

PRESENT

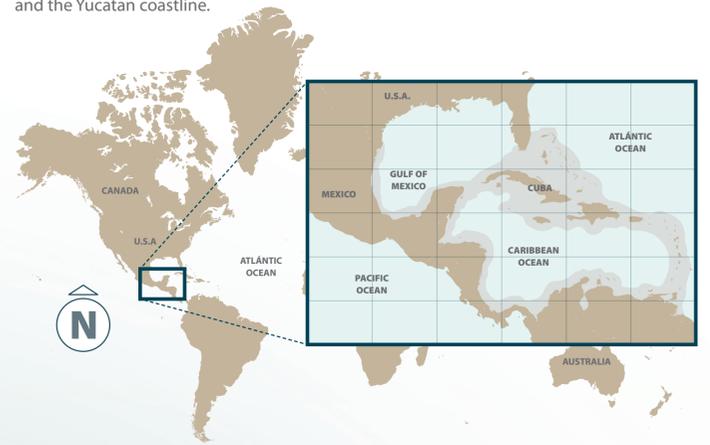
QUEEN CONCH

Aliger gigas

The Queen conch is a species of cultural and commercial importance in the Yucatan Peninsula, in southeastern Mexico. Fishing targeting this species has been carried out since pre-Hispanic times, not only providing a food source, but the shell was used to create tools and jewelry. Currently, fishing in Mexico is limited to the Banco Chinchorro area in Quintana Roo through free diving, protecting populations in deeper areas where they tend to aggregate.

DISTRIBUTION

The Queen Conch's distribution spans 36 countries and territories along the Caribbean Ocean, from northern Brazil to the Bahamas. Its distribution includes the Gulf of Mexico and the Yucatan coastline.



TAXONOMY

Kingdom: Animalia
Phylum: Mollusca
Class: Gastropoda
Order: Sorbeoconcha
Family: Strombidae
Genus: *Aliger*
Species: *A. gigas*



Conservation status:
• NOM 059 – NA (Not included)
• IUCN – NA (Not included)

Synonyms: *Lobatus gigas*, *Strombus gigas*

- Distribution:** From Northern Brazil to the Bahamas.
- Diet:** Benthic herbivores that feed on diatoms, detritus from sea grass, algae and other epiphytes.
- Reproduction:** Presents separate sexes; they reproduce all year long with mating during the warm months; they lay eggs two or three times.
- Predators:** Rays, pampano, hogfish, triggerfish, puffer fish, lobster, loggerhead turtle.

BEHAVIOR

- 2-20 meters**
Depth range they can live in.
- It is a benthic species with restricted movements.
- Tends to form aggregations.

THREATS

- ILLEGAL FISHING:** an estimated 90 tons of conch are illegally harvested every year.
- SARGASSO BLOOMS:** the large amounts of sargasso cover the sea grass beds where they like to live.
- CLIMATE CHANGE:** it affects larvae dispersion and habitat availability.
- DISEASES** the *Apicomplexa* parasite could be affecting gametogenesis.

CONSERVATION TIMELINE

- 1950:** In Mexico, the fishery targeting Queen conch begins during this decade.
- 1965-1985:** The fishery reaches its peak in the Yucatan Peninsula.
- 1988:** The Mexican government suspends all commercial fishing targeting the species in Yucatan.
- 1992:** *S. gigas* was listed in CITES' Appendix II which includes threatened species or those in need of strict regulations.
- 1994:** The NOM-013-PESC-1994 specifies fishing seasons and areas in Campeche, Quintana Roo and Yucatan.
- 2012:** Fishers from Quintana Roo proposed a five-year fishery closure (2012-2017), made official through the DOF.
- 2016:** The NOM-013-PESC is updated and regulates the fishery in the Gulf of Mexico and Caribbean.
- 2017:** The name change from *Strombus gigas* to *Lobatus gigas* is validated based on molecular studies.
- 2018:** Mexico's National Fishery Charter establishes that *L. gigas*' population is deteriorating.

SOURCES:
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ANATOMY

The species is characterized by its large size.

