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Zbyněk ROČEK

List of fossil amphibians of Czechoslovakia

[With 1 text-fig.]

Lista kopalnych płazów Czechosłowacji

Abstract. 30 species of labyrinthodonts (*Baphetes bohemicus*, *Megalcephalus* sp., *Dawsonerpeton polydens*, *Cochleosaurus boemicus*, *Gaudrya latistoma*, ?*Lusor tenellus*, *Cheliderpeton vranyi*, "Ptyonius" *bendai*, *Sclerocephalus credneri*, *Onchiodon* ? *foveolatum*, *Amphibamus laticeps*, *Mordex calliprepes*, *Branchiosaurus salamandroides*, *Branchiosaurus venosus*, *Branchiosaurus robustus*, *Apateon pusillus*, *Moraverpeton remesi*, *Limnogyrinus elegans*, "Limnerpeton" *laticeps*, *Archegosaurus dyscriton*, *Diplovertebron punctatum*, *Nummulosaurus kolbii*, *Gephyrostegus boemicus*, *Gephyrostegus watsoni*, *Discosauriscus pulcherrimus*, *Discosauriscus potamites*, *Letoverpeton moravicum*, *Letoverpeton austriacum*, *Hemichthys problematica*, *Solenodonsaurus janenschi*), 13 species of lepospondyls (*Ophiderpeton granulosum*, *Ophiderpeton vicinum*, *Phlegethontia linearis*, *Phlegethontia longissima*, *Scincosaurus crassus*, *Sauropleuria scalaris*, *Urocordylus angustatus*, *Crinodon limnophyes*, *Boii crassidens*, *Rienodon copei*, *Sparodus validus*, *Microbrachis pelikani*, *Hyloplesion longicostatum*), 1 species incertae sedis (*Adenoderma gracile*), from Permo-Carboniferous deposits, and 32 anuran species (*Bombina* cf. *bombina*, *Bombina* cf. *variegata*, *Discoglossus giganteus*, *Eodiscoglossus hessi*, *Latonia fejafari*, *Latonia kolebabi*, *Latonia zapfei*, *Palaeobatrachus* (*P.*) *dilurianus*, *Palaeobatrachus* (*P.*) *luedekii*, *Palaeobatrachus* (*P.*) *rostae*, *Palaeobatrachus* (*Hekatobatrachus*) *grandipes*, *Palaeobatrachus* (*Pelobatinopsis*) *grandipes*, *Palaeobatrachus* (*Hekatobatrachus*) *novotnyi*, *Palaeobatrachus* (*Suleobatrachus*) *laubei*, *Neusibatrachus estesi*, *Pliobatrachus langhae*, *Eopelobates* cf. *anthracinus*, *Eopelobates bayeri*, *Pelobates fuscus*, *Pelobates syriacus*, *Hyla* cf. *arborea*, *Bufo bufo*, *Bufo viridis*, *Bufo viridis stranensis*, *Bufo calamita*, *Rana temporaria*, *Rana arvalis*, *Rana dalmatina*, *Rana esculenta*, *Rana* cf. *latastei*, *Rana* cf. *lessonae*, *Rana luschitzana*, *Asphaerion reussi*) and 13 urodelan species (*Andrias scheuchzeri*, *Bargmannia wettsteini*, *Mertensiella mera*, *Salamandra salamandra*, *Salamandra sansaniensis*, *Salamandra broili*, *Archaeotriton basalticus*, *Triturus* cf. *alpestris*, *Triturus* cf. *marmoratus*, *Triturus cristatus*, *Triturus opalinus*, *Triturus rohrsii*, *Triturus vulgaris*) found in Tertiary localities of Czechoslovakia are listed. Some of this material, as well as some specimens originally described by FRIČ, still need modern systematic revision.

I. INTRODUCTION

The study of fossil amphibians in Czechoslovakia began in the middle of the 19th century. The first published work of international significance was that of FRIČ (FRITSCH, 1883, 1889, 1895a, 1901*), in which many Permo-Carboniferous amphibians from Bohemia (the western region of Czechoslovakia) were described. FRIČ's material was not reviewed for another 50 years until STEEN (1938) revised it, reducing some of FRIČ's forms in synonymy and adding some new genera. In the last 30 years, the most important contributions to our knowledge of the fossil herpetofauna of Czechoslovakia have been the revisions of the discosauriscids and the Tertiary frogs undertaken by ŠPINAR (1952, 1972b).

As well as these major steps in the investigation of the fossil amphibians of Czechoslovakia, many palaeoherpetologists have either revised material originally described by FRIČ**, or have undertaken further excavations that have yielded new large assemblages of material. These systematic revisions have resulted in some changes in our understanding of the fossil herpetofaunas of Czechoslovakia.

The following list is far from being definitive, because the taxonomic history of some groups is very complex, and their systematic position is still a matter of discussion (e. g. CARROLL, 1970: tab. 3). However, even in the present state of incomplete systematic revision, it is useful to review our knowledge from time to time by compiling at least a provisional faunal list. For the Permo-Carboniferous freshwater fauna, such a list has recently been published by ZAJÍC and ŠTAMBERG (1985). It is hoped that the following list of the known fossil amphibians of Czechoslovakia will serve as a starting point for further investigation in this field.

Because of the limited space available, only the most significant literature is given. The references given are those which specify geographical and geological occurrence of the amphibian material. Most of the Palaeozoic taxa are ordered in accordance with the "Classification of amphibians and list of genera and species known as fossils" by CARROLL and WINER (1977). *Anura* are ordered in accordance with ŠPINAR (1984: 215—216), and *Caudata* after ESTES (1981).

* In fact, the "Fauna der Gaskhole etc." appeared subsequently in the years 1879—1901, in fifteen separate parts (1879, 1880, 1881, 1883, 1885, 1885, 1888, 1889, 1890, 1893, 1894, 1895, 1899, 1899, and 1901). Later these parts were hardbound into four volumes (1883, 1889, 1895, and 1901), original title pages of each part being removed and replaced by another ones, slightly altered, only in the first part of each volume. Hence, the final bound volumes bear another date of publication than their parts. If there are problems of name priority, then the precise date at which a name was published is most important. This is why in taxonomic comments the date of issue of the pertinent part is referred (see also A. R. MILNER, 1980b : 494).

** This material is deposited mainly in the collections of the National Museum, Prague, of the Department of Palaeontology, Charles University, Prague, and of the Regional Museum in Plzeň.

