Osprey Nest Management in Virginia:

A Guideline for Landowners

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Osprey Nestlings by Vincent Slabe

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Introduction

The Virginia Department of Wildlife Resources (DWR or Department) and the U.S. Fish and Wildlife Service (USFWS), respectively, exercise state and federal authority over conservation and management of Ospreys (*Pandion haliaetus*) in Virginia. The DWR, in consultation with USFWS and the Virginia Wildlife Services office of the U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA/WS), has developed the following guidance to ensure that problematic Osprey nests are managed in a consistent and lawful manner in Virginia. These guidelines address laws that pertain to protection of Ospreys and their nests, Osprey nest removal, and construction and placement of alternative nest platforms. It is important to point out that these guidelines are intended to inform landowners and land managers of relevant wildlife regulations and to recommend voluntary protocols (see page 5 'Osprey Nest Removal – Inactive Nests' and page 6 'Replacement Nesting Platforms' and page 6 'Working Near Osprey Nests') for addressing problematic Osprey nest situations. They are not regulatory and do not supplant reviews and/or consultations required of projects undertaken by federal agencies under the National Environmental Policy Act or for regional issues such as Bird Aircraft Strike Hazard (BASH) management.

The great majority of Virginia's Ospreys are migratory, arriving from their winter haunts in the West Indies, Central America and South America in March and April, and then departing in August and September (Watts and Paxton 2007). Males typically arrive on their breeding territories one to two weeks before females, with mating activity commencing immediately after arrival of the female. Eggs are typically laid in April and are incubated by the female for 35-37 days. The young remain in the nest for approximately 8 weeks after hatching. Most young are capable of sustained flight by late June or early July; yet, after fledging from the nest, the young remain dependent on the parents for up to 2 months.

The Chesapeake Bay historically has been recognized as supporting one of the largest populations of Ospreys in the world (Henny et al. 1974, Watts and Paxton 2007, Glass and Watts 2009). Habitat loss, egg collection, persecution, and shooting contributed to population declines from the mid-1800s through the 1930s, however (Henny et al. 1977, Watts and Paxton 2007); and during the post-World War II era, the Bay population (as elsewhere) declined dramatically due to pesticide-induced reproductive suppression (Henny et al. 1977, Watts and Paxton 2007). The population reached an estimated low of about 1,450 pairs in the early 1970's (Henny et al. 1974) then began to recover after the banning of DDT and other related pesticides.

Surveys during the mid-1990s in Maryland and Virginia indicated significant recovery; the Chesapeake Bay regional population estimate rose to nearly 3,500 breeding pairs (Watts et al. 2004, Watts and Paxton 2007). More recent data suggest a current Chesapeake Bay population of 10,000-12,000 pairs (B.Watts, pers. comm. August 2019). The recovery has not been consistent geographically throughout the Bay. Low-salinity and tidal-fresh reaches have exhibited much larger population increases than higher salinity reaches over the last 40 years, evidently in response to the availability of high-quality food resources (Watts et al. 2004, Watts and Paxton

2007, Glass and Watts 2009).

As elsewhere, Ospreys in Virginia have benefited from the availability of artificial nest supports (*e.g*., channel markers, nest platforms, duck blinds, dock pilings, communication towers). Prior to 1950, virtually all Osprey nests were reported as being built in living or dead trees, but by the 1990's over 90% of all nests in Chesapeake Bay were built on human-made structures (Watts and Paxton 2007). Aside from the banning of DDT and similar compounds, the availability of artificial nesting substrates may be the most significant contributing factor in the recovery of the Chesapeake Bay Osprey population (Watts and Paxton 2007).

