Rachycentron canadum (Cobia or Black Kingfish)

Family: Rachycentridae (Cobia)
Order: Perciformes (Perch and Allied Fish)
Class: Actinopterygii (Ray-finned Fish)

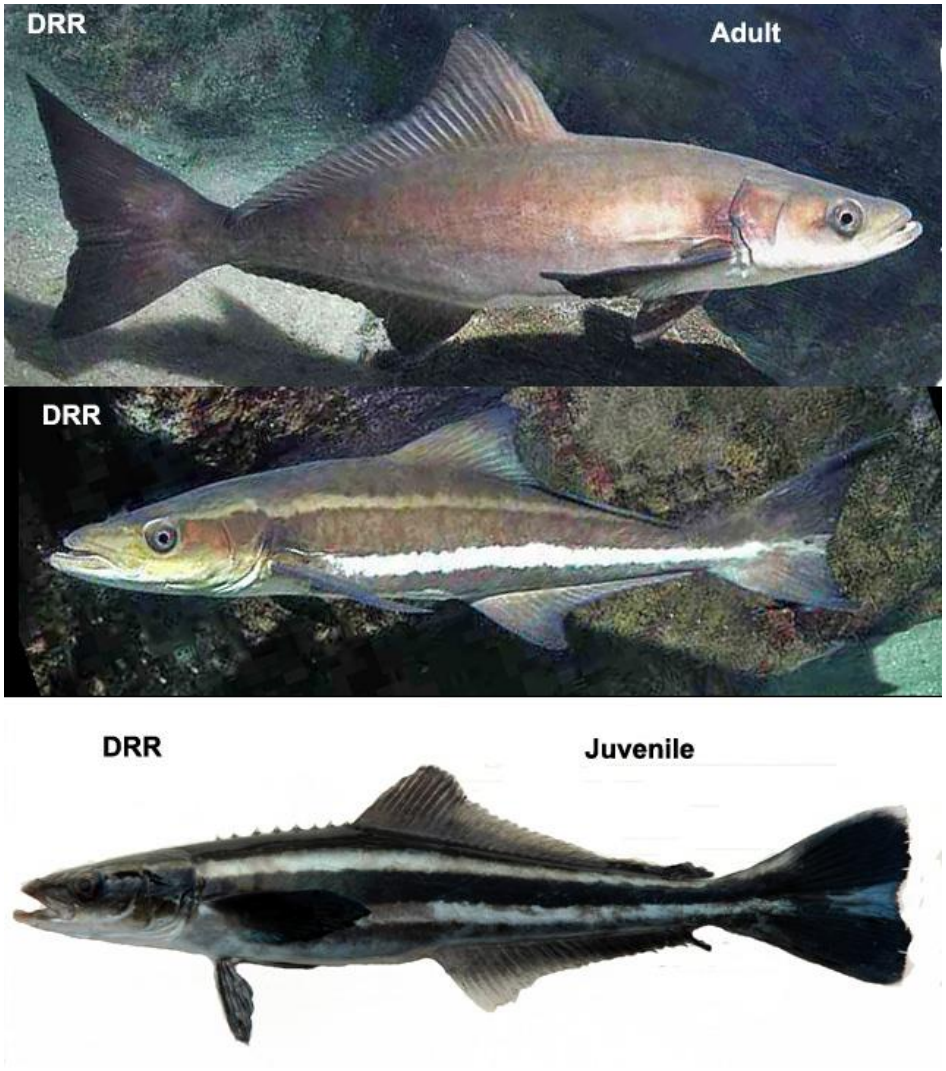

Fig. 1. Cobia, *Rachycentron canadum*.

[https://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=2987, downloaded 27 October 2016]

TRAITS. The cobia or black kingfish is the only member of the family Rachycentridae. Characteristic features include an elongate dark brown body with two silver stripes on its side, and a flattened head (Coelho and Coriolano, 2012). Young cobia have noticeable dark bands which fade as they reach adulthood (Fig. 1). The cobia can grow up to 200cm in length but its size generally ranges from 50-120cm; average weight is around 23kg, with the highest recorded weight being 61kg (FLMNH, 2016). There is a single dorsal fin with 7-9 spines and 23-31 soft-

rays, anal fin with 2-3 spines and 22-28 soft-rays (FishBase, 2016). The cobia also has small eyes, a broad snout, the lower jaw is longer than the upper jaw, and both jaws and the roof of the mouth have villiform (brush-like) teeth. The skin appears smooth and has very small scales (FLMNH, 2016).

