

The Emma Osprey Cam

In the fall of 2015, Pitkin County Open Space and Trails partnered with Aspen Center for Environmental Studies, the Pitkin County Healthy Rivers and Streams Board, Pitkin County Information Technology and Holy Cross Energy to install a wildlife camera on a pole adjacent to an active



Osprey nest. The nest, located in Emma, Colorado, sits on a platform between Highway 82 and the Roaring Fork River in a riparian ecosystem. The camera saw its first use in 2016 and was replaced in the spring of 2018 with a new and better version. The camera streams live footage each spring and summer season, capturing the real-time activities of a pair of nesting Ospreys that return to this nest each year to breed.

The nest platform was installed in 2010 after a pair of Osprey began nest-building activities on a nearby Holy Cross Energy utility pole. No young birds were reared that year, but the Osprey pair's return in 2011 was anticipated, so action to move the nest out of harm's way took place in late 2010, after the birds had departed for the winter.

Since an Osprey nest and high-voltage electrical lines are not compatible, the nest and the crossbeams it was built on were transferred to a "safe pole" located about 40 feet away that was already in place. Pitkin County and Holy Cross Energy worked together to come to this solution, a safe option for both birds and humans. Since 2011, the pair of Osprey have returned each year to the relocated nest. One or two young Ospreys have fledged from this nest in most years since then, though three chicks fledged in 2019. Of the breeding pair, the female is the larger bird, with lighter, frosted coloring on the tips of her feathers. (She's on the right in the photo above). The male, is smaller, sleeker and darker in color.

Ospreys often choose nesting sites near where they were hatched. This means some of the other Ospreys in the Roaring Fork Valley may be related to, or are offspring, of the Emma pair.

Share your observations!

New in 2020, citizens who watch the goings-on at the Emma Osprey nest are invited to submit their observations for the cause of science. Observers of the Emma nest are invited to report fish counts and fish species via a form that can be accessed by clicking [Share Your Observations](#). The data collected at Emma, along with data from other nest sites in the U.S. and overseas, will be compiled for a manuscript for *The Journal of Raptor Research*. The aim of this project, led by a William and Mary graduate student, is to establish citizen science and nest cameras as valid and substantial tools for the scientific and educational communities.

Nature takes its course

This is a wild Osprey nest; there is no human intervention. Great Horned Owls, Golden Eagles and Bald Eagles thrive in this area, and are known to prey upon both juvenile and adult Ospreys. Other Ospreys have also been observed harassing the breeding

pair in Emma. Predation, sibling competition and natural disturbances may affect the inhabitants of this nest and some viewers may find that type of activity difficult to watch.

General Osprey Information

Ospreys, commonly seen flying above shallow inland waterways or near the sea, are one of the few birds of prey that subsist almost exclusively on fish. Most Ospreys are migratory, traveling from northern breeding grounds to winter locales near tropical lakes, rivers, seashores and coral reefs. Ospreys have some of the widest habitat range of any raptor species and can be found on every continent except for Antarctica. Osprey populations have rebounded significantly following the ban on the pesticide DDT, representing one of the most successful environmental conservation stories in North American history.

Ospreys usually mate for life and nesting pairs return to the same nest every year to lay eggs. Some Osprey nests span many generations and can be over 70 years old. Ospreys typically situate their nests close to shallow bodies of water, often atop snags (standing dead trees) or man-made structures like telephone poles or platforms constructed specifically for Osprey nests.

Osprey eggs have an incubation period of about 5 weeks. New hatchling(s) typically have their first flight after 8 to 10 weeks of living in the nest. While the female is carrying and sitting on the eggs, the male Osprey may catch fish and bring them to the female.

FAQs

What do Ospreys eat?

Ospreys are one of the few raptor species known to eat a diet almost exclusively of fish, often performing a shallow dive to catch them. For this reason, Ospreys nest in close proximity to shallow waters, including lakes, rivers, reservoirs, swamps and marshlands.

