

BIONUMERIC CODES FOR AMPHIBIANS AND REPTILES OF THE WORLD. I. SALAMANDERS

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ABSTRACT

For the benefit of large-scale computerized data-retrieval and sorting, numbers must be applied to taxa admitted in biological nomenclature. These bionumeric codes must be sufficiently inclusive in the nomenclatural hierarchy to be recognizable to any moderately well-trained biologist, but not so inclusive and therefore so lengthy as to seriously impair their utility in the envisioned context. A system entailing 7 fields, for phylum-class, order, family, subfamily, genus, species and subspecies, requiring 20 digits, is devised and applied to all known members of the salamander order Caudata, including living and extinct taxa and totalling 7 suborders, 11 families, 5 subfamilies, 91 genera, 424 species bs 542 species plus subspecies. *Trans. Kansas Acad. Sci., Vol. 81:1. 1978.*

The use of numerical codes for biotic taxa is a coming certainty in the progressively computer-dependent world. Indeed, the United States government has taken multi-directional strides toward that end, creating codes the use of which has been largely limited to in-house studies.

Yet biologists in general have a direct concern with development of a universal coding system that (1) will be maximally information-rich and at the same time minimally cumbersome, requiring a widely-acceptable compromise between these conflicting aims; and (2) matching the binomial system of nomenclature, which is already essentially universal, in flexibility, providing for name-changes, changes in rank, and allocation of synonyms and other potentially confusing invalid names.

The history of attempts to devise "bionumeric codes," and a rationale supporting the system here adopted, is dealt with in a forthcoming review by the present authors and other collaborators. In the meantime, we here provide codes for all members of the Order Caudata, or salamanders, including both extant and extinct members. The latter are designated in the conventional manner, with an initial dagger, in the table of assigned code numbers.

As in all sizeable taxonomic compilations such as this, selection of those taxa regarded as valid, and their ranks, is to a certain degree subjective and arbitrary, although a strong consensus exists for most. The senior author is responsible for the entire classification here adopted, although he has deferred to the judgment of HMS relative to a very few Mexican species and subspecies. The major classification of Estes (for fossil salamanders, 1964, 1965; Estes and Hoffstetter, 1976) and Wake (1966), as revised by Edwards (1976), is followed for both recent and fossil urodeles. At present, six suborders, eight families, four subfamilies, 54 genera, 339 species and 457 species plus subspecies are recognized as extant, whereas among solely extinct taxa three families (one of which is unknown), one subfamily, 37 genera and 85 species are counted, yielding a total of seven suborders, eleven families, five subfamilies, 91 genera, 424 species and 542 species plus subspecies. All the recent suborders, all the recent families and 12 recent genera possess fossil representatives.

However, this list cannot be regarded as definitive, in reference to either described or total taxa, not even in reference to extant taxa and certainly not in reference to extinct taxa. The senior author (AHB) is aware of about 73 recent species of Caudata to be described as new over the next several years, some now in press, as well as some 12 fossil species. At least eight recent and five fossil species currently recognized will be synonymized or reduced to a lower rank (subspecies) during this same period.

This list updates those of Brame (1967, 1978). It anticipates favorable action by the International Commission on Zoological Nomenclature upon the petition (Smith, Stuart and Conant, 1971) for sanction by the Code of omission of one *-i* in the *-ji* endings of patronyms (with certain exceptions), so that *Ambystoma dumerili*, *Archaeotriton menzeli*, *Batrachuperus pinchoni*, *Bolitoglossa salvini*, *Ensatina eschscholtzi*, *Hynobius keyserlingi*, *H. leechi*, *Neurergus strauchi*, *Pseudoeurycea belli* and *P. gadovi* all are written with a single terminal *-i*, instead of a double *i*. We have likewise modified certain patronyms, where necessary, to conform with the proper spelling of the name of the person honored; thus *Aneides hardyi*, *Bolitoglossa niceforoi*, *Rhyacosiredon altamiranoi* and *Ambystoma tigrinum velascoi* replace *A. hardii*, *B. nicefori*, *R. altamirani* and *A. t. velasci*, respectively. *Epipolysemia rusconii* is, however, proper since the person honored is Rusconi. We also change the ending of *lineola* in the combination *Lineatriton lineolus* to agree in gender with the masculine generic name. These strictly nomenclatural changes are to a degree subjectively arbitrary, and re-criminatory visitation, if any, should be laid upon HMS.

The bionumeric code system adopted for this project allows for only seven fields, in order to keep the number at a manageable size; they are

(1) phylum-class, (2) order, (3) family, (4) subfamily, (5) genus, (6) species, and (7) subspecies. Therefore, it does not permit recognition of certain classificatory refinements desired by the senior author (AHB), to wit suborders, tribes and supergenera. The two latter categories are not consistently utilized in all recognized higher categories, although suborders are specified for all lower taxa in the conventional classification to which our code system is adapted.

The code for the phylum-class field of the complete bionumeric code is 050 for the Class Amphibia, and 50 for the Order Caudata. The assigned numbers for the families of Caudata are:

Ambystomatidae Hallowell, 1856	100
Amphiumidae Gray, 1825	150
Batrachosauroididae Auffenberg, 1958	250
Cryptobranchidae Cope, 1889	350
Dicamptodontidae Tihen, 1958	450
Hynobiidae Cope, 1859	550
Plethodontidae Gray, 1850	600
Prosirenidae Estes, 1969	650
Proteidae Tschudi, 1838	700
Salamandridae Gray, 1825	800
Sirenidae Gray, 1825	900
Unknown	000

Subfamilies are recognized in only two families. In the Dicamptodontidae, three are accepted: Dicamptodontinae Tihen, 1958; Rhyacotritoninae Tihen, 1958; and Scapherpetoninae Auffenberg and Goin, 1959; these are assigned the code numbers 30, 70 and 80, respectively. In the Plethodontidae, two subfamilies require numbers: Desmognathinae Cope, 1867; and Plethodontinae Gray, 1850; they are assigned the code numbers 30 and 60, respectively.

The seven suborders, which are not incorporated in the bionumeric codes, and their contained families, are as follows:

- Suborder Cryptobranchoidea Dunn, 1922
 - Family Hynobiidae
 - Family Cryptobranchidae
- Suborder Sirenoidea Goodrich, 1930
 - Family Sirenidae
- Suborder Proteoidea Cope, 1866
 - Family Proteidae
 - Family Unknown
- Suborder Batrachosauroidoidea Kuhn, 1961
 - Family Batrachosauroididae
 - Family Prosirenidae

Suborder Amphiumoidea Cope, 1889

Family Amphiumidae

Suborder Amystomatoidea Noble, 1931

Family Dicamptodontidae

Family Ambystomatidae

Family Plethodontidae

Suborder Salamandroidea Garman, 1883

Family Salamandridae

Tribes and supergenera are recognized (but not incorporated in the bionumeric codes) only in the subfamily Plethodontinae, as follows, with their contained genera:

Tribe Hemidactylini Hallowell, 1856

Genus *Eurycea*

Genus *Gyrinophilus*

Genus *Haideotriton*

Genus *Hemidactylium*

Genus *Pseudotriton*

Genus *Stereochilus*

Genus *Typhlomolge*

Genus *Typhlotriton*

Tribe Plethodontini Gray, 1850

Genus *Aneides*

Genus *Ensatina*

Genus *Plethodon*

Tribe Bolitoglossini Hallowell, 1856

Supergenous *Batrachoseps* Bonaparte, 1839

Genus *Batrachoseps*

Supergenous *Hydromantes* Gistel, 1848

Genus *Hydromantes*

Supergenous *Bolitoglossa* Dumeril, Bibron and Dumeril, 1854

Genus *Bolitoglossa*

Genus *Chiropterotriton*

Genus *Lineatriton*

Genus *Oedipina*

Genus *Parvimolge*

Genus *Pseudoeurycea*

Genus *Thorius*

The bionumeric codes here generated for salamanders are thus constant in the first two fields (050 in first field for Amphibia, 50 in second field for Caudata). All other fields vary in numbers assigned, with the third field representing family, the fourth subfamily. Numbers in these four fields have been assigned arbitrarily, more or less in accordance with alphabetical rank. The fifth field represents genus; the numbers were computer-assigned for the genera in alphabetical order, occupying every tenth consecutive number. The sixth field represents species, with numbers assigned just as for genera. The seventh field

represents subspecies, with every fourth number occupied and assigned to the subspecies in alphabetical order.

