

# Overview of Corals and Hardbottom Resources in Southeast Florida

## Contents (Unit 1, file 2 of 3):

- Introduction
- General Biology & Ecology of SE Florida Reefs
  - Threats to SE Florida Reefs
- Identification Resources for SE Florida Corals (cont.)
  - Nearshore Hardbottom Resources

# Other Common Corals, Not Threatened, but All Protected under State & Federal Rules\* (\*: Units 2 & 3)



Great star coral  
*Montastraea cavernosa*



Mustard hill coral  
*Porites astreoides*



Smooth star coral  
*Solenastrea bournoni*

## Detailed ID Slides for These & Other Common Species Follow



Grooved brain coral  
*Diploria labyrinthiformis*



Maze coral  
*Meandrina meandrites*



Elliptical star coral  
*Dichocoenia stokesii*

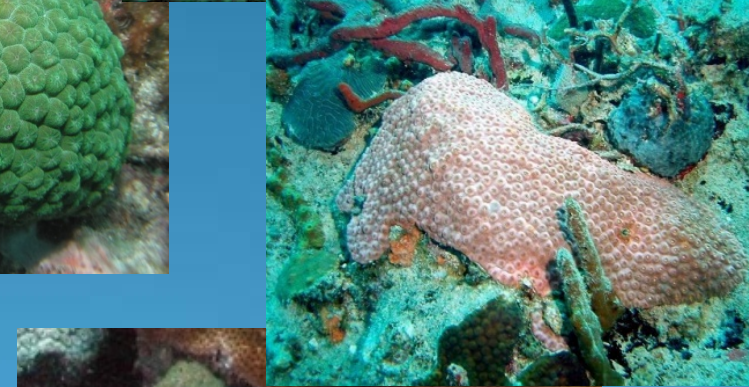
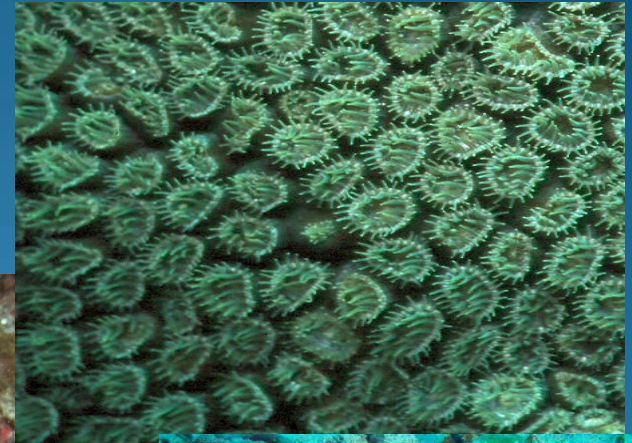


# *Montastraea cavernosa* / **great star coral**

Reef Coral / Humann: pg #115  
Common to abundant South FL

- Size = 2 - 8'
- *M. cavernosa* has the largest polyps of the genus *Montastrea*. Easy to identify due to large polyps.
- Can appear as yellow, blue, green, color varies
- Could be confused with the colonial zoanthid *Palythoa*, which encrusts over dead corals, but *Palythoa* forms a mat (not a hard colony), and has smaller polyps.
- **TO REMEMBER:** has the largest polyps - like caverns - *cavernosa*

Miami-Dade	confirmed	abundant
Broward	confirmed	16%
Palm Beach	confirmed	very common
Martin	confirmed	?







# *Porites asteroides* / **mustard hill coral**

Reef Coral / Humann: pg #121

Abundant to common FL

- Size = 6" - 2'
- One of the most common species in our region
- **TO REMEMBER:** often mustard yellow or brown and size of ant hill (mustard hill coral)

Miami-Dade	confirmed	abundant
Broward	confirmed	12%
Palm Beach	confirmed	very common
Martin	confirmed	?





