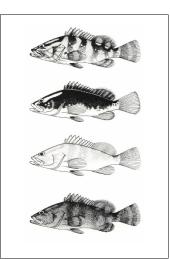
Information Circular No 8: The Belize Spawning Aggregation Working Group

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Shown at right, from top to bottom: Four color-phase changes of the Nassau Grouper, *Epinephelus striatus* – Barred, Bicolor, White belly, Dark



Update for the 2010 Nassau Grouper Spawning Season

This is the eighth year that Working Group members have monitored the spawning aggregation sites and reported on the maximum counts of Nassau grouper. During the 2010 season, however, only four of the seven selected sites were monitored. This was primarily due to a shortage of funds to cover monitoring costs. The table below shows that the Dog Flea Caye site has not been surveyed properly since 2004. With the active participation of the Environmental Research Institute of the University of Belize on the Spawning Aggregation Working Group, however, this site is expected to be surveyed during the 2011 spawning season.

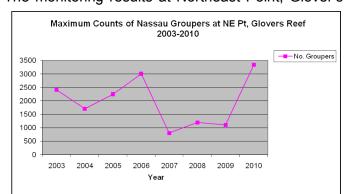
Maximum Nassau Grouper Counts for 2003 - 2010

maximam Nacoda Crouper Counter for 2000 2010								
Site	2003	2004	2005	2006	2007	2008	2009	2010
Rocky Point	0	200	200	0 1	N/A	0	N/A	N/A
Dog Flea Caye, Turneffe	1,500	100 ³	-	2 ²	N/A	N/A	N/A	N/A
Sandbore, Lighthouse	1,800	2,500	1,800	1,205 4	1,495	1,250	2,050	2,000
Caye Glory	1,000	1,000	350	7 ⁵	69	405	3,000	N/A
NE Pt., Glover's	2,400	1,700	2,240	3,000	800	1190	1,100	3,328
Gladden Spit	250	450	360	239 ⁶	255 ⁶	350	260	238
Nicholas Caye	52	~50	80	48	80	100	25	30

^{(&}lt;sup>1</sup>Only one dive; ² Site only monitored in February; ³ Site only monitored in January; ⁴ Probably missed peak spawning due to bad weather; ⁵ Different dive team used and precise location in question; ⁶ One dive, after the last quarter moon)

Good News from NE Point, Glover's Reef

The monitoring results at Northeast Point, Glover's Reef in 2010 were very encouraging. This site is



monitored by the Wildlife Conservation Society in partnership with the marine reserve staff of the Fisheries Dept. The maximum count, recorded in February, 3,328 Nassau groupers, representing a three-fold increase compared to the highest count during the 2008/2009 season, and the highest count since monitoring started in 2003 (see graph). Spawning was observed during the surveys, demonstrating that the population is probably reproducing successfully. Special enforcement patrols have conducted at the site over the past four years.

New Management for Maugre Caye and Northern Two Caye Spawning Sites

Since the protection of 11 spawning aggregation sites and a four-month closed season for the Nassau grouper were introduced in 2003, fishermen have continued to fish for Nassau groupers at two spawning sites, Maugre Cave on Turneffe, and Northern Two Caye on Lighthouse Reef. This was permitted under a system of special licenses issued to a few elderly fishermen who traditionally fished these sites for decades. This system, however, meant that a 'closed season' for the Nassau grouper was never truly in effect and the exception to the rule made enforcement very difficult.

Over the past several years, many fishermen have expressed their concern about these two spawning sites being fished during the spawning season. During a recent series of consultations held by the Fisheries Department. fishers again strongly stated that these sites should be permanently closed to fishing during the Nassau grouper closed season. As a result of this response. and the strona recommendation of the Working Group, the Department has decided that fishing for Nassau grouper will no longer be permitted at Maugre Caye and Northern Two Caye during the closed season. The few fishers who had been given special licenses in the past have been informed of this change. In addition, the practice of issuing special licenses for fishing in the Caye Bokel and Dog Flea marine reserves will be discontinued, and these two sites will be fully protected, as provided for by law.

The Working Group is hopeful that the Maugre Caye and Northern Two Caye sites will be declared fully protected marine reserves like the other 11 spawning sites.

New Educational Material on Fisheries Regulations

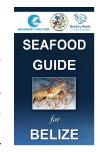
Conservation International, CI/MMAS Science to Action project, Fisheries Dept., SeaWiffs, and Healthy Reefs Initiative have jointly produced a fisheries regulations guide and a seafood card.



The colourful guide is a comprehensive, bi-lingual, user-friendly, water-proof publication designed to remind fishers of the regulations for closed seasons and size limits for commercial species such as lobster, conch, and grouper, as well as specifying prohibited activities within marine

reserves. It highlights the recent law to protect parrotfish and other grazers, stressing the importance of these species. The guide clearly specifies which marine species are protected and cannot be fished or collected, such as turtles, bonefish, tarpon and corals. The seafood

card for Belize was designed with both locals and visitors in mind. Globally as well as locally, seafood species are rapidly disappearing. Consumers can make a difference with every meal if they know all the Belize Fisheries Laws. The pocket card guide was designed for



convenience, to carry in your wallet or purse to help you make the right decisions everyday when it comes to local seafood. Fishermen can obtain the regulations guide at the Fisheries Dept. and the seafood card is available through your local NGO and the Fisheries Dept. Copies can also be downloaded from the Spawning Aggregation Working Group web site (see below).

If you would like more information about the Nassau Grouper, the Belize Spawning Aggregation Working Group, or anything mentioned in this newsletter, please contact Dr. Leandra Cho-Ricketts, Chairperson, Spawning Aggregation Working Group at the Environmental Research Institute, University of Belize.

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