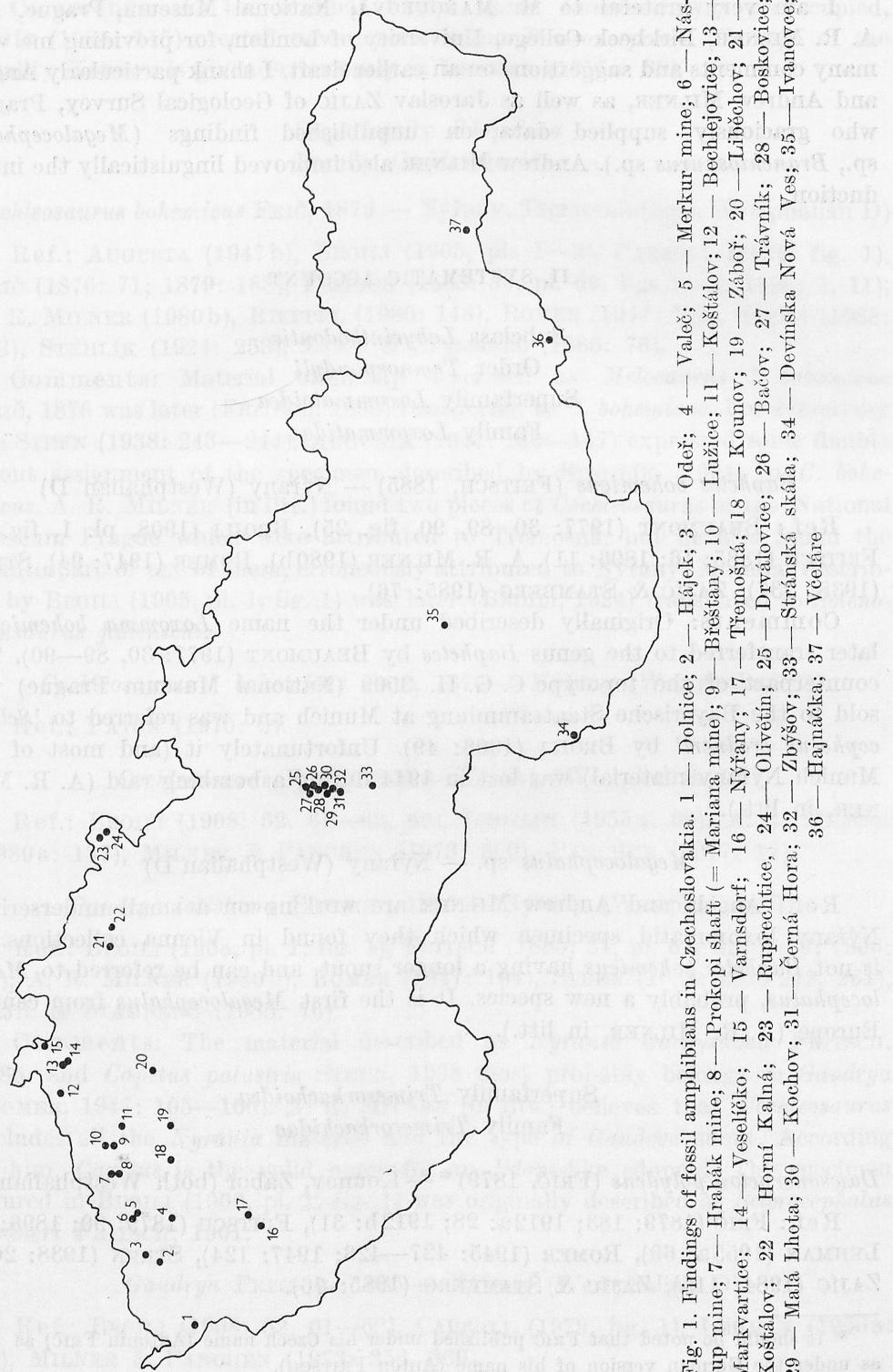


Fig. 1. Findings of fossil amphibians in Czechoslovakia. 1 — Dolnice; 2 — Hájek; 3 — Odeř; 4 — Valeč; 5 — Merkun mine; 6 — Nás-tup mine; 7 — Hrabák mine; 8 — Prokopí shaft (= Mariána mine); 9 — Břešany; 10 — Lužice; 11 — Koštálov; 12 — Bechlejovice; 13 — Markvartice; 14 — Veselíčko; 15 — Varnsdorf; 16 — Nýřany; 17 — Třemošná; 18 — Kounov; 19 — Záboř; 20 — Liběchov; 21 — Koštálov; 22 — Horní Káhná; 23 — Ruprechtice; 24 — Olivětín; 25 — Drávalovice; 26 — Bačov; 27 — Trávník; 28 — Boskovice; 29 — Malá Lhota; 30 — Kochov; 31 — Černá Hora; 32 — Zbýšov; 33 — Stránská skála; 34 — Devínska Nová Ves; 35 — Ivanovce; 36 — Hajnáčka; 37 — Věláre.

I am very grateful to M. MAŇOUROVÁ, National Museum, Prague, and A. R. MILNER, Birkbeck College, University of London, for providing me with many comments and suggestions on an earlier draft. I thank particularly Angela and Andrew MILNER, as well as Jaroslav ZAJÍC of Geological Survey, Prague, who graciously supplied data on unpublished findings (*Megalocephalus* sp., *Branchiosaurus* sp.). Andrew MILNER also improved linguistically the introduction.

II. SYSTEMATIC ACCOUNT

Subclass *Labyrinthodontia*

Order *Temnospondyli*

Superfamily *Loxommatoidae*

Family *Loxomatidae*

Baphetes boemicus (FRITSCH, 1885) — Nýřany (Westphalian D)

Ref.: BEAUMONT (1977: 30, 89, 90, fig. 25), BROILI (1908, pl. 1, fig. 2), FRITSCH (1885: 16; 1896: 11), A. R. MILNER (1980b), ROMER (1947: 94), STEEN (1938: 237), ZAJÍC & ŠAMBERG (1985: 76).

Comments: Originally described under the name *Loxomma boemicum*, later transferred to the genus *Baphetes* by BEAUMONT (1977: 30, 89—90). The counterpart of the topotype C. G. H. 3509 (National Museum Prague) was sold to the Bayerische Staatsammlung at Munich and was referred to '*Sclerocephalus credneri*' by BROILI (1908: 49). Unfortunately it (and most of the Munich Nýřany material) was lost in 1944 during a bombing raid (A. R. MILNER, in litt.).

Megalocephalus sp. — Nýřany (Westphalian D)

Ref.: Angela and Andrew MILNER are working on a small underscribed Nýřany loxommatid specimen which they found in Vienna collections. It is not *Baphetes boemicus* having a longer snout, and can be referred to *Megalocephalus*, probably a new species. It is the first *Megalocephalus* from central Europe (A. R. MILNER, in litt.).

Superfamily *Trimerorhachoidea*

Family *Trimerorhachidae*

Dawsonerpeton polydens (FRIČ, 1879) * — Kounov, Záboř (both Westphalian D)

Ref.: FRIČ (1879: 183; 1912a: 28; 1912b: 31), FRITSCH (1879: 90; 1896: 8), LEHMAN (1955a: 69), ROMER (1945: 427—428; 1947: 124), STEEN (1938: 265), ZAJÍC (1984: 115), ZAJÍC & ŠAMBERG (1985: 76).

* It should be noted that FRIČ published under his Czech name (Antonín FRIČ) as well as under the German version of his name (Anton FRITSCH).

Comments: As the original FRIČ's name *Dawsonia* was preoccupied, ZAJÍC (1984: 115) erected new generic name *Dawsonerpeton*. The age of the locality Kounov is given erroneously in LEHMAN (1955a: 69).

Superfamily *Edopoidea*
Family *Cochleosauridae*

Cochleosaurus boemicus FRIČ, 1876 — Nýřany, Třemošná (both Westphalian D)

Ref.: AUGUSTA (1947b), BROILI (1905, pls 1—2), CARROLL (1979, fig. 1), FRIČ (1876: 71; 1879: 188), FRITSCH (1885: 30, pl. 60, figs 1—3; 1896: 4, 11), A. R. MILNER (1980b), RIEPPEL (1980: 148), ROMER (1947: 113), STEEN (1938: 243), STEHLÍK (1924: 253), ZAJÍC & ŠTAMBERG (1985: 76).

Comments: Material originally described as *Melosaurus* ? *boemicus* FRIČ, 1876 was later (FRITSCH, 1885) transferred to *C. boemicus*. For synonymy see STEEN (1938: 243—244). AUGUSTA (1947: 146—147) expressed some doubts about assignment of the specimen described by STEHLÍK (1924) to *C. boemicus*. A. R. MILNER (in litt.) found two pieces of *Cochleosaurus* at the National Museum Prague which were attributed to Třemošná, but he also found the counterpart of one of them, erroneously attributed to Nýřany. Material described by BROILI (1905, pl. 1, fig. 1) was later (BROILI, 1924) transferred to *Solenodonsaurus janenschi*.

