Axolotl Caresheet

The axolotl is a type of salamander, native to Mexico. Its scientific name is Ambystoma mexicanum. The common pet or laboratory Axolotl refers exclusively to A. mexicanum, although in Mexico the term Axolotl is used in reference to several species of Ambystoma, and is considered an edible food source!

The Axolotl is neotenic, meaning that it doesn't routinely undergo metamorphosis from the larval to adult form, as happens with most other salamanders. Instead, the larval form (with gills) becomes sexually mature and reproduces, maintaining a strictly aquatic life style. Under some circumstances, the Axolotl can undergo metamorphosis into a terrestrial form, although this can be stressful on the animal.

The Axolotl has amazing regenerative abilities - if injured, even to the point of losing a body part, the Axolotl will heal readily and even regenerate lost bits. They are fairly hardy creatures that can be expected to live up to 10-15 years with attention to proper care, particularly with respect to water quality. Their skin and gills are very sensitive and quite soft, so handling is not recommended.

Juvenile axolotls can be cannibalistic towards each other, so they are best raised in separate enclosures. Adults can potentially be housed together but watch for cannibalistic tendencies. Of course, if a body part gets bitten off by a tank mate, an axolotl can regenerate it over time.

A Tank for Axolotls

Axolotls can get quite large, so I would recommend at least a 15-20 gallon tank, although the tank doesn't have to be full - just deeper than the full length of the axolotl. Most owners will find a filtered aquarium easier to maintain; without a filter their water will need frequent changing. However, the filtration rate should be fairly slow and avoid powerful filters that create strong currents. The filter intake should not be in a position to trap the gills. A siphon can be used to vacuum the bottom of the tank, and a 20 percent water change should be done weekly. If you are not using a filter, you will have to do a 20% water change every day or every other day. Never do a full water change as this creates a situation where the water chemistry changes too drastically.

Tap water should have any chlorine or chloramines (added during the water treatment process) removed using commercially available solutions. Never use distilled water. The pH of the water should be 6.5-7.5.

If gravel is used on the bottom of the tank it needs to be coarse gravel. Fine gravel might be ingested during feeding. Some keepers simply leave the bottom of the tank bare, although others believe this may stress the axolotls a bit since they can't get a foothold on the bottom that way.

Temperature and Lighting

The tank should be kept in a cool room away from bright sunlight. The water temperature should be kept cool, between 57-68 F (14-20 C), and never above 75 F (24 C). No special lighting is required, and in fact a place to get out of the light may be appreciated, such as a half flower pot or aquarium type castle.

Feeding Axolotls

In the wild, axolotls feed on snails, worms, crustaceans, small fish, and small amphibians. In captivity, they can be fed brine shrimp, small strips of beef or liver, earthworms (wild caught worms can carry parasites), bloodworms, tubifex worms, or commercial fish pellets (e.g. salmon or trout pellets). If feeding these fresh items it is best to feed a variety to get a better balance in the diet. Uneaten food should be cleaned from the tank daily.

Terrestrial Axolotls

Axolotls do occasionally undergo metamorphosis to take on the terrestrial form. The conditions under which this would happen naturally are poorly understood. They can be induced using changes in water characteristics, or by supplementing with certain proportions of thyroid hormone. Of course the terrestrial form of the axolotl has a completely different set of care requirements. Trying to induce metamorphosis is not recommended, as this can place undue stress on the creature, and can significantly shorten its life span.