

The Generic Position of a Cretaceous Bird

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Cimolopteryx is a genus of fossil birds that occurs in the Lance formation of the latest Cretaceous of Wyoming. In describing it Marsh (1892) included two species without designating either as its type, but this omission was subsequently rectified by Hay (1902), who selected *Cimolopteryx rara*. For years the genus remained among the Aves Incertae Sedis, until material recently collected by field parties of the University of California permitted the establishment of a family Cimolopterygidae, at the base of the order Charadriiformes and hence ancestral to the shore birds, gulls, and auks (Brodkorb, 1963).

The second species, described by Marsh as *Cimolopteryx retusus*, possesses many unique characters that require its removal to a different genus. In the paper cited above I reluctantly referred it to *Apatornis* Marsh. This procedure is unsatisfactory, however, as *Apatornis celer*, the type of that genus, is restricted to a much earlier stage of the Cretaceous and is allied to *Ichthyornis*.

In view of these considerations I propose for it the following genus in the family Cimolopterygidae.

Palintropus, new genus

Type of Genus. *Cimolopteryx retusus* Marsh, which becomes *Palintropus retusus* (Marsh).

Etymology. Greek palintropos (masculine, that which is turned back), from *palin* (backwards) and *trepo* (I bend), in reference to the recurved glenoid facet of the coracoid.

Diagnosis. Resembles *Cimolopteryx* Marsh and *Ceramornis* Brodkorb of the family Cimolopterygidae, but coracoid differs in having glenoid facet greatly extended laterally, strongly recurved, with surface somewhat concave; scapular facet a shallow cup; no procoracoid process in part preserved, but grooves on shaft may indicate the presence of a procoracoid process in life; anterior face of shaft deeply concave along glenoid facet.

Discussion. In the Lance formation, the family Cimoloptery-

gidae is now known from five species referable to three genera. Through the kindness of Dr. Robert E. Sloan I have also seen fossils of this family from the Hell Creek formation in Montana, but study of this material has not been completed as yet.

LITERATURE CITED

- BRODKORB, PIERCE. 1963. Birds from the Upper Cretaceous of Wyoming. Proc. XIIIth Internat. Ornith. Congress, pp. 55-70, figs. 1-10.
- . 1967. Catalogue of fossil birds: Part 3 (Ralliformes, Ichthyornithiformes, Charadriiformes). Bull. Florida State Mus., vol. 11, no. 3, pp. 99-220.
- HAY, O. P. 1902. Bibliography and catalogue of the fossil vertebrata of North America. Bull. U. S. Geol. Surv., no. 179, pp. 1-868.
- MARSH, O. C. 1892. Notes on Mesozoic vertebrate fossils. Amer. Jour. Sci., ser. 3, vol. 44, no. 260, pp. 171-176, pls. 2-5.

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