

PICTURE GUIDE TO COMMON STONY CORALS OF FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY



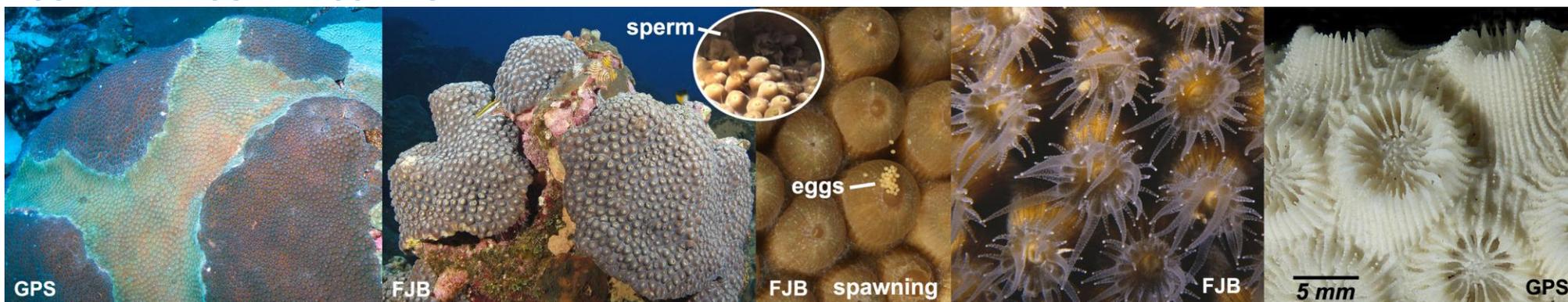
FIRE CORALS



BRANCHING FIRE CORAL *Millepora alcicornis*

Crusts, growing out into small round branches. Slender polyps projecting from small pores in smooth skeleton. Color yellow, cream, tan. **Causes painful sting if touched.**

MOUND AND BOULDER CORALS



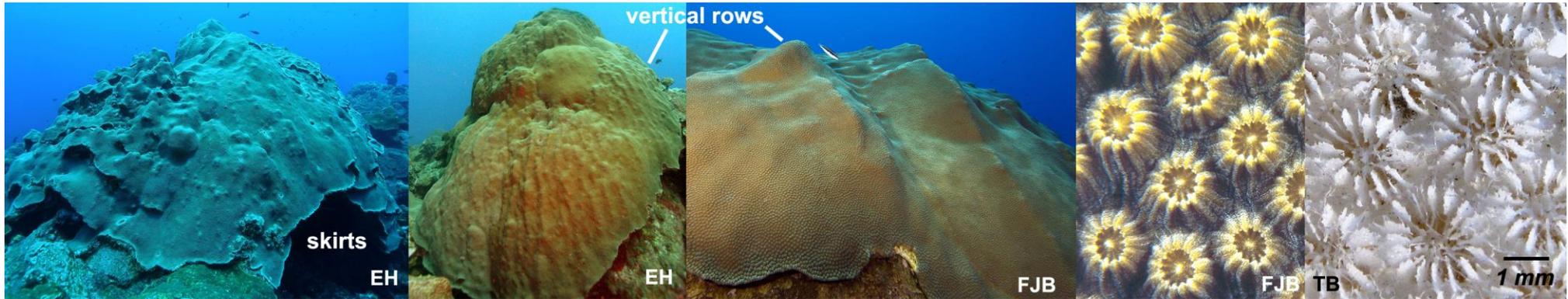
GREAT STAR CORAL *Montastraea cavernosa*

Mounds or short columns (shallow) and crusts (deep) to ~ 3 m diam. Polyps large (to ~ 1 cm), round, protruding. Light to dark brown, sometimes pigmented white or fluorescent.