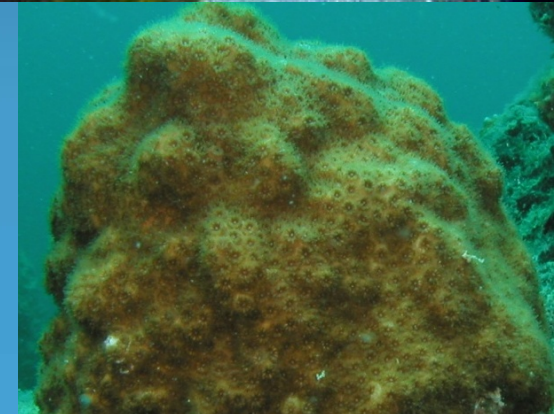
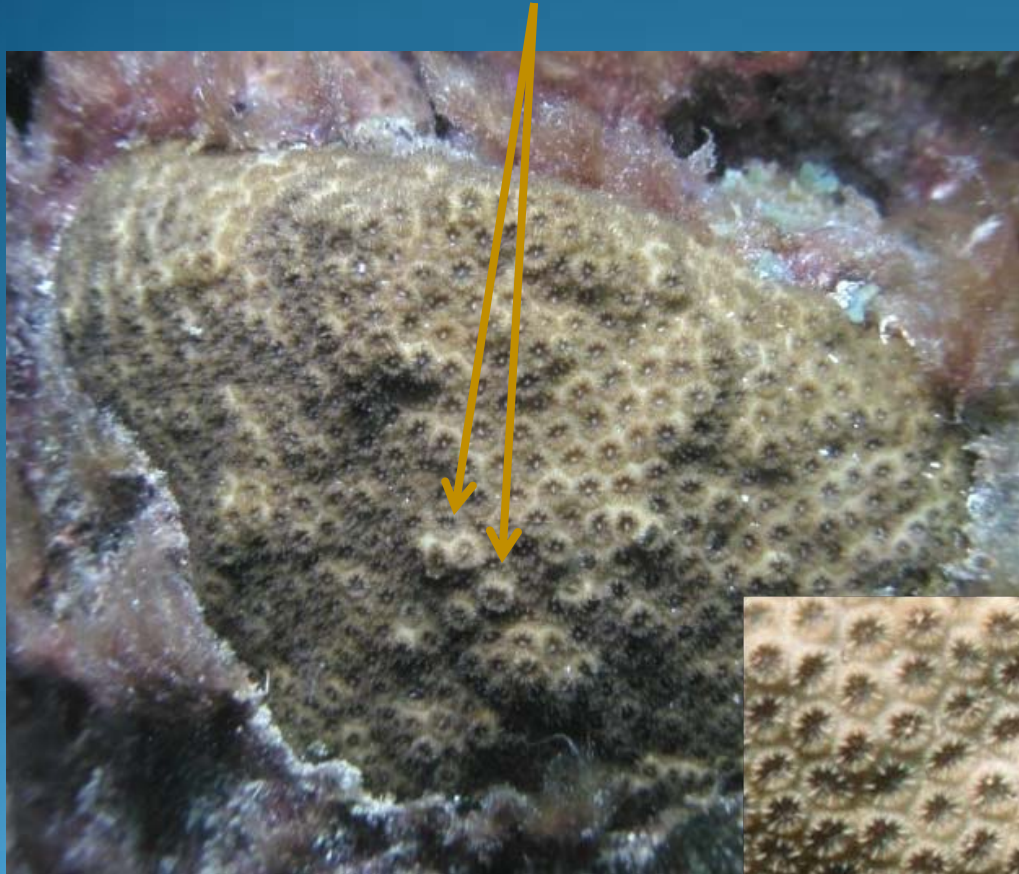


# *Solenastrea bournoni* / **smooth star coral**

Reef Coral / Humann: pg #117  
Common to occasional South FL

- Size = 4 - 18"
- Corallite rims protrude noticeably, giving a blistered appearance

Miami-Dade	confirmed	common
Broward	confirmed	4%
Palm Beach	confirmed	fairly common
Martin	confirmed	?



