A Compendium of Zoological Type Nomenclature: a Reference Source

NEAL L. EVENHUIS

Bishop Museum Technical Report 41

Honolulu, Hawaii April 2008 Bishop Museum Press 1525 Bernice Street Honolulu, Hawaii



Copyright© 2008 All rights reserved Printed in the United States of America

ISSN 1085-455X

A Compendium of Zoological Type Nomenclature: a Reference Source

NEAL L. EVENHUIS

Department of Natural Sciences, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai'i 96817-2704; email: neale@bishopmuseum.org

Abstract. A synthesis of the various terms used in type nomenclature obtained from numerous sources is presented and annotated.

Ever since zoological nomenclature became codified, taxonomists have been creative in their attempts to coin terms for the different array of "types" they encountered. Aside from the terminology governed by the ICZN Code (i.e., holotype, paratype, lectotype, syntype, neotype, ischnotype, etc.) for just about every kind of activity or specimens, a certain "type" has been defined and given a term. This compendium attempts to list all of the published and unpublished type terminology that I have encountered in providing a historical context to the hobby of coining type terms.

In the list below, the terms are listed alphabetically and followed by the definition. If there is more than one definition for that term, the definitions are placed in order of most frequent usage. Cross references in the definition to other terms in this list are placed in boldface. Synonyms follow the definition and are placed in boldface. Variant spellings of the term are listed in italics following the definition. Numbers in square brackets following the definition correspond to the references at the end. For those terms without published references, these have accumulated from list provided to me by colleagues, my own experiences (usually obtaining them at lectures or meeting presentations).

LIST OF TYPE TERMINOLOGY

Abruptotype	Type of a taxon hastily described to meet a project, grant, or publication deadline. [2]
Adelfotype	A topotype obtained by the original collector of the species; specimens from the type locality collected by the original collector (but not of the original type series). [1, 8]
Aedeotype	The first specimen of a species to have the genitalia studied, together with the genital preparation (syn: holoaedeotype ; pare-aedeotype). [1, 8, 9]
Agriotype	1. Ancestral type. [9] 2. A wild form considered the ancestor of a domestic form. [8]
Alivotype	A live type (requires special storage and handling). [2]
Allohomotype	A homotype of the same sex as the allotype or lectoallotype (allohomoitype, allohomoiotype). [8]
Allolectotype	The type specimen of the opposite sex of the lectotype (syn. lectoallotype). [6, 8]
Alloneotype	The type specimens of the opposite sex of the neotype (syn. neallotype).
Alloparalectotype	A specimen from the original type series, of the opposite sex of the type, and designated later than the original publication of the species. [6, 8, 9]
Alloparatype	A paratype of the same sex as the allotype.
	[6, 8]
Alloplesiotype	

Allotype

1. The type specimen of the opposite sex of the holotype; 2. A paratype specimen of the opposite sex to the holotype, chosen by the original author; 3. A specimen chosen by the original author of a species to show morphologic features not exhibited by the holotype. [1, 5, 6, 8, 9, 10]

Ambiguotype

1. An inadequately described type, also known in some entomological circles as a "Walker type"; 2. A type specimen, usually a primary type, with inadequate date-locality labels (e.g., "N. Amer.", "Northwest Territory", "Summer '69", "No. 313"; 3. Unlabeled primary type specimen hidden in a series of paratypes syntypes, the series of which ultimately is proven to be a conglomerate of several closely related species. 4. An inadequately designated or labeled type specimen that is found to be stored or mounted (slide, pin, same jar or vial, etc.) with other specimens also fitting the exact description. [2, 3, 4]

Androtype

The designated original specimen of the male sex. [1, 9]

Anirotype Antetype Antitype

See Chirotype. See Prototype.