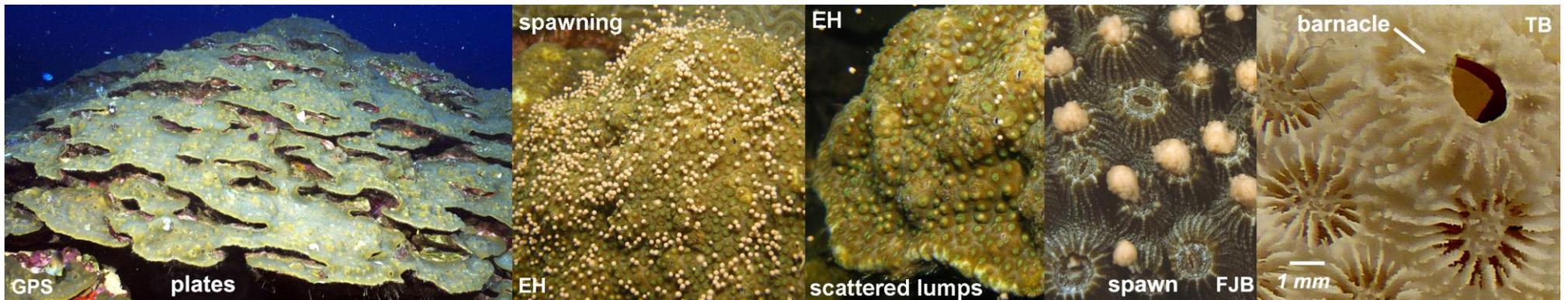


LOBED STAR CORAL *Orbicella annularis* (formerly *Montastraea annularis*)

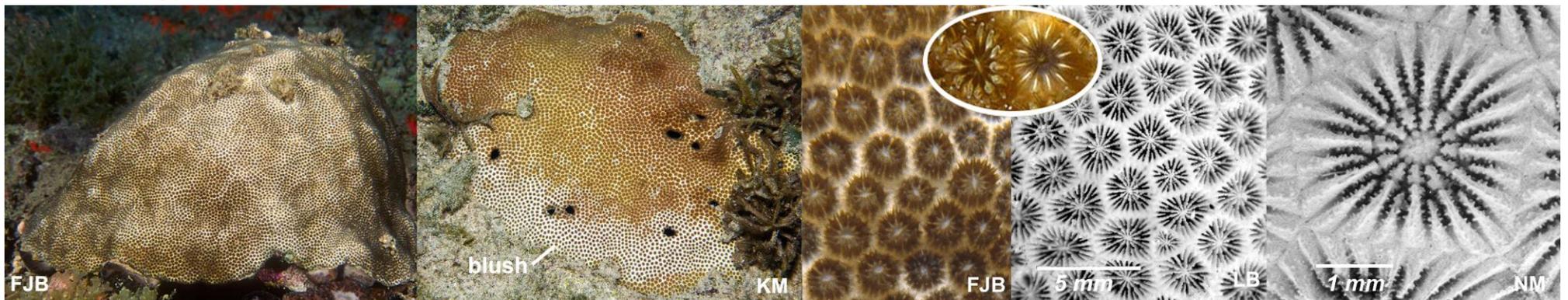
Large (> 3 m) mounds with small live polyps on the tops of closely packed lobes or columns. Plate-like basal "skirts" under low light conditions. Light tan to yellow-brown.



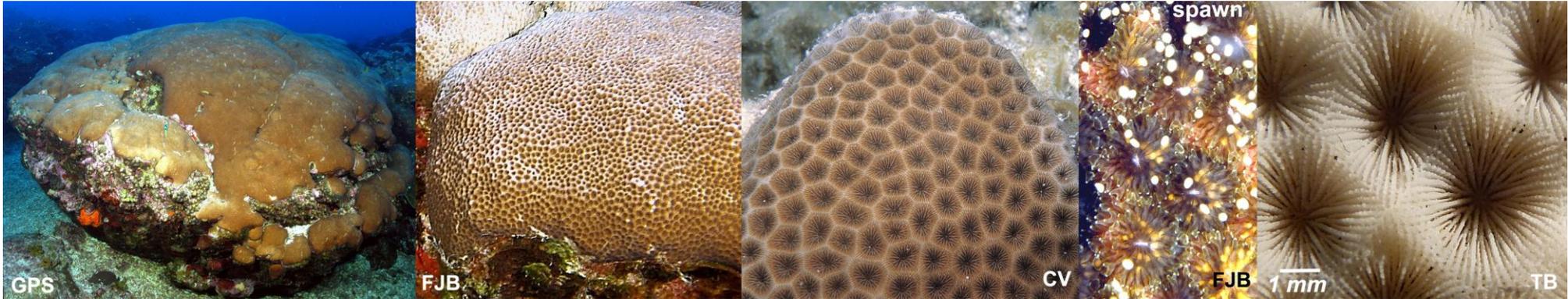
MOUNTAINOUS STAR CORAL *Orbicella faveolata* (formerly *Montastraea faveolata*) Very large (to 5 m), smooth, skirted heads, with ridged or bumpy vertical rows running down their sides. Small, pale to dark brown or fluorescent green polyps.



BOULDER STAR CORAL *Orbicella franksi* (formerly *Montastraea franksi*) Large (> 3 m), irregular mounds and plates with enlarged, protruding polyps on scattered lumps. Color orange-brown, gray or greenish-brown with pale polyps on the lumps. Embedded barnacles common.