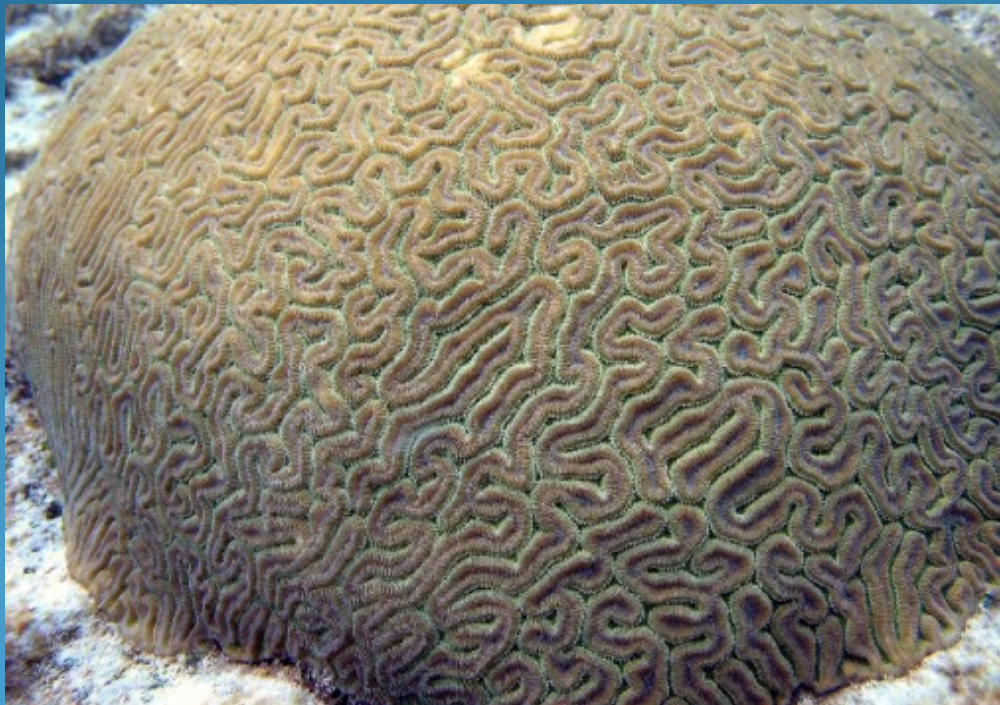
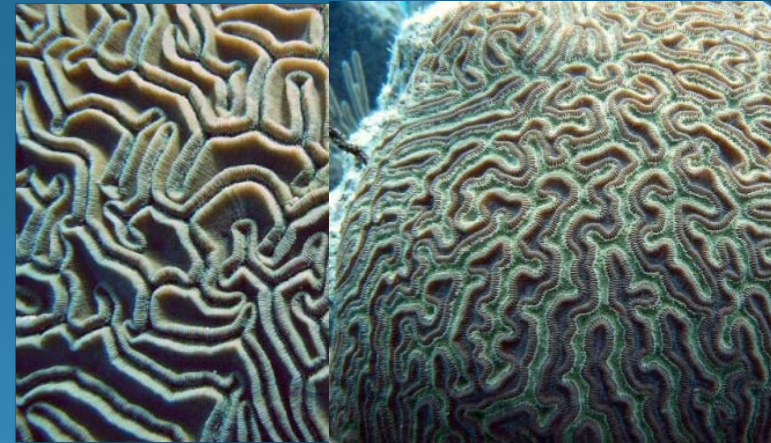




# *Diploria labyrinthiformis*/ **grooved brain coral**

- Size = 1 - 4'
- Deep grooves on top of the ridges (labyrinths)
- Colonies form hemispherical heads
- TO REMEMBER: Labyrinth - the only brain coral with a labyrinth / groove on the ridges.

Miami-Dade	confirmed	common
Broward	confirmed	<1%
Palm Beach	confirmed	?
Martin	not confirmed	?







# *Meandrina meandrites* / maze coral

Reef Coral / Humann: pg #129  
Common to occasional South FL

- Size = 1 - 3'
- Relatively easy species to ID
- Doesn't really look like anything else out there
- TO REMEMBER: meandering maze

Miami-Dade	confirmed	common
Broward	confirmed	2%
Palm Beach	confirmed	very common
Martin	confirmed	?





# *Dichocoenia stokesii* / **elliptical star coral**

Reef Coral / Humann: pg #119  
Occasional South FL

- Size = 4 - 15"
- Protruding corallites (up to 1/4")
- Colonies typically form rounded heads
- Meandroid (elliptical) long calices
- Corallites protrude up to 1/4" and are usually elliptical or circular and occasionally Y shaped

Miami-Dade	confirmed	common
Broward	confirmed	2%
Palm Beach	confirmed	?
Martin	confirmed	?





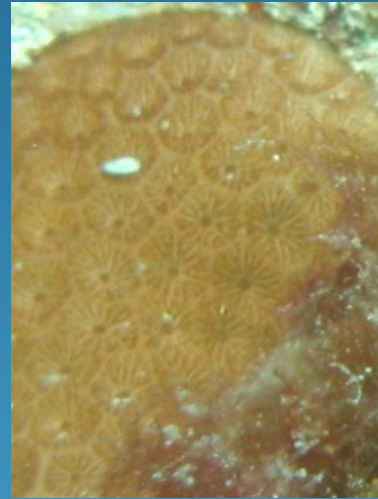
# *Siderastrea siderea* / massive starlet coral

Reef Coral / Humann: pg #123  
Common FL

- Size = 1 - 6' (to six feet)
- Probably the most common species in our area
- Easy to confuse recruits (new colonies) with *S. radians*

Miami-Dade	confirmed	abundant
Broward	confirmed	25%
Palm Beach	confirmed	very common
Martin	confirmed	?

