## Osprey (Pandion haliaetus)

The osprey is the one of the most widespread birds of prey, occurring on every continent except Antarctica. They are generally dark brown on the back and wings with contrasting white underparts. The whitish head includes a dark stripe through each eye and a black, distinctly hooked beak.

The female is typically larger than the male and often displays a necklace of darker feathers across the breast. Juvenile osprey are similar to the adults, but have white edging on back and wing feathers creating speckled appearance which wears off by their second year. As juvenile osprey mature, their eye color changes from orange-red to yellow. Adult osprey have a wing span of about 6 feet. Osprey life span is typically about 10 years. The oldest known bird in the wild lived to 25.

The osprey is unique among North American raptors for its nearly exclusive diet of live fish and ability to dive into water to catch them by using their long, hooked talons. The osprey exhibits several additional adaptations for catching fish, including dense, oily plumage designed to shed water, oversized feet with barbed pads on the soles, a reversible outer toe that helps with carrying fish through the air, and nostrils that close and eyes that see under water.

Osprey are excellent anglers, typically catching fish on at least 1 in every 4 dives.

In North America, osprey nest along the coasts and large inland

lakes. Osprey overwinter from Florida to Central and South America with many New England birds known to winter within the Amazon Rain Forest of Brazil. In Rhode Island, osprey typically arrive from wintering grounds in late March to early April with pairs forming at the large stick nests following a dramatic courtship display.

Osprey often build nests on manmade structures, such as telephone poles, channel markers, and nest platforms designed especially for it. They require nest sites in open surroundings for easy approach, sturdy base to support the weight of the large nests and safety from ground predators (such as raccoons).





Adult male with dark back and wings, whitish head includes a dark stripe through each eye and a black, distinctly hooked beak and yellow eyes. Photo credit Jay McGowan/Macaulay Library, Cornell Lab of Ornithology



Adult female in flight with white belly and underwings contrasting with dark wrist patches and barred flight feathers, darker necklace across breast. Photo credit Kris Perlberg/Macaulay Library at the Cornell Lab of Ornithology

Osprey typically lay 2 to 4 eggs in April or May. The female incubates them for about a month with the male bringing food back to the nest.

After fledging, the young remain with their parents for up to two months before instinctively migrating on their own to wintering grounds. Young birds will remain there for two to three years until they return north to make their first attempt at breeding. Adult osprey return not only to their same breeding area each year, but also to their same wintering grounds.

Osprey are a true conservation success story. By the end of the 1960s, nest sites in Rhode Island declined to an estimated 8 active

nests. This was caused by the wide-spread use of a pesticide (DDT) which resulted in egg shells being too thin to successfully hatch. Following the ban of DDT in 1972, osprey began a slow recovery.

RI Audubon Society reported 156 active nests with 239 fledged young osprey by 2015. Sadly, a growing cause of death for osprey is entanglement with discarded fishing line.



When carrying their prey back to the nest, osprey arrange the fish so that it is facing upright, head forward for less wind resistance. Photo credit George DeCamp

## Sources

http://www.dem.ri.gov/programs/bnatres/fishwild/swap/birdprof.pdf https://www.allaboutbirds.org http://www.arkive.org http://identify.whatbird.com



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