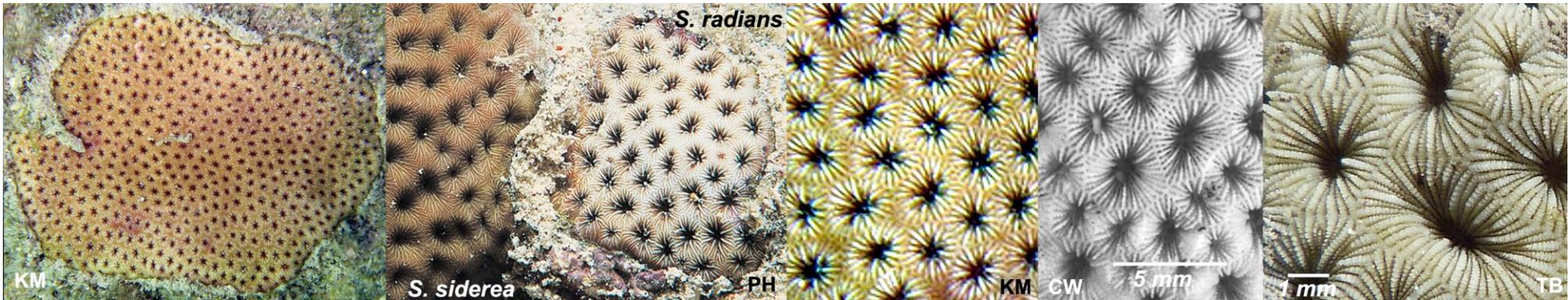
BLUSHING STAR CORAL *Stephanocoenia intersepta* Colonies are thick crusts and mounds up to ~1m diameter. Small cream, tan, gray or brown polyps with dark centers that are commonly expanded by day and appear to "blush" when retracted.



MASSIVE STARLET CORAL *Siderastrea siderea*

Rounded masses, usually > 1 m, with smoothish "dimpled" surface.

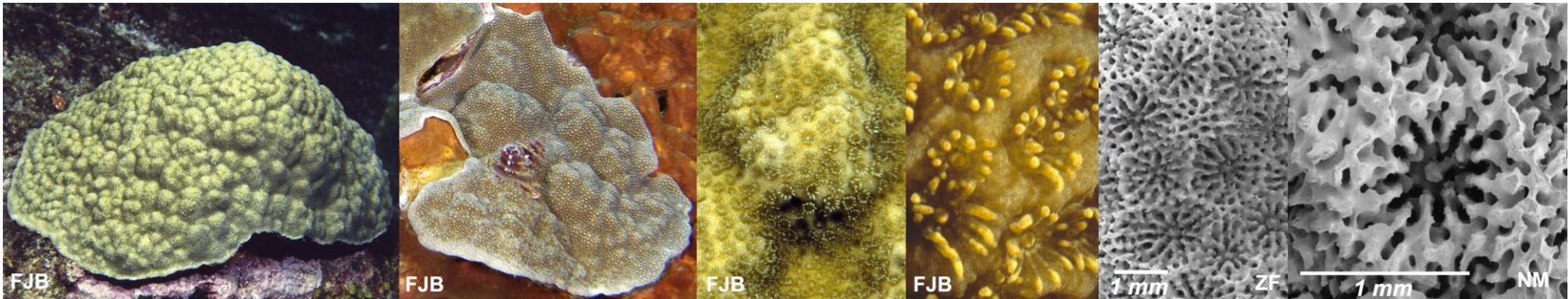
Polyps small, sunken, with many thin, "hard-to-see" septa. Brownish, reddish or grey.



LESSER STARLET CORAL *Siderastrea radians*

Small crusts or flat mounds with "dimpled" surface. Usually < 30 cm.

Tiny, sunken, pale brownish polyps, some "pinched," with darker centers and thick septa that are easily seen in-situ.