Cochleosaurus ? *boemicus* FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: PATON (1975: 3).

Cochleosaurus FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 52, 61—62, 69), LEHMAN (1955a: 69), A. R. MILNER (1980a: 137), MILNER & PANCHEN (1973: 360), PANCHEN (1977: 12).

Gaudrya latistoma FRITSCH, 1885 — Nýřany (Westphalian D)

Ref.: BROILI (1908, pl. 1, fig. 1), FRITSCH (1885: 31, pl. 61, figs 1—6; 1896: 11), A. R. MILNER (1980b), ROMER (1947: 104), STEEN (1938: 241, 242, 261), ZAJÍC & ŠTAMBERG (1985: 76).

Comments: The material described as *Nyrania trachystoma* FRITSCH, 1885, and *Capetus palustris* STEEN, 1938 most probably belongs to *Gaudrya* (ROMER, 1947: 105—106). A. R. MILNER (in litt.) believes that *Cochleosaurus* includes all the *Nyrania* material and the type of *Gaudrya* snout. According to him, *Capetus* is the valid name for an *Edops*-like edopoid. The specimen figured in BROILI (1908, pl. 1, fig. 1) was originally described as *Sclerocephalus credneri* FRITSCH, 1901.

Gaudrya FRITSCH, 1885 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 52, 61—62), CARROLL (1979, fig. 1), LEHMAN (1955a: 68), MILNER & PANCHEN (1973: 356, 360).

? *Lusor tenellus* STEEN, 1938 — Ruprechtice (U Autunian)

Ref.: ROMER (1947: 108), STEEN (1938: 249), ZAJÍC & ŠTAMBERG (1985: 76).

? *Lusor* STEEN, 1938 — Ruprechtice (U Autunian)

Ref.: LEHMAN (1955a: 68).

Superfamily *Eryopoidea*

Family *Eryopidae*

Cheliderpeton vranyi FRIČ, 1877 — Olivětín, Ruprechtice (both U Autunian)

Ref.: BROILI (1908: 57), FRIČ (1877a: 6—7; 1877b: 241; 1879: 188), FRITSCH (1878; 1885: 18, pls 54—57, pl. 58, fig. 12; 1896: 11), KUHN (1939: 127, 130), ROMER (1947: 138, 142), STEEN (1938: 248). ZAJÍC & ŠTAMBERG (1985: 76).

Comments: STEEN (1938: 248) and ROMER (1947: 138) misspelled *vranyi* as *vranii*, and also *Chelyderpeton* is incorrect spelling, as original FRIČ's designation (FRIČ, 1877a: 6—7) is *Cheliderpeton* (not *Chelidosaurus* which is the name used by FRIČ in all his later papers). ROMER (l. cit.) considers "*Actinodon germanicum*" KUHN, 1939 as conspecific with *Cheliderpeton vranyi*.

Cheliderpeton FRIČ, 1877 — Koštálov (L Autunian)

Ref.: BROILI (1908: 52, 69), LEHMAN (1955a: 92), PATON (1973: 3), ZAJÍC & ŠTAMBERG (1985: 76).

"*Ptyonius*" *bendai* FRITSCH, 1896 — Koštálov (L Autunian)

Ref.: FRITSCH (1896: 4; 1901: 92), A. R. MILNER (1981), ZAJÍC & ŠTAMBERG (1985: 76).

Comment: *Ptyonius bendai* was considered by STEEN (1938) a young individual of *Urocordylus* (= *Sauropleura*) *scalaris* (see comment on *Sauropleura scalaris*, p. 525).

Ptyonius COPE, 1874 — Nýřany (Westphalian D)

Ref.: SCHWARZ (1908: 67).

Sclerocephalus credneri FRITSCH, 1901 — Ruprechtice (U Autunian)

Ref.: BROILI (1908: 55, pl. 1, figs 1—3), FRITSCH (1896: 4; 1901: 93), KUHN (1939: 127), A. R. MILNER (1978: 667), STEEN (1938: 247), ZAJÍC & ŠTAMBERG (1985: 76).

Comments: FRIČ's (FRITSCH 1901: 93) *Sclerocephalus credneri* from Koštálov is the type of *Archegosaurus dyscriton* (see comment on p. 521). FRIČ transferred to *S. credneri* the material originally described (FRITSCH 1896: 4) as *S. labyrinthicus*.

Onchiodon? *foveolatum* (FRITSCH, 1885) — Kounov (Stephanian B)

Ref.: FRIČ (1879: 188), FRITSCH (1885: 8; 1896: 10), ROMER (1945: 427; 1947: 136), ZAJÍC & ŠTAMBERG (1985: 76).

Comment: Originally described as *Dendrerpeton foveolatum*.

Family *Dissorophidae*

Amphibamus laticeps (FRITSCH, 1881) — Nýřany, Třemošná (both Westphalian D)

Ref.: FRITSCH (1881: 148, pl. 31, text.-fig. 90), A. R. MILNER (1986: 672), ZAJÍC & ŠTAMBERG (1985: 76).

Comment: Originally described under generic names *Microdon* and *Limnerpeton*. A. R. MILNER (1986: 672) also includes to this species types of *Limnerpeton macrolepis* FRITSCH, 1883 and *Potamochoston limnaios* STEEN, 1938 (see also comment on "Limnerpeton" *laticeps*, p. 521).

Mordex calliprepes (STEEEN, 1938) — Nýřany (Westphalian D)

Ref.: CARROLL (1964: 241; 1979, fig. 1), A. R. MILNER (1980b; 1986: 672), ROMER (1947: 167), STEEN (1938: 260), ZAJÍC & ŠTAMBERG (1985: 76).

Comments: Originally described as *Mordex calliprepes* by STEEN (1938: 260), later transferred to the genus *Amphibamus* by CARROLL (1964: 241). A. R. MILNER (1986: 672) however, does not associate this form with *Amphibamus*.

Branchiosaurus salamandroides FRIČ, 1876 — Třemošná, Nýřany (both Westphalian D)

Ref.: AUGUSTA (1939b: 1), BOY (1972: 65—66, 96, 100; 1978: 68), BROILI (1908: 57), CARROLL (1979, fig. 1), FRIČ (1876: 73; 1877: 19; 1879: 185), FRITSCH (1879: 26; 1896: 7), LEHMAN (1955c: 231), A. R. MILNER (1980b; 1982: 657; 1986: 673), ROMER (1947: 144), STEEN (1938: 253), STEHLÍK (1924: 271), ZAJÍC & ŠTAMBERG (1985: 76).

Comment: Specimens described by STEHLÍK (1924: 225—230, 271—272, figs 3, 4) as *B. gracilis* belong according to ROMER (1947: 144) and A. R. MILNER (1986: 673) to *B. salamandroides*.

Branchiosaurus venosus FRIČ, 1879 — Kounov (Stephanian B)

Ref.: BOY (1978: 69), BROILI (1908: 57), FRIČ (1879: 185; 1912a: 28; 1912b: 31), FRITSCH (1879: 26; 1880: 83, pl. 9, figs 5—7; 1896: 7), STEEN (1938: 264), ZAJÍC & ŠTAMBERG (1985: 76).

Branchiosaurus robustus FRIČ, 1879 — Kounov (Stephanian B)

Ref.: BOY (1978: 69), BROILI (1908: 57), FRIČ (1879: 185), FRITSCH (1879: 26; 1880: 84, pl. 10, figs 8—10; 1896: 7), STEEN (1938: 264), ZAJÍC & ŠTAMBERG (1985: 76).

Comment: Both latter forms are erroneously given by FRITSCH (1896: 7) from Nýřany. Both two are considered by A. R. MILNER (in litt.) *Temnospondyli* incertae sedis.