The assigned bionumeric codes for salamanders follow.

†Albanerpeton inexpectatum Estes and Hoffstetter, 1976	050	50	650	00	0010	0010	00
Ambystoma amblycephalum Taylor, 1940	050	50	100	00	0010	0010	00
Ambystoma annulatum Cope, 1886	050	50	100	00	0010	0020	00
Ambystoma bombypellum Taylor, 1940	050	50	100	00	0010	0030	00
Ambystoma californiense Gray, 1853	050	50	100	00	0010	0040	00
Ambystoma cingulatum (Cope, 1867)	050	50	100	00	0010	0050	00
Ambystoma dumerili (Dugès, 1870)	050	50	100	00	0010	0060	00
Ambystoma flavipiperatum Dixon, 1963	050	50	100	00	0010	0070	00
Ambystoma gracile decorticatedum Cope, 1886	050	50	100	00	0010	0080	04
Ambystoma gracile gracile (Baird, 1859)	050	50	100	00	0010	0080	08
Ambystoma granulatum Taylor, 1944	050	50	100	00	0010	0090	00
†Ambystoma hibbardi Tihen, 1955	050	50	100	00	0010	0100	00
Ambystoma jeffersonianum (Green, 1827)	050	50	100	00	0010	0110	00
†Ambystoma kansense (Adams and Martin, 1929)	050	50	100	00	0010	0120	00
Ambystoma lacustris Taylor and Smith, 1945	050	50	100	00	0010	0130	00
Ambystoma laterale Hallowell, 1856	050	50	100	00	0010	0140	00
Ambystoma lermaensis (Taylor, 1940)	050	50	100	00	0010	0150	00
Ambystoma mabeei Bishop, 1928	050	50	100	00	0010	0160	00
Ambystoma macrodactylum columbianum Ferguson, 1961	050	50	100	00	0010	0170	04
Ambystoma macrodactylum croceum Russell and Anderson, 1956	050	50	100	00	0010	0170	08
Ambystoma macrodactylum krausei Peters, 1882	050	50	100	00	0010	0170	12
Ambystoma macrodactylum macrodactylum Baird, 1849	050	50	100	00	0010	0170	16
Ambystoma macrodactylum sigillatum Ferguson, 1961	050	50	100	00	0010	0170	20
Ambystoma maculatum (Shaw, 1802)	050	50	100	00	0010	0180	00
Ambystoma mexicanum (Shaw, 1789)	050	50	100	00	0010	0190	00
†Ambystoma minshalli Tihen and Chantell, 1963	050	50	100	00	0010	0200	00
Ambystoma opacum (Gravenhorst, 1807)	050	50	100	00	0010	0210	00
Ambystoma ordinarium Taylor, 1940	050	50	100	00	0010	0220	00
Ambystoma platineum (Cope, 1867)	050	50	100	00	0010	0230	00
Ambystoma queretarensis (Maldonado-Koerdell, 1948)	050	50	100	00	0010	0240	00
Ambystoma rosaceum Taylor, 1941	050	50	100	00	0010	0250	00
†Amphiuma antica Holman, 1978	050	50	150	00	0040	0010	00
Ambystoma schmidtii Taylor, 1939	050	50	100	00	0010	0260	00
Ambystoma subsalsum Taylor, 1943	050	50	100	00	0010	0270	00
Ambystoma talpoideum (Holbrook, 1838)	050	50	100	00	0010	0280	00
Ambystoma texanum (Matthes, 1855)	050	50	100	00	0010	0290	00
Ambystoma tigrinum diabolii Dunn, 1940	050	50	100	00	0010	0300	04
Ambystoma tigrinum mavortium Baird, 1850	050	50	100	00	0010	0300	08
Ambystoma tigrinum melanostictum (Baird, 1860)	050	50	100	00	0010	0300	12
Ambystoma tigrinum nebulosum Hallowell, 1852	050	50	100	00	0010	0300	16
Ambystoma tigrinum stebbinsi Lowe, 1954	050	50	100	00	0010	0300	20
Ambystoma tigrinum tigrinum (Green, 1825)	050	50	100	00	0010	0300	24
Ambystoma tigrinum velascoi Dugès, 1891	050	50	100	00	0010	0300	28
†Ambystoma thieni Holman, 1968	050	50	100	00	0010	0310	00
Ambystoma tremblayi Comeau, 1943	050	50	100	00	0010	0320	00
†Ambystomichnus montanensis (Gilmore, 1928)	050	50	450	30	0020	0010	00
†Amphitriton brevis Rogers, 1976	050	50	100	00	0030	0010	00
†Amphiuma antica Holman, 1978	050	50	150	00	0040	0010	00
†Amphiuma jepseni Estes, 1969	050	50	150	00	0040	0020	00
Amphiuma means Garden, 1821	050	50	150	00	0040	0030	00
Amphiuma pholeter Neill, 1964	050	50	150	00	0040	0040	00
Amphiuma tridactylum Cuvier, 1827	050	50	150	00	0040	0050	00
Andrias davidianus (Blanchard, 1871)	050	50	350	00	0050	0010	00
Andrias japonicus (Temminck, 1837)	050	50	350	00	0050	0020	00
†Andrias matthewi (Cook, 1917)	050	50	350	00	0050	0030	00
†Andrias scheuchzeri (Holl, 1831)	050	50	350	00	0050	0040	00
Aneides aeneus (Cope and Packard, 1881)	050	50	600	60	0060	0010	00
Aneides ferreus Cope, 1869	050	50	600	60	0060	0020	00
Aneides flavipunctatus flavipunctatus (Strauch 1870)	050	50	600	60	0060	0030	04

