

The Mexican Axolotl as a Pet and a Laboratory Animal

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Basic taxonomy, life span and habitat preferences:

The axolotl is a urodele amphibian from the largest family of salamanders, the new world's Ambystomatidae or mole salamanders. The Mexican axolotl is known scientifically as *Ambystoma mexicanum*. The axolotl is originally from two large lakes, Lake Xochimilco and Lake Chalco, in the same central plateau where Mexico City is now located. One hundred years ago, these lakes and their connecting marshes, swamps, and lagoons covered over 200 square km (77 square mi). The lakes were filled by springs and meltwater from the nearby snow capped volcanoes.

Up until this century, the axolotl was also a common food source, taking the place of fish in the region. Today, the lakes have been sacrificed to provide farmland and space for Mexico City itself (Brandon, 1989). Lake Chalco is completely dry. Lake Xochimilco has shrunk to 314 hectares (personal communication, Virginia Graue). The reduction in size and the pollution of the axolotl's natural habitat has led to its being listed in Appendix II of the Endangered Species list.

European naturalists have been commenting on the axolotl as far back as the late 1500s (Smith, 1989). Unfortunately, it is now so rare in the wild that almost all scientific observations on behavior and preferences are based on laboratory animals. The axolotl has a long and honorable history as a lab animal. The ancestry of some individual animals can be traced all the way back to an original large group of axolotls imported from Mexico in 1864. Six of the specimens were given to M.A. Dumeril of the Jardin des Plantes of Paris. At least one more of the original group, and perhaps more, were subsequently added to collection (Smith, 1989; Newth, 1960).

