Ospreys: A Sad Past, A Bright Future

by Candace E. Cornell We Almost Lost Them

The North American Osprey, Bald Eagle, and Peregrine Falcon became poster-children for DDT poisoning in the 1940-70s when such organochlorides and other persistent pesticides almost wiped them out. DDT was sprayed on coastal marshes during the 1940-60s in an effort to kill mosquitoes. Once these poisons entered the aquatic food chain, they eventually worked their way up to contaminate fish, the mainstay of the osprey. These poisons accumulated in the ospreys, causing their eggshells to thin to the point of cracking and ruining the eggs. Whole osprey populations across the US and Canada became extinct and the species nearly died out in North America. About 90%



of the pairs nesting along the coast between New York City and Boston, for example, disappeared during this period. Ospreys became locally extinct in areas where they had flourished. Thanks to Rachel Carson's *Silent Spring* and other environmental activists, scientific data was presented on the osprey's decline, and the courts blocked the use of persistent pesticides.

They Are Coming Back!

After the ban on DDT and its relatives, these toxins gradually lessened in aquatic food chains and the remaining ospreys responded. To reintroduce osprey to an area of former abundance, hacking programs were established to assist the osprey's comeback. Wildlife biologists removed eggs of healthy adult birds from regions that had been spared the toxic spraying and placed them in nests of birds that had been unsuccessful in incubating their eggs. These adults raised these adoptees as their own. The juveniles imprinted to the region in which they were raised and thus established new colonies of healthy birds.

Eleven states, including New York, started hacking programs where they imported young ospreys from areas with low toxicity and stable populations. During 1980-87, thirty-seven chicks were hacked at Allegheny Reservoir in Cattaraugus County and thirty-one were released at Oak Orchard Wildlife Management Area in Genesee County. These birds originated in Long Island. There is a chance that the ospreys at Salt Point are descended from these released birds.

In addition to hacking, artificial osprey nest platforms have been erected across the state providing nesting sites where natural ones—tall snags or live trees with open tops—are nonexistent. Since these measures, osprey populations have rebounded in recent decades, though they remain scarce in a few places where fish populations have crashed. The fact that ospreys have returned and are now flourishing is due to their resilience, adaptability, and high tolerance of humans as well as the hands-on work of many dedicated wildlife agency workers, talented osprey researchers, and hard-working volunteers.

The Future

"Overall, ospreys are booming -- maybe not quite on the scale of kudzu or phragmites or Toyota, but if they were a stock on the New York Exchange, they'd be a "buy," says osprey expert Alan Poole,* from the Cornell Lab of Ornithology. "In 2002, there were close to 20,000 breeding pairs in the US and at least half that number in Canada."

By 2014, many U.S. and Canadian populations will approach historical numbers, boosted by a cleaner aquatic environment and increasingly available artificial nest sites—especially the proliferation of osprey platforms.