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## Amphibian Species of the World [book review]

Kevin McDonough Northern Michigan University, kmcdonou@nmu.edu

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Reviewer affiliation: Northern Michigan University, Marquette, MI 49855

Amphibian Species of the World (ASOTW) is a taxonomic catalog of amphibians. Taxonomic catalogs are not like normal databases. They focus on the history and documentation of naming conventions, and do not provide basic biological or ecological information on species. The records in ASOTW start with the current scientific name (Order, Family, or species) followed by the original name. Both of these include the author(s) who provided evidence for the name, and the scientific literature in which it was reported. Also included is a synonymy of names from the original to the current, each with references to the scientific literature. English names are provided, if available, along with geographic distribution of the taxon. Controversies or disagreements on naming conventions are also mentioned, but narrative is brief. Most of the text is directed to the cited literature.

ASOTW began when the author, David Frost, was hired by his Ph.D. advisor in late 1980 to manage and develop this project while working in collaboration with a steering committee of the World Congress of Herpetology. After four years a publication resulted, titled *Amphibian Species of the World* (D.R. Frost, editor, Allen Press: Association of Systematics Collections, 1985). In 1989, the Association of Systematic Collections undertook a new direction and the copyright to *Amphibian Species of the World* was transferred to the Herpetologists' League. In 1990, Frost was hired as curator at the American Museum of Natural History where he continued working on the catalogue, releasing the first iteration of the online version in 1999. Since then there have been fourteen revisions, the most recent being version 6.0 in January 2014.

There are multiple ways to access the species data in ASOTW. On the home page is a taxonomic tree of the class Amphibia, with hyperlinks to the orders, families, and subfamilies. Each category also provides the number of species. However, to access species information requires clicking through the taxa hierarchy, a tedious process. A faster way is through the guided search form, also on the home page. There is a taxon name field, but unfortunately it

defaults to an OR search. You need to put the species name in quotations for an exact search, or use the + sign in front of each term.

Once you perform a search, ex. *Bufo americanus* (American toad), you get a taxonomic tree with the species name in context. In this case, *Bufo americanus* is listed as a synonym under the new species name *Anaxyrus americanus*. Viewing the record for *Anaxyrus americanus* provides several synonymous species and subspecies along with the English names. Relevant literature provides evidence for the taxonomy and is hyperlinked and represented by authors' names, date and source. Clicking on the links will take you to the full citations. As mentioned earlier, narrative is brief.

Amphibian Species of the World is the source for taxonomic information on amphibians. It is used by the International Union for Conservation of Nature and Natural Resources (IUCN) for its endangered species "red list." Other sources of amphibian taxonomy on the Web include *Catalogue of Life* (<u>http://www.catalogueoflife.org/</u>) and *Integrated Taxonomic Information System* (ITIS, <u>http://www.itis.gov/</u>). Both use data from ASOTW. *AmphibiaWeb* (<u>http://amphibiaweb.org/</u>) relies on its own experts to assess taxonomic classification, but only provides family revisions, with no links to supporting literature.

Overall, *Amphibian Species of the World* is a specialized source that will be primarily used by faculty and graduate students in the biological sciences. Most laypeople with interest in amphibian species are more concerned with biological and ecological information, not the development of naming conventions. *Amphibian Species of the World* is recommended for libraries in higher education with active programs in herpetology.

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