Laws Protecting Ospreys

Migratory Bird Treaty Act (16 U.S.C. §§ 703-712): This federal law (MBTA), first adopted in 1918, generally prohibits taking or attempting to take any migratory bird, nest, egg, or parts thereof, except as permitted by the USFWS. To *Take* is broadly defined as to pursue, hunt, shoot, wound, kill, trap, capture, possess, or collect any migratory bird species, their nests, or their eggs. In April 2003, however, the USFWS provided clarification (USFWS 2003) asserting that the destruction of inactive migratory bird nests not otherwise protected under another statute such as the Endangered Species Act or the Bald and Golden Eagle Protection Act is not prohibited under the MBTA, provided that no possession occurs during the destruction of said nest. Nest destruction that entails possession of the nest or results in the unpermitted take of migratory birds or their eggs, remains illegal and fully prosecutable under the MBTA. On December 22, 2017, the Office of the Solicitor of the US Department of the Interior (DOI) reinterpreted the scope of the MBTA (hereafter referred to as the M-Opinion) by stating that the statute only prohibits purposeful (or intentional) take of migratory birds (Office of the Solicitor 2017). However, in March 2021, the DOI rescinded the M-Opinion, and is in the process of developing new language to clarify the protections provided to migratory birds under the MBTA.

Under a federal Migratory Bird Special Purpose / Depredation Permit issued by the USFWS, the DWR may capture Ospreys for rehabilitation purposes as well as salvage inactive nests and infertile eggs, and euthanize sick, injured, or orphaned Ospreys. Department employees also may trap and relocate Ospreys and move active nests or eggs, including in nuisance bird situations.

The USDA/WS also has authority from the USFWS to take migratory birds and their nests and young, specifically with regard to minimization or avoidance of aircraft strike hazards, and management of wildlife damage and threats to human health and safety. Regarding Ospreys, the USDA/WS staff in Virginia focuses on airport/aircraft safety issues in close consultation with DWR and USFWS, and attend to "nuisance" Osprey nests often for a fee charged to the affected landowner.

The Code of Virginia (§29.1-521): This statute and DWR regulation 4 VAC 15-30-10 generally protect all native birds and their nests, eggs, and young, except those subject to legal hunting or harvest under prescribed conditions. There is no provision in Virginia law or in the DWR regulations for legal hunting or harvest of Ospreys, active Osprey nests, eggs, or young (other than take of adults or young for falconry purposes). Though Virginia Code §29.1-100 defines a "nuisance species" to include a species ". . . concentrated in numbers and manners as to

constitute a health hazard or other nuisance" and §29.1-511 then provides for year-round take of such "nuisance" animals, §29.1-100 specifically excludes any species protected by state or federal law (*e.g.*, the federal MBTA) from the definition of a "nuisance species."

DWR regulation 4 VAC 15-30-50 provides authorization for Department employees, certain U.S. Government employees (whose responsibility includes fisheries and wildlife management), and certain local government animal control officers to capture, temporarily hold or possess, transport, release, or euthanize wildlife (including problematic or nuisance species) in the performance of their official duties. Under this authority, though, such activities may only be conducted in accordance with the MBTA as discussed above.

It is also worth noting that under the authority of Virginia Code §29.1-103, §29.1-501, and DWR Regulation 4 VAC 15-30-50, the Department may issue Commercial Nuisance Animal Permits to qualified individuals for capture, possession, transport, release, and euthanasia of wildlife that are causing property damage or refuse problems, or posing a risk to human health or safety. Ospreys, however, are protected under the MBTA and therefore are specifically excluded (General Condition 5(B)iii) from the authorities granted by these permits. Thus, it is unlawful for Commercial Nuisance Animal Permit holders to remove or relocate Ospreys, or their active nests or young.

Osprey Nest Removal

Inactive Nests: An inactive Osprey nest is defined as a nest without any eggs or dependent (flightless) young and includes nests under construction. Inactive nests may be removed or relocated at any time without authorization or consultation. However, affected landowners may call the DWR or the USDA/WS to informally consult on pending removals or relocations if they so desire. It can be very difficult to discern the status of a nest from below, but the majority of Osprey nests in Virginia are active from 1 April through September 15. Vigilance and continued removal of sticks is strongly recommended in the weeks that follow removal of an inactive Osprey nest, given the strong probability that the same Osprey pair will continue attempting to nest at the site from which the nest was removed. If an egg is laid during the course of nest removal activities, the nest is considered active and nest removal activities must cease immediately.

