

**FY 14 Wildlife Preservation Fund Large Project**

**Grant 14-L24W**

**Let's Bring Back the Barn Owl**

**Final Report**



**Barn owl exiting a nest box in Marion County, Il 2014**

**Illinois Audubon Society**

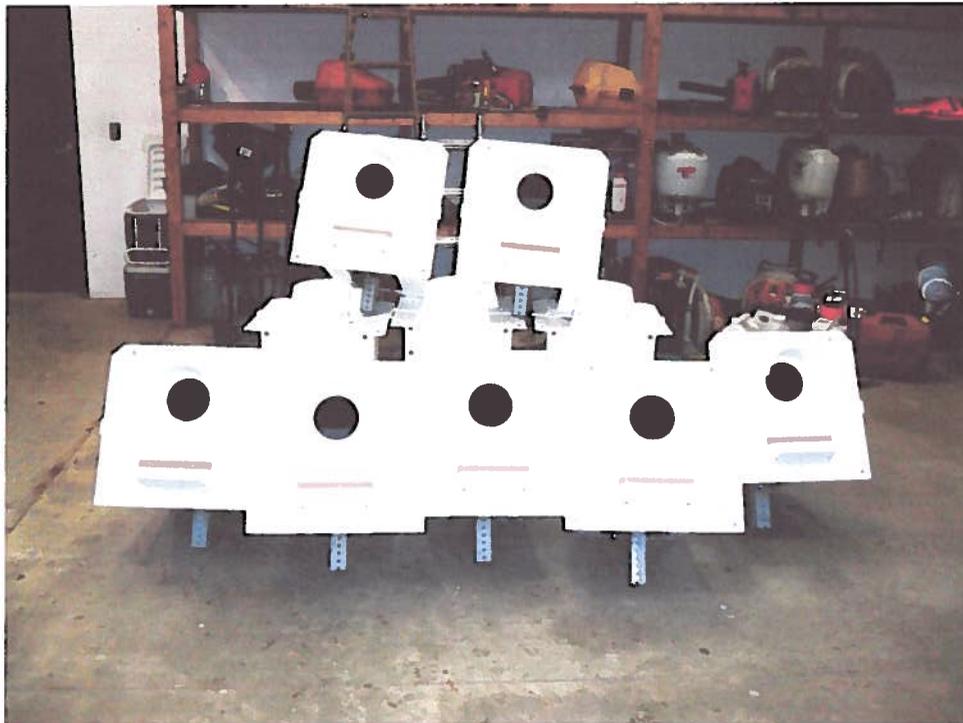
Deploying nest boxes in suitable habitat is the priority action from the Illinois Barn Owl Recovery Plan (2010). Since 2009 efforts by the Illinois Department of Natural Resources (IDNR) and other partner organizations including The Illinois Audubon Society, the number of known barn owl nests has increased significantly in Illinois. The majority of these barn owl nests are located in nest boxes. In many places with otherwise suitable habitat, structures for installing a nest box are either unavailable or unsafe. Free-standing, pole-mounted nest boxes are ideal for these situations, and are readily adopted by barn owls.

To assist with the recovery of the barn owl in Illinois, The Illinois Audubon Society wrote a Wildlife Preservation Fund large project proposal called Let's Bring Back the Barn Owl in the spring of 2013. This grant application proposed purchasing 32 additional barn owl nest boxes for use by IDNR staff and the Barn Owl Recovery Team. Placement of the nest boxes was determined by criteria in the Barn Owl Recovery Plan, including surrounding habitats, available foraging areas and/or recent barn owl use or observations in the area. Installation and monitoring of the nest boxes was done by IDNR Natural Heritage Biologists and the Barn Owl Recovery Team.

Our overall goal is to continue measurable progress towards the complete recovery of barn owls in Illinois. To date, Illinois Audubon Society has purchased 48 barn owl nest boxes for deployment and monitoring by IDNR Natural Heritage staff and the Barn Owl Recovery Team.

To complete the requirements of the grant, The Illinois Audubon Society purchased 12 pole-mounted nest boxes in 2013 from The Barn Owl Box Company ([www.barnowlbox.com](http://www.barnowlbox.com)), @ \$159 each (incl. shipping), for a total of \$1908.00 for use by IDNR Natural Heritage Biologists and the Barn Owl Recovery Team. In addition, thirty-five cypress boards 1" X 1" X 12' were purchased for a total of \$982.20 and nineteen 1" X 16" X 12' were purchased for \$1026.00 from the Brownstown Lumber Company. These boards were used to provide materials to construct 20 wooden pole mounted barn owl nest boxes following a modified design from IDNR.

In addition, other materials needed to install and assemble the pole mounted barn owl nest boxes were purchased from Menards in Effingham for a total of \$130.05. These materials included: bolts, washers & nuts, metal blades and welding rods. Hardwood mulch, secrete – concrete mix, PVC pipe for predator guards, nuts and bolts were purchased at Menards in Springfield, IL for a total of \$390.11. Mounting brackets used to attach the nest boxes to the mounting poles were purchased and cut out at D.M. Manufacturing, Inc. at a total cost of \$250.00. A total of \$4686.97 was spent on this project out of the requested \$4700.00 grant from the Wildlife Preservation Fund. Volunteers from the Illinois Audubon Society participated in assembling the 32 barn owl nest boxes along with IDNR staff.



**Plastic pole mounted barn owl nests boxes purchased from the Barn Owl Box Company**



**Sacrete and other materials purchased to install barn owl nest boxes.**



### **Constructing wooden pole mounted barn owl nest boxes in 2014**

Nest box sites were selected by the Barn Owl Recovery Team and Natural Heritage Biologists in various Counties in Illinois. The Barn Owl Recovery Plan includes scoring criteria for evaluating habitat potential of locations under consideration. Priority was given to locations on public lands and private lands in conservation ownership or where known active nests were located or nearby.

