

ENDOHELMINTHS OF A SNAKE MACKEREL, *GEMPYLUS SERPENS* (TRICHIUROIDEA: GEMPYLIDAE), FROM THE GULF OF MEXICO

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ABSTRACT: Endohelminths are reported from a female snake mackerel, *Gempylus serpens* (Trichiuroidea: Gempylidae), captured from a depth of 61 m in the Gulf of Mexico 140 km south of the mouth of Mobile Bay, AL, in August 1998. A diverse endohelminth parasite fauna was found: 29 plerocercoid type I tetraphyllideans from the lower intestine; 4 didymozoid metacercariae allocated to the collective group *Monilicaecum* and one didymozoid metacercaria of the collective group *Torticaecum* from the pyloric cecum; one juvenile *Gonocerca phycidis* from the stomach; and 5 larvae (L3 stage) comprising 3 species of *Anisakis* from the pyloric cecum. These nematodes were identified as species of *Anisakis* due to the presence of an oblong ventriculus lacking an appendix, no intestinal cecum or interlabia, 3 lips with dentigerous ridges, and an excretory pore located between the lateroventral lips. Differences in overall size and in the lengths of the ventriculus and esophagus in relation to total body length were used to distinguish the 3 species of *Anisakis* collected. Seven specimens of a possibly unnamed species of parasitic copepod representing *Bomolochus* infected the gill chamber. Stomach contents included 6 early-juvenile flatfish (Pleuronectiformes). All of the helminths are measured and illustrated, and for some of the parasites recovered, we are unaware of any reports from this host species.

RECRUITMENT AND COLONIZATION OF MACROALGAE TO A NEWLY CONSTRUCTED ROCKY INTERTIDAL HABITAT IN THE NORTHWEST GULF OF MEXICO

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ABSTRACT: Marine macroalgal assemblages on artificial structures play an important ecological role in coastal and estuarine ecosystems and may supplement natural communities in nearby waters. The rocky jetties of Packery Channel, located near Corpus Christi, Texas represent a recent addition of hard structure for colonization in the northwest Gulf of Mexico. The purpose of this research was to monitor the initial immigration of macroalgal species during the first year of colonization and determine the effects of wave energy on recruitment. Ten sampling sites were established along the offshore portion of the new Packery Channel jetties. Samples were taken bimonthly from along a 10 m transect between September 2006 and July 2007, with quadrats (20 x 30 cm) sampled every meter by destructive harvesting techniques. Biomass data obtained from this study assess composition and establish a timeline for algal recruitment. Within the first year macroalgal richness was found to be 40 species. Multivariate analyses show strong linkages between rate of recruitment and site location. Sites with the highest level of wave energy exhibited significantly increased biomass and simultaneous decreased richness values, indicating recruitment is affected by wave energy at a microhabitat scale.

DO SMALL, PATCHY, CONSTRUCTED INTERTIDAL OYSTER REEFS REDUCE SALT MARSH EROSION AS WELL AS NATURAL REEFS?

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ABSTRACT: One ecological service that oyster reefs provide is stabilization of shorelines through reduced wave energy and erosion from boat traffic, storms, and predominant wind direction. Additionally, increasing sedimentation can enhance the growth of emergent marsh vegetation which further stabilizes unconsolidated sediments. A 21 mo study of constructed (with only 30-35% coverage) and natural oyster reefs in 3 bayous in the Grand Bay National Estuarine Research Reserve (NERR) suggested constructed reefs benefit this retrograding deltaic ecosystem. The marsh edge adjacent to all constructed reefs was less eroded (mean = 0.043 m) than edges adjacent to natural reefs (mean = 0.728 m), although all natural and constructed sites, regardless of bayou, illustrated large variations in marsh edge growth. The marsh edge in constructed sites in one bayou retreated more than in the other bayous, most likely due to its coarser sediments, greater boat traffic, and its apparent higher energy location within the landscape. By the end of this study, the ecological function of constructed oyster reefs in all bayous, as measured by marsh edge erosion reduction, was equivalent or exceeded the function in nearby natural oyster reefs. The physical structure of the reef further served to reduce erosion and marsh loss and this approach may be useful for management of a retrograding deltaic estuarine ecosystem like the Grand Bay NERR.

