

Threatened fishes of the world: *Epinephelus striatus* (Bloch, 1792) (Serranidae)

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Common name: Nassau grouper. **Taxonomy:** Groupers (*Epinephelus*, *Mycteroperca*, etc.) will likely move to the newly resurrected Family Epinephelidae based on Smith and Craig (2007). **Conservation status:** Listed as *endangered* (A2ad) by IUCN, *threatened* in US and Mexico by AFS, a *species of concern* by NMFS, and *overfished* by the CFMC, SAFMC and GMFMC (Sadovy and Eklund 1999; Musick et al. 2000; Cornish and Eklund 2003). **Identification:** Typically has buff ground color, with 5 dark bars, black saddle at caudal peduncle, row of black spots below/behind eye, dark “tuning fork” mark from upper jaw to top of head (Fig. 1a). May rapidly assume one of three alternate color phases including bicolored (Fig. 1b), white-bellied, and dark. Max length, 122 cm TL; max weight, 23–27 kg. GR, 8–9+15–17; D, XI+16–18; A, III+8; P, 17–19 (Heemstra and Randall 1993; Sadovy and Eklund 1999). **Distribution:** Bermuda, Florida, Bahamas, Yucatan, throughout Caribbean,

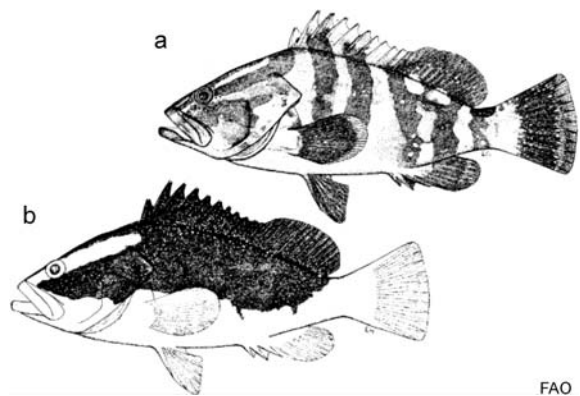


Fig. 1 Typical coloration (a) and bicolor pattern (b) (modified from Heemstra and Randall 1993)

rare/transient in Gulf of Mexico. **Habitat and ecology:** Shallow (0–130 m), insular, clear waters with coral, rocky, or artificial substrate. Juveniles inhabit back-reef macroalgae, coral, and seagrass beds. Generalist, benthic predators of fishes, crustaceans and mollusks. Predators include conspecifics, sharks, and barracuda. **Reproduction:** Gonochoristic with potential for sex change (Sadovy and Colin 1995). Max life span ca. 29 yrs. Sexual maturation at 4+ yrs. Forms large (tens of thousands of individuals) annual spawning aggregations at specific times/locations (Smith 1972). **Threats:** Historically common and important fisheries species. Severe declines across range due to overfishing, especially on spawning aggregations (Sadovy and Eklund 1999).

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Conservation action: Landings prohibited in U.S. Elsewhere, gear and size restrictions and/or protection for spawning aggregations, with varying degrees of success. *Conservation recommendations:* Range-wide prohibition of fishing on spawning aggregations and take of juveniles. Implementation of network of no-take marine reserves protecting adult and juvenile habitats, especially in the vicinity of current and historical spawning aggregation sites.

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