<i>Aneides flavipunctatus niger</i> Myers and Maslin, 1948	050	50	600	60	0060	0030	08
<i>Aneides hardyi</i> (Taylor, 1941)	050	50	600	60	0060	0040	00
<i>Aneides lugubris</i> (Hallowell, 1849)	050	50	600	60	0060	0050	00
† <i>Archaeotriton basalticus</i> (Meyer, 1859)	050	50	800	00	0070	0010	00
† <i>Archaeotriton menzeli</i> Laube, 1898	050	50	800	00	0070	0020	00
† <i>Bargmannia wettssteini</i> Herre, 1955	050	50	550	00	0080	0010	00
† <i>Batrachosauroides dissimulans</i> Taylor and Hesse, 1943	050	50	250	00	0090	0010	00
† <i>Batrachosauroides gotoi</i> Estes, 1969	050	50	250	00	0090	0020	00
<i>Batrachoseps aridus</i> Brame, 1970	050	50	600	60	0100	0010	00
<i>Batrachoseps attenuatus</i> (Eschscholtz, 1833)	050	50	600	60	0100	0020	00
<i>batrachoseps major</i> Camp, 1915	050	50	600	60	0100	0040	00
<i>Batrachoseps nigriventris</i> Cope, 1869	050	50	600	60	0100	0050	00
<i>Batrachoseps pacificus</i> (Cope, 1865)	050	50	600	60	0100	0060	00
<i>Batrachoseps relictus</i> Brame and Murray, 1968	050	50	600	60	0100	0070	00
<i>Batrachoseps simatus</i> Brame and Murray, 1968	050	50	600	60	0100	0080	00
<i>Batrachoseps stebbinsi</i> Brame and Murray, 1968	050	50	600	60	0100	0090	00
<i>Batrachoseps wrighti</i> (Bishop, 1937)	050	50	600	60	0100	0100	00
<i>Batrachuperus cochranæ</i> Liu, 1950	050	50	550	00	0110	0010	00
<i>Batrachuperus karlschmidti</i> Liu, 1950	050	50	550	00	0110	0020	00
<i>Batrachuperus mustersi</i> Smith, 1940	050	50	550	00	0110	0030	00
<i>Batrachuperus persicus</i> Eiselt and Steiner, 1970	050	50	550	00	0110	0040	00
<i>Batrachuperus pinchoni</i> (David, 1871)	050	50	550	00	0110	0050	00
<i>Batrachuperus tibetanus</i> Schmidt, 1925	050	50	550	00	0110	0060	00
<i>Batrachuperus yenyuanensis</i> Liu, 1950	050	50	550	00	0110	0070	00
<i>Bolitoglossa adspersa</i> (Peters, 1863)	050	50	600	60	0120	0010	00
<i>Bolitoglossa altamazonica</i> (Cope, 1874)	050	50	600	60	0120	0020	00
<i>Bolitoglossa arborescens</i> Taylor, 1954	050	50	600	60	0120	0040	00
<i>Bolitoglossa alvaradoi</i> Taylor, 1954	050	50	600	60	0120	0030	00
<i>Bolitoglossa attitlanensis</i> (Brocchi, 1883)	050	50	600	60	0120	0050	00
<i>Bolitoglossa biseriata</i> Tanner, 1962	050	50	600	60	0120	0060	00
<i>Bolitoglossa borburata</i> Trapido, 1942	050	50	600	60	0120	0070	00
<i>Bolitoglossa brevipes</i> (Bumzahem and Smith, 1955)	050	50	600	60	0120	0080	00
<i>Bolitoglossa capitana</i> Brame and Wake, 1963	050	50	600	60	0120	0090	00
<i>Bolitoglossa cerroensis</i> (Taylor, 1952)	050	50	600	60	0120	0100	00
<i>Bolitoglossa chica</i> Brame and Wake, 1963	050	50	600	60	0120	0110	00
<i>Bolitoglossa colonnea</i> (Dunn, 1924)	050	50	600	60	0120	0120	00
<i>Bolitoglossa compacta</i> Wake, Brame and Duellman, 1973	050	50	600	60	0120	0130	00
<i>Bolitoglossa cuchumatana</i> (Stuart, 1943)	050	50	600	60	0120	0140	00
<i>Bolitoglossa cuna</i> Wake, Brame and Duellman, 1973	050	50	600	60	0120	0150	00
<i>Bolitoglossa diminuta</i> Robinson, 1976	050	50	600	60	0120	0160	00
<i>Bolitoglossa doleini</i> (Werner, 1903)	050	50	600	60	0120	0170	00
<i>Bolitoglossa dunni</i> (Schmidt, 1933)	050	50	600	60	0120	0180	00
<i>Bolitoglossa engelhardti</i> (Schmidt, 1936)	050	50	600	60	0120	0190	00
<i>Bolitoglossa epimela</i> Wake and Brame, 1963	050	50	600	60	0120	0200	00
<i>Bolitoglossa equatoriana</i> Brame and Wake, 1972	050	50	600	60	0120	0210	00
<i>Bolitoglossa flavimembris</i> (Schmidt, 1936)	050	50	600	60	0120	0220	00
<i>Bolitoglossa franklini</i> (Schmidt, 1936)	050	50	600	60	0120	0230	00
<i>Bolitoglossa hartwegi</i> Wake and Brame, 1969	050	50	600	60	0120	0240	00
<i>Bolitoglossa helmrichi</i> (Schmidt, 1936)	050	50	600	60	0120	0250	00
<i>Bolitoglossa hypacra</i> (Brame and Wake, 1962)	050	50	600	60	0120	0260	00
<i>Bolitoglossa lignicolor</i> (Peters, 1873)	050	50	600	60	0120	0270	00
<i>Bolitoglossa lincolni</i> (Stuart, 1943)	050	50	600	60	0120	0280	00
<i>Bolitoglossa macrinii</i> (Lafrentz, 1930)	050	50	600	60	0120	0290	00
<i>Bolitoglossa marmorea</i> (Tanner and Brame, 1961)	050	50	600	60	0120	0300	00
<i>Bolitoglossa medemi</i> Brame and Wake, 1972	050	50	600	60	0120	0310	00
<i>Bolitoglossa mexicana mexicana</i> Duméril, Bibron and Duméril, 1854	050	50	600	60	0120	0320	04
<i>Bolitoglossa mexicana odonnelli</i> (Stuart, 1943)	050	50	600	60	0120	0320	08
<i>Bolitoglossa minutula</i> Wake, Brame and Duellman, 1973	050	50	600	60	0120	0330	00
<i>Bolitoglossa morio</i> (Cope, 1869)	050	50	600	60	0120	0340	00
<i>Bolitoglossa mulleri</i> (Brocchi, 1883)	050	50	600	60	0120	0350	00
<i>Bolitoglossa niceforoi</i> Brame and Wake, 1963	050	50	600	60	0120	0360	00
<i>Bolitoglossa nigrescens</i> (Taylor, 1949)	050	50	600	60	0120	0370	00
<i>Bolitoglossa nigroflavescens</i> Taylor, 1941	050	50	600	60	0120	0380	00

<i>Bolitoglossa occidentalis</i> Taylor, 1941	050	50	600	60	0120	0390	00
<i>Bolitoglossa omniunsanctorum</i> (Stuart, 1952)	050	50	600	60	0120	0400	00
<i>Bolitoglossa orestes</i> Brame and Wake, 1962	050	50	600	60	0120	0410	00
<i>Bolitoglossa palmata</i> (Werner, 1897)	050	50	600	60	0120	0420	00
<i>Bolitoglossa pandi</i> Brame and Wake, 1963	050	50	600	60	0120	0430	00
<i>Bolitoglossa peruviana</i> (Boulenger, 1883)	050	50	600	60	0120	0440	00
<i>Bolitoglossa phalarosoma</i> Wake and Brame, 1962	050	50	600	60	0120	0450	00
<i>Bolitoglossa platydactyla</i> (Gray, 1831)	050	50	600	60	0120	0460	00
<i>Bolitoglossa ramosi</i> Brame and Wake, 1972	050	50	600	60	0120	0470	00
<i>Bolitoglossa resplendens</i> McCoy and Walker, 1966	050	50	600	60	0120	0480	00
<i>Bolitoglossa riletii</i> Holman, 1964	050	50	600	60	0120	0490	00
<i>Bolitoglossa robusta</i> (Cope, 1894)	050	50	600	60	0120	0500	00
<i>Bolitoglossa rostrata</i> (Brocchi, 1883)	050	50	600	60	0120	0510	00
<i>Bolitoglossa rufescens</i> (Cope, 1869)	050	50	600	60	0120	0520	00
<i>Bolitoglossa salvini</i> (Gray, 1868)	050	50	600	60	0120	0530	00
<i>Bolitoglossa savagei</i> Brame and Wake, 1963	050	50	600	60	0120	0540	00
<i>Bolitoglossa schizodactyla</i> Wake and Brame, 1966	050	50	600	60	0120	0550	00
<i>Bolitoglossa schmidtii</i> (Dunn, 1924)	050	50	600	60	0120	0560	00
<i>Bolitoglossa silverstonei</i> Brame and Wake, 1972	050	50	600	60	0120	0570	00
<i>Bolitoglossa sima</i> (Vaillant, 1911)	050	50	600	60	0120	0580	00
<i>Bolitoglossa sooyorum</i> Vial, 1963	050	50	600	60	0120	0590	00
<i>Bolitoglossa striatula</i> (Noble, 1918)	050	50	600	60	0120	0600	00
<i>Bolitoglossa stuarti</i> Wake and Brame, 1969	050	50	600	60	0120	0610	00
<i>Bolitoglossa subpalmata pesrubra</i> (Taylor, 1952)	050	50	600	60	0120	0620	04
<i>Bolitoglossa subpalmata subpalmata</i> (Boulenger, 1896)	050	50	600	60	0120	0620	08
<i>Bolitoglossa subpalmata torresi</i> (Taylor, 1952)	050	50	600	60	0120	0620	12
<i>Bolitoglossa taylori</i> Wake, Brame and Myers, 1970	050	50	600	60	0120	0630	00
<i>Bolitoglossa valleculea</i> Brame and Wake, 1963	050	50	600	60	0120	0640	00
<i>Bolitoglossa veracrucis</i> Taylor, 1951	050	50	600	60	0120	0650	00
<i>Bolitoglossa walkeri</i> Brame and Wake, 1972	050	50	600	60	0120	0660	00
<i>Bolitoglossa yucatanana</i> (Peters, 1882)	050	50	600	60	0120	0670	00
† <i>Brachycormus noachicus</i> (Goldfuss, 1831)	050	50	800	00	0130	0010	00
† <i>Chelotriton paradoxus</i> Pomel, 1853	050	50	800	00	0140	0010	00
<i>Chioglossa lusitanica</i> Bocage, 1864	050	50	800	00	0150	0010	00
† <i>Chioglossa meini</i> Estes and Hoffstetter, 1976	050	50	800	00	0150	0020	00
<i>Chiropterotriton arboreus</i> (Taylor, 1941)	050	50	600	60	0160	0010	00
<i>Chiropterotriton barbouri</i> (Schmidt, 1936)	050	50	600	60	0160	0020	00
<i>Chiropterotriton bromeliacia</i> (Schmidt, 1936)	050	50	600	60	0160	0030	00
<i>Chiropterotriton chiropterus</i> (Cope, 1863)	050	50	600	60	0160	0040	00
<i>Chiropterotriton chondrostega chondrostega</i> (Taylor, 1941)	050	50	600	60	0160	0050	04
<i>Chiropterotriton chondrostega cracens</i> Rabb, 1958	050	50	600	60	0160	0050	08
<i>Chiropterotriton chondrostega terrestris</i> (Taylor, 1941)	050	50	600	60	0160	0050	12
<i>Chiropterotriton cuchumatanus</i> Lynch and Wake, 1975	050	50	600	60	0160	0060	00
<i>Chiropterotriton dimidiatus</i> (Taylor, 1939)	050	50	600	60	0160	0070	00
<i>Chiropterotriton laevis</i> (Taylor, 1942)	050	50	600	60	0160	0080	00
<i>Chiropterotriton magnipes</i> Rabb, 1965	050	50	600	60	0160	0090	00
<i>Chiropterotriton megarhinus</i> Rabb, 1960	050	50	600	60	0160	0100	00
<i>Chiropterotriton mosaueri</i> (Woodall, 1941)	050	50	600	60	0160	0110	00
<i>Chiropterotriton multidentatus</i> (Taylor, 1938)	050	50	600	60	0160	0120	00
<i>Chiropterotriton nasalis</i> (Dunn, 1924)	050	50	600	60	0160	0130	00
<i>Chiropterotriton picadoi</i> (Stejneger, 1911)	050	50	600	60	0160	0140	00
<i>Chiropterotriton priscus</i> Rabb, 1956	050	50	600	60	0160	0150	00
<i>Chiropterotriton rabbi</i> Lynch and Wake, 1975	050	50	600	60	0160	0160	00
<i>Chiropterotriton richardi</i> (Taylor, 1949)	050	50	600	60	0160	0170	00
<i>Chiropterotriton xolocaltcae</i> (Taylor, 1941)	050	50	600	60	0160	0180	00
† <i>Comonecturoides marshi</i> Hecht and Estes, 1960	050	50	000	00	0170	0010	00
<i>Cryptobranchus alleganiensis alleganiensis</i> (Daudin, 1802)	050	50	350	00	0180	0010	04
<i>Cryptobranchus alleganiensis bishopi</i> Grobman, 1942	050	50	350	00	0180	0010	08
<i>Cynops cyanurus</i> Liu, Hu and Yang, 1962	050	50	800	00	0190	0010	00
<i>Cynops ensicauda ensicauda</i> (Hallowell, 1860)	050	50	800	00	0190	0020	04
<i>Cynops ensicauda popei</i> (Inger, 1947)	050	50	800	00	0190	0020	08
<i>Cynops orientalis</i> (David, 1873)	050	50	800	00	0190	0030	00
<i>Cynops pyrrhogaster pyrrhogaster</i> (Boie, 1826)	050	50	800	00	0190	0040	04
<i>Cynops pyrrhogaster sasayamae</i> (Mertens, 1969)	050	50	800	00	0190	0040	08

