

Amphibian Resources on the Internet

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Abstract

The use of amphibians in classrooms and research laboratories has increased, along with a corresponding increase in the amount of information about these animals on the Internet. This review is intended to aid both novices and experts in the search of such information. The bibliography of Internet resources is organized by discipline and includes general and selected species information, taxonomy, natural history, anatomy and histology, physiology, ontogeny, genetics, conservation, toxicology, medicine and surgery, sources (for animals, housing, and research tools), listservs, databases, associations, educational sources, and husbandry. For each web site, descriptive titles, web addresses, and a brief review are provided. Note that the authors of this review cannot assure the accuracy of content in these web resources.

Key Words: amphibian; animal model; Anura; Caudata; Gymnophiona; herpetology; Internet resources; veterinary medicine

Since the 1950s, the role that amphibians play in society has greatly expanded. Captive salamanders and tadpoles that have fascinated young children for ages are now making their way into homes as family pets. In addition, with the expanded interests of the veterinary community, these pets are better cared for and live longer than ever before. Similarly, frogs that have filled the soup bowls of ethnic cuisine for centuries have recently become the focus of cutting-edge scientific research. It is expected that these animals will help unravel the mysteries of human development. Nevertheless, not all of this earned attention

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has been positive, with global industrialization and habitat destruction taking a toll on amphibians. To address the decline in global amphibian populations, researchers and conservationists alike are endeavoring to aid these slippery cohabitants of our planet and to save them from extinction (Choinski 1999).

This review is provided to benefit those who take interest in the many issues surrounding amphibians. This compilation should facilitate Internet inquiries about amphibian-related materials. It is designed to be an equally useful resource for all users, ranging from novices to high school biology teachers to well-seasoned researchers. Nevertheless, it is not intended to be a complete listing of all amphibian-related Internet resources because the expansiveness and time-sensitivity of the World Wide Web simply does not favor the publication of such a document. Instead, this article should be used as a guide for finding information that will aid in preliminary searches and that will provide a resource of established organizations that have demonstrated interest in furthering knowledge about and/or ensuring the appropriate care and use of amphibians.

General Information

AmphibiaTree (National Science Foundation)

<http://texas.amphibiatree.org>

Information intended to keep visitors abreast of the most recent amphibian-related research, including published abstracts and forums for discussion of such materials.

Amphibian-Wikipedia

<http://en.wikipedia.org/wiki/Amphibian>

Foundational information regarding the natural history, classification, physiology, and conservation of amphibians.

Amphibians

<http://www.wildanimalsonline.com/amphibians/>

A brief overview of amphibian physiology and a list of links to web pages containing information about selected common amphibian species.

Living Underworld

<http://www.livingunderworld.org/>

Links to general information pages for the amphibian orders Anura, Caudata, and Gymnophiona.

The Wildfowl and Wetlands Trust—Down the Frog and Toad

<http://www.wwtlearn.org.uk/index0.html?factfile/frog-and-toad.htm&2>

Descriptions of the major characteristics of amphibians and introductions of species native to the United Kingdom.

Taxonomy

General

Amphibians–Table of Contents (US Department of Agriculture, Forestry Service)

http://www.fs.fed.us/r4/amphibians/table_of_contents.htm

General information about amphibians through taxonomically organized links.

Animal Diversity Web–Class Amphibia (University of Michigan Museum of Zoology)

<http://animaldiversity.ummz.umich.edu/site/accounts/information/Amphibia.html>

An archive containing a photographic atlas and collection of amphibian vocalizations, organized by species; and a summary of amphibian taxonomy, listed by species and organized by phylogenetic classification.

Anuran Identification (Trent University)

<http://www.trentu.ca/biology/berrill/Identification.htm>

A collection of amphibian vocalizations including keys for identification of both tadpoles and adult frogs.

Search Engines

Integrated Taxonomic Information System (US Department of Agriculture)

<http://www.its.usda.gov/>

A comprehensive and searchable database of animal and plant taxonomy.

Amphibian Species of the World (The American Museum of Natural History)

<http://research.amnh.org/herpetology/amphibia/index.php>

A comprehensive and searchable online catalog of amphibian taxonomy.

Identification Keys (Photograph- and Text-based)

Amphibians and Reptiles of Europe

<http://www.herp.it/>

An extensive photographic atlas of European amphibians and reptiles.