DISTRIBUTION. Widespread around the world in waters that are tropical and sub-tropical. Its range includes all oceans apart from the central and eastern Pacific Ocean (Fig. 2). Migration to warmer areas occurs when the water becomes colder due to shifting of seasons (FLMNH, 2016). Native to many places including Trinidad and Tobago (FishBase, 2016).

HABITAT AND ECOLOGY. The cobia lives in the open ocean but can also be found in habitats such as coral and rocky reefs and estuaries (IUCN, 2015). Temperature lived in ranges from 17-32°C, at depths of 50-1200m (USGS, 2016). They grow quickly and have lifespans varying with location. For example, males live up to 9 years while females live up to 11 years in the Gulf of Mexico, while off North Carolina lifespans extend to 14 and 13 years for males and females respectively. The cobia is carnivorous and usually feeds on the ocean floor, on crabs, fish and squid (IUCN, 2015); they are fast and aggressive predators (Coelho and Coriolano, 2012). Juveniles mostly feed on nekton (swimming animals larger than plankton) (FishBase, 2016).

REPRODUCTION. Cobia are egg-laying; eggs and sperm are released into open water where fertilisation takes place. Spawning occurs in different months depending on the geographical location: June-August in the Atlantic Ocean and April-September in the Gulf of Mexico. It takes place every 9-12 days, during the day, at least 15-20 times each season (FLMNH, 2016). After 1-3 days larvae around 2.5mm long are released from the fertilised eggs. After 5 days, larvae have developed eyes and mouth and then feed actively.

BEHAVIOUR. Cobia are most likely to be seen living in small groups (Fig. 3) or swimming along with other animals such as manta rays (Ulanski, 2011) (Fig. 4). Little information is known about predators of cobia, but they are prey to larger pelagic fish (FLMNH, 2016), and the juveniles tend to hide from predators between sea plants (FAO, 2016).

APPLIED BIOLOGY. Cobia is sold for consumption and is a fish commonly caught by recreational fishers. The fish can however be dangerous to the recreational fishers as it has great strength and stout sharp dorsal spines. It is widely used in aquaculture as it has a fast growth rate and is of good quality (FAO, 2016). It is not endangered according to the IUCN Red List (IUCN, 2015).

REFERENCES

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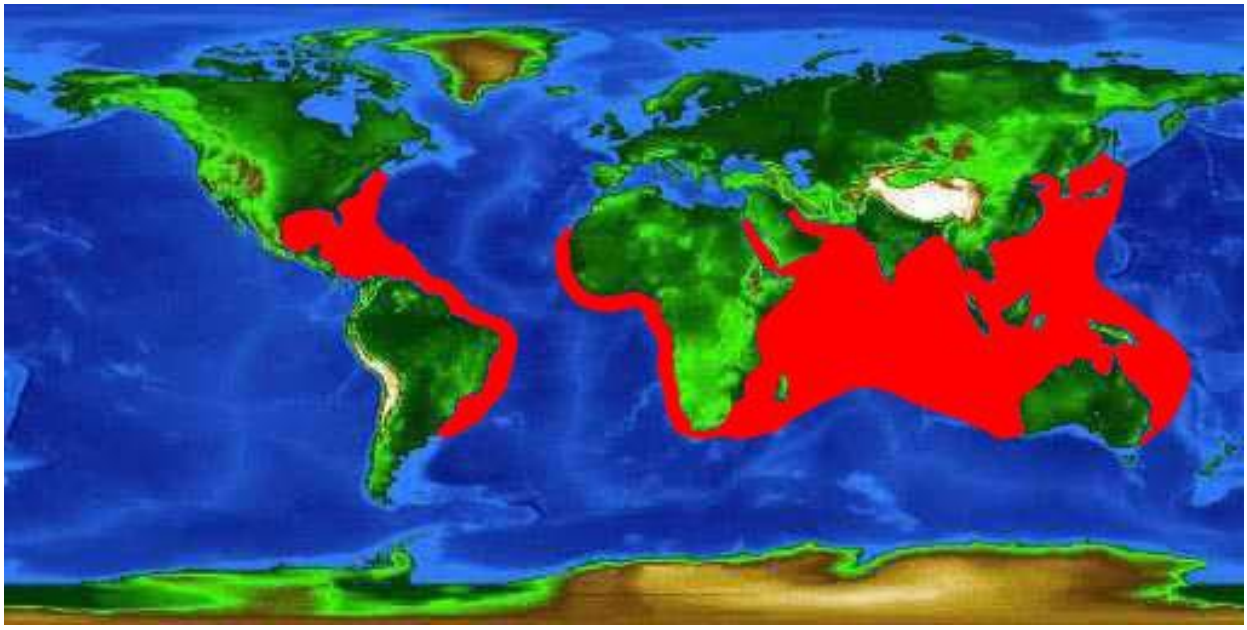

