

Researchers monitor 'Grouper Moon' spawning

By **Carolina Lopez** - February 20, 2020

Researchers from Cayman's Department of Environment and the Reef Environmental Education Foundation reported encouraging initial findings from the annual Nassau grouper aggregation in the Sister Islands.

The DoE said the researchers, in their preliminary estimates, recorded 8,000 Nassau groupers in Little Cayman and 3,000 in Cayman Brac during last week's surveys.

The grouper spawning took place in Little Cayman on 13-15 Feb., when DoE and REEF scientists were on hand to collect data. They were also in Cayman Brac on 12-13 Feb. to observe the population during daytime dives.

Last year, the DoE and REEF scientists annual 'Grouper Moon' research project, that involves monitoring and tagging the species spawning, counted more than 7,000 groupers in Little Cayman and Cayman Brac waters.

The project is a conservation effort between the DoE and REEF aimed at studying the Nassau grouper, and is the Caribbean's oldest continuous grouper-spawning aggregation research programme.

The findings from last week's Grouper Moon aggregation seem to confirm data published by REEF last month that showed that the Nassau grouper population in the Sister Islands, which was once dangerously low, is recovering. The REEF study highlighted how the annual aggregation of Nassau groupers in Little Cayman is now the largest remaining identified aggregation of this species in the world.

Spawning takes place at specific aggregation sites during the week of a full moon each year, giving the project its 'Grouper Moon' name.

The Nassau grouper was classified last year as critically endangered by the International Union for Conservation of Nature.

DoE senior marine officer Croy McCoy said the spawning went "brilliantly" this year.

"There were lots of smaller groupers joining in that have reached reproductive age, which is a positive sign of a healthy, growing population and that the management strategies implemented are working," McCoy said.

He added that the numbers at both aggregation sites appear to be up by at least 1,000 fish.

“With these numbers, it’s pretty clear that both aggregations have grown considerably over the last few years, indicating continued strong recovery of the Nassau grouper aggregations on both Little Cayman and Cayman Brac,” McCoy said.

He explained that the spawning in Little Cayman began four days after the full moon (9 Feb.).

“This year was interesting in terms of fish behaviour because it appeared that two separate groups of Nassau grouper on the west end of Little Cayman formed different aggregations, separated by a few hundred metres. As in years past, we looked for evidence of spawning on the east end of Little Cayman, where Nassau groupers have historically spawned. We found none,” McCoy said.

In addition to the higher number of groupers the scientists found, McCoy said other interesting details emerged from their survey.

“This year was the first year we saw a large number of yellowfin grouper spawning immediately following Nassau grouper spawning at the same site. This is yet more evidence of the importance of our fish aggregation sites in the Cayman Islands for many fish species,” McCoy said.

The researchers also did a “proof of concept” project using active acoustics, collaborating with the National Oceanic and Atmospheric Administration, as well as SIMRAD, which manufactures fish-finding equipment, to finetune a cost-effective means of using acoustic technology to improve spawning biomass (fish abundance) estimates of the Nassau grouper population in Little Cayman and Cayman Brac.

“Next year we hope to use that technology in Grand Cayman to get a firm grip on grouper populations on that island as the fish spawning aggregation site is below safe SCUBA diving limits (150-180 feet),” McCoy said.

In the Little Cayman site specifically, McCoy said it was encouraging to see how the ocean system is working as a whole.

“We saw lots of sharks this year at the Little Cayman spawning aggregation site, a very encouraging sign that the whole system is responding in a positive way,” McCoy said.

Grouper fishing season

To help combat overfishing, which has decimated the grouper population in some Caribbean locations, Cayman operates an open and closed season for Nassau grouper fishing. The season is currently closed until 30 April.

“It is important that people remember the current fishing restrictions on Nassau grouper are in place from December 1-April 30,” a DoE spokesman said.

“During the closed season, anyone who takes, purchases, receives, offers for sale, exchanges or donates Nassau grouper commits an offence under the National Conservation Law. In addition, anyone who possesses or permits another person to take Nassau grouper (*Epinephelus striatus*) from Cayman waters commits an offence.”

The Nassau grouper is a protected species under the National Conservation Law.

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