Desmognathus aeneus Brown and Bishop, 1947	050	50	600	30	0200	0010	00
Desmognathus auriculatus (Holbrook, 1838)	050	50	600	30	0200	0020	00
Desmognathus brimleyorum Stejneger, 1895	050	50	600	30	0200	0030	00
Desmognathus fuscus conanti Rossman, 1958	050	50	600	30	0200	0040	04
Desmognathus fuscus fuscus (Green, 1818)	050	50	600	30	0200	0040	08
Desmognathus imitator Dunn, 1927	050	50	600	30	0200	0050	00
Desmognathus monticola jeffersoni Hoffman, 1951	050	50	600	30	0200	0060	04
Desmognathus monticola monticola Dunn, 1916	050	50	600	30	0200	0060	08
Desmognathus ochrophaeus Cope, 1859	050	50	600	30	0200	0070	00
Desmognathus quadramaculatus (Holbrook, 1840)	050	50	600	30	0200	0080	00
Desmognathus welteri Barbour, 1950	050	50	600	30	0200	0090	00
Desmognathus wrighti King, 1936	050	50	600	30	0200	0100	00
Dicamptodon copei Nussbaum, 1970	050	50	450	30	0210	0010	00
Dicamptodon ensatus (Eschscholtz, 1833)	050	50	450	30	0210	0020	00
Ensatina eschscholtzi croceator (Cope, 1867)	050	50	600	60	0220	0010	04
Ensatina eschscholtzi eschscholtzi Gray, 1850	050	50	600	60	0220	0010	08
Ensatina eschscholtzi klauberi Dunn, 1929	050	50	600	60	0220	0010	12
Ensatina eschscholtzi oregonensis (Girard, 1856)	050	50	600	60	0220	0010	16
Ensatina eschscholtzi picta Wood, 1940	050	50	600	60	0220	0010	20
Ensatina eschscholtzi platensis (Espada, 1875)	050	50	600	60	0220	0010	24
Ensatina eschscholtzi xanthoptica Stebbins, 1949	050	50	600	60	0220	0010	28
†Epipolysemia ogygia (Goldfuss, 1831)	050	50	800	00	0230	0010	00
†Epipolysemia rusconii (Costa, 1851)	050	50	800	00	0230	0020	00
Euproctus asper asper (Duges, 1852)	050	50	800	00	0240	0010	04
Euproctus asper castelmouliensis Wolterstorff, 1925	050	50	800	00	0240	0010	08
Euproctus montanus (Savi, 1838)	050	50	800	00	0240	0020	00
Euproctus platycephalus (Gravenhorst, 1829)	050	50	800	00	0240	0030	00
Eurycea aquatica Rose and Bush, 1963	050	50	600	60	0250	0010	00
Eurycea bislineata bislineata (Green, 1818)	050	50	600	60	0250	0020	04
Eurycea bislineata cirrigera (Green, 1830)	050	50	600	60	0250	0020	08
Eurycea bislineata wilderae Dunn, 1920	050	50	600	60	0250	0020	12
Eurycea junaluska Sever, Dundee and Sullivan, 1976	050	50	600	60	0250	0030	00
Eurycea latitans Smith and Potter, 1946	050	50	600	60	0250	0040	00
Eurycea longicauda guttolineata (Holbrook, 1838)	050	50	600	60	0250	0050	04
Eurycea longicauda longicauda (Green, 1818)	050	50	600	60	0250	0050	08
Eurycea longicauda melanopleura (Cope, 1893)	050	50	600	60	0250	0050	12
Eurycea lucifuga Rafinesque, 1822	050	50	600	60	0250	0060	00
Eurycea multiplicata griseogaster Moore and Hughes, 1941	050	50	600	60	0250	0070	04
Eurycea multiplicata multiplicata (Cope, 1869)	050	50	600	60	0250	0070	08
Eurycea nana Bishop, 1941	050	50	600	60	0250	0080	00
Eurycea neotenes Bishop and Wright, 1937	050	60	600	60	0250	0090	04
Eurycea quadridigitata (Holbrook, 1842)	050	50	600	60	0250	0100	00
Eurycea tridentifera Mitchell and Reddell, 1965	050	50	600	60	0250	0110	00
Eurycea troglodytes Baker, 1957	050	50	600	60	0250	0120	00
Eurycea tynerensis Moore and Hughes, 1939	050	50	600	60	0250	0130	00
†Geyeriella mertensi Herre, 1950	050	50	550	00	0260	0010	00
†Grippiella mohrae Herre, 1949	050	50	800	00	0270	0010	00
Gyrinophilus pallaeus gulolineatus Brandon, 1965	050	50	600	60	0280	0010	04
Gyrinophilus pallaeus necturoides Lazell and Brandon, 1962	050	50	600	60	0280	0010	08
Gyrinophilus pallaeus pallaeus McCrady, 1954	050	50	600	60	0280	0010	12
Gyrinophilus porphyriticus danielsi (Blatchley, 1901)	050	50	600	60	0280	0020	04
Gyrinophilus porphyriticus dunni Mittleman and Jopson, 1941	050	50	600	60	0280	0020	08
Gyrinophilus porphyriticus duryi (Weller, 1930)	050	50	600	60	0280	0020	12
Gyrinophilus porphyriticus porphyriticus (Green, 1827)	050	50	600	60	0280	0020	16
Gyrinophilus subterraneus Besharse and Holsinger, 1977	050	50	600	60	0280	0030	00
†Habrosaurus dilatus Gilmore, 1928	050	50	900	00	0290	0010	00
Haideotriton wallacei Carr, 1939	050	50	600	60	0300	0010	00
†Heliarchon furcillatus Meyer, 1860	050	50	800	00	0310	0010	00
Hemidactylium scutatum (Schlegel, 1838)	050	50	600	60	0320	0010	00
†Heteroclitotriton zitteli De Stefano, 1903	050	50	800	00	0330	0010	00
Hydromantes brunus Gorman, 1954	050	50	600	60	0340	0010	00