Fig. 2. Map showing the distribution of cobia throughout the world.

[https://www.flmnh.ufl.edu/fish/discover/species-profiles/rachycentron-canadum, downloaded 29 September 2016]

Fig. 3. Schooling behaviour of cobia.

[http://www.seapics.com, downloaded 29 September 2016]

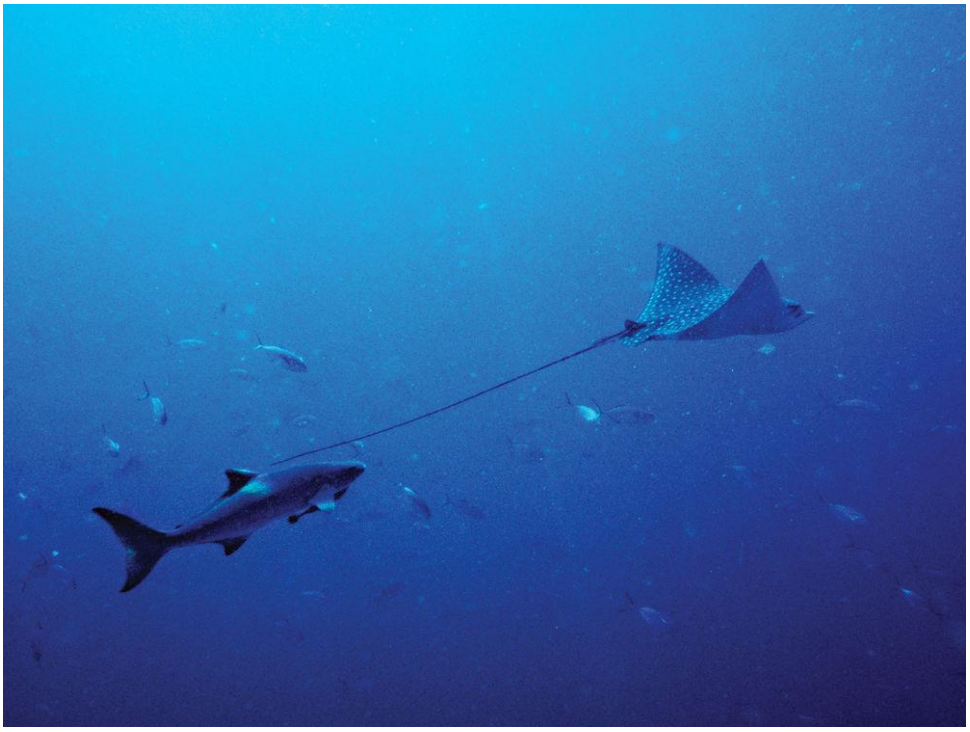

Fig. 4. Cobia following manta ray.

[http://www.saltwatersportsman.com/year-round-florida-cobia, downloaded 29 September 2016]