Gulf and Caribbean Research

Volume 19 | Issue 2

January 2007

Large Pelagic Fishes in the Caribbean Sea and the Gulf of Mexico: Current Status and Integrated Management

Mark S. Peterson

University of Southern Mississippi, mark.peterson@usm.edu

Nancy J. Brown-Peterson

University of Southern Mississippi, nancy.brown-peterson@usm.edu

James S. Franks

University of Southern Mississippi, jim.franks@usm.edu

Follow this and additional works at: <https://aquila.usm.edu/gcr>

Part of the [Marine Biology Commons](#)

Recommended Citation

Peterson, M. S., N. J. Brown-Peterson and J. S. Franks. 2007. Large Pelagic Fishes in the Caribbean Sea and the Gulf of Mexico: Current Status and Integrated Management. *Gulf and Caribbean Research* 19 (2): 1-3.

Retrieved from <https://aquila.usm.edu/gcr/vol19/iss2/1>

DOI: <https://doi.org/10.18785/gcr.1902.01>

This Editorial is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in *Gulf and Caribbean Research* by an authorized editor of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.

EDITORIAL COMMENTS

LARGE PELAGIC FISHES IN THE CARIBBEAN SEA AND GULF OF MEXICO: CURRENT STATUS AND INTEGRATED MANAGEMENT

A Symposium Convened on 7 November 2006 in conjunction with the 59th Annual meeting of the Gulf and Caribbean Fisheries Institute in Belize City, Belize.

Large pelagic fishes migrate throughout the Gulf of Mexico and Caribbean Sea and are widely harvested in commercial and recreational fisheries within the region. If overexploitation of the stocks of these transboundary species and the resulting negative impacts on fishers and user groups dependent upon them are to be avoided, sustainable utilization of large pelagics must be based on collaboration among countries in the context of regional management that is compatible with and functional within the existing management regimes. Fisheries management organizations are making some progress in addressing critical large pelagic fishery issues through various management initiatives, planning efforts, fishery management plans, and, in some instances, actual implementation of regulations (Mahon and McConney 2004, NMFS 2006). Regulation of large pelagic fishes that move across national boundaries is difficult and requires improved understanding of their biology and ecology in support of regional fisheries development and management. However, the development of management strategies to ensure the region-wide sustainability of large pelagic fish, fisheries, and user groups in the Gulf of Mexico and Caribbean Sea represents a complex process and requires input from fisheries scientists, resource managers and fishers.

The purpose of this symposium was to share current research on the biology and management of large pelagic fishes in the Caribbean Sea and Gulf of Mexico region and to develop a list of recommendations for future research and management of large pelagic fishes related to critical issues of regional concern. We wished 1) to initiate interactions and focused discussion among the GCFI participants on these vitally important issues through oral and poster presentations and a panel/audience discussion, 2) to produce a series of peer-reviewed papers on the current state of knowledge of large pelagic fishes in the Caribbean Sea and Gulf of Mexico, and 3) to allow the committee, based on these presentations and subsequent panel discussions, to develop a synthesis of critical issues of regional concern and the development of a list of recommendations pertaining to future research and management of large pelagic fishes in the region (Brown-Peterson et al., *this issue*). The symposium consisted of 2 keynote speakers (*B. Luckhurst*

and *E. Prince [for N. Thomspon]*), 3 invited theme speakers (*E. Prince, J. McDowell, and P. McConney*), and contributed oral and poster presentations. The Symposium Themes were 1) Fisheries Ecology, 2) Movements and Population Structure, and 3) Management: Strategies, Problems and Solutions. This Special Issue is organized around these 3 themes and comprised 45 total oral and poster presentations.

Papers presented under the Fisheries Ecology theme addressed a number of fundamental and applied topics ranging from basic reproduction (Arocha, *this issue*), abundance and distribution (Cortes et al., Fulling et al., *this issue*) to feeding behavior (Hoffmayer et al., *this issue*) and influences of hypoxia on habitat use (Prince and Goodyear, *this issue*). Papers presented under the Movements and Population Structure theme addressed both short-term (Loefer et al., Kraus and Rooker, *this issue*) and long-term (Luckhurst, *this issue*) movements of large pelagic fishes as well as a detailed analysis of the population structure of blue marlin (McDowell et al., *this issue*). Papers presented under the Management: Strategies, Problems and Solutions theme were diverse and ranged from local island fishing culture (Grant et al., *this issue*), description of a large-scale pelagic fish tagging study (Singh-Renton and Renton, *this issue*), and an overview of the US large pelagic fisheries (Thompson and Prince, *this issue*), to the changes in the fisheries catch in a Caribbean MPA (Castro et al., *this issue*), fishing mortality of sharks (Morgan and Burgess, *this issue*), eco-tourism of whale sharks (Graham, *this issue*) and an conceptual overview of management within the wider Caribbean Sea and Gulf of Mexico (McConney et al., *this issue*). Also included are the abstracts from papers presented in the symposium but not submitted for publication in this issue. Finally, the abstracts from other presentations given at the symposium are arranged by theme and presented at the end of this issue. Additionally, the abstracts from the peer-reviewed papers, as well as, full papers or abstracts of the other symposium presentations are also found in the 59th Proceedings of the Gulf and Caribbean Fisheries Institute.

Finally, in order to incorporate as many stakeholders as possible, we established a 5 member panel (*H. Oxenford,*