, the whooping crane moved out.

Since 1922, when a single pair was spotted near Davidson, Saskatchewan, none have been found nesting near towns or farms.

Efforts to protect the dwindling species were underway in 1937 when their southern wintering area in Texas was declared a refuge, but no really effective steps could be taken until their northern nesting place was found.

By 1941 there were only 21 left in the world and few whoops were ever heard by human ears. Fifteen wintered in the Aransas National Wildlife Refuge on the Texas Gulf Coast. The six who lived in Louisiana year round vanished by 1950. In 1954 G. M. Wilson and J. D. Landells - a scientist and a forester who were flying equipment to a forest fire spotted an adult pair with a young bird south of Great Slave Lake. The next year a ground party found the flock's full nesting area near Fort Smith in Wood Buffalo National Park, north of Alberta. The cranes were watched, counted and worried about. By 1956 the number had risen to 27, three of them in captivity. In 1967 the Canadian Wildlife Service and the US Bureau of Fisheries and Wildlife decided to hatch eggs artificially at Patuxent, Maryland. Nesting cranes usually produced two eggs but had difficulty finding enough food to keep two chicks alive. The Patuxent theory was that if one egg were removed and incubated artificially, the remaining egg would still be hatched by the parents and both chicks would have a better chance of survival. It proved correct. Six eggs were removed from Wood Buffalo Park in 1967, ten more in 1968 and ten in 1969. By 1970 the captive flock totalled 22. By 1971 the total was 59, but the flock was still in danger; a single violent storm could kill them all. In Wood Buffalo Park, more young reached maturity in years when one egg was removed from each nest than in years when both were left.

The Patuxent experiment had only limited success; the captive birds remained captive and did not breed. There was no clear way to convert them into wild birds following natural nesting and migrating patterns.

In 1973 two new plans were conceived.

Patuxent added an animal behaviourist to its staff. He separated the captive whoopers into what he hoped would be compatible pairs. Each pair had its own quarters where artificial light lengthened the day to 22 hours — like that in Wood Buffalo National Park. The cranes courted, but did not mate. Artificial insemination provided the first fertile eggs in 1975. In 1978, one captive female laid ten eggs; another, nine.

The second plan was even more daring; it made sandhill cranes foster parents of whoopers. The sandhill cranes are relatively plentiful. A large flock nests in Grays Lake National Wildlife Refuge in Idaho. In May 1975 Ernst Kuyt, of the Canadian Wildlife Service, and Dr. Elwood Bizeau, of the Idaho Cooperative Wildlife Unit, collected eggs, as usual, at Fort Smith.

The process is slow and careful. Collectors fly in by helicopter, the noise frightening the nesting whoopers who leave their nests. The helicopter lands in the marsh, and the visitors take one of the two light olive-green and brown speckled eggs. If

Whoopers whoop for a variety of reasons. One is to announce their territorial nesting rights to intruders; another, to attract each other at mating time.

