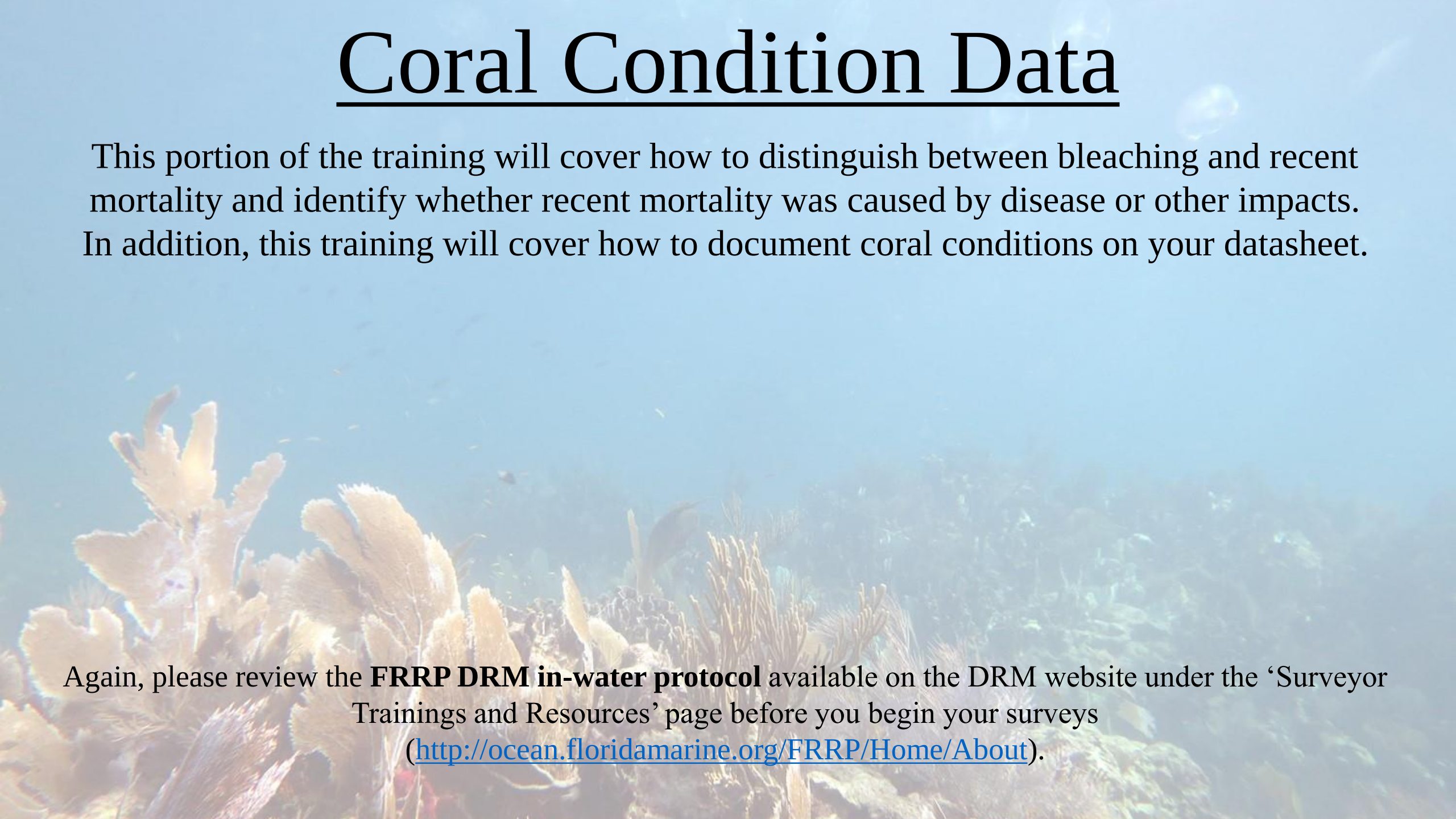
Coral Condition Data

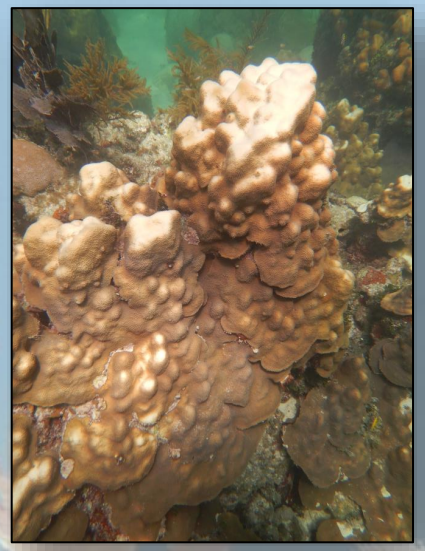
This portion of the training will cover how to distinguish between bleaching and recent mortality and identify whether recent mortality was caused by disease or other impacts. In addition, this training will cover how to document coral conditions on your datasheet.



Again, please review the **FRRP DRM in-water protocol** available on the DRM website under the 'Surveyor Trainings and Resources' page before you begin your surveys (http://ocean.floridamarine.org/FRRP/Home/About).

DRM documents the condition of corals to assess the health of each colony and the overall health of the coral community.

Only conditions that are actively affecting the health of a coral are recorded.



Color Loss
Paling
Partial Bleaching
Bleached

Discoloration
Dark tissue
Off-colored Tissue

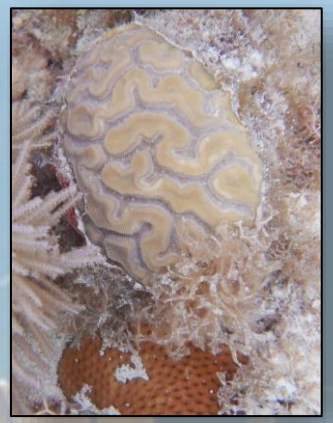
Disease
Tissue loss

Recent Mortality

Other Impacts
Predation
Sediment Cover
Overgrowth, Interactions
Abrasion

Color Loss

Often, when a coral becomes stressed, it can no longer support its symbiotic algae and expels it from its tissue. The coral tissue remains intact and is still functioning to feed the coral through filter feeding; however, the colony will eventually starve if the algae are not restored.



Paling

Coral tissue has either just begun to lose its zooxanthellae or is recovering from bleaching. Tissue appears lighter in color than typically observed.

Partial Bleaching

Patches of fully bleached or white tissue.

Bleached

Colony appears totally white. Some corals fluoresce when they lose their zooxanthellae but are functionally bleached.

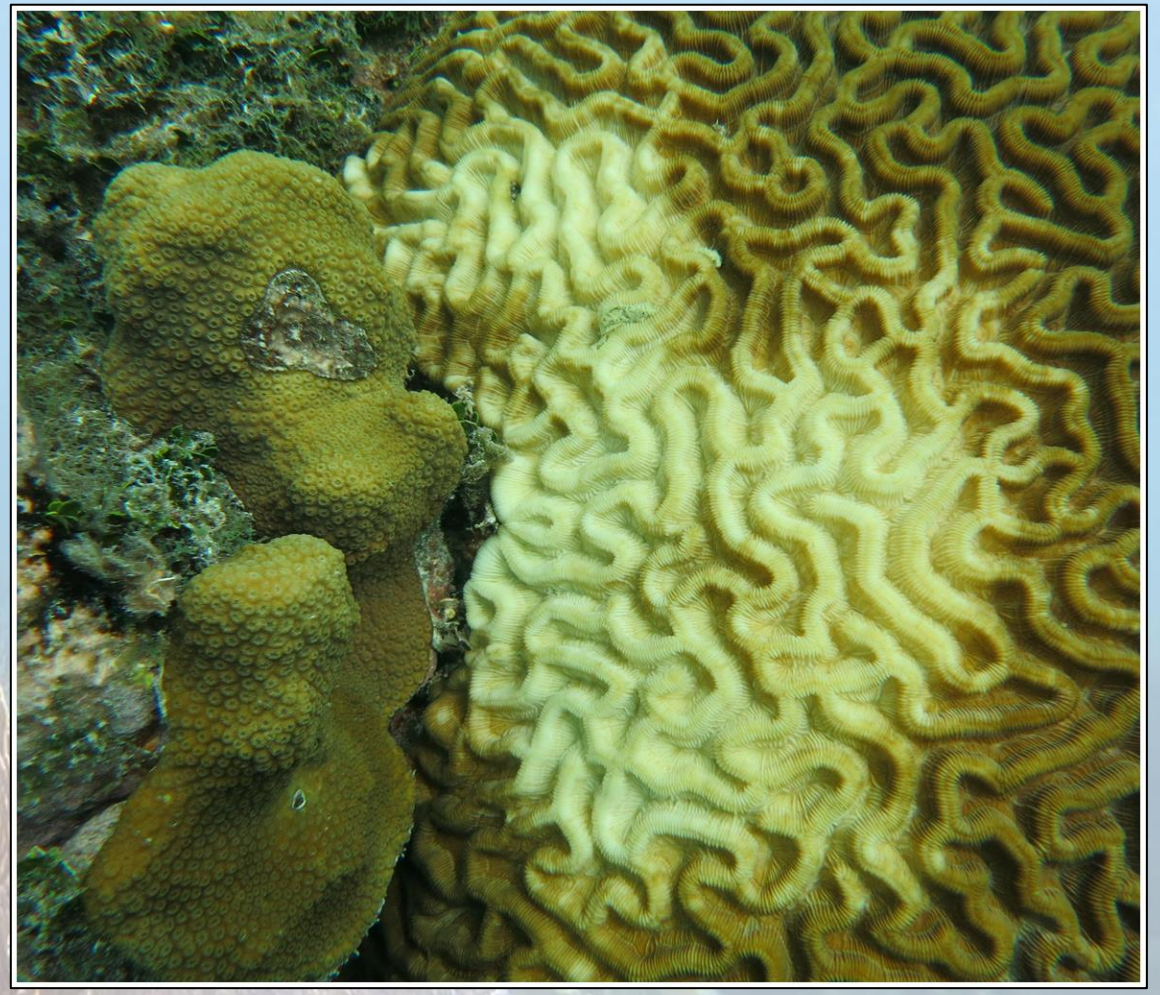
Loss of Color from 'Other' Factors

Recovering from direct impacts such as predation. Loss of color can also be associated with disease or be a precursor for tissue loss from disease. Color loss can be a normal growth habit in select coral species.

Severity of Color Loss is Variable…

The Scale of Color Loss is Variable

- Bleaching varies at all **scales** (regions, reefs, sites, species, colonies)
- Numerous **sources** of variation (exposure, depth, location, etc.)
- Bleaching severity can be determined by an individual colony's **past exposure** to stressors.

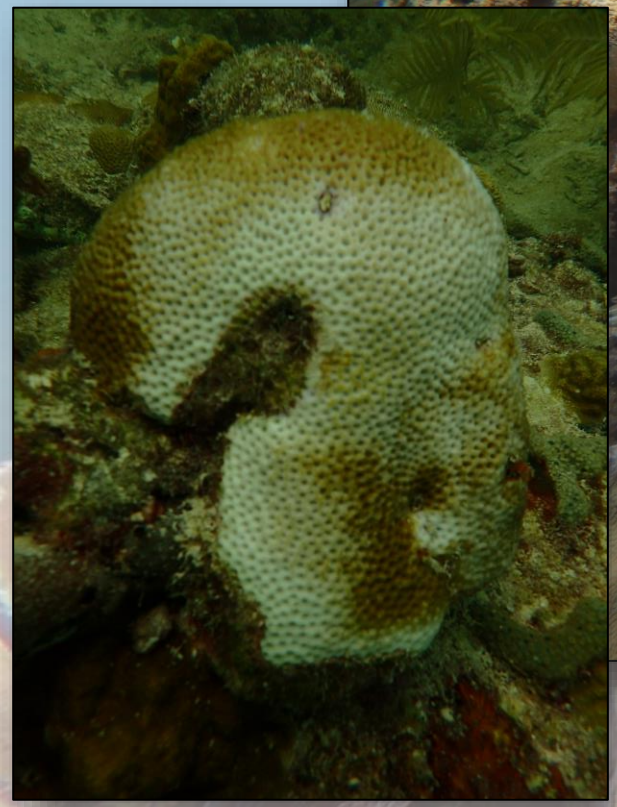


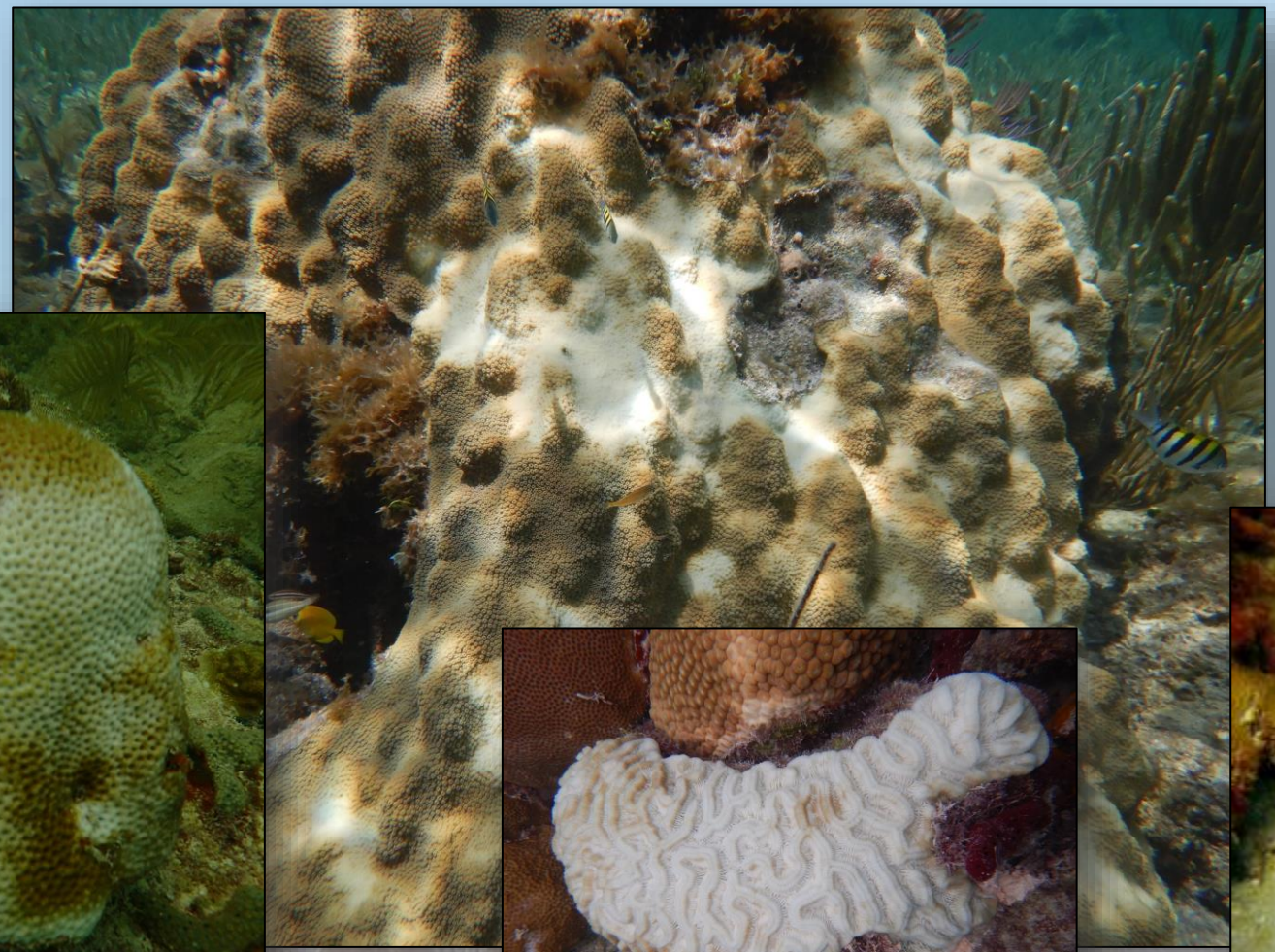
Paling (P)

"Because any visible loss of color indicates a loss of most zooxanthellae originally present in a coral colony (Hoegh-Guldberg et al., 2005), it is important to include any degree of bleaching, from pale and partially bleached to fully bleached colonies, as an indicator of significant stress in corals."

