

Audubon Society of Rhode Island



Osprey Monitoring Guide

Protecting Osprey Populations Through Volunteer Efforts

Audubon Society of Rhode Island

12 Sanderson Road Smithfield, RI 02917 Tel: 401-949-5454 Fax: 401-949-5788 Connecting People With Nature

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Connecting People With Nature



Dear Dedicated Volunteer,

Welcome to the Rhode Island Osprey Monitoring Program! For over three decades, Rhode Island has been monitoring the success of its Osprey population. Although once threatened, due to continued conservation efforts and volunteers like you, this magnificent bird is abundant once more. Thank you for your participation!

Our goal is to ensure you find monitoring personally fulfilling and educational. In this manual, you will find general information about Ospreys and their recent fight for survival. We provide you with our monitoring guidelines, sample data sheet, and tips for a more enjoyable experience for you and the Ospreys.

Please take the time to read through this manual. If you have further questions, please feel free to contact me. Again, we would like to thank you for joining a long history of Osprey monitoring, and we look forward to hearing about your experience.

Sincerely,

Jon Scoones Volunteer Director 401-949-5454 x3044 jscoones@asri.org

Introduction

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The osprey is one of North America's most magnificent birds of prey and has long been admired by naturalists. John James Audubon eloquently captured the mystique of the Osprey in *Birds of North America*: "The habits of this famed bird differ so materially from those of almost all others of its tribe, that an accurate description of them cannot fail to be interesting to the student of nature."

In the 1950's-60's, the Osprey's population began to decline because of the use of pesticides like DDT. DDT accumulates up the food chain, eventually reaching birds of prey. In birds, DDT causes thin eggshells resulting in breakage during incubation and nest failure. In the 1940's, breeding surveys estimated ~1000 nests between New York and Boston. By the end of the 60's, nest sites declined by 98.5% to 150 active nests.

In 1972, the Federal Government banned DDT, and then in 1976, the Osprey was listed as an Endangered Species by the U.S. Fish and Wildlife Service. Since then, the Osprey has begun to recover and was upgraded to "Threatened" in 1982 and "Special Concern" in 1999.

Introduction

In 1977, the Rhode Island Department of Environmental Management (RIDEM) began monitoring the state's osprey population as it recovered from the effects of DDT. Staff biologists and volunteers observed all known nests in Rhode Island and recorded how many chicks fledged each year. In 2010, with cooperation from RIDEM, the Audubon Society of Rhode Island took over management of this successful program.

Over the years, the osprey population steadily increased. In 1977, there were 8 fledged chicks and 9 active nests. Over thirty years later, ospreys are increasing in abundance with a recorded 168 fledged chicks and 138 active nests in 2013.



Natural History

The Osprey is a large bird of prey that feeds primarily on fish. They hunt on the wing, sometimes hunting from a perch, but mostly hovering and circling until locating a prey item. Then, they dive from great heights and plunge



feet first into the water to secure their prey. Ospreys can plunge deep enough to fully submerge their bodies, but because of their buoyancy, they rarely submerge more than a meter. Their feet have spicules especially designed to hold onto slippery fish. They typically forage in early morning and late afternoon.

Due to their food resource, Ospreys nest near bodies of open shallow water with open sky. The male typically selects a nest site on treetops, cliffs,



utility poles, channel markers, duck-hunting blinds, or manmade Osprey platforms (pictured here). Nests are large, built of sticks, and lined with bark, grass, algae, and sometimes, plastic bags. The clutch usually consists of three eggs, which are incubated mostly by the female. Males occasionally pitch in, but they mainly provide their mates with food during the 38-day incubation period. Females then care for the brood, and

males continue to provide food. Offspring fledge when they are about 50 to 55 days old, but depend on their parents for nourishment for another 8 weeks.

Natural History

Ospreys nesting in Rhode Island are migratory; they spend their winters in Central and South America. They migrate to their breeding grounds between March and April and return to the wintering grounds beginning in August. They migrate alone.



Identification



The Osprey weighs three to four pounds, has a wingspan of up to six feet, and is approximately two feet long. Plumage is largely dark brown on top and white underneath. The bird has a black, sharply curved bill, and a white crown and head, with a dark band extending back from its yel-

low eyes. The female is larger than the male and frequently has a

speckled brown necklace across the upper chest. The bird's four pale toes are tipped with long black talons. In flight, the underwings show dark patches at the wrist (crook), and dark bars at the trailing edge and wing tips.



Monitoring

The goal of the monitoring program is to document the breeding success of Ospreys in Rhode Island. The Osprey Monitoring Program achieves this through the efforts of volunteers and Audubon personnel that monitor and report on the success of nesting pairs. Audubon provides location information of historic nest sites in Rhode Island to its nest monitoring volunteers. As a volunteer, you are asked to visit your given nest site during the breeding season (April-July) on a regular basis and report on your findings.



