

The birds were adult and juvenile Broad-tailed Hummingbirds (*Selasphorus platycercus*) and the estimated number of individuals involved was 20–25. The feeding bottles used were half-ounce vials with a one-tenth inch hole drilled in the cap, which excluded any feeders, insect or avian, except hummingbirds. Six bottles were hung in a row on a standard at each of three stations about 100 yards apart. For several days, until the birds were accustomed to the set-up, the regular 50–50 sucrose syrup was placed in all bottles. Then in succession each of the sweeteners listed above was tested against sucrose on each stand—three bottles of sucrose alternating with three of the test syrup. Output was measured each morning, bottles refilled and the order changed. Each test syrup was used for two days. Finally all six kinds of syrup were offered together for two days. Without going into details the result in round numbers on a scale of 10 was as follows: sucrose 10; dextrose 8; levulose 5; galactose 1; maltose 0; saccharin 0. Previous experiments had indicated that a 50–50 sucrose syrup was preferred to weaker mixtures and to various solutions involving honey and orange juice. This experiment tends to confirm the conclusion that this syrup is the most desirable for hummingbird feeding.—WALKER VAN RIPER *Denver Museum of Natural History*.

The Spelling of *Notharchus macrorhynchus hyperrhynchus* (Sclater).—Peters' "Check-List of Birds of the World" is so remarkably free of errors in the spelling of names that ornithologists tend to follow it uncritically. To prevent further perpetuation of an error in the name of a neotropical puffbird listed as "*Notharchus macrorhynchus hyperrhynchus* (Sclater)" (*op. cit.*, 6: 10, 1948), attention is called to the fact that the spelling of the subspecific name should be "*hyperrhynchus*". The omission of the middle "h" must have been a typographical error or pen-slip, for Peters cites as the original source of the name, using the correct spelling, "*Bucco hyperrhynchus* Sclater, Proc. Zool. Soc. London, pt. 23, 1855 (1856), p. 193, pl. 105". Until Peters' book Sclater's spelling was consistently used in the literature (see Cory, *Field Mus. Nat. Hist., Zool Ser.*, 13, pt. 2, no. 2: 391, 1919).—EUGENE EISENMANN, *American Museum of Natural History, New York, N. Y.*

A Yellow Mutant of the Evening Grosbeak.—On Oct. 29, 1957, in my yard at Canaan, Conn., there appeared among a flock of Evening Grosbeaks (*Hesperiphona vespertina*) that we were feeding, a single individual that was mainly so bright yellow in coloring that it stood out from the other birds very strikingly. My wife and I watched it from a distance of about ten feet, and I studied the details of its coloring with a 7x binocular.

The head, neck, back and entire underparts were a brilliant, clear yellow. Except for a few black speckles on the crown, there was nothing of the dark colors on the head and body that normal individuals show. The wings and tail were the normal black and white of a male Evening Grosbeak, though it seemed to me that the white patch in the wings was somewhat larger than in the other male birds near it. Except for the larger size and heavier bill, the bird suggested a summer male American Goldfinch (*Spinus tristis*).—ARETAS A. SAUNDERS, *Box 141, Canaan, Conn.*

Unilateral Microphthalmia in *Quiscalus quiscula* and Synophthalmia in *Mimus polyglottos*.—In the course of artificially incubating more than two thousand eggs of more than one hundred native bird species over a period of six years only two teratological specimens have come to my attention. On May 25, 1955 there hatched in my incubator a Common Grackle (*Quiscalus quiscula*) with apparently no right eye and with the upper bill crossing the normal lower one toward the right.

Closer examination showed this to be a condition known in poultry and in other non-avian animals as the sporadic malformation unilateral anophthalmia, or more strictly microphthalmia. This teratological condition, which may be caused in chickens by a genetic factor (and can be produced experimentally by anoxia during development) (Landauer, Bull. Storrs Agric. Exp. Sta., **262**: 157-159, 1951), is in this instance the more unusual since the rudimentary eye is on the right side, not the left, as is most frequent in poultry. Since the embryo normally develops with the head under the right wing with the left eye juxtaposed to the body it is thought that cases of sinistral unilateral microphthalmia are more apt to be anoxia induced phenocopies of the true genetic model than are dextral cases, such as the present one. Dr. Walter Landauer states (personal communication), "there is little doubt that the occurrence of the defect (in fowl) depends on the genotype of the bearer." The possibility suggests itself that there may be a genetic factor involved in *Quiscalus* for microphthalmia. The egg from which this specimen hatched was collected at Storrs, Connecticut, which is on the edge of the *Q. q. versicolor* and *Q. q. stonei* populations of disputed taxonomic status. This individual may have been of mixed *versicolor* and *stonei* descent. There is opened the possibility of partial genetic incompatibility between *versicolor* and *stonei* populations. The incompatibility might be an illustrative example of the often mentioned, but seldom defined "partial genetic isolation" in evolution. It might involve the dilution of protective recessive modifiers of deleterious mutations already established in a population, such as Landauer (Jour. Genetics, **54**: 219-235, 1956) describes as preventing phenotypic expression of perocephaly in rumpless fowl. This specimen is normal in every other respect examined. The coronal neosoptile pterylosis is interestingly normal on both left and right sides. The hatchling peeped and elicited the normal gaping behavior, seemingly unhampered for nestling life. The chick, from a clutch of four eggs was the only anomalous one of the four. A dozen other grackle clutches incubated concurrently under the same conditions (forced draft, 88° F. wet bulb; 99.5° F. dry bulb) were normal at hatching. This egg was under artificial incubation 308 plus or minus 5 hours (13 days) probably close to the entire natural incubation period. The egg had an initial weight of 9.39 g., a volume of 8.91 cc., reached specific gravity of 1.0 eight days before hatching; the chick weighed 7.03 g. at hatching and apparently had no difficulty in opening the shell.

