



1 December 2024

Mr. Carlos Farchette
Chairman, Caribbean Fisheries Management Council
270 Muñoz Rivera Ave., Suite 401
San Juan, Puerto Rico 00918

Re: Extending the Grammanik Bank seasonal closure from January 1 - May 15

Dear Mr. Farchette,

We respectfully submit this letter for consideration by the Caribbean Fisheries Management Council for modifying the closed season for the Grammanik Bank to enhance protections for the endangered Nassau grouper.

In February 2004 the University of Virgin Islands' Center for Marine and Environmental Studies (CMES) submitted a formal request for an immediate emergency action to protect a multi-species spawning aggregation site for grouper and snapper, including a small number of endangered Nassau grouper (*Epinephelus striatus*). The Grammanik Bank Seasonal closed area was established in 2006 and protected a small 1.5 km² mesophotic reef from February 1 to April 30 (Federal Register 70:208, Oct. 2005, p. 62081). Since that time the number of Nassau grouper aggregating at the Grammanik Bank has increased from 30 fish in 2004 to over 1000 in 2024 (R. Nemeth, unpublished data).

Despite the success in increasing their spawning population over a 20-year period, the Nassau grouper is still critically endangered and highly susceptible to fishery bycatch in and around the Grammanik Bank. Several scientific papers provide evidence that the Nassau grouper spawning season starts as early as January and continues into May (Rowell et al. 2015, Nemeth et al. 2023) (Figure 1). This has been especially evident in recent years where Nassau grouper seem to be shifting their spawning season earlier in the year, with peak numbers occurring in January (Figure 2).

Nemeth RS, E Kadison, J Jossart, M Shivji, BM Wetherbee, J Matley (2023) Acoustic telemetry provides insights for improving spatial and temporal management at a spawning aggregation site of the endangered Nassau grouper (*Epinephelus striatus*). *Frontiers in Marine Science: Marine Conservation and Sustainability*: 10 – 2023, <https://doi.org/10.3389/fmars.2023.1154689>

Rowell TJ, RS Nemeth, RS Appeldoorn, MT Schärer (2015) Fish sound production and acoustic telemetry reveal behaviors and spatial patterns associated with spawning aggregations of two Caribbean groupers. *Marine Ecology Progress Series*. 518: 239-254





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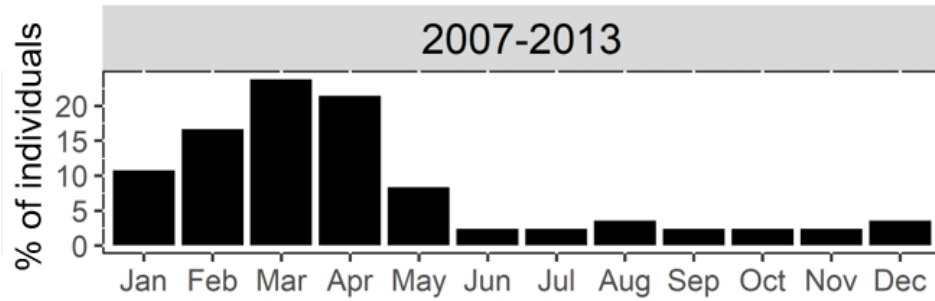


Figure 1. Summary of acoustic telemetry detections of tagged Nassau grouper (n=26) on the Grammanik Bank from 2007 to 2013 (modified from Figure 2 in Nemeth et al. 2023)

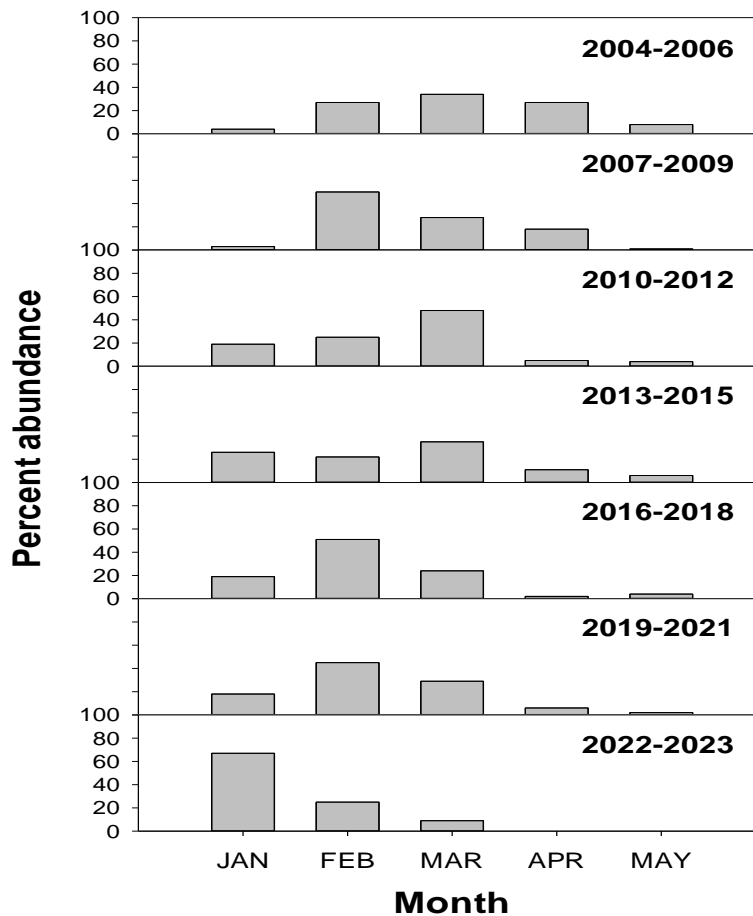


Figure 2. Percent mean abundance of Nassau grouper counted on underwater visual surveys from 2004 to 2023 (from presentation by Nemeth et al. 2023 Gulf and Caribbean Fisheries Institute, Nassau Bahamas, November 2023)





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Nassau grouper is protected in both federal and Virgin Islands territorial waters, but they are still very vulnerable as bycatch because fishing is allowed on the Grammanik Bank in January and May. This can cause unintended mortality from fish being brought up from depth, and fishing on the spawning site can disrupt important courtship behaviors, thus reducing reproductive success. For example, in January 2024, multiple boats were observed fishing on the Grammanik Bank daily during the week after the full moon. During the same time period, we conducted visual surveys and documented over 1000 fish per dive. At present there is no prohibition to fishing the Grammanik Bank in January, and no enforcement to ensure that Nassau grouper is not harvested. These data and observations emphasize the urgency for action to modify existing Grammanik Bank regulations.

The most impactful change to continue the positive population trend of Nassau grouper is enhanced protection during its spawning season. **We recommend modifying the seasonal closure for the Grammanik Bank to extend from January 1 to May 15 each year.** Other priority management recommendations concerning the boundaries of the Grammanik Bank can be found in Nemeth et al. (2023). Previous management regulations have made significant contributions to facilitating the recovery of the Nassau grouper in the US Virgin Islands. Adapting management actions as new information becomes available is essential for continued success. We look forward to your favorable consideration in this matter.

Sincerely

Handwritten signature of Richard S. Nemeth in blue ink.

Richard S. Nemeth PhD
Research Professor, CMES

Handwritten signature of Elizabeth Kadison in black ink.

Elizabeth Kadison MS
Research Associate, CMES

CC: Mr. Andrew Strelcheck (andy.strelcheck@noaa.gov), Regional Administrator NMFS; Dr. Nicole Angeli, (nicole.angeli@dpr.vi.gov), Director, Division of F&W, USVI-DPR; Mr. Red Bailey (redbailey11@gmail.com), Chair, St. Thomas/St. John FAC.