1. An opposite type; a countertype. 2. A corresponding specimen of a type species, obtained at the same time and location of the type. [9] 3. Every specimen, other than the holotype, in the type-series; all the specimens on which the author bases the series, except any that (s)he refers to as variants, or doubtfully associates with the nominal species, or expressly excludes from it. Paratype is preferred. [6]

Apogenotype	When a genus-group name is replaced because of homonymy, its type species automatically becomes the apogenotype of the renamed genus-group name (apogenotyp). [6, 8]
Apotype	1. Hypotype . 2. Type fixation of a genusgroup name through substitution. [5, 6, 8]
Archetype	A hypothetical ancestral type arrived at by the elimination of specialized characters of known later forms. (<i>archeotype</i>). [6, 8, 9]
Architype	A specimen that formed the basis of publication of a species previous to the modern type-interpretation. Unless such a specimen is included in one of the modern categories (in which it will be so termed) it cannot be included with types. (arquetype). [8]
Arithmotype	1. A specimen that belongs to a different taxon than the holotype (isotype). 2. specimens bearing the same collection number but not necessarily representing the same taxon. [6]
Artotype	Type specimen of a new species with clearly distinctive color patterns ultimately shown to be paint spots.
Associate Type	Any of two or more type specimens listed in the original description of a taxon in the absence of a designated holotype (syn: Cotype, Syntype) [1, 6, 8]
Atopotype	A type specimen described from a locality where it is known not to occur. [2]
Atypicotype	1. A type stated by the author not to be characteristic of the taxon; 2. A type specimen of a new species ultimately recognized as merely a color variant of a well-known common species. [2, 3, 4]
Autogenotype	A type of a genus-group name fixed by original designation. [6, 8]

Autotype

1. A specimen illustrated by the author after the original publication. (hypotype). [5, 6, 8] 2. A specimen designated by the author of a species subsequernt to the original description as being identical to the holotype (syn: homotype). [6] 3. autogenotype. [8] 4. A type specimen originating from the radiator grill of a truck or car after having traveled some distance, [3, 4]

Auxiliary Type

A specimen or element to serve as type of a subordinate taxon when the type of a major taxon is inadequate to assign subordinate rank names to the type. Also called Sustaining specimen. [6]

Basic Types Behaviorotype

See Primary Types

Biasotype

A type of a taxon distinguishable only by behavioral characteristics. [2]

Biotype

A type specimen of a species recognized as distinct by detailed statistical treatment involving a small sample size. [2, 3, 4]

Individuals of the same genotypical constitution. A particular combination of parental genomes. Not nomenclatural. [6, 8, 91

Boobootype

A holotype that should not have been described. For example, a specialist fails to recognize his own earlier described species; the museum technician or the star graduate student does, however. [2, 3, 41

Brevotype

A type specimen, whose name is validated on the most minimal of characters necessary to meet Code requirements "yellow, 20 mm.")

Cheirotype

See Chirotype.

Chirotype

A type specimen of an unpublished or manuscript name (cheirotype, quirotype). [1, 5, 6, 8, 9]

Chromosomotype	1. A fossil specimen collected from the same stratum but a different locality than the type. [8] 2. A local type. [9] A type specimen of a new species known only
Cm omosomotype	from its chromosome smear because the remainder of the specimen was discarded. See also Crickotype . [4]
Clastotype	A part or fragment of a type specimen of a species. See also Giraultotype . [8]
Clonotype	1. An asexually propagated specimen from a part of a type specimen or holotype. 2. The phenotype or homogenous product of cloning. [9]
Collateral Type	Any specimen used in the description of a species with the exception of primary types. [6, 8]
Collectotype	The type specimen of a new species instantly recognized by an authority but in the personal collection of a collector who refuses to give it up under any circumstances. [3, 4]
Concoctotype	A complete holotype made from several incomplete specimens. [2]
Conservotype	A type described solely for the purpose of having it listed as an Endangered Species.
Constructotype	A holotype (created during a taxonomic revision) due to a mix-up of body parts, such as male genitalia on a female body, etc. [2, 3, 4]
Contortotype	The type specimen of a soft-bodied species that has dried to an unrecognizable blob. See also xerotype . [3]
Conveniotype	The type of as taxon that still has its distinguishing characters yet to be established. [2]
Copulotype	A pair of types locked forever in copulatory embrace. [2]