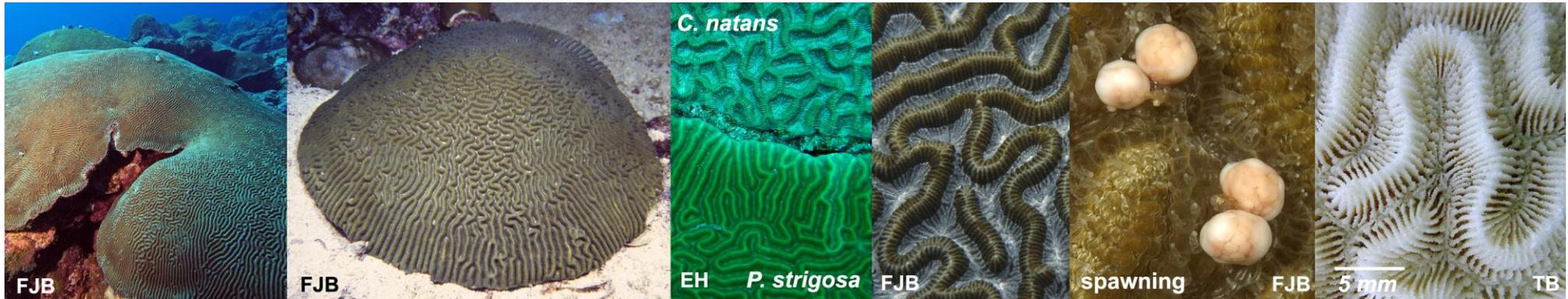


MUSTARD HILL CORAL *Porites astreoides*

Small lumpy mounds, or crusts and plates up to 1 m diam. Color mustard yellow, green,

gray, light to chocolate brown. Fuzzy appearing due to expanded polyps. Polyps small (1.2-1.4 mm).

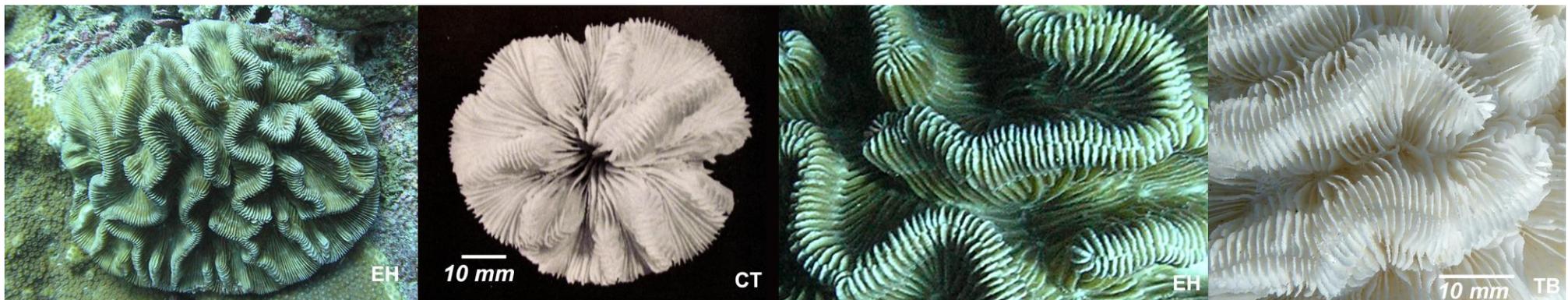
MEANDROID CORALS



SYMMETRICAL BRAIN CORAL *Pseudodiploria strigosa* (formerly *Diploria strigosa*) Ridges smaller and valley width narrower (5-10 mm) than in *Colpophyllia*. Sometimes grooves on ridges. Ridge and valley color may differ.



BOULDER BRAIN CORAL *Colpophyllia natans* Large, domed heads up to 3 m, or flatish discs. Ridges grooved on top and mid-way down sides. Valleys wide (15- 20 mm across). Valley color green, tan, white. Ridges brown.



BRAIN CORAL *Colpophyllia amaranthus* Colonies small (10-30 cm) and sometimes “stalked”. Valleys wide and splayed (15-20 mm across).

BRANCHING CORALS



ELKHORN CORAL *Acropora palmata*

Side (radial) polyps small (0.5-0.8 mm). Terminal (axial) polyps larger, white. Recent recruit to Flower Gardens, two colonies known in sanctuary.

