ALGAE AND INVERTEBRATES
of Deepwater Communities in the Northwestern Gulf of Mexico

Developed by Flower Garden Banks National Marine Sanctuary

Emma L. Hickerson and G.P. Schmahl

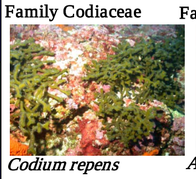
Collaborators: Mary Wicksten (Texas A&M University), Douglas C. Weaver and Kyle Byers (NOAA/FGBNMS), Lance Horn (National Undersea Research Center/University of North Carolina at Wilmington), Suzanne Fredericq (University of Louisiana, Lafayette), Stephen Cairns (Smithsonian Institute), Chris Pomory (University of West Florida), Charles Messing (NOVA Southeastern University), Gordon Hendler (Natural History Museum of Los Angeles County), Wes Tunnell and Fabio Moretzsohn (Texas A&M University - Corpus Christi), John Forsythe (University of Texas Medical Branch at Galveston)

February, 2007

KINGDOM PLANTAE

DIVISION CHLOROPHYTA (GREEN ALGAE)

Order Bryopsidales
Family Codiaceae

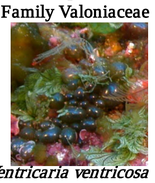


Codium repens

Order Cladophorales
Family Anadyomenaceae

Anadyomene lacerata

Order Siphonocladales
Family Valoniaceae



Ventricaria ventricosa

CLASS PHAEOPHYCEAE (BROWN ALGAE)

Order Dictyotales
Family Dictyotaceae

Padina profunda

Order Fucales
Family Sargassaceae

Sargassum hystrix

DIVISION RHODOPHYTA (RED ALGAE)

Order Cryptonemiales
Family Cryptonemiaceae

Halymenia hancockii

Family Schizymeniaceae

Titanophora incrustans

Order Gigartinales
Family Kallymeniaceae

Kallymenia westii

Order Caulerpales
Family Caulerpaceae

Caulerpa racemosa

KINGDOM ANIMALIA

PHYLUM CNIDARIA
CLASS ANTHOZOA
SUBCLASS HEXACORALLIA
Order Zoanthidea

Protopalythoa grandis
Mushroom zoanthid

PHYLUM ANNELIDA
CLASS POLYCHAETA
ORDER CANALIPALPATA
Family Serpulidae

Filograna huxleyi?

Order Actinaria
Family Aliciidae

Alicia mirabilis
Warty anemone

Family Isophelliidae

Telmatactis sp.

ORDER SCLERACTINIA
Family Pocilloporidae

Madracis brueggemanni

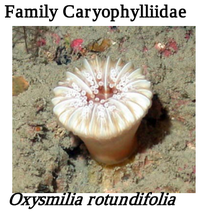
Madracis cf *asperula?*

Family Oculinidae

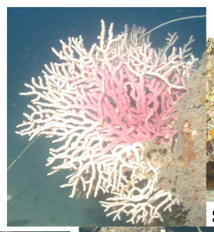
Madrepora carolina

Oculina sp.?

