



## Reptiles and Amphibians

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Use this three-page publication as the starting place for your 4-H Self-Determined Project. You may choose to do a little or a lot depending on your level of interest in this topic. Use in conjunction with 4-H 365, Self-Determined Project Guide, available through your county OSU Extension office or by visiting our web page at [www.ag.ohio-state.edu/~idea](http://www.ag.ohio-state.edu/~idea). Be sure to register your Self-Determined Project with your county OSU Extension office. You can show your reptile or amphibian at the Ohio State Fair Small Animals judging.

### Background

There are more than 8,000 species of reptiles in the world, inhabiting every continent except Antarctica. Reptiles are air-breathing, cold-blooded animals that have backbones. Scientists group reptiles into four orders: turtles and tortoises (order Testudinata); crocodiles and alligators (order Crocodylia); tuataras (order Rhynchocephalia); and snakes, lizards, and amphisbaenians or “worm lizards” (order Squamata). The Squamata order is divided into three suborders: snakes (Serpentes), lizards (Sauria), and amphisbaenians (Amphisbaenia).

The name Amphibian comes from the Greek word “amphibios,” which means “living a double life.” Most amphibians start out as larvae in water and end up on land. Amphibians consist of three orders: salamanders and newts (order Caudata); frogs and toads (order Anura); and caecilians (order Gymnophiona). Herpetology is the branch of zoology that studies both amphibians and reptiles.

All reptiles and amphibians are ectothermic, which means they do not produce internal body heat but rely on their surrounding environment to keep them warm. Understanding this fact makes caring for your pet both fun and challenging. It is not like caring for a cat or dog, but it can be equally rewarding.

Before adopting a reptile or amphibian, it is important to learn all you can about its required care and feeding, and how to design a habitat that mimics its natural environment. Other things to consider include its adult size, temperament, and proper handling.

Reptiles and amphibians such as Bearded Dragons, Leopard Geckos, Corn snakes, King snakes, African Spur Thigh tortoises, Russian tortoises, Painted turtles, and Sliders are among those that make good pets for the first-time owner.

Remember to handle your pet properly at all times and to wash your hands afterward to avoid the possible spread of salmonella, a bacterial disease that can be transmitted from reptiles to humans.

### Planning Your Self-Determined Project

Every Self-Determined Project can be broken down into areas of interest. These are the specific things members wish to address during their project adventure. Using your Self-Determined Project Guide, identify at least three (3) areas of interest with at least three (3) activities per area to explore. Record the results of each completed activity in a journal that you will create throughout this project.

## Areas of Interest and Things to Do

### Choosing Your Pet

- Research and decide which reptile or amphibian you want as a pet. Consider total cost, space requirements, adult size, temperament, lifespan, and daily care needs.
- List at least five (5) reptiles and amphibians that you would consider and five (5) or more of their traits in your journal.
- Identify three (3) reptiles and/or amphibians that typically have a docile temperament throughout their lifespan, and list three (3) or more of their traits in your journal.
- Identify three (3) reptiles and/or amphibians that are naturally aggressive when reaching maturity, and list three (3) or more of their traits in your journal.
- Research the pros and cons of owning wild caught (farm-raised or captive-hatched) reptiles, and make an informed decision before owning one.
- Identify a yearly lifespan action plan for the animal that you have chosen for your project.
- Purchase your reptile or amphibian from a reputable breeder. A local breeder can show you your pet's parents and give you specific care information.

### Proper Habitat

- Discuss different types of enclosures and the proper size and habitat (with hiding spots) needed.
- Determine the heat, lighting, humidity, and water needs for your pet.
- Set up a habitat suitable for your new pet's home.  
*Note: Aquariums are not always the best home for all reptiles.*
- Bring the pet home, or if you already have the animal, give it a special treat (food or habitat addition).
- Take a photograph of your pet's home. Be prepared to discuss what is in the picture and why the habitat is right for your pet.

### Care and Feeding

- Identify how your reptile or amphibian finds, captures, and swallows food.
- Learn what to feed them and how often.

- Read a reference book on reptile and amphibian care.
- Does your animal shed? If so, how?
- Record in your journal the chores involved with keeping a reptile or amphibian.
- Clean your pet's habitat regularly and check that all electrical accessories are working properly.
- Record in your journal the amount of money you spend for food, bedding, heat, lighting, and so on.

### Identifying Reptiles and Amphibians

- Attend a local reptile show and identify as many reptiles and amphibians as you can. Journal your conversations with breeders and herpetologists about the animals they keep and why.
- Talk with a knowledgeable person (breeder, herpetologist, zookeeper, etc.) and list key points in your journal.
- Go on a field trip to discover Ohio's resident reptiles and amphibians and record your findings in your journal.
- Visit your local zoo's reptile house.
- Determine at least five (5) or more characteristics that make reptiles and amphibians different from each other.
- Learn how reptiles and amphibians reproduce in captivity.
- Visit a web site to learn more about reptiles and amphibians.
- Visit a web site that tells more about what herpetologists do.

### Leadership Activities

- “RAP (Reptile and Amphibian Project) with Reptiles”**—Find or make up a song about reptiles or amphibians that encourages others to sing along.
- Write a poem or short story that tells others about your pet.
- Encourage another 4-H member to join you in the reptile and amphibian self-determined project.
- Prepare and exhibit a poster on reptiles or amphibians.

- Give a demonstration on how to set up a proper habitat for your reptile project.
- Serve as an officer for your club.
- Make a motion at a club meeting.
- Identify at least five additional activities to learn more about reptiles and amphibians. E-mail these ideas for activities to Jim Frasure at [jfrasura@ag.ohio-state.edu](mailto:jfrasura@ag.ohio-state.edu), to be shared online at <http://southcentersosu.edu/4h/>.

### Facts and Superstitions

- Ask family members or school friends how they feel about reptiles and amphibians and make notes in your journal. How do they differ?
- Find out at least five (5) superstitions about reptiles and amphibians.
- Find out at least five (5) facts regarding reptiles and amphibians.
- Volunteer at an animal center to help with education of facts and superstitions.
- Donate any sum to a conservation group for educating the public about facts and superstitions.

### Related Web Pages

[www.allohioshows.com](http://www.allohioshows.com)

web site that lists Ohio shows

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

Herp and Green Iguana Information Collection

[www.dnr.state.oh.us](http://www.dnr.state.oh.us)

Ohio Department of Natural Resources

[www.colszoo.com/animalareas/reptiles/reptext1.html](http://www.colszoo.com/animalareas/reptiles/reptext1.html)

The Columbus Zoo and Aquarium

<http://netvet.wustl.edu/reptiles.htm>

NetVet

<http://www.reptilesmagazine.com/reptiles/home.aspx>

Reptiles Magazine.com

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

School of Tropical Biology

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

The online community for Reptile & Amphibian Hobbyists

[askthereptiledoc@aol.com](mailto:askthereptiledoc@aol.com)

Jim Fracker

[www.noahonline.net](http://www.noahonline.net)

Northern Ohio Association of Herpetologists

<http://nationalzoo.si.edu/Animals/ReptilesAmphibians/>

Smithsonian National Zoological Park

**Check your local, state, and federal laws about owning the animal you have selected. The Ohio Department of Natural Resources has regulations about the possession, purchase, sale, or trade of reptiles and amphibians native to our state and requires propagating licensing.**

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