Amphibians of Australia

http://en.wikipedia.org/wiki/Amphibians_of_Australia

A brief introduction to Australian amphibians and an extensive review of the taxonomy of Australian amphibians including a listing of endangered amphibians.

Amphibians of San Diego (San Diego Natural History Museum)

<http://www.sdnhm.org/research/herpetology/sdamphib.html>

A taxonomically organized list of amphibians common to southern California including links to sites containing descriptions of each listed species.

Amphibians of Singapore

<http://www.geocities.com/slowloris9/amphibia/amphibia.htm>

Descriptions of the taxonomy of the 26 amphibious species that have been identified in Singapore including links to pages with textual and visual descriptions of each organism.

Biodiversity Resources, Amphibians, and Reptiles (University of Puget Sound)

<http://www.ups.edu/x5678.xml>

Keys for identification of amphibians and reptiles of the US Pacific Northwest, also including lists of amphibians and reptiles common to the North American continent.

CalPhotos Digital Library Project (University of California)

<http://calphotos.berkeley.edu/fauna/com-Amphibian.html>

An extensive photographic atlas of amphibians.

Ecology Asia

<http://www.ecologyasia.com/verts/amphibians.htm>

An atlas of photographs of numerous Asian amphibians.

Frogs of Hillwood (Nchila Wildlife Reserve)

<http://www.nchila-wildlife-reserve.com/http/frgs.htm>

Textual and photographic descriptions of the 40 amphibian species documented on Hillwood Farm in Zambia (Southern Africa).

Frogs and Toads of Japan

<http://www.rieko.net/amph/index1.htm>

A list by taxonomic classification of frogs and toads of Japan with common, Japanese, and scientific names; also including links to pages with textual and photographic descriptions of the various species.

Herpbreeder

<http://herpbreeder.com>

A basic outline of amphibian nomenclature.

Reptiles and Amphibians of France

<http://www.reptilia-amphibia.net/index.html?en/home.html~mainFrame>

Textual and photographic descriptions of reptiles and amphibians found in France.

Reptiles and Amphibians of Hawaii (Explore Biodiversity)

<http://explorebiodiversity.com/Hawaii/BiodiversityForgotten/Wildlife/Reptiles/Reptile%20Main.htm>

The six nonindigenous species currently found on the Hawaiian Islands including textual, photographic, and auditory descriptions.

Tadpoles of the US and Canada: A Tutorial and Key (US Geologic Society)

<http://www.pwrc.usgs.gov/tadpole/>

A key for identification of North American tadpoles.

Natural History

Amphibian and Reptile Diversity Research Center
(University of Texas at Arlington)

<http://www.uta.edu/ra/real/editprofile.php?pid=550&onlyview=1>

A natural history specimen collection.

Smithsonian Institution–National Museum of Natural History, Division of Reptiles and Amphibians

<http://www.nmnh.si.edu/vert/reptiles/>

Homepage for the Division of Reptiles and Amphibians at the Smithsonian Institute including links to amphibian and reptile research pages, pages with information about Smithsonian collections, and pages with information about basic care of pet amphibians and reptiles.

Anatomy and Histology

Amphibian Anatomy and Histology

<http://www.hla.wiener-neustadt.at/amphibien/html/anatomie.html>

Detailed illustrations of amphibian anatomy, histology, and embryology [in German].

Amphibian Histology (Trent University)

http://www.trentu.ca/biology/berrill/histology/Histology_Home.htm

Chronicle of the normal histology of amphibians including a short discussion of histological techniques.

DigiMorph (National Science Foundation)

http://digimorph.org/specimens/Xenopus_laevis/

An interactive programming with two- and three-dimensional portrayals of frog anatomy including visual depictions of frog morphology derived from images obtained through computed tomography.

Les Amphibiens

<http://www.snv.jussieu.fr/bmedia/PetitBuffon/amphibien/index.htm>

A systematic description of amphibian anatomy and histology, with instructive illustrations for speakers of all languages [in French].

Net Frog (University of Virginia)

<http://frog.edschool.virginia.edu>

An interactive virtual dissection of a frog including text, photographs, and video.

Whole Frog Project (Lawrence Berkeley National Laboratory)

<http://froggy.lbl.gov>

Mechanical sections and MRI images that demonstrate the three-dimensional anatomy of frogs.

Physiology

Amphibian Biology and Physiology

<http://www.livingunderworld.org/biology/>

A textual description of basic amphibian biology and physiology.