Cotype	Obsolete—1. Syntype ; any specimen of the original type series when the author did not designate a holotype. 2. A paratype ; any specimen of the type series except the holotype or allotype . [1, 5, 6, 8, 9, 10]
Countertype	In compression fossils, where the rock or other medium is split open to reveal a mirrored impression of the fossil, the opposite half of the holotype. See also antitype . [6]
Crickotype	A holotype and only known specimen of a taxon that has been completely ground up for DNA analysis.
Cryptotype	1. A type published in a medium such as <i>Turtox News</i> , <i>Ranger Rick</i> , <i>Carolina Tips</i> , <i>High Times</i> , or <i>VWR News</i> . 2. A type specimen among thousands of specimens received from the estate of a taxonomist, who failed to label any of his specimens. [2, 3, 4]
Cyrioplesiotype	The principal or typical specimen among several plesiotypes . [8]
Cytotype	A portion of a type prepared to show identical cytological features, e.g. chromosomes, as those originally described for the taxon. [6]
Dermestotype	A specimen of a type series so badly eaten by dermestids that its identity cannot be confirmed. Usually accompanied by large frass. See also psocotype . [3, 4]
Derogatotype	A type of a taxon, the name of which is an unflattering reference to another worker (syn. libelotype) [2]
Descriptotype	Element or elements on which the original
Deuterotype	description was based. [6] A replacement type specimen. [6]

Diplomatotype 1. A type specimen of a taxon described solely for political purposes, such as to get access to government lands otherwise inaccessible to biologists. 2. The type of a taxon named after a person with whom the author wishes to have good relations. [2, 3, 4]Diplotype See Genoholotype. [6] Dissectotype A completely dissected type. See also Crickotvpe. [2, 3, 4] 1. A new species found and collected alive **Divinotype** already bearing a holotype label; 2. A type only seen during séances. [2] A type specimen mounted in such a way that Dorsotype only its dorsal aspect is visible for study. [2] See Incognitotype. Dubiotype A type with the head of one species glued onto Ducotype the body of another (syn: gluotype). 1. A second holotype for the same taxon. 2. **Duplotype** The same specimen used as holotype for two different taxa (syn: redundotype). See also **triplotype**. [2] E-type Digital image of a **holotype**. [6] Ecophenotype A **phenotype** showing adaptations associated with the habitat or environment that are not genetic. Not nomenclatural. [6, 9] In the case of a poorly preserved holotype, a Electotype specimen from a locality other than the type locality but agrees closely with the original description. See also **neotype** [8] A type specimen that disintegrates completely Ephemerotype after only a day and must be replaced by a **neoephemerotype** on a daily basis. [2] An illustration or specimen selected to serve as **Epitype** interpretative type when holotype, lectotype or previously designated neotype, or all original

material associated with

name,

is

published

a validly

demonstrably

ambiguous and cannot be critically identified for purposes of the precise application of the name of a taxon. [Botanical but could be used in zoology.] See also hypotype, interpretotype] [ICBN] The type of a worker caste in the case of

polymorphic Hymenoptera. See also

morphotype. [1]

Escapotype An **alivotype** that has escaped [2] Figure-Type

The original figure or illustration of a specimen (syn: **iconotype**) [1, 6, 8]

Ergatotype

See Phototype.

Fototype Fragmotype

A type specimen represented by a single body part. See also Giraultotype. [2]

Freudotype

A type specimen represented only by its genitalia vial on the pin. [2]

Fungotype

A type specimen that has been damaged by being subjected to high humidity or moisture and is covered with fungal hyphae to the point that it represents a furry white ball. See also pluviotype.

Generitype Generotype Genoholotype See Genotype. See Genotype.

1. A typical species specified by the author as the generic type (= type species by original designation). 2. A figure that is regarded as the type of a genus-group name. [5, 6, 8, 9]

Genoisotype Genolectotype Genotype plus isotype. [6]

The type of a genus selected subsequent to the original description from a series of species originally placed in the genus (= type species by subsequent designation). [5, 6, 8, 9]

Genoneotype Genoparatype Genosyntype

Genotype plus **lectotype**. [6] **Genotype** plus **paratype**. [6]