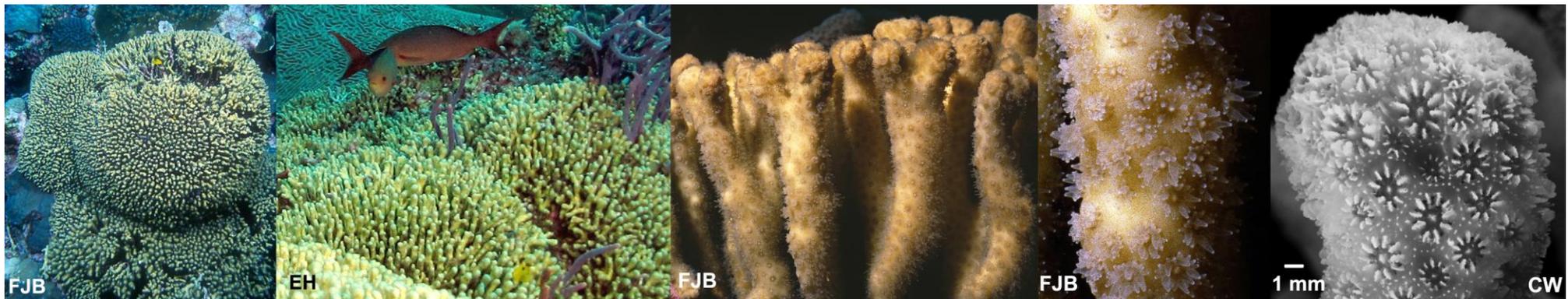
Large, broad, palm-shaped branches. Brown to yellowish-brown.



BRANCHED FINGER CORAL *Porites furcata*

Branches compact, thin (1-2 cm), finger-like, usually elongate, rounded tips, bases usually dead. Gray or tan. Polyps small (1.6-1.8 mm) with 12 septa.

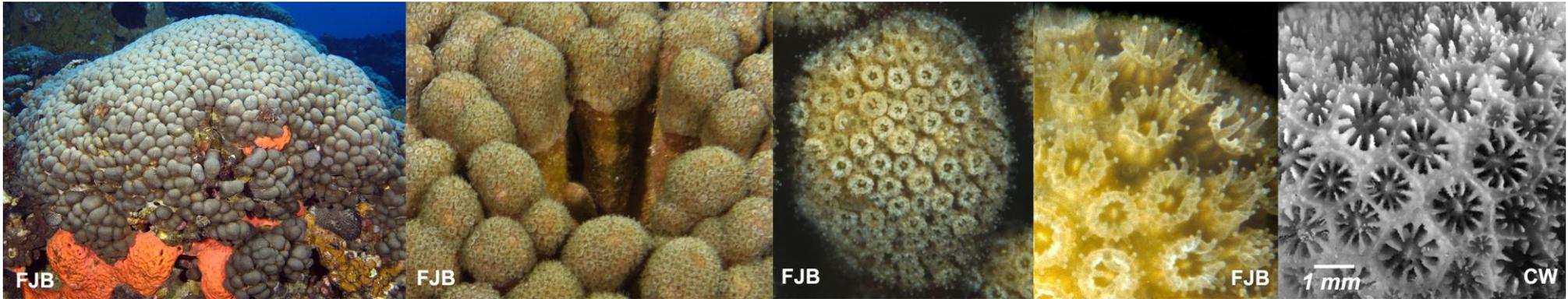
Branches compact, thin (1-2 cm), finger-like, usually elongate, rounded tips, bases usually dead. Gray or tan. Polyps small (1.6-1.8 mm) with 12 septa.



YELLOW PENCIL CORAL *Madracis auretenra* (formerly *M. mirabilis*)

Thin, densely packed, finger-like branches. Pale yellow to light tan. Polyps expanded day & night. Polyps widely separated, with 10 septa fused with a solid, conical columella.

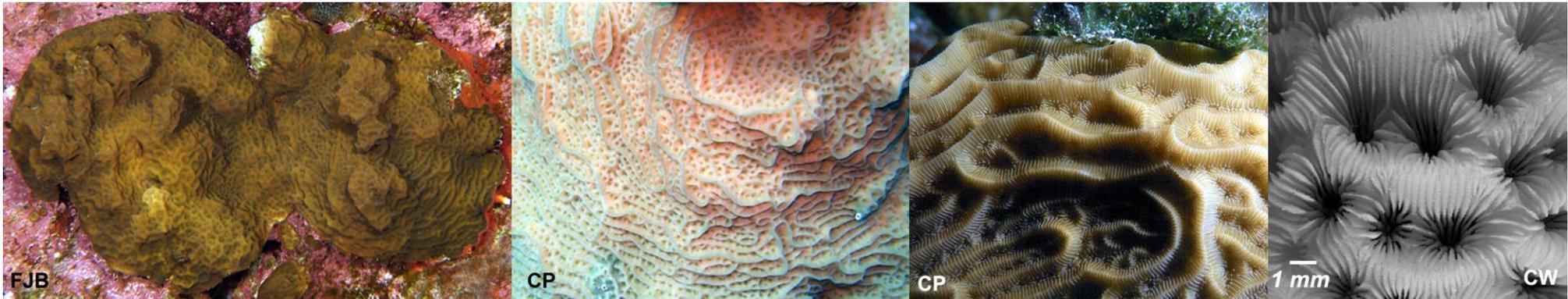
Thin, densely packed, finger-like branches. Pale yellow to light tan. Polyps expanded day & night. Polyps widely separated, with 10 septa fused with a solid, conical columella.



