

That the Fish Crow has not been previously reported in Missouri seems surprising since it is found in every major drainage in Arkansas (1962. *Audubon Field Notes*, 16:338; 1957. AOU Check-list, p. 380) and in southwestern Tennessee (1957. AOU Check-list, p. 380). The abundance of this species at Memphis, Tennessee, is apparent from the 1962 Christmas Bird Count where 74 were recorded (1962. *Audubon Field Notes*, 16:195).

David H. Snyder, professor of biology at Austin Peay State College, Clarksville, Tennessee, reports in correspondence that he has observed the Fish Crow at Reelfoot Lake (nw. Tennessee) during March and May. In late March 1962, Wally George and the writer observed and heard Fish Crows at this location. As the crow flies, Reelfoot Lake would be no more than 14 miles from Big Oak Tree State Park, Missouri.

Richard Anderson of St. Louis, Missouri, informs me that he and James Haw observed several Fish Crows at Charlestown, Missouri, and Big Oak Tree State Park on 12 September 1964.

On 9 June 1965, at Big Oak Tree State Park, the writer was successful in collecting an adult male Fish Crow while it was calling. The bird was definitely in breeding condition (testes— 16×12 mm) and several other family groups were observed in the same area. The measurements and glossy coloration were typical of the species and comparison with specimens at the University of Kansas confirmed identity. The specimen was preserved as a study skin, D.A.E. #902. Thanks are extended to Dr. Richard F. Johnston, University of Kansas, for allowing examination of specimens.—DAVID A. EASTERLA, *Department of Biology, Northwest Missouri State College, Maryville, Missouri, 8 October 1964.*

A new subspecies of *Icterus prothemelas* from Panamá and Costa Rica.—Recently the authors have had the opportunity to compare series of *Icterus prothemelas* from throughout the species' range. We find that the population of the Caribbean slope of Costa Rica and adjacent Panamá represents an undescribed subspecies based on the juvenal plumage. This population may be known as:

***Icterus prothemelas praecox* new subspecies**

Type. Juvenile male, No. 392316, American Museum of Natural History; taken at Almirante, Bocas del Toro Province, western Panamá, 22 August 1927, by R. R. Benson (original field no. 797).

Diagnosis. Juvenal plumage similar to that of *I. p. prothemelas*, but with the black of the throat patch more extensive, extending onto the lower breast, and the interscapular region solid black, instead of yellow-green. No differences in any of the postjuvenal plumages, or in size.

Discussion. Five juveniles from Costa Rica (Estrella Valley 2, Guápiles 1, and Naranjo 1) and Panamá (the type) are uniform in the characters described above, and differ from 21 juveniles from north of Nicaragua. Two juveniles from Nicaragua (Río Escondido and Segovia River) and one from Honduras (La Ceiba) have some entirely black feathers in the interscapular region, and three of the four show a narrow extension of black onto the lower breast. They are thus somewhat intermediate. Juvenile *prothemelas* from Guatemala and México have at most only narrow black tipping on the interscapular feathers in some individuals.

The description of a new subspecies based solely on the juvenal plumage may be questioned by some ornithologists. To these we would point out the large number of forms the world over that have been described only on the basis of the adult male definitive plumage (*Icterus fuertesi*), or adult female definitive plumage (*Agelaius*

spp.), or even the male definitive alternate plumage (*Dendroica petechia* subsp. and *Vidua paradisaea* subsp.). Each of these plumages, like the juvenal plumage, is genetically controlled and presents characters which identify local populations. Moreover, each of these definitive plumages is found only on a minority of the birds of any one population. On the other hand, every living bird in the population has passed through the juvenal plumage, albeit the latter is usually worn for only a short period of time and is seldom adequately represented in museum collections. These are not valid arguments against the use of the juvenal plumage (or any other particular plumage) as the principal taxonomic character of a subspecies.

Acknowledgments. We wish to thank the curators of the following institutions for kindly lending us specimens in their care: American Museum of Natural History; Carnegie Museum; Museum of Comparative Zoology; Peabody Museum, Yale University; United States National Museum; and the University of Minnesota Museum of Natural History. Dr. Dean Amadon placed the facilities of the American Museum of Natural History at the authors' disposal; and Phillips was generously supported by a grant from the Frank M. Chapman Fund, permitting him to carry out extensive research at the museum.—ALLAN R. PHILLIPS, *Instituto de Biología, Universidad Nacional Autónoma de México, México, D.F.*, AND ROBERT W. DICKERMAN, *Department of Microbiology, Cornell University Medical College, New York, New York, 5 January 1965.*