

Body Pterylosis of *Atrichornis*, *Menura*, the 'Corvid Assemblage' and Other Possibly Related Passerines (Aves: Passeriformes)

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ABSTRACT. In a study of the body pterylosis of *Atrichornis clamosus* and *Menura novaehollandiae*, the dorsal and ventral feather tracts of these taxonomic enigmas are compared with the pterylae of 96 other passerine genera in an effort to discover relationships. I conclude that scrub-birds and lyrebirds are each other's closest relatives but that the degree of similarity is such that they should remain separated taxonomically, at least in different families. Their next closest relationships lie with the Paradisaeidae-Ptilonorhynchidae-Callaeidae complex; the degree of similarity is not strong, but it is stronger than it is to any other passerine group.

Other major conclusions of this study are that: 1) the so-called 'corvid assemblage' is not a natural group; 2) *Astrapia* is a core member of the Paradisaeidae-Ptilonorhynchidae group, with its pattern lying between the normal patterns for paradisaeine and cnemophiline birds-of-paradise and reminiscent of that of bowerbirds; 3) *Platylophus* is not a corvid and *Podoces*, *Pseudopodoces*, and *Ptilostomus* are probably not, either; and 4) *Grallina* shows no pterylographic relationship to *Struthidea* and *Corcorax*.

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Results of my initial study of the body pterylosis of the Passeriformes (Heimerdinger, 1964) strongly suggested that study of this character system in the 'corvid assemblage' could help to determine relationships therein. In contrast to many oscines, the crows and jays and some of the other groups commonly considered to be related to them, seemed to show distinctive features in their pterylosis—either dorsal or ventral or both. Since the initial study, I gradually have acquired a broad sample of specimens of most of the genera involved. As I reported at the XVIth International Ornithological Congress in Canberra (Clench, 1975, incorporated in the present study), I consider the *Menurae* to be related to this assemblage, and hence have delayed publication until an adequate specimen of *Atrichornis* was available to complete the series.

In the following report I have included descriptions and discussion of not only *Atrichornis* and *Menura* and those families often regarded as part of the corvid assemblage (Corvidae, Sturnidae, Paradisaeidae,

Ptilonorhynchidae, Cracticidae, Artamidae, Grallinidae, Callaeidae, Dicruridae and Oriolidae), but also a few problem genera such as *Pseudopodoces* (discussed under Corvidae), *Prionops* (Laniidae), *Turnagra* (Paradisaeidae, *sensu lato*), *Picathartes* (Muscicapidae), *Pityriasis* (Laniidae), *Platylophus* (Corvidae) and *Ptilostomus* (Corvidae) which have been suggested to be allied to the corvid group (review in Amadon, 1944). I have also included brief remarks on two other groups: 1) the Furnarioidea, in light of the recent suggestion by Feduccia and Olson (1982) of the possible relationship of the Rhinocryptidae to the *Menurae*; and 2) the Vireonidae and a few other oscine groups, in response to Sibley and Ahlquist's findings (1982, in press) that the vireos are closely related to members of the corvid assemblage.

METHODS AND TERMINOLOGY

In general, I have followed the flat-skin technique described previously (Clench, 1970), but have largely

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