Amphibians

Amphibians are interesting creatures. They are quiet and do not take up much space. The largest problem with keeping them is that they often require unusual food which may be hard to find. Amphibians include frogs, toads, and salamanders.

Amphibians are cold blooded. Their life starts in a pond or stream. At this stage they look nothing like their parents. As they grow older, many species move out of water onto land. At this time, they become air breathers and their gills are replaced by lungs. In general they like a moist environment but spend more of their time on land than in water.

Pet frogs are interesting and fun to watch. They come in a variety of colours, and some can change their colour. You find frogs almost everywhere from North to South. They have a head and body, but no real neck. The skin is usually smooth and moist. Some of the most common frogs are the tree frog, (which is the smallest), bullfrog, green frog, and yellow legged frog.

A toad has dry skin, no teeth or upper jaw. He spends most of his life on land, but goes to ponds, rivers, or swamps to lay eggs. Their warty skin secretes a substance that is irritating to the eyes and mouth of an enemy. This is why a dog or cat quickly drops a toad it has picked up. After handling a toad, you should always wash your hands with plenty of soap and water. Toads come in several colours. Some are plain brown, others have black, greenish, or red spots.

Salamanders look like lizards but have porous moist skin instead of scales. They live in the water as larva and on land as an adult. Newts are a type of salamander.

Selection

Before choosing one of these animals find out as much as you can about its care. You will need to build it a proper habitat for it to live in. You will have to learn how to feed it. Some reptiles and amphibians will only eat live food such as insects, worms, fish or small rodents. You should know this before you bring the new animal home. If it will be a problem to find insects in the winter time, you should not choose a pet that needs these to stay alive.

Base your decision on the type of care the animal requires. Most amphibians are available from pet stores. Some, like frogs, toads or salamanders may be caught in the wild.
Facilities

The best housing for reptiles or amphibians is a glass or plastic aquarium. This will be waterproof and escape-proof. The aquarium should have a cover made from a wooden frame with a piece of strong aluminum screen nailed or stapled to it (you may want to weight this down with something like a small rock). It is very important that the reptile’s or amphibian’s home be made into a proper “habitat”. It should be as close as possible to its home in the wild. Some of these creatures are used to “desert living” with sand, cactus and rocks. Some are used to “forest living” where there would be moist soil covered by ferns and moss and dead logs to climb over. Others are “semi-aquatic” which means that they like to go in and out of shallow water and sit on stones or sand surrounded by water plants. Here are some tips about fixing up different types of habitats.

Desert habitat: Put a few inches of sand into your aquarium. Add pieces of rock and small stones as landscaping. Pieces of dry weathered wood will make interesting places for the reptile to lie when resting. Small cactus plants will add colour and interest to the aquarium. Plants should be left in their flowerpots and the flowerpots set down into the sand. This is because the reptile may decide to dig down into the sand and it will uproot the cactus and break its roots if it is planted directly into the sand.

Forest habitat: Put a few inches of sand into an aquarium. You can cover this with a thin layer of filter charcoal to keep the sand fresh smelling. Cover this with an inch or two of top soil (you may want to buy sterilized soil which does not have bugs or weeds in it). Plant some forest plants such as ferns and mosses. You might like to put in tropical plants from a plant store rather than collecting plants from the wild. Plants should be left in their little pots and placed down into the earth (because of burrowing by the creatures). Little sticks or rocks with moss or lichens on them are also good. Keep the soil moist at all times so that the plants stay healthy.

Semi-aquatic: Make a forest habitat as above but set a tray or bowl which is about 3 inches deep into the earth in the aquarium. Put some small stones in the bottom of the tray. Fill the tray with water. Place a rock or stick into the tray of water and make a ramp that leads out of the water to the earth. The frog or salamander can then climb out onto the earth when it wants to.

Another way to fix up the aquarium is to set a tray (20 to 100 cm deep) along one side. Fill the other side with small stones or gravel. Put some earth and plants on top of this. Fill the tray with water. Make some type of ramp with rocks or wood to lead up onto the soil. Keep your aquarium in a place which is not too cold or too hot. Do not allow direct sunlight to shine right onto the aquarium.