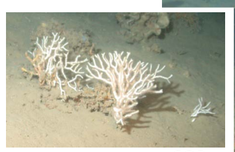
Family Caryophylliidae



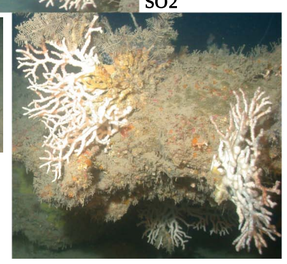
Oxysmilia rotundifolia



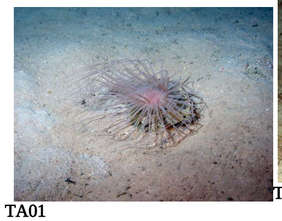
SO2



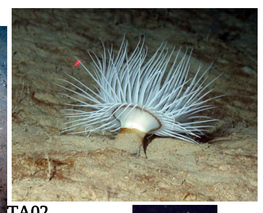
SO3
Yet to be identified stony coral



SUBCLASS CERIANTIPATHARIA
ORDER CERIANTHARIA



TA01



TA02

SUBCLASS OCTOCORALLIA
ORDER PENNATULACEA

SPEN1

SPEN2

SPEN3

PHYLUM ECHINODERMATA
CLASS ASTEROIDEA
ORDER FORCIPULATIDA
Family Asteriidae

Coronaster briareus

Sclerasterias contorta

ORDER VALVATIDA
Family Goniasteridae

Tosia parva

Family Ophidiasteridae

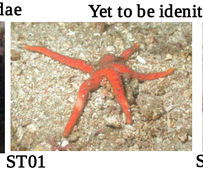
Linckia guildingii

Narcissia trigonaria

Hacelia superba

ORDER SPINULOSIDA
Family Echinasteridae

Henricia sexradiata



ST01

Yet to be idenitified sea stars

ST13

ST08

CLASS OPHIUROIDEA
ORDER PHRYNOPHIURIDA

Astrophyton muricatum

ORDER OPHIURIDA
Family Gorgonocephalidae

Astrocyclus caecilia

Family Gorgonocephalidae

ST07

Family Ophiothricidae

Ophiothrix suensonii

CLASS ECHINOIDEA
ORDER CIDAROIDA
Family Cidaridae

Stylocidaris affinis

ORDER DIADEMATOIDA
Family Diadematidae

Astropyga magnifica

ORDER TEMNOPLEUROIDA
Family Toxopneustidae

Lytechinus sp.

Lytechinus sp.

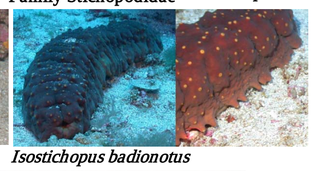
CLASS HOLOTHUROIDEA
ORDER ASPIDOCHIROTIDA

Isostichopus badionotus

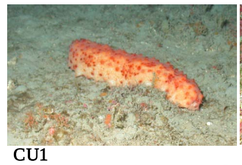
Family Holothuriidae

Holothuria lentiginosa

Family Stichopodidae

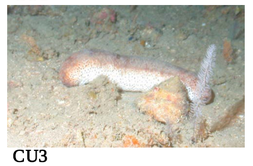


Isostichopus badionotus



CU1

CU2



CU3

CLASS CRINOIDEA
ORDER COMATULIDA
Family Antedonidae

Stylometra spinifera var. *brevispina*

ORDER CHARITOMETRIDAE

Crinometra brevipinna

CR11

Yet to be identified crinoids

CR07

CR06

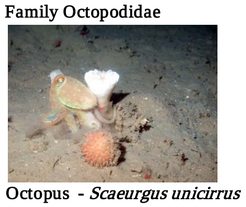
ORDER COMASTERIDAE

Comactinia meridionalis

Comactinia meridionalis

Davidaster discoideus

PHYLUM MOLLUSCA
CLASS CEPHALOPODA
ORDER OCTOPODA
Family Octopodidae



Octopus - *Scaeurgus unicirrus*

CLASS GASTROPODA
ORDER VETIGASTROPODA
Family Pleurotomariidae

Entemnotrochus adansonianus
Slit shell

ORDER CAENOGASTROPODA
Family Ovulidae

Cyphoma gibbosum
Flamingo Tongue

PHYLUM ARTHROPODA
CLASS MALACOSTRACA
ORDER DECAPODA
Family Pandalidae

Plesionika longicauda

Family Hippolytidae

Lysmata grabhami

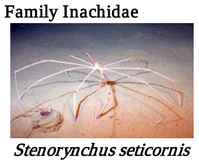
Family Palaemonidae

Periclimenes pedersoni

Family Axiidae

Calaxius sp.

Family Inachidae



Stenorynchus seticornis
Arrow crab

Family Galatheidae

Munida sp.

Family Diogenidae

Dardanus fucosus?

All of these images were obtained with a camera on a remotely operated vehicle at depths between 50m and 150m