Frog Morphology and Physiology Tutorials (Cornell University)

http://biog-101-104.bio.cornell.edu/Biog101_104/tutorials/frog.html

A photographic atlas of frog anatomy and a discussion of amphibian cardiac physiology.

IACUC Learning Module–*Xenopus laevis* (University of Arizona)

<http://www.iacuc.arizona.edu/training/xenopus/intro.html>

Basic justifications for the use of *Xenopus* as research models including a summary of clinically relevant physiology.

Ontogeny

Amphibian Embryology Tutorial (University of Wisconsin)

<http://worms.zoology.wisc.edu/frogs/welcome.html>

An interactive undergraduate-level tutorial designed to communicate the principles of amphibian embryology.

DeRobertis' Lab (Howard Hughes Medical Institute–University of California, Los Angeles)

<http://www.hhmi.ucla.edu/derobertis/>

Homepage of the DeRobertis laboratory, with its focus on describing the molecular events of gastrulation in frogs and mice.

Developmental Staging of *Xenopus* (Davidson College)

<http://www.bio.davidson.edu/people/balom/StagingTable/xenopushome.html>

A photographic atlas that chronicles stages 1-50 in the development of *Xenopus laevis*.

Early Amphibian Development (US National Institutes of Health)

<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=dbio.section.2265>

An online developmental biology text, with a section devoted to early development in amphibians.

The Sokol Lab (Beth Israel Deaconess Medical Center at Harvard University)

<http://www.bih.harvard.edu/sokol-lab/>

An overview of the work of the Sokol lab, with its focus on the study of inductive signaling and embryonic pattern formation in *Xenopus laevis*.

Genetics

Genetic Map of *Xenopus* (University of Houston)

<http://tropmap.biology.uh.edu/>

A genetic map for *Xenopus tropicalis*.

Xenopus tropicalis Home (University of Virginia)

<http://faculty.virginia.edu/xtropicalis/>

The focus of the Grainger laboratory, on strengthening *Xenopus* as a genetic model by establishing improved husbandry and laboratory protocols, and on identifying genes involved in axial extension, morphogenetic movements, axial patterning, and eye development.

Conservation

The web pages listed below are generally dedicated to conservation and preservation of the declining global amphibian populations.

Amphibian Conservation Alliance

Amphibian Research and Monitoring Initiative (US Geologic Society)

<http://armi.usgs.gov/index.asp>

The Amphibian Research Centre

<http://frogs.org.au/arc/>

Amphibian Research Synopsis (Aldo Leopold Wilderness Research Institute)

<http://leopold.wilderness.net/research/wildlife/amphib.htm>

Canadian Amphibian and Reptile Conservation Network

http://www.carcnet.ca/english/biology/a_0.htm

The Center for Reptile and Amphibian Conservation and Management (Indiana-Purdue University)

<http://herpcenter.ipfw.edu/main/index.htm>

Center for Reptile and Amphibian Research

<http://www.cfrar.com/>

Costa Rican Amphibian Research Center

<http://www.cramphibian.com/>

The Declining Amphibian Populations Task Force

<http://www.open.ac.uk/daptf/index.htm>

A free online newsletter titled "Froglog," which features a range of research articles relating to the amphibian decline phenomenon.

FrogWatch Australia (Amphibian Research Centre and Alcoa World) Alumina Australia

<http://frogs.org.au/frogwatch/>

FrogWatch Ontario (Nature Canada and Environment Canada)

<http://www.cnf.ca/naturewatch/frogwatch/index.html>

FrogWatch USA (National Wildlife Federation)

<http://www.nwf.org/frogwatchUSA/>

Partners in Amphibian and Reptile Conservation

<http://www.parcplace.org>

Toxicology

Amphibian Research (Virginia Polytechnic Institute & State University)

<http://www.fishwild.vt.edu/hopkins/>

The focus of the Hopkins group, on studying toxicology and ecology by examining the physiological impacts of both natural and anthropogenic stressors.

Ecotoxicology (Brunel University)

<http://www.brunel.ac.uk/about/acad/ife/research/ecotox/>

The focus of the Pickford laboratory, on studying the effects of xenoestrogens on amphibian endocrinology and the impacts of pollutants from commercial aviation on amphibian development.

