

PRESENTS

MEXICAN AXOLOTL

Ambystoma mexicanum

Also known as the Xochimilco axolotl, this amphibian is endemic to the Mexico basin and is in critical danger of extinction. Its name comes from Nahuatl: atl - water and xolotl - aquatic monster. According to Aztec mythology, the axolotl is connected to the god Xólotl, the brother of Quetzalcóatl, who fled to the depths of the lake to avoid sacrifice by taking on the form of the axolotl.

ENDEMIC SPECIES

FICHA
TÉCNICA

Kingdom: Animalia
Phylum: Chordata
Class: Amphibia
Order: Urodela
Family: Ambystomatidae
Genus: *Ambystoma*
Species: *A. mexicanum*

17 SPECIES
of axolotls in Mexico

Distribution: Network of freshwater channels in Xochimilco, Mexico.

Diet: Carnivore; feeds on small fish, alevin and acociles (an endemic group of crayfish).

Predators: Invasive species like carp and tilapia, as well as small mammals and birds.

Reproduction: Annual, during winter (January-March) when the water temperature drops.

CONSERVATION TIMELINE



1863: The first individuals were collected for the Natural History Museum in Paris.



1950-1970: Urban development in Mexico City tripled during this period, causing the loss of natural habitat.



1970: The Mexican government introduced carp and tilapia into Xochimilco to create jobs in freshwater fishing.



1987: Xochimilco is declared a World Heritage Site by UNESCO.



2000: The community-led program "Umbral Axochiatl" is established to preserve Xochimilco's local culture and ecosystem.



2002: The Biology Institute's Ecological Restoration Laboratory is established, both from UNAM.



2018: The Axolotl's genome is sequenced, the largest for an animal species.



POLLUTION
Fertilizers and untreated water are discharged into the channels.



LOSS OF HABITAT
Urbanization and changes in land use have resulted in loss of wetland cover.



INVASIVE SPECIES
Introduced species compete with native species for resources and feed on axolotls during their larval stage.

SOURCES:

• Hernández, P. (2017). Ajolote: el símbolo mexicano que se resiste a la extinción. Series de Mongabay: Fauna en peligro de extinción. Disponible en: <https://es.mongabay.com/2017/05/ajolote-lucha-contra-extincion/>
• Laboratorio de Restauración Ecológica-Instituto de Biología. <https://www.restauracionecologica.org/>
• Smith, J.E. (2023). ¿Qué se necesita para salvar a los ajolotes? New York Times. Disponible en: <https://www.nytimes.com/es/2023/12/05/espanol/ajolotes-como-salvarlos.html>
• Webb, Aden. (2023). Urbanization's impact on Mexican axolotl (*Ambystoma sp.*) and status of ongoing conservation efforts. Tesis Licenciatura. University of Arizona, Tucson, EUA.

dPVP. ENERO 2024

ANATOMY

Females tend to be bigger and more robust.

