OSPREY EGG TRANSPLANT PROGRAM A SUCCESS

By

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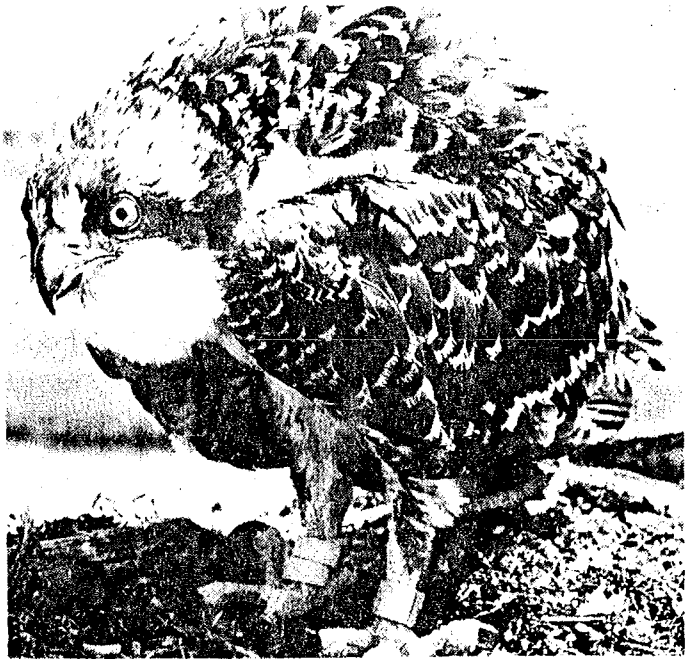
← *During April, helicopter surveillance was made of the active osprey nests on Barnegat Bay through the courtesy of the Ocean County Mosquito Commission. Five osprey nests were located and on May 2, biologists with the Nongame Section flew to Maryland and brought back 16 Maryland eggs which were transplanted in the five active New Jersey nests. Pete McLain holding up two young ospreys.*

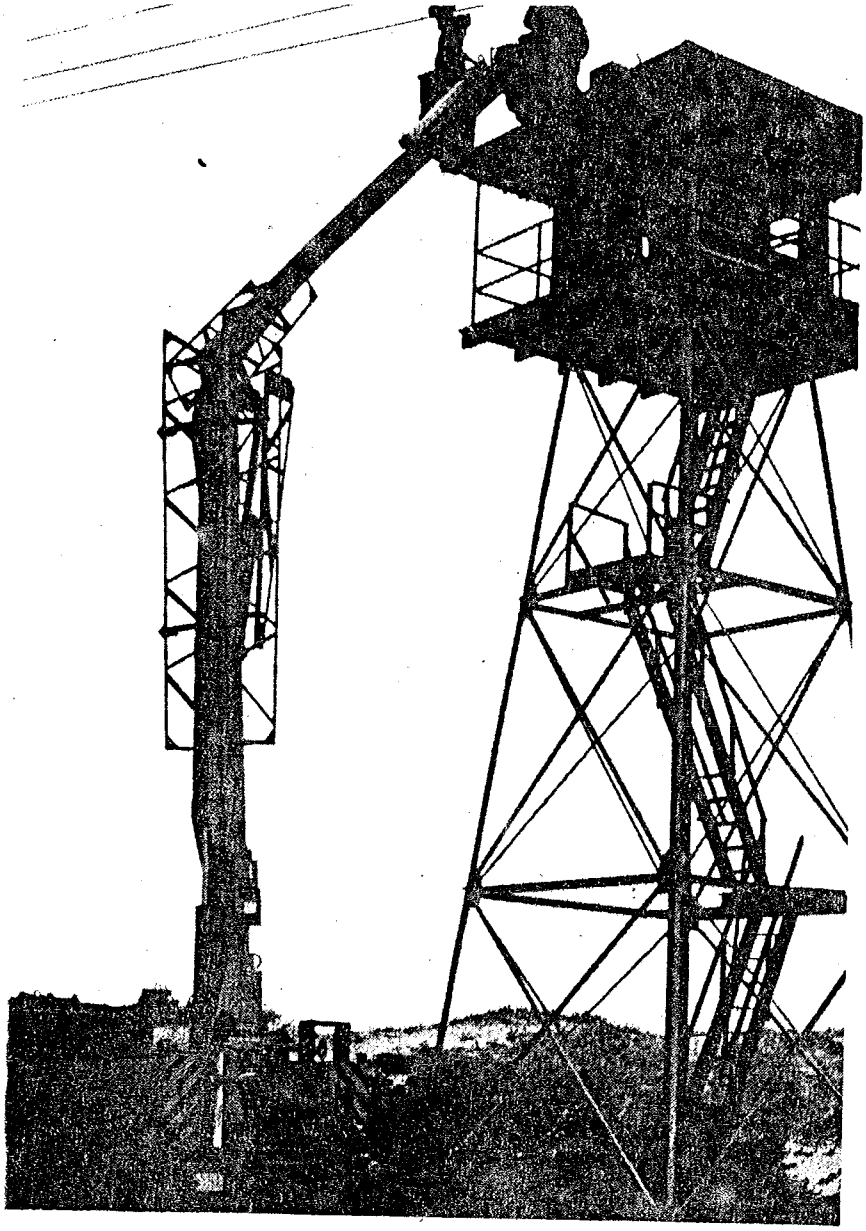
Ospreys may have a new lease on life along the Jersey shore due to the work of the New Jersey Division of Fish, Game and Shellfisheries Endangered and Nongame Species Project. The osprey, locally called "fish-hawk," has shown a marked decline during the past ten years and been declared an Endangered Species in New Jersey. At Island Beach State Park in Ocean County, where six years ago a total of 12 osprey nests were counted, only one was present in 1974. The same is true all along the north and central Jersey coast where presently only a remnant of nesting ospreys remain. At Sandy Hook Gateway National Recreation Area, only three young were produced in five nests in 1974.

