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PRESENTS

LONGFIN DACE

Agosia chrysogaster

The Longfin Dace is an adaptable and hardy fish that inhabits low-lying desert streams and up to 6,500 ft high mountain streams. This small species belongs to the carp group, specifically to the Cyprinidae family and, until a few years ago, it was the only species of the Agosia genus. Categorized as an endangered species since 1994, the American Fisheries Society considers it vulnerable due to the destruction, modification, or reduction of its natural habitat. In Mexico, conservation groups have proposed for it to be classified as Endangered.

DATA SHEET

Kingdom: Animalia
Phylo: Chordata
Class: Actinopterygii
Order: Cypriniforms
Family: Cyprinidae
Genus: *Agosia*
Species: *A. chrysogaster*

NOM-059 SEMARNAT – A – THREATENED

Conservation status:
• Nom 059 – **A** (Threatened)
• IUCN – **LC** (Least concern)

Distribution: From the lowlands in Arizona's coniferous zone in the United States and Sonora, to the streams of the lower Sonoran Desert in Mexico.

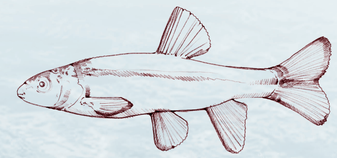
Diet: Facultative omnivores; they feed on detritus, aquatic invertebrates and plants according to their availability.

Reproduction: Oviparous; they reproduce during the summer before the summer monsoon rains. It builds saucer-shaped nests on sandy bottoms in streams.

Predators: Predation by piscivorous birds and mammals is high in streams, particularly when current is slow.

