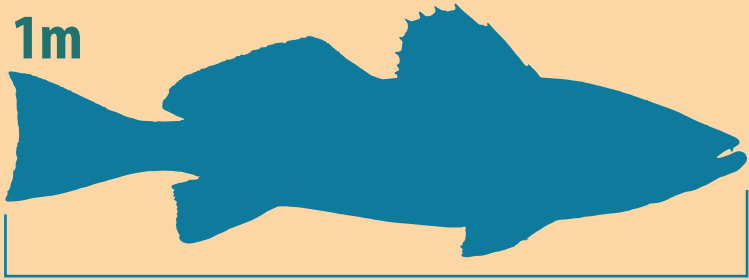


GULF CORVINA
(*Cynoscion othonopterus*)

GENERAL FACTS

Family: *Sciaenidae*
Diet: carnivorous predators (mainly sardines and shrimp)
Age: up to 9 years



Length: up to 1 meter; they reach 65-75 cm in 5 and 6 years.
Weight: up to 12 kg

GULF PRESENTS
CORVINA

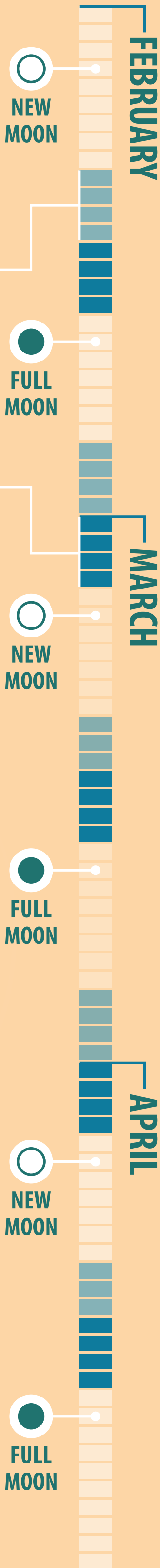
REPRODUCTIVE BEHAVIOR

SEXUAL MATURITY
at 2 years

FEBRUARY TO JUNE

AGGREGATIONS
They form aggregations during the spring tides in the Colorado River Delta.

SPAWNING
5 to 2 days before the new and full moons.



560,000
EGGS
released on average by each fish, each spawning.

2.5 MILLION EGGS
per aggregation could be produced by a female measuring 1.4 meters. Larger females produce more eggs.

During the aggregation, males produce loud croaking sounds. This is the loudest sound recorded for a group of fish.

+150 decibels
The highest level of sound recorded. Louder than takeoff of a jet plane.



Geographic distribution: endemic to the Upper Gulf of California, from the Colorado River Delta to south of the Midriff Islands region.

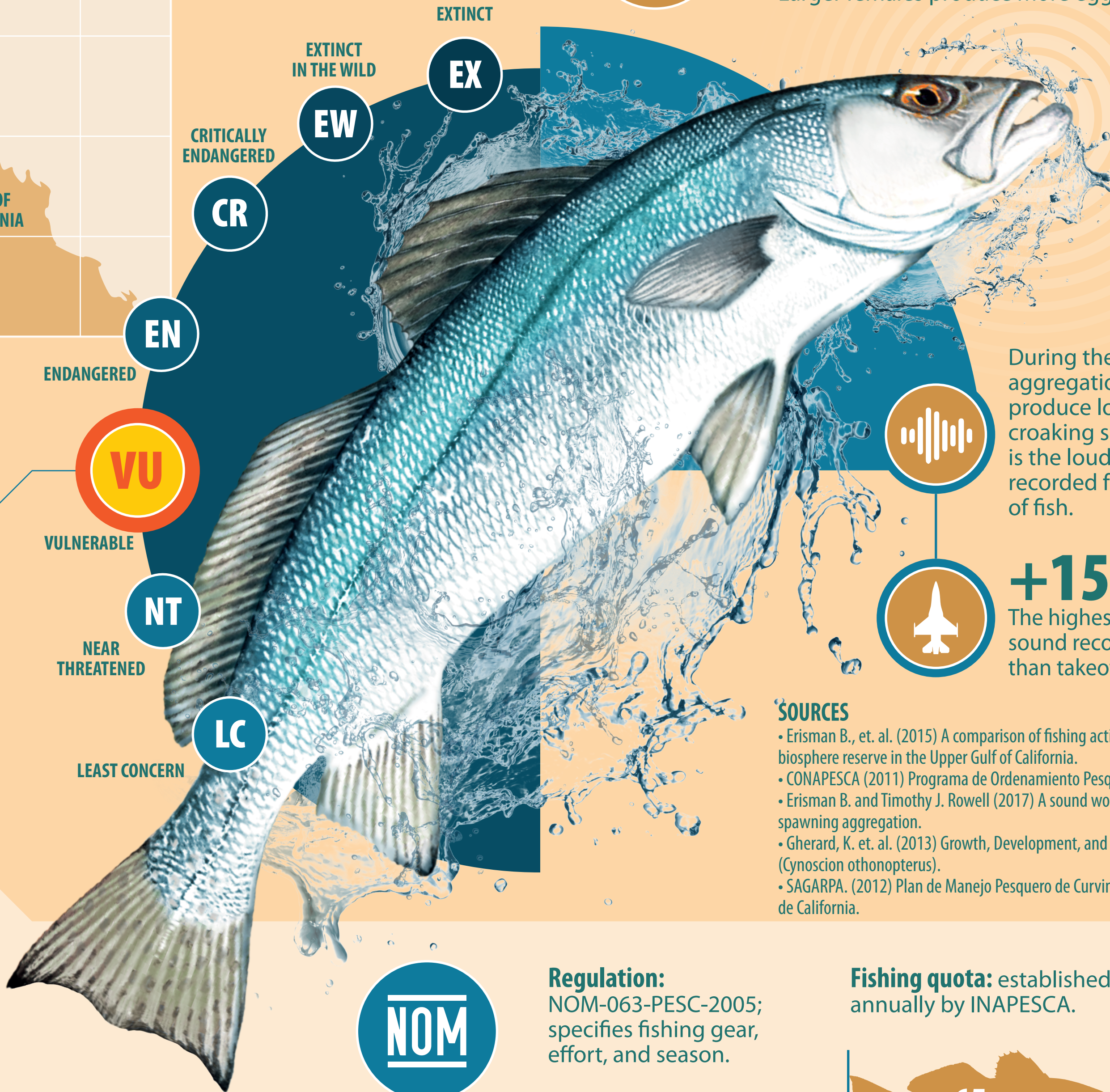
Conservation status:
"Vulnerable" (IUCN)
The species is exposed to overfishing during their spawning aggregations.

