## Case 2882

# Lagomeryx Roger, 1904 (Mammalia, Artiodactyla): proposed designation of L. ruetimeyeri Thenius, 1948 as the type species

## A.W. Gentry

clo Department of Palaeontology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

## E.P.J. Heizmann

Staatliches Museum für Naturkunde in Stuttgart, Rosenstein 1, 7000 Stuttgart 1, Germany

**Abstract.** The purpose of this application is to conserve the established understanding of the name *Lagomeryx* Roger, 1904 which has been used for nearly 90 years for a genus of Eurasian Miocene cervoids. The present type designation is of a species of uncertain identity which renders *Lagomeryx* either a senior or a junior subjective synonym. It is proposed that *Lagomeryx ruetimeyeri* Thenius, 1948 be designated the type species, thereby also allowing the stable usage of generic names of other Miocene cervoids to be maintained.

- 1. By the end of the nineteenth century numbers of cervoid (deer-like) artiodactyls of Miocene age had come to light in the European fossil record. Schlosser (1887, p. 295) recorded that material of 'Palaeomeryx pygmaeus' (as used in Meyer's manuscript notes and therefore not an available name) included at least three species, two of them represented at Reisensburg, near Günzburg, Germany, which is now regarded as a lower Miocene locality. Cervoid antlers from there had been illustrated but not named by Rütimeyer (1880, pl. 1, figs. 2–7).
- 2. The specific name of *Dicroceros* [sic; recte *Dicrocerus*] minimus Toula, 1884 (p. 395) was founded for some cervoid teeth from Göriach, Austria. Schlosser (1887, p. 296) considered that the larger of the two Reisensburg 'Palaeomeryx pygmaeus' species could be conspecific with Toula's species.
- 3. Hofmann (1893, p. 61) replaced *Dicrocerus minimus* Toula by the name *Palaeomeryx meyeri*. This was because, if Toula's species was assignable to *Palaeomeryx* (para. 2 above), it would be a secondary homonym of 'P. minimus', a name also given in Meyer's manuscript notes and a different species from that at Göriach. Hofmann rejected 'Palaeomeryx pygmaeus' because this name, as used by Meyer, was composite. These actions did not take account of the unavailability of Meyer's names. Hofmann (1893, pl. 12, figs. 10–15, pl. 13, figs. 1–4, 6) illustrated dental pieces and a distal metacarpal of P. meyeri, all housed in the Joanneum, Graz. Schlosser (1916, p. 15, footnote) subsequently asserted that the metacarpal belonged to a different species, Palaeomeryx furcatus Hensel, 1859, later to be placed in Euprox Stehlin, 1928, although Thenius (1948, p. 221) preferred Hofmann's original attribution. At that time no antlers had been attributed to the species described from Göriach.

