

Coral Abnormalities

Examine tissue loss
patterns and features

What is a Coral Abnormality?

- Impacts such as:
 - Coral diseases
 - Non-thermal bleaching
 - Growth anomalies
- Coral disease occurrence is expected to increase in warming oceans



White Syndrome



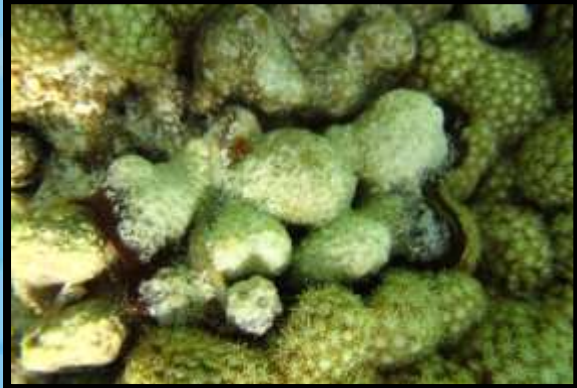
Photos courtesy of R. Miller & L. Raymundo





Eyes of the Reef

Black Band Disease



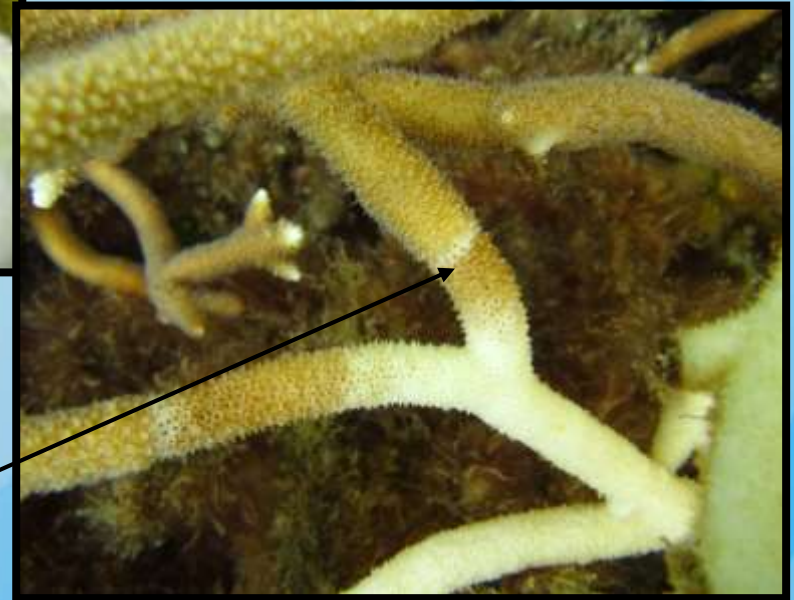
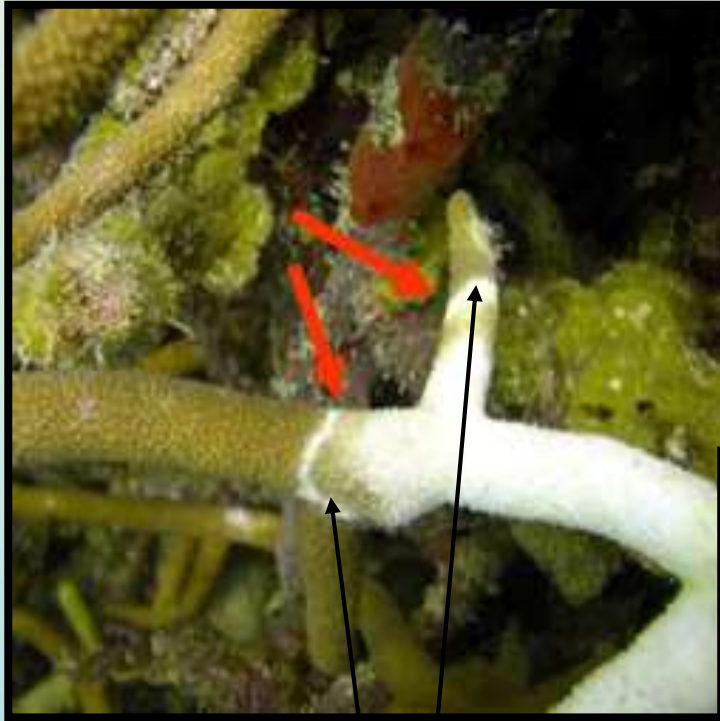
Look for distinct “band” lines

