



Greenbelt Osprey Program **Osprey Nest Monitoring Guidelines** Updated 2025

Here are the guidelines for volunteering to be a member of Greenbelt's Osprey Monitoring Program! Below you will find methodology explained, tips, and other informational facts about Ospreys. Be safe and have fun! We hope your experience is personally fulfilling and educational. The data the Osprey Monitoring Program collects will provide Greenbelt valuable information for our Osprey conservation efforts and specifically help us understand Osprey abundance, distribution and overall recovery in Essex County.



About Greenbelt

Essex County Greenbelt is a non-profit land trust that works to conserve the farmland, wildlife habitat and scenic landscapes within the 34 communities of Essex County, MA. Since 1961, Greenbelt has conserved over 20,000 acres of land and has been directly involved in protecting 75% of the acreage conserved in the last decade. Through active land conservation initiatives and multi-platform public outreach, Greenbelt continues to build a community of conservation and stewardship throughout the region.

About Greenbelt's Osprey Program

Greenbelt's Osprey Program is an engaging, multi-faceted program, involving managing, monitoring, and researching Ospreys around Essex County. The Program consists of installing nesting platforms, streaming live video from our Cox Reservation OspreyCam, monitoring nesting activity with our volunteer Osprey Monitoring Program, and working with a leading Osprey researcher to monitor migration behavior of a couple of the Ospreys nesting in Essex County. Greenbelt hopes these efforts will educate, excite, and engage the public on Ospreys and assist with the recovery of Ospreys in Essex County.

Monitoring Guidelines

Please visit your nest at least once a week for 15 minutes and enter data to the online form on our website (<https://www.ecga.org/conservation/osprey/monitoring-sightings>). Taking notes in the field can be useful when you enter data online after your visit. If you snap a great photo that you want to share, email them to dwr@ecga.org with the date taken, a caption, and name to credit and we will share them on Facebook.

What to bring:

- Binoculars and/or spotting scope
- A notebook
- Pen/pencil
- Camera (optional)

Monitoring Tips:

- **Setting Up For Monitoring:** Your first few visits will give you a chance to familiarize yourself with the area and get a good feeling for one or two good monitoring locations. In most instances, you will have no choice but to remain a safe distance from the nest but should you be able to approach more closely to the nest, then approach the nest slowly and quietly and keep a good observation distance. Some Osprey's spook easily. If your presence causes Ospreys to leave the nest, increase your observation distance. An unattended nest could endanger eggs or chicks.
- **Avoid monitoring in inclement weather.** These conditions can be stressful to birds if your presence forces them off the nest. Use your judgment.
- **Osprey Behavior:**
 - Males do most of the nest building, although the female will help arrange materials on the nest. Once eggs are laid, the female does almost all the incubating unless she is feeding.
 - The male hunts for both birds during incubation and chick rearing.
 - The female does most of the chick feeding, but eventually the chicks will feed themselves.
 - If you have distinctly marked individuals (see identification info below), you may be able to differentiate the male and female based on these behaviors.
 - Adult females are generally larger than adult males.

- **Confirming Eggs/Chicks:**

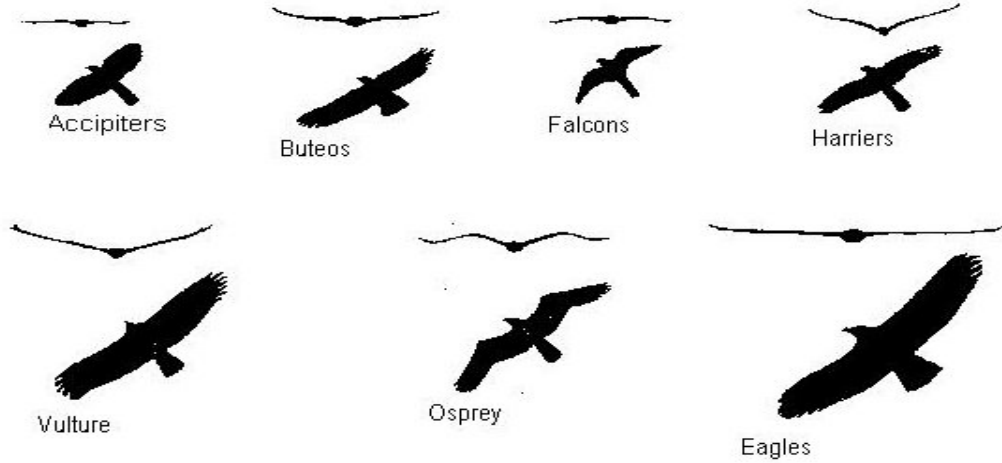
- Because you will be below the level of the nest, you will not be able to see the eggs, but will most likely be able to tell there are eggs when a bird (usually the female) is sitting very stationary in the nest incubating.
- Eggs will hatch approximately 35-40 days after being laid, but not all eggs will necessarily hatch at the same time because they are laid every other day. It may take 4-5 days for all eggs to hatch.
- If eggs do hatch, you will notice the adult osprey will become more active. The female will stand up and sit down a lot more and be noticeably feeding chicks. The male will bring in food more frequently, especially as the chicks grow larger.
- Eventually the chicks will grow large enough to become clearly visible in the nest, often standing on the rim of the nest. At 5-6 weeks old, the chicks will start flapping their wings.
- Once the chicks fledge, they will start flying around the nest but will remain at the nest with the adults for 2-3 weeks in most cases, still being fed by the adults but also improving their flying skills and learning to hunt for themselves.

Identification:



- Wingspan of up to six feet
- Approximately 2 feet long
- Plumage is mostly dark brown on top and white underneath
- Black, sharply curved bill

- White crown and head, with a dark band extending back from its eyes
- Yellow eyes
- Female larger than male
- Female has speckled brown necklace across upper chest.
- 4 toes with long black talons



Habitat:

- Nests are made of branches, shoreline debris, and other organic (and sometimes inorganic) materials. Nests are naturally located near water on live trees and dead snags, but are in our region north of Boston, nests are exclusively found on manmade structures like nesting platforms, duck blinds and camps and utility poles.

Feeding:

- Feed on primarily on medium sized fish; sometimes on birds like waterfowl.
- Hunt by flying high above water to search for fish. Once prey is spotted, osprey will hover beating its wings, then quickly dive down and sink its talons into the water and into the fish.
- Once in the air, the osprey will position the fish so it's facing forward, allowing for it to be more aerodynamic for transport back to the nest.



Life Cycle:

- Begin mating at 3-5 years old and usually keep the same mate for life.
- Pairs will return repeatedly to same nest.
- Young often return each year to the same area they were born.

Breeding Cycle – New England

- MARCH/APRIL-Experienced birds return to nests in late March. Males arrive before females. Courtship and nest building or repair begins when pair is reunited after migration. Less experienced birds arrive later and can spend several weeks locating a mate and a nest site.
- APRIL/MAY-Eggs, usually three, are laid between mid-April late May and incubated for approximately 40 days. Eggs do not hatch all at the same time. Sometimes oldest chick dominates and can cause the other chicks to starve to death.
- JUNE-Nestlings are brooded and fed fish for approximately 40 days after they hatch. They begin to resemble adults, but have orange eyes rather than yellow.
- JULY-The young begin to fly approximately 55 days after hatching and stay with their families through July while they learn to fish.
- AUGUST/SEPTEMBER-Birds begin to migrate south, usually to South America, in late August early September.

