

branch and not at the extreme end of it. It was made of fine fibres and dry grasses and had no lining. The 2 eggs, which rested on the fine fibres of the bottom, were fresh, so perhaps the clutch was not yet complete. Their weight was 1.80 and 1.98 grams. They measured 18.4×13.2 and 19.1×13.4 mm. In ground colour they were creamy white (dead white after blowing). They were marked all over with small reddish spots and blotches. These markings were larger and more numerous at the larger end.—FR. HAVERSCHMIDT, *P. O. Box 644, Paramaribo, Surinam, Dutch Guiana.*

Behavior and habitat of *Thryophilus leucotis* in Central Panamá.—On July 15, 1950, in a damp thicket in the Juan Franco suburb of the city of Panamá, I observed an adult Buff-breasted Wren (*Thryophilus leucotis galbraithii*) feeding an almost full-grown, but still stub-tailed, young bird. Another adult wren was singing close by. For several minutes the adult which I was watching proceeded to work over the top of the young bird's head and back with its bill, as if searching for vermin or preening the feathers. While I had often watched monkeys busy with their social grooming, and seen birds picking ticks from the bodies of mammals, this particular form of bird behavior was new to me.

Thryophilus leucotis is a South American species which reaches its northern limit in central Panamá. In western Panamá and elsewhere in Middle America it is replaced by various forms of the closely related, and very similar, *T. modestus*. The most striking point of difference between the two species is this: in *leucotis* the wing-barring is sharp and black, in *modestus* it is vague and obsolescent. The two birds are so similar morphologically that some ornithologists would doubtless consider them conspecific but for the overlapping of their ranges in central Panamá. In this narrow zone of overlap there appears to be some tendency toward ecological segregation: *leucotis* prefers the more humid thickets, particularly those near water, *modestus* the drier, more open areas, near houses. At the Pacific coast locality mentioned above I heard a singing individual of each species within a hundred yards of each other, one in a wet thicket near a small stream, the other in a dry thicket on an open hillside. Similarly, on the humid, and formerly forested, Caribbean slope of the Canal Zone, *leucotis* has been recorded at the edge of small openings in heavy woodland (e.g., that on Barro Colorado Island), while *modestus* is found along roadsides and in the more extensive clearings. In western Panamá, beyond the range of *leucotis*, *modestus* is often noted in wet tangles and along river borders.

Both species indulge in antiphonal singing and utter a variety of loud, emphatic, whistled phrases which, though similar in basic character, are, according to my experience, sufficiently different in pattern to be distinguishable. *Leucotis* tends to end its phrases with a downward slur or drop in pitch, while *modestus* usually favors a rising or sustained *ee* as the final sound.—EUGENE EISENMANN, *Linnaean Society of New York, 11 Broadway, New York 4, New York.*

Some Remarks on West Indian Icteridae.—In his stimulating article, "Convergent evolution in the American orioles" (1950. *Wilson Bulletin*, 62: 51–86), Beecher suggests that two phyletic lines (*Icterus* and "*Bananivorus*") have arisen from "opposite ends" of the genus *Agelaius*. Thought provoking though this concept may be, certain of Beecher's statements relating to West Indian forms appear to me to be open to criticism.

Beecher is evidently of the opinion that *Agelaius* and "*Bananivorus*" entered the West Indies through Cuba from Honduras. He states (p. 59) that "*A. humeralis* may have reached Cuba from the ancestral *thilius* stock of Central America as a typical marsh-dweller when it [Cuba] was emergent in the Early Pliocene." Now, most students of West Indian natural history believe that the majority of species that reached the Antilles from Central America entered the region mainly via Jamaica, an island not shown on Beecher's map (p. 62) depicting evolution in the "*Bananivorus*" group. Jamaica is a "key-island" in any such discussion. The fact that neither "*Bananivorus*" nor *Agelaius* now inhabits this island is of no

