

**Flower Garden Banks National Marine Sanctuary
Coral Disease Response
Cruise Report - April 13-14, 2005**

Overview

A two day cruise was conducted to survey the East (EFGB) and West Flower Garden Banks (WFGB) to determine the status of a white plague coral disease outbreak, as reported by G.P. Schmahl and Emma Hickerson (EFGB – Buoy #4) from February 23, 2005.

A total of 26 dives were conducted by 5 divers at 5 different buoy locations – three at the East Flower Garden Bank, and 2 at the West Flower Garden Bank. A total of 41 colonies were observed with white plague symptoms – most appeared to be inactive. ID tags and margin nails were placed in 7 colonies exhibiting active white plague symptoms.

During the initial observations, the following species were observed to be affected by the disease outbreak: *Montastraea franksi*, *M. faveolata*, *Diplora strigosa*, and *Porites astreoides*. During this latest effort, two additional species were observed to be affected: *M. annularis*, *Stephanocoenia intersepta*, and *Colpophyllia natans*. Total species affected to date: 7

Conditions: 40’-80’ visibility, water temperature 68-70F, no – little current, 2-4’ seas.

Participants

G.P. Schmahl – FGBNMS

Emma Hickerson – FGBNMS

Lauri MacLaughlin – Florida Keys NMS

Steve Gittings – National Marine Sanctuary Program – Silver Spring, MD

Chris Ostrom - National Marine Sanctuary Program – Silver Spring, MD

Dive Summary, Observations and Response Action by Location

Please see the attached summary form for individual tagged colony details.

EFGB#4

Dive #1 , 2 and 4

3 dives, 5 divers each

Roving diver surveys, photography and tagging colonies

Affected colonies observed:

Montastraea annularis 1

Montastraea franksi 6

Montastraea faveolata 1

Montastraea sp. 1

Colpophyllia natans 2

Total: 11

Tag #1 *M. annularis* (no margin nails)



Figure 1. EFGB#4 Tag #1 – *M. annularis* (Schmahl – NOAA/FGBNMS)

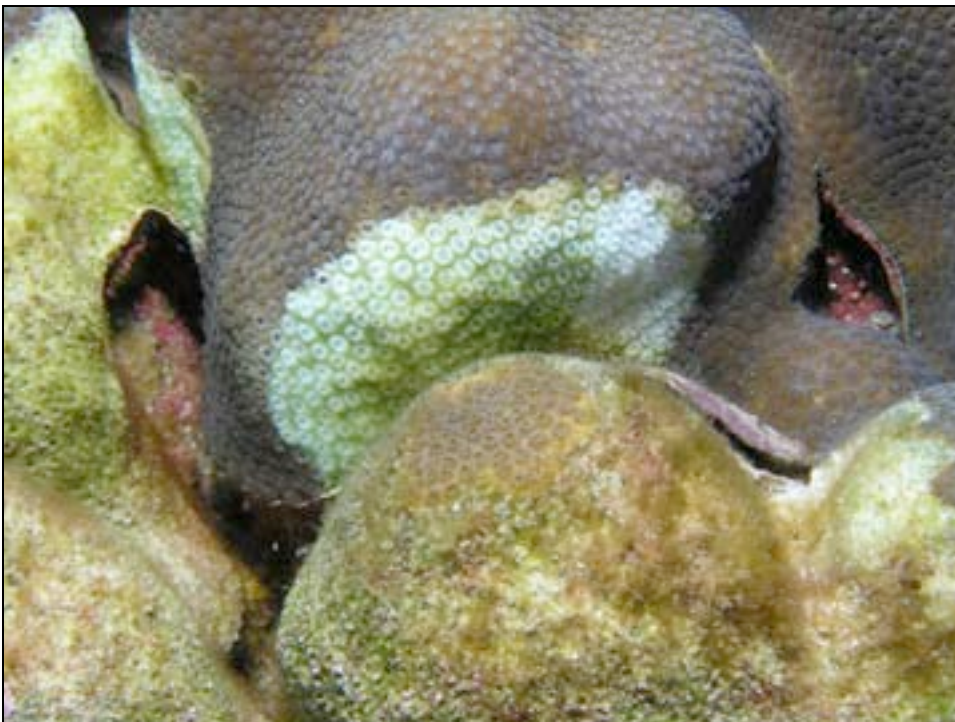


Figure 2. EFGB#4 Tag #1 – *M. annularis* (Hickerson – NOAA/FGBNMS)

Tag #2 *M. franksi* (1 margin nail)



Figure 3. EFGB#4 – Tag #2 – *M. franksi* (Schmahl – NOAA/FGBNMS)



Figure 4. EFGB #4 – Tag #2 – *M. franksi* (Hickerson – NOAA/FGBNMS)

Tag #6 *M. faveolata* (2 margin nails)



Figure 5. EFGB #4 – Tag #6 *M. faveolata* (Schmahl – NOAA/FGBNMS)