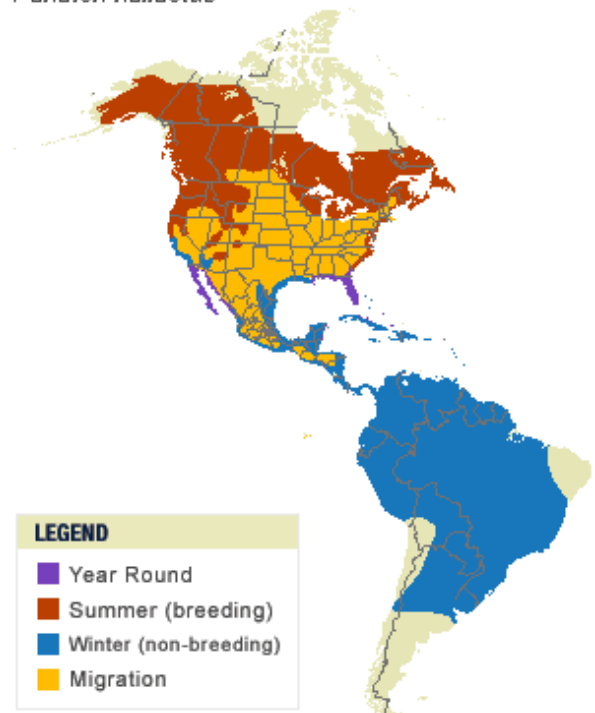
Do Ospreys migrate? If so, where do they go?

Ospreys are extremely long-distance migrants that breed in North America and migrate to Central and South America each winter. An Osprey may travel more than 160,000 migration miles during its lifetime. During a mere 13 days in 2008, one Osprey flew 2,700 miles - from Martha's Vineyard, Massachusetts, to French Guiana, South America (Cornell Lab of Ornithology).

Are Ospreys endangered?

Ospreys are listed as a species of "Least Concern" by the International Union for Conservation of Nature and are now considered one of the quintessential success stories of the conservation movement. Osprey population numbers crashed in the 1960s and '70s, when pesticides like DDT bio-accumulated in individual birds and thinned their eggshells, causing startling rates of mortality. Along certain portions of the Eastern U.S. coast, for example, nearly 90 percent of breeding pairs suddenly

Osprey
Pandion haliaetus



Map by Cornell Lab of Ornithology
Range data by NatureServe

disappeared. The species' dramatic decline was halted by pesticide bans throughout the U.S. and the construction of artificial nests in wetlands countrywide. Overall, according to the North American Breeding Bird Survey, their populations grew by 2.5 percent per year from 1966 to 2014.

Do Ospreys mate for life?

Yes! However, when Ospreys migrate, they migrate as individuals. Rarely do both the male and female of a mating pair spend their winter in the same place. When the Ospreys migrate north for the spring breeding season, they each find their way back to the same nest.

Do Ospreys return to the same nest site every year?

Yes.

When will Ospreys lay their eggs?

In Colorado, a female will usually lay her eggs in mid-to-late April.

How many eggs does a female Osprey lay in a season?

Typically, an Osprey female will lay two to four eggs during the breeding season.

How long do Osprey eggs need to be incubated?

Incubation lasts 36 to 42 days before the eggs hatch. The female will spend most of this time on the nest keeping the eggs warm during incubation, with the male taking over occasionally. The eggs will then hatch within a few days of each other.

How long does it take for Osprey hatchlings to fledge (leave the nest)?

Hatchlings will stay in the nest for 50 to 55 days before fledging.

Do the Osprey chicks compete with one another?

Sometimes. Osprey eggs are laid a few days apart from each other, and the oldest eggs hatch first. The chicks grow quickly, meaning that the youngest chick can weigh 25 to 30 percent less than the oldest chick by the time it hatches. When food is scarce, the older chicks may peck at or push the younger chicks to get the food they need to survive. Although this may seem harsh to humans, it makes it possible for the Ospreys to have one or two strong offspring rather than three or four weak offspring that may not survive. When food is abundant, this competition is not necessary, and the Ospreys may raise up to four healthy chicks.

What are some of the natural dangers to Osprey chicks?

Food scarcity can lead to competition among the chicks in the nest, and predators such as owls and raccoons may raid the nest while the parent Ospreys are out fishing.

How long do Ospreys live?

Ospreys have been known to live 25 years.