Eakin et al., 2010

Partial Bleaching (PB)





Bleached (BL)

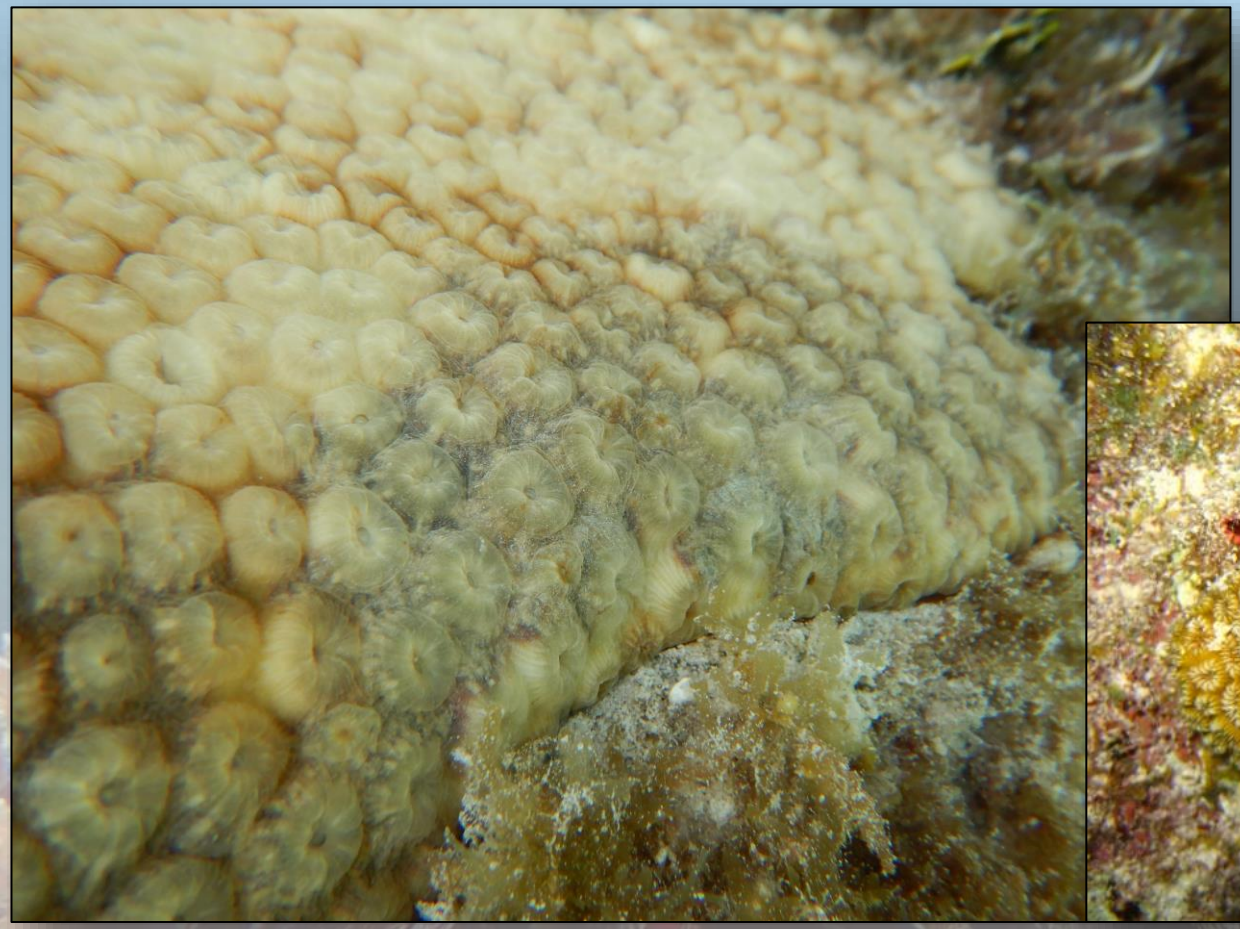
Fluorescing *Siderastrea siderea*

Healthy vs. Bleached

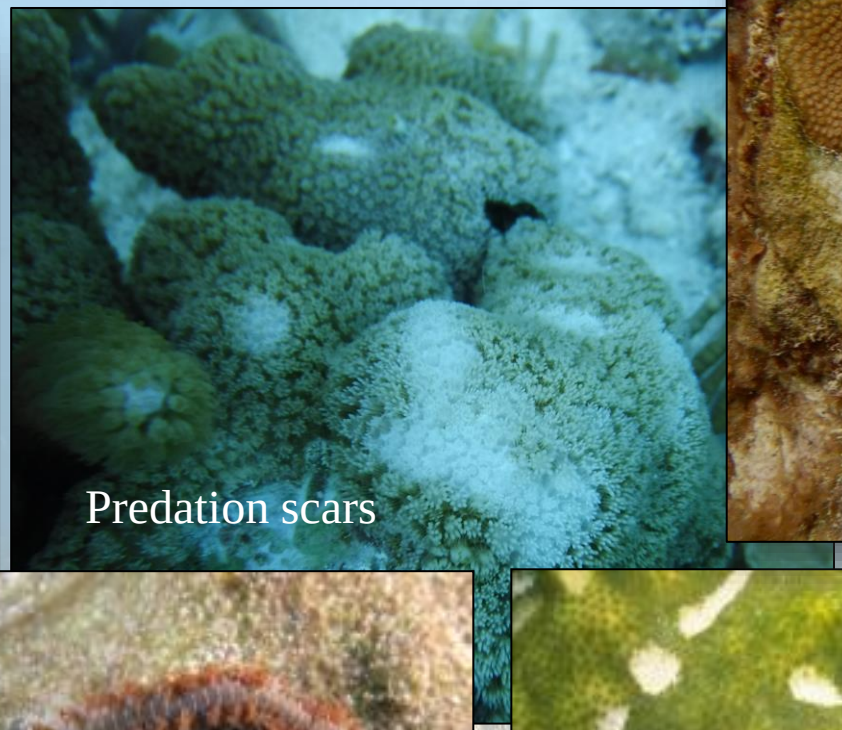
There is evidence that fluorescent granules of corals function as screens against high UVA/blue irradiance by absorbing these wavelengths as well as by reflecting a large proportion of visible light.

Discolored (DC)

Tissue is still present but is abnormally colored.
Should not be confused with ‘Loss of Color’.



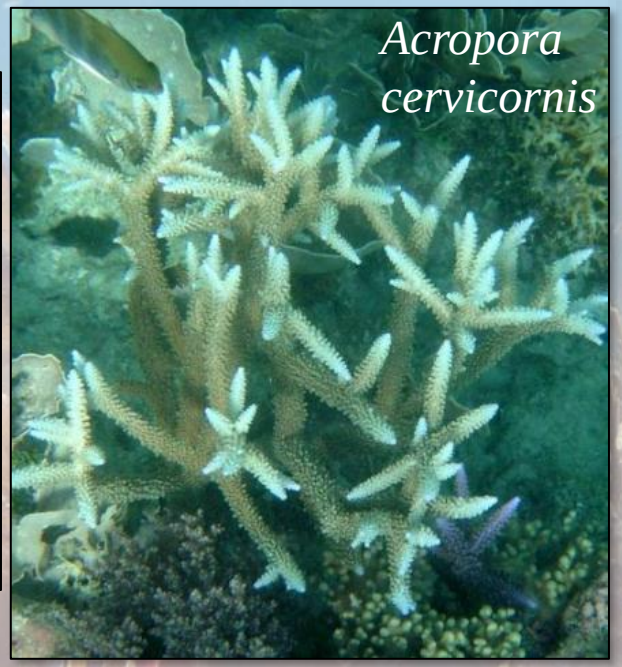
Distinguishing Bleaching From Other Issues



Confusing Bleaching With Natural Growth Patterns

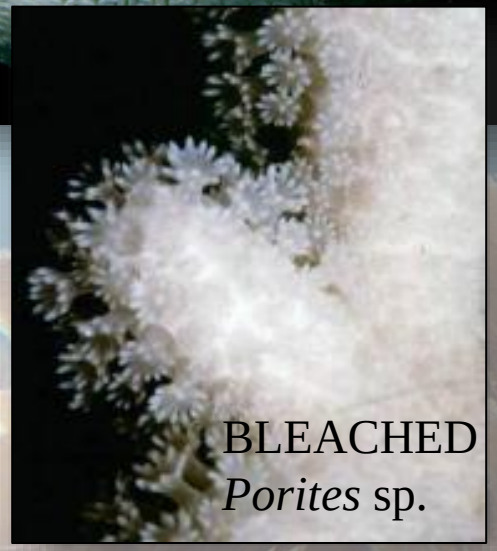
Partially bleached corals are often confused with corals that have fast growing **tips** such as *Acropora* spp. and *Agaricia fragilis*. Growth tips or edges cans sometimes have no zooxanthellae, appearing white.

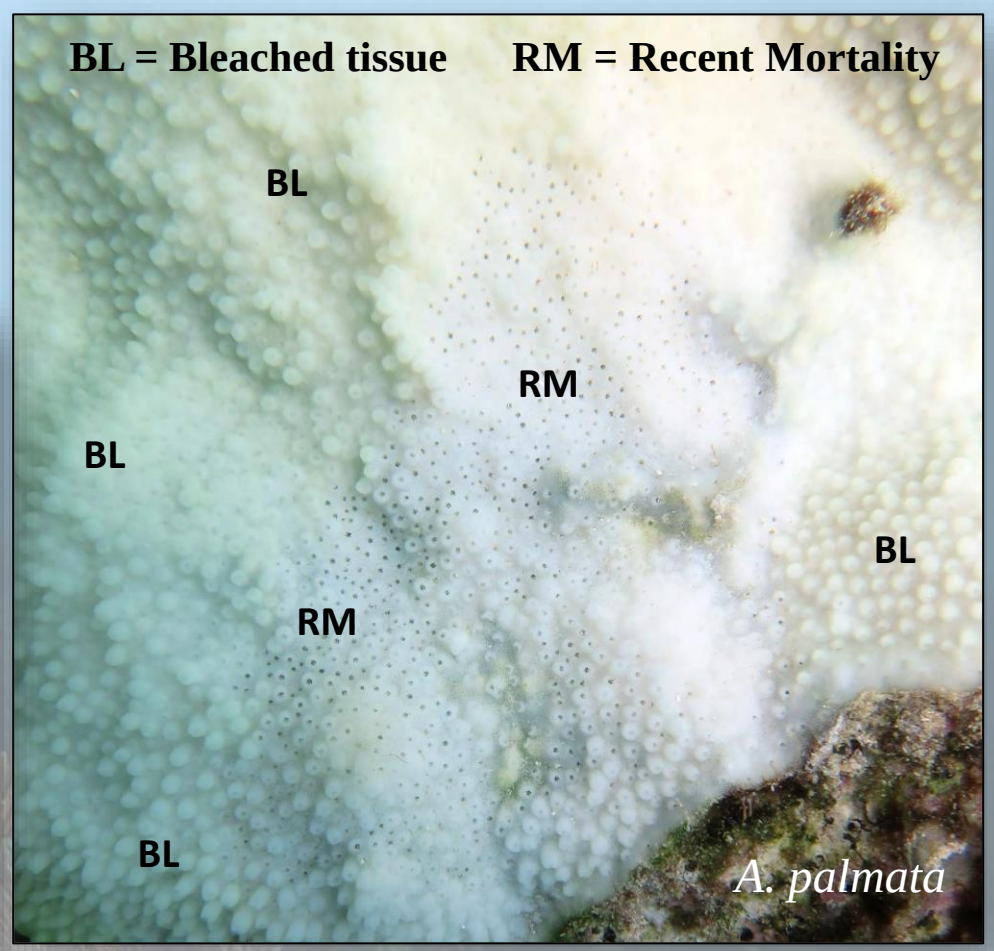
Other species such as *Orbicella franksi* naturally have clusters of polyps with no zooxanthellae.



Distinguishing Bleaching from "Recent Mortality"

When bleached, polyps are translucent (nearly colorless) however, they distort the appearance of the skeleton below.

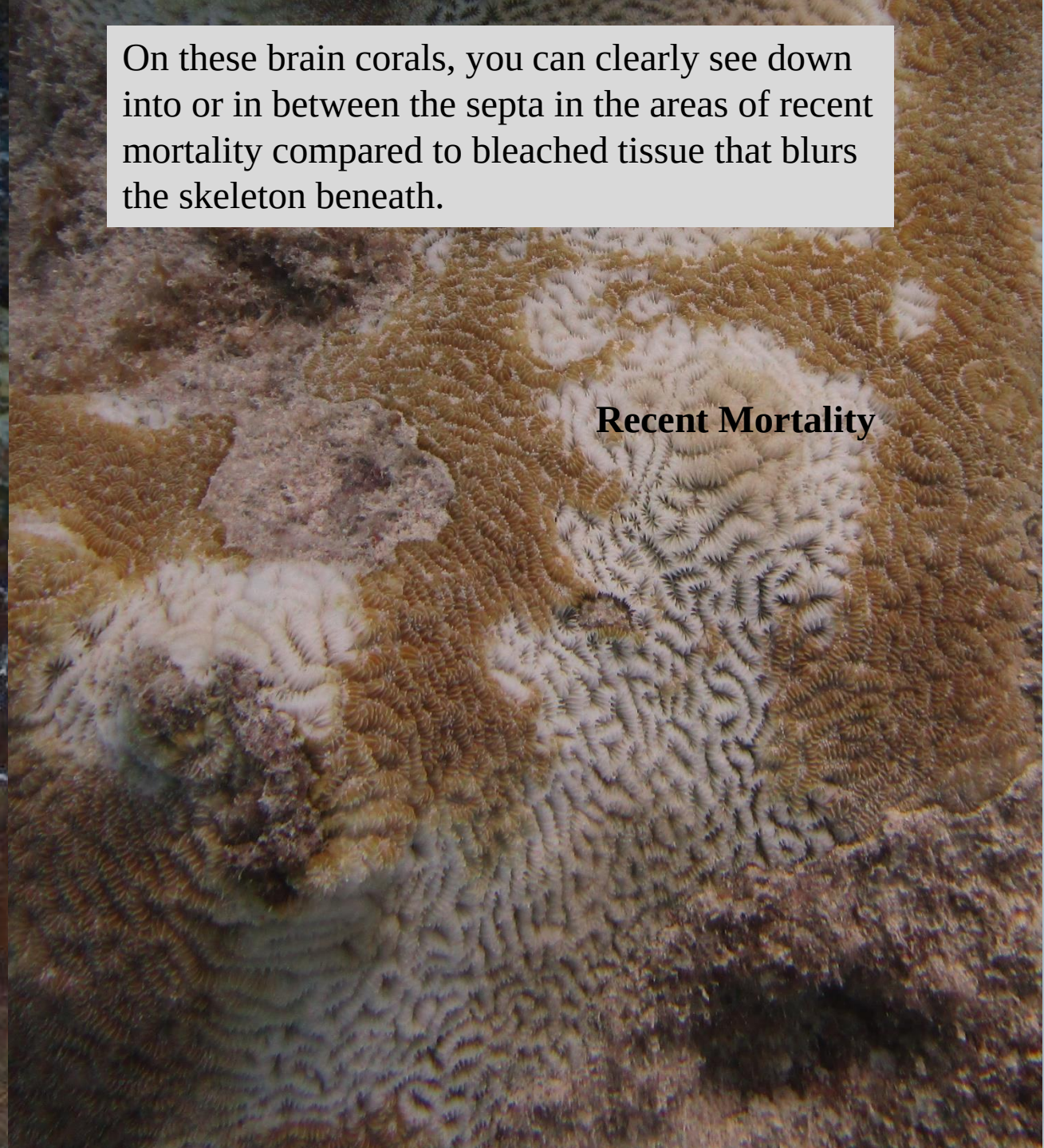




D Williams

Corals with **large, thick polyps** are conspicuous, even when they are bleached; however, corals with **smaller polyps with thin tissue** are harder to distinguish.

On these brain corals, you can clearly see down into or in between the septa in the areas of recent mortality compared to bleached tissue that blurs the skeleton beneath.

