

Diagnoses of four new tribes within Carnivora (Mammalia)

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Nyctereutini trib. n. (Canidae: Caninae), Hyaenictini trib. n., Adcrocutini trib. n. and Crocutini trib. n. (Hyaenidae) are established.

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Describing deciduous teeth of Carnivora we proposed names for four new tribes of the families Canidae and Hyaenidae (Baryshnikov & Averianov, 1993, 1995), some of which were used in recent taxonomic checklists (Pavlinov et al., 1995; Baryshnikov & Vereshchagin, 1996; McKenna & Bell, 1997; Pavlinov & Rossolimo, 1998). As the descriptions of these new taxa were absent in the publications, these names must be treated as nomina nuda (International Code of Zoological Nomenclature [later ICZN], Art. 13). For their formal establishment we give below the diagnoses of the new tribes.

McKenna & Bell (1997: 245, 246) erroneously cited some tribal names among Canidae with our authorship: Lycaonini Baryshnikov & Averianov, 1993: 171, Otocyonini Baryshnikov & Averianov, 1993: 165, and Cuonini Baryshnikov et Averianov, 1993: 169. According to the ICZN, Art. 35a and 36a, the oldest available names for these family-group taxa are: Lycaonina Gray, 1868: 495, Otocyonidae Trouessart, 1885: 6, 51, and Cuoninae Miller, 1924: 155.

Family **CANIDAE** Fischer, 1817

Subfamily **CANINAE** Fischer, 1817

Nyctereutini trib. n.

Nyctereutini triba nov. [nomen nudum]: Baryshnikov & Averianov, 1993: 166.

Nyctereutini Baryshnikov & Averianov, 1993 [nomen nudum]: Pavlinov et al., 1995: 131; McKenna & Bell, 1997: 245, 246; Pavlinov & Rossolimo, 1998: 83.

Type genus *Nyctereutes* Temminck, 1839 (Early Pliocene (or Late Miocene?) – Recent; Eurasia, Africa).

Diagnosis. Canids of moderate size. Viscerocranial part of skull short, somewhat longer than neurocranial part. Ventral margin of mandible under angular process with additional projection. I3 separated from I2 by a small diastema. Length of M1 almost equal to its width; talon without constriction; protocone and metacone of similar size. m2 about half as long as m1.

Composition. Monotypic.

Remarks. The genus *Nyctereutes* is similar with *Otocyon* Muller, 1836 and *Urocyon* Baird, 1857, but differs in some autapomorphies given in the diagnosis of the tribe.

Family **HYAENIDAE** Gray, 1821

Hyaenictini trib. n.

Chasmaporthetini [nomen nudum]: Kalandadze & Rautian, 1992: 71.

Hyaenictini trib. nov. [nomen nudum]: Baryshnikov & Averianov, 1995: 56.

Type genus *Hyaenictis* Gaudry, 1861 (Late Miocene, Middle Turolian; Pikermi, Greece).

Diagnosis. Hyaenas of moderate size. Suture between premaxillary and frontal on snout present. Contribution of maxillary to antero-internal rim of zygomatic arch small to none. Premolars narrow. Carnassial teeth lying in line with tooth row and forming angle relative to sagittal plane. Protocone P4 robust. M1 large. p1 most often absent. m1 with or without metaconid. m2 present or (in later representatives) absent.

Composition. *Hyaenictis* Gaudry, 1861, *Chasmaportheites* Hay, 1921, and possibly *Lycyaena* Hensel, 1862.

Remarks. In the cladogram of Werdelin & Solounias (1991), the genera mentioned form a single clade. McKenna & Bell (1997: 243) included *Lycyaena* in Ictitheriinae Trouessart, 1897 (= Ictitheriidae in our classification).

Adcrocutini trib. n.

Adcrocutini trib. nov. [nomen nudum]: Baryshnikov & Averianov, 1995: 62.

Type genus *Adcrocuta* Kretzoi, 1938 (Late Miocene, Middle Turolian; Pikermi, Greece).

Diagnosis. Hyaenas of large size. Suture between premaxillary and frontal on snout absent. Maxillary makes up a substantial portion of antero-dorsal margin of zygomatic arch. Premolars wide. Carnassial teeth situated parallel to sagittal plane. Protocone projection P4 rudimentary. M1 well developed. p1 present. m1 usually without metaconid, with a well developed talonid. m2 absent.

Composition. Monotypic.

Remarks. Werdelin & Solounias (1991) draw together *Adcrocuta* with *Crocuta*, *Pliocrocuta* and *Pachycrocuta*; the discussion on their relationships see in Baryshnikov & Averianov, 1995.

Crocutini trib. n.

Crocutini trib. nov. [nomen nudum]: Baryshnikov & Averianov, 1995: 65.

Crocutini Baryshnikov et Averianov, 1995 [nomen nudum]: Baryshnikov & Vereshchagin, 1996: 10.

Type genus *Crocuta* Kaup, 1828 (Late Pliocene – Recent; Eurasia, Africa).

Diagnosis. Hyaenas of middle or large size. Skull short and strongly widened in facial part. Suture between premaxillary and frontal on snout present (*Parahyaena*) or absent (*Crocuta*). Maxillary makes up a substantial

portion of antero-dorsal margin of zygomatic arch. Premolars wide. Carnassial teeth situated parallel to sagittal plane. P4 with large protocone projection; cutting blade (metastyle) longer than paracone. M1 small, with two roots. p1 and m2 absent. m1 often without metaconid.

Composition. 2 extinct genera (*Pliocrocuta* Kretzoi, 1938 and *Pachycrocuta* Kretzoi, 1938) and 2 extant genera (*Parahyaena* Hensley, 1974 and *Crocuta* Kaup, 1828).

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