Branchiosaurus FRIČ, 1879 — Koštálov (L Autunian), Třemošná, Nýřany (both Westphalian D), Zbýšov, Liběchov (both Stephanian C)

Ref.: AUGUSTA (1948: 87; 1947a: 194), MAŇOUROVÁ (1981: 171), MILNER & PANCHEN (1973: 360), PATON (1975: 3), ZAJÍC (pers. comm., 1986), ZAJÍC & ŠTAMBERG (1985: 76).

Comments: Material described by AUGUSTA needs a revision. Personal communication by ZAJÍC concerns borehole from the locality Liběchov (Lib—1) performed by Geological Survey, Prague.

Apateon pusillus (FRIČ, 1878) — Horní Kalná (Autunian), Olivětín (U Autunian)

Ref.: AUGUSTA (1937a: 1; 1937c), BOY (1972: 65, 97, 101; 1978: 68), FRIČ (1878: 249; 1879: 186), FRITSCH (1879: 27; 1880: 96, pl. 13; 1898: 8), KUHN (1939: 127), LEHMAN (1955c: 231), MAŇOUROVÁ (1981: 171), STEEN (1938: 256), ŠPINAR (1950: 3), ZAJÍC & ŠTAMBERG (1985: 76).

Comments: Originally described as *Melanerpeton pusillum* by FRIČ (1878: 249), later transferred to the genus *Branchiosaurus* by BOY (1972). The latter author recently (1986: 132) placed most of the Permian material in the genus *Apateon* MEYER, 1844. Hence *B. pusillus* became *Apateon pusillus*. LEHMAN (1955c: 231) erroneously gives *Melanerpeton pusillum* (= *A. pusillus*) from Nýřany. *Branchiosaurus umbrosus* FRITSCH, 1879 is according to BOY (1972: 65) identical with *B.* (= *A.*) *pusillus*, however, A. R. MILNER (in litt.) considers it a separate form.

Moraverpeton remesi AUGUSTA, 1947 — Zbýšov (Stephanian C)

Ref.: AUGUSTA (1948: 87; 1947: 189).

Comment: This material needs a revision.

Family *Micromelerpetontidae*

Limnogyrinus elegans (FRITSCH, 1881) — Nýřany (Westphalian D)

Ref.: FRITSCH (1883, pl. 34; 1896: 9), A. R. MILNER (1986: 672), ZAJÍC & ŠTAMBERG (1985: 76).

Comment: Originally described under the generic name *Limnerpeton*. See also comment on "*Limnerpeton*" *laticeps*.

"*Limnerpeton*" *laticeps* FRITSCH, 1881 — Nýřany (Westphalian D)

Ref.: BOY (1972: 38, 99, 101), CARROLL (1964: 242), FRITSCH (1879: 28; 1883: 148, pl. 31, pl. 36, fig. 1; 1896: 9), GREGORY (1950), A. R. MILNER (1980b), ROMER (1947: 143), STEEN (1938: 250, 261).

Comments: *Potamochoston limnaios* described by STEEN (1938: 250—252, figs 36—37) is according to ROMER (1947: 144) identical with *Limnerpeton laticeps*. The same presumably holds for *Sparagmites lacertinus* described by FRITSCH (1885: 15—16), also from Nýřany (ROMER 1947: 145). A. R. MILNER (1986: 672) assigned much museum material (National Museum Prague) referred to *L. laticeps*, to *Limnogyrinus elegans*. Very limited material described by STEHLÍK (1924: 235—238) as *Limnerpeton obtusatum* FRITSCH, 1883 needs a revision.

Limnerpeton FRITSCH, 1881 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 60), CARROLL (1979, fig. 1), FRITSCH (1896: 4).

Family *Archegosauridae*

Archegosaurus dyscriton (STEEEN, 1938) — Koštálov (L Autunian)

Ref.: LEHMAN (1955b), A. R. MILNER (1978), PANCHEN (1970: 53), ROMER (1947: 268), STEEN (1938: 240), ZAJÍC & ŠTAMBERG (1985: 76).

Comments: The skull, originally assigned by FRIČ to *Sclerocephalus credneri* (1901: 93), was reassigned by STEEN (1938: 240) as the type and only specimen of new genus and species of *Memonomenos dyscriton*, believed to be an anthracosaur. This was doubted by PANCHEN (1970: 53). A. R. MILNER (1978) transferred it to the form *Archegosaurus dyscriton* comb. nov., belonging to temnospondylus family *Archegosauridae*. Material from Kounov, provisionally referred by ROMER (1945: 425) as *Memonomenos simplex*, still needs a revision.

Order *Anthracosauria*

Suborder *Embolomeri*

Family *Eogyrinidae*

Diplovertebron punctatum FRIČ, 1879 — Nýřany (Westphalian D)

Ref.: CARROLL (1970: 286), FRIČ (1879: 187), FRITSCH (1896: 10), A. R. MILNER (1980b), PANCHEN (1970: 55, fig. 17a—b), ROMER (1947: 296), STEEN (1938: 239), ZAJÍC & ŠTAMBERG (1985: 77).

Diplovertebron FRIČ, 1879 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 61), CARROLL (1969b: 406; 1979, fig. 2), LEHMAN (1955b: 197).

Nummulosaurus kolbii (FRITSCH, 1896), Třemošná (Westphalian D)

Ref.: BROILI (1908: 62), FRITSCH (1896: 3; 1901: 89), PANCHEN (1970: 55—56, fig. 17c), ROMER (1947: 268), STEEN (1938: 261), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: Originally described as *Molgophis* ? *kolbi*. PANCHEN (1970: 55) and ROMER (1947: 268) consider material ascribed to the genus *Nummulosaurus* as not distinguishable from *Diplovertebron*.

Suborder *Gephyrostegida*
Family *Gephyrostegidae*

Gephyrostegus bohemicus JAEKEL, 1902 — Nýřany (Westphalian D)

Ref.: BROUGH & BROUGH (1967c: 147, 148), CARROLL (1970: 268), JAEKEL (1902: 127, fig. 1; 1909, fig. 11), A. R. MILNER (1980b), ZAJÍC & ŠTAMBERG (1985: 77).

Comment: *Diplovertebron punctatum*, *Sparagmites lacertinus*, *Hemichthys problematica*, *Nummulosaurus kolbii*, and *Gephyrostegus bohemicus* could be, according to A. R. MILNER (in litt. and 1980b: 452) the same species.

Gephyrostegus watsoni BROUGH & BROUGH, 1967 — Nýřany (Westphalian D)

Ref.: BROUGH & BROUGH (1967c: 158).

Gephyrostegus JAEKEL, 1902 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 53, 62), CARROLL (1969b: 403, 406; 1979, fig. 2), PAN-CHEN (1973: 124).

Family *Discosauriscidae*

Discosauriscus pulcherrimus (FRIČ, 1879) — Ruprechtice (U Autunian), Bačov, Trávník, Boskovice, Drválovice, Kochov, Malá Lhota, ? Horní Kalná (all Autunian)

Ref.: AUGUSTA (1925: 7, 10, fig. 2; 1936a: 13, 14, 29; 1936b: 26; 1937b; 1937d; 1939a: 1; 1948: 87; 1949), FRIČ (1879: 186; 1912a: 26; 1912b: 29), FRITSCH (1879: 27; 1880: 99, pl. 14; 1896: 8), GEINITZ & DEICHMÜLLER (1882: 26), KUHN (1939: 127), PATON (1975: 6), ROMER (1947: 290), STEEN (1938: 257), STEHLÍK (1924: 207, fig. 1), ŠPINAR (1949; 1951; 1952a: 27—30), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: Originally described as *Melanerpeton pulcherrimum* by FRIČ (1879: 186). For taxonomic history and synonymy see ŠPINAR (1952a: 27). AUGUSTA (1937b, 1939a) expressed some doubts about the systematic determination of the material from Horní Kalná.