Any one of a series of species that a genus can be based upon when no single species

	has been selected as the type species. [5, 6, 8, 9]
Genotype	1. Obsolete — see Type Species. 2 . The genetic constitution of an organism or taxon, regardless of its outward appearance (phenotype). Not nomenclatural. [5, 6, 8, 9]
Giraultotype	A type specimen that is represented by only the distinguishing character of the species (e.g., an antenna, leg, or wing).
Gluotype	See Ducotype.
Gynetype	A designated female type specimen. [6, 8, 9]
Hallucinotype	The type of a taxon described while the author was under the influence of drugs. [2]
Hamatype	A specimen from the type series, not specified
	as a holotype or paratype (= syntype). [1, 9]
Hapanotype	One or more preparations consisting of directly related individuals representing distinct stages in the life cycle, which together form the name-bearing type in an extant species of protistan. [ICZN]
Haplotype	A single species included in a genus at the time of the original description. (= type species fixation by monotypy). [5, 6, 8]
Heautotype	A specimen used by the original describer in an illustration of that species and compared with the type or cotype (syn:
Habanatuna	autotype, hypotype). [6, 8, 9]
Heberotype	A unique type specimen that has been used for molecular analysis (that failed) and is only left with a barcode label to identify it. See also Crickotype , tagotype).
Hemitype	A type represented by only half of its original body.
Heterotype	A type derived by combining the characters of two or more different species (e.g., in paleontology). [6]
Hipotype	See Hypotype.

Hoaxotype

1. A planted type (e.g., Piltdown Man) [2]. 2. A unique type, constructed of parts and pieces of several unrelated higher taxa. This kind of specimen often appears on practical examinations when instructor feels he has a sense of humor and the students do not. See also **Ducotype**. [3, 4]

See **Aedeotype** (holaedotype). [8]

See Aedeotype. see Homotype

See **Homotype** (holohomoitype). [6, 8]

See Lectotype. [6] See Neotype. [6]

Any specimen from a series of paralectotypes that is of the same sex as the holotype. [6, 8, 9]

Paratype of the same sex as the holotype. [1,

The cast of a **holotype** (syn: **plastoholotype**). [1, 8]

The **hypotype** of the same sex as the **holotype**. [1, 6, 8]

The single type specimen that is the sole representative of a named species-group taxon. Usually designated as such (as "type" or "holotype") in the original description, but if not explicitly designated, it is to be considered as such if evidence in the original description shows that the description was based on only a single specimen. [1, 5, 6, 8, 9, 10]

See Homotype. See Homotype.

See Homotype.

A **homotype** from the type locality. [1, 6, 8]

1. Any specimens that has been directly compared with the holotype determined to be conspecific with it, and done so by someone other than the

Holaedeotype

Holaedotype Holohomoitype

Holohomotype Hololectotype

Holoneotype

Holoparalectotype

Holoparatype

Holoplastotype

Holoplesiotype

Holotype

Homeotype Homoiotype Homoeotype Homotopotype Homotype

Нуропут	author of the type with which it is being compared (homeotype, homoeotype, homoiotype). See also Metatype. [1, 5, 6, 8, 9, 10]. 2. That which is constructed on the same plan — as metameres of the body. Not nomenclatural. [1] 1. A name rejected in the absence of a type. [6] 2. A generic name not based on a type species; a provisional or temporary
Hypoparatype	name. [9] Any specimen used in the description of a new species, but not chosen as a paratype . [1, 9]
Hypoplastotype	An artificial reproduction (model) of a supplementary type. [1, 8]
Hypotype	A specimen, other than the type, upon which a subsequent or supplementary description or figure is based (syn: apotype, heautotype, plesiotype). [6, 8, 9]
Iconotype	A graphic reproduction (illustration or photograph) of the type. [1, 6, 8, 9]
Icoplastotype Icotype	The cast of an icotype . [1, 8] A representative specimen serving for the purposes of identifying a species (in a collection and labeled as a type of a new species) but not yet published in the literature (i.e., a manuscript type specimen). [1, 5, 6, 8, 9]
Idealotype	The artist's model of the perfect form of a taxon. [2]
Ideotype	A specimen examined by the author after comparison with the type species, but not from the type locality (<i>idiotype</i>). [1, 5, 6, 8, 9]
Idiogenotype Immaturotype	Obsolete — See Logotype (<i>idiogenotyp</i>). [8] A type specimen based on the immature stage of the organism. See also nepionotype. [3, 4]
Incognitotype	A type for which all labels are lost (syn: dubiotype). [2, 3, 4]

