

- BERGER, D. D., and MUELLER, H. C. 1959. "The Bal-Chatrri: A Trap for the Birds of Prey." *Bird-Banding*, **30**: 18-26.
- CRAIGHEAD, F., and CRAIGHEAD, J. 1942. "Life with an Indian Prince." *National Geographic*, **81**(2): 247.
- MACPHERSON, H. A. 1897. "A History of Fowling." David Douglas, Edinburgh.

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## CAPTURE AND CARE OF PILEATED AND RED-HEADED WOODPECKERS

By ROBERT L. RUMSEY

Two methods of stocking an outdoor aviary with Red-headed (*Melanerpes erythrocephalus*) and Pileated (*Dryocopus pileatus*) Woodpeckers have been tried at Alexandria, Louisiana. Adult birds were captured and put in an aviary, and nestlings were raised from the age of 26 to 28 days. Adult birds were the more satisfactory; they readily acclimatized to the aviary.

Information on the care and maintenance of these two species in captivity is sparse. Bent (1964) gives an account of a young Red-headed Woodpecker being hand-raised from the nest to adulthood. Hoyt (1950) captured a nestling female Pileated and kept it for 9 years. Kilham (1959) reared a female Pileated and several other species of woodpeckers. Pfitzenmeyer (1956) raised nestling Pileateds to adulthood, but other researchers at Pennsylvania State University were unsuccessful in keeping Pileateds captured as adults (Progr. Rep. for Proj. 1256. 1959. Pa. State Univ., University Park).

### THE AVIARY

An aviary was constructed for a study of ways to prevent woodpecker attacks on wooden utility poles. It provides a high-risk testing area for materials that may prevent attack. The structure (Fig. 1) is made of metal framing enclosed by 1-inch mesh poultry netting, and is located in a quiet park-like area. There are five contiguous cages, each measuring 10 × 20 × 8 feet. Each cage has a 3- × 8-foot gate framed with angle iron. A 6-foot-wide strip at the top of each cage is covered with galvanized roofing to afford protection from bad weather. This design has proved satisfactory. The metal framing prevents damage by the birds, and the poultry netting affords light, ventilation, and perching sites.

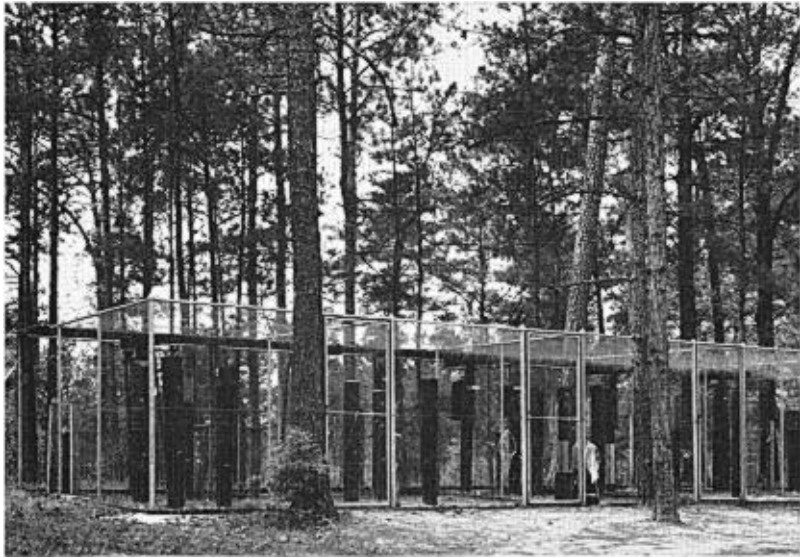


Figure 1. The aviary.

Artificial roost cavities, approximately the size of those found in the wild, have been constructed and placed in each cage. They are provided with a hinged portion, which can be opened to permit cleaning.

#### NESTLINGS

Initially, attempts were made to obtain nestling Pileateds and Red-heads; success was encountered only with the latter. In the spring of 1965, five young Red-heads were obtained from three different nests. Of these, two were raised to adulthood and are still in captivity; two others were much smaller than their siblings when taken from the nest and did not survive the initial hand-feeding periods. The remaining bird was fatally injured by its sibling when they were placed in a single cage. Age of these nestlings, all of which were obtained 26 to 28 days after hatching, was determined by inspecting the nests and noting the date of hatching.

During the first week after capture, the young were fed a watered mixture of high-protein (34 percent) baby cereal and strained beef every 2 hours during daylight. Nestlings rarely opened their beaks voluntarily for food. They were fed by forcibly inserting the tip of a medicine dropper down their throats and ejecting the watered mixture. Three droppers full, a total of approximately 3 g, constituted one feeding at the beginning. Quantity of food given and time between feedings were increased progressively for 30 days, until about 8 g were being given three times a day. Each bird was fed until food backed up to the pharynx.

Force feeding was discontinued after about 1 month, when all

the birds had begun eating meal worms. Some began eating worms within 2 or 3 weeks, but force feeding was continued as a precaution against starvation.

Water was always available, but the birds seldom drank. Since the food mixture was moist, it was believed unnecessary to force the birds to take additional water.