25cm
Average size

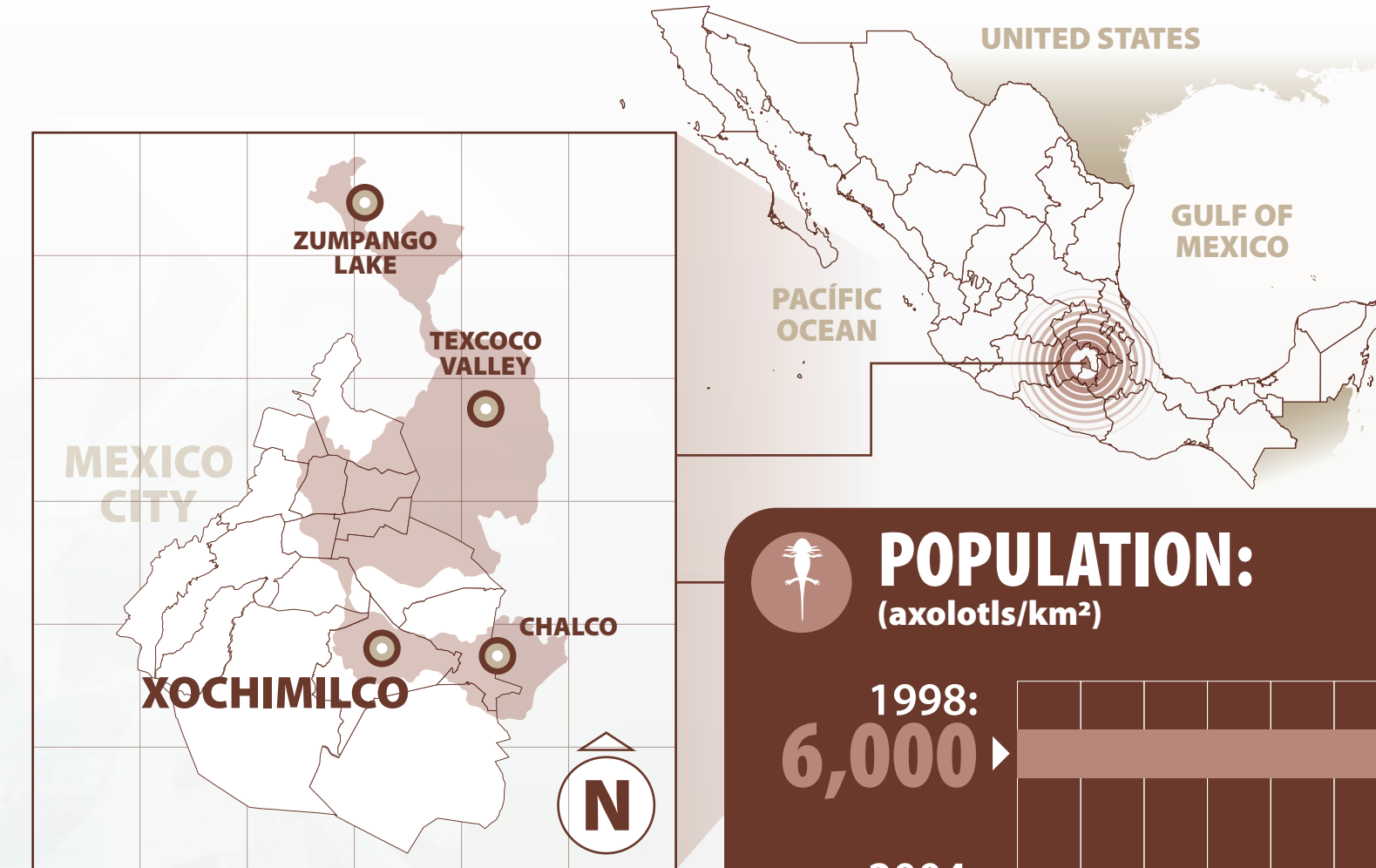
Average weight in males:
125-130 gr

Average weight in females:
170-180 gr

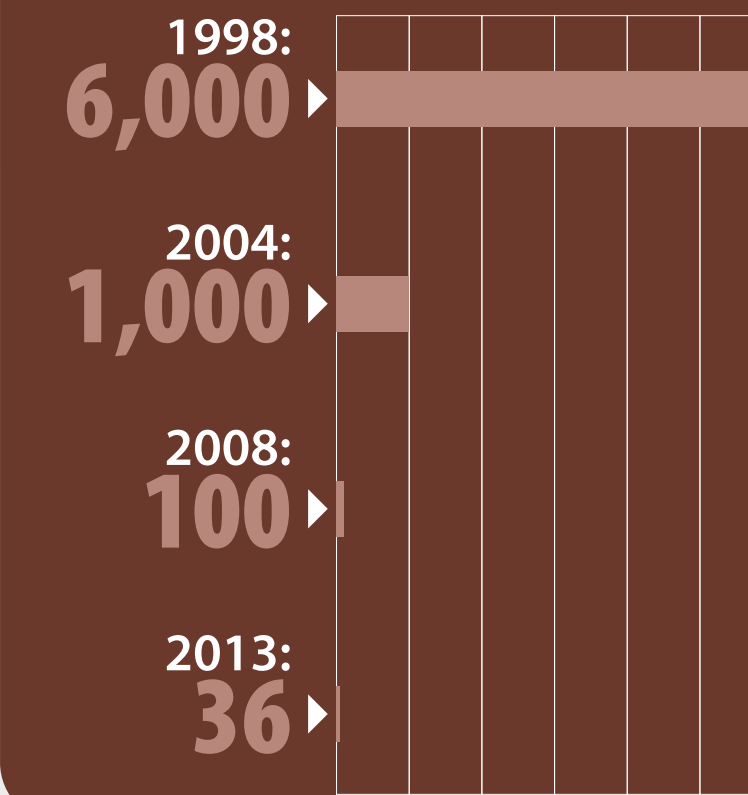
Average lifespan:
8-10 years

DISTRIBUTION

The Mexican axolotl was originally distributed throughout the entire Texcoco Valley, which included Chalco and Tlaxcala. Today, it only inhabits the Xochimilco channels.



POPULATION:
(axolotls/km²)



40 km²
estimated area of its remaining natural habitat.

COLOR

4 color patters depending on genetic mutations:



Normal:
dark green or brown with small dark or light spots.



Hypermelanism:
Body completely black or dark green without spots.



Albino:
White or very light body with pink eyes.



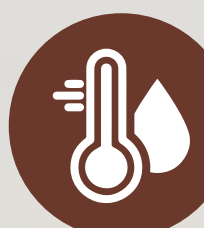
Leucistic:
Pale pink skin color with black eyes.

BEHAVIOR

Usually solitary but interacts with others to reproduce.

Completely aquatic.

Prefers areas with slow currents, cloudy water and abundant vegetation.



16-18°C
Preferred water temperature.

ECOLOGICAL IMPORTANCE

Controls its preys' populations.

It is an indicator of good water quality.



32,000 billion
number of base pairs in the axolotl's genome.