Interpretotype Specimens interpreted by the original author as belonging to the taxon proposed (i.e., authentic specimens or expertly identified specimens), [6] A specimen felt to be the type but not yet Intuotype proven to be so. [2] Isocotype See Adelfotype. Isolectotype A duplicate specimen of a lectotype. A duplicate specimen of a neotype. Isoneotype One of two or more names based on the same Isonvm type specimen. [6] A duplicate specimen of a paratype. [6] Isoparatype A duplicate of a syntype. [6] Isosyntype 1. One of two or more forms common to Isotype different countries. 2. A duplicate part of a holotype [6, 8, 9] A type stolen from its original type depository, Kleptotype borrowed and not returned, or mistakenly retained in a collection other than the rightful owner. [2, 3, 4, 6] Larval Type See Nepionotype. Lectoallotype A specimen selected subsequent to the original description of the opposite sex of a holotype or lectotype. (syn: allolectotype) [1, 9] Lectoholotype See Lectotype. Lectoparatype See Paralectotype. Lectotype The subsequently designated type specimen of a species that was originally based on more than one specimen and the author did not designate one of those specimens as a holotype or "type". [1, 5, 6, 8, 9, 10] See Derogatorotype. Libelotype Limbotype A type, the whereabouts of which is unknown. If eventually found in a collection it was not intended, it might be a kleptotype. A form, the absence of which is characteristic Lipotype of a fauna. Not nomenclatural. [8]

See Topotype. [6]

Locotype

Logotype	A type of a genus-group name by subsequent
	designation (= type species by
	subsequent designation) (syn:
	idiogenotype) [5, 6, 8, 9]
Merotype	A part of an organism that is removed from the
	holotype and kept separate. See also
35.4	clastotype, Giraultotype [6, 8]
Metatopotype	See Metatype.
Metatype	1. A specimen from the type locality
	determined by the original author
	subsequent to the original description of the species (syn: metatopotype). See
	also topotype . 2. a specimen
	subsequently determined by the original
	author after comparison with type. See
	also homotype . [1, 5, 6, 8, 10]
Mimotype	One of two or more analogous forms (similar
	forms representing each other in
	different areas). Not nomenclatural. [8]
Miragotype	A type of a taxon in which the distinguishing
5 71	characters can only be seen at certain
	times and under certain conditions. [2]
Mobilitotype	A type represented only by a column of
	polyacrimide gel bearing the
	characteristic banding pattern for the
	taxon. [2]
Monogenotype	The type of a genus-group name containing
	only a single species (= type species by
M 4	monotypy) (syn: haplotype). [8]
Monotype	The holotype of a taxon based on a single
Morphotype	known specimen. [5, 6, 8, 9] 1. One of several morphologically distin-
wioi photype	guishable populations of a single taxon.
	2. A figured specimen which has not
	been used to illustrate anything not
	previously known about the morphology
	of the taxon. $[1, 5, 6, 8, 9]$
Mythicotype	A type specimen of a mythological taxon. [2]
	,, ,

The type genus, type species, holotype, Name Bearing Type lectotype, series of syntypes (which, together, form the name-bearing type), **neotype**, type slide, or **hapantotype**, that provides the objective standard of reference whereby the application of the name of a taxon can be determined. [6] An allotype of the opposite sex from that **Neallotype** described in the publication of a **neotype** [1, 5, 6, 9]The type of the pupal stage. [8] Neanotype A form extinct in a particular locality. Not Necrotype nomenclatural. [8] An uncurated type specimen not found for Neglectotype decades until an office is cleaned out. May have evolved into a dermestotype or **psocotype** [2] See Neallotype. [6] Neoallotype Neocotype A replacement syntype [6, 8] Neoemphemerotype See Ephemerotype. A new type species of a genus chosen because Neogenotype the original type species is considered unrecognizable. [8] See Neotype [6, 8] Neoholotype See Paraneotype [6, 8] Neoparatype Neosyntype See Neocotype [6, 8] The designated type specimen of a species Neotype (holotype, lectotype, whose type neotype) or type series (syntypes) has been shown to be lost or destroyed. [1, 5, 6, 8, 9, 10The type of a larva of a species-group name Nepionotype [8, 9]The single element of a taxon to which its Nomenclatural Type name is permanently applied: type; nomenifer; onomatophore. [6] Nomenifer The name bearer, **type**, **onomatophore**. [6] 1. A type specimen only labeled with a Numerotype collection number, and the field data associated with the number is lost or