#### CAPTURE AND ACCLIMATIZATION OF ADULTS

After efforts to obtain nestling Pileateds were unsuccessful, adult woodpeckers were captured and permitted to acclimatize to the aviary. Red-heads were selected for perfecting the techniques of capture and maintenance because they were more abundant and less elusive than Pileateds.

The method of capture was essentially that described by Low (1957). Mist nets with 2-3/8-inch mesh were used for Red-heads. The bottoms of the nets were suspended within 6 or 8 feet of the ground because of the woodpeckers' habit of swooping low prior to ascending and alighting on a tree or pole. Several birds were captured in August 1965, but only two were confined in the aviary. They began feeding on meal worms immediately and appeared to suffer no ill effects.

Adult Pileateds were captured in 4-inch-mesh nets. Two birds were taken at their food source in October 1965, and two others in March 1966, when they began excavating a nest cavity in a utility pole. After being held for a few hours in a small cage within the aviary, the birds were released in the outer confine. Like the Red-heads, they soon began feeding on the meal worms.

Meal worms (*Tenebrio* sp. larvae), the main food for the birds, are placed in shallow 4- × 6-inch metal containers with wire screen bottoms and 3/4-inch hardware cloth tops. The screen facilitates self-cleaning, and the hardware cloth reduces food wastage by limiting the number of worms a bird can obtain at one time. Poultry pellets are provided as supplemental food, but they are not eaten readily. Most are "stored" in cracks in sections of wood that are placed in all cages. Water with antibiotics added is provided in poultry-type, inverted-jar waterers.

Adults are offered as many meal worms as they can consume daily. This amounts to approximately 100 g per bird for Pileateds and approximately 25 g for Red-heads. Periodic weighings of both species showed most birds gained weight soon after confinement.

Worms are purchased from a commercial fish-bait producer. While they are expensive, they are cheaper and easier to obtain than insect-infested bolts.

All adult birds were somewhat nervous when first placed in the aviary. However, after flying against the poultry netting a few times, they became adept at alighting and moving along the sides and tops of the cages. None of the birds sustained physical injuries during the period of orientation. They have tamed considerably, and are now easily caught in the cages with a fish landing net.

Caution should be exercised in placing more than one bird of a species in a cage. Red-headed Woodpeckers are aggressive to siblings, even at an early age, and dominants may inflict severe damage on subordinates. The confinement of an established pair does not ensure compatibility. No complications arose from the confinement of a Pileated and a Red-headed Woodpecker in a single cage for several months.

## LITERATURE CITED

- BENT, A. C. 1964. Life histories of North American woodpeckers. Dover Publications, Inc., New York.
- HOYT, S. Y. 1950. The feeding technique of the pileated woodpecker. *Bull. Mass. Audubon Soc.* **34**: 99-103.
- KILHAM, L. 1959. Behavior and methods of communication of pileated woodpeckers. *Condor* **61**: 377-387.
- Low, S. H. 1957. Banding with mist nets. *Bird-Banding* **28**: 115-128.
- PFITZENMEYER, H. T., JR. 1956. Life history and behavior patterns of the pileated woodpecker relative to utility lines. Unpublished M. S. thesis Pa. State Univ., University Park.

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## GENERAL NOTES

**A Male MacGillivray's-like Oporornis Warbler Banded at Brigantine, New Jersey in June.**—The paper by Lanyon and Bull (*Bird-Banding*, **38**:187-194, 1967) on identification of warblers in the genus *Oporornis* prompts me to report a male bird banded on 1 June 1965 at the Rutgers Field Station on Brigantine National Wildlife Refuge, north of Atlantic City, New Jersey. The sharp eye of William Russell in the Patuxent banding office led to consideration that my "atypical Mourning Warbler" might in fact belong to *O. tolmiei* rather than *O. philadelphia*, a possibility I had not considered because of the extreme extralimital record that a MacGillivray's warbler would represent.

Unfortunately, I do not have the critical tail measurements used by Lanyon and Bull (*op. cit.*) in constructing the identification key for these species, but I did record some other helpful characteristics of the bird in question. The wing (flattened) was 61.5 mm, and the tarsus was 24.25 mm (read to one-quarter mm). The bill was bicolor, being black above and pinkish below, the iris was a deep brown, and the legs and feet were of a pinkish flesh color. The breast and under tail coverts were bright yellow, the crown was gray with brownish feathers toward the rear, and the upper breast and throat were gray with small white and blackish feathers flecked through the gray. The bird had an incomplete whitish-buff eyering.

Lacking the diagnostic tail measurement and the color of the lores, which I did not record, the critical characteristics seem to be the gray chest (no darker than the hood) and the incomplete eye ring. *Oporornis tolmiei* has both, *O. philadelphia* neither.

Dr. Monica Impekoven and I checked specimens of both species in the U. S. National Museum's collection. All the male *tolmiei* in the collection of 259 skins possessed the incomplete eye ring, and none of the 70 adult male *philadelphia* possessed any indication of an eye ring. This last finding does not seem to square with the statement by Lanyon and Bull (*op. cit.*, p. 189) that "the eye-ring is