consequence when one speaks of early Pliocene invasions. In any case their absence is explained by the presence of *Icterus leucopteryx* and *Nesopsar nigerrimus*. The latter appears to be simply an aberrant *Agelaius* with bill modified for certain unusual methods of feeding (e.g., probing bromeliads). Incidentally, *Nesopsar* is an inhabitant of mountain rain forest and is entirely black in both sexes, although Beecher states (p. 64) that black plumage "seems singularly unadapted for forest-dwelling orioles." Moreover, the species is even more arboreal than *Agelaius humeralis* and *A. xanthomus*, which fact may be explained by the non-existence of extensive or suitable marsh habitat in Jamaica.

Beecher states (p. 59) that "the Recent inundation [of Cuba] accounts for" the arboreal adaptations of *A. humeralis*. It appears more likely, however, that the species was forced from the marsh environment through competition with *A. phoeniceus assimilis*, an Antillean form which is not arboreal. Since three weak-flying monotypic genera (*Cyanolimnas*, a rail; *Ferminia*, a wren; and *Torreornis*, a finch) now confined to the Zapata Swamp have evidently survived the marsh adaptations of the Pleistocene, it is inconceivable that *A. humeralis* was unable to do so.

In regard to West Indian forms of "*Bananivorus*," it appears to me that "*B.*" *dominicensis* reached the Antilles from Central America rather recently (during the Pleistocene), for there are no specific characters serving to separate it from the Central American *I. prothemelas*, although Hellmayr (1937. Cat. Birds Amer., pt. 10: 117) unites merely the Bahaman *northropi* with *prothemelas*. I agree with Beecher, and for reasons expressed by him, that the three Lesser Antillean forms should be regarded as distinct species. It appears that mutation has progressed more rapidly on these small islands, possibly as a result of the so-called 'Sewall Wright effect.' The extraordinary distinctness of the numerous races of Lesser Antillean wrens of the genus *Troglodytes* may also be due to this factor.

Finally, I wish to point out that no land bridge or "partial bridge" (p. 73) would have been necessary to account for the forms of *Icterus leucopteryx* on Grand Cayman and St. Andrew's. Hurricanes were far more likely responsible for the presence of this species on these islands.—
JAMES BOND, *Academy of Natural Sciences of Philadelphia*.

Records from Brewster County, Texas.—During April of 1949 my wife and I saw 119 species of birds in Brewster County, Texas. I am obliged to Dr. Josselyn Van Tyne for going over our notes and suggesting which observations are of sufficient interest to place on record. We collected no specimens. The geographical and ornithological nomenclature of our list follows, for the most part, that of Van Tyne and Sutton (1937. "The Birds of Brewster County, Texas," *Misc. Publ. Univ. Mich. Mus. Zool.*, No. 37). Other papers which we have consulted are those of Borrell (1938. "New Bird Records for Brewster County, Texas," *Condor*, 40: 181-182), and of Stevenson and Smith (1938. "Additions to the Brewster County, Texas, Bird List," *Condor*, 40: 184).

Pied-billed Grebe (*Podilymbus podiceps*). One which we saw on the Rio Grande near Hot Springs on April 18 appears to be the only spring record for the county. Borrell (1938) and Stevenson and Smith (1938) have recorded it in the fall.

American Egret (*Casmerodius albus*). Three seen wading in the river near Boquillas on April 26. The species has been identified with certainty in Brewster County on two other occasions (Van Tyne and Sutton, 1937: 12-13).

Spotted Sandpiper (*Actitis macularia*). Seen three times along the Rio Grande, a single bird on each occasion. Our earliest record (one at Hot Springs, April 18) is considerably earlier than other published records.

Greater Yellow-legs (*Tringa melanoleuca*). A single bird observed at close range and heard calling along the Rio Grande near Hot Springs on April 18 is apparently the first of this species recorded in the county. It was chased off by a Duck Hawk (*Falco peregrinus*) which made several unsuccessful stoops.