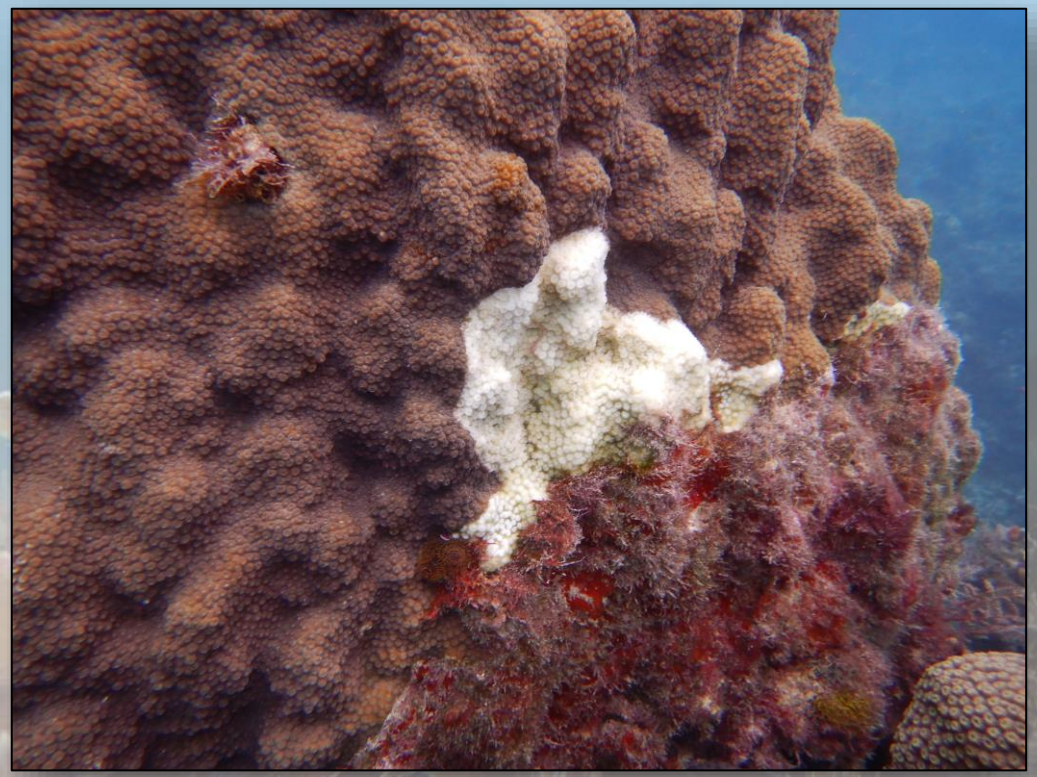


If Recent Mortality IS identified, it is classified in one of two categories

Recent Mortality from Disease

OR

Recent Mortality from Other Conditions



Recent Mortality from Other Factors

DRM Code: 1000
Surveyor: JEST
Lat: DD.DDDD
Long: DD.DDDD
Date: 9/15/2022 Depth: 25

Transect: 1 / 2 / 3 / 4
Shared? Y / N
Buddy: LHUB

Rugosity Msmts:
1. 10 2. 35 3. 17
4. 15 5. 105 6. 45
7. 25 8. 20 9. 20
10. 100

P/A
H.Diad.
D.Diad.
ACER
APAL
DCYL

Habitat:
Isolated Reef
Contiguous Reef Spur and Grv.
Contiguous Reef Other
Reef Rubble

						Tissue Loss Disease					
Species Code	Width (cm)	Height (cm)	Bleaching P, PB, BL	% Old Mort	Other % Recent Mort	Disease % Recent Mort	TL Rate Fast, Slow	Disease Conditon(s)	Other Condition(s)	Scientific Name Transect 3 & 4 in Grey	Sp. Codes
1 SSID	10	5	PB	10	2				PRD	*Colpophyllia natans*	CNAT
2 SINT	15	10		15				DSD		*Dichocoenia stokesii*	DSTO
3 MCAV	45	40		40		10	SL	STL, DC		*Diploria labyrinthiformis*	DLAB
4 CNAT	61	30	P	55	5				OGI	*Meandrina meandrites*	MMEA
5 SSID	25	10		5						*Mussa angulosa*	MANG
6 DSTO	15	8	P	2		15	FA	STL		*Mycetophyllia aliciae*	MALI
7 PAST	25	12		5	20				MUC, CLN	*Mycetophyllia ferox*	MFER
8										*Mycetophyllia lamarckiana*	MLAM
9										*Pseudodiploria clivosa*	PCLI

"Other Recent Mortality" is defined as any non-living parts of the coral in which the corallite structures are either white and still intact or slightly eroded but identifiable to species. Recently dead skeletons may be covered by sediment or a thin layer of turf algae. '**Other**' refers to any non-disease related lesions such as predation, abrasion, overgrowth of other organisms, interaction with other organisms or sediment cover. The cause of the lesion **must** be identified in the last column of the datasheet under "Other Conditions" using the pre-defined letter codes at the base of the datasheet.

Recent Mortality from Disease

DRM Code: 1000
Surveyor: JEST
Lat: DD.DDDD
Long: DD.DDDD
Date: 9/15/2022 Depth: 25

Transect: 1 / 2 / 3 / 4
Shared? Y / N
Buddy: LHUB

Rugosity Msmts:
1. 10 2. 35 3. 17
4. 15 5. 105 6. 45
7. 25 8. 20 9. 20
10. 100

P/A
H.Diad.
D.Diad.
ACER
APAL
DCYL

Habitat:
Isolated Reef
Contiguous Reef Spur and Grv.
Contiguous Reef Other
Reef Rubble

						Tissue Loss Disease					
Species Code	Width (cm)	Height (cm)	Bleaching P, PB, BL	% Old Mort	Other % Recent Mort	Disease % Recent Mort	TL Rate Fast, Slow	Disease Conditon(s)	Other Condition(s)	Scientific Name Transect 3 & 4 in Grey	Sp. Codes
1 SSID	10	5	PB	10	2				PRD	*Colpophyllia natans*	CNAT
2 SINT	15	10		15				DSD		*Dichocoenia stokesii*	DSTO
3 MCAV	45	40		40		10	SL	STL, DC		*Diploria labyrinthiformis*	DLAB
4 CNAT	61	30	P	55	5				OGI	*Meandrina meandrites*	MMEA
5 SSID	25	10		5						*Mussa angulosa*	MANG
6 DSTO	15	8	P	2		15	FA	STL		*Mycetophyllia aliciae*	MALI
7 PAST	25	12		5	20				MUC, CLN	*Mycetophyllia ferox*	MFER
8										*Mycetophyllia lamarckiana*	MLAM
9										*Pseudodiploria clivosa*	PCLI

"Disease Recent Mortality" is any disease related tissue loss lesion(s). If recent mortality from disease is identified, the rate of tissue loss (TL Rate) and cause of the lesion (Disease Conditions column) **must** be identified using the pre-defined letter codes outlined at the base of the datasheet.

Recording Tissue Loss and Conditions

DRM Code: 1000
Surveyor: JEST
Lat: DD.DDDD
Long: DD.DDDD
Date: 9/15/2022 Depth: 25

Transect: 1 / 2 / 3 / 4
Shared? Y / N
Buddy: LHUB

Rugosity Msmts:
1. 10 2. 35 3. 17
5. 105
7. 25 8. 20 9. 20
10. 100

P/A
H.Diad.
D.Diad.
ACER
APAL
DCYL

Habitat:
Isolated Reef
Contiguous Reef Spur and Grv.
Contiguous Reef Other
Reef Rubble

						Tissue Loss Disease					
Species Code	Width (cm)	Height (cm)	Bleaching P, PB, BL	% Old Mort	Other % Recent Mort	Disease % Recent Mort	TL Rate Fast, Slow	Disease Conditon(s)	Other Condition(s)	Scientific Name Transect 3 & 4 in Grey	Sp. Codes
1 SSID	10	5	PB	10	2				PRD	*Colpophyllia natans*	CNAT
2 SINT	15	10		15				DS		*Dichocoenia stokesii*	DSTO
3 MCAV	45	40		40		10	SL	S DC		*Diploria labyrinthiformis*	DLAB
4 CNAT	61	30	P	55	5				OGI	*Meandrina meandrites*	MMEA
5 SSID	25	10		5						*Mussa angulosa*	MANG
6 DSTO	15	8	P	2		15	FA	STL		*Mycetophyllia aliciae*	MALI
7 PAST	25	12		5	20				MUC, CLN	*Mycetophyllia ferox*	MFER
8										*Mycetophyllia lamarckiana*	MLAM
9										*Pseudodiploria clivosa*	PCLI

- If % Other Recent Mortality is recorded, Other Condition(s) column **MUST** be filled out.
- If % Disease Recent Mortality is recorded, Tissue Loss Rate and Disease Condition(s) columns **MUST** be filled out.

Recording Tissue Loss and Conditions

DRM Code: 1000
Surveyor: JEST
Lat: DD.DDDD
Long: DD.DDDD
Date: 9/15/2022 Depth: 25

Transect: 1 / 2 / 3 / 4
Shared? Y / N
Buddy: LHUB

Rugosity Msmts:
1. 10 2. 35 3. 17
5. 105 6.
7. 25 8. 20 9. 20
10. 100

P/A
H.Diad.
D.Diad.
ACER
APAL
DCYL

Habitat:
Isolated Reef
Contiguous Reef Spur and Grv.
Contiguous Reef Other
Reef Rubble

						Tissue Loss Disease					
Species Code	Width (cm)	Height (cm)	Bleaching P, PB, BL	% Old Mort	Other % Recent Mort	Disease % Recent Mort	TL Rate Fast, Slow	Disease Conditon(s)	Other Condition(s)	Scientific Name Transect 3 & 4 in Grey	Sp. Codes
1 SSID	10	5	PB	10	2				PRD	*Colpophyllia natans*	CNAT
2 SINT	15	10		15				DS		*Dichocoenia stokesii*	DSTO
3 MCAV	45	40		40		10	SL	S DC		*Diploria labyrinthiformis*	DLAB
4 CNAT	61	30	P	55	5				OGI	*Meandrina meandrites*	MMEA
5 SSID	25	10		5						*Mussa angulosa*	MANG
6 DSTO	15	8	P	2		15	FA	STL		*Mycetophyllia aliciae*	MALI
7 PAST	25	12		5	20				MUC, CLN	*Mycetophyllia ferox*	MFER
8										*Mycetophyllia lamarckiana*	MLAM
9										*Pseudodiploria clivosa*	PCLI

Note the codes for all coral conditions are at the base of the datasheet.

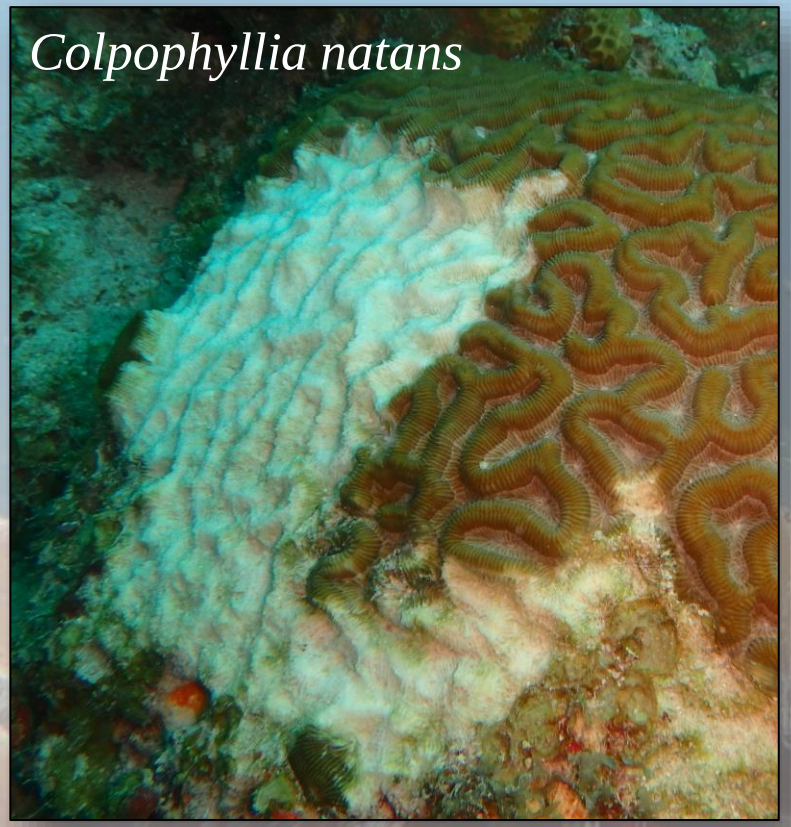
Bleaching Severity - Pale (P); Partially Bleached (PB); Bleached (BL) Tissue Loss Rate - Fast >1 cm bare skel. (FA); Slow <1 cm bare skel. (SL)

Disease Cond.s - Unknown Disease (UNK); Diseases (STL, WPL, WBD, WPX, RTL, DSD, YB, BB/RB); Discolored (DC) Other Cond.s - Predation (PRD); Overgrowth and Interaction (OGI); Abrasion (ABR); Sediment Cover (SC); Clionid sp. (CLN); Mucus sheathing (MUC); Other Unknown (OUK)

Types of ‘Other’ Recent Mortality

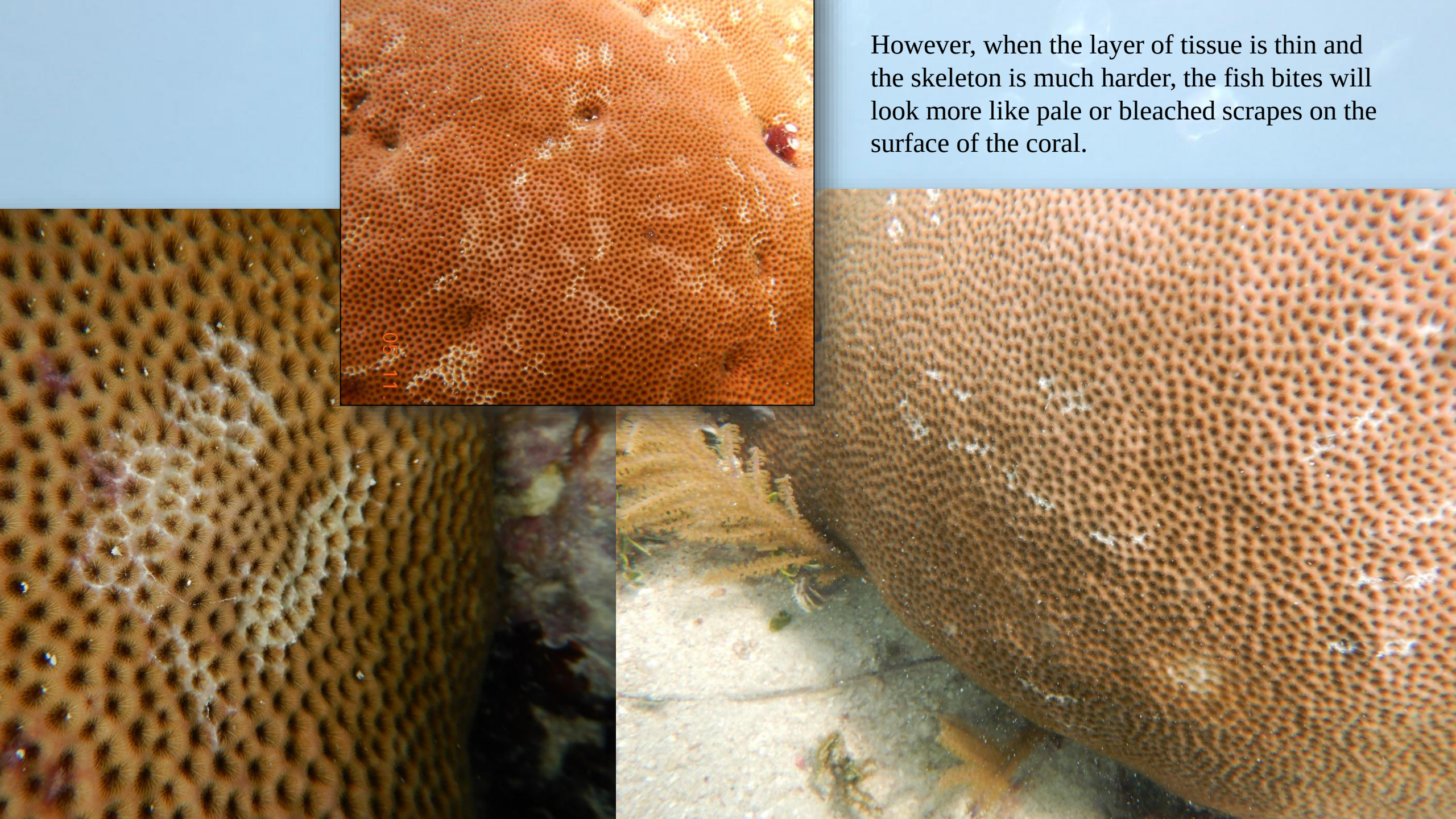
Parrotfish Bites (PRD)

Tissue loss and skeletal scarring in patches or strips



Stoplight parrotfish
(Sparisoma viride)
biting *Orbicella annularis*

However, when the layer of tissue is thin and the skeleton is much harder, the fish bites will look more like pale or bleached scrapes on the surface of the coral.



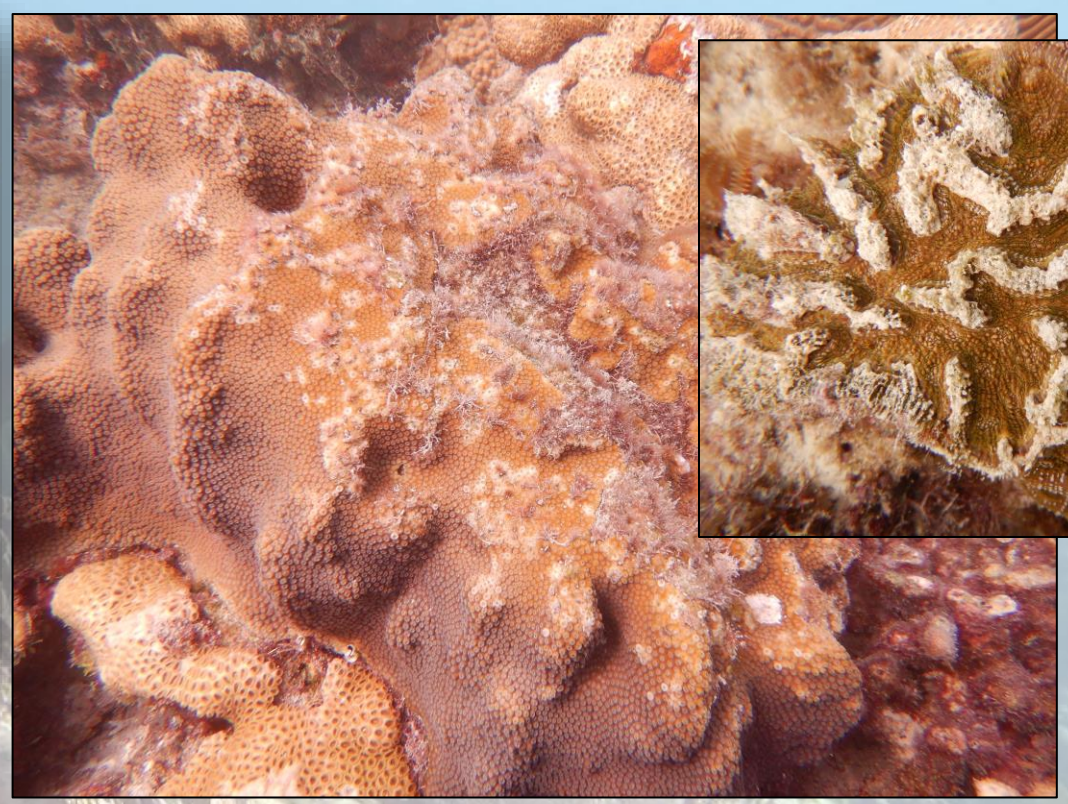
Types of ‘Other’ RM

Damselfish Bites/Gardening (PRD)

Look for small, circular (<1cm diameter) lesions on the coral.
Damselfish are not actually eating the coral tissue, but we still identify it as “Predation” for the purposes of this program.