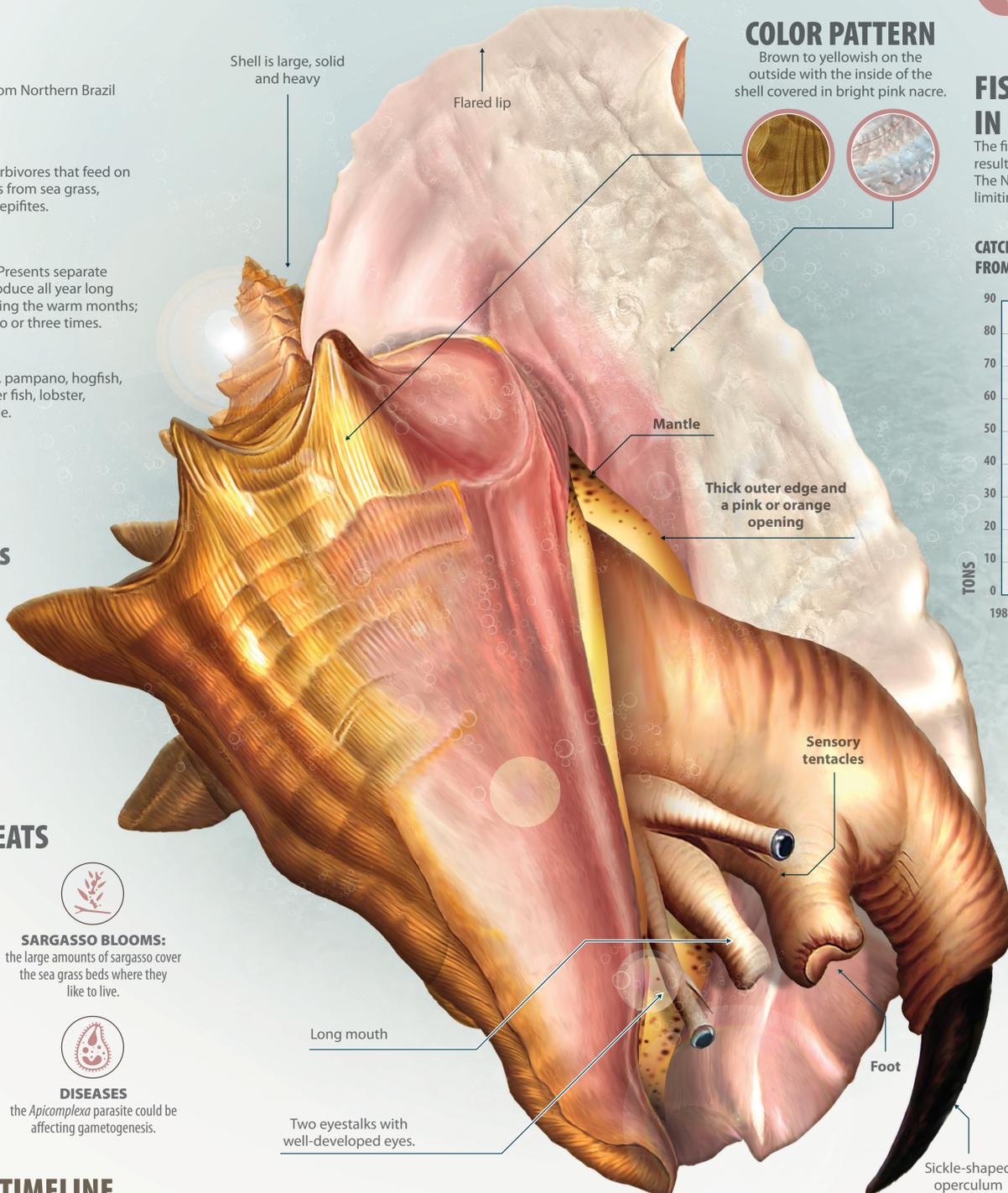


Average size:
30 cm shell's total length
21 cm length at which it reaches sexual maturity.

Average weight:
3-5 kg
Average life span:
6 years

COLOR PATTERN

Brown to yellowish on the outside with the inside of the shell covered in bright pink nacre.



ECOLOGICAL IMPORTANCE

- In places like the Bahamas, Puerto Rico and Florida it is considered a flagship species.
- They help keep algae growth and coverage under control.
- It is a food source for other species.
- It provides habitat and refuge to the Conchfish (*Astropogon stellatus*).

FISHERIES LANDINGS IN MEXICO

The fishing dynamic and the unregulated fishing effort resulted in a sharp decrease in annual landings since 1981. The NOM-013-PESC, published in 2016, regulates fishing by limiting it to free diving and reserving it to artisanal fishers.

CATCH QUOTAS AUTHORIZED FOR QUEEN CONCH FROM 1987 - 2022.



3 fishing cooperatives own fishing concessions for this species.

350 tons of pulp is the maximum production estimated for the 1970s.

May 1st - November 30
Period in which the fishery closes and is restricted to the Banco Chinchorro Biosphere Reserve.

20 cm Minimum allowable size of siphon in the fishery.

CREDITS:

