## NOTES ON THE GENERA OF CACIQUES.

## I. THE GENUS ARCHIPLANUS CABANIS.

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In 'The Birds of North and Middle America' (Pt. II, p. 186) Mr. Ridgway called attention to the decided differences between the more typical members of the Icterid genus Cacicus and three aberrant species, C. albirostris (type of Archiplanus Cabanis), C. chrysonotus, and C. leucoramphus. Another species allied to this group, which was not seen by Ridgway, is Agelaius sclateri DuBois, of which the American Museum has recently received two adult males from eastern Ecuador. But for lack of adequate material there is little doubt that Mr. Ridgway would have formally recognized Cabanis's genus.

After an examination of every species I am able to confirm most of the points mentioned by Ridgway and to add another character. Although certain intermediate species nearly connect the extremes, yet these are on the whole so different that I believe the genus Archiplanus should be recognized for the four species named. This arrangement better expresses the interrelationships of the genera of Caciques, for Archiplanus approaches Amblycercus in all the respects in which it differs from Cacicus, and agrees also with Cassiculus in the straighter culmen, less expanded basally. Cacicus, on the other hand, approaches the larger forms, such as Zarhynchus and Ocyalus, in all of the features in which it differs from Archiplanus.

The four species of Archiplanus represent each other geographically, no two living in the same region. In each case their habitat is shared by one or two species of Cacicus and usually by an Amblycercus, but they do not always occur actually together, for some inhabit different life zones.

The characters separating Archiplanus from Cacicus are as follows:

Bill smaller, wedge-shaped, the culmen straight or nearly so, usually not distinctly elevated or expanded basally, relatively

broader and more depressed terminally; commissure straight or nearly so; mandible not expanded laterally. Nostrils larger, the postnasal membrane thickened immediately back of nostrils, forming a slight rim which coalesces with the operculum. In Cacicus the edge of the operculum is continuous with the prominent lateral border of the frontal shield, and the postnasal membrane reaches the nostril in a narrow groove, well defined from the ramphotheca, and not raised anteriorly. Wing-tip shorter and more rounded, the ninth primary shorter than the third (longer than third in Cacicus). Aftershaft of feathers usually better developed; more than half as long as main feather, except in A. sclateri (vestigial or absent in Cacicus).

In Cacicus (except true C. uropygialis) the wing-tip is more than one-third as long as the tail (often more than one-half); in C. uropygialis one-fourth or slightly less. In Archiplanus the wing-tip is considerably less than one-fourth the length of the tail in C. leucoramphus, one-fifth to one-seventh in the three other species.

In all four species of Archiplanus the tail is longer than in any Cacicus excepting true C. uropygialis, but the excess in length is very slight in A. albirostris in which species and in A. sclateri the tail is actually shorter than in C. uropygialis.

The plumage in Archiplanus is duller and more lax, the postnasal and frontal plumage somewhat longer and less dense. There is a general lengthening of the coronal feathers, forming a fuller crest than in Cacicus. What little luster is present, chiefly in A. albirostris, is greenish rather than violaceous. There is no exclusive color character, but no species of Cacicus is wholly black as in A. sclateri nor combines yellow rump with black tail and coverts as in the other species. The bill is distinctly bicolored, instead of being wholly or almost wholly pale or (in C. flavicrissus) mostly plumbeous.

I am unable to confirm the supposed difference in the relative length of the toes mentioned by Mr. Ridgway.

Cacicus uropygialis is an intermediate species closely approaching Archiplanus in the form of its wing and tail, in its smaller bill, and in the restriction of the bright (red) rump-patch. By the shape of its bill, however, and by the wing and tail of the two allied species or races, C. pacificus and C. microrhynchus, it is

connected with the more typical members of the genus. The aftershaft in the three forms just mentioned approaches that of *Archiplanus* in its development, but a vestige is present in *C. hazmorrhous* and sometimes in *C. cela* and its immediate allies.

Archiplanus sclateri is a rare species which was described by DuBois as an Agelaius but has no close affinity with that genus. It is a remarkably distinct species with resemblances both to Cacicus and Amblycercus. In the widened basal part of the culmen it approaches the former and in the very small aftershaft agrees with the intermediate C. uropygialis group. In the uniform black plumage it is like Amblycercus, and the short wing-tip is scarcely longer than that of A. solitarius.

In size, profile of culmen, and length of tail A. sclateri is intermediate between the small A. albirostris (in which the culmen is very nearly as perfectly straight as in Amblycercus holosericeus and the tail relatively short) and A. leucoramphus, which has the most distinctly curved culmen, as well as the longest wing-tip. A. chrysonotus which has the longest tail, closely resembles A. sclateri in its nearly straight culmen and short wing-tip.

In A. sclateri the mandibular rami are longer and the gonys correspondingly shorter than in the other species, particularly A. albirostris. In these respects it resembles Cacicus and, to a less degree, Amblycercus.

C. haemorrhous, the type of Cacicus, is the only one of the group in which the crown feathers are not lengthened into a distinct crest, and furthermore it has the most attenuate primaries. The three closely allied species with yellow in the tail (C. cela, C. flavicrissus and C. vitellinus) are the only ones with pointed rectrices (approached by C. haemorrhous) and with the tail-coverts like the rump in color. In these respects and in the normal absence of the aftershaft they agree with Cassiculus.

## II. OTHER GENERA OF CACICINAE.

As is the case in many other groups of birds our classification expresses the interrelationships of the species of Cacicinae very imperfectly. This is as evident from a survey of the other genera as in those just reviewed. Each of the polytypic genera contains species that strongly approach those of allied genera.

Thus Gymnostinops yuracares and Ostinops viridis are the only species of their respective groups with a broad frontal shield, and they are also strikingly alike in color. Furthermore O. viridis approaches Gymnostinops in its long crest, long upper tail-coverts and the large amount of yellow in the tail. O. decumanus and O. angustifrons are intermediate in these respects. The monotype Clypeicterus is greatly like O. viridis and G. yuracares in color and, like them, has the base of the culmen expanded.

Again, the two species of Amblycercus are very distinct structurally and, as Mr. Ridgway remarks, may not be truly congeneric. A. solitarius, the type of the genus, approaches Archiplanus in its open nostrils, faintly convex (instead of perfectly straight or even slightly concave) culmen, well-developed crest, longer wing-tip, and firmer remiges and rectrices, and it also differs from A. holosericeus in the form of the primaries.

The gradation in the length of the wing-tip between the longest winged species of *Cacicus* and the shorter winged *Amblycercus*, with the intermediate position and close mutual approach of *Archiplanus* and *Amblycercus solitarius* is shown by the following comparison. In *Cacicus vitellinus* the wing-tip is more than one-third the length of the wing, in the shorter winged species of *Archiplanus* less than one-sixth (in *A. sclateri* less than one-seventh), in *Amblycercus solitarius* one-eighth, and in *A. holosericeus* one-eleventh.

The mutual relationships of the genera of this subfamily may be shown by a comparison of the main groups. The Oropendolas comprise the genera Gymnostinops, Ostinops, Zarhynchus, Ocyalus and Clypeicterus, the last three monotypic. These are all large or very large Troupials with chestnut in the body plumage, and much yellow in the tail, but with neither yellow nor red on the wings, rump or crissum. The last two regions are chestnut, or in Ocyalus, black, and this is also the only species with a terminal black tail-band. The body plumage is often mostly greenish or chestnut with little or no black. A long, sparse crest of a few very narrow feathers is frequently present. In the three monotypic genera and in one species of each of the others, there is a broad frontal shield.

The typical Caciques (Cassiculus, Cacicus and Archiplanus) are small or medium-sized birds, with mainly black body-plumage

and with no olive-green or chestnut. There is yellow in the tail in Cassiculus and in some of the species of Cacicus, but only in the first does it reach the tip. The rump is yellow or red (except in A. sclateri), and there is a yellow patch on the wing-coverts in some species of each genus. The crest, if present, is fuller and consists of much broader feathers than in the Oropendolas.

Cassiculus approaches the latter in the color of the tail and in the form of the crest. Archiplanus and, to a less degree, certain species of Cacicus, approach the next group in the form of the bill, short wing-tip, (but ninth primary longer than first), longer tail with broader and most obtuse rectrices, well-developed aftershaft, and in the absence of yellow in the tail.

The aberrant Caciques (Amblycercus) are of rather small or medium size and wholly black plumage. The wing-tip is short, or very short (ninth primary shorter than first) and the tail is long, with broad, soft, very obtuse rectrices. One species has a crest like Archiplanus and closely approaches that genus in the length of the wing-tip.

In Cassiculus, Archiplanus and Amblycercus the culmen is scarcely or not elevated or expanded basally, as it is in nearly all the others.

Thus Cassiculus in some respects, and Cacicus in others approach the Oropendolas, while Archiplanus and especially Amblycercus differ from the large forms in nearly every feature.

I would arrange the genera of Cacicinae in the following order which differs somewhat from that of Sharpe's (Hand-List.) Gymnostinops seems on the whole to deserve the highest position. Cassidix is not a member of this group. It differs in having a well-defined nasal fossa, a neck ruff, ninth primary equalling eighth, shorter tibial plumage, bill wholly black.

Amblycercus Ocyalus
Archiplanus Zarhynchus
Cacicus Ostinops
Cassiculus Gymnostinops

Clypeicterus

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