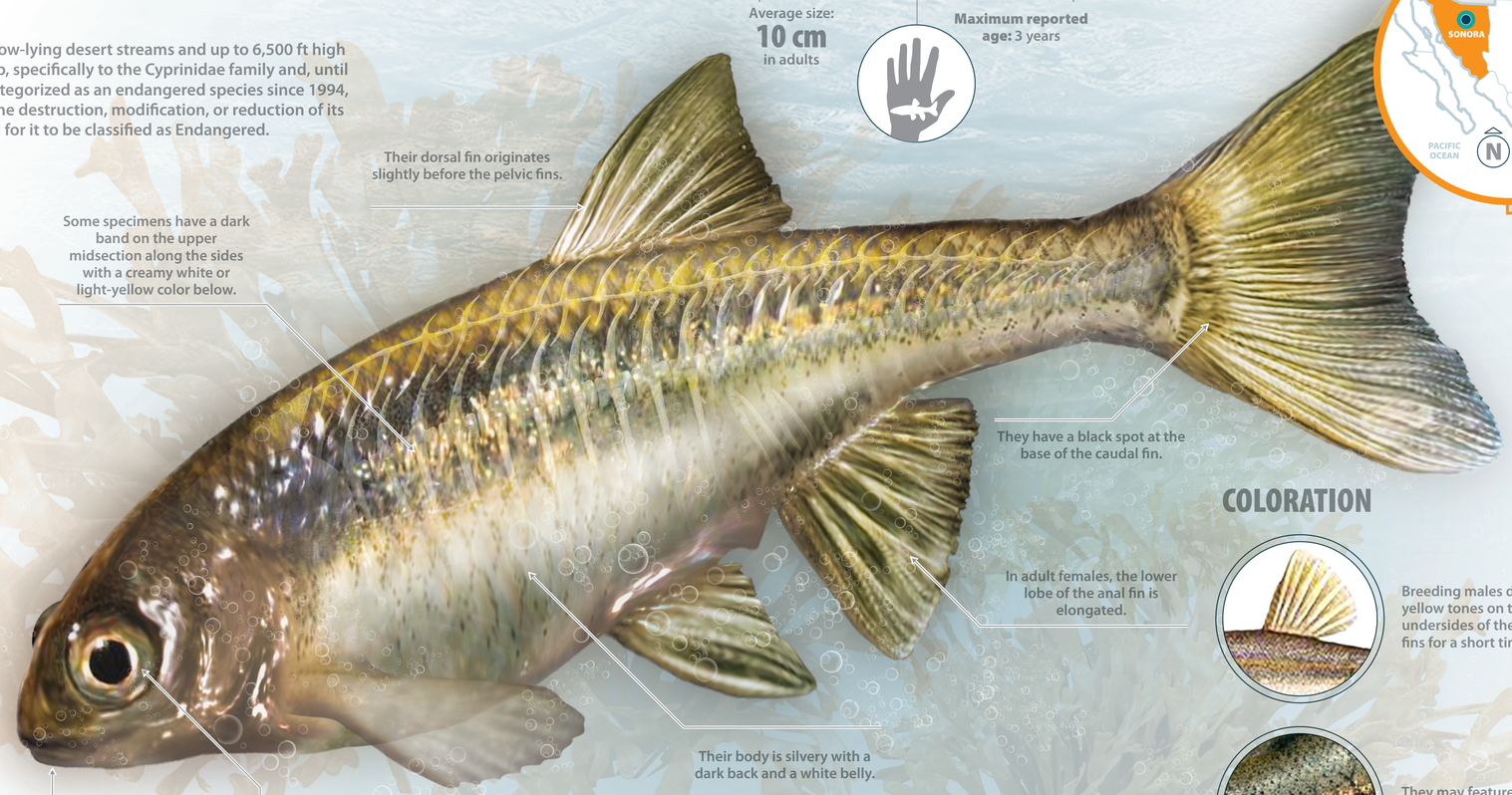
ANATOMY

Compared to other fish of its kind, the Longfin Dace has several unique characteristics, particularly its size and color.



Average size: **10 cm** in adults

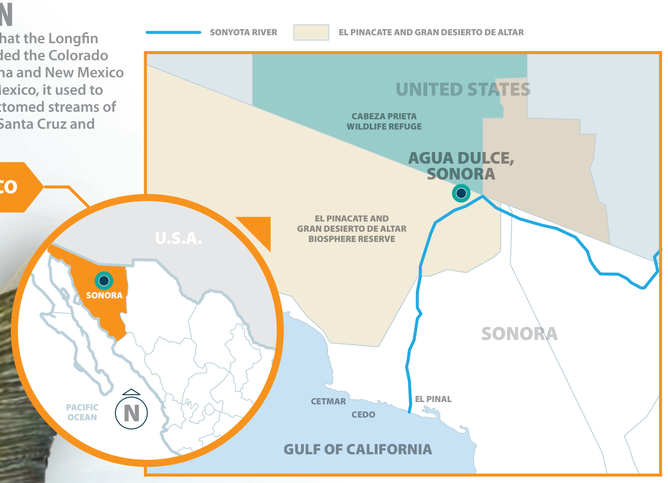
Maximum reported age: 3 years



DISTRIBUTION

Historical records show that the Longfin Dace's distribution included the Colorado River watershed in Arizona and New Mexico in the United States. In Mexico, it used to live in sandy or rocky bottomed streams of the Sonoyta, San Pedro, Santa Cruz and Concepción rivers.

SONORA, MEXICO



The Longfin Dace no longer inhabits the natural streams of the Sonoyta River.

RELEVANCE

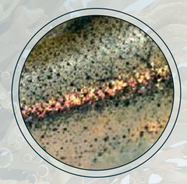
>5% of the national territory is the known geographic distribution area occupied by this species.

The Longfin Dace is the most common and abundant species in rivers and streams of low and medium elevation in the state of Sonora, Mexico.

They help maintain the ecological balance of the streams they inhabit.

COLORATION

Breeding males display yellow tones on the undersides of their paired fins for a short time.



They may feature iridescent gold sparkles on the top sides.

REPRODUCTION

Foto: John Snow

During breeding, males develop nuptial tubercles on their fins and tail that resemble ich disease seen in aquarium fish.

Although they reproduce throughout the year, reproduction peaks before the rainy season.

This species has a long spawning season (December-September, or longer).

JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER

THREATS

The total population size is probably very large, however, local populations have declined or disappeared due to habitat loss or deterioration.

This species is susceptible to parasites, is moderately vulnerable to environmental fluctuations and also competes with exotic species.

CONSERVATION TIMELINE

1931: The Federal Penal Code establishes fines and prison sentences for anyone who captures, traffics, possesses, transports or damages products, by-products and genetic resources of endangered, endemic or regulated species in any international treaty to which Mexico is a party.

1988: The Longfin Dace is protected by the General Law of Ecological Balance and Environmental Protection (LGEEPA in Spanish) in articles 79 and 87, which highlights the need to preserve threatened wild flora and fauna species, condemns their trafficking and exploitation and dictates the rules for their extraction, commercial and conservation use.

2000: The General Wildlife Law (LGVS in Spanish), states that threatened flora and fauna species may only be collected and captured for the purposes of restoration, repopulation, reintroduction, and scientific research.

2000: Article 87 in SEMARNAT's LGVS specifies the necessary measures for the use of wild species at risk.

2021: The Intercultural Center for the Study of Deserts and Oceans (CEDO) made a proposal to CONANP to change the Longfin Dace's category in the Official Mexican Standard 059-SEMARNAT-2010 from Threatened (A) to Endangered (P).

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