Stegastes planifrons
(threespot damselfish)

Damselfish bites on
Orbicella spp.

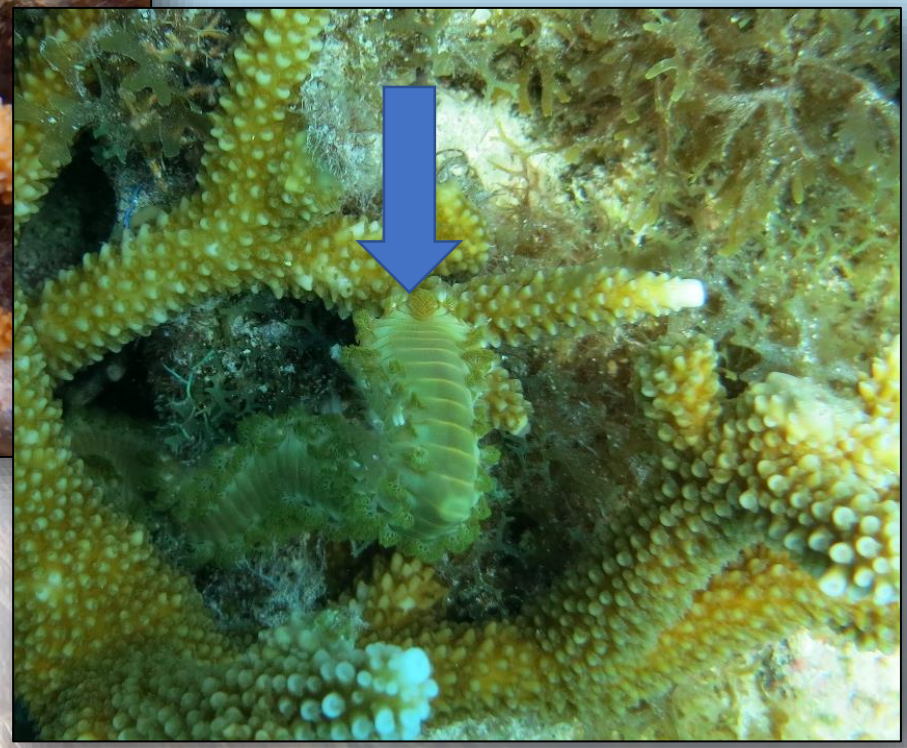


Damselfish
bites on
M. aliciae

Types of ‘Other’ RM

Predation by Fireworms (PRD)

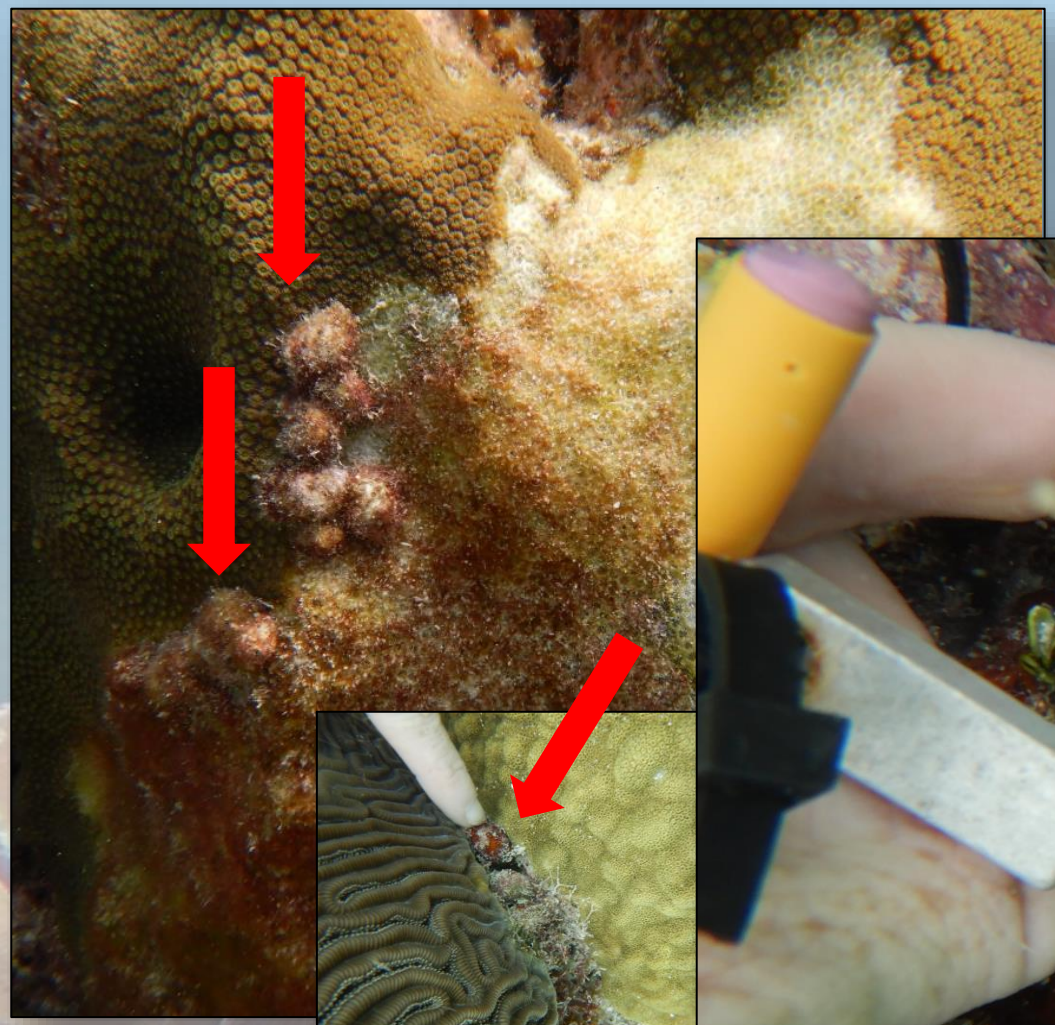
(*Hermodice carunculata*)

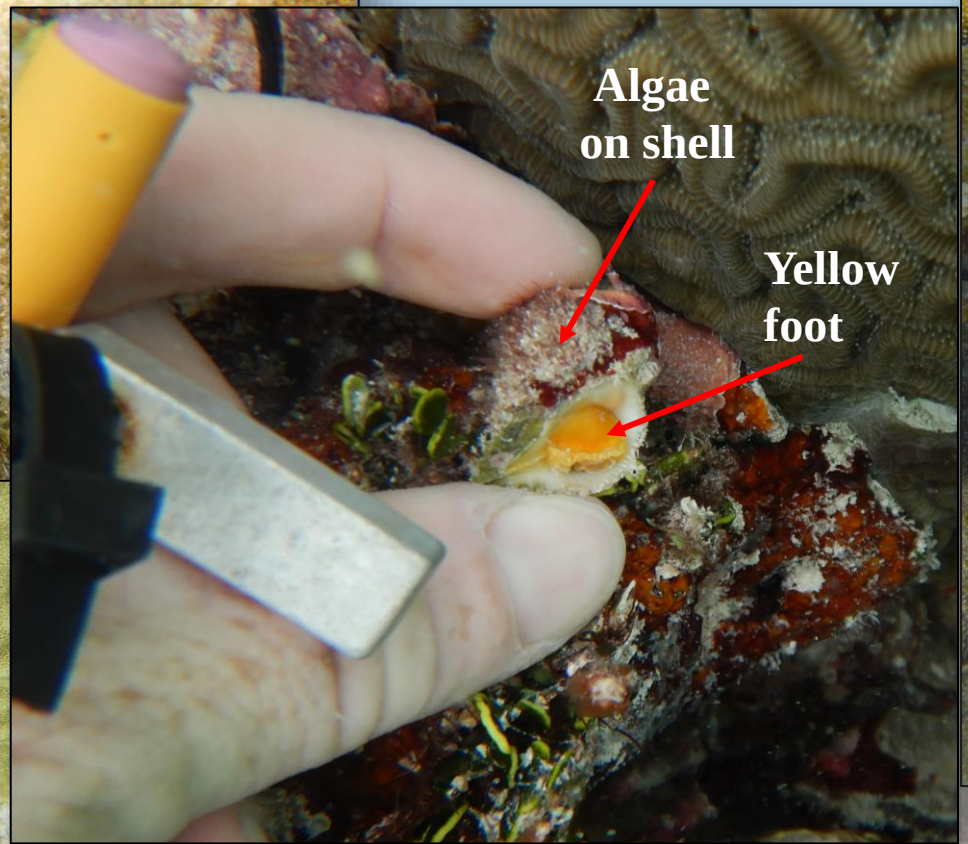


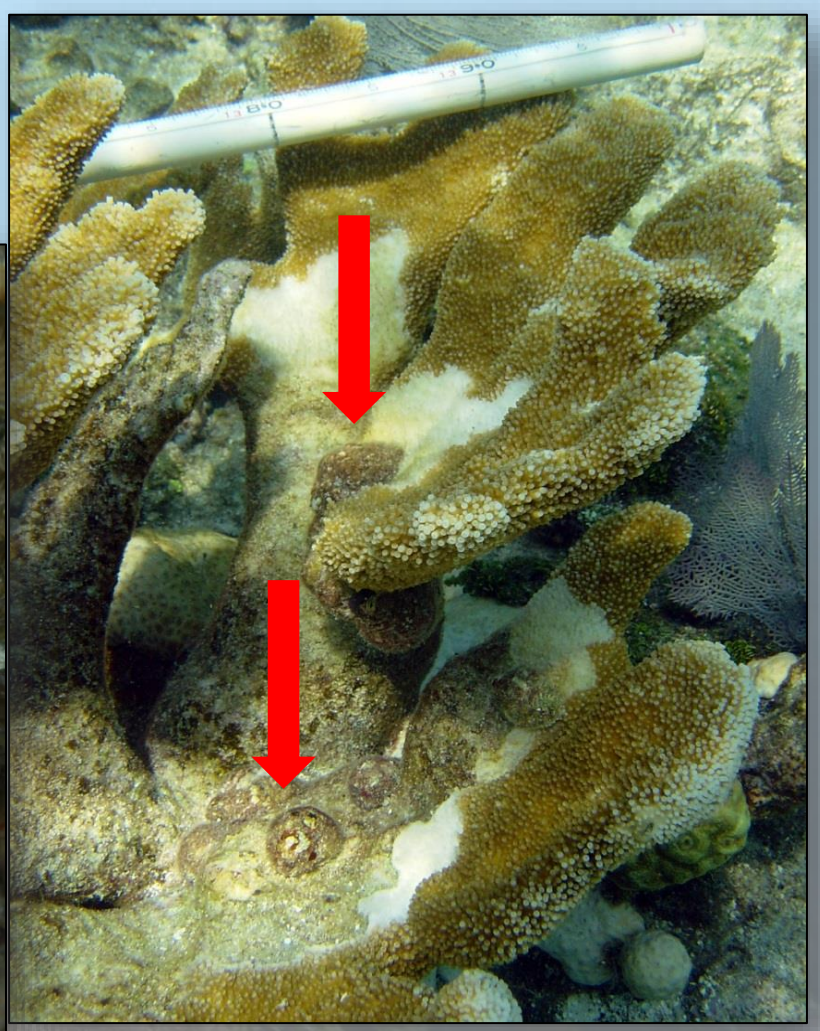
Types of ‘Other’ RM

Predation by *Coralliophila* spp. (PRD)

Look along tissue margins. *Coralliophilia* can be hard to find and are often camouflaged by algae.



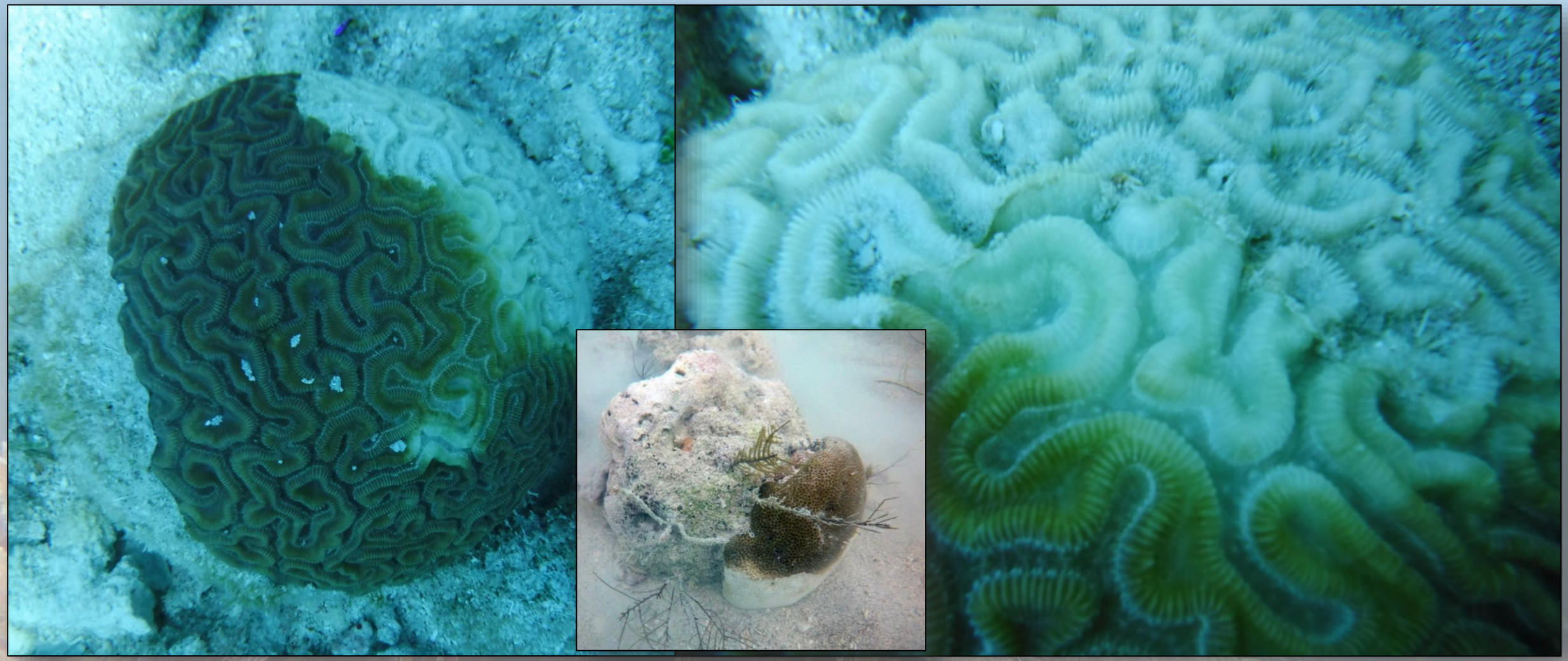




Types of ‘Other’ RM

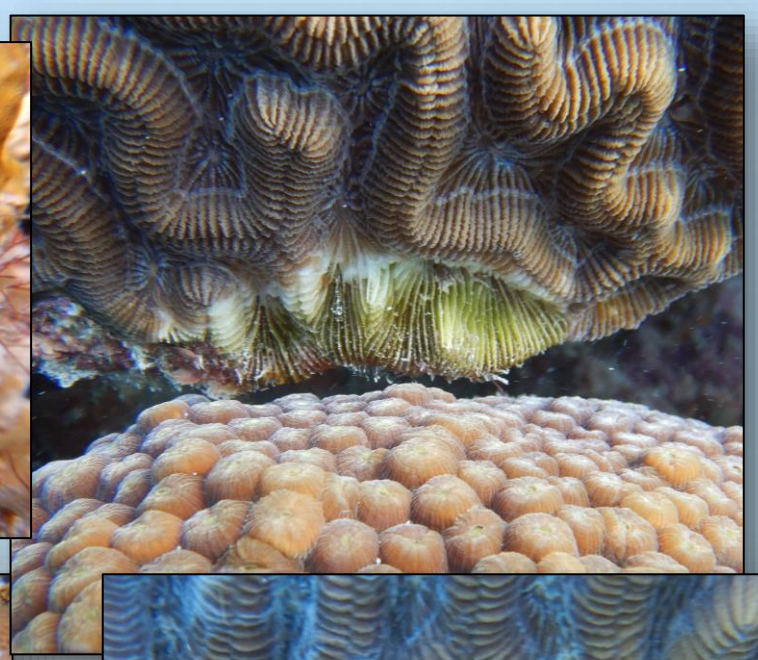
Sediment Cover (SC)

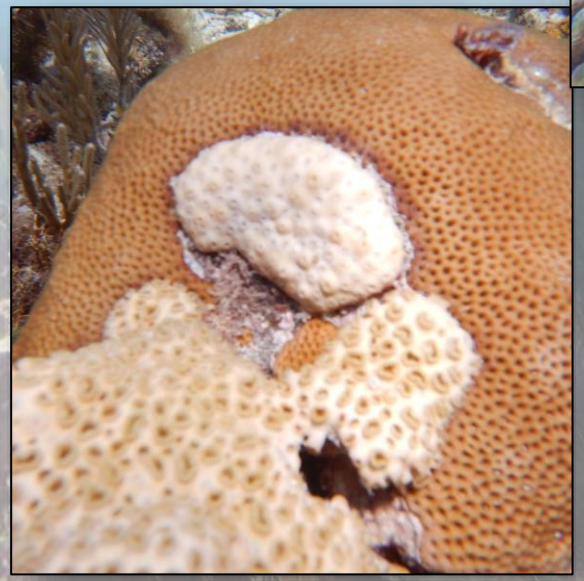
Evidence of recent mortality from sediment cover includes sand lodged within recently exposed septa and the colony is often surrounded by sand or rolled into a sandy area.



