

Tertiary Avian Localities of Greece

J. MLÍKOVSKÝ

Institute of Geology and Palaeontology, Charles University,
Albertov 6, 128 43 Praha 2, Czech Republic;
and Institute of Ecology, Czech Academy of Sciences,
Květná 8, 603 65 Brno, Czech Republic.

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Abstract: Bird remains were reported from three Tertiary localities in Greece thus far. Two of them, however, are classical localities for the European Tertiary.

Key-words: Aves, Tertiary, Miocene, Greece.

INTRODUCTION

First remains of Tertiary birds were reported from Greece already since the 1850s (Roth and Wagner 1855, Gaudry 1862a, b, c, 1862-1867), but only scattered remarks on Greek Tertiary birds can be found in later literature (Forsyth Major 1888, Weithofer 1888, Lydekker 1891, Martin 1903, Newton 1921, Lambrecht 1933, Bachmayer and Zapfe 1962, Harrison 1981, Jánossy 1991).

The transliteration of Greek names to the Latin alphabet is an uneasy task, because no spelling system is officially applied in Greece. For example, the Greek capital Athens can officially be written (pers. observation in 1991) as follows: Αθῆναι (spelling: Athenai), Αθῆνι (Athine), or Αθῆναι (Athina). I follow here the classical spelling of the names (ICZN 1985), and add all modern spellings in parentheses, if applied. The stratigraphical divisioning applied here follows Mein (1990).

Museum acronyms are as follows:

BMNH: Natural History Museum, London, United Kingdom

BV: Barbey, Valleyres, Switzerland (fide Lambrecht 1933)

IGPW: Institut für Geologie und Paläontologie, Universität Wien, Wien, Austria

MA: Museum of Athens, Athéné, Greece

MM: München Museum, München, Germany (fide Lambrecht 1933)

MNHN: Musée National d'Histoire Naturelle, Paris, France.

NFS: Naturmuseum und Forschungsinstitut Senckenberg Frankfurt/Main, Germany



Fig. 1. Tertiary avian localities of Greece. The numbering of the localities corresponds with that in the text. Scale bar = 100 km.

LIST OF LOCALITIES

(1) Samos 1 (Andrianò, Samos, Mytilini)

Location: Near Mytilini, Samos Province; approx. 37.44 N, 26.50 E. Early researchers excavated fossils on the island of Samos at several different places, and it has been commonly believed that exact localities were not listed. This was indeed true for many of the then papers (Forsyth Major 1888, 1892), but a detailed catalogue of the fossil

vertebrates from Samos (Forsyth Major 1894) includes these data. According to Forstén (1980), the classical locality Andrianò is identical with the modern locality Samos 1, which belongs in the zone MN 11 (Mein 1990). All the vertebrate Tertiary localities on Samos appear to be Turolian (MN 11-13) in age (Tobien 1981, Mein 1990).

Avifauna: Bones and eggshell fragments of large birds, including the Struthionidae (*Struthio*), and Ergilornithidae (*Amphipelargus*) (Forsyth Major 1888, 1892, 1894, Lydekker 1891, Martin 1903, Lambrecht 1933, Cracraft 1973, Harrison 1981, Solounias 1981). Deposited in BMNH (incl. type of *Amphipelargus majori*), BV (type of *Struthio karatheodoris*), IGPW, MM, and NFS. Type locality of *Struthio karatheodoris* Forsyth Major 1888, and *Amphipelargus majori* Lydekker 1891.

(2) PIKERMI

Location: Attiké Province. Late Miocene, MN 12 (Mourer-Chauviré *et al.* 1985), MN 12/13 (Mein 1990), or MN 13 (Tobien 1981).

Avifauna: Isolated bones of the Struthionidae (*Struthio*), Pelecanidae (*Pelecanus*), Ciconiidae (*Ciconia*), Phoenicopteridae (*Palaelodus*, *Phoenicopterus*), Phasianidae (*Pavo*) and Gruidae (*Grus*) (Roth and Wagner 1855, Gaudry 1862a,b,c, 1862-1867, Weithofer 1888, Lambrecht 1933, Bachmayer and Zapfe 1962, Mlíkovský, in prep.). Deposited in MA (fide Lambrecht 1933: 688), IGPW and MNHN. Type locality of *Ciconia gaudryi* Lambrecht 1933, *Phasianus archiaci* Gaudry 1862a, *Gallus aesculapi* Gaudry 1862a, and *Grus pentelici* Gaudry 1862a.

(3) AEGINA (Aigina)

Location: Island of Aegina, Attiké Province; 37.54 N, 23.30 E. Lambrecht (1933) believed that the avian remain reported below was of late Miocene age. However, recent studies on the island identified two fossil molluscan assemblages, which correspond in age to MN 14-15 (Deremitzakis and Georgiades-Dikeoulia 1987). Hence, I tentatively estimate the age of this avian fossil as early Pliocene, MN 14-15. Exact place, where the avian remain was collected on Aegina, is unknown.

Avifauna: Pedal phalanges, attributed to a passeriform bird (Lambrecht 1933: 689). Lambrecht (1933) did not mention the collection, where he examined the remains, and their whereabouts is unknown at present.

DISCUSSION

Only three Tertiary avian localities are known from Greece, but two of them - Samos 1 and Pikermi - are of great importance as classical localities, which yielded several new avian taxa. Pikermi continues to belong to the most important late Miocene localities of Europe.

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