Discosauriscus potamites (STEEEN, 1938) — Bačov, Kochov, Trávník (all Autunian)

Ref.: AUGUSTA (1948: 87), ROMER (1947: 290), STEEN (1938: 256), ŠPINAR (1952a: 50, 54), ZAJÍC & ŠTAMBERG (1985: 77).

Comment: Originally described as *Melanerpeton potamites* by ŠTEEN (1938: 256), later transferred to *Discosauriscus* by ŠPINAR (1952a: 50).

Letoverpeton moravicum (FRITSCH, 1883) — Malá Lhota, Kochov, Trávník, Bačov (all Autunian)

Ref.: AUGUSTA (1925: 7; 1935; 1936a: 26), ROMER (1947: 290), STEEN (1938: 259), ŠPINAR (1952a: 61, 64), ZAJÍC & ŠTAMBERG (1985: 77).

Comment: For synonymy see ŠPINAR (1952a: 61).

Letoverpeton austriacum (MAKOWSKY, 1876) — Malá Lhota, Trávník, Drválovice, Černá Hora, Kochov, Boskovice, Bačov (all Autunian)

Ref.: AUGUSTA (1925: 5, fig. 3; 1936a: 33; 1948: 87), MAKOWSKY (1876: 155—166), ROMER (1947: 290), STEEN (1938: 259), STEHLÍK (1924: 204), ŠPINAR (1952a: 73—74, 96), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: For synonymy see ŠPINAR (1952a: 73). Material described as *Melanerpeton longicaudatum* and *M. magnum* by AUGUSTA (1936a: 36—39) needs a revision.

Hemichthys problematica FRITSCH, 1895 — Nýřany, Třemošná (both Westphalian D)

Ref.: FRITSCH (1895: 121, pl. 128, figs 9—11; 1896: 15), ZAJÍC & ŠTAMBERG (1985: 77).

Comment: According to A. R. MILNER (in litt.) *Hemichthys* is gephyrostegid, not discosauriscid (see also comment on *Gephyrostegus bohemicus*, p. 522).

Family *Solenodonsauridae*

Solenodonsaurus janenschi BROILI, 1924 — Nýřany (Westphalian D)

Ref.: BROILI (1924, figs 1, 2), BROUGH & BROUGH (1967c: 148), CARROLL (1970: 292), A. R. MILNER (1980b), PEARSON (1924), ROMER (1947: 298), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: In figure explanations (BROILI 1924, figs 1, 2) there is incorrect generic name *Solenodon*. According to BROUGH & BROUGH (1967c: 148) BROILI's type of *Solenodonsaurus janenschi* is identical with the type of *Gephyrostegus bohemicus*.

Solenodonsaurus BROILI, 1924 — Nýřany (Westphalian D)

Ref.: CARROLL (1969b: 400, 406; 1979, fig. 2), LEHMAN (1955b: 198).

Subclass *Lepospondyli*

Order *Aistopoda*

Family *Ophiderpetontidae*

Ophiderpeton granulosum FRIČ, 1879 — Nýřany (Westphalian D)

Ref.: BAIRD (1964: 4, 14), CARROLL (1979, fig. 3A), FRIČ (1879: 186), FRITSCH (1879: 27; 1880: 119, pl. 17, figs 2—7; 1896: 8), A. R. MILNER (1980b), STEEN (1938: 222), ZAJÍC & ŠTAMBERG (1985: 77).

Ophiderpeton vicinum FRIČ, 1879 — Kounov (Stephanian B)

Ref.: BAIRD (1964: 4, 14), FRIČ (1879: 186), FRITSCH (1879: 27; 1880: 123, pl. 19, figs 2—8), ROMER (1945: 429), STEEN (1938: 265), ZAJÍC & ŠTAMBERG (1985: 77).

Ophiderpeton FRIČ, 1879 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 59, 62), SCHWARZ (1908: 67).

Comment: *O. forte*, *O. zieglerianum*, *O. persuadens*, *O. corvinii*, *O. kounoviense*, *O. breviceps*, and *O. pectinatum* (all described by FRIČ from Nýřany and Kounov) are based on fragmentary material, and all these forms need a revision.

Family *Phlegetontiidae*

Phlegetontia linearis COPE, 1871 — Nýřany (Westphalian D)

Ref.: LUND (1978: 54, 55), ZAJÍC & ŠTAMBERG (1985: 77).

Phlegetontia cf. *linearis* COPE, 1871 — Nýřany (Westphalian D)

Ref.: A. R. MILNER (1980b).

Phlegetontia longissima (FRIČ, 1876) — Nýřany (Westphalian D)

Ref.: BROILI (1908: 59), CARROLL (1979, fig. 3A), FRIČ (1876: 73; 1879: 186), FRITSCH (1879: 27; 1881: 108; 1896: 8), MCGINNIS (1967: 4, 36, 38), STEEN (1938: 225).

Comments: Originally described as *Dolichosoma longissima*. MCGINNIS (1967: 38) considered *P. linearis* COPE, 1871 and *P. longissima* (FRIČ, 1876) identical but chose the junior name. This was corrected by LUND (1978: 54) who also considered Linton and Nýřany material identical but used the correct senior name. Also CARROLL (1979, fig. 3A) notes that both forms may not be distinct. The status of the Nýřany material should be reconsidered. *Dolichosoma scutiferum* FRITSCH, 1901 is synonymized by BAIRD (1964: 14, 15) with *P. longissima*.

Order *Neckridea*

Family *Scincosauridae*

Scincosaurus crassus FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 60), FRIČ (1876b: 72; 1877: 19; 1879: 187), FRITSCH (1879: 28; 1880, pl. 27, figs 1—4, pl. 28, 29, 30; 1896: 9), JAEKEL (1909, fig. 12), A. C. MILNER (1980: 405), A. R. MILNER (1980b), PATON (1975: 7), STEEN (1938: 213), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: Originally described by FRIČ (1876: 72) as *Scincosaurus crassus*, later transferred by the same author (FRITSCH 1881: 136) to the genus *Keratoperpeton*. STEEN (1938: 213), however, reinstated the generic name *Scincosaurus*. FRITSCH (1896: 9) gives it erroneously from Kounov.

Scincosaurus FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 60, 62, 68), CARROLL (1979, fig. 3A), A. C. MILNER (1980: 393) SCHWARZ (1908: 67).

Family *Urocordylidae*

Sauroplectron scalaris (FRIČ, 1876) — Nýřany (Westphalian D)

Ref.: BAIRD (1964: 14, 15), BROILI (1908: 59), CARROLL (1979, fig. 3A), FRIČ (1876: 73; 1879: 187), FRITSCH (1879: 28; 1881: 129, pl. 25, 26; 1896: 4, 8; 1901: 90), A. R. MILNER (1980b), A. C. MILNER (1980: 404), PATON (1975: 7), STEEN (1938: 207), STEHLÍK (1924: 242), ZAJÍC & ŠAMBERG (1985: 77).

Comments: Originally described as *Urocordylus scalaris*, later transferred to the genus *Sauroplectron* by BAIRD (1964: 14). BAIRD (loc. cit.) also transferred to *S. scalaris* the type of "*Dolichosoma*" *angustatum* FRITSCH, 1880. STEEN (1938: 207) writes that *Ptyonius distinctus* FRITSCH agrees with *P. bendai* FRITSCH, 1896, and considers both young individuals of *Urocordylus* (= *Sauroplectron*) *scalaris*. The taxonomic position of this material is still obscure (see comment on "*Ptyonius*" *bendai*, p. 518).

Urocordylus angustatus (FRITSCH, 1880) — Nýřany (Westphalian D)

Ref.: BROILI (1908: 59), FRITSCH (1880: 117; 1896: 8), STEEN (1938: 213).