- 4. Roger (1904, p. 18) founded the genus Lagomeryx for species of small cervoids with distinctive clusters of terminal prongs on their antlers. He did not designate a type species. He included Palaeomeryx meyeri in the genus and placed the Reisensburg antlers (see para. 1) in this species. He also referred two other species to Lagomeryx: Palaeomeryx parvulus Roger (1898, p. 38) and P. pumilio Roger (1898, p. 39). For P. parvulus he had originally illustrated a dentition (Roger, 1898, pl. 2, fig. 7) and an antler (pl. 2, fig. 4), but he later (Roger, 1904, p.18) reassigned the antler to P. pumilio. Fahlbusch (1977, p. 232) reported that the antler had been destroyed in the Second World War, and he also regarded it as of uncertain species identity within Lagomeryx. The only described specimens of L. pumilio were a figured lower third molar (Roger, 1898, pl. 2, fig. 5), another lower third molar and some limb bone fragments. The syntypical material of all three originally included species of Lagomeryx thus failed to include any specifically attributable antlers.
- 5. Thenius (1948, p. 221; 1950, p. 244, figs. 7-9) recorded that some Göriach upper teeth (numbered 9572 in the Joanneum, Graz) assigned to L. meyeri were found in association with an antler resembling those of Euprox sp.; the species could not therefore include antlers like those at Reisensburg (para. 4 above). Thenius noted that Meyer's manuscript name 'Palaeomeryx minimus' could not be a homonym of Dicrocerus minimus Toula and that the latter therefore had priority over P. meyeri Hofmann. Because of the morphology of the antler he placed D. minimus in Euprox. Thenius (1948, p. 221) founded L. ruetimeyeri for Lagomeryx fossils from sites other than Göriach which had hitherto been placed in L. meyeri and designated as holotype the Reisensburg left antler illustrated by Rütimeyer (1880, pl. 1, figs. 2, 3). This antler has an almost complete crown and is housed in the Bayerische Staatssammlungen für Paläontologie und historische Geologie, Munich. At one time Ginsburg (1971, p. 1001) thought that the Göriach antler and teeth studied by Thenius could belong to Heteroprox larteti (Filhol, 1891), but now (personal communication, February 1993) he regards the antler as belonging to a female Dicrocerus elegans Lartet, 1851, a species which has also been identified at the site.
- 6. In spite of the doubtful identity of the nominal taxon Palaeomeryx meyeri Hofmann, 1893, Vislobokova (1983, p. 24) designated it as the type species of Lagomeryx. If the interpretation of Palaeomeryx meyeri by Thenius (1948, 1950) or by Ginsburg (1971) is correct, recognition of this type designation would render Lagomeryx Roger, 1904 a senior subjective synonym of either Euprox or of Heteroprox, both founded by Stehlin (1928, p. 255). If Ginsburg's current interpretation should be correct, Lagomeryx would be a junior subjective synonym of Dicrocerus Lartet, 1851. Any of these outcomes would introduce considerable confusion into the nomenclature of Miocene cervoids. All four names, Lagomeryx, Heteroprox, Euprox and Dicrocerus, are currently in use. Their status was discussed by Simpson (1945, pp. 266-268). Lagomeryx, based on the Reisensburg antler, is regarded as the most distinctive of the genera. The name has consistently been used to refer to cervoid species having antlers like those of L. ruetimeyeri and unlike those of Heteroprox, Euprox or Dicrocerus (see, for example, Schlosser, 1916; Roman & Viret, 1934; Stehlin, 1937; Pilgrim, 1941; Crusafont Pairo, 1952; Rinnert, 1956; Viret, 1961; Young, 1964 and Chow & Shih, 1978).
- 7. None of the three species originally included in Lagomeryx is suitable as the type species: Palaeomeryx meyeri is of uncertain identity (paras. 5 and 6 above),

whilst *P. parvulus* and *P. pumilio* were not characterised by specifically identifiable antlers but based on teeth (para. 4), which are less diagnostic. To maintain the current concept and nomenclature of *Lagomeryx* Roger, 1904 we propose that *Lagomeryx ruetimeyeri* Thenius, 1948 be designated the type species. The latter is the best choice for type species because its holotype is an antler which is complete almost to the tip, and which was studied by Roger and placed by him in the first species assigned to the genus. Moreover, it is the first illustrated antler ascribed to *Lagomeryx*. This designation will also safeguard the usage of names for other nominal genera of Miocene cervoids.

- 8. The International Commission on Zoological Nomenclature is accordingly asked:
  - (1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Lagomeryx* Roger, 1904 and to designate *Lagomeryx* ruetimeyeri Thenius, 1948 as the type species;
  - (2) to place on the Official List of Generic Names in Zoology the name Lagomeryx Roger, 1904 (gender: masculine), type species by designation in (1) above Lagomeryx ruetimeyeri Thenius, 1948;
  - (3) to place on the Official List of Specific Names in Zoology the name *ruetimeyeri* Thenius, 1948, as published in the binomen *Lagomeryx ruetimeyeri* (specific name of the type species of *Lagomeryx* Roger, 1904).

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