RATL: A database of reptile and amphibian toxicology literature (Canadian Wildlife Service)

<http://dsp-psd.communication.gc.ca/Collection/CW69-5-357E.pdf>

References relating to toxicology in reptiles and amphibians.

Medicine and Surgery

Amphibian Diseases (US Geological Survey)

<http://www.pwrc.usgs.gov/nearmi/disease/>

Discussion of the various diseases that have been documented in wild amphibians in the northeastern United States, designed as part of the "Amphibian Research and Monitoring Initiative" organized by the US Geological Survey.

Amphibian Diseases Home Page (James Cook University)

<http://www.jcu.edu.au/school/phtm/PHTM/frogs/ampdis.htm>

Descriptions of diseases documented in wild amphibians and associated with population declines, with emphasis on chytridiomycosis.

Aseptic Amphibian Survival Surgery (Yale University)

<http://iacuc.yale.edu/policies/asepticamph.html>

Tenets of aseptic amphibian surgery including information about anesthetic protocols and postoperative care.

Canadian Herp Veterinarians

<http://www.triciaswaterdragon.com/canrepvt.htm>

Contact information according to home provinces of Canadian veterinarians who treat reptiles and amphibians.

Developmental Abnormalities in Tadpoles (Trent University)

http://www.trentu.ca/biology/berrill/developmental_abnormalities/Developmental_abnormalities.htm

Photographic atlas describing tail abnormalities, and a collection of histopathology slides that demonstrate various sexual abnormalities in tadpoles.

Disease Home (The Frog Decline Reversal Project, Inc.)

<http://www.fdrproject.org/pages/disease/disease.htm>

Descriptions of various fungal, viral, bacterial, parasitic, and neoplastic diseases of frogs.

Emerging Infectious Diseases and Amphibian Population Declines (US Centers for Disease Control and Prevention)

<http://www.cdc.gov/ncidod/EID/vol5no6/daszak.htm>

Review of recent research on the pathology, ecology, and biogeography of two emerging infectious wildlife diseases, chytridiomycosis and ranaviral disease.

Field Guide to Malformations of Frogs and Toads (US Geological Survey)

http://www.nwhc.usgs.gov/publications/fact_sheets/pdfs/frog.pdf#search=%22field%20guide%20to%20malformations%20of%20frogs%20and%20toads%22

Encyclopedia of the various developmental anomalies that have been reported including written descriptions, photographs, and radiographs of the gross lesions.

Host-Pathogen Biology and the Global Decline of Amphibians (Arizona State University)

<http://lifesciences.asu.edu/irceb/amphibians/>

Homepage of a group whose main focus is on determining the role of pathogens in amphibian population declines.

Merck Veterinary Manual

http://www.merckvetmanual.com/mvm/index.jsp?cfile=htm/bc/toc_170100.htm

Overview of clinical medicine in amphibians, written for veterinary practitioners.

Reptile and Amphibian Pain and Analgesia

<http://www.anapsid.org/herppain9.html>

Selected abstracts of articles that discuss analgesia in amphibians and reptiles.

Veterinary Advisors (American Association of Zoo Veterinarians)

<http://www.aazv.org/ssptagvetadvisors.htm>

A list of veterinarians and veterinary pathologists who routinely work with zoo animals including amphibians.

Sources

Animals

Ambystoma Genetic Stock Center (University of Kentucky)

<http://bigapple.uky.edu/~axolotl/>

A genetic stock center dedicated to the supply of genetically well-characterized axolotl embryos, larvae, and adults to laboratories and classrooms throughout the United States and abroad.

Xenopus Express

<http://www.xenopus.com/>

A source for 17 different taxa of laboratory grade frogs and supplies for their maintenance.

Xenopus I, Inc.

<http://www.xenopusone.com/>

A source for laboratory grade frogs of varying taxa and age and supplies for their maintenance.

Housing

Each of the companies listed below sells housing units for maintenance of laboratory animals.

Aquaneering, Inc.

<http://www.aquaneer.com/zebra.htm>

Aquatic Habitats, Inc.

<http://www.aquatichabitats.com/>

Marineland, Inc.

http://www.marineland.com/products/prod_researchsys.asp

Marine Biotech, Inc.

http://www.marinebiotech.com/index.php?pid=aquaria_xrack

PharmHouse Aquatic Systems

<http://www.pharmacal.com/aquaticsdiv.htm>

Research Tools

Affymetrix Genechip

<http://www.affymetrix.com/products/arrays/specific/xenopus.affx>

A microarray that allows for expression analysis of approximately 14,400 genes from *Xenopus laevis*.