Types of ‘Other’ RM

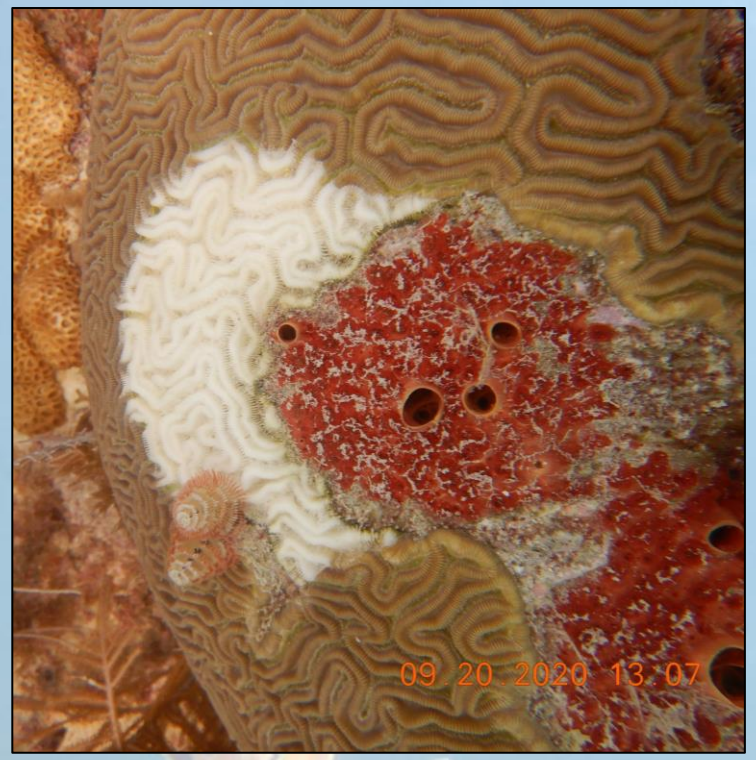
Overgrowth and Interaction (OGI)





Common overgrowths
Macroalgae
Encrusting gorgonian
Palythoa
Sponges
Millepora alcicornis

Common interactions
Christmas Tree Worms
Gorgonian branches
Fighting corals



CLN

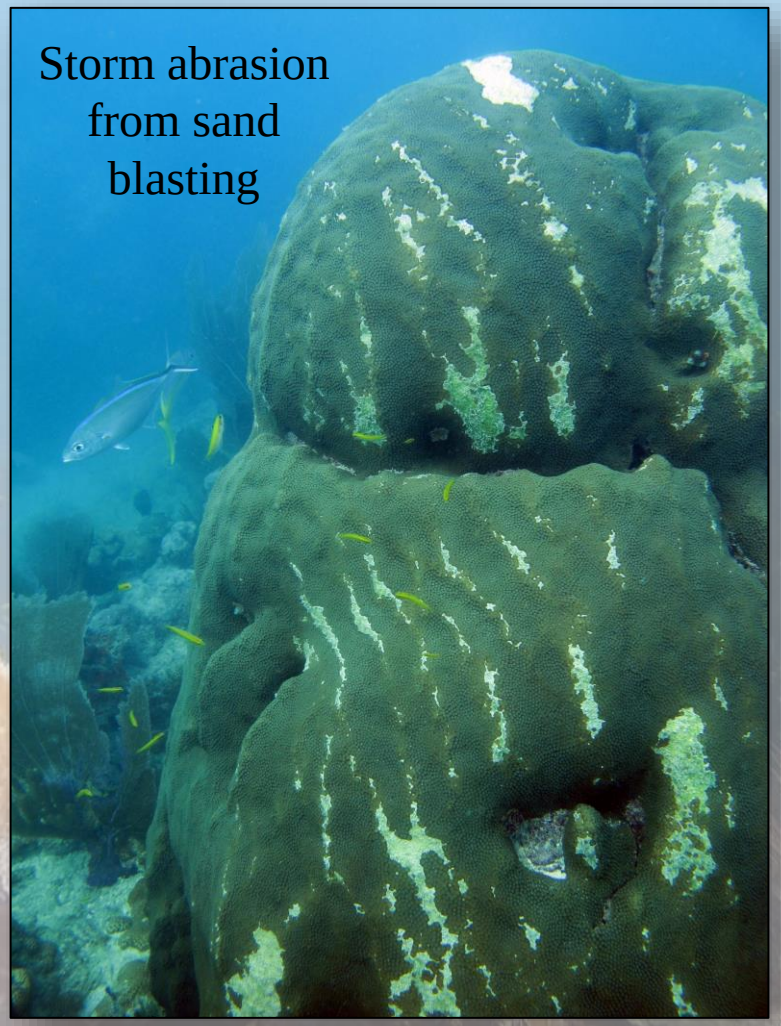
Cliona delitrix is a boring sponge that grows from inside the coral and can slowly overtake the colony.
The interaction of the sponge with the coral tissue can often cause tissue loss (recent mortality). For recent mortality related to Cliona, use the **CLN** code.

Tip: Look for the red oscula protruding from the skeleton.

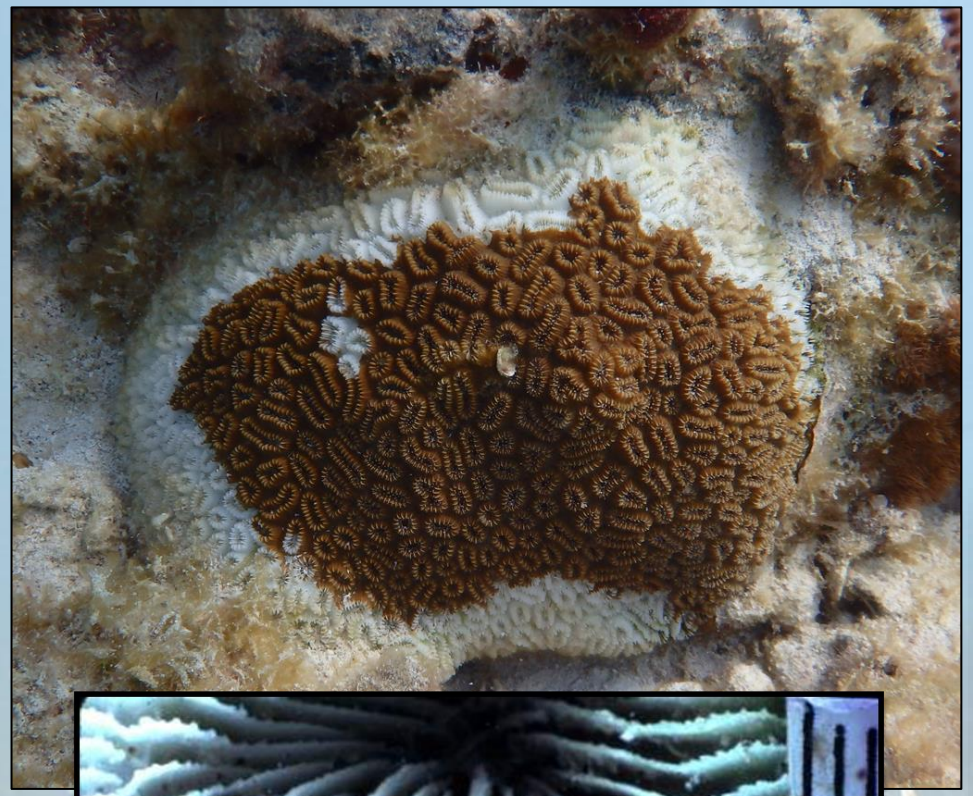
Types of ‘Other’ RM

Abrasion (ABR)

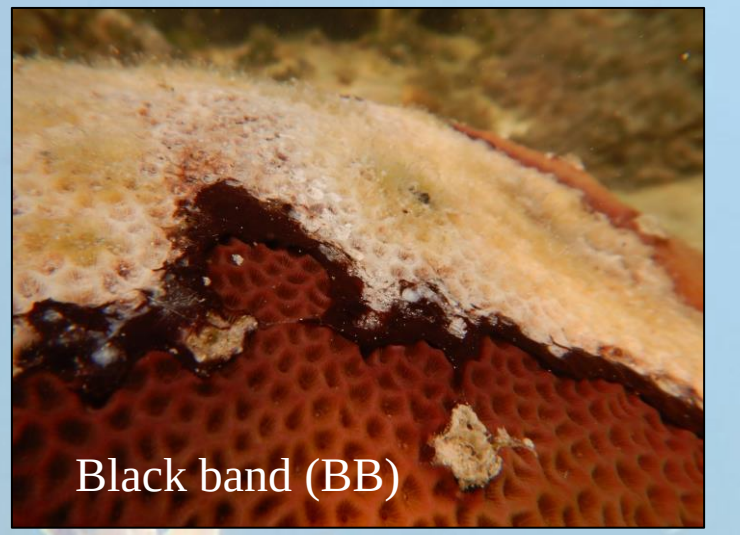
Abrasion can be inflected by hurricanes and storms.
Abiotic objects or particles abrading the coral tissue.

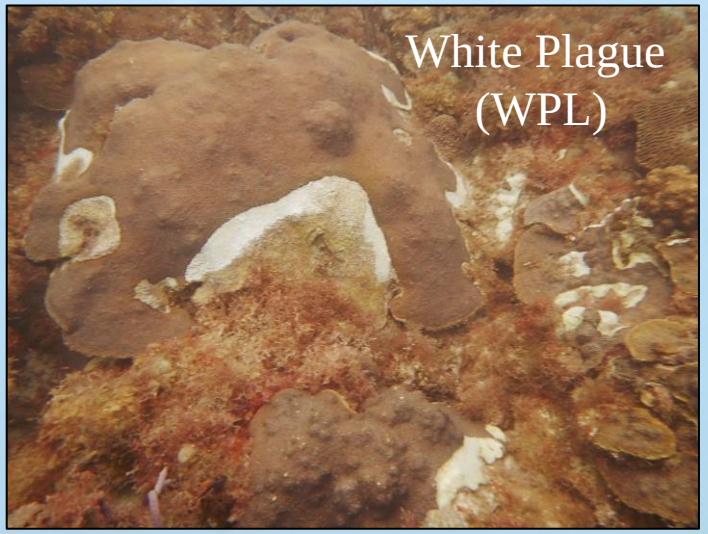


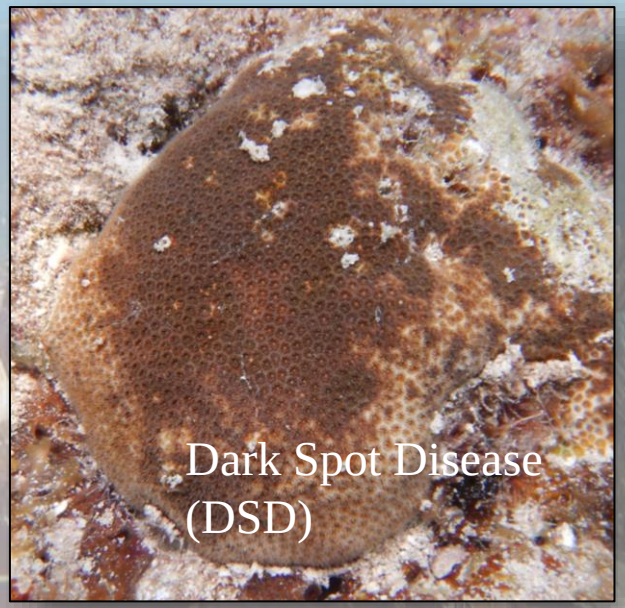
Recent Mortality Caused by Disease

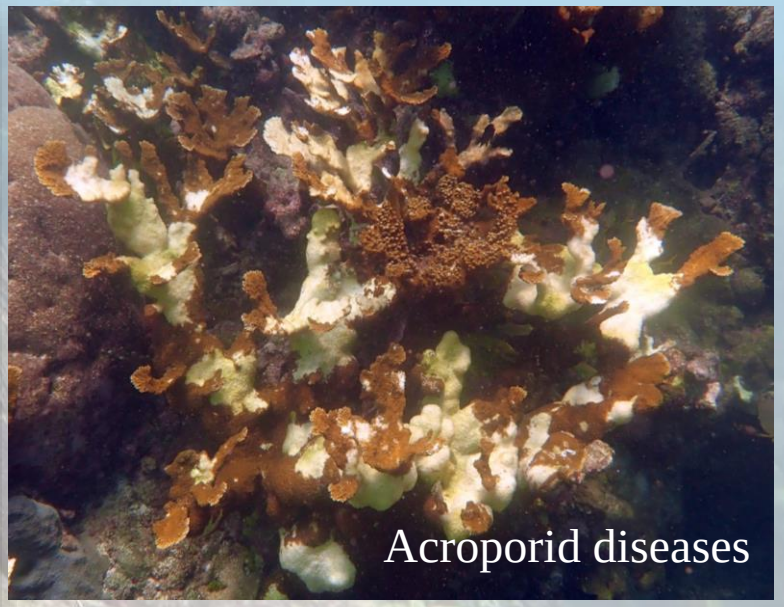


Identifying Known Coral Diseases



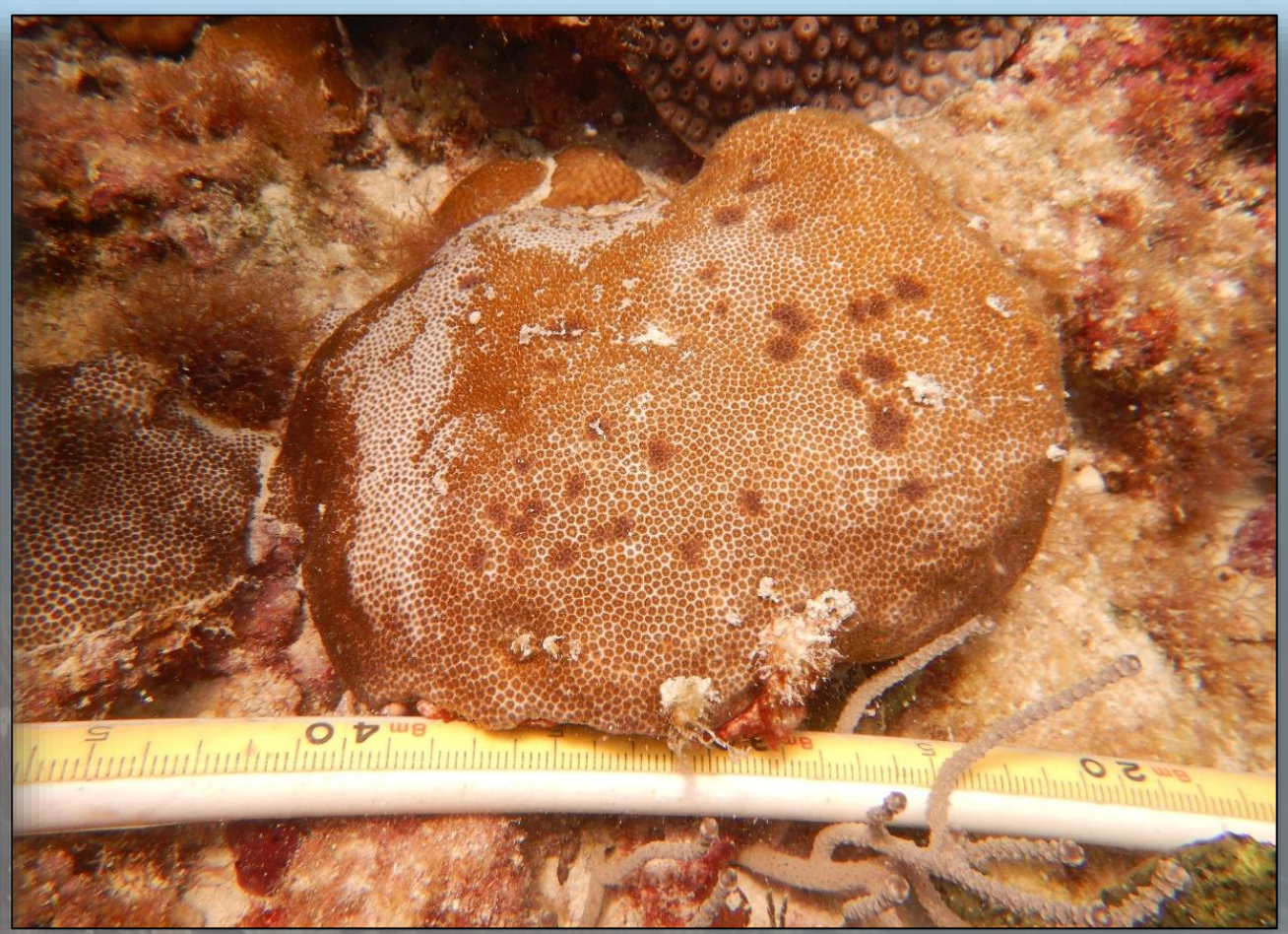






Dark Spot Disease (DSD)