On May 16, 1957 I took from my incubator an egg of a Mockingbird (*Mimus polyglottos*) that was past term, and on opening it found a dead chick at a stage of development ready to hatch but slightly decomposed. The specimen had a normal lower bill and tongue but a mere undifferentiated flap representing the upper bill projecting from the usual frontal region of the head. The optic capsules had grown together ventral to the rudimentary upper bill. This is a case of synophthalmia, approaching cyclopia of the genetic syndrome perocephaly (Landauer, *loc. cit.*). As with the anomalous grackle, this condition also can be produced in poultry by a genetic factor, occurring once in about ten thousand in some breeds (Landauer, personal communication), and can be phenocopied experimentally by anoxia and by biochemical injection. Synophthalmia and microphthalmia, however, are unrelated phenomena. Synophthalmia is lethal, primarily because there can be no egg tooth to effect hatching and secondarily because feeding is impossible, probably even regurgitative feeding—if indeed the parental feeding behavior would be released by such a monstrosity. The neosoptile pterylosis of this specimen is normal even to the so-called ocular pterylae, which Mockingbirds have and which Grackles have not (Wetherbee, Amer. Mus. Nat. Hist. Bull. **113**: 339-436, 1957). The egg, 2.40 cm.

by 1.89 cm. was the first and only egg found in a nest in Brentwood, Williamson County, Tennessee on April 29, 1957, 6 P. M., and was immediately put in the incubator. The egg was under artificial incubation at standard conditions during the entire incubation period (plus an undetermined post-mortem period). Other eggs (Mockingbird and others), concurrently incubated, hatched normally. It is suggested that synophthalmia is a lethal factor perhaps widespread in the Mockingbird population affecting hatchability and survival ratios.

The kindness of Dr. Walter Landauer of the Department of Animal Genetics, University of Connecticut, in checking my identifications of the anomalies is acknowledged.

It is perhaps appropriate to mention here that the anomalous condition of double yolk eggs in native birds, such as Berger (Condor, 55: 157-158, 1953) has found in the American Goldfinch (*Spinus tristis*) and in the Song Sparrow (*Melospiza melodia*), has not yet occurred in my experience.—DAVID KENNETH WETHERBEE, *New Hampshire Fish and Game Department, Concord, New Hampshire.*

First Record of the Five-striped Sparrow in the United States.—On June 18, 1957, C. D. Fisher, R. P. Kirby, and I observed a Five-striped Sparrow (*Aimophila quinquestriata*) near the Proctor Ranch, at the mouth of Madera Canyon, Pima County, Arizona (about 40 miles south of Tucson). The bird was found on the steep north side of a wash located in arid, generally flat country at the northwestern foot of the Santa Rita Mountains. The elevation was about 4700 feet. The dominant vegetation was mesquite, with a few live oaks and large cacti. The rocky ground was sparsely covered by grasses and small cacti. Small pools of water stood in the wash.

The bird was first observed by Fisher about 10:30 a.m. as it crouched on the ground behind a small clump of grass. It remained there for several minutes and then, when approached, flew into the low branches of a large mesquite about ten feet from the observers. Here the bird remained on the same perch for five minutes and sang a faint whisper song with its bill closed. The song was a high, musical, varied series of short trills and phrases, accompanied by a slight twitching of the tail. Several times, the bird also gave a single, thin, high-pitched "tseep." The sparrow continually turned its head from side to side, as if keeping an alert eye on us. Finally, it hopped to the ground, remaining in plain view until I collected it.

The specimen proved to be an adult male with an ossified skull; the testes were white and measured three by five millimeters each. The stomach was full of fine gravel and small seeds. The iris was brown, the tarsi and feet were horn-colored, the maxilla was black, and the mandible was pale blue with a black tomium. The slight amount of fat was restricted to the feather tracts.

The specimen (U.M.M.Z. 152,400) has been identified by Dr. Herbert Friedmann as *A. q. septentrionalis*. This subspecies is native to eastern Sonora, Sinoloa, western Chihuahua, and western Durango. The northernmost Mexican record of which I am aware is represented by three specimens taken by Dr. Allen R. Phillips about 9 road miles northeast of Imuris, Sonora, on the Rio Babasac, about 60 air miles south of Madera Canyon, Arizona. The present specimen is the first taken north of the U. S.-Mexican border.—LAURENCE C. BINFORD, *University of Michigan Museum of Zoology, Ann Arbor, Michigan.*