

UK Overseas Territories Conservation Forum

Championing UK's most special species: the wildlife of UK's Overseas Territories (UKOTs) and Crown Dependencies (CDs)

FACT-SHEET ON:

Nassau Grouper *Epinephelus striatus* UK Overseas Territory: Cayman Islands

Nassau Groupers, one of the largest fish species found around coral-reefs, can grow to over 1m in length and up to 25kg in weight. Their colour patterns vary and are thought to depend on an individual fish's circumstances and environment. Their characteristic large mouths enable them to 'inhale' their prey, which consists of fish and crustaceans found on the reef. They spawn in December and January, around the full moon. Huge numbers of Groupers cluster together to mate in mass spawning. One of the most spectacular takes place at the Cayman Islands, a UK Overseas Territory.

Importance: Nassau Groupers are important top predators. By keeping other animals on the reef in check, they prevent overpopulation of certain organisms on the reef and so directly contribute towards the overall health of the coral-reef ecosystem. Historically, they have also been a significant commercial fish species.



Above: Nassau Grouper, © Cayman Compass. Below: Nassau Groupers gather in 2018 at a site off the coast of Little Cayman for their annual spawning aggregation. Screengrab from video by Berkley White, supplied by Cayman Department of Environment



Ecosystem: They are an important part of the coral-reef ecosystem. They can be found from the shoreline to a depth of 100m. Their distribution ranges across the Atlantic Ocean from as far north as Bermuda to southern Brazil.

Threats: Overfishing has led to the species being listed as Critically Endangered on the IUCN Red list. They are slow breeders and have a high attachment to spawning sites. This can make them a target for fishermen who may take reproductively mature adults (as well as undersized/immature Groupers). Habitat-loss, pollution and alien invasive species also threaten them.

Needs: Closed seasons, when fishing is not permitted, are needed to protect the species. Protection of spawning sites through legislation, which then needs to be enforced, could also halt the decline. After hugely excesive catching in 2001-3, the Cayman Islands made a start on this in 2003 by closing to fishing certain areas during the winter spawning. This, together with marine protected areas, was followed by a tripling of the population around Little Cayman Islands reinforced these measures by size- and catch-limits and a total fishing ban for this species from December to April.