

## AN ABERRANT MOCKINGBIRD

by William E. Davis, Jr.

On July 16, 1993, while driving along Summer Street in Foxboro, I saw an all-white bird fly across a garden and land next to the road. When I returned, I found the bird hopping from fence post to fence post along a wire fence. The bird was essentially white, but its shape and behavior—it flicked its wings—identified it as a Northern Mockingbird (*Mimus polyglottos*). I went home to get binoculars and a camera and returned to find the white bird flying across the street in the company of a normally plumaged mockingbird. The white bird landed on the roof of a house at 100 Summer Street. I talked to the owner of the house, William Peveronis, and learned that the bird had been present since mid-April and that it had a nest with young in a yew less than two feet from where I stood. He showed me the nest, which contained four phenotypically (in appearance) normal chicks, several days old, which opened their yellow-lined gapes when we examined the nest. I returned to my car and watched first the normal adult and then the white bird entering the nest shrub carrying food. The white bird was more furtive, approaching the nest from the rear of the shrub after considerable hesitation and looking about, and was also the more attentive of the pair, feeding the young more frequently, suggesting that it was the female.

On close inspection the white bird proved to be actually slightly cream-colored, or off-white, rather than pure white, but showed no hint of normal feather pattern whatsoever. The rectrices (tail feathers) were frowsy. The legs and bill were also abnormal in color—a uniform grayish pink, rather than black—but looked pink in photographs. The eye color was the normal mockingbird bright yellow or orange-yellow. My descriptions of soft-part and feather coloration were corroborated by Brian Cassie on July 24.

This white bird was not an albino because it had normal eye pigmentation. According to Buckley (1982), "albinism is, no more and no less, the complete absence of *all* pigmentation, resulting in white feathers . . . , pink eyes . . . , and light bills and legs/feet. Albinism is all or nothing, and a bird can no more be a 'partial albino' than a female mammal 'partially pregnant.'" Using Buckley's classification, the bird is *leucistic* and hence, a *leucino*. Leucism is the complete loss of a particular pigment, in this case melanin, and hence the bird is properly called a *nonmelanic leucino*. The cause of the abnormal feather, bill, and leg coloration may be genetic (the pigmentation for eyes, soft parts, and feathers may be controlled by different genes or combinations of genes). If the aberrations in this bird are genetic, then the genes are probably recessive, because the young were phenotypically normal. The aberrations could result, however, from ontogenetic (developmental) factors or other congenital



*Aberrant Mockingbird, July 1993*

*Photos by William Peveronis*

problems.

Studies of "albinism" (including albinos, leucinos, and a broad spectrum of other pigment abnormalities) in North American birds dates back at least to Ruthven Deane's first paper on that topic (1876); a subsequent paper of his (Deane 1879) on "albinism" reported a pair of pure white mockingbirds from Alabama and a nearly white mockingbird from Florida. He does not mention whether the pure white birds had pink or normally colored eyes. More recently, Ross (1963) found nearly 500 "albino" birds in a survey of many of the east's major museums and the literature. Of the 500, he records thirty-two mockingbirds—one "dilute" specimen, five pure white birds, and twenty-six in "partial albino plumage." Ross states that of the latter, eighteen were the progeny of a single pair originally reported by McIlhenny (1940). However, in that 1940 paper McIlhenny states that the eighteen birds were full albinos, and specifically notes the absence of any pigmentation in the eyes. McIlhenny also noted that none of the albino mockingbirds survived to maturity; they seemed particularly vulnerable to predation, at least partially because of their defective eyesight. They were inactive during the bright part of the day, and, as nestlings, apparently could not see well enough to take food from the parents. One flew into a wire screen, seriously injuring itself. Four were severely injured or killed by the adult birds. When the adult female died, the male secured a new mate, and all further offspring were phenotypically normal, leading to the following conclusions: (1) this particular albinism was genetic and recessive, and (2) both original parents were heterozygous (carried dominant normal and recessive albinistic alleles). These conclusions are further supported by the fact that none of the phenotypically normal young produced any albino offspring in subsequent years.

McIlhenny's study suggests that loss of eye pigment is severely debilitating, and the fact that the white mockingbird in Foxboro was able to survive to maturity and find a mate may reflect the fact that its eye pigmentation was normal. It is difficult to determine from published reports whether the presence or absence of eye color plays such a significant role, because museum study skins often are not annotated for eye color, and most reports of "albino" birds similarly fail to report on this important character. Buckley (1982) notes that leucism in its various manifestations is far more common than albinism.

Arrangements to color band the young birds were finalized on July 27, but a nest check that day revealed that the young had fledged or been predated. Neither the white bird nor the young were seen again. Mockingbirds fledge in about twelve to fourteen days. Because eight days elapsed between the initial and July 24 nest inspections and because the chicks may have been four to six days old when first observed, it seems probable that the young fledged.

## References

- Buckley, P.A. 1982. Avian Genetics. In *Diseases of Cage and Aviary Birds*, 2nd edition (Margaret L. Petrak, ed.). Philadelphia: Lea and Febiger.
- Deane, R. 1876. Albinism and Melanism Among North American Birds, *Bulletin of the Nuttall Ornithological Club* 1:20-24.
- Deane, R. 1879. Additional Cases of Albinism and Melanism in North American Birds, *Bulletin of the Nuttall Ornithological Club* 4:27-30.
- McIlhenny, E.A. 1940. Albinism in Mockingbirds, *Journal of Heredity* 31:433-438.
- Ross, C.C. 1963. Albinism Among North American Birds, *Cassinia* 47:2-21.

WILLIAM E. DAVIS, JR., is president of Bird Observer. He wishes to thank Brian Cassie for assistance in field work and Paul A. Buckley and John C. Kricher for helpful suggestions on the manuscript. Special thanks are extended to William Peveronis for his help and for permission to print his two photographs of the leucistic mockingbird.

---

# BIRD NANTUCKET

Study fall migration on the beautiful island of Nantucket.

**September 9 - 30, 1995**

**Banding Workshops    Field Trips**

Sponsored by Maria Mitchell Association.

*Write:*

Edith Andrews, P. O. Box 1182  
Nantucket, MA 02554

---