destroyed [see also ambiguotype]. 2. A type represented only by the numbers in the character matrix and used to ascertain its evolutionary relationship with other taxa through computer analysis. [2] The specimen acting as the name bearer: type, Onomatophore nomenifer. [6, 9] A specimen cited in print but not adding to the Onomatotype knowledge of the morphology of the species (onomatype), [8] See Onomatotype. **Onomatype** Ootype The type of an egg (syn: ovotype, ovoholotype, ovoparatype). [1] Ornatype See Topotype The fixation of a genus-group name by Orthotype original designation of a type species. [5, 6, 81 See Ootype Ovoholotype Ovoparatype See Ootype Ovotype See Ootype. **Paraallotype** See Parallotype. Paraedeotype An **aedeotype** where the preparation is made paratypes from one of the (paraedotype). [1] See Paraedeotype. *Paraedotype* **Paralectotype** The remainder of the original syntype series after a lectotype has been designated (syn: **lectoparatype**). [6, 8, 9] Paratypes of the same series and sex as the **Parallotype** allotype when described by someone other than the original describer. [1] A figured specimen used in addition to the Paraneotype neotype (syn: neoparatype). [6] A paratype collected at the same locality as **Paratopotype** the **holotype**. [8, 9] All specimens other than the holotype upon Paratype which a species-group name is based and so designated. Specimens used in the description but excluded from the

	holotype or paratypes are called collateral types [1, 5, 6, 8, 9, 10]
Paratype Allotype	A paratype from a different locality than the
Turue, pe minot, pe	holotype (syn: paratype). [1, 8]
Paratype Omotype	A paratype from the same locality as the
	holotype (syn: paratype). [1, 8]
Patronymotype	The type specimen of a new species in the personal collection of the collector, who will relinquish it to a recognized authority if the new species is named after the collector. [3, 4]
Phaenotype	See Phenotype.
Phase Type	A type specimen exhibiting a "phase" different from that of the holotype (e.g., another sex, age, dimorphic form, etc.). [1, 8]
Photographotype	See Photoype.
Photosyntype	One of a series of several photomicrographs representing the same new species. [Dus-
	7vnski 19991
Phototype	zynski, 1999] 1. A photograph of a type specimen (<i>fototype</i>). 2. The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8]
Phototype Piesmotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from
Piesmotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8]
Piesmotype Plastocotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype
Piesmotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a
Piesmotype Plastocotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a holotype. [1, 8] An artificial mold made directly from a
Piesmotype Plastocotype Plastoholotype Plastolectotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a holotype. [1, 8] An artificial mold made directly from a lectotype.
Piesmotype Plastocotype Plastoholotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a holotype. [1, 8] An artificial mold made directly from a lectotype. An artificial mold made directly from a
Piesmotype Plastocotype Plastoholotype Plastolectotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a holotype. [1, 8] An artificial mold made directly from a lectotype.
Piesmotype Plastocotype Plastoholotype Plastolectotype Plastoneotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a holotype. [1, 8] An artificial mold made directly from a lectotype. An artificial mold made directly from a neotype. An artificial mold made directly from a neotype. An artificial mold made directly from a paratype. [8]
Piesmotype Plastocotype Plastoholotype Plastolectotype Plastoneotype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a holotype. [1, 8] An artificial mold made directly from a lectotype. An artificial mold made directly from a neotype. An artificial mold made directly from a paratype. [8] An artificial mold made directly from a paratype. [8]
Plastocotype Plastoholotype Plastolectotype Plastoneotype Plastoparatype	 A photograph of a type specimen (fototype). The type specimen of a taxon known only from a single photograph. [1, 2, 6, 8] A picture made from a plate bearing an imprint made by mechanical means from an authentic merotype. [8] See Plastoholotype An artificial mold made directly from a holotype. [1, 8] An artificial mold made directly from a lectotype. An artificial mold made directly from a neotype. An artificial mold made directly from a neotype. An artificial mold made directly from a paratype. [8]