Acquiring a Nest to Monitor:



The Audubon will provide you with a digital Google Earth map of all the nest sites in Rhode Island that require monitoring. Then, you choose one or more available nests to monitor. Your volunteer coordinator will provide you with information on your choice such as its history and success. After you have your nest, it is time to observe.

Monitoring

Monitoring Tools:

You will need a pair of binoculars or spotting scope, field data sheets, clipboard, pencil, and directions/map to nest location.

Observation Timeline and Data:

You are asked to commit to eight total visits throughout the breeding season. Additional observations are welcome. You will document basic information on the data forms provided. Below is a breakdown of the eight visits and the information you will gather for each nest.

Month of Observation	Osprey Nesting Behavior Around Obser- vation Times	Observations
April (Bi-Weekly)	Starting to arrive in mid–March to se- lect and construct nest site. Egg laying starts in mid-April.	Are there Ospreys present at the nest?
May (Bi-Weekly)	Ospreys continue to incubate eggs. Eggs begin to hatch late May.	Are there Ospreys present? Are the Ospreys incubating? (Ospreys are incubating if an individual bird spends extended time sitting on the nest).
June (Bi-Weekly)	Chicks develop through June.	Are there Ospreys present? Are there young present? If so, how many young?
July (Bi-Weekly)	Chicks begin to fledge. Migration starts in August.	Are there Ospreys present? Are there young present? If so, how many young?

Reporting: Each month you will receive a reminder by email with instructions to complete the online submission of your data. We use this system to track nesting progress and help us identify any unmonitored nests. In August, please submit your completed Osprey Monitoring Field Observations form(s) to July Lewis. Email: jlewis@asri.org or Fax: 401-949-5788 or Mail: July Lewis, Audubon Society of RI, 12 Sanderson Rd., Smithfield, RI 02917

Monitoring

Sample Monitoring Form

AUDUBON SOCIETY OF RI OSPREY DATA SHEET

Name of Nest:		
Use the officia	al name from the Google Earth map for accurate data tracking. If you are unsure, please ask.)	
Observer Name		
Observer Name: _		
Observation Date (MM/DD/YY): _	Minutes of Observation:	
Number Of Adults: _	Number Nestlings:	
Nestling Age:	DOWNY FEATHERED	
Please check Behavior		
<u>Observed:</u>	ADULT(S) IN THE AREA, BUT NOT AT THE NEST TREE/POLE ADULT(S) ON NEST TREE/POLE ADULT(S) ON NEST TREE/POLE IN INCUBATION POSTURE ADULT(S) FEEDING YOUNG AT NEST TREE/POLE ADULT(S) BRINGING FOOD TO NEST AND/OR CARRYING FOOD IN FLIGHT NO ADULT(S) AT OR NEAR NEST TREE/POLE	
Observer Notes:		
L		
CONTACT INFORMATION:	on Scoones	
phone 4	401-949-5454 EXT. 3044	
email j	scoones@asri.org	

email jscoones@asri.org address 12 Sanderson Road Smithfield, RI 02917 FAX 401-949-5788

Monitoring Tips and FAQ

General Tips:

Some Ospreys are tolerant of humans and others are not. If nesting Ospreys spook easily and leave the nest, increase your observation distance. An unattended nest could cause eggs and nestlings to cool leading to nest failure.



- Avoid observations in inclement weather. These conditions can be stressful for birds.
- Approach nesting sites slowly and quietly.
- Spotting scopes are a great tool for long distance observation.
- Enjoy your experience. Spend some time observing the Ospreys and their behavior. You never know what you might discover.

Does the monitoring program have a website?

Information and a blog on the Audubon Osprey Monitoring Program can be found at www.riosprey.info

How long do I observe?

Observe until you gather the information requested; usually 10-15 minutes is a good observation period. If ospreys are building a nest, you have all the info you need almost immediately. If they are not there, you may wait to see if they show up.

Monitoring Tips and FAQ

What if I can't see the chicks?

Some chicks are difficult to see, based on your vantage point and the nest height and depth. Don't worry, the chicks grow quickly and soon will be visible. In addition, Osprey eggs do not hatch at the same time. Sometimes a dominant chick will monopolize the nest; observe carefully for additional chicks.



Yellow Eyes Adult How do I distinguish young from adults?

As the chicks grow, distinguishing young from adult can become more challenging. The young will have reddish-orange eyes, while adults have golden eyes. Young have more speckling in their feathers than adults.

What if I can't fulfill an observation?

The observation timeline has some flexibility built into it. Delaying or skipping a single observation is usually not a problem. But if it is more than that, please inform the Volunteer Coordinator, so we can find a substitute.

Jon Scoones

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