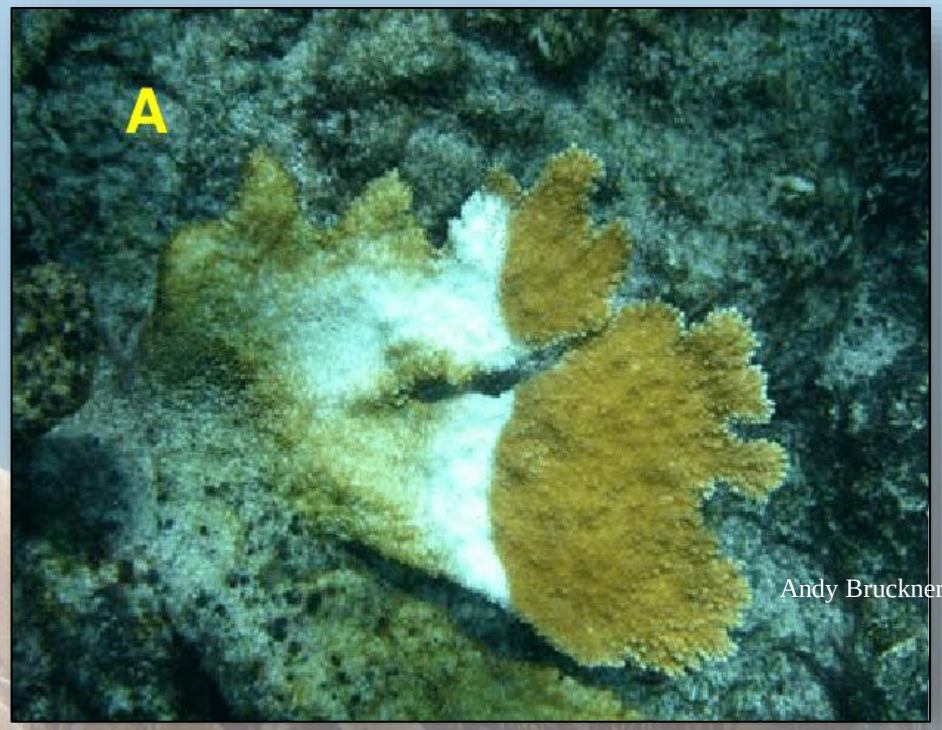
Commonly seen on *Siderastrea* spp. and *Stephanocoenia intersepta*.
Typically seen as spots or coalescing spots of dark discolored tissue.



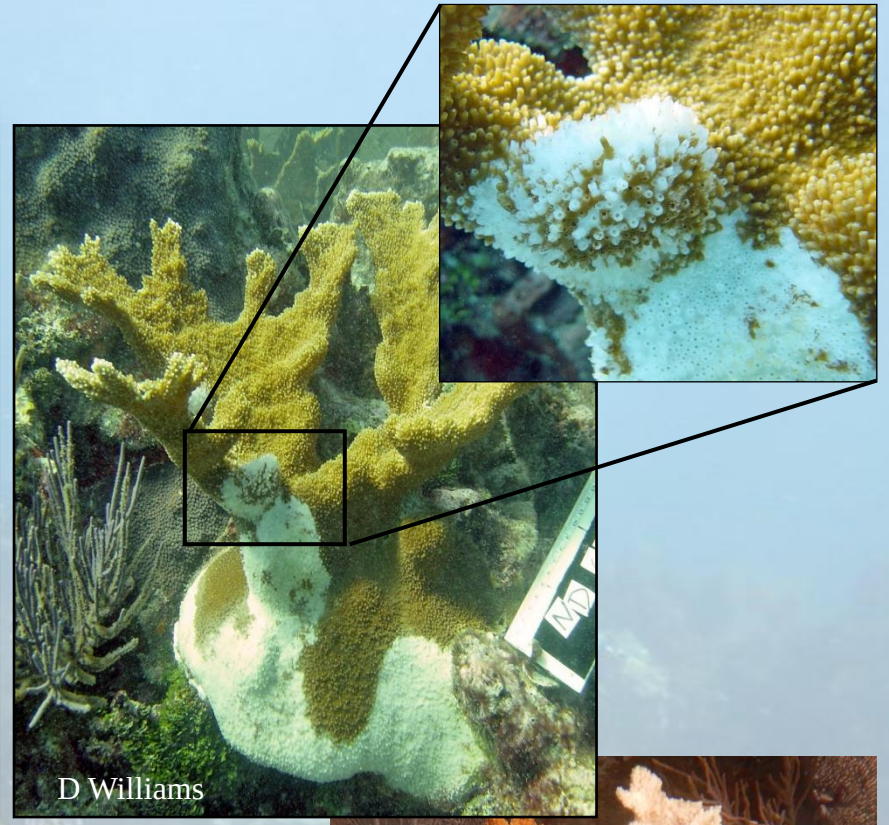
Acropora spp. Diseases

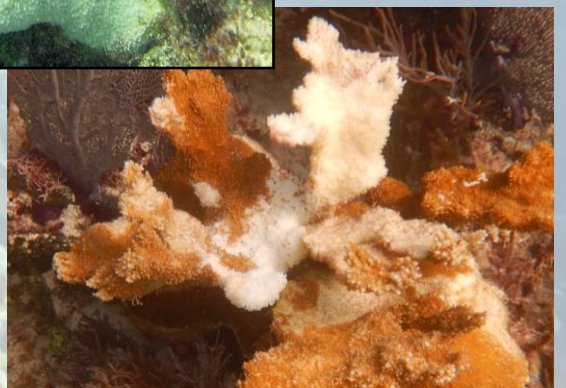
White Pox (WPX)

White band (WBD)



Rapid Tissue Loss (RTL)



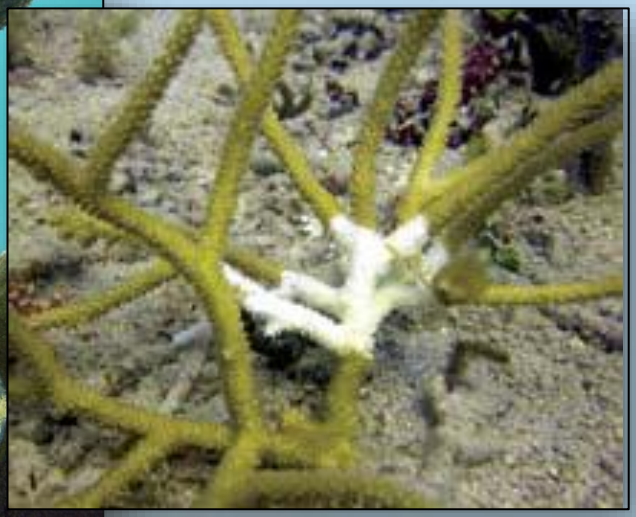


White Pox Disease

- Exclusive to *A. palmata*
- Lesions form distinct white patches and can develop simultaneously on all surfaces of the colony.

White Band Disease

- Tissue loss progresses mostly at a uniform rate from the base of the branch towards the tip resulting in a ‘band’.
- Band can be 5 to 10cm wide (typically fast tissue loss).



Rapid Tissue Loss

- Highly irregular tissue loss pattern that progresses very rapidly.
- Lesions can occur anywhere on the colony.

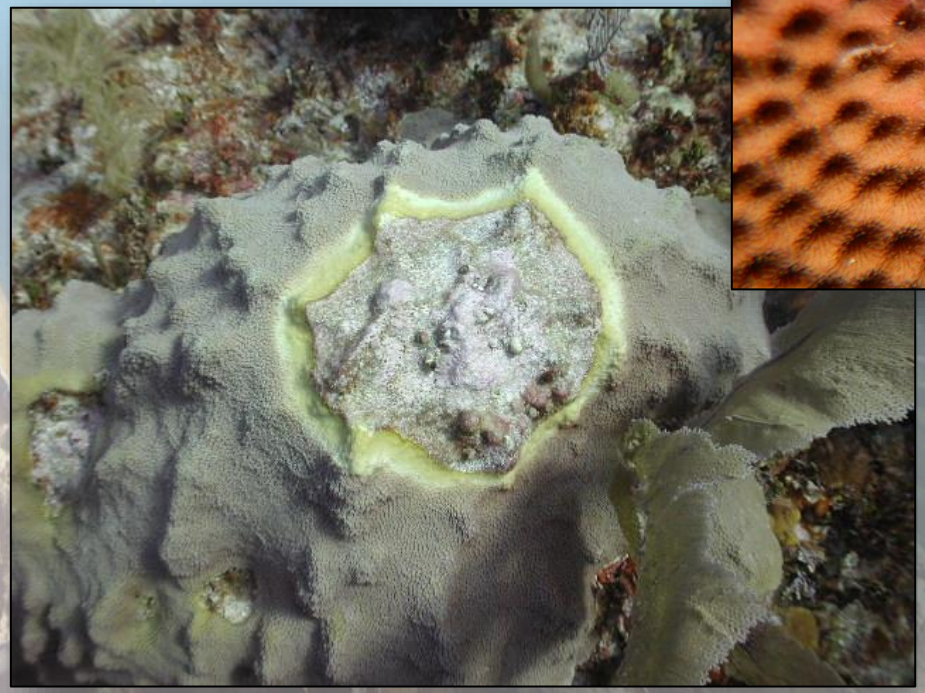
Band Diseases

Black Band/Red Band Disease (BB/RB)

- Black or Red mat (a few mm to cm wide)
- Moving across the surface of the skeleton
- Leaving behind bare white skeleton

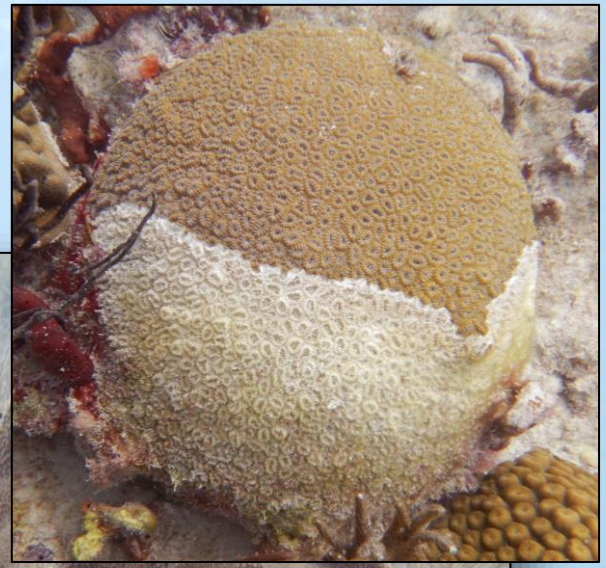
Yellow Band Disease (YB)

- Chronic tissue loss following a narrow band of yellow tissue



White Plague (WPL)

Polyps die relatively quickly (acute tissue loss). Can be focal or multifocal and affects multiple species. Tissue margin is distinct, in most cases forming a defined line between live tissue and recent mortality. Tissue loss always progresses from an edge of an isolate or base of the colony.



Stony Coral Tissue Loss Disease (STL)

First documented in 2014 and continues to affect corals at present.

Has now impacted the entire extent of Florida's Coral Reef.

Currently, 22 of 43+ species are affected by the disease.

Affects all forms of corals (brain, star, finger, flower, and encrusting).





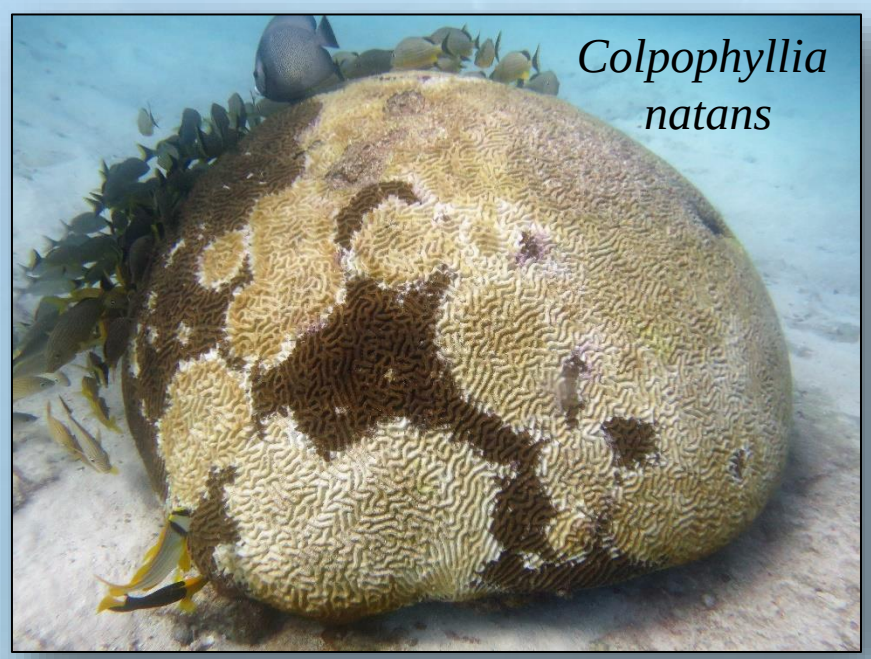


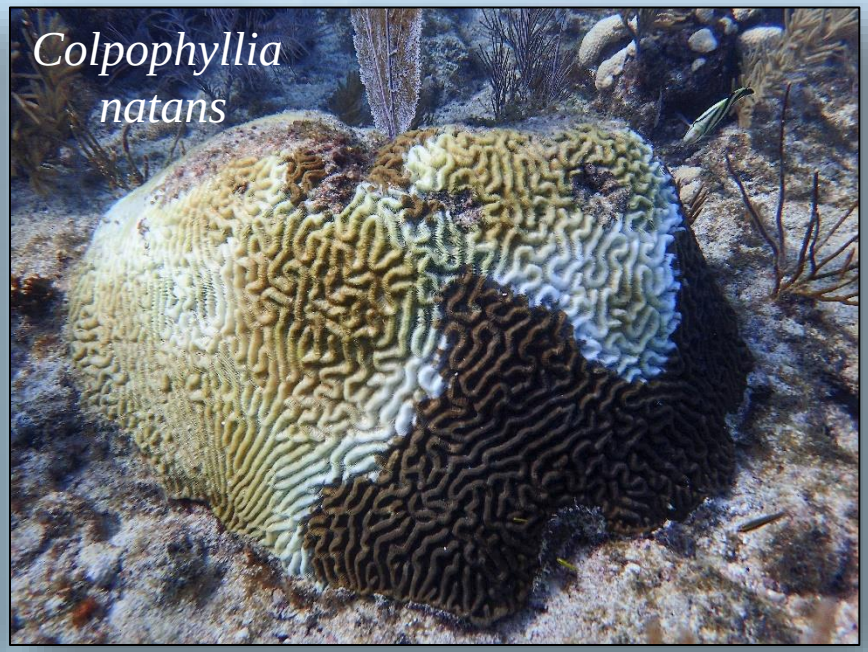

STL

SCTLD is a virulent disease that can be spread through direct contact or through the water column.

It is likely that if it is present on a reef, it will be affecting other colonies of susceptible species. However, due to the loss of colonies from the disease, susceptible species may be few when searching the area.

If you are having trouble confirming SCTLD on a colony, look in the surrounding area. Do you see other susceptible species with similar lesions or recently dead colonies?
If so, it is likely SCTLD.

