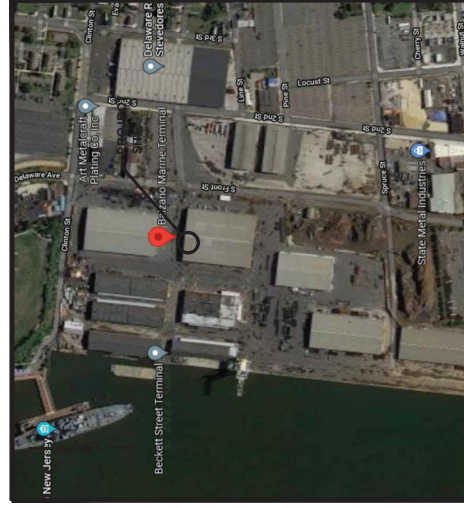


**PLANS FOR SOUTH JERSEY PORT CORPORATION
FOR THE
HIGH MAST TOWER REPAIRS
AT THE BALZANO TERMINAL
TOWNSHIP OF CAMDEN
MAY 08, 2024**



KEY MAP
SCALE: 1" = 200'

SHEET INDEX			
SHEET NUMBER	SHEET TITLE	DATE	LAST REVISED
T-1.0	COVER SHEET	12/09/2022	
S-1.0	SPECIFICATIONS AND FINISHING PLAN	12/09/2022	
S-2.0	SITE PLAN	12/09/2022	
S-3.0	DETAILS	12/09/2022	

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HOLOPHANE
LIGHTING



LDV55
LIGHT POLES

Discover the most advanced and efficient lighting solution for your business. The LDV55 is a revolutionary lighting pole that combines the best of both worlds: the durability and strength of a traditional steel pole, with the sleek, modern design of a composite pole. The LDV55 is made from a high-strength, lightweight composite material that is resistant to corrosion, rust, and UV damage. This makes it the perfect choice for outdoor lighting applications, where it can withstand the harshest weather conditions. The LDV55 is also designed to be easy to install and maintain, with a simple, modular design that allows for quick assembly and disassembly. The pole is available in a variety of heights and configurations, making it a versatile solution for a wide range of lighting needs. The LDV55 is the future of outdoor lighting, and it's the only pole you'll ever need to buy.

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Living with Ospreys in New Jersey:

A guide for the removal, relocation, and placement of osprey nests

January 2020



Photo by Howie Williams



NEW JERSEY DIVISION OF
Fish and Wildlife



CONSERVE WILDLIFE

FOUNDATION OF NEW JERSEY

In New Jersey, the New Jersey Division of Fish and Wildlife, Endangered and Nongame Species Program (ENSP) and U.S. Fish and Wildlife Service (USFWS) are responsible for the management and conservation of ospreys (*Pandion haliaetus*). In addition, the Conserve Wildlife Foundation of New Jersey is a partnering non-profit organization that assists with osprey management and conservation. This document was produced to describe the laws that pertain to the protection of ospreys and their nests and to inform landowners and managers of these regulations to protect the birds, property, and people. We specifically address problematic nests with emphasis on nest removal, relocation and placement of alternative nest sites. These guidelines may be modified to address individual circumstances when in direct consultation with ENSP, USFWS, and USDA–Wildlife Services.

Historically, before the effects of DDT caused the state's osprey population to decline, over 500 osprey nests could be found along New Jersey's coastline. Most nests were found on snags (dead trees), trees with broken tops, or on the ground. By 1974 only 50 nests remained (Clark 2004). The effects of DDT in the food chain caused reproduction to fail, and habitat was lost with a rapidly increasing shore population that eliminated many trees and increased ground predator populations. In New Jersey the osprey was listed as state endangered in 1974. Recovery began when DDT use was banned in 1968 in New Jersey and 1972 in the U.S. In the early 1970s, biologists transferred healthy eggs and chicks from Chesapeake Bay into NJ nests to improve nest success at NJ nests (McLain 1974). ENSP biologists also coordinated efforts with many partners to install man-made nest platforms for them. These new artificial nest platforms replaced the snags and trees that were lost as the barrier islands became more developed.

Ospreys build large nests which can weight up to 200 lbs. They use sticks, grass, muck, seaweed, eelgrass, reeds, and often trash to build up their nests.