Plesiogenotype Plesiotype	 A specimen, at the time of the original description, was only provisionally included in a genus, and which has been since designated as the type. [8] 1. A specimen used by an author for a redescription, supplementary description, or illustration published subsequent to the original description. [1, 5, 6, 8, 9, 10] 2. a specimen related to the type
	specimen but from another biological
Pluviotype	province or geological formation. [6] A type that has been damaged in a flood and is now encrusted with silt. [2]
Pollutotype	A type specimen so badly encrusted with pollutants as to be no longer recognizable. [2]
Pornotype	Type based primarily, if not totally, on genitalic characters, often accompanied by numerous illustrations. [3, 4]
Post Type	See Neotype
Primary Type	A specimen upon which the description of a new species-group name is based (syn: basic type, proterotype). [1, 8, 10]
Primogyne	The primary type female of a species. [9]
Profanotype	The type of a taxon, the name of which cannot be mentioned in mixed company. [2]
Progressotype	The type specimen of a species (now probably extinct) whose original habitat is now a sprawling urban development. [3, 4]
Prostitutotype	The type specimen of a species that was sold to the highest bidder in order to receive funding to help support the describer's research.
Proterotype	See Primary Type.
Protograph	1. Original figure of figures illustrating a holotype. 2. The single figure of one of the primary types made by the author at the time of the original description of the species-group name. [1]

Protolog	The original description of the new species-group name. [1]
Protoplastotype	The cast of a proterotype . [1, 8]
Prototype	1. Proterotype or Primary type. 2. The most primitive representation of a group; in most cases, a fictional or hypothetical type. [1, 8, 9]
Protype	A specimen because of its completeness supplants a fragmentary holotype (syn:
	proxy type). [1, 8]
Proxy Type	See Protype
Psocotype	Similar to dermestotype but frass much smaller and damage not as obvious without close inspection.
Pseudotype	1. Type fixation of a genus-group name by erroneous designation. [5, 8] 2. Any duplicate of a type specimen not studied by the describer of a new taxon for the taxon description. [6]
Publishotype	Holotype described after rumors of staff cuts are circulated. Known in some circles as "boiling the pot". [4]
Quirotype	see Chirotype.
Recordotype	1. The type of a taxon distinguishable only by a sound recording. 2. The type of a taxon known only from and audio-recording that has sold over a million copies. [2]
Remorsotype	The type of a taxon the author regrets having described. [2]
Replacemotype	A better looking specimen that a exhibitor uses to replace a destroyed holotype or one in poor condition that had been on display. [2]
Resurrectotype	The type specimen rediscovered subsequent to the designation of a neotype for the taxon because it was thought to have been lost or destroyed. [2]
Schizotype	1. A single type specimen for two valid taxa. [2] 2. A syntype regarded by a subsequent author as the type of a taxon but

	not specifically designated as the type for
	that taxon. [6]
Scoopotype	The type specimen of a new species that was described more quickly than that of a
	colleague, who was describing the same
	new species. [2]
Secondary Type	Specimen used by an author to supplement or
	correct knowledge of a previously
	defined species, including plesiotype,
	heautotype, neotype (syn: supplement-
_	ary type). [1, 6, 10]
Sequotype	The specimen immediately following the holo-
	type in the author's collection. [2]
Solutotype	A type specimen inadvertently kept in an
	extremely high or low pH liquid so that it eventually dissolved into solution over
	time. [2, 3, 4]
Spiritotype	1. A type specimen stored in spirit for so long
Spiritotype	that is has cleared to the point that it is
	virtually invisible in the vial or jar. 2. A
	much hoped-for type. [2]
Spitotype	The type of a taxon described expressly to vex
- Fire of F	a colleague. [2]
Splatotype	A type specimen scraped off of the windshield
	of the car that collected it. See also
	autotype. [2]
Stratotype	The type of the soldier caste in ants. [1]
Subgenotype	Obsolete — a type species of a subgenus. See
	Genotype. [8]
Supplementary Type	See Secondary Type [6]
Sustaining Specimen	See Auxiliary Type [6]
Symbiotype	A host specimen from which a new symbiotic
	or parasitic taxon was described. [Frey et al., 1992]
Synonymotype	The constituent or element of a taxon quoted
oj nonjinotj pe	by the author as being identical with
	his/her newly established taxon. [6]
Synthetograph	A figure made from two or more individuals
~ J	of the type series. [1]
	> L (+1