TEN-RAY STAR CORAL *Madracis decactis*

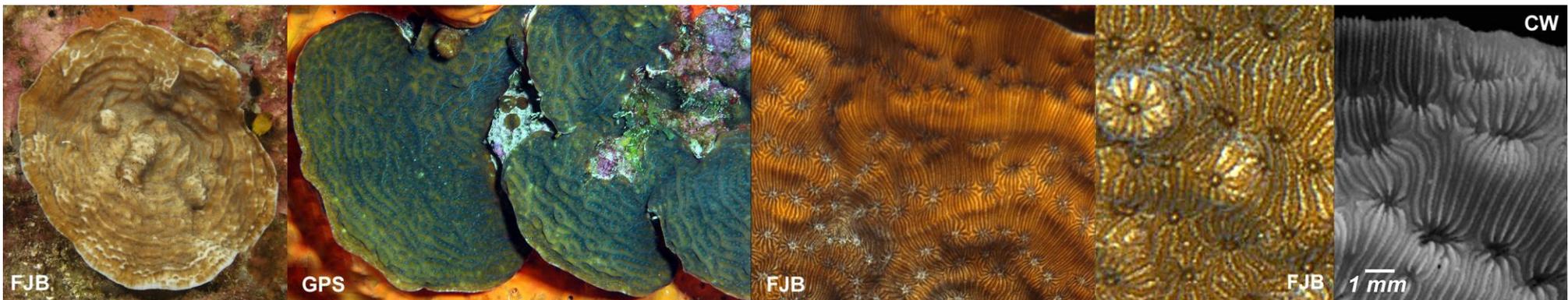
Colonies are densely packed nodular lobes. Gray, brown, yellow-brown or greenish. Polyps small (less than 2 mm), with 10 distinct septa fused with a solid, conical columella

AGARICIIDAE, CRUSTS AND PLATES



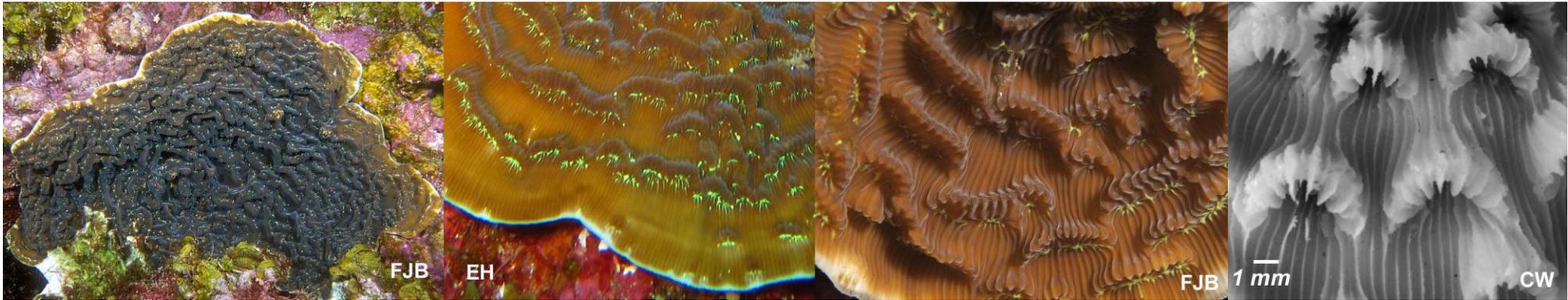
LETTUCE CORAL *Agaricia agaricites* (formerly *Undaria agaricites*)

Colonies of many diverse shapes: crusts, plates mounds, keels and thick lobes. Reticulated ridges of varying lengths with pointed tops. Tan to brown tissues, sometimes fluorescent.