<i>Hydromantes genei flavus</i> Stefani, 1968	050	50	600	60	0340	0020	04
<i>Hydromantes genei funereus</i> Stefani, 1968	050	50	600	60	0340	0020	08
<i>Hydromantes genei genei</i> (Schlegel, 1838)	050	50	600	60	0340	0020	12
<i>Hydromantes genei imperialis</i> Stefani, 1968	050	50	600	60	0340	0020	16
<i>Hydromantes italicus ambrosii</i> Lanza, 1954	050	50	600	60	0340	0030	04
<i>Hydromantes italicus argentatus</i> Stefani, 1968	050	50	600	60	0340	0030	08
<i>Hydromantes italicus bonsanoi</i> Bruno and Bologna, 1973	050	50	600	60	0340	0030	12
<i>Hydromantes italicus gormanii</i> Lanza, 1952	050	50	600	60	0340	0030	16
<i>Hydromantes italicus italicus</i> Dunn, 1923	050	50	600	60	0340	0030	20
<i>Hydromantes italicus ligusticus</i> Stefani, 1968	050	50	600	60	0340	0030	24
<i>Hydromantes italicus strinatii</i> Aellen, 1958	050	50	600	60	0340	0030	28
<i>Hydromantes platycephalus</i> (Camp, 1916)	050	50	600	60	0340	0040	00
<i>Hydromantes shastae</i> Gorman and Camp, 1953	050	50	600	60	0340	0050	00
† <i>Hylaobatrachus croyi</i> Dollo, 1884	050	50	700	00	0350	0010	00
<i>Hynobius abei</i> Sato, 1934	050	50	550	00	0360	0010	00
<i>Hynobius chinensis</i> Günther, 1889	050	50	550	00	0360	0020	00
<i>Hynobius dunni</i> Tago, 1931	050	50	550	00	0360	0030	00
<i>Hynobius formosanus</i> Maki, 1922	050	50	550	00	0360	0040	00
<i>Hynobius keyserlingi</i> (Dybowski, 1870)	050	50	550	00	0360	0050	00
<i>Hynobius kimurai</i> Dunn, 1923	050	50	550	00	0360	0060	00
<i>Hynobius leechi</i> Boulenger, 1887	050	50	550	00	0360	0070	00
<i>Hynobius lichenatus</i> Boulenger, 1883	050	50	550	00	0360	0080	00
<i>Hynobius naevius</i> (Schlegel, 1838)	050	50	550	00	0360	0090	00
<i>Hynobius nebulosus nebulosus</i> (Schlegel, 1838)	050	50	550	00	0360	0100	04
<i>Hynobius nebulosus tokyoensis</i> Tago, 1931	050	50	550	00	0360	0100	08
<i>Hynobius nigrescens</i> Stejneger, 1907	050	50	550	00	0360	0110	00
<i>Hynobius okiensis</i> Sato, 1940	050	50	550	00	0360	0120	00
<i>Hynobius retardatus</i> Dunn, 1923	050	50	550	00	0360	0130	00
<i>Hynobius sadoensis</i> Sato, 1940	050	50	550	00	0360	0140	00
<i>Hynobius shihi</i> Liu, 1950	050	50	550	00	0360	0150	00
<i>Hynobius sonani</i> (Maki, 1922)	050	50	550	00	0360	0160	00
<i>Hynobius stejnegeri</i> Dunn, 1923	050	50	550	00	0360	0170	00
<i>Hynobius tsuensis</i> Abe, 1922	050	50	550	00	0360	0180	00
<i>Hypselotriton wolterstorffi</i> (Boulenger, 1905)	050	50	800	00	0370	0010	00
† <i>Koallia genzeli</i> Herre, 1950	050	50	800	00	0380	0010	00
<i>Leurognathus marmoratus</i> Moore, 1899	050	50	600	30	0390	0010	00
<i>Lineatriton lineolus</i> (Cope, 1865)	050	50	600	60	0400	0010	00
† <i>Lisserpeton bairdi</i> Estes, 1965	050	50	450	80	0410	0010	00
† <i>Megalotriton filholi</i> Zittel, 1888	050	50	800	00	0420	0010	00
† <i>Megalotriton portisi</i> De Stefano, 1903	050	50	800	00	0420	0020	00
<i>Mertensiella caucasica</i> (Waga, 1876)	050	50	800	00	0430	0010	00
<i>Mertensiella luschani antalyana</i> Basoğlu and Baran, 1976	050	50	800	00	0430	0020	04
<i>Mertensiella luschani atifi</i> Basoğlu, 1967	050	50	800	00	0430	0020	08
<i>Mertensiella luschani fazilae</i> Basoğlu and Atatürk, 1974	050	50	800	00	0430	0020	12
<i>Mertensiella luschani finikensis</i> Basoğlu and Atatürk, 1976	050	50	800	00	0430	0020	16
<i>Mertensiella luschani helverseni</i> Pieper, 1963	050	50	800	00	0430	0020	20
<i>Mertensiella luschani luschani</i> (Steindachner, 1891)	050	50	800	00	0430	0020	24
<i>Necturus alabamensis</i> Viosca, 1937	050	50	700	00	0440	0010	00
<i>Necturus beyeri</i> Viosca, 1937	050	50	700	00	0440	0020	00
<i>Necturus lewisi</i> Brimley, 1924	050	50	700	00	0440	0030	00
<i>Necturus maculosus louisianensis</i> Viosca, 1938	050	50	700	00	0440	0040	04
<i>Necturus maculosus maculosus</i> (Rafinesque, 1818)	050	50	700	00	0440	0040	08
<i>Necturus punctatus</i> (Gibbes, 1850)	050	50	700	00	0440	0050	00
<i>Neurergus crocatus</i> Cope, 1862	050	50	800	00	0450	0010	00
<i>Neurergus kaiseri</i> Schmidt, 1952	050	50	800	00	0450	0020	00
<i>Neurergus microspilotus</i> (Nesterov, 1916)	050	50	800	00	0450	0030	00
<i>Neurergus strauchi</i> (Steindachner, 1887)	050	50	800	00	0450	0040	00
† <i>Notophthalmus crassus</i> Tihen, 1974	050	50	800	00	0460	0010	00
<i>Notophthalmus meridionalis kallerti</i> (Wolterstorff, 1930)	050	50	800	00	0460	0020	04
<i>Notophthalmus meridionalis meridionalis</i> (Cope, 1880)	050	50	800	00	0460	0020	08
<i>Notophthalmus perstriatus</i> (Bishop, 1941)	050	50	800	00	0460	0030	00