If collecting frog or toad eggs, fill a quart jar about half full of pond water. Hold jar in water and gently push some eggs into jar. Keep the eggs in the uncovered jar in a warm, sunshiny place until the eggs hatch. Then transfer the tadpoles, or polliwogs, to the aquarium. Place 1 inch of clean sand on bottom of aquarium. Add several small rocks and set out a few water plants. The aquarium should be filled with pond water. As polliwogs grow, add extra rocks to aquarium so they can get out of the water. When the polliwogs, or tadpoles, become toads or frogs, remove them from the aquarium into a shelter.
Feeding

Tadpoles or polliwogs require a different diet than adult frogs. For tadpoles or polliwogs in captivity, feed spinach leaves and hard-boiled egg yolk.

Frogs and toads drink water through their skin and not by mouth. This water comes from dew. Most toads stay buried in the soil during daytime and come out at night to feed on insects. Toads and frogs, in captivity, should be fed earthworms, larger insects, or mealworms.

Feeding of amphibians is very specialized. Check in books or on websites about these creatures and find out what they like to eat. Many will only eat live insects or worms, frogs. Bait shops or fishing supply stores might have worms year round. Insects and worms are often available from pet shops. Some meat amphibians will eat chopped pieces of meat if you hold the meat up and wiggle it around in front of them. Some amphibians like to nibble on plants, fruit or vegetables.

Water should be available at all times. Many of these creatures get the water they need by licking at damp plants. It is a good idea to have a little bottle with a pump sprayer and spray water on the plants to "mist" them every day. Creatures kept in a semi-aquatic aquarium will get their water from their little "pond".

Management

Handling: Always wash your hands well after handling your pet or something in its habitat.

Amphibians should not be handled often. Amphibians will lose moisture from their skin from handling.

Frogs & Toads: Gently pick them up inside your cupped hand. Be careful that they do not leap from your hand to the floor (they will get injured).

Salamanders: pick up by their body (gently). Salamanders should be handled as little as possible.

NOTE: Don’t carry these creatures around with you. They are fragile and should not be handled more than needed. Don’t use them to scare your friends. The creature may get knocked out of your hand and fall to the floor where it will be injured or run away in fear.

Grooming: None needed.

Training: You can train most reptiles and amphibians to take food from your hand.

Exercise: None necessary.

General Maintenance: Remove uneaten foods (other than live) regularly and replace with fresh food to prevent spoilage and pollution. Replant plants which have been dug up or turned over by burrowing creatures. Add fresh water to the semi-aquatic aquarium when needed.

Health Care

Many health problems are due to poor management. The colour of the animal is a good clue to its health. No vaccinations necessary.

The main way to keep amphibians healthy is by:
• providing the proper kind of habitat (see housing).
• providing the proper kinds of foods (see feeding).
• keeping the temperature and humidity comfortable for your kind of pet.
Breeding

It’s fun to watch eggs hatch into polliwogs, polliwogs grow to polly-frogs and polly-frogs grow to adult frogs. The frog will develop into four stages of growth. During the spring, take a quart jar and set out to collect frog or toad eggs. You can find eggs at the edge of the water. Most frog eggs are clean and greenish. Toad eggs are long, jelly-looking strings.

Economics

A very economical pet as you can capture them from the wild. You may need to purchase live insects if you cannot maintain a steady supply for its diet.

Project Resources

Pinterest - The Visual Discovery Tool
Pinterest is a social media bulletin board for you to virtually pin pictures of things that interest you to your own personal boards – Pin-Explore-Discover! 4-H Manitoba has a Pinterest account. Each project series has a board full of fun and interesting ideas. There are also boards for 4-H Awesome, Community Service, Volunteers, Communications and Building Blocks. Check it out at www.pinterest.com/4hmanitoba/.

When you are doing a search for amphibian information on the internet be sure to be specific about what you want to find out - just entering “amphibian” will yield too many results for you to check and not all of them will relate to what you want to know. For example, try salamander habitat instead of amphibian habitat.

Sections of the Amphibian Fact Sheet were adapted with permission of Manitoba Agriculture from the Manitoba 4-H Project: Small Animals Leader’s Manual - 1998. Portions of the fact sheet have been used with permission from Ontario 4-H and Saskatchewan 4-H Council.

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