Comment: Originally described as *Dolichosoma angustatum* by FRITSCH (1880: 117). This material still needs a revision.

Urocordylus HUXLEY, 1867 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 59, 62, 68), SCHWARZ (1908: 67).

Order *Microsauria*
Family *Tuditanidae*

Crinodon limnophyes (STEEEN, 1938) — Nýřany (Westphalian D)

Ref.: CARROLL (1964: 241), CARROLL & GASKILL (1978: 24), CARROLL & BAIRD (1968: 9, 13), GREGORY (1950), A. R. MILNER (1980b), STEEN (1938: 227), WATSON (1913: 341, 346), ZAJÍC & ŠAMBERG (1985: 77).

Comment: Originally described under the generic name *Rienodon*.

Crinodon CARROLL & GASKILL, 1978 — Nýřany (Westphalian D)

Ref.: CARROLL (1979, fig. 3B).

Boii crassidens (FRIČ, 1876) — Kounov, Záboř (both Stephanian B)

Ref.: BROILI (1908: 58), CARROLL (1966: 75, 83—84, fig. 17), CARROLL & GASKILL (1978: 26), FRIČ (1876: 76; 1879: 183), FRITSCH (1879: 26, 86; 1896: 7), ROMER (1945: 429), STEEN (1938: 265), ZAJÍC & ŠAMBERG (1985: 77).

Comments: Originally described as *Batrachocephalus crassidens* by FRIČ (1876: 76). FRIČ later (FRITSCH, 1879: 86) attributed this species to the genus *Sparodus*. CARROLL (1966: 83) erected new genus *Boii* and assigned most of the FRIČ's *Sparodus crassidens* material to *Boii crassidens*.

Boii CARROLL, 1966 — Kounov (Stephanian B)

Ref.: CARROLL (1979, fig. 3B).

Comment: CARROLL & BAIRD (1968: 30) erroneously speak about *Boii* from Nýřany.

Family *Hapsidopareiontidae**Ricnodon copei* FRITSCH, 1883 — Nýřany (Westphalian D)

Ref.: CARROLL (1966: 84, 86, fig. 18; 1979, fig. 3B), CARROLL & BAIRD (1968: 20, 23), CARROLL & GASKILL (1978: 39), FRITSCH (1883, pl. 42; 1896: 9), A. R. MILNER (1980b), STEEN (1938: 226), STEHLÍK (1924: 239), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: According to CARROLL (1966: 86), this species is represented only by the holotype, other specimens described by FRIČ belonging to fragmental labyrinthodonts. Other species attributed to this genus by FRIČ and STEEN (1938: 226), namely *R. dispersus* and *R. trachylepis* do not appear to be closely related. STEHLÍK's (1924: 239—241) material also needs a revision.

Family *Gymnarthridae**Sparodus validus* FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 58), CARROLL (1966: 75; 1988: 441), CARROLL & GASKILL (1978: 74), FRIČ (1876: 73; 1877: 19; 1879: 185), FRITSCH (1879: 26, 84; 1896: 7), A. R. MILNER (1980b), STEEN (1938: 265), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: This species is represented by eight specimens figured by FRITSCH (1885, pl. 8). According to CARROLL (1966: 75) the single isolated dentary figured by FRITSCH (1879, pl. 9, fig. 2) and by CARROLL (1966, fig. 10) resembles the dentary of *S. validus*, and is unrelated to *S. crassidens*. Material in the plate 10 (FRITSCH, 1879) is erroneously designed as originated from the locality Kounov.

Sparodus FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: CARROLL (1979, fig. 3B).

Family *Microbrachidae**Microbrachis pelikani* FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: BROUGH & BROUGH (1967b: 131), CARROLL & GASKILL (1978: 115), FRIČ (1876: 72; 1877: 19; 1879: 188), FRITSCH (1879: 28; 1883, pl. 40, fig. 2, pl. 41, figs 4—9, pl. 47, figs 1—8, pl. 48, figs 2—10; 1896: 10), HUMMEL (1913, pl. 18), JAEKEL (1909, fig. 10), A. R. MILNER (1980b: 447—448, fig. 1), PATON (1975: 9), STEEN (1938: 227), STEHLÍK (1924: 231), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: The specimen considered by HUMMEL (1913) *Ricnodon* cf. *dispersus* is according to STEEN (1938: 227) *M. pelikani*. STEEN (op. cit.) also

considers type specimen of *Microbrachis ? branchiophorus* FRITSCH (1883: 181) as synonym of *M. pelikani*. CARROLL & GASKILL (1978: 115—117) consider following forms as conspecific with *M. pelikani*: *Limnerpeton obtusatum* FRITSCH, 1881, *Microbrachis mollis* FRITSCH, 1883 and *Microbrachis ? branchiophorus* FRITSCH, 1883.

Microbrachis FRIČ, 1876 — Nýřany (Westphalian D)

Ref.: BROILI (1908: 60), BROUGH & BROUGH (1967a: 108, 124), CARROLL (1979, fig. 3B), PANCHEN (1973: 124), SCHWARZ (1908: 67), WATSON (1940: 195).

Family *Hyloplesiontidae*

Hyloplesion longicostatum (FRIČ, 1876) — Nýřany, Třemošná (both Westphalian D)

Ref.: AUGUSTA (1939a), CARROLL & GASKILL (1978: 127), CARROLL & BAIRD (1968: 30), FRIČ (1876: 72; 1879: 188), FRITSCH (1879: 28; 1883: 160, pl. 27, fig. 5, pl. 37, pl. 38, pl. 39, figs 1—9; 1896: 9), GEINITZ & DEICHMÜLLER (1882: 38), A. R. MILNER (1980b), PATON (1975: 9), STEEN (1938: 234), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: Originally described under the generic name *Stelliosaurus*. CARROLL & GASKILL (1978: 127) synonymized *Seeleya pusilla* FRITSCH, 1883 and *Orthocosta microscopica* FRIČ, 1879, with *H. longicostatum*.

Hyloplesion FRITSCH, 1883 — Třemošná (Westphalian D)

Ref.: CARROLL (1979, fig. 3B), CARROLL & GASKILL (1978: 133), PANCHEN (1973: 124), WATSON (1940: 195)

Incertae sedis

Adenoderma gracile FRIČ, 1877 — Třemošná (Westphalian D)

Ref.: BROILI (1908: 59), FRIČ (1877a: 6; 1877c: 5; 1879: 187), FRITSCH (1883: 126, pl. 19, fig. 1; 1896: 8), ROMER (1947: 300), ZAJÍC & ŠTAMBERG (1985: 77).

Comments: Because of the poor preservation of the holotype and the only specimen (it is suffering from pyritic decay), ROMER (1947: 300) considered this genus indeterminable. According to A. R. MILNER (in litt.) it is neither a branchiosaur, nor a microbrachid, and has no clear relations with discosauriscids. This is the reason why it is placed under incertae sedis.

Palaeosiren beinertii GEINITZ, 1864 from Olivětín (U Autunian)

It is not a vertebrate fossil but either a sedimentary structure (ESTES 1970a) or possibly modified plant material (A. R. MILNER, in litt.).

Other material described by FRIČ (see also STEEN, 1938: 261—266) still needs a revision.

Subclass *Salientia*
 Superfamily *Bombinoidea*
 Family *Bombinidae*

Bombina cf. *bombina* (LINNAEUS, 1761) — Ivanovce (Csarnótan), Včeláre 6/1 (Villányian)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981: 217, fig. 1; 1985, fig. 1).

Bombina cf. *variegata* (LINNAEUS, 1758) — Ivanovce (Csarnótan)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981: 217, fig. 1).

Bombina OKEN, 1816 — Včeláre 6/1 (Villányian), Včeláre 6/3 (L Biharian)

Ref.: HODROVÁ (1985: 146).