† <i>Notophthalmus robustus</i> Estes, 1963	050	50	800	00	0460	0040	00
† <i>Notophthalmus slaughteri</i> Holman, 1968	050	50	800	00	0460	0050	00
<i>Notophthalmus viridescens dorsalis</i> (Harlan, 1828)	050	50	800	00	0460	0060	04
<i>Notophthalmus viridescens louisianensis</i> (Wolterstorff, 1914)	050	50	800	00	0460	0060	08
<i>Notophthalmus viridescens piaropicola</i> (Schwartz and Duellman, 1952)	050	50	800	00	0460	0060	12
<i>Notophthalmus viridescens viridescens</i> (Rafinesque, 1820)	050	50	800	00	0460	0060	16
<i>Oedipina alfaroi</i> Dunn, 1921	050	50	600	60	0470	0010	00
<i>Oedipina altura</i> Brame, 1968	050	50	600	60	0470	0020	00
<i>Oedipina carablanca</i> Brame, 1968	050	50	600	60	0470	0030	00
<i>Oedipina collaris</i> (Stejneger, 1907)	050	50	600	60	0470	0040	00
<i>Oedipina complex</i> (Dunn, 1924)	050	50	600	60	0470	0050	00
<i>Oedipina cyclocauda</i> Taylor, 1952	050	50	600	60	0470	0060	00
<i>Oedipina elongata</i> (Schmidt, 1936)	050	50	600	60	0470	0070	00
<i>Oedipina grandis</i> Brame and Duellman, 1970	050	50	600	60	0470	0080	00
<i>Oedipina ignea</i> Stuart, 1952	050	50	600	60	0470	0090	00
<i>Oedipina parvipes</i> (Peters, 1879)	050	50	600	60	0470	0100	00
<i>Oedipina paucidentata</i> Brame, 1968	050	50	600	60	0470	0110	00
<i>Oedipina poelzi</i> Brame, 1963	050	50	600	60	0470	0120	00
<i>Oedipina pseudouniformis</i> Brame, 1968	050	50	600	60	0470	0130	00
<i>Oedipina stuarti</i> Brame, 1968	050	50	600	60	0470	0140	00
<i>Oedipina taylori</i> Stuart, 1952	050	50	600	60	0470	0150	00
<i>Oedipina uniformis</i> Keferstein, 1868	050	50	600	60	0470	0160	00
† <i>Oligosemia ankeli</i> Herre, 1949	050	50	800	00	0480	0010	00
† <i>Oligosemia gehardti</i> Herre, 1949	050	50	800	00	0480	0020	00
† <i>Oligosemia spinosa</i> Navás, 1922	050	50	800	00	0480	0030	00
<i>Onychodactylus fischeri</i> (Boulenger, 1886)	050	50	550	00	0490	0010	00
<i>Onychodactylus japonicus</i> (Houttuyn, 1782)	050	50	550	00	0490	0020	00
† <i>Opisthotriton kayi</i> Auffenberg, 1961	050	50	250	00	0500	0010	00
† <i>Orthophya longa</i> Meyer, 1845	050	50	700	00	0510	0010	00
† <i>Orthophya solida</i> Meyer, 1845	050	50	700	00	0510	0020	00
<i>Pachypalaminus boulengeri</i> Thompson, 1912	050	50	550	00	0520	0010	00
<i>Pachytriton brevipes</i> Sauvage, 1877	050	50	800	00	0530	0010	00
† <i>Palaeopleurodeles hauffi</i> Herre, 1935	050	50	800	00	0540	0010	00
† <i>Palaeoproteus gallicus</i> Estes and Hoffstetter, 1967	050	50	800	00	0550	0010	00
† <i>Palaeoproteus klatti</i> Herre, 1935	050	50	800	00	0550	0020	00
† <i>Palaeosalamandra kohlitzi</i> Herre, 1949	050	50	800	00	0560	0010	00
† <i>Palaeosalamandra renschi</i> Herre, 1949	050	50	800	00	0560	0020	00
† <i>Palaeosalamandra dehmi</i> Herre, 1949	050	50	800	00	0570	0010	00
<i>Paramesotriton chinensis</i> (Gray, 1859)	050	50	800	00	0580	0010	00
<i>Paramesotriton deloustali</i> (Bourrett, 1934)	050	50	800	00	0580	0020	00
<i>Paramesotriton hongkongensis</i> (Myers and Leviton, 1962)	050	50	800	00	0580	0030	00
<i>Parvimolge praececellens</i> Rabb, 1955	050	50	600	60	0590	0010	00
<i>Parvimolge townsendi</i> (Dunn, 1922)	050	50	600	60	0590	0020	00
<i>Phaeognathus hubrichti</i> Highton, 1961	050	50	600	30	0600	0010	00
† <i>Piceoerpeton willwoodense</i> Meszoely, 1967	050	50	450	80	0610	0010	00
<i>Plethodon caddoensis</i> Pope and Pope, 1951	050	50	600	60	0620	0010	00
<i>Plethodon cinereus</i> (Green, 1818)	050	50	600	60	0620	0020	00
<i>Plethodon dorsalis angusticlavius</i> Grobman, 1944	050	50	600	60	0620	0030	04
<i>Plethodon dorsalis dorsalis</i> Cope, 1889	050	50	600	60	0620	0030	08
<i>Plethodon dunni</i> Bishop, 1934	050	50	600	60	0620	0040	00
<i>Plethodon elongatus</i> Van Denburgh, 1916	050	50	600	60	0620	0050	00
<i>Plethodon glutinosus albagula</i> Grobman, 1944	050	50	600	60	0620	0060	04
<i>Plethodon glutinosus glutinosus</i> (Green, 1818)	050	50	600	60	0620	0060	08
<i>Plethodon hoffmani</i> Highton, 1972	050	50	600	60	0620	0080	00
<i>Plethodon jordani</i> Blatchley, 1901	050	50	600	60	0620	0090	00
<i>Plethodon larselli</i> Burns, 1953	050	50	600	60	0620	0100	00
<i>Plethodon longicrus</i> Adler and Dennis, 1962	050	50	600	60	0620	0110	00
<i>Plethodon neomexicanus</i> Stebbins and Riemer, 1950	050	50	600	60	0620	0120	00
<i>Plethodon nettingi hubrichti</i> Thurow, 1957	050	50	600	60	0620	0130	04
<i>Plethodon nettingi nettingi</i> Green, 1938	050	50	600	60	0620	0130	08
<i>Plethodon nettingi shenandoah</i> Highton and Worthington, 1967	050	50	600	60	0620	0130	12
<i>Plethodon ouachitae</i> Dunn and Heintze, 1933	050	50	600	60	0620	0140	00
<i>Plethodon punctatus</i> Highton, 1972	050	50	600	60	0620	0150	00

