## LETTERS

## BALD EAGLES USE ARTIFICIAL NEST PLATFORM IN FLORIDA

Reports of Bald Eagles (*Haliaeetus leucocephalus*) nesting in human-made nest structures or on artificial platforms are rare. Occasionally, artificial nest structures have been used to replace destroyed natural nests, remove a breeding pair from existing or future human activity, or to promote the expansion of a population (M.V. Stalmaster 1987, The Bald Eagle, Universe Books, NY). Successful acceptance and use of artificial nests by Bald Eagles have been reported from Michigan (S. Postupalsky 1978, Artificial nesting platforms for Ospreys and Bald Eagles. Pages 35–45 in S.A Temple [ED.], Endangered birds: management techniques for preserving threatened species, University of Wisconsin Press, Madison, WI) and Arizona (T.G. Grubb 1980, An artificial Bald Eagle nest structure. Research Note RM-383, Forest Service, U.S. Department of Agriculture, Tempe, AZ).

Monitoring of Bald Eagle nesting activities near facilities of Florida Power and Light Company to minimize potential impacts on this endangered species has occurred for more than a decade in Florida (N. Williams-Walls et al. 1986, *Fla. Field Nat.* 14:29-37). In the winter and spring of 1987, a pair of Bald Eagles built a small nest at the intersection of the cross member supports near the top of a 18.3 m-tall power line structure (H-frame) on a 240 kV line southwest of Titusville, Brevard County, Florida. The resident landowner indicated that winds destroyed the nest in 1987. In December 1987 and January 1988, a similar nest was built at the same location; incubation by adult Bald Eagles began in the latter part of January 1988. Much of the nesting material fell to the ground between mid-April and mid-May due to either wind or destruction by the two growing eaglets. Nevertheless, two eagles fledged from this nest.

Late in 1988, a nest was again rebuilt by Bald Eagles at the same location and incubation began in January 1989. Two Bald Eagle chicks hatched in late February 1989 and on 19 April 1989 a wind storm dislodged much of the nest material and both young birds fell to the ground where they died.

In June 1989, we constructed an artificial nesting platform  $(1.5 \text{ m} \times 1.5 \text{ m} \text{ of } 1.9 \text{ cm} \text{ marine plywood attached}$  with five wooden supports to a cross member of the structure) and erected it within 1.5 m of the former nest site. Only minor adjustment in location of the platform was an improvement as the new nest was not directly over a power line and reduced the potential for harm to the birds or interrupted service in the event that wet branches or feces contacted this high voltage line. The platform was painted in a camouflage pattern of green and black and had a series of long slots to facilitate drainage. Also, the upper surface of the platform had about 20 9-cm pegs projecting up and inward to help retain nest material. Vertical structures, sometimes used along sides of the platform to provide protection and/ or shade for young, were not placed on this platform.

We built a 1.3-m diameter nest on the platform, with a 50-cm "cup" in the middle, using Loblolly Pine (*Pinus taeda*) branches from nearby trees. Green pine boughs were added to the top to simulate a natural nest. All nesting materials placed on the platform in June 1989 were secured using ropes tied through the slots in the platform. This artificial platform was in place several months in advance of the normal October-April Bald Eagle nesting season in Florida (Stalmaster 1987).

In December 1989, adult Bald Eagles were repeatedly seen perched on or near the artificial platform. Because the nearest pine trees were >100 m away, Loblolly Pine branches and green boughs were placed in two piles on the ground near the power lines. In mid-January 1990, additional sticks were added by the adult Bald Eagles to the nest on the platform. A follow-up investigation indicated that only a small quantity of the nest material provided was used by the adult eagles in completing the nest. Two Bald Eagles chicks hatched and occupied the platform nest until mid-May, when they successfully fledged. This was the first time that Florida Bald Eagles successfully fledged from an artificial nest on an artificial platform. Adult Bald Eagles again used the platform and were incubating in January 1991. Unfortunately, repeated traffic under the nest appeared to disrupt incubation and the platform was abandoned in February 1991.

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