

Some Species-Level Terminology

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Monotypic: a species consisting of a single recognized morph.

ex. *Latimeria* (coelocanth)

Polytypic Species: a species comprising several subspecies or geographical segregates; composite species.

ex. *Thomomys* (gophers)

Rassenkreis: a polytypic species; a species with two or more distinct races.

Sibling Species: two or more morphologically similar (and sometimes indistinguishable) taxa; that are very closely related, i.e., often they share a common ancestor.

ex. members of *Aedes maculipennis* (mosquito) species complex

Sister species: two species that share an immediate common ancestor. They may be very different in habit, morphology, etc. (e.g., giraffe and okapi). The sister species is a relative/relational term as many lineages may have gone extinct between two extant “sister taxa.”

Cryptic Species: two or more morphologically identical or nearly indistinguishable taxa, but which are not necessarily closely related to one another.

Ring Species: species whose parapatric populations experience gene flow, but end points of the populations/species are often reproductively isolated from one another.

ex. *Ensatina* salamanders

Semispecies: (1) incipient species or partially differentiated segregates; populations that are intermediate between races and biological species, exhibiting partial interbreeding and intergradation, and weak reproductive isolation. (2) A component species of a superspecies. Also called allospecies.

Superspecies: A monophyletic group of entirely or essentially allopatric species that are considered to be too distinct morphologically to be regarded as a single species; a cluster of incipient species (semispecies).

ex. paradise magpies in New Guinea

Chronospecies (paleospecies): a time-delimited species. Futuyma (2005): phenotypically distinguishable forms in an ancestor-descendant series in the fossil record.

Morphospecies: an operational term for a morphologically distinct species-level taxon; cf. phenon. Often a fallback hypothesis with recognized uncertainty.

OTU: operational taxonomic unit. Emphasizes a taxon as a hypothesis.