<i>Plethodon richmondi</i> Netting and Mittleman, 1938	050	50	600	60	0620	0160	00
<i>Plethodon serratus</i> Grobman, 1944	050	50	600	60	0620	0170	00
<i>Plethodon stormi</i> Highton and Brame, 1965	050	50	600	60	0620	0180	00
<i>Plethodon vandykei idahoensis</i> Slater and Slipp, 1940	050	50	600	60	0620	0190	04
<i>Plethodon vandykei vandykei</i> Van Denburgh, 1906	050	50	600	60	0620	0190	08
<i>Plethodon vehiculum</i> (Cooper, 1860)	050	50	600	60	0620	0200	00
<i>Plethodon wehrlei</i> Fowler and Dunn, 1917	050	50	600	60	0620	0220	00
<i>Plethodon welleri</i> Walker, 1931	050	50	600	60	0620	0230	00
<i>Plethodon yonahlossee</i> Dunn, 1917	050	50	600	60	0620	0240	00
<i>Pleurodeles poireti</i> (Gervais, 1835)	050	50	800	00	0630	0010	00
<i>Pleurodeles waltl</i> Michahelles, 1830	050	50	800	00	0630	0020	00
† <i>Praesalamandra goessweinsteini</i> Brunner, 1957	050	50	800	00	0640	0010	00
† <i>Praesalamandra pottensteinia</i> (Brunner, 1956)	050	50	800	00	0640	0020	00
† <i>Praesalamandra sirenoides</i> Brunner, 1957	050	50	800	00	0640	0030	00
† <i>Proamphiuma cretacea</i> Estes, 1969	050	50	150	00	0650	0010	00
† <i>Procyonops miocenicus</i> Chung-Chien, 1965	050	50	800	00	0660	0010	00
† <i>Prodesmodon copei</i> Estes, 1964	050	50	650	00	0670	0010	00
† <i>Prosiren elinorae</i> Goin and Auffenberg, 1958	050	50	650	00	0680	0010	00
<i>Proteus anguinus</i> Laurenti, 1768	050	50	700	00	0690	0010	00
† <i>Proteus bavaricus</i> Brunner, 1956	050	50	700	00	0690	0020	00
† <i>Pseudobranchius robustus</i> Goin and Auffenberg, 1955	050	50	900	00	0700	0010	00
<i>Pseudobranchius striatus axanthus</i> Netting and Goin, 1942	050	50	900	00	0700	0020	04
<i>Pseudobranchius striatus belli</i> Schwartz, 1952	050	50	900	00	0700	0020	08
<i>Pseudobranchius striatus lustricolus</i> Neill, 1951	050	50	900	00	0700	0020	12
<i>Pseudobranchius striatus spheusiscus</i> Goin and Crenshaw, 1949	050	50	900	00	0700	0020	16
<i>Pseudobranchius striatus striatus</i> (Le Conte, 1824)	050	50	900	00	0700	0020	20
† <i>Pseudobranchius vetustus</i> Goin and Auffenberg, 1955	050	50	900	00	0700	0030	00
<i>Pseudoeurycea altamontana</i> (Taylor, 1938)	050	50	600	60	0710	0010	00
<i>Pseudoeurycea anitae</i> Bogert, 1967	050	50	600	60	0710	0020	00
<i>Pseudoeurycea belli belli</i> (Gray, 1850)	050	50	600	60	0710	0030	04
<i>Pseudoeurycea belli boneti</i> Alvarez and Martin, 1967	050	50	600	60	0710	0030	08
<i>Pseudoeurycea belli sierraccidentalis</i> Lowe, Jones and Wright, 1968	050	50	600	60	0710	0030	12
<i>Pseudoeurycea brunnata</i> Bumzahem and Smith, 1955	050	50	600	60	0710	0040	00
<i>Pseudoeurycea cephalica cephalica</i> (Cope, 1865)	050	50	600	60	0710	0050	04
<i>Pseudoeurycea cephalica manni</i> (Taylor, 1938)	050	50	600	60	0710	0050	08
<i>Pseudoeurycea cephalica rubrimembris</i> (Taylor and Smith, 1945) ..	050	50	600	60	0710	0050	12
<i>Pseudoeurycea cochranae</i> (Taylor, 1943)	050	50	600	60	0710	0060	00
<i>Pseudoeurycea conanti</i> Bogert, 1967	050	50	600	60	0710	0070	00
<i>Pseudoeurycea expectata</i> Stuart, 1954	050	50	600	60	0710	0080	00
<i>Pseudoeurycea firscheini</i> Shannon and Werler, 1955	050	50	600	60	0710	0090	00
<i>Pseudoeurycea gadovi</i> (Dunn, 1926)	050	50	600	60	0710	0100	00
<i>Pseudoeurycea galeanae</i> (Taylor, 1941)	050	50	600	60	0710	0110	00
<i>Pseudoeurycea goebeli</i> (Schmidt, 1936)	050	50	600	60	0710	0120	00
<i>Pseudoeurycea juarezi</i> Regal, 1966	050	50	600	60	0710	0130	00
<i>Pseudoeurycea leprosa</i> (Cope, 1869)	050	50	600	60	0710	0140	00
<i>Pseudoeurycea melanomolga</i> (Taylor, 1941)	050	50	600	60	0710	0150	00
<i>Pseudoeurycea mystax</i> Bogert, 1967	050	50	600	60	0710	0160	00
<i>Pseudoeurycea nigromaculata</i> (Taylor, 1941)	050	50	600	60	0710	0170	00
<i>Pseudoeurycea rex</i> (Dunn, 1921)	050	50	600	60	0710	0180	00
<i>Pseudoeurycea robertsi</i> (Taylor, 1938)	050	50	600	60	0710	0190	00
<i>Pseudoeurycea scandens</i> Walker, 1955	050	50	600	60	0710	0200	00
<i>Pseudoeurycea smithi</i> (Taylor, 1938)	050	50	600	60	0710	0210	00
<i>Pseudoeurycea unguidentis</i> (Taylor, 1941)	050	50	600	60	0710	0220	00
<i>Pseudoeurycea werleri</i> Darling and Smith, 1954	050	50	600	60	0710	0230	00
<i>Pseudotriton montanus diastictus</i> Bishop, 1941	050	50	600	60	0720	0010	04
<i>Pseudotriton montanus flavissimus</i> Hallowell, 1856	050	50	600	60	0720	0010	08
<i>Pseudotriton montanus floridanus</i> Netting and Goin, 1942	050	50	600	60	0720	0010	12
<i>Pseudotriton montanus montanus</i> Baird, 1849	050	50	600	60	0720	0010	16
<i>Pseudotriton ruber nitidus</i> Dunn, 1920	050	50	600	60	0720	0020	04
<i>Pseudotriton ruber ruber</i> (Latreille, 1801)	050	50	600	60	0720	0020	00
<i>Pseudotriton ruber schencki</i> (Brimley, 1912)	050	50	600	60	0720	0020	12
<i>Pseudotriton ruber vioscai</i> Bishop, 1928	050	50	600	60	0720	0020	16

† <i>Ramonellus longispinus</i> Nevo and Estes, 1969	050	50	650	00	0730	0010	00
<i>Ranodon sibiricus</i> Kessler, 1866	050	50	550	00	0740	0010	00
<i>Ranodon tsinpaensis</i> Liu and Hu, 1966	050	50	550	00	0740	0020	00
<i>Ranodon wushanensis</i> Liu, Hu and Yang, 1960	050	50	550	00	0740	0030	00
<i>Rhyacosiredon altamiranoi</i> (Dugès, 1895)	050	50	100	00	0750	0010	00
<i>Rhyacosiredon leorae</i> Taylor, 1943	050	50	100	00	0750	0020	00
<i>Rhyacosiredon rivularis</i> Taylor, 1940	050	50	100	00	0750	0030	00
<i>Rhyacosiredon zempoalaensis</i> Taylor and Smith, 1945	050	50	100	00	0750	0040	00
<i>Rhyacotriton olympicus olympicus</i> (Gaije, 1917)	050	50	450	70	0760	0010	04
<i>Rhyacotriton olympicus variegatus</i> Stebbins and Lowe, 1951	050	50	450	70	0760	0010	00
<i>Salamandra atra</i> Laurenti, 1768	050	50	800	00	0770	0010	00
† <i>Salamandra broilii</i> Schlosser, 1922	050	50	800	00	0770	0020	00
† <i>Salamandra mimula</i> Brunner, 1957	050	50	800	00	0770	0040	00
† <i>Salamandra perversa</i> Brunner, 1957	050	50	800	00	0770	0050	00
<i>Salamandra salamandra algira</i> Bedriaga, 1883	050	50	800	00	0770	0060	04
<i>Salamandra salamandra almanzorae</i> Müller and Hellmich, 1935	050	50	800	00	0770	0060	08
<i>Salamandra salamandra bejarae</i> Wolterstorff, 1934	050	50	800	00	0770	0060	12
<i>Salamandra salamandra corsica</i> Savi, 1838	050	50	800	00	0770	0060	16
<i>Salamandra salamandra fatuosa</i> Schreiber, 1912	050	50	800	00	0770	0060	20
<i>Salamandra salamandra gallaica</i> Seoane, 1884	050	50	800	00	0770	0060	24
<i>Salamandra salamandra giglioli</i> Eiselt and Lanza, 1956	050	50	800	00	0770	0060	28
<i>Salamandra salamandra infraimmaculata</i> Martens, 1885	050	50	800	00	0770	0060	32
<i>Salamandra salamandra salamandra</i> (Linnaeus, 1758)	050	50	800	00	0770	0060	36
<i>Salamandra salamandra semenovi</i> Nesterov, 1916	050	50	800	00	0770	0060	40
<i>Salamandra salamandra terrestris</i> Lacépède, 1788	050	50	800	00	0770	0060	44
† <i>Salamandra sansaniense</i> Lartet, 1851	050	50	800	00	0770	0070	00
† <i>Salamandra schindewolfi</i> (Herre and Lunau, 1950)	050	50	800	00	0770	0080	00
<i>Salamandrina terdigitata</i> (Lacépède, 1788)	050	50	800	00	0780	0010	00
† <i>Scapherpeton tectum</i> Cope, 1877	050	50	450	80	0790	0010	00
† <i>Siren dunni</i> Goin and Auffenberg, 1957	050	50	900	00	0800	0010	00
† <i>Siren hesterna</i> Goin and Auffenberg, 1955	050	50	900	00	0800	0020	00
<i>Siren intermedia intermedia</i> Barnes, 1826	050	50	900	00	0800	0030	04
<i>Siren intermedia nettingi</i> Goin, 1942	050	50	900	00	0800	0030	08
<i>Siren intermedia texana</i> Goin, 1957	050	50	900	00	0800	0030	12
<i>Siren lacertina</i> Linnaeus, 1766	050	50	900	00	0800	0040	00
† <i>Siren miotexana</i> Holman, 1978	050	50	900	00	0800	0050	00
† <i>Siren simpsoni</i> Goin and Auffenberg, 1955	050	50	900	00	0800	0060	00
<i>Stereochilus marginatus</i> (Hallowell, 1856)	050	50	600	60	0810	0010	00
<i>Taricha granulosa granulosa</i> (Skilton, 1849)	050	50	800	00	0820	0010	04
<i>Taricha granulosa mazamae</i> (Myers, 1942)	050	50	800	00	0820	0010	08
† <i>Taricha miocenica</i> Tihen, 1974	050	50	800	00	0820	0020	00
† <i>Taricha oligocenica</i> (Van Frank, 1955)	050	50	800	00	0820	0030	00
<i>Taricha rivularis</i> (Twitty, 1935)	050	50	800	00	0820	0040	00
<i>Taricha torosa sierrae</i> (Twitty, 1942)	050	50	800	00	0820	0050	04
<i>Taricha torosa torosa</i> (Rathke, 1833)	050	50	800	00	0820	0050	08
<i>Thorius dubitus</i> Taylor, 1941	050	50	600	60	0830	0010	00
<i>Thorius maddougalli</i> Taylor, 1949	050	50	600	60	0830	0020	00
<i>Thorius maxillabrochus</i> Gehlbach, 1959	050	50	600	60	0830	0030	00
<i>Thorius minutissimus</i> Taylor, 1949	050	50	600	60	0830	0040	00
<i>Thorius narisovalis</i> Taylor, 1939	050	50	600	60	0830	0050	00
<i>Thorius pennatulus narismagnus</i> Shannon and Werler, 1955	050	50	600	60	0830	0060	04
<i>Thorius pennatulus pennatulus</i> Cope, 1869	050	50	600	60	0830	0060	08
<i>Thorius pulmonaris</i> Taylor, 1939	050	50	600	60	0830	0070	00
<i>Thorius schmidtii</i> Gehlbach, 1959	050	50	600	60	0830	0080	00
<i>Thorius troglodytes</i> Taylor, 1941	050	50	600	60	0830	0090	00
† <i>Tischleriella buddenbrocki</i> Herre, 1949	050	50	800	00	0840	0010	00
† <i>Tischleriella langi</i> Herre, 1949	050	50	800	00	0840	0020	00
† <i>Tischleriella remanei</i> Herre, 1949	050	50	800	00	0840	0030	00
<i>Triturus alpestris alpestris</i> (Laurenti, 1768)	050	50	800	00	0850	0010	04
<i>Triturus alpestris apuanus</i> (Bonaparte, 1839)	050	50	800	00	0850	0010	08
<i>Triturus alpestris cyreni</i> Wolterstorff, 1932	050	50	800	00	0850	0010	12
<i>Triturus alpestris lacusnigri</i> (Seliškar and Pehani, 1935)	050	50	800	00	0850	0010	16

