

## Aspects of diversity in early Antarctic penguins

Piotr Jadwiszczak and Thomas Mörs

*Acta Palaeontologica Polonica* 56 (2), 2011: 269-277 doi: <http://dx.doi.org/10.4202/app.2009.1107>

Penguin bones from the Eocene La Meseta Formation (Seymour Island, Antarctic Peninsula) constitute the only extensive fossil record of Antarctic Sphenisciformes. Here, we synonymize some of the recognized genera (*Anthropornis* with *Orthopteryx*, *Delphinornis* with *Ichtyopteryx*) and species (*Anthropornis nordenskjoeldi* with *Orthopteryx gigas*, *Delphinornis gracilis* with *Ichtyopteryx gracilis*). Moreover, we suggest that Antarctic species of *Anthropornis* and *Palaeeudyptes*, so-called giant penguins, may in fact comprise only one species each instead of two, based on evidence of well-marked sexual dimorphism. We also present new estimates of body mass based on femora testifying to the impressive scope of interspecific body-size variation in Eocene Antarctic penguins.

**Key words:** Aves, Sphenisciformes, systematics, sexual dimorphism, body mass, Eocene, Antarctic Peninsula.

Piotr Jadwiszczak [[piotrj@uwb.edu.pl](mailto:piotrj@uwb.edu.pl)], Uniwersytet w Białymstoku, Instytut Biologii, ul. Świerkowa 20B, PL-15-950 Białystok, Poland; Thomas Mörs [[thomas.moers@nrm.se](mailto:thomas.moers@nrm.se)], Swedish Museum of Natural History, Department of Palaeozoology, P.O. Box 50007, SE-104 05 Stockholm, Sweden.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see [creativecommons.org](http://creativecommons.org)), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