Today, the estimated size of the population is above 650 nesting pairs (Wurst and Clark 2020). Ospreys nest primarily on man-made platforms that are designed specifically for them. However, many nest on almost any tall structure near water. Ospreys seek nest sites that are close to open waters where they can find fish, their main prey, and protection from ground predators like raccoons. For example, ospreys nest on old duck blinds, channel markers, utility poles, docks, and now more frequently on communication towers, docks, boat lifts, light poles, billboards, and even chimneys along the New Jersey shore.

In New Jersey, ospreys are listed as threatened under the Endangered and Nongame Species Conservation Act of 1973. Nests are protected in the nesting season from April 1 through August 31. During this time nests cannot be disturbed or moved without obtaining federal and state permits issued in situations of threat to human health or safety. Active nests can only be moved or removed with permits and with oversight by the appropriate government agency.

Laws Protecting Ospreys

- New Jersey Endangered and Nongame Species Conservation Act of 1973 (N.J.S.A 23:2A): prohibits the take or possession of any species on the endangered or nongame list. “Take”

means to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill, wildlife.
“Wildlife” means any wild animal or any part, including eggs or offspring.

- Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712): prohibits the take or attempt to take any parts of a migratory bird, including its nest, eggs, or young. “Take” broadly means to “pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, transport.” This was updated by USFWS in 2003 with clarification that inactive nests of migratory birds (excluding bald and golden eagles and federally endangered and threatened species) were not protected under the Migratory Bird Treaty Act.

Osprey Nest Access, Removal, and Relocation

If you need to approach and conduct work on a structure that supports an osprey nest, please follow these guidelines to help protect the birds, yourself, and your company.

Active Nests - An active nest is defined as one that contains eggs or dependent (flightless and newly-fledged) young in April through August, or which is being actively tended in those months. An active nest cannot be entered or disturbed without first obtaining a permit from the USFWS or with oversight from the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service–Wildlife Services (USDA), co-signed by the NJ Division of Fish and Wildlife. Before seeking authorization from ENSP, USFWS, or USDA to relocate or remove an active nest, all reasonable measures to protect the nest until the young fledge must be taken. In general, removal of active nests is not permitted, but a nest may be relocated or removed if it poses a direct threat to human health or safety; or when the birds and their nest are threatened (for example, fire risk associated with a live power pole structure). In rare cases, nests that do not pose a threat, but interfere with the intended use of the structure, can be relocated or removed with appropriate permits.

Inactive nests - An inactive nest is defined as a nest without any eggs or dependent (flightless and newly-flighted) young and includes nests under construction outside of the normal nesting season of April 1-August 31. Removal of inactive nests requires a NJ Division of Fish and Wildlife depredation permit. Inactive nests should only be removed if the nest poses a threat to property integrity, human health or safety. In most cases it can be difficult to determine from the ground if a nest contains eggs or young, so during the nesting season of April 1 to August 31, no inactive nest can be removed without first obtaining written confirmation by ENSP and/or USDA–Wildlife Services.

Removal of inactive nests during the non-nesting season of September 1 through March 31 requires a depredation permit from NJ Division of Fish and Wildlife. We request consultation so we can help design a successful alternative for future nesting on a new nest structure.

Maintenance of Communication Towers

- *Maintenance during the nesting season (April 1 – August 31):*
 - Maintenance work on a tower during the nesting season: These nest sites (constituting the entire tower structure) may not be entered without a Federal (USFWS Migratory Bird Program) and State permit (NJ Division of Fish & Wildlife). You must work with USDA-Wildlife Services or the permitting agency to access, enter, or remove a nest, due to the potential for disturbance or take. Permits to access a nest during this time will be issued on a case by case basis. Call USDA for further guidance.

- Ground-maintenance (work near the base of the tower) during nesting season: Send an email to Kathy Clark and CC: Ben Wurst to notify them of the proposed work. Give Clark or Wurst your contact info and a location map (with GPS coordinates) of the tower that contains the nest.
- *Maintenance during the non-breeding season (September 1 – March 31):*
 - Maintenance work on tower: No notification required. Nests cannot be removed without a NJDFW depredation permit. If the nest is new please provide Clark or Wurst with coordinates or an address for the tower and your contact information.
 - Ground-level maintenance: No notification required. If the nest is new please provide Clark or Wurst with coordinates or an address for the tower and your contact information.