Family *Discoglossidae*

Discoglossus giganteus WETTSTEIN-WESTERSHEIMB, 1955 — Devínska Nová Ves (Badenian), Ivanovce (Csarnótan)

Ref.: MŁYNARSKI (1976: 1—2; 1977: 24), ŠPINAR (1972a: 229), WETTSTEIN-WESTERSHEIMB (1955: 808).

Comments: SANCHÍZ & MŁYNARSKI (1979) regard this form a synonym of *Latonia seyfriedi*.

Eodiscoglossus hessi (ŠPINAR, 1976) — Bechlejovice (M Aquitanian)

Ref.: ŠPINAR (1972a: 103; 1976a; 1983: 56).

Comment: Originally described as *Opisthocheilus hessi*.

Family *Latoniidae*

Latonia fejafari (ŠPINAR, 1975) — Dolnice (Ottnangian)

Ref.: ŠPINAR (1975b: 41).

Comment: Originally described as *Miopelobates fejafari*. SANCHÍZ & MŁYNARSKI (1979) regard this form a synonym of *Latonia seyfriedi*.

Latonia kolebabi ŠPINAR, 1976 — Ivanovce (Csarnótan)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981: 217), ŠPINAR (1976c: 287; 1978: 292).

Latonia zapfei (WETTSTEIN-WESTERSHEIMB, 1955) — Devínska Nová Ves (Badenian)

Ref.: WETTSTEIN-WESTERSHEIMB (1955: 812—813).

Comment: Originally described as *Miopelobates zapfei*. SANCHÍZ & MŁYNARSKI regard this form a synonym of *Latonia seyfriedi*.

Superfamily *Pipoidea*
Family *Palaeobatrachidae*

Palaeobatrachus (Palaeobatrachus) diluvianus (GOLDFUSS, 1831) — Bechlejovice (M Aquitanian), Markvartice near Česká Kamenice, Veselíčko near Česká Kamenice, Prokopi shaft (presently called Mariána mine) near Most, Odeř near Karlovy Vary (all Oligo-Miocene)

Ref.: BAYER (1882: 243), MEYER (1858: 202—203), ŠPINAR (1972a, fig. 1; 1972a: 112).

Comment: For taxonomic history and synonymy see ŠPINAR (1972b: 98—99).

Palaeobatrachus (Palaeobatrachus) luedekii WOLTERSTORFF, 1886 — Bechlejovice (M Aquitanian), Markvartice, Koštálov (both Oligo-Miocene)

Ref.: ŠPINAR (1972a: 117).

Palaeobatrachus (Palaeobatrachus) rostae ŠPINAR, 1972 — Bechlejovice (M Aquitanian)

Ref.: ŠPINAR (1972a: 103; 1972b: 117).

Palaeobatrachus (Hekatobatrachus) grandipes (GIEBEL, 1851) — Bechlejovice (M Aquitanian), Suleticé, Odeř, Hájek (all Miocene)

Ref.: BAYER (1882: 244), ŠPINAR (1972a: 103; 1972b: 147).

Comment: For taxonomic history and synonymy see ŠPINAR (1972b: 123).

Palaeobatrachus (Pelobatinopsis) grandipes (GIEBEL, 1851) — Bechlejovice (M Aquitanian)

Ref.: ŠPINAR (1976b, figs 1—3).

Palaeobatrachus grandipes GIEBEL, 1851 — Bechlejovice (M Aquitanian)

Ref.: ŠPINAR (1970, figs 1, 5).

Palaeobatrachus (Hekatobatrachus) novotnyi ŠPINAR, 1972 — Bechlejovice (M Aquitanian)

Ref.: ŠPINAR (1972a: 103; 1972b: 147, 149).

Palaeobatrachus (Hekatobatrachus) ŠPINAR, 1972 — Bechlejovice (M Aquitanian), Markvartice (Miocene)

Ref.: ŠPINAR (1972a: 103; 1972b: 149, 150).

Palaeobatrachus (Suleobatrachus) laubei BIEBER, 1880 — Suleticé near Litoměřice (Oligo-Miocene)

Ref.: BAYER (1882: 245), ŠPINAR (1972b: 152, 159).

Comment: *Protopelobates gracilis* BIEBER, 1880 is a synonym of *P. (S.) laubei*.

Neusibatrachus estesi ŠPINAR, 1975 — Devínska Nová Ves (L Badenian)

Ref.: ŠPINAR (1975a: 62, 66).

Comments: SANCHIZ & MŁYNARSKI (1979) regard this form a synonym of *Latonia seyfriedi*.

Pliobatrachus langhae FEJÉRVÁRY, 1917 — Ivanovce (Csarnótan)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981: 219).

Pliobatrachus FEJÉRVÁRY, 1917 — Ivanovce (Csarnótan), Hajnáčka (Villa-franchian)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981: 219; 1982: 37, 38, 47).

Superfamily Pelobatoidea

Family Pelobatidae

Eopelobates cf. *anthracinus* PARKER, 1929 — Bechlejovice (M Aquitanian), Nástup mine near Kadaň, Hrabák mine near Most (both Oligo-Miocene)

Ref.: ROČEK (1981: 147), ŠPINAR (1972: 103; 1972b: 219).

Eopelobates bayeri ŠPINAR, 1952 — Bechlejovice (M Aquitanian), Hrabák mine near Most, Merkur and Nástup mines near Kadaň, Devínska Nová Ves (all Tertiary)

Ref.: ROČEK (1981: 147), ŠPINAR (1952b; 1972a: 103; 1972b: 199, 216), WETTSTEIN-WESTERSHEIMB (1955: 811).

Comment: WETTSTEIN-WESTERSHEIMB's (1955: 811) *Eopelobates neudorfensis* is according to ESTES (1970a: 308) and ŠPINAR (1972b: 199; 1978: 289) a synonym of *Eopelobates bayeri*.

Eopelobates cf. *bayeri* ŠPINAR, 1952 — Ivanovce (Csarnótan), Bechlejovice (M Aquitanian)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981: 219, fig. 2), ŠPINAR, BOUBELÍK, ROMANOVSKÝ (1971: 279—280).

Comment: ŠPINAR & ROČEK (1984: 94) discussed differences between *E. anthracinus* and *E. bayeri* and came to the conclusion that they can be explained by ontogenetic and individual variation. Thus both forms might be conspecific.

Pelobates fuscus (LAURENTI, 1768) — Stránská skála (L Quaternary)

Ref.: NĚMEC (1972: 32).

Comment: Specimen considered by ŠPINAR (1976c, pl. II, fig. 1) "*Pelobates fuscus fossilis*" from the Miocene of Valeč (western Bohemia) most probably does not belong to the fossil material found in this locality; perhaps it is of Subrecent age.

Pelobates cf. fuscus (LAURENTI, 1768) — Ivanovce (Csarnótan)

Ref.: FEJFAR & HEINRICH (1985: 211), HODROVÁ (1981: 219).

Pelobates syriacus BOETTGER, 1889 — Včeláre 6/1 (Villányian), Včeláre 6/3 (L Biharian)

Ref.: HODROVÁ (1985: 151).

Pelobates WAGLER, 1830 — Včeláre 6/1 (Villányian), Včeláre 6/3, 6/6, 6/7, 6/8 (L Biharian), Včeláre 2B (Pliocene), Včeláre 7 (U Villányian)

Ref.: HODROVÁ (1985: 146).

Superfamily *Hyloidea*

Family *Hylidae*

Hyla cf. arborea (LINNAEUS, 1758) — Ivanovce (Csarnótan)

Ref. FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981, fig. 4).