Active Nests: An active Osprey nest is defined as a nest containing one or more eggs or occupied by dependent (flightless) young. Active nests should not be removed until the young are able to fly (fledge). Only when a nest poses a direct threat to human health or safety or when the birds, nest, or eggs themselves are threatened should the removal of an active nest be considered. In rare situations, removal of an active nest that merely constitutes a nuisance may be authorized if it interferes with the operation or intended use of a structure.

Anyone seeking to have an active nest removed must contact the DWR, the USFWS, or the USDA/WS. To comply with federal regulations, active nest removal may only be undertaken by an individual authorized by USFWS for the nest removal. Individuals interested in applying for a USFWS permit to remove an active nest may do so at: https://www.fws.gov/forms/3-200-13.pdf (see also Frequently Asked Questions at https://www.fws.gov/migratorybirds/pdf/policies-and-regulations/3-200-13FAQ.pdf). If the nest is on a utility structure, use the following form: https://www.fws.gov/forms/3-200-81.pdf.

Relocation of active Osprey nests is a time- and resource-intensive endeavor, requiring identification of a suitable relocation site, acquisition of special equipment and/or machinery, and post-relocation monitoring to ensure that the adults continue to tend the nest. Because of this, the DWR, the USFWS and the USDA/WS do not have the capacity to oversee active nest relocation, and strongly discourage this activity. Relocations conducted by qualified and experienced environmental consultants or natural resource professionals may be considered on a case-by-case basis. Relocation of active Osprey nests should follow the same process as active Osprey nest removal.

Replacement Nesting Platforms: We recommend that a replacement (new) nesting platform be erected any time an active or inactive Osprey nest is removed. Replacement platforms ensure that a preferred nest site is not "lost" to the regional population and may also reduce the likelihood of the resident pair re-nesting on the original platform or structure. The following guidance applies to siting and construction of replacement nest structures (see Fig. 1 for details regarding platform shape, dimensions and construction):

1. If possible, the replacement platform should be as tall as or taller than the original nest support, but not less than 15 feet above the ground or normal water elevation (above high tide stage in tidal waters).

2. The replacement platform should be located as close as possible to the original nest site; preferably within 150 feet, and not beyond 300 feet.

3. The replacement platform should be in an exposed location (*i.e.*, not under or within the canopy of a tree or other shelter).

4. The platform support should be strong enough to support a 200-pound nest.

5. If feasible, old nests should be relocated intact onto the new platform. When this is not feasible, sticks from the old nest should be roughly arranged on the platform in the shape of a nest to help draw the nesting pair to the new location.

6. The original nest support or substrate should be modified to discourage Ospreys from rebuilding a nest at the site. We recommend contacting USDA/WS for guidance.

Working near Osprey Nests

General Guidance

There are situations that require maintenance or repair work be done on a structure with an active Osprey nest. In these situations, we recommend adherence to the following guidelines and Best Management Practices (BMPs) designed to minimize threats to Osprey, workers, and property.

In order to minimize disturbance to nesting Ospreys we strongly recommend that work at or near nests occur before nests become active in a given year (April 1, although egg laying may occur beginning in the last week of March) or after the young fledge from the nest (usually in late June through July). If work is urgent, we generally recommend waiting

until the adults are no longer incubating eggs and nestlings are past the stage of being actively brooded or shaded by the parents (typically greater than 4 weeks old). If delaying work is not a viable option, we recommend the following: (1) work should take place during daylight hours in order to avoid risk of injury under low light conditions to an Osprey flushing from the nest; (2) work near the nest should be avoided during cool (<75° F), wet and cloudy days as well as hot days (>90° F) to reduce the risk of egg failure and nestling mortality; (3) incubating/brooding adults should not be kept from the nest for more than 60 consecutive minutes; and (4) if the adult birds remain off the nest for longer than 60 consecutive minutes, all work should cease immediately and workers must move off the structure to allow the birds to return and tend the nest for a minimum of 60 minutes before work resumes.

Nest site conditions, nest substrate, and the nature and duration of the work near Osprey nests can vary greatly. Moreover, the behavior of breeding adults is often unpredictable making it difficult to establish failsafe criteria under which work can be performed. It is for these reasons **we strongly recommend coordination with the DWR prior to conducting work** on a structure with an active nest or a nest whose status is unknown in order to comply with Virginia law and DWR regulations.