Syntype	Any specimen upon which the author based the description of a new species-group name without designating a holotype, including specimens at hand and (for those names published prior to 1931) those specimens referred to by bibliographic reference. [1, 6, 8, 9]
Tagotype	A type specimen that is completely destroyed except for the label. See also Heberotype , Crickotype. [2]
Tautotype	The type of a genus whose species-group name is identical in spelling with the genus-group name. [6, 8]
Teletype	A type specimen whose description reads like a report of the New York Stock Ex- change and has about as much use- fulness. [4]
Teratotype	The type of an abnormality or monstrosity. [1, 8]
Tophomeotype	See Homotopotype and Metatopotype. [1, 8]
Topotype	Any specimen from the original (type) locality. [1, 5, 6, 8, 9]
Triplotype	A single specimen used as a holotype for three separate new species.
Туре	1. A holotype of a species-group name. 2. Any of the original type material. [1, 5, 6, 8, 9, 10]
Type Material	All specimens used in the original description of a new species-group name. [1, 6, 8]
Typotype	Said of the specimen from which an illustration or description that constitutes a type is prepared; the type of a type. [6]
Tyrranotype	Type designated by the International Commission on Zoological Nomenclature. [2, 3, 4]
Vampirotype	A type specimen (usually insect) impaled with a hugely oversized pin for the specimen. [4]
Vivotype	A live type (requires special handling and storage) [syn: alivotype].

Xerotype

A type normally stored in fluid that has dried up. Deliberately dried skins of fishes and stuffed skins might be called this. [6]

References (those with numbers in square brackets were used as sources for the list above)

- [1] **Alexander, C.P.** (1939) List of type names proposed thus far, pp. 689-701. *In*: Fernald, H.T., On type nomenclature. *Annals of the Entomological Society of America* **32:** 689-702.
- [2] **Anonymous** (1968) Games paleontologists play. *News Bulletin of the Society of Vertebrate Paleontologists* **28:** 66-67.
- [3] **Baker, N.T.** (1975) Type concepts in entomological pseudoscience. Unpublished newsletter, Association of Minnesota Entomologists, St. Paul, Minnesota, pp. 13-15.
- [4] **Baker, N.T. and Timm, R.M.** (1976) Modern type concepts in entomology. *Journal of the New York Entomological Society*, 84: 201-205.
- [5] **Chamberlin, W.J.** (1941) *Entomological nomenclature and literature.* Edwards Bros., Michigan. 93 pp.
- [6] **Coad, B.W. and McAllister, D.E.** 2006. Dictionary of Ichthyology. Available from: [http://www.coad.ca/Dictionary/Complete Dictionary latest version.htm] [Accessed 2 April 2008].
- [7] Cresson, E.T., Jr. (1934) Terminology of types. *Entomological News*, **45**: 122-126.
 - **Duszynski, D.W.** (1999) Revisiting the Code: clarifying name-bearing types for photomicrographs of protozoa. *Journal of Parasitology* **85**: 769–770.
 - Frey, J.K., Yates, T.L., Duszynski, D.W., Gannon, W.L. and Gardner, S.L. (1992) Designation and curatorial management of type host specimens (symbiotypes) for new parasite species. *Journal of Parasitology* **78**: 930–932
- [8] **Frizzell, D.L.** (1933) Terminology of types. *The American Midland Naturalist* **14**(6): 637-668.
- [9] Maggenti, A.R., Maggenti, M.A. and Gardner, S.L. (2005) Online dictionary of invertebrate zoology: complete work. Available from: [http://digitalcommons.unl.edu/onlinedictinvertzoology/2/] Accessed: 2 April 2008.

- [10] **Remington, C.L.** 1948. Type nomenclature. *The Lepidopterist's News*, **2**(3): 26.
 - **Schuchert, C.** 1897. What is a type in natural history? *Science* (n.s.) **5**: 636-640.
 - **Schuchert, C. and Buckman, S.S.** 1905. The nomenclature of types in natural history. *Annals and Magazine of Natural History* (7) **16**: 102-104.