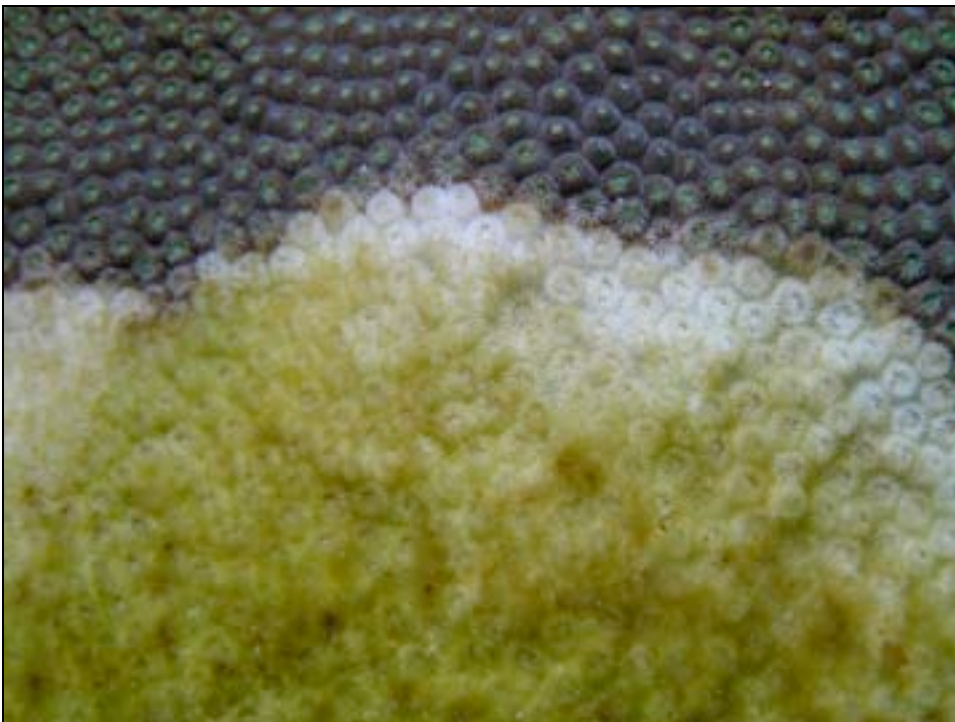


Figure 6. EFGB #4 – Tag #6 *M. faveolata* (Hickerson – NOAA/FGBNMS)

EFGB#3

Dive #3

1 dive, 5 divers

Transects – N, S, E,W – Approx. 8m wide. Unknown length. No tags or nails placed.

Photography

Affected colonies observed:

M. faveolata 9

M. franksi 1

S. intersepta 1

Total: 11

EFGB#5

Dive #5

1 dive, 4 divers (Schmahl, Gittings, Ostrom, McLaughlin)

4 Transects – N, S, E, W – 50m x 8m each, photography, colonies tagged

Affected colonies observed:

M. faveolata 7

M. annularis 1

M. franksi 2

C. natans 1

D. strigosa 1

Total: 12

Tag #7 *M. faveolata* (2 margin nails)



Figure 7. EFGB #5 – Tag #7 – *M. faveolata* (Schmahl – NOAA/FGBNMS)

#8 *M. faveolata* (2 margin nails)



Figure 8. EFGB#5 – Tag #8 - *M. faveolata* (Schmahl – NOAA/FGBNMS)

WFGB#2

Dive#6

1 dive, 5 divers

4 Transects – N, S, E, W – 50m x 8m each

Photography, colonies tagged

Affected colonies observed:

M. faveolata 4

D. strigosa 1

Total: 5

#12 *M. faveolata* (1 margin nail)



Figure 9. WFGB#2 – Tag #12 – *M. faveolata* (Schmahl – NOAA/FGBNMS)

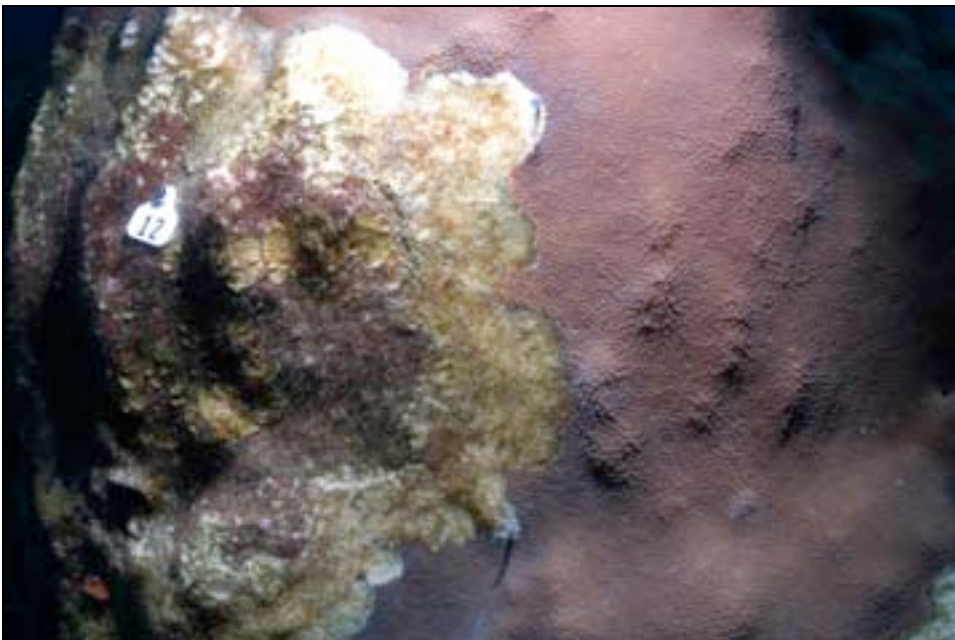


Figure 10. WFGB#2 – Tag #12 – *M. faveolata* (Schmahl – NOAA/FGBNMS)

#20 *M. faveolata/annularis* ? (1 margin nail)



Figure 11. WFGB#2 – Tag #20 – *Montastraea* sp. (Hickerson – NOAA/FGBNMS)



Figure 12. WFGB#2 – Tag #20 – *Montastraea* sp. (Hickerson – NOAA/FGBNMS)

WFGB#1

1 dive, 2 divers (Hickerson/Schmahl)
2 Transects – N, S – 50m x 4 m each
Photography, no tags or margin nails placed.

Affected colonies observed:

M. faveolata 2

Total: 2

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