<i>Triturus alpestris montenegrinus</i> Radovanovic, 1951	050	50	800	00	0850	0010	20
<i>Triturus alpestris piperianus</i> Radovanovic, 1961	050	50	800	00	0850	0010	24
<i>Triturus alpestris reiseri</i> (Werner, 1902)	050	50	800	00	0850	0010	28
<i>Triturus alpestris serdarus</i> Radovanovic, 1961	050	50	800	00	0850	0010	32
<i>Triturus alpestris veluchiensis</i> Wolterstorff, 1935	050	50	800	00	0850	0010	36
<i>Triturus boscai</i> (Lataste, 1879)	050	50	800	00	0850	0020	00
<i>Triturus cristatus carnifex</i> (Laurenti, 1768)	050	50	800	00	0850	0030	04
<i>Triturus cristatus cristatus</i> (Laurenti, 1768)	050	50	800	00	0850	0030	08
<i>Triturus cristatus dobrogicus</i> (Kiritzescu, 1903)	050	50	800	00	0850	0030	12
<i>Triturus cristatus karelinii</i> (Strauch, 1870)	050	50	800	00	0850	0030	16
<i>Triturus helveticus alonsoi</i> (Seoane, 1885)	050	50	800	00	0850	0040	04
<i>Triturus helveticus helveticus</i> (Razoumowsky, 1789)	050	50	800	00	0850	0040	08
<i>Triturus helveticus punctillatus</i> Schmidtler, 1970	050	50	800	00	0850	0040	12
<i>Triturus italicus</i> (Peracca, 1898)	050	50	800	00	0850	0050	00
<i>Triturus marmoratus marmoratus</i> (Latreille, 1800)	050	50	800	00	0850	0070	04
<i>Triturus marmoratus pygmaeus</i> (Wolterstorff, 1905)	050	50	800	00	0850	0070	08
† <i>Triturus megacephalus</i> (Costa, 1864)	050	50	800	00	0850	0080	00
<i>Triturus montandoni</i> (Boulenger, 1880)	050	50	800	00	0850	0090	00
† <i>Triturus opalinus</i> (Meyer, 1851)	050	50	800	00	0850	0110	00
† <i>Triturus rohrsi</i> Herre, 1955	050	50	800	00	0850	0120	00
† <i>Triturus schnaitheimi</i> Herre and Lunau, 1950	050	50	800	00	0850	0140	00
<i>Triturus vittatus ophryticus</i> (Berthold, 1846)	050	50	800	00	0850	0150	04
<i>Triturus vittatus vittatus</i> (Gray, 1835)	050	50	800	00	0850	0150	08
<i>Triturus vulgaris ampelensis</i> Fuhn, 1951	050	50	800	00	0850	0160	04
<i>Triturus vulgaris borealis</i> Kauri, 1959	050	50	800	00	0850	0160	08
<i>Triturus vulgaris dalmaticus</i> (Kolombatovic, 1907)	050	50	800	00	0850	0160	12
<i>Triturus vulgaris graecus</i> (Wolterstorff, 1905)	050	50	800	00	0850	0160	16
<i>Triturus vulgaris kosswigi</i> Freytag, 1955	050	50	800	00	0850	0160	20
<i>Triturus vulgaris lantzi</i> (Wolterstorff, 1914)	050	50	800	00	0850	0160	24
<i>Triturus vulgaris meridionalis</i> (Boulenger, 1882)	050	50	800	00	0850	0160	28
<i>Triturus vulgaris schreiberi</i> (Wolterstorff, 1914)	050	50	800	00	0850	0160	32
<i>Triturus vulgaris tataiensis</i> Dely, 1967	050	50	800	00	0850	0160	36
<i>Triturus vulgaris vulgaris</i> (Linnaeus, 1758)	050	50	800	00	0850	0160	40
† <i>Triturus wintershofi</i> Lunau, 1949	050	50	800	00	0850	0170	00
<i>Tylotriton andersoni</i> Boulenger, 1892	050	50	800	00	0860	0010	00
<i>Tylotriton asperrimus</i> Unterstein, 1930	050	50	800	00	0860	0020	00
<i>Tylotriton chinhaiensis</i> Chang, 1932	050	50	800	00	0860	0030	00
† <i>Tylotriton kosswigi</i> Herre, 1949	050	50	800	00	0860	0040	00
<i>Tylotriton kweichowensis</i> Fang and Chang 1932	050	50	800	00	0860	0050	00
† <i>Tylotriton laticeps</i> (Meyer, 1858)	050	50	800	00	0860	0060	00
† <i>Tylotriton primigenius</i> Noble, 1928	050	50	800	00	0860	0070	00
<i>Tylotriton taliangensis</i> Liu, 1950	050	50	800	00	0860	0080	00
<i>Tylotriton verrucosus</i> Anderson, 1871	050	50	800	00	0860	0090	00
† <i>Tylotriton weigelti</i> Herre, 1935	050	50	800	00	0860	0100	00
<i>Typhlomolge rathbuni</i> Stejneger, 1896	050	50	600	60	0870	0010	00
<i>Typhlotriton spelaeus</i> Stejneger, 1892	050	50	600	60	0880	0010	00
† <i>Voigtiella ludwigi</i> Herre, 1949	050	50	800	00	0890	0010	00
† <i>Wolterstorffiella wiggeri</i> Herre, 1950	050	50	550	00	0900	0010	00

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