Applications for Permits Referenced in this Document can be found here:

- NJ Division of Fish and Wildlife Depredation Permit application: http://njfishandwildlife.com/pdf/xotic_depredationapp.pdf
- USDA Migratory Bird Permits: <http://www.fws.gov/forms/3-200-13.pdf>

Osprey Nest Relocation

If a problematic active osprey nest needs to be removed, then we highly recommend a replacement nest be installed before or at the time of nest removal. Ospreys have a very high level of site fidelity, which means that they return to the same nest site every year. Replacement nests help ensure that the local population remains in a viable and productive position to keep the regional population at a sustainable level. In addition, it will provide a more suitable place for the ospreys to rebuild and therefore help prevent them from rebuilding on the same problematic site. Replacement nests should be installed *within view* of the existing nest and not more than 300' away. They should be *as tall as or taller* than the original nest. The new nest platform should be installed in an *open area* away from trees, powerlines and potential human disturbance. Please refer to the attached platform plans (page 6-7) for specifications, which can be adapted for use on utility poles. If possible, nests removed should be transferred to the new nest platform intact. If not, the new nest can be "rebuilt." Lastly, a deterrent should be installed on the original nest site to block future nesting attempts by ospreys. A simple deterrent consists of a half-sawn pipe or tube that is installed above the nest site. This blocks the ospreys attempt to drop nesting material onto the structure.

Osprey Nest Site Selection

Placement of nest structures for ospreys affects the chances they'll be used. As a general rule, the closer to water, the better. Colonization of new sites is related to how close ospreys presently nest to the new site, since young birds returning to breed usually take up nesting within one to several miles of their natal area. Nest structures should be placed at least 25' to 50' from the water's edge so that it is not lost to soil erosion.

Another very important consideration is predation. We recommend a single pole structure with a platform on top. Single poles are easily outfitted with a predator guard (inverted cone, or a sleeve of aluminum flashing) that prevents raccoons from climbing into the nest. A raccoon has been seen climbing into a 30-foot high nest, so a guard is very necessary.

An attractive nest, to an osprey, includes a nearby perch. The male prefers to perch either on the nest or within 50'. A 2x4 that rises two to three feet higher on both sides of the nest platform is ideal, as is a perch pole least 4' in height, placed nearby. A simple perch consists of a 2x4 with a wood branch (1½" to 2" diameter) mounted perpendicularly on top of the 2x4. Ospreys generally return to New Jersey in late March and take up nesting in April. Nest structures should be in place by mid-March for that season's use.

Ospreys are most sensitive to disturbance during April, when they are laying eggs, and are most likely to abandon the nest if disturbance is too great. They will grow more defensive of the nest area in May and June when they have young, and both male and female must feed intensively to keep up with all the appetites. It is important that disturbance remain low during this time as well. Ospreys have exhibited tolerance of certain types of disturbance, such as boat traffic on waterways, as long as such traffic ignores them. Disturbance increases as boats stop nearby and people focus on the birds at close range. A safe distance from which to observe ospreys will vary depending on the area, but observers must stay beyond the distance at which the adults react. Their reaction must be judged as even their attention to the observer, not simply when they lift off the nest in defense.

You should have permission from the landowner before installing a nest platform. Landowner information can be obtained at the municipal or township office. For lands in state ownership, a special use permit may be required by the Department of Environmental Protection. If you put up an osprey nest structure, please send GPS coordinates or a map in Google Earth and email us the location. We include all potential nest sites in our triennial census of ospreys in the state. If the nest is used by ospreys, please notify us. New nests can also be mapped using www.osprey-watch.org.

Finally, we offer technical assistance to private consulting firms, individuals, school groups, environmental commissions, Boy & Girl Scouts, and anyone else interested in building and constructing osprey nesting structures. We can help you choose the most suitable location to place a platform so it will not negatively impact other wildlife that may live in the area. Please do not hesitate to contact us for more information or if you have a question.

Ospreys & Unmanned Aerial Vehicles (UAV)

As technology and access to UAVs expands we realize that a larger portion of the public may fly these vehicles in areas where ospreys may nest. All guidelines set by the FAA must be followed when operating a UAV. UAV pilots must not fly within 1,000 feet of any active osprey nest. To an osprey, a UAV looks like a potential predator. Ospreys will defend their nests and attack any potential predator at nest sites. Simply flying near a nest can add stress to birds and cause adults to fly off nests where their young are vulnerable to predation. The UAV itself can also put the adult osprey and their young at risk of being seriously injured or killed from an impact. Any harm caused by a UAV to an osprey is a violation of the NJ Endangered & Nongame Species Conservation and the Migratory Bird Treaty Act.