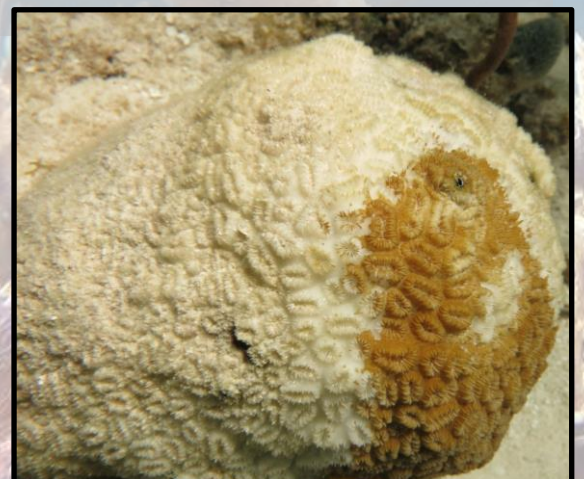


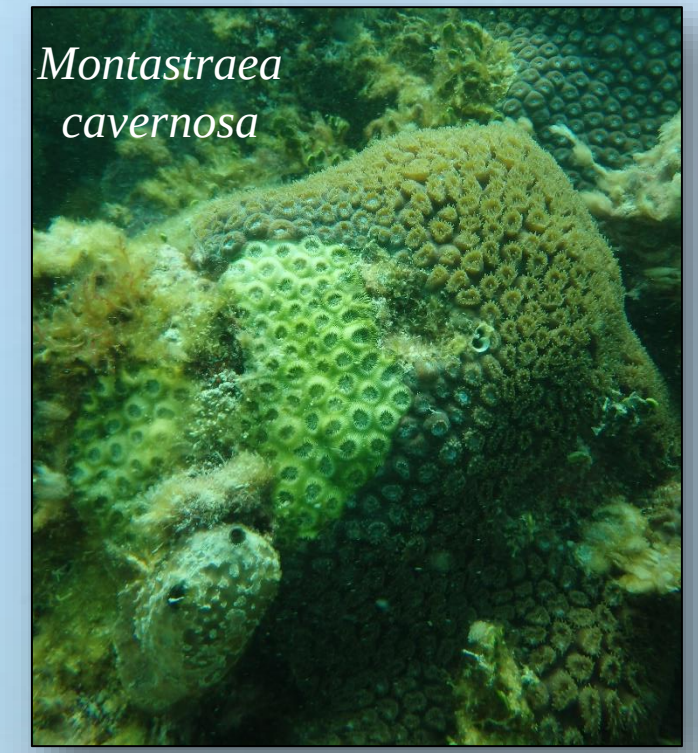


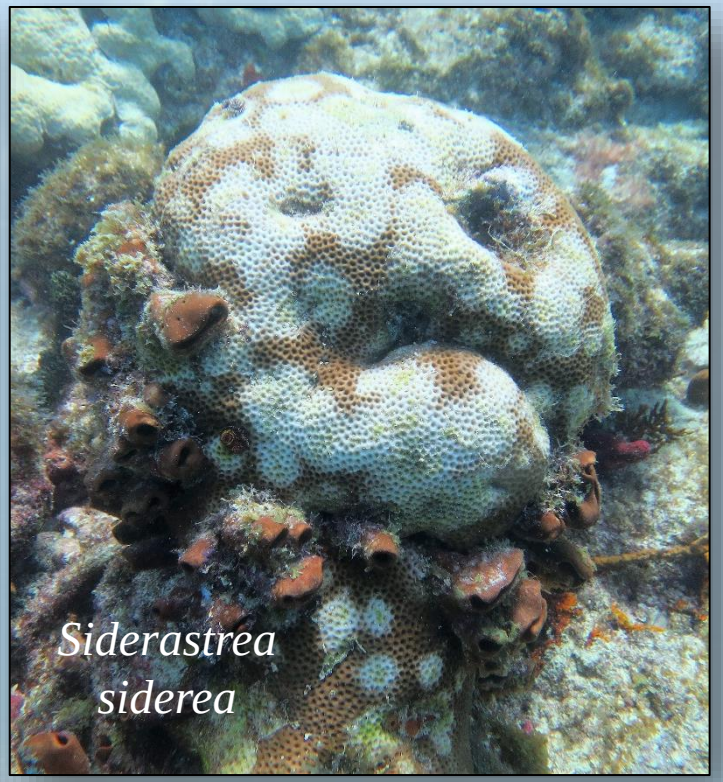
STL

Tissue loss from SCTLD can appear on any part of the colony with live tissue and can evolve into multiple lesions.

Often the rate of tissue loss on some highly susceptible species is so acute that the whole colony will experience rapid recent mortality.







Recent Mortality from Disease

If recent mortality from disease is identified, the rate of tissue loss progression **must** be recorded, and a disease code **must** be recorded.

Estimating the Rate of Tissue Loss Progression

Slow (S)

(< 1 cm of disease related recent mortality)

Fast (F)

(> 1 cm of disease related recent mortality)

How and where do we measure?

The rate of tissue loss is determined by measuring the width or diameter of recent mortality

However…

Recent mortality is not always uniform.

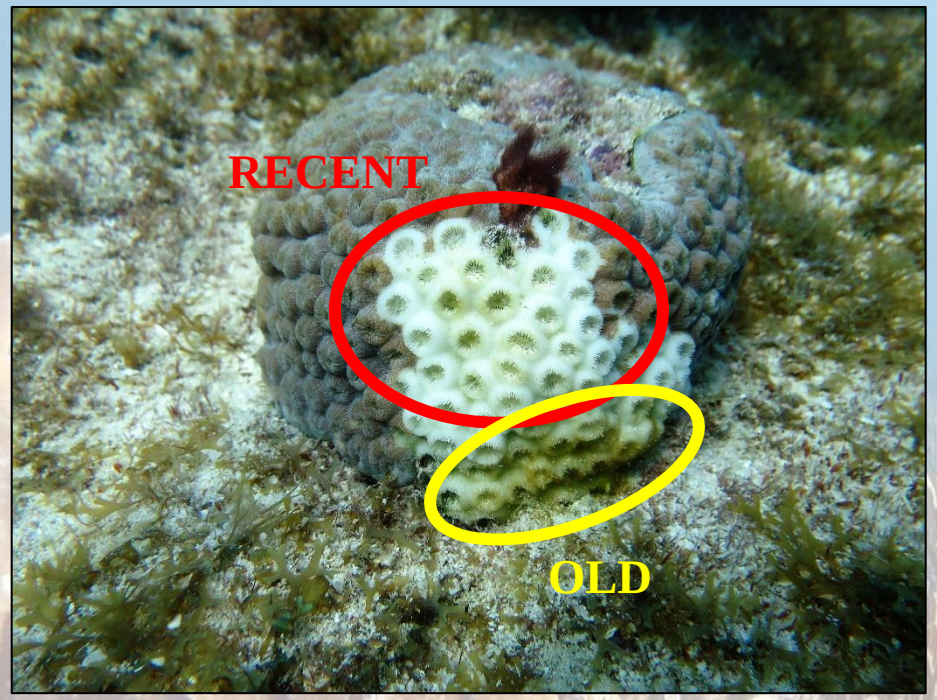
Recent mortality is not always in a strait line or band.

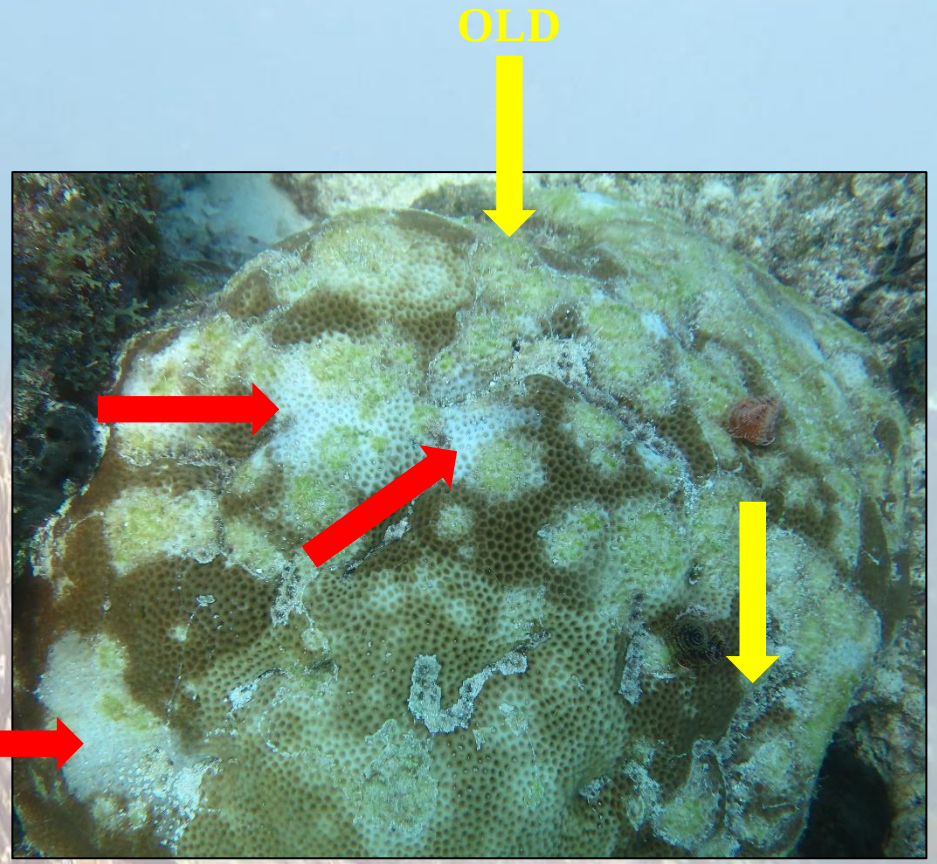
The margins of recent mortality can sometimes be diffuse.

Areas of recent mortality on a single colony can range from Slow to Fast.

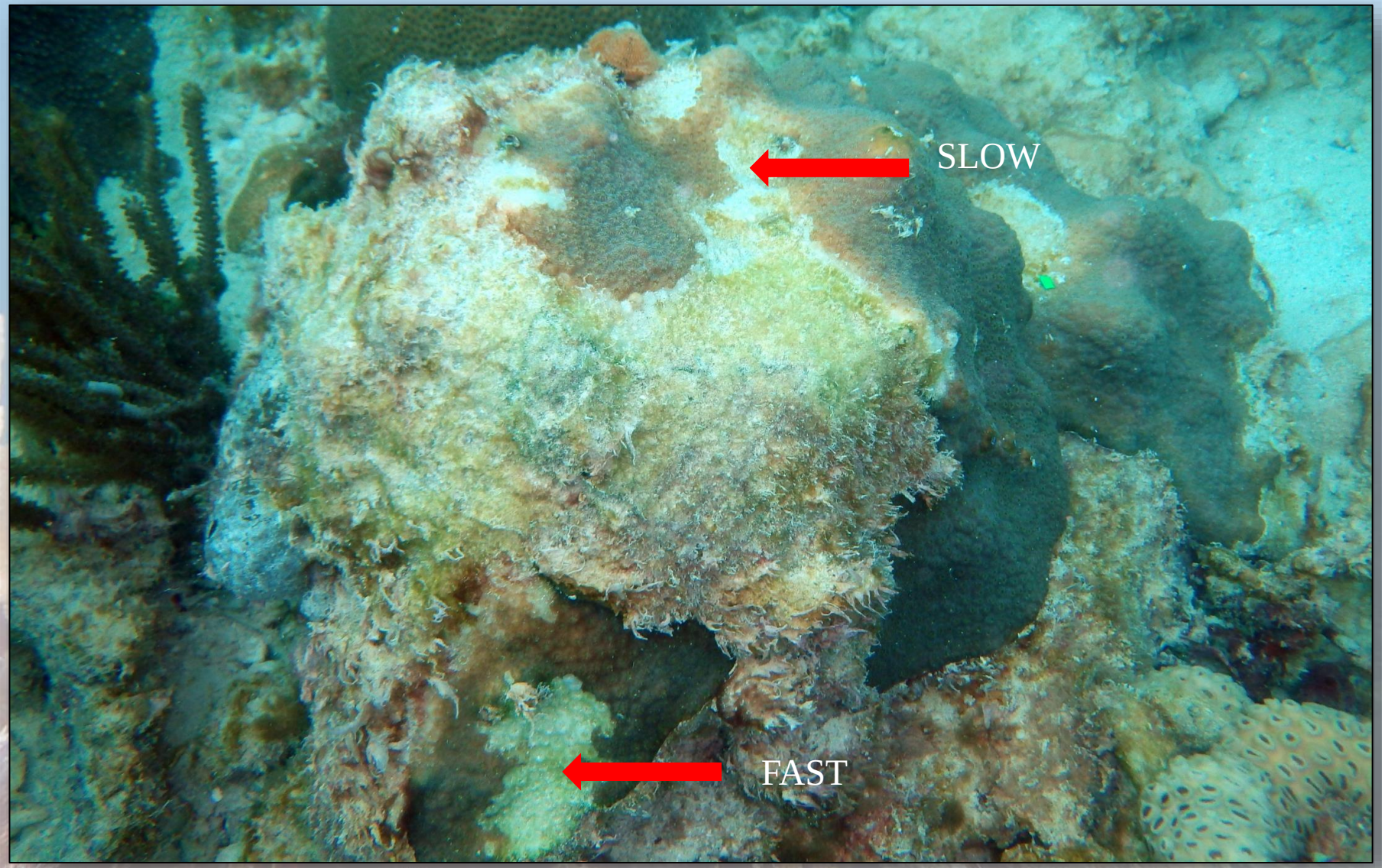
Despite variability of recent mortality on a colony,
the goal is to measure the maximum width of recent mortality progression to determine the rate.

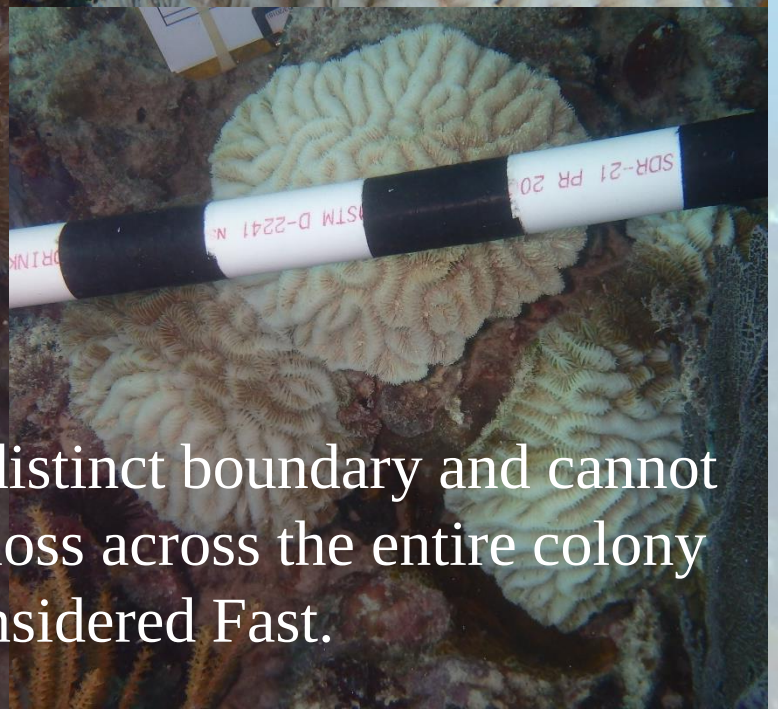
Recent Mortality vs. Old Mortality





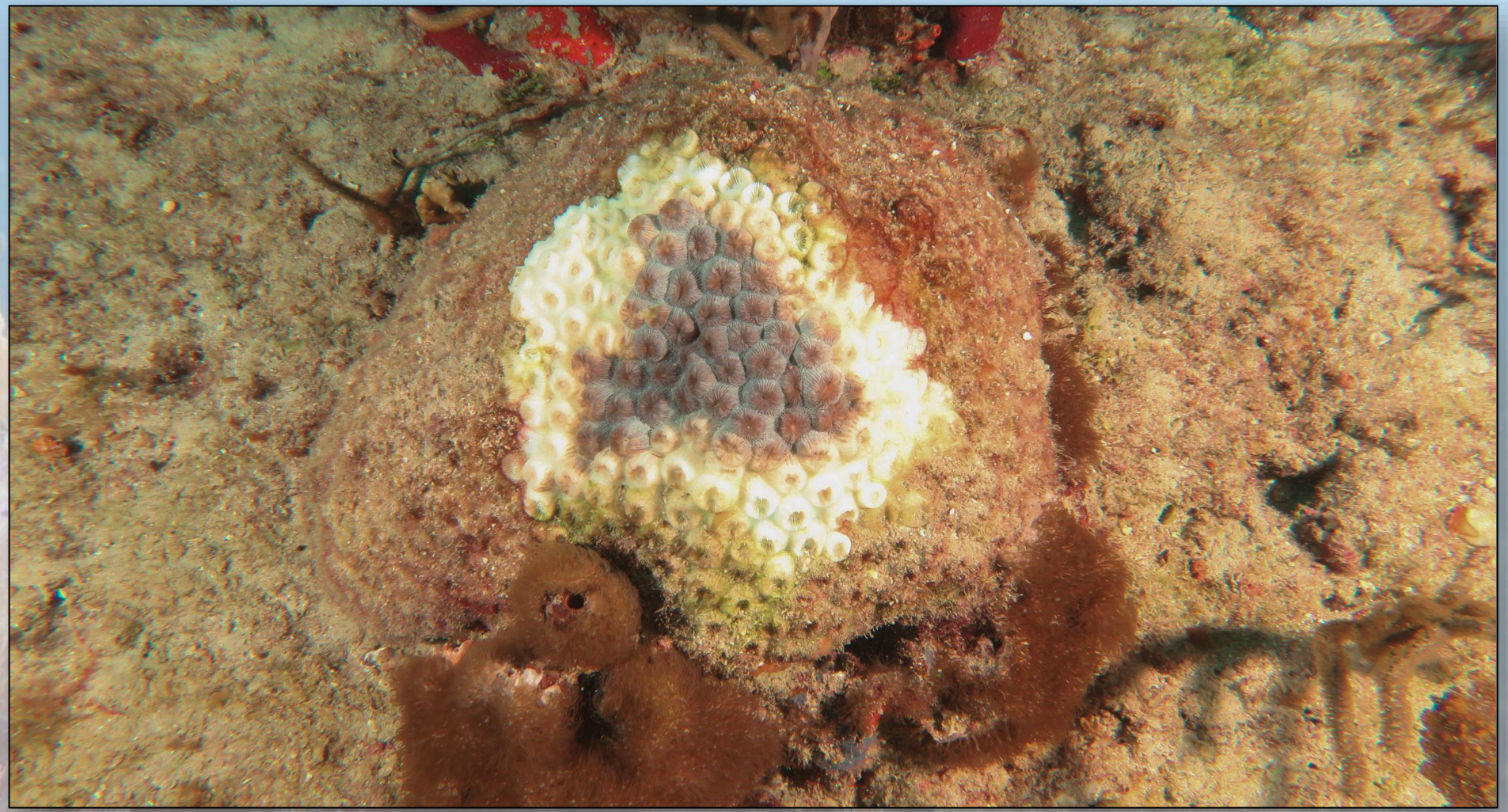
Looking at the top of the coral, it may seem that the rate of tissue loss is SLOW, however if you look towards the base, you can see a larger area of tissue loss that you may have missed.