Best Management Practices

Utilities

Ospreys routinely select electric distribution poles and transmission towers as nest sites, which exposes them to potential electrocutions or collisions with wires. Conversely, Osprey nest materials may catch on fire or otherwise compromise critical utility components thereby damaging equipment and causing interruptions in electrical service (Washburn 2014). Ideally, Osprey should be discouraged from nesting on utility structures when logistically feasible. This may be accomplished by erecting an alternate nesting platform near the problematic nest site. Other practices include: (1) installing avian perch deterrents, (2) pole caps, (3) thermoplastic coatings, and (4) bushing covers, (5) using line marking and bird deterrent devices, and (6) separating phase to phase ground wires (Washburn 2014, Avian Power Line Interaction Committee 2006). The Avian Power Line Interaction Committee manual at the following website (https://www.aplic.org/documents.php) gives more detailed descriptions of the above mentioned techniques.

If an active nest needs to be removed from an electric utility structure to avoid harm to the birds or nest or to prevent potential damage to equipment, the procedures in the 'Osprey Nest Removal - Active Nests' section must be followed.

Cell Towers

Osprey/cell tower interactions have increased significantly in Virginia due to the increase in the number of cell towers across the landscape coupled with the large Osprey population. Currently, no consistently reliable method exists to prevent Osprey from nesting on cell towers. We recommend that cell tower owners, cellular carriers or their contractors plan maintenance activities and/or nest removal outside of the nesting season on towers frequently used by Osprey for nesting. If this is not feasible, cell tower personnel should coordinate with DWR or the USDA/WS to discuss management options.

Transportation (Aids to Navigation)

Osprey frequently nest on channel markers found in navigable waters. Nests on channel markers poses a serious safety hazard to boat traffic by blocking navigation lights and signage. Navigation signs, markers and lights can be modified in areas of high Osprey abundance. This can be accomplished by repositioning a sign on a marker (ex. if it is helping to support a nest), installing perch deterrent to deter nesting, or constructing a nest platform above makers signs (Washburn 2014).

Collision with Aircraft

Osprey collisions with aircraft, particularly in the coastal plain of Virginia, pose a serious human safety issue. Integrated Wildlife Damage Management Programs, implemented by USDA/WS, are the best option in reducing strike risk at airports and air stations. The USDA/WS use multiple methods and tools to abate air-strike. Some of the common methods include non-lethal hazing/harassment, perch deterrents, infrasound and noise deterrents, pyrotechnics, translocation/removal of problematic individuals, and elimination of nest structures (Washburn 2014). USDA/WS should be contacted if Osprey pose a potential threat to aircraft safety at or near an airport.

Other Human-built Structures

Osprey frequently nest on homes, docks, boat houses and occasionally on boat covers or on boats themselves. Osprey that nest on these structures may be encouraged to nest on nesting platforms constructed adjacent to these human structures (see Figure 1 for guidance on nest platform construction). We recommend removing nesting material before nests become active. In situations where nests are active we recommend removal of the nest after the young are able to fly. If this is not feasible, the landowner should coordinate with DWR or the USDA/WS to discuss management options.

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FAX: 804-739-7738

https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/SA_Program_Overview/SA_Contact

United States Fish & Wildlife Service
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OSPREY NEST PLATFORM