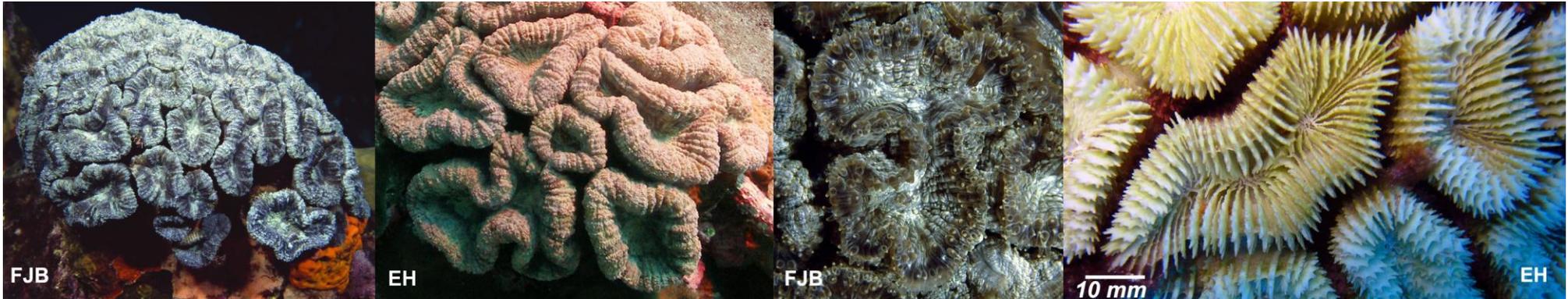
FRAGILE SAUCER CORAL *Agaricia fragilis*

Colonies small (< 15 cm), contour-hugging with thin edges. Small polyps (~2 mm), in irregularly concentric rows. Ridges low with round tops.



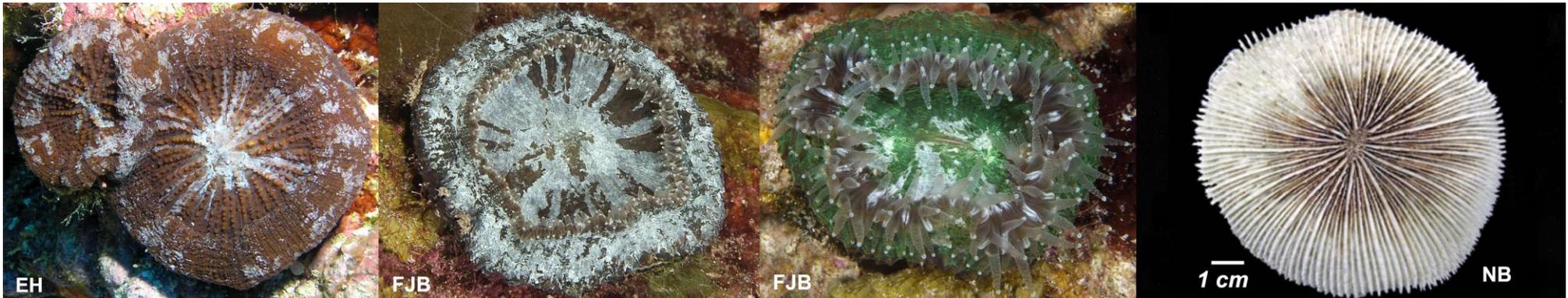
SUNRAY LETTUCE CORAL *Helioseris cucullata* (formerly *Leptoseris cucullata*) Thin plates. Polyps in cup-like ridges of varying lengths facing edge of colony. Prominent septa, thin septal lines radiating to edge. Brown or fluorescent tissues with yellow polyp mouths.

FLOWER CORALS



SPINY FLOWER CORAL *Mussa angulosa* Clumps (up to 1 m wide) of stalks, each topped with usually 1 large, fleshy polyp (sometimes 2 or 3). Gray, may be tinted green, blue, reddish.

SOLITARY CORALS

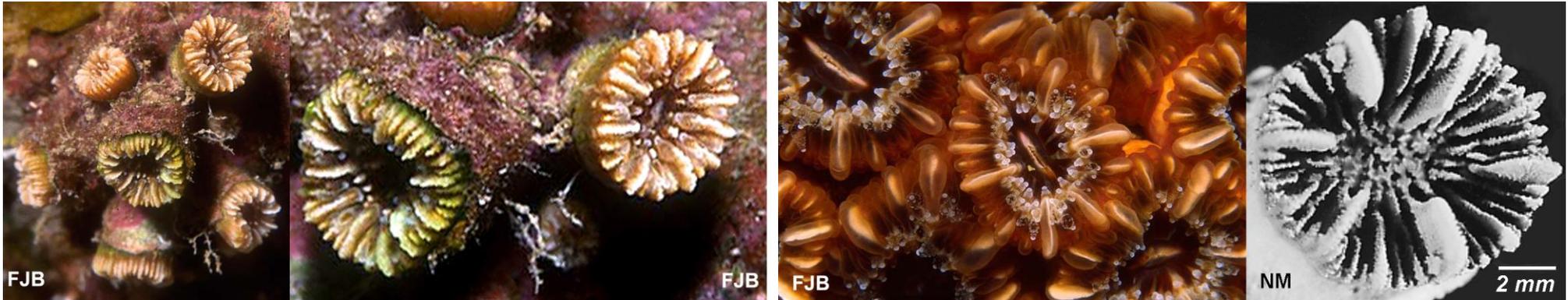


ARTICHOKE CORAL *Scolymia cubensis* Large (to ~10 cm), fleshy, smoothish-surfaced polyp that occasionally divides to form several connected mouths. Septal teeth often visible below gray, brown or greenish tissues.