OBSERVATIONS ON THE KALLIAPSEUDID TANAIDACEA (CRUSTACEA: MALACOSTRACA: PERACARIDA) FROM THE NORTHWESTERN ATLANTIC, WITH AN ILLUSTRATED KEY TO THE SPECIES

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ABSTRACT: New information for the kalliapseudid Tanaidacea occurring in the northwestern Atlantic is presented and discussed, including data on range extensions and new depth ranges for 4 species. The taxa studied came from the shelf and coastal waters of the southeastern United States, Puerto Rico and Trinidad. The occurrence of *Mesokalliapseudes bahamensis* Sieg is extended from the Bahamas and Belize to the coastal waters of East and Gulf coasts (South Carolina to West Florida). The range of *Psammokalliapseudes granulatus* Brum is expanded northward into the eastern Gulf of Mexico and new locality records for this species are established for Tobago and Puerto Rico. *Mesokalliapseudes brasiliensis* (Băcescu), previously known from the southwestern Atlantic off Brazil, is reported from the coastal waters off Trinidad. The range of *Tanapseudes gutui* Hansknecht, Heard, and Bamber is expanded northward into the eastern Gulf of Mexico. New depth ranges are established for *Alokalliapseudes macsweenyi* (Drumm) (82 m), *M. bahamensis* (52 m), *P. granulatus* (53 m), and *T. gutui* (82 m). An offshore form of *A. macsweenyi* occurs at depths ranging from 10-82 m on the inner and mid continental shelf off the west coast of Florida (Gulf of Mexico); it differs from the coastal form by the shape and dentition of the male and female chelipeds. Synonymies, diagnoses, life history remarks, and an illustrated key to the seven kalliapseudid species known from the NW Atlantic are presented.

OBSERVATIONS OF A BLACK GROUPER (*MYCTEROPERCA BONACI*) SPAWNING AGGREGATION IN BERMUDA

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ABSTRACT: Diving observations at a black grouper (*Mycteroperca bonaci*) spawning aggregation site on Bermuda's reef platform revealed many similarities to observations of this species obtained at multi-species spawning aggregation sites in Belize. In addition to similarities in body sizes, color patterns and some behavior, the principal spawning period in the days after the full moon was also similar. Although spawning was not observed in this study, there was ample indirect evidence of spawning at the site, i.e. courtship behavior by males, females with distended abdomens, and color changes. The formation of temporary spawning territories by males and courtship behavior within these territories is described and illustrated. Taken together, these data appear to indicate that the behavior of black grouper at spawning aggregations is consistent across a broad latitudinal range from Belize in the south to the northern limit of the species' range in Bermuda.

EVALUATING MANAGEMENT ACTIONS FOR SPOTTED SEATROUT, *CYNOSCION NEBULOSUS*, IN MISSISSIPPI WITH AN AGE-STRUCTURED PROJECTION MODEL

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ABSTRACT: Spotted seatrout, *Cynoscion nebulosus*, is an important recreational fishery in the coastal waters of the Gulf of Mexico and is the most sought after gamefish in coastal Mississippi. The management of *C. nebulosus* is state-specific, and unlike other similarly managed species, data on both population structure and movement support the existence of local sub-stocks. It is important for each state to clearly examine its own sub-stock in the context of its own state fishery in order to properly manage for local sustainability. We used an age-structured assessment model to examine the status (1993–2005) of the Mississippi *C. nebulosus* population and to project forward several probable management actions (i.e., length limits) while also accounting for uncertainty in both fishing mortality and annual recruitment. Model results suggest annual fishing mortality for Mississippi *C. nebulosus* is close to F_{msy} , but that spawning stock biomass (SSB) is not below SSB_{msy} . This suggests the sub-stock is currently stable, but with high fishing pressure and a high dependence on annual recruitment to the fishery. Projections suggest that when uncertainty in angler effort and annual recruitment are included in the analysis, more conservative management actions are warranted in order to achieve both higher fishery yield and stable SSB.

SHORT COMMUNICATION

**EFFECTS OF HURRICANE KATRINA ON AN INCIPIENT
POPULATION OF GIANT SALVINIA *SALVINIA MOLESTA*
IN THE LOWER PASCAGOULA RIVER, MISSISSIPPI**

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SHORT COMMUNICATION

NOTES ON THE BIOLOGY OF AN ADULT FEMALE *CHIMAERA CUBANA* CAPTURED OFF ST. CROIX, U.S. VIRGIN ISLANDS

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SHORT COMMUNICATION

**GROWTH PATTERNS OF SHOAL GRASS *HALODULE WRIGHTII*
AND MANATEE GRASS *SYRINGODIUM FILIFORME* IN THE
WESTERN GULF OF MEXICO**

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