

Compatibility Determination

Use: Installation of Bluebird Boxes, Henhouses, Wood Duck Boxes, or other Nesting Structures by the Public, Individuals or Groups

Refuge Name: Big Stone Wetland Management District (WMD)

Establishing and Acquisition Authorities:

Waterfowl Production Areas (WPAs) - The Migratory Bird Hunting and Conservation Stamp Act, March 16, 1934, (16 U.S.C. Sec. 718-718h, 48 Stat. 452) as amended August 1, 1958, (P.L. 85-585; 72 Stat. 486) for acquisition of "Waterfowl Production Areas"; the Wetlands Loan Act, October 4, 1961, as amended (16 U.S.C. 715k-3 - 715k-5, Stat. 813), funds appropriated under the Wetlands Loan Act are merged with duck stamp receipts in the fund and appropriated to the Secretary for the acquisition of migratory bird refuges under provisions of the Migratory Bird Conservation Act, February 18, 1929, (16 U.S.C. Sec. 715, 715d - 715r), as amended.

FmHA fee title transfer properties - Consolidated Farm and Rural Development Act 7 U.S.C. § 2002.

Fish and Wildlife Act of 1956 (16 U.S.C. § 742(a)(4)) and (16 U.S.C. § 742(b)(1))
Emergency Wetlands Resources Act of 1986 (16 U.S.C. § 3901(b), 100 Stat. 3583).

Refuge Purposes:

Waterfowl Production Areas (WPAs) - "...as Waterfowl Production Areas" subject to "...all of the provisions of such Act [Migratory Bird Conservation Act]...except the inviolate sanctuary provisions...." and "...for any other management purpose, for migratory birds."

FmHA fee title transfer properties - "...for conservation purposes...."

National Wildlife Refuge System (NWRS) Mission:

The Mission of the NWRS is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

Allow the installation of nest structures such as bluebird nest boxes, henhouses, and wood duck boxes by individuals or groups on WPAs. This use would require a Special Use Permit (SUP).

Is the use a proposed new use or an existing use?

The WMD currently does not have any nesting structures or any partnerships for placing these structures. This would be a new use for any partner who wishes to place these structures.

Is the use a priority public use?

Placing artificial nesting structures on WPAs is not a priority public use as defined in the Refuge Improvement Act (1997). The use is a non-essential contributor to other priority uses such as wildlife observation, wildlife photography, and environmental education and interpretation.

Where would the use be conducted?

Nesting structures would be placed on WPAs throughout the WMD on a case by case basis. The majority of requests are for Bluebird and Wood Duck boxes to be placed along roads near the edge of WPA boundaries. Some structures such as henhouses are placed directly in wetlands.

When would the use be conducted?

The structures are usually placed in late winter or early spring. Maintenance usually takes place during the winter months. The SUP would outline the exact dates and maintenance requirements the group or individual would need to follow.

How would the use be conducted?

Nest structures are often erected on a post in a shallow wetland or along roads near the edge of the WPA, preventing access by many common duck nest predators. Structures may be affixed using either floating rafts (less common), poles, or posts. Structures are occasionally mounted to existing trees although this is less desirable due to increased nest predation.

Maintenance is one of the more critical components of a successful nest structure program. Over time, use by birds, weather and other factors contribute to deterioration of the nest structure. Damaged or dilapidated structures are less likely to be used and they reflect poorly on the landowner and responsible waterfowl management agency or organization. These issues can be remedied by visiting nest structures during spring and again during winter for routine maintenance.

Why is this use being proposed?

This use allows groups and individuals to install nesting structures for the enhancement of wildlife populations by providing safe nesting sites for various avian species. Monitoring of structures and record keeping can provide important management data. Nest structures enhance the existing habitat by providing safer locations for nesting birds. Nest success is the primary factor influencing annual population growth of ducks. Surveys have shown that nesting success in Minnesota henhouse structures has been very high compared to natural ground nests in the same area.

Availability of Resources:**What resources are needed to properly and safely administer use?**

Installation of artificial nest structures on WPAs by private individuals or groups requires minimal U.S. Fish and Wildlife Service (Service) resources. Monitoring and maintenance of structures is required by the private individual or group as well as all associated costs of the installation. Should cooperators fail to adequately maintain the structures, there will be some cost associated with removing abandoned structures.

Are existing resources adequate to properly and safely administer the use?

District resources are currently adequate to administer the use. Installation of artificial nest structures on WPAs by private individuals or groups requires minimal WMD resources.

Anticipated Impacts of the Use:

How does the installation of Bluebird boxes, henhouses, Wood Duck boxes, or other nesting structures by the public, individuals, or groups affect WMD purposes and the NWRS mission?

Artificial nesting structures do not materially interfere with or detract from the purposes for which the units were acquired. In fact, these structures likely contribute to the purpose of the WMD and the NWRS mission by providing secure nesting sites for waterfowl and other migratory birds.

How does the installation of Bluebird boxes, henhouses, Wood Duck boxes, or other nesting structures by the public, individuals, or groups affect fish, wildlife, plants, and their habitats; and the biological integrity, diversity, and environmental health of the WMD?

The installation of artificial nesting structures has a minimal impact on the purposes for which WPAs were established. Waterfowl nesting structures will likely increase the production of waterfowl by providing sites for nests where predators are less likely to destroy the nests. Waterfowl nesting in structures are far more likely to be successful than nests in uplands. Other structures such as bluebird houses will provide nesting sites for other migratory birds. Artificial nesting boxes are widely credited with helping increase the population of Eastern Bluebirds, *Sialia sialis*, in North America. There is some small, temporary wildlife disturbance caused during placement and maintenance of the structures. This disturbance is minor. There are some aesthetic costs associated with the placement of artificial structures in natural settings. These costs are minimized by requiring placement of non-waterfowl structures along the edges of WPAs in areas already appearing unnatural due to fences, signs, and adjacent crop fields. Wood Duck, *Aix sponsa*, boxes and other waterfowl nesting devices are typically placed in or near wetlands, although private individuals or groups typically prefer to place the structures adjacent to roads. Minimal access by motorized vehicles or other special access may be provided for installing nest structures.

Public Review and Comment:

This compatibility determination is part of the 10-year review process for Compatibility Determinations in the Big Stone WMD Comprehensive Conservation Plan. Public notification and review will include a comment period from February 13 through March 7, 2014. Comments received and agency responses will be included in the final version of this Compatibility Determination.

Determination:

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Approval from Project Leader through a Special Use Permit (SUP) is required prior to installation.
2. Annual maintenance, monitoring and summary reports are required.
3. Structures may be removed upon Project Leaders’ request. Possible reasons for removal include: lack of maintenance, poor placement, or variation from approved installation plan.
4. Ownership of any nest structure placed on any WPA by private individuals or groups will be forfeited to the Service upon installation.

Justification:

Artificial nesting structures do not materially interfere with or detract from the purposes for which the units were acquired. In fact, these structures likely contribute to the purposes of WPAs by providing secure nesting sites for waterfowl and other migratory birds. Nest success for ducks using artificial nest structures is higher than for ducks nesting in grasslands. Nesting boxes for cavity nesting birds like bluebirds and wood ducks can increase populations when natural cavities are scarce. At worst, nesting structures are neutral in their effect; likely there is a positive effect. The aesthetic costs of artificial nest structures are modest and can be minimized through appropriate structure location.

Signature: Project Leader

(Signature and Date)

Concurrence: Regional Chief

(Signature and Date)

Mandatory 10- or 15-year Re-Evaluation Date: 2024