

THE UNDESCRIBED JUVENAL PLUMAGE OF THE YUCATAN JAY.

Cissilopha yucatanica (Dubois).

I.

On September 3, 1911, three jays in immature plumage were received from Yucatan. The plumage was a hitherto undescribed one, and a drawing was made of one of the birds on September 8. The subsequent postjuvenal moult transformed the birds into undoubted *Cissilopha yucatanica*. This change is described in detail in Part II of the present paper.

Both Sharpe (1) and Salvin and Godman (2) describe the female of this jay as differing from the male in having the beak yellow instead of black and the outer rectrices tipped with white. Our collector who brought north the young birds, reflecting the opinion of the natives in Yucatan, asserts that the white rectrice tips alone characterize the female. Ridgway (4) describes the adult sexes as alike, and considers the yellow beak and white-tipped rectrices as "immature" characters. This he evidently bases on Chapman (3) whose notes on this species are obtained at first hand in the field. Chapman writes as follows:

"Current descriptions of this bird, including that in the 'Biologia,' ascribe the differences shown by certain individuals in the color of the bill and tail to sex, the male being stated to have a black bill and tail, while the female is said to have the bill yellow and the tail tipped with white. My series of twelve specimens shows that this variation is not sexual, but is evidently due to age. Thus I have males and females with black bills and tails, and also examples of both sexes in which the bill is yellow and the tail tipped with white. The series also contains intermediates between the two extremes.

1—1877. Sharpe, Cat. Birds Brit. Mus., III, 133.

2—1887. Salvin and Godman, Biol. Cent.-Amer., Aves, I, 498, pl. 35.

3—1896. Chapman, Bull. Amer. Mus. Nat. His., VIII, 282.

4—1904. Ridgway, Bull. U. S. Nat. Mus., No., 50, Part III, 315.

"How long a time is required for the acquisition of the adult plumage remains to be determined. Apparently at least two years, for each group of jays had several yellow-billed individuals, about one in every four birds giving evidence of immaturity."

The chief points of interest may be thus summed up:

1. The juvenal plumage of *Cissilopha yucatanica* is characterized chiefly by the entire head, neck and under parts being white; bill and eye-ring orange yellow; iris pale hazel brown; all but the central rectrices more or less tipped with white. This white plumage is retained from the time of leaving the nest, about July 15th, until October.

2. The first winter plumage is acquired exactly as in our northern *Cyanocitta cristata* by a partial postjuvenal moult (Dwight [5]), reaching its height in October. The head, neck and under parts become black; the iris darkens to a cold slaty gray; the primaries and rectrices are not moulted, but if the latter are accidentally pulled out, they are replaced with feathers showing no trace of white.

3. The advance toward an adult plumage in this species is marked chiefly by an increase in dark pigment; sudden and complete in the body plumage of head, neck and under parts in the fall moult, and in the lateral rectrices in the first moult of the following year; more gradual in the color of the iris; and still more gradual in the color of the mandibles and eye-ring.

II.

JUVENAL PLUMAGE OF THREE INDIVIDUALS.

INDIVIDUAL A.—(FIG. 51.)

SEVEN WEEKS OLD (SEPTEMBER 8, 1911).

Head, neck, breast, belly and under tail-coverts pale creamy white, faintly tinged on the crown with blue, all of the white feathers with sooty black bases; above, pale blue, with a few new feathers of brighter blue; wing-coverts like the back; remiges



Fig. 51. Yucatan Jay in Juvenal Plumage
Zoologica, Vol. 1, No. 7

sooty black on inner web and rachis, (rachis white below), outer web bright blue like new back feathers. The blue on the tip of the inner web gradually increases, from the outer feathers inward, so that the inner secondary is uniform blue, with the exception of the proximal portion of inner web. Under wing-coverts sooty black, with faint lighter bars; tail bright blue above, black below; rachis black above and below; thighs brownish black, tinged with blue at the tarsal joint. Legs and feet pale yellow; bill orange yellow. Iris dark hazel brown. A small patch of black feathers is appearing at either side of the breast and scattered ones throughout the rest of the under parts, but none on the head. In both this and the other individuals the rectrices are so broken that it is impossible to state the amount and place of occurrence of the white. Bill 32 mm., tarsus 46 mm.

SIXTEEN WEEKS OLD (NOVEMBER 18, 1911).

Feathers of the head, neck and upper breast deep black, a few white feathers, interposed with black ones, remain above and below the eyes and on the lores and chin. The lower breast and abdomen are slightly tinged with blue, which becomes more distinct on the under tail-covers. The back and scapulars are uniform bright blue. The lesser coverts, carpal edge and inner median coverts have been renewed and are like the back, but the outer median coverts and all the greater coverts have not as yet been moulted. Wing and unplucked tail feathers have not been renewed, nor have the under wing-coverts and the feathers of the thighs. The eye-lid is bright yellow, the bill and legs somewhat paler. The iris is dark slaty gray. All of the feathers, except rectrices, remiges and upper wing-coverts, are loose in texture, the barbs few, long and disconnected. Bill 33 mm., tarsus 46.5 mm.

INDIVIDUAL B.

SEVEN WEEKS OLD.

Similar to A, except that the sooty bases are present on only a few isolated feathers; a distinct blue tinge on the crown; thighs wholly bluish black; pectoral tracts of incoming black

feathers further advanced; crown, nape and sides of the neck thickly sprinkled with black blood-feathers. Bill orange yellow. Bill 35 mm., tarsus 47 mm.

This specimen was skinned and preserved in its juvenal plumage.

INDIVIDUAL C.

SEVEN WEEKS OLD.

Shows sooty feather-bases on only the anterior part of crown, where they are very pronounced. Black feathers on breast are more scattered and more advanced than in A and B; thighs bluish black. One or two dark feathers appear on the crown. Bill clear orange yellow. Bill 31 mm., tarsus 45 mm.

SIXTEEN WEEKS OLD.

Similar to A, but breast and abdomen uniform black, only the under tail coverts tinged with blue. No white feathers remain. The thighs are deep black, very slightly tinged with blue near the tarsal joint; these feathers have evidently been renewed. The under wing-coverts have been moulted and are deep black, slightly tinged with blue. Back, scapulars, carpal edge, and wing-coverts have been moulted, but not the remiges or rectrices. Bill and legs clear yellow, iris dark slaty gray. Bill 33mm., tarsus 47 mm.



Beebe, William and Crandall, Lee S. 1911. "The undescribed juvenal plumage of the Yucatan jay. *Cissilopha yucatanica* (Dubois)." *Zoologica : scientific contributions of the New York Zoological Society* 1(7), 153–156.

<https://doi.org/10.5962/p.203797>.

View This Item Online: <https://www.biodiversitylibrary.org/item/97326>

DOI: <https://doi.org/10.5962/p.203797>

Permalink: <https://www.biodiversitylibrary.org/partpdf/203797>

Holding Institution

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.