Photos courtesy of R. Miller & L. Raymundo



Eyes of the Reef

Brown Band Disease



Look for distinct "band" lines

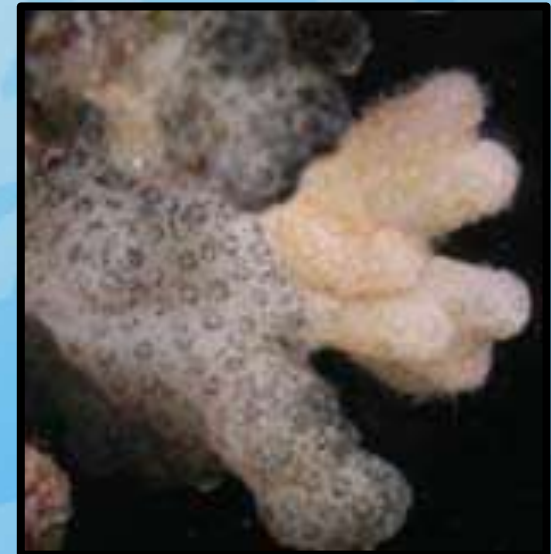
Photos courtesy of R. Miller & L. Raymundo





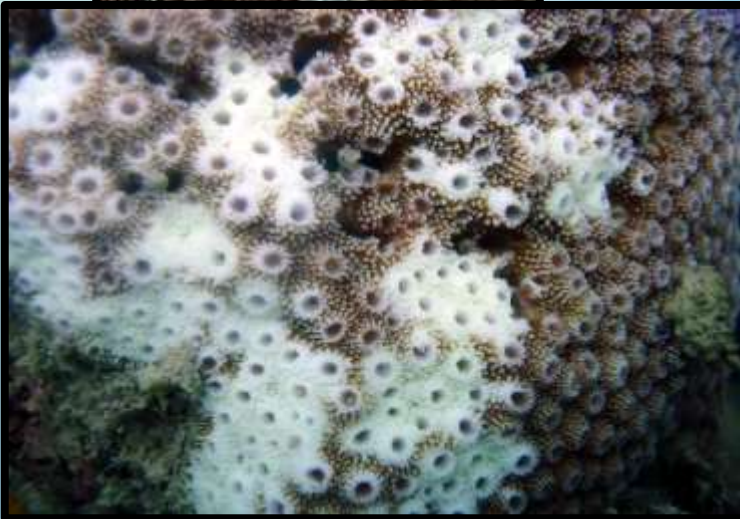
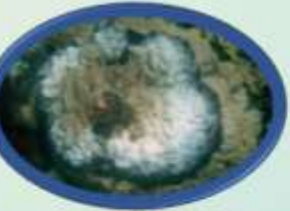
Eyes of the Reef

Skeletal Eroding Band



Corals have a “salt and peppery” appearance

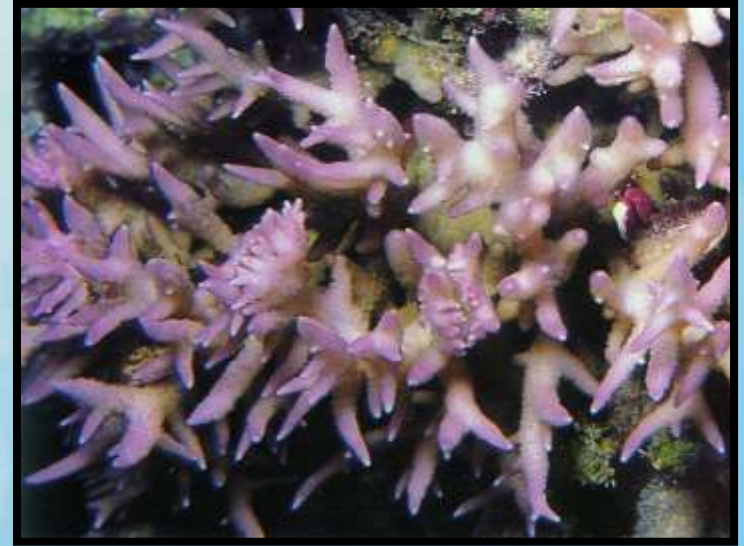
Other bleaching patterns (not thermal bleaching)



