

## Osprey Life History

Ospreys (*Pandion haliaetus*) are large, specialized raptors known for a global distribution and a diet consisting almost exclusively of live fish caught by plunging feet-first into water. They are renowned for their, often life-long, monogamous pairings, building large, elevated, and annually reused nests of sticks near water bodies. Following a severe decline from 1950s–70s pesticides, they have recovered significantly, with average lifespans of 15–20 years (up to 25–29 years).

### Breeding and Lifespan

- **Reproduction:** Ospreys reach sexual maturity at 3 years. They breed March to September in temperate to sub-arctic latitudes.
- **Nesting:** Pairs build large, bulky, and frequently repaired stick nests, often on man-made structures like utility poles, channel markers, duck blinds and nest platforms especially designed for it, or high, dead trees near water. Man-made nest platforms have become an important tool in reestablishing Ospreys in areas where they have disappeared.
- **Eggs & Care:** Females lay 1–4, typically 3, eggs, which are incubated for roughly 32–35 days by both parents. Osprey eggs do not hatch all at once, but rather, the first chick emerges up to five days before the last one.
- **Development:** Chicks hatch helpless, fledge in about 8 weeks, and depend on parents for another 2 months, during which they learn to hunt.
- **Lifespan:** Average in the wild is 15–20 years, though some have lived to over 25 years. The oldest known Osprey was over 25 years old and lived in Virginia. It was banded in 1973 and found in 1998.

### Migration and Habitat

- **Range:** Found on every continent except Antarctica.
- **Habitats:** Coastal areas, lakes, and rivers.
- **Migration:** Northern populations migrate thousands of miles to Central and South America in October, returning to nesting grounds in mid-March. An Osprey may log more than 160,000 migration miles during its 15-to-20 year lifetime.

### Hunting and Diet

- **Diet:** They eat over 80 species of fish, hunting from 50 to 200 feet in the air, diving feet-first and often submerging completely. Over several studies, Osprey caught fish on at least 1 in every 4 dives, with success rates sometimes as high as 70 percent.
- **Adaptations:** Ospreys are excellent anglers. They have a reversible front toe and spicules (barbs) on their feet to hold slippery fish, which they carry head-forward for better aerodynamics.

### **Conservation and Threats**

- **Recovery:** Populations decimated by DDT in the 1960s-70s have rebounded significantly following bans, becoming a major conservation success.
- **Threats:** Today, they face hazards from entangling nests in discarded baling twine or plastic, habitat loss, and competition with larger predators like bald eagles.

Source: All About Birds/Cornell Lab