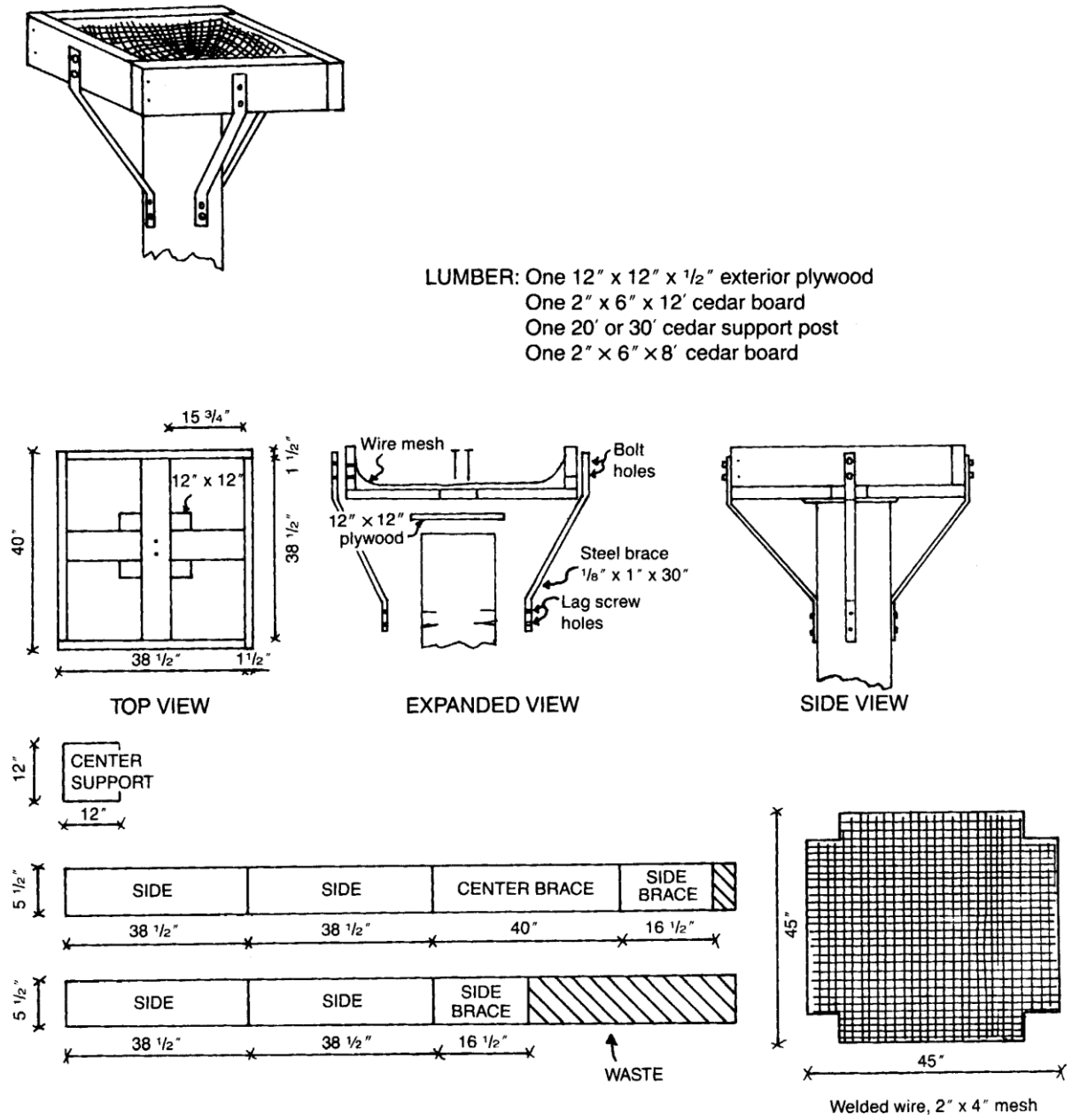

Fig. 1. Diagram for an Osprey nest platform. To construct the platform, the following materials are required: (1) 2” x 6” x 12’ cedar board; (1) 2” x 6” x 8’ cedar board; (1) 12” x 12” x ½” exterior plywood; (1) 45” X 45” piece of heavy duty wire mesh; (20) galvanized 40D nails; (4) ⅛” x 1” x 30” steel strapping; (8) 2 ½" x ½" bolts with washers and nuts; (8) 4” x ½" lag screws; (1) 6” or 8” diameter cedar post, 20’ to 30’ long; and wood preservative and stain. To prevent splitting, pre-drill all nail and bolt holes. Treat the entire structure with wood preservative and stain brown. To encourage use by Ospreys, wire several sticks into the platform (National Wildlife Federation 1987; used with permission).