SOURCES
• Nelson J.S., et.al. (2006) Fishes of the world.
• CRIP Ensenada y Guaymas. (2005) Compilación biológico-pesquera de curvina golfina (*Cynoscion othonopterus*) en el alto Golfo de California.
• Erisman B., et.al. (2012) Spatio-temporal dynamics of a fish spawning aggregation and its fishery in the Gulf of California.

DESCRIPTION OF THE FISHERY

Fishing takes place in el Golfo de Santa Clara, Sonora; and in Baja California in San Felipe, Bajo Río and the Cucapa community.

SOURCES
• Erisman B., et.al. (2012) Spatio-temporal dynamics of a fish spawning aggregation and its fishery in the Gulf of California.
• Diario Oficial de la Federación (DOF). 2018. Carta Nacional Pesquera 2017.
• DOF. 2007. NOM-063-PESC-2005. Pesca responsable de curvina golfina (*Cynoscion othonopterus*) en aguas de jurisdicción federal del Alto Golfo de California y Delta del Río Colorado.
• Ortiz, R. et. al. (2016) Biological and fisheries monitoring of the Gulf Corvina in the Upper Gulf of California.
• SAGARPA (2012) Plan de Manejo Pesquero de Curvina Golfina (*Cynoscion othonopterus*) del norte del Golfo de California.



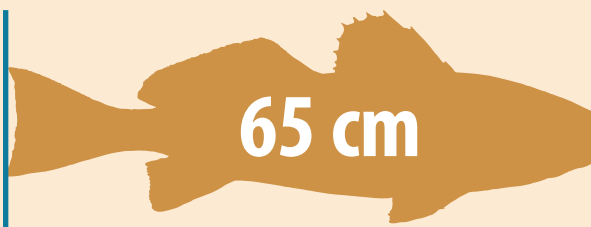
Regulation:
NOM-063-PESC-2005; specifies fishing gear, effort, and season.



Fishery status:
at maximum sustainable yield, according to CONAPESCA.

Fishing quota: established annually by INAPESCA.

Fishing ban: May 1 to August 31.



MINIMUM LEGAL SIZE



TOLERANCE BELOW MINIMUM LEGAL SIZE

FISHERY PRODUCTION AND ECONOMIC VALUE



1.5-1.8 MILLION GULF CORVINAS caught per year on average during ~ 25 fishing days, in an area of 1,149m2.

Important source of protein during Lent.

MAIN MARKETS:

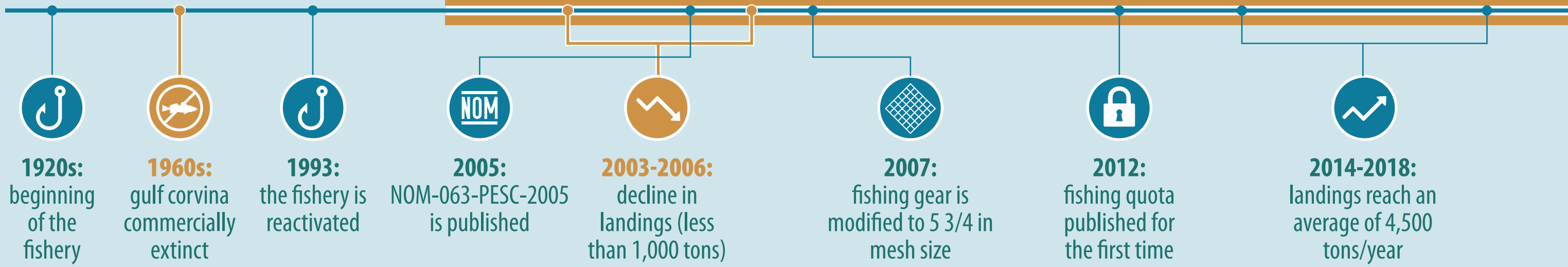
80%
• Mexico City
• Guadalajara
• Tijuana
• Ensenada

20%
• Brazil
• Hong Kong
• California (USA)

SOURCES
• Erisman B., et.al. (2012) Spatio-temporal dynamics of a fish spawning aggregation and its fishery in the Gulf of California.
• Environmental Defense Fund. María Curvina: El valor de la Curvina. Web: <https://www.edf.org/sites/default/files/content/mac2lowres.pdf>

TIMELINE:
• DOF. 2018. Carta Nacional Pesquera 2017.
• Mascareñas, I., et. al. (2017). Mexico's National fisheries statistics, 2001-2017.
• Erisman B., et.al. (2012) Spatio-temporal dynamics of a fish spawning aggregation and its fishery in the Gulf of California.

TIMELINE



VALUE LANDINGS