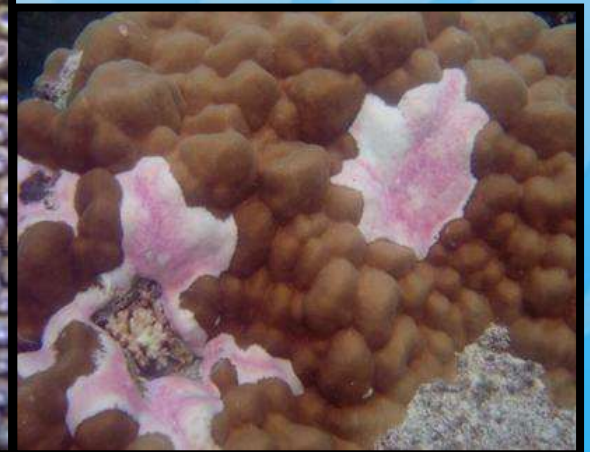
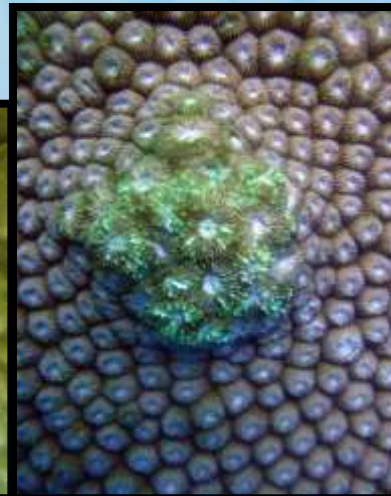
- Tissue still present
- Unusual patterns of bleaching that are ***not consistent with response to thermal stress***

Growth Anomalies

- Excess skeletal growth
 - Paler tissue
 - Enlarged calices
- Affects corallite structure, size, shape, density and color



Photos courtesy of R. Miller & L. Raymundo





Eyes of the Reef



How to report Coral Abnormalities...

CORAL ABNORMALITY

Depth of observed coral abnormalities

At what depth(s) did you observe coral abnormalities? Include units (feet or meters)

Type(s) of coral affected

See guide below for photos of coral types

- Small/Branching
- Massive
- Large Branching/Pillar
- Foliose
- Staghorn
- Encrusting
- Soft Corals
- Other:



Small/Branching Corals

- Discrete, branching coral heads



Staghorn

- Distinct branches with sharp-pointing tips
- Pronounced corallites



Massive Corals

- Surface smooth, ball or boulder-shaped
- Crowded, small polyps



Encrusting

- Covers substrate in sheet formation adhering to hard surfaces



Large Branching/Pillar

- Extended pillar structures
- Upward growth, not widespread branching



Soft Corals

- Have feathery tentacles
- Do not have hard skeletons; flexible skeleton
- Flowy appearance in water

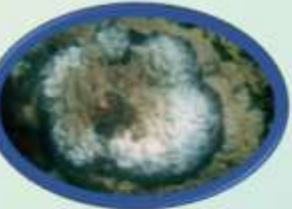


Foliose

- Steep-sided ridges
- Polyps in valleys
- Aka "lettuce corals"

Photos courtesy of guamreeflife.com





2

Number of affected colonies

Approximately how many coral colonies did you observe with abnormalities?

Abnormality description

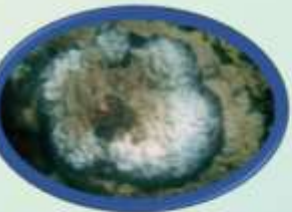
Describe lesions, coloration, distinct features of abnormality

3

Additional information

Do you have any other additional information about this reef impact that might be useful?

Do you have photos? Upload photos here: <http://goo.gl/eX57bR>



2

Number of affected colonies

Approximately how many coral colonies did you observe with abnormalities?

Abnormality description

Describe lesions, coloration, distinct features of abnormality

NOTE: It is NOT required to identify the coral disease or specific abnormality. A detailed description with photos is enough information.

3

Additional information

Do you have any other additional information about this reef impact that might be useful?

Do you have photos? Upload photos here: <http://goo.gl/eX57bR>

Let's practice – Abnormality #1



✓Coral type affected?

✓Number of colonies affected?

✓Description?

Guamreeflife.com

Let's practice – Abnormality #2



✓Coral type affected?

✓Number of colonies affected?

✓Description?

W. Hoot

Abnormality Practice Answer Key

- **Abnormality #1:**

Coral type affected: Massive

Number of colonies: one

Description: Distinct line around colony, top half of coral is dead/white and bottom half has color.

- **Abnormality #2:**

Coral type affected: Massive

Number of colonies: one

Description: Distinct black band around colony; top half is dead and bottom half looks normal OR Looks like black band disease.