Reef Number and Name 90 Pat Mulligan Reef


GPS Manufacturer \& Model: SIMRAD NSS9 EVO3
Survey Date Jun 5, 2018 Dive \# 2 Time 1100
Cloud Cover \% 90 Wind Spd \& Dir Calm $\quad$ Wave Height ( ft ) $1-2$ Boat Name Bobcat Boat Captain Bob Cox Crew Michael Scoggins

Divers Bob Cox, Ron Childs, and Michael Scoggins
Survey Type Roving Diver Depth Gauge Depth (ft) 105 Diver Bottom Time (minutes) 23
Water Temp Surface (Fahrenheit) 80 Water Temp Bottom (Fahrenheit) 73
Water Visibility Surface (feet) 30 Water Visibility Bottom (feet) 30

Other Water Column Characteristics (check all that apply)
$\square$ Plankton $\quad \square$ Algae $\quad \square$ Jellyfish $\boxtimes$ Turbid $\square$ Other $\square$ Bottom Composition (check all that apply)
$\square$ Sand $\quad \square$ Silt $\quad \square$ Mud $\quad \square$ Gravel $\quad \square$ Shell $\quad \square$ Other $\square$

Reef Materials \& Quantity 10 FS/FLAR

Reef Height at Highest Point (measured from base to top of the reef)(feet) 10
Physical Condition (Durability, stability, storm damage, other damage or movement):

- No damage ○ Damage
- No movement $\bigcirc$ Movement

Explain damage/movement and suspected cause

Fish Counts (Click on the hyper-links below for identification)

| $\checkmark$ Angelfish-Blue | $\bigcirc 1$ | © | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ Angelfish-Queen | $\bigcirc 1$ | $\bigcirc$ | 2-10 | $\bigcirc$ | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Barracuda-Great | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Batfish-Polka-Dot | $\bigcirc 1$ | $\bigcirc$ | 2-10 | $\bigcirc$ | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Blenny-Seaweed | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |
| $\square$ Blenny-? | $\bigcirc 1$ | $\bigcirc$ | 2-10 | $\bigcirc$ | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |
| $\square$ Blenny-? | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| ( Butterflyfish-Spotfin | $\bigcirc 1$ | © | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Butterflyfish? | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Cardinalfish-Two-Spot | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| (V) Chromis-Purple-Reeffish | $\bigcirc 1$ | $\bigcirc$ | 2-10 | (-) | 11-100 | O | 101+ | Length (inches) | Comments |
| Chromis-YellowtailReeffish | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Damselfish-Cocoa | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Damselfish? | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Drum-Cubbyu | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Drum-Jackknifefish | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Eel? | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Flounder-Gulf | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square \underline{\text { Filefish? }}$ | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square \underline{\text { Frogfish-Ocellated }}$ | $\bigcirc 1$ | $\bigcirc$ | 2-10 | O | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Goby-Spotted | $\bigcirc 1$ | $\bigcirc$ | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |
| $\square$ Goby? | $\bigcirc 1$ | $\bigcirc$ | 2-10 | $\bigcirc$ | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |



| V | Lionfish | $\bigcirc 1$ |  |  | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments | 50+ harvested ${ }^{\text {m }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ | Mackeral-King | $\bigcirc 1$ |  | 0 | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Mackeral-Spanish | $\bigcirc 1$ |  | $\bigcirc$ | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Minnows-Glass-Small-Fry | O | 1 | 0 | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Pinfish? | $\bigcirc 1$ |  |  | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| V | Porgy-Sheepshead- <br> Porgy | $\bigcirc$ |  | © | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Porgy-Sheepshead | $\bigcirc 1$ |  | $\bigcirc$ | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Porgy? | $\bigcirc 1$ |  | $\bigcirc$ | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Puffer-Bandtail | $\bigcirc 1$ |  |  | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| V | Puffer-Sharpnose | $\bigcirc$ |  |  | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Puffer? | $\bigcirc 1$ |  |  | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Ray? | $\bigcirc 1$ |  | O | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Shark-Bull | $\bigcirc 1$ |  | $\bigcirc$ | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Shark-Sandbar | $\bigcirc 1$ |  | O | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Shark? | $\bigcirc 1$ |  | $\bigcirc$ | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| V | Sharksucker-Sharksucker | © | 1 | O | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Sand-Perch | $\bigcirc 1$ |  | O | 2-10 | O | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Seabass-Bank | $\bigcirc$ |  | O | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Seabass-Belted-Sandfish | O | 1 | $\bigcirc$ | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Seabass-Black | $\bigcirc 1$ |  | O | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Seabass-Pygmy | $\bigcirc 1$ |  | O | 2-10 |  | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |
| $\square$ | Seabass? | $\bigcirc$ |  | O | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| V | Snapper-Gray | $\bigcirc$ |  | O | 2-10 | - | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Snapper-Lane | $\bigcirc$ |  | O | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| V | Snapper-Red | $\bigcirc 1$ |  | $\bigcirc$ | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| V | Snapper-Vermillion | $\bigcirc$ |  | $\bigcirc$ | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
| $\square$ | Snapper? | $\bigcirc 1$ |  |  | 2-10 |  | 11-100 |  | 101+ | Length (inches) | Comments |  |
|  | Soapfish-Whitespotted | $\bigcirc 1$ |  | $\bigcirc$ | 2-10 | O | 11-100 | $\bigcirc$ | 101+ | Length (inches) | Comments |  |


Unlisted-See-Comments $\bigcirc 1-25 \% \bigcirc 26-50 \%$ ○ $51-75 \% \bigcirc 76-100 \%$ Size (inches) $\square$ Describe $\square$
Invertebrates at Reef (Click on the hyper-links below for identification)


## Turtles and Air Breathers/Mammals (Click on the hyper-links below for identification)

Dolphin?○ 1
(2-10 $\bigcirc 11-100$
( 101 $\square$ Comments $\square$
Turtle-Loggerhead
○ 1
$\bigcirc$ 2-10 $\bigcirc 11-100$
(101+
 Comments $\square$
Turtle?
○ 1
$\bigcirc$ 2-10 $\bigcirc 11-100 \bigcirc 101+$
Size (inches) $\square$ Comments $\square$Whale?
○ 1
○ 2-10 $\bigcirc 11-100 \bigcirc 101+$
Size (inches) $\square$ Comments $\square$
Unlisted-See-Comments 1
(2-10
0 $11-100 \bigcirc 101+$ Size (inches) $\square$ Comments $\qquad$Other Observations/Photos:

## Observations

Main objective was Lionfish removal.