The 32 nest boxes were installed by the Barn Owl Recovery Team, Natural Heritage biologists in IDNR Regions II, IV and V, and IAS cooperators. Each plastic pole mounted nest box model was attached to a 10-12 foot long 2 inch X 2 inch metal post, these used metal sign posts were donated to the Illinois Department of Natural Resources by the Illinois Department of Transportation.

The barn owl nest boxes were mounted to the pole with a mounting plate using bolts. The metal post with the nest box attached was placed in a 3 feet deep hole that was dug with a tractor mounted auger. Sacrete concrete was put into the hole and mixed with water to hold the post in place. Mulch was placed in the nest box to provide a base layer for egg placement.

All nest box openings face east to reduce any potential for overheating and weather impacts. GPS coordinates and other information was collected and entered in the IDNR nest box tracking system in use by the Barn Owl Recovery Team.

The Barn Owl Recovery Team, DNR staff and others will include these new nest boxes into annual monitoring of >200 other barn owl nest boxes. EORs of any nesting activity are reported within 30 days of discovery to the DNR's Natural Heritage database.

IAS in cooperation with IDNR field staff installed 23 pole mounted nest boxes on Public Lands and 12 pole mounted nest boxes on private lands. Public lands properties include both IDNR and other Federal public lands, included: 3 boxes on XXX NWR in Fulton County, 3 boxes on Green River xxx in Lee County, 1 box on Prairie Ridge State Natural Area in Marion County, 6 boxes on Dixon Springs Agricultural Research Station in Pope County, 3 boxes on Dixon Lakes ??? in Putnam County and 6 boxes on Crab Orchard National Wildlife Refuge in Williamson County. Private Lands included: 3 boxes on Monterey Mine in Clinton County, one box on xxx farm in Edwards County, 8 boxes on various vineyards and orchards in Union County.

Nest boxes were placed in 09 counties during the course of this project including: Clinton – 3, Edwards - 1, Fulton – 3, Lee – 3, Marion - 1, Pope – 6, Putnam – 3, Union – 6, Williamson – 6.



**Barn owl chicks in a plastic pole mounted nest box – Prairie Ridge State Natural Area – Marion County – November 2014.**

**Figure 1.**

<b>County &amp; Nest box Number</b>	<b>Site Name</b>	<b>Public/Private Land</b>	<b>Date Installed</b>	<b>Style</b>
1. Clinton 02	Monterey Mine	Private	10/16/2014	Plastic
2. Clinton 03	Monterey Mine	Private	10/16/2014	Plastic
3. Clinton 06	Monterey Mine	Private	10/16/2014	Wooden
4. Edwards 14	Dan Newport farm	Private	06/27/2014	Wooden
5. Fulton 06	Emiquon NWR	Public	09/23/2014	Wooden
6. Fulton 07	Emiquon NWR	Public	09/23/2014	Wooden
7. Fulton 08	Emiquon NWR	Public	09/23/2014	Wooden
8. Lee 01	Green River SWA	Public	09/24/2014	Wooden
9. Lee 03	Green River SWA	Public	09/24/2014	Wooden
10. Lee 04	Green River SWA	Public	09/24/2014	Wooden
11. Marion 22	Prairie Ridge SNA	Public	07/23/2014	Plastic
12. Pope 24	Dixon Spring Ag Center	Public	06/18/2014	Plastic
13. Pope 25	Dixon Spring Ag Center	Public	06/18/2014	Plastic
14. Pope 26	Dixon Spring Ag Center	Public	06/18/2014	Wooden
15. Pope 27	Dixon Spring Ag Center	Public	06/18/2014	Wooden
16. Pope 28	Dixon Spring Ag Center	Public	06/18/2014	Wooden
17. Pope 29	Dixon Spring Ag Center	Public	06/18/2014	Plastic
18. Putnam 02	Dixon Waterfowl Refuge	Private	09/24/2014	Wooden
19. Putnam 03	Dixon Waterfowl Refuge	Private	09/24/2014	Wooden
20. Putnam 04	Dixon Waterfowl Refuge	Private	09/24/2014	Wooden
21. Union 20	Flamm Orchards	Private	09/11/2014	Wooden
22. Union 21	Flamm Orchards	Private	09/11/2014	Wooden
23. Union 22	Flamm Orchards	Private	09/11/2014	Plastic
24. Union 23	Flamm Orchards	Private	09/11/2014	Wooden
25. Union 25	Alto Pass Vineyard	Private	09/11/2014	Plastic
26. Union 26	Rendleman Orchard	Private	09/11/2014	Plastic
27. Williamson 14	Crab Orchard NWR	Public	05/07/2014	Wooden
28. Williamson 15	Crab Orchard NWR	Public	05/07/2014	Plastic
29. Williamson 16	Crab Orchard NWR	Public	05/07/2014	Wooden
30. Williamson 17	Crab Orchard NWR	Public	05/07/2014	Wooden
31. Williamson 18	Crab Orchard NWR	Public	05/07/2014	Wooden
32. Williamson 19	Crab Orchard NWR	Public	05/07/2014	Plastic



**Installing plastic pole mounted nest box on  
Dixon Springs Agriculture Center in Pope County.**



**Plastic pole mounted barn owl nest box Installed  
at Crab Orchard NWR in Williamson County,**



**Installed wooden pole mounted barn owl nest box in Southern Illinois**

**The Illinois Audubon Society would like to thank the Illinois Department of Natural Resources and the Wildlife Preservation Fund for supporting the Illinois Audubon Society and the Recovery of the Common Barn Owl in Illinois.**