CUP CORALS



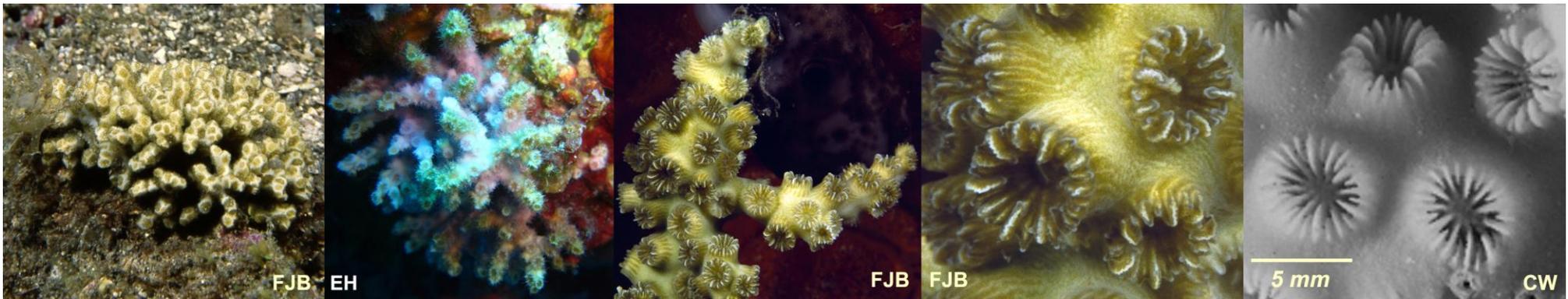
ORANGE CUP CORAL *Tubastraea coccinea* An *invasive* "Indo-Pacific" coral. Polyps ~1 cm diameter. In clumps often forming hemispherical mounds. Wall tissue pink, red, orange. Tentacles bright orange to yellow (color variations suggest presence of an additional *Tubastrea* species).



SPECKLED CUP *Rhizosmilia maculata*

HIDDEN CUP *Phyllangia americana*

OCULINIDAE



DIFFUSE IVORY CORAL *Oculina diffusa* Lumpy clumps, extensively branched. Branches <1cm thick. Polyps on ends and sides of branches, far apart and slightly projecting, with 24 septa. Washed-out yellowish to olive drab color.

This will help you identify the common stony corals comprising the coral caps above 125 ft. at the East and West Flower Garden Banks. It may be copied intact for educational purposes. Use it in the field with tablets and smart phones. For underwater use, you can laser copy it to waterproof paper (2 pages per sheet, front & back), or laminate and ring-bind it.

Distinguishing between similar species in-situ or from photographs is often difficult. For coral basics and more detailed species descriptions go to:

NOAA coral tutorials <http://flowergarden.noaa.gov/education/coralbasics.html> and <http://coralreef.noaa.gov/aboutcorals/coral101/>.

AGRRA coral tutorials "Atlantic and Gulf Rapid Reef Assessment" <http://www.agrra.org/method/trainingid.html>.

"MARINE LIFE OF THE FLOWER GARDEN BANKS NMS", by Frank & Joyce Burek, Azure Computer and Photographic Services, Inc.

"REEF CORAL IDENTIFICATION: FLORIDA, CARIBBEAN, BAHAMAS" by Paul Humann & Ned DeLoach, New World Publications, Inc.

"CORALPEDIA" <http://coralpedia.bio.warwick.ac.uk/>.

"CORALS OF THE WORLD ONLINE" <http://coral.aims.gov.au/speciesPages/>

"HEXACORALLIANS OF THE WORLD" <http://hercules.kgs.ku.edu/hexacoral/dev/index.cfm>.

"NEOGENE MARINE BIOTA OF TROPICAL AMERICA, NMITA", University of Iowa <http://nmita.iowa.uiowa.edu/database/corals/coralmnu.htm>.

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Ann Budd et al. 2012, Taxonomic classification of the reef coral family Mussidae. *Zoological Journal of the Linnean Society*, 166 (NB)

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Made for ***FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY*** by

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