Sometimes the tissue loss does not have a distinct boundary and cannot necessarily be measured. If there is tissue loss across the entire colony or majority of the colony, then it can be considered Fast.

Be sure to examine the area closely. Often, the tissue at the margin of the diseased area will be bleached and have a very small margin of tissue loss or none at all.
Be sure to measure only the recent mortality or tissue loss when identifying tissue loss as FAST or SLOW.



Coral Disease Conditions

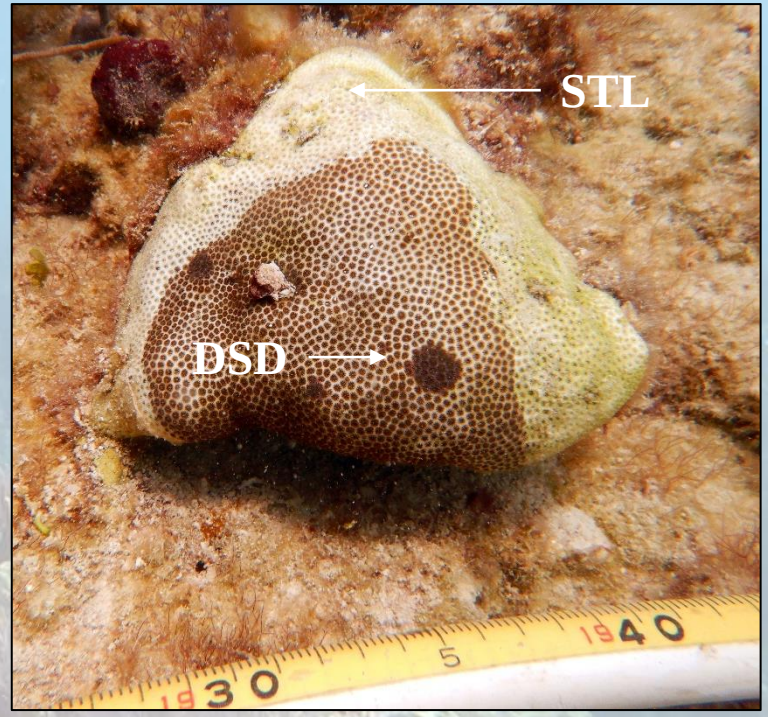
If % Disease Recent Mortality is recorded the Disease Condition(s) column **MUST** be filled out.

The Disease Condition(s) column allows the surveyor to identify any known diseases observed or unusual discoloration of tissue **'DC'** – not to be confused with the loss of zooxanthellae.

If the tissue loss is associated with the current coral disease outbreak, the condition can be recorded as **'STL' (Stony Coral Tissue Loss Disease)**.

More than one condition can be recorded in the Disease Condition(s) column if multiple disease conditions exist on a single colony.

Example:
Stephanocoenia intersepta
Stony Coral Tissue Loss Disease = STL
Dark Spot Disease = DSD



Discoloration (DC) and Dark Spot Disease

Dark Spot Disease (DSD) can be written in the 'Disease Condition(s)' column even if there is no recent tissue loss on the colony. The same goes for Discoloration (DC).

Often, Discoloration of coral tissue can be associated with tissue loss disease. In this case, two entries can be recorded in the 'Disease Condition(s)' column. For example, "DC, STL".

However, DSD and/or DC cannot be used as the only condition code for recent mortality.

DRM Code: 1000
Surveyor: JEST
Lat: DD.DDDD
Long: DD.DDDD
Date: 9/15/2022 Depth: 25

Transect: 1 / 2 / 3 / 4
Shared? Y / N
Buddy: LHUB

Rugosity Msmts:
1. 10 2. 35 3. 17
4. 15 5. 105 6. 45
7. 25 8. 20 9. 20
10. 100

P/A
H.Diad.
D.Diad.
ACER
APAL
DCYL

Habitat:
Isolated Reef
Contiguous Reef Spur and Grv.
Contiguous Reef Other
Reef Rubble

						Tissue Loss Disease					
Species Code	Width (cm)	Height (cm)	Bleaching P, PB, BL	% Old Mort	Other % Recent Mort	Disease % Recent Mort	TL Rate Fast, Slow	Disease Conditon(s)	Other Condition(s)	Scientific Name Transect 3 & 4 in Grey	Sp. Codes
1 SSID	10	5	PB	10	2				PRD	*Colpophyllia natans*	CNAT
2 SINT	15	10		15				DSD		*Dichocoenia stokesii*	DSTO
3 MCAV	45	40		40		10	SL	STL, DC		*Diploria labyrinthiformis*	DLAB
4 CNAT	61	30	P	55	5				OCI	*Meandrina meandrites*	MMEA
5 SSID	25	10		5						*Mussa angulosa*	MANG
6 DSTO	15	8	P	2		15	FA	STL		*Mycetophyllia aliciae*	MALI
7 PAST	25	12		5	20				MUC, CLN	*Mycetophyllia ferox*	MFER
8										*Mycetophyllia lamarckiana*	MLAM

UNKNOWN (UNK/OUNK)
Disease Condition & Other Condition

Unknown **Disease** Condition (UNK)

If you identify any Recent Mortality from disease but cannot confidently identify what type of disease it is, mark it as UNKNOWN (UNK) disease condition.

Other Unknown Condition (OUK)

If you identify any Recent Mortality not from disease but cannot confidently identify what caused it, mark it as UNKNOWN (OUK) other condition.

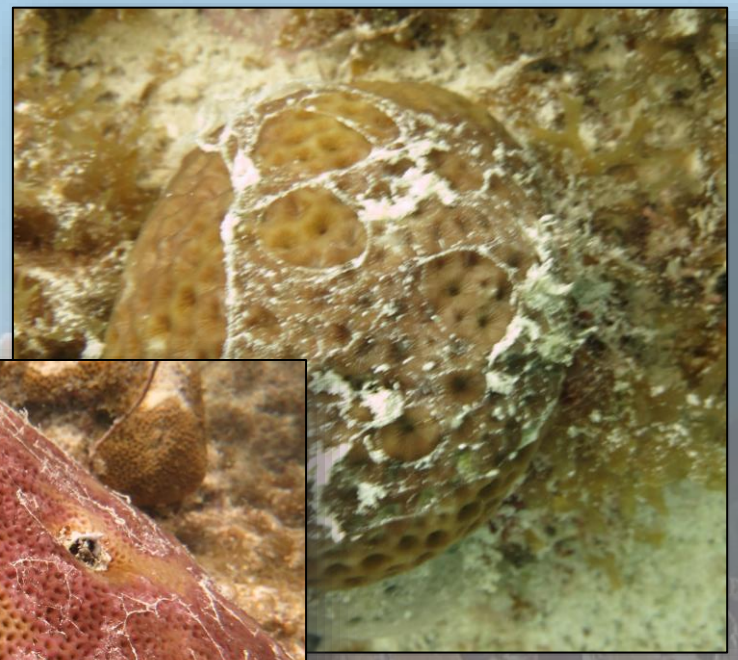
Please be sure to write UNK or OUK in the correct column depending on whether you are identifying an unknown disease or other unknown condition.

‘OTHER’ CONDITIONS TO RECORD

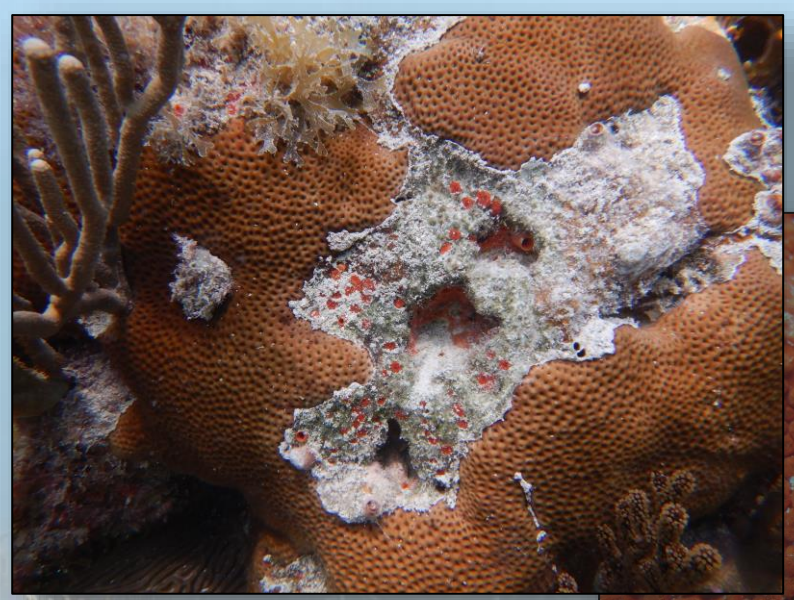
These conditions may or may not have recent mortality associated but should be recorded if observed on a colony.

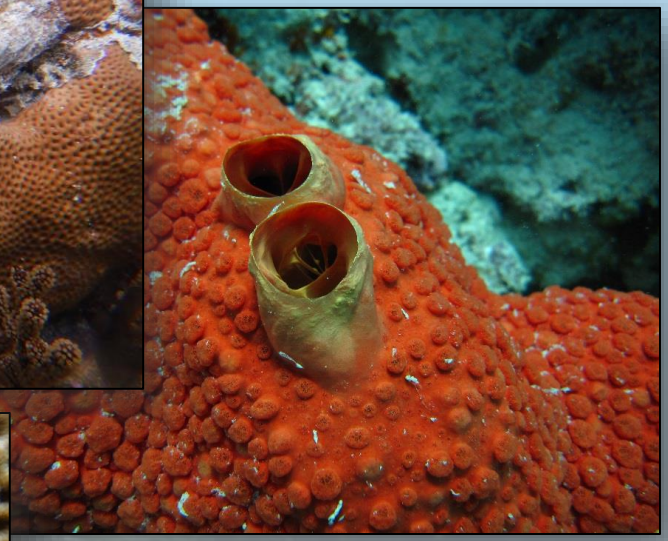
Mucus Sheathing (MUC)

Commonly seen on *Porites astreoides* and *Siderastrea siderea*

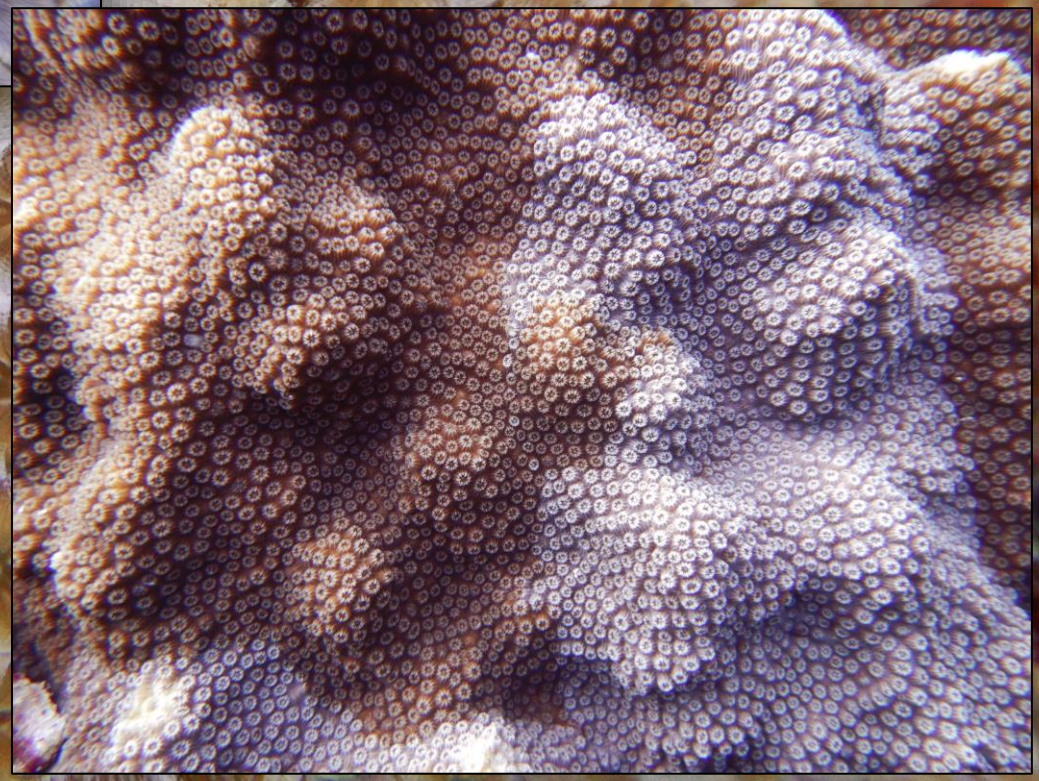


Cliona delatrix (CLN)





OTHER CONDITION **NOT** TO RECORD



Stramenopiles

- At first, these corals may seem pale or bleached but upon closer inspection, one can see that there is thin layer on top of the coral tissue.
- Stramenopiles are Eukaryotic microorganisms embedded in the coral tissue.
- Is not known to impact coral health.
- **Not a “Disease” condition** or an “Other” condition.
- Not a new phenomenon and has been documented in publications since the 90’s.

Example Datasheet for Recording Coral Conditions

DRM Code: 1000
Surveyor: JEST
Lat: DD.DDDD
Long: DD.DDDD
Date: 9/15/2022 Depth: 25

Transect: 1 / 2 / 3 / 4
Shared? Y / N
Buddy: LHUB

Rugosity Msmts:
1. 10 2. 35 3. 17
4. 15 5. 105 6. 45
7. 25 8. 20 9. 20
10. 100

P/A
H.Diad.
D.Diad.
ACER
APAL
DCYL

Habitat:
Isolated Reef
Contiguous Reef Spur and Grv.
Contiguous Reef Other
Reef Rubble

	Species Code	Width (cm)	Height (cm)	Bleaching P, PB, BL	% Old Mort	Other % Recent Mort	Tissue Loss Disease: Disease % Recent Mort	Tissue Loss Disease: TL Rate Fast, Slow	Tissue Loss Disease: Disease Conditon(s)	Other Condition(s)	Scientific Name Transect 3 & 4 in Grey	Sp. Codes
1	SSID	10	5	PB	10	2				PRD	*Colpophyllia natans*	CNAT
2	SINT	15	10		15				DSD		*Dichocoenia stokesii*	DSTO
3	MCAV	45	40		40		10	SL	STL, DC		*Diploria labyrinthiformis*	DLAB
4	CNAT	61	30	P	55	5				OGI	*Meandrina meandrites*	MMEA
5	SSID	25	10		5						*Mussa angulosa*	MANG
6	DSTO	15	8	P	2		15	FA	STL		*Mycetophyllia aliciae*	MALI
7	PAST	25	12		5	20				MUC, CLN	*Mycetophyllia ferox*	MFER
8											*Mycetophyllia lamarckiana*	MLAM
9											*Pseudodiploria clivosa*	PCLI

Final Notes:

If you encounter a diseased coral, **do not to touch** it with your hands or measuring tool to avoid spreading the disease to other colonies.

Take pictures of anything unusual or if you cannot identify an adult or juvenile coral. Information on where to upload images from your DRM surveys will be covered in the 'Website and Data Entry Training' to follow.