Bayer Technology Services

http://www.bayertechnology.com/index2.htm?/eng/products/43_493.php?~mainFrame

The range of modern in vitro methods available from Bayer for the investigation of membrane-bound receptors in amphibians as drug development targets.

Gastromaster for Microsurgery

<http://www.gastromaster.com/>

The microsurgical units available from Gastromaster for producing explants and transplants using blastulae/gastrulae/neurulae of amphibian embryos.

Millipore, Inc.

http://www.specialtymedia.com/01Products/0310_XenopusCultureProducts.htm

The different media and reagents available from Millipore for use with *Xenopus*.

Roboocyte

<http://www.multichannelsystems.com/products/roboocyte/robointro.htm>

An available fully automated all-in-one solution for high-throughput screenings based on the standard *Xenopus* oocytes expression system.

Listservs

HERP-L: Herpetology Mailing List (Harvard University)

Internet Subscribe to: listproc@xtal200.harvard.edu

Internet Mail to: herp-l@xtal200.harvard.edu

A mailing list for discussion of scientific issues related to herpetology.

Herp Mailing Lists

<http://www.kingsnake.com/maillist.html>

Links to several nonscientific herpetology-related listservs.
ROG-NET: Amphibian Researcher Mailing List (University of Southern California)

Internet Subscribe to: liaw@rana.usc.edu

Internet Mail to: frog-net@rana.usc.edu

A mailing list for researchers interested in the neural mechanisms of amphibian behavior.

Herp-Related Mailing Lists and Discussion Groups

<http://www.anapsid.org/resources/lists.html>

Links to several nonscientific herpetology-related listservs.

Northeast Partners in Amphibian and Reptile Conservation (US Geologic Survey)

<http://www.pwrc.usgs.gov/neparc/listserv.htm>

Discussions on conservation-related issues in the northeastern United States.

Xenopus Listserv (University of California, Irvine)

<http://blumberg-serv.bio.uci.edu/xine/index.htm>

A newsletter with updates on research-related items concerning *Xenopus*.

Xenopus Listserv (University of Virginia)

<http://faculty.virginia.edu/xtropicalis/newsgroup.html>

An exchange of information regarding technical advances in the husbandry, transgenesis, genetics, and embryology of the short-generation diploid pipid frog *Xenopus tropicalis*.

Yahoo!—Amphibians Group

<http://groups.yahoo.com/group/amphibians/messages>

Distribution of knowledge about the care and breeding of amphibians.

Databases

AmphibiaWeb (University of California)

<http://amphibiaweb.org>

Access to information on amphibian biology and conservation inspired by global amphibian declines.

Amphibian Declines and Malformations (US Geological Survey)

<http://www.frogweb.gov>

A government-maintained clearinghouse for information regarding amphibian population declines.

Amphibian Research and Monitoring Initiative (ARMI)
National Atlas for Amphibian Distributions (US Geological Survey)

<http://www.pwrc.usgs.gov/armiatlas/>

A compilation of current and historic records of amphibian occurrences from published, peer-reviewed scientific literature, museum records, state and regional herpetological atlases, and other confirmed and validated observations.

Australian Herpetological Directory (James Cook University)

<http://www.jcu.edu.au/school/tbiol/zoology/herp/herp2.shtml>

A repository for information on Australian herpes research.

Bibliomania!

<http://www.herplit.com/>

A searchable database of information about various herpetological publications including options to purchase.

HerpNet

<http://herpnet.org>

A searchable database of the collections of natural history museums that have collaborated to establish a global network of herpetological data.

Tree of Life Web Project—Living Amphibians

http://tolweb.org/tree?group=Living_Amphibians

Identification keys, figures, phylogenetic trees, and other systematic information for a group of organisms, designed for biologists and educators teaching organismal diversity.

Xenbase: A *Xenopus* Web Resource

<http://www.xenbase.org/>

A comprehensive and searchable database of information pertaining to both cell and developmental biology of *Xenopus*.

Associations

All of the groups listed below are international in scope and membership and are interested in the biology, conservation, and humane treatment of amphibians and reptiles.