The cause of the decline of the Jersey osprey is thought to be the heavy use of pesticides for mosquito control in the 1950's and early 1960's. The osprey, being at the top of the food chain and feeding extensively on fish which had accumulated DDT and other pesticides in their bodies, absorbed enough poison to

Day-old ospreys. A total of 12 of the 16 Maryland eggs transplanted hatched in New Jersey nests.



One of the four Maryland hatched ospreys ready to leave the nest. All young ospreys were banded with Fish and Wildlife Service bands and color bands for later identification.



A "cherry picker" supplied by the New Jersey Central Power and Light Company was used to transplant the osprey eggs into the only nest at Island Beach State Park.

Photos supplied by authors

Jim Collis of WNBC Television, New York, making one of the two nationally televised television programs of the New Jersey Osprey Egg Transplant.

render them infertile. As a result the ospreys produced thin-shelled eggs which would not stand incubation.

The New Jersey Endangered and Nongame Species Project became operational in January, 1974, as a result of Assembly Bill A-2151 which made $100,000 available for endangered and nongame projects management. One of the first jobs was an April aerial inventory of the osprey population from Toms River to Atlantic City.

The survey showed only five active nests where ten years ago there had been over fifty. To try and combat the infertile eggs problem, the biologists on the Endangered Species Project contacted Administrator Ralph Bitely of the Maryland Department of Natural Resources. Then, working with Bud Halla of the Maryland Nongame Project, our biologists located five osprey nests in the Chesapeake Bay near Crisfield.

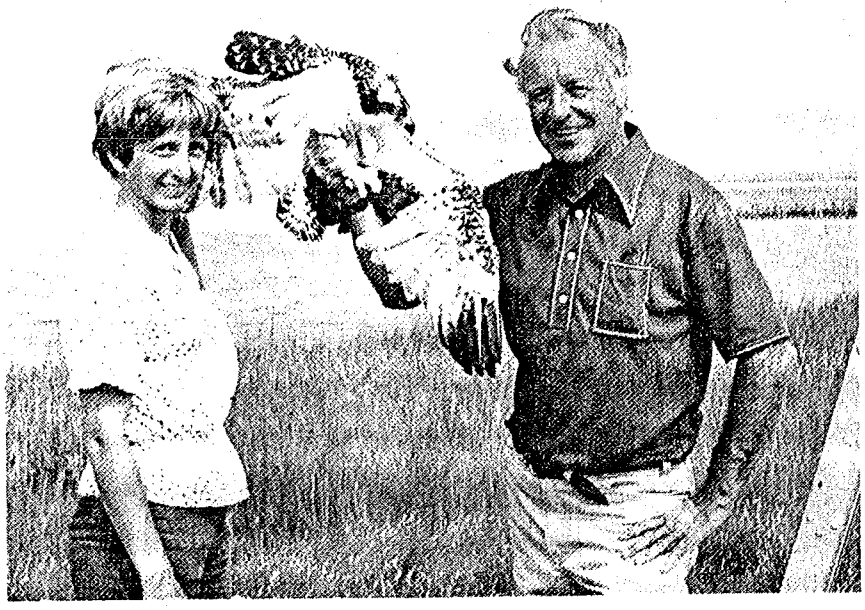
After all local arrangements were finalized, the New Jersey biologists flew to Maryland, removed 16 eggs from the Maryland nests, returned them to Barnegat Bay and transplanted them into five active Jersey nests. The eggs that were replaced in the five New Jersey nests were taken to the Edward Roth Quail Farm for incubation in the event that some might be fertile.

Then the five nests were observed bi-weekly by a helicopter supplied by the Ocean County Mosquito Control Commission. The first Maryland osprey eggs hatched on May 22, and by May 30th, a total of 12 of the 16 eggs transplanted from Maryland had hatched. One nest was deserted by the adults when human interference frightened the birds during the late stage of incubation.

During the interval of May 23 to July 10, a total of eight of the young birds died. Two day-old chicks were lost at hatching. Three were lost to the suspected predation of a great horned owl. Three were lost when the adults deserted the nest for unknown reasons when the young birds were half grown. However, by mid-July, a total of four young ospreys had fledged. These birds were banded with standard Fish and Wildlife Service bands and also with green plastic color bands which will enable us to identify the birds at a distance.

Although no young ospreys were produced on Barnegat Bay in 1973, this year we fledged four young. Next year, armed with information and experience gained from our Maryland-New Jersey egg transplant, we hope to expand the program to Sandy Hook and farther south along the coast.

It's possible that by catching the remaining osprey nests in New Jersey early enough and by conducting an egg transplant, we may be able to develop a strain of resident ospreys which are free from pesticide residues. Since DDT has not been used on the New Jersey wetlands for the past six years, it may not be a threat to the young ospreys produced from the transplant program. Hopefully, the osprey in New Jersey will gradually start to increase in numbers and eventually be removed from the Endangered Species List. □



Pete McLain, project leader, and Teddy Schubert, a conservation officer on the Endangered and Nongame Project with one of the young ospreys.