*S. radians* vs. *S. siderea*



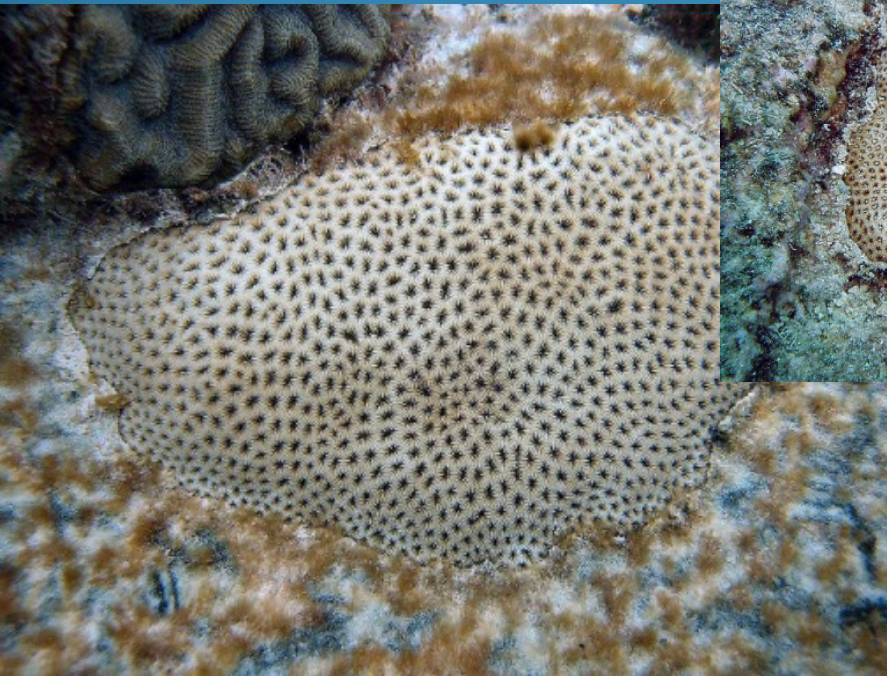




# *Siderastrea radians* / **lesser starlet coral**

- Size = 4 - 12"
- Lighter color and less common than *S. siderea*
- Colonies small, often flat shaped
- Polyps darker than colony
- Colony pale white (looks bleached) with dark polyps
- Irregular corallites (square, polygonal, triangular)
- **Easily confused with: *S. siderea***

Miami-Dade	confirmed	abundant
Broward	confirmed	8%
Palm Beach	confirmed	very common
Martin	confirmed	8%



*S. radians* vs. *S. siderea*



# *Montastraea annularis* - forma *faveolata* (boulder) mountainous star coral

Reef Coral / Humann: pg #113  
Common to abundant South FL

Miami-Dade	confirmed	Abundant
Broward	confirmed	2%
Palm Beach	confirmed	?
Martin	confirmed	?

- Size = 1 - 10' (to 15')
- Can have ribs (rows of vertical ribs on colony)
- Bumps (like *M. franksii*, but larger and with pigment)
- Oldest local colony = 314 years old (15' tall) off of Ft. Lauderdale

• TO REMEMBER: look for  
vertical ribs  
and/or bumps  
and/or mountainous growth



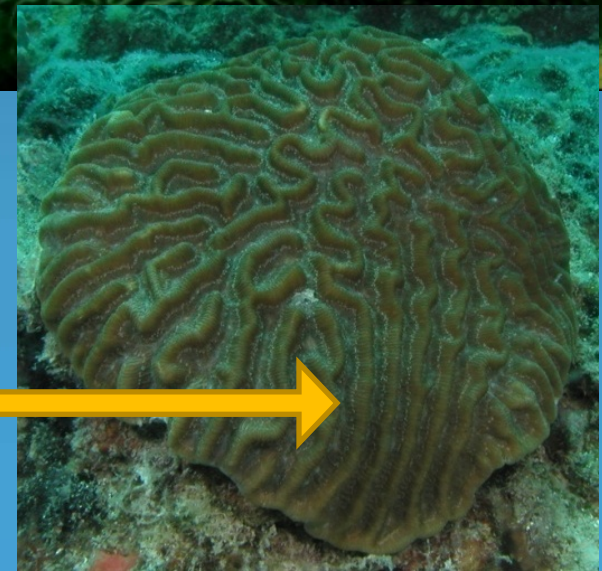




# *Diploria strigosa* / symmetrical brain coral

- Size = 6" - 6'
- Horizontal or vertical (parallel) ridges near base
- Can be confused with other brain corals, but:
  - Colpophyllia natans* - has thicker ridges
  - D. labrinthyformis* - has labyrinth (groove in ridges)
  - D. clivosa* - has knobs

Miami-Dade	confirmed	common
Broward	confirmed	<1%
Palm Beach	confirmed	common
Martin	confirmed	?





# *Eusmilia fastigiata*/ smooth flower coral

Reef Coral / Humann: pg #163  
Common to occasional FL

- Size = 1/2' - 2 1/2'
- Polyps = 3/4" - 1 1/4"
- Polyps on long stalks
- Corallites round to oval
- Easy to identify
- **TO REMEMBER: You smell (*Eusmilia*) the flowers (bouquet - smooth flower coral)**

Miami-Dade	confirmed	common
Broward	confirmed	<1%
Palm Beach	confirmed	common
Martin	not confirmed	?