American Society of Ichthyologists and Herpetologists

<http://www.asih.org/>

Association of Reptilian and Amphibian Veterinarians

<http://www.arav.org>

Canadian Herpetological Societies

<http://www.triciaswaterdragon.com/cansocty.htm>

Links to various Canadian herpetological societies, organized by province.

The Herpetologists' League (University of Illinois at Urbana-Champaign)

<http://www.inhs.uiuc.edu/cbd/HL/HL.html>

Society for the Study of Amphibians and Reptiles

<http://www.ssarherps.org/pages/conservation.php>

Educational Sources

Center for Global and Environmental Education (Hamline University)

<http://cgee.hamline.edu/frogs/>

Resource for students and teachers of amphibian sciences and conservation.

Frogs and Amphibians

<http://www.homestead.com/kidstuff/index.html>

A child-friendly web site containing fun facts, printable coloring pages and games, and basic information regarding the care of pet amphibians.

Frogland

<http://allaboutfrogs.org/frogland.shtml>

A child-friendly web site containing fun facts, games, and basic information about frogs and their care.

Reptiles and Amphibians Teacher Resources (National Biological Information Infrastructure)

<http://www.nbio.gov/education/herps.html>

Annotated list of links to various educational resources, organized by target age range.

Trans-NIH *Xenopus* Initiative (US National Institutes of Health)

<http://www.nih.gov/science/models/xenopus>

Up-to-date information concerning *Xenopus* genomics and for funding of such work by the National Institutes of Health, designed for researchers.

Wildlife Habitat Council—Amphibians: Hoptoad Habitats

<http://www.wildlifehc.org/managementtools/backyard-amphibians.cfm>

Habitat, amphibian life cycle, and the connection between habitat and amphibians.

Husbandry

Research Animals

The titles and corresponding web sites listed below are self-explanatory.

Amphibians: Guidelines for the Breeding, Care and Management of Laboratory Animals (National Research Council/Institute for Laboratory Animal Research)

<http://newton.nap.edu/html/amphibian/>

Comfortable Quarters for Amphibians and Reptiles in Research Institutions

<http://www.awionline.org/pubs/cq02/cq-amph.html>

Fish, Amphibians, and Reptiles (National Research Council/Institute for Laboratory Animal Research)

http://dels.nas.edu/ilar_n/ilarjournal/37_4/

Guidelines for Use of Live Amphibians and Reptiles in Field Research (Clemson University)

<http://www.clemson.edu/research/orcSite/ARCforms/doc/AmphibiansReptilesGuidelines.pdf>

Information Resources on Amphibians, Fish & Reptiles Used in Biomedical Research (US Department of Agriculture)

<http://www.nal.usda.gov/awic/pubs/amphib.htm#amph4>

Working with Amphibians in the Research Setting

<http://www.researchtraining.org/moduletext.asp?intModuleID=864>

Pets

Amphibiancare

<http://www.amphibiancare.com>

“Care sheets,” articles on basic husbandry, photographs of housing units, and a section of frequently asked questions for amphibian pet owners.

Herp Care Collection

<http://www.anapsid.org/anapsid.html>

Links to information about husbandry of pet amphibians including sections on health, zoonotic diseases, veterinary care, cleaning and disinfection, behavior, and feeding.

The Newt and Salamander Portal

<http://caudata.org>

Shared information about newts and salamanders, with an emphasis on their maintenance in captivity.

Reptiles and Amphibians as Pets (The Minnesota Herpetological Society)

<http://www.bellmuseum.org/herpetology/Pets.html>

A brief overview of amphibian ownership and care, designed for pet owners.

Selected Species

African Clawed Frog

<http://animal.discovery.com/guides/reptiles/frogs/africanclawedfrog.html>

A brief introduction to the African clawed frog including a discussion of natural history and basic husbandry.

Boreal Toad Husbandry Manual (Colorado Division of Wildlife)

<http://wildlife.state.co.us/NR/rdonlyres/23912565-3F5F-4026-A4C3-BD34C29BB564/0/FinalHatcheryManual122402.pdf>

A thorough description of management protocols for captive toads.

The Fascinating Mexican Axolotl and the Tiger Salamander

<http://www.axolotl.org/>

Information about the natural history and basic biology of axolotls including numerous suggestions regarding husbandry and breeding.

Xenopus laevis Frog Colony Care

<http://www.xlaevis.com/>

Information about housing, rearing, and care of *Xenopus laevis* and, to a lesser extent, *Xenopus tropicalis*.

Reference

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