Family *Bufoidea*

Bufo bufo (LINNAEUS, 1758) — Ivanovce (Csarnótan), Hajnáčka (Villafranchian), Devínska Nová Ves (Badenian), Stránská skála (L Quaternary), Včeláre (Villányian)

Ref.: FEJFAR & HEINRICH (1985: 212), HODROVÁ (1980: 311, 312; 1981: 221; 1985: 150), NĚMEC (1972: 27).

Bufo viridis LAURENTI, 1768 — Stránská skála (L Quaternary)

Ref.: NĚMEC (1972: 22).

Bufo viridis stranensis NĚMEC, 1972 — Stránská skála (L Quaternary)

Ref.: NĚMEC (1972: 23).

Bufo calamita LAURENTI, 1768 — Stránská skála (L Quaternary)

Ref.: NĚMEC (1972: 29).

Bufo LAURENTI, 1768 — Včeláre 6/1 (Villányian), Včeláre 6/3, 6/7 (L Biharian)

Ref.: HODROVÁ (1985: 146).

Family *Ranidae*

Rana temporaria LINNAEUS, 1758 — Stránská skála (L Quaternary)

Ref.: NĚMEC (1972: 30).

Rana cf. temporaria LINNAEUS, 1758 — Ivanovce, (Csarnótan), Hajnáčka
 (Villafranchian)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981, fig. 5).

Rana arvalis LINNAEUS, 1758 — Včeláre 6/1 (Villányian)

Ref.: HODROVÁ (1985, fig. 3).

Rana cf. arvalis LINNAEUS, 1758 — Ivanovce (Csarnótan), Hajnáčka

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1981, fig. 5).

Rana dalmatina BONAPARTE, 1840 — Ivanovce (Csarnótan), Včeláre 6/1
 (Villányian)

Ref.: HODROVÁ (1981, fig. 5; 1985, text-figs 3, 4).

Rana cf. dalmatina-latastei — Ivanovce (Csarnótan), Hajnáčka (Villafran-
 chian)

Ref.: FEJFAR & HEINRICH (1985: 222).

Rana esculenta complex — Ivanovce (Csarnótan), Stránská skála
 (L Quaternary)

Ref.: FEJFAR & HEINRICH (1985: 222), NĚMEC (1972: 31).

Rana cf. latastei BOULENGER, 1879 — Ivanovce (Csarnótan)

Ref.: HODROVÁ (1981, fig. 5).

Rana cf. lessonae CAMERANO, 1882 — Ivanovce (Csarnótan)

Ref.: HODROVÁ (1981, fig. 5).

Rana luschitzana MEYER, 1852 — Lužice near Bílina (Tertiary)

Ref.: BAYER (1882: 245), MEYER (1852; 1858: 203), ŠPINAR (1972b: 230).

Asphaerion reussi MEYER, 1852 — Lužice near Bílina (Tertiary)

Ref.: BAYER (1882: 245), MEYER (1852), ŠPINAR (1972b: 230).

Comment: Type material of both latter two forms was destroyed in Budapest in 1956 (see ŠPINAR, 1972b: 230).

Rana LINNAEUS, 1758 — Včeláre 5 (L Biharian), Včeláre 6/1 (Villányian),
 Včeláre 6/3, 6/6, 6/7, 6/8, 6/9, 4E (L Biharian), Včeláre 2B (Pliocene)
 Ref.: HODROVÁ (1985: 147).

Subclass *Caudata*

Order *Cryptobranchidae*

Family *Cryptobranchidae*

Andrias scheuchzeri (HOLL, 1831) — Břeštany, Suleticé (L Miocene)

Ref.: ESTES (1981: 16), LAUBE (1897: 31, 32; 1909: 121), LIEBUS (1929a;
 1929b: 284), WESTPHAL (1958: 25, 70).

Comment: Originally described by LAUBE (1897: 32) as *Andrias bohemicus*, later transferred to the genus *Megalobatrachus* by HERRE (1935: 50). WESTPHAL (1958: 70) synonymized it with *Andrias scheuchzeri*.

Order *Ambystomatoidea*
Family *Dicamptodontidae*

Bargmannia wettsteini HERRE, 1955 — Devínska Nová Ves (Badenian)
Ref.: ESTES (1981: 46), HERRE (1955: 787, figs 4, 5).

Order *Salamandroidea*
Family *Salamandridae*

Mertensiella mera HODROVÁ, 1984 — Ivanovce (Csarnótaan)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1984: 333, text-figs 2, 3).
Comment: The material was originally designed as *Chioglossa* seu *Mertensiella* by FEJFAR & HEINRICH (1985: 222).

Salamandra salamandra (LINNAEUS, 1758) — Ivanovce (Csarnótan), Suchomasty-3 (U Miocene)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1984: 332—333).

Salamandra sansaniensis LARTET, 1851 — Devínska Nová Ves (Badenian)

Ref.: ESTES (1981: 68), HERRE (1955: 787, fig. 3), MEYER (1858: 203; 1859: 431; 1860: 63, 72).

Comments: Material from Devínska Nová Ves was originally assigned to *Voigtiella ludwigi* HERRE, 1949, later questionably referred to *Salamandra sansaniensis* by ESTES (1981: 66). Also some vertebrae from the same locality, that are in the collections of the Palaeontological Institute of the Vienna University, are referred to *S. sansaniensis* (ESTES, 1981: 66). Estes (op. cit.: 68, fig. 16 A) referred to this form also *S. laticeps* MEYER, 1858 from Markvartice near Česká Kamenice.

Salamandra broili SCHLOSSER, 1922 — Devínska Nová Ves (Badenian)

Ref.: ESTES (1981: 68), HERRE (1955: 786, fig. 2).

Comment: ESTES (l. cit.) gives erroneously age of the locality (Devínska Nová Ves, = Neudorf) as Vindobonian.

Chelotriton — *Tylotriton* complex — Ivanovce (Csarnótan)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1984: 340).

Archaeotriton basalticus (MEYER, 1859) — Varnsdorf (U Oligocene), Bechlejovice (Aquitanian), Suleticé (U Oligocene or L Miocene)

Ref.: ESTES (1981: 81), MEYER (1859: 431; 1860: 61).

Comments: ESTES (1981: 81) referred to *A. basalticus* also *A. menzeli* LAUBE, 1897.

Triturus cf. alpestris (LAURENTI, 1768) — Ivanovce (Csarnótan)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1984: 340).

Triturus cristatus (LAURENTI, 1768) — Ivanovce (Csarnótan), Včeláre 6/1 (Villányian), Včeláre 6/3, 6/8 (L Biharian)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1984: 337; 1985: 146, 156).

Triturus cf. marmoratus (LATREILLE, 1800) — Ivanovce (Csarnótan)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1984: 338).

Triturus opalinus (MEYER, 1851) — Lužice (Miocene)

Ref.: ESTES (1981: 88), HODROVÁ (1984: 341), MEYER (1851: 70, 1859: 430; 1860: 72).

Triturus rohrsii HERRE, 1955 — Devínska Nová Ves (Badenian)

Ref.: HERRE (1955: 792, fig. 6), ESTES (1981: 89).

Triturus vulgaris (LINNAEUS, 1758) — Ivanovce (Csarnótan), Včeláre 6/1 (Villányian), Včeláre 6/3, 6/8 (L Biharian)

Ref.: FEJFAR & HEINRICH (1985: 222), HODROVÁ (1984: 339; 1985: 146).

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STRESZCZENIE

Praca stanowi przegląd kopalnych płazów Czechosłowacji. Ze stanowisk permo-karbońskich pochodzi 30 gatunków *Labyrinthodontia*, 13 gatunków *Temnospondyli* oraz jeden gatunek incertae sedis. Z trzeciorzędu opisano 32 gatunki *Salientia* oraz 13 gatunków *Caudata*. Część z omówionych taksonów, opisanych w pracach FRIČA, wymaga rewizji.

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