

Coberturas Subacuáticas de la Zona Marina Costera De Chabihau, Yucatán, México: Análisis de una Imagen Satelital TM del Año 1997

D. VERA-MANRIQUE, E. BATLLORI-SAMPEDRO,
E. MENDOZA, y G. AVILÉS

Laboratorio de Hidrobiología, CINVESTAV I.P.N. Unidad Mérida
Antigua carretera a Progreso km 6 S/N
Apdo. Postal 73, Cordemex, C.P. 97310
Mérida, Yucatán, México

Se realizó un estudio cualitativo y de distribución de las coberturas subacuáticas que conforman el fondo marino de la zona costera de Chabihau, Yucatán, México, a partir del registro visual de 24 estaciones y de la clasificación supervisada de una imagen de satélite Landsat TM (Thematic Mapper) del área de estudio, tomada en el año 1997. Fueron identificados seis coberturas diferentes: (1) cama de pastos de *Thalassia* sp, (2) cama de pastos de *Syringodium*, (3) pastos escasos de *Thalassia* sp, (4) Algas escasas, (5) Algas densas y (6) blanquizales. La cobertura predominante fue la cama de pastos de *Thalassia* sp, la cual representó el 31.49% del área total. Este trabajo constituye un esfuerzo complementario en la creación de un Sistema de información Geográfica (SIG) de la porción marina de esta área y forma parte de un estudio integral que pretende obtener el conocimiento básico que permita alcanzar un manejo sustentable de los recursos naturales de la región.

PALABRAS CLAVES: Ecología del paisaje, coberturas subacuáticas, manejo sustentable, percepción remota, Sistemas de información geográfica.

Subaquatic Covers in Marine Portion of the Coastal Zone of Chabihau, Yucatan, Mexico:

Analysis of Satellital Image TM from 1997

A qualitative and distribution study about subaquatic covers was achieved in the marine portion of the coastal zone of Chabihau, Yucatán, México, from visual samples of 24 localities and from the supervised classification of an satellite image Landsat TM (Thematic Mapper) of this study zone from 1997. Were identified six different subaquatic covers: (1) seagrass beds of *Thalassia* sp, (2) seagrass beds of *Syringodium*, (3) scarce seagrass of *Thalassia* sp, (4) scarce seaweeds, (5) dense seaweeds and (6) sand flats. The seagrass beds of *Thalassia* sp was the predominant landscape, with 31.49 % of cover. This work represent a complementary effort on the creation of a Geographic Information System (GIS) about the marine portion of

this area, and form part of an integral study that intend to obtain the basic knowledge that allow to reach a sustainable management of the natural resources of the region.

KEY WORDS: Landscape ecology, subaquatic covers, sustainable management, remote sensing, Geographic Information Systems.

Cohort Strength and Size at Age of Red Drum *Sciaenops ocellatus* from the Northern Gulf of Mexico: 1986-1988 and 1997-1998

CHARLES A. WILSON^{1,2} and DAVID L. NIELAND²

¹*Department of Oceanography and Coastal Sciences*

²*Coastal Fisheries Institute*

School of the Coast and Environment

Louisiana State University

Baton Rouge, Louisiana 70803-7503 USA

Red drum *Sciaenops ocellatus* were randomly sampled from among large schools captured with purse seine gear during the National Marine Fisheries Service tag-recapture efforts of 1986-1988 (1980s) and 1997-1998 (1990s) in the northern Gulf of Mexico. Totals of 1,352 specimens from the 1980s sampling and 929 specimens from the 1990s sampling were provided for age analysis. Ages estimated from counts of otolith annuli ranged from 2 to 35 years and from 2 to 42 years in the 1980s and 1990s, respectively. The 1980s sample population was dominated by individuals from the 1971-1974 cohorts while the 1990s population was largely composed of specimens from the 1990-1993 cohorts. Fork length data indicate a recent decrease in size at age among younger red drum. Compared during maximum growth early in life (age 3.5 - 6 years), red drum captured in the 1990s were on average 91 % - 93 % the length of specimens taken in the 1980s.

KEY WORDS: Red drum, *Sciaenops ocellatus*, age estimates

Fuerza y Tamaño de la Cohorte en la Edad de la Corvina Roja *Sciaenops ocellatus* del Noroeste del Golfo de México: 1986-1988 y 1997-1998

Especímenes de corvina (*Sciaenops ocellatus*) fueron seleccionados al azar de