Key Contacts

- Kathy Clark
Supervising Zoologist
Endangered & Nongame Species Program
NJ Division of Fish & Wildlife
Direct line: 609-628-1605
Main line: 609-628-2103
Email: Kathy.Clark@dep.nj.gov
- Ben Wurst
Habitat Program Manager
Conserve Wildlife Foundation of New Jersey
609-628-2103
Email: ben.wurst@conservewildlifenj.org
- USDA Animal and Plant Health Inspection Service – Wildlife Services, New Jersey Field Office
140 Locust Grove Road
Pittstown, NJ 08867
Tel: (908) 735-5654 ext. 17
Fax: (908) 735-0821
- US Fish and Wildlife Service
Migratory Bird Permit Office
PO Box 779
Hadley, MA 01035
Tel: (413) 253-8643
Email: permitsR5MB@fws.gov
- US Fish and Wildlife Service
New Jersey Field Office
Atlantic Professional Park
4 East Jimmie Leeds Road
Galloway, NJ 08205
Tel: (609) 646-9310

Resources

- Clark, K. 2004. Thirty Years of Osprey Recovery in New Jersey: 1973 to 2003. New Jersey Birds. Spring 2004 – Volume XXX, Number 1. New Jersey Audubon Society. P. 2-6.
- McLain, P. and T. Shubert. 1974. Osprey Egg Transplant Program a Success. NJ Outdoors. Sept/Oct 1974.
- U.S. Fish & Wildlife Service. 2003. Migratory Bird Permit Memorandum MBPM-2. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 2p
- Virginia Department of Game and Inland Fisheries. 2010. Removal or Relocation of Osprey Nests in Virginia: A guideline for landowners. Virginia Department of Game and Inland Fisheries, Bureau of Wildlife Resources, Wildlife Diversity Division, Nongame and Endangered Wildlife Program. Richmond, VA. 8 p.
- Wurst, B., and K. Clark. 2019. The 2019 Osprey Project in New Jersey. NJ DEP Fish & Wildlife, Endangered and Nongame Species Program; Conserve Wildlife Foundation of NJ. 12p.

Material list for building one Osprey Nest Platform

Item	Quantity	Size	Description	Unit price (approx.. 2015)
<i>Lumber</i>				
Pole	1	16'	6"x6" pressure treated	\$55.20
36" Box frame	1	12'	2"x8" pressure treated	\$14.00
Bottom box supports	1	12'	2x6" pressure treated	\$12.00
Perch / brace	2	8'	2"x4" pressure treated	\$8.00
Red cedar branches (or other wood)	2	~3'	about 2" in diameter	n/a
<i>Fasteners</i>				
Base to pole	2	1/2" x 6"	galvanized lag bolts	\$4.60
	2	1/2"	galv. flat washers	\$0.80
Box to base	6	3"	stainless wood screws	
4 box corners	12	3"	stainless wood screws	
	18 total	3"	1 lb. box stainless wood screws	\$15.00
Brace to base	2	3/8" x 8"	galv. carriage bolts	\$5.00
	2	3/8"	galv. flat washers	\$0.40
	2	3/8"	galv. locking washer	\$0.40
	2	3/8"	galv. Nut	\$0.40
Brace to pole		5/8" x		
	1	10"	galv. hex or carriage bolt	\$7.00
	2	5/8"	galv. flat washers	\$1.40
	1	5/8"	galv. locking washer	\$0.40
	1	5/8"	galv. nut	\$0.80
<i>Predator Guard</i>				
Aluminum flashing *	1	24"x26"	Trim coil (painted)	\$5.00
Nails	5	6d	Galvanized roofing nails (1 lb.)	\$4.00
Estimated Total Cost				\$144.40

** Trim coil with a 24" width can only be purchased by the roll, which is 50' and is approximately \$75-98**

For help with siting a nest platform refer to page 3-4 of this document.

Please let us know where you place the nest platform(s) and when they are used by a pair of ospreys. We will include the site in our annual surveys.

For a video tutorial on building a platform, visit: www.conservewildlifenj.org/osprey

Thank you for helping ospreys in New Jersey!

OSPREY NEST PLATFORM

