MBARA Diver's Reef Survey Form Rev 11 May 2013	Clear Form
Reef Number and Name 38 Nicole's Reef	
Latitude (00 00.000) Longitude (00 00.000) 85 32.286 Was published lat/lon correct?	No
GPS Manufacturer & Model: Garmin 188C	
Sonar Depth (feet) 62 Survey Date Sep 10, 2014 Time 1200	
Weather Conditions Sunny Sea Condition 1 ft	
Boat Name Bob Cat Boat Captain Bob Cox	
Dive Leader Bob Cox	
Dive Team Members Carol Cox	
Depth Gauge Depth (feet) 62 Diver Bottom Time (minutes) 30	
Water Temp Surface (Fahrenheit) 86 Water Temp Bottom (Fahrenheit) 86	
Water Visibility Surface (feet) 10 Water Visibility Bottom (feet) 30	
Thermocline Depth (feet) Current Direction Current Speed (knots)	
Other Water Column Characteristics (check all that apply)	
$\square$ Plankton $\square$ Algae $\square$ Jellyfish $\square$ Turbid $\square$ Other	
Bottom Composition (check all that apply)	
⊠ Sand ☐ Silt ☐ Mud ☐ Gravel ☐ Shell ☐ Other	
Reef Materials & Quantity 1 FLAR	
Reef Height at Highest Point (measured from base to top of the reef)(feet) 8	
Physical Condition (Durability, stability, storm damage, other damage or movement):	
<ul> <li>No damage</li></ul>	ovement
Explain damage/movement and suspected cause	

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

Angelfish-Blue	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Angelfish-Queen	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Barracuda-Great	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Barracuda-Guaguanche	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Batfish-Polka-Dot	O 1	O 2-10	<u> </u>	<u> </u>	Length (inches)	Comments
Blenny-Molly-Miller	O 1	O 2-10	<u> </u>	○ 101+	Length (inches)	Comments
<b>✓</b> Blenny-Seaweed	O 1	<u> </u>	11-100	○ 101+	Length (inches)	Comments
Blenny-Tessellated	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Blenny?	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Butterflyfish-Spotfin	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Butterflyfish?	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Cardinalfish-Two-Spot	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Chromis-Purple-Reeffish	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Chromis-Yellowtail- Reeffish	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Cobia (Ling)	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Cowfish-Scrawled	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
✓ Damselfish-Cocoa	O 1	<ul><li>2-10</li></ul>	<u> </u>	O 101+	Length (inches)	Comments
Damselfish?	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Dolphin?	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
✓ Drum-Cubbyu	O 1	<ul><li>2-10</li></ul>	<u> </u>	O 101+	Length (inches)	Comments
Drum-Jackknifefish	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Eel?	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Flounder-Gulf	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Filefish?	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Frogfish-Ocellated	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Goby-Spotted	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Goby?	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments

Grouper-Gag	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Grouper-Goliath	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Grouper-Graysby	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Grouper-Red	<u> </u>	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Grouper-Rock-Hind	<u> </u>	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Grouper-Scamp	<u> </u>	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Grunt-Juvenile	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
<b>✓</b> Grunt-Tomtate	<u> </u>	<u> </u>	<u> </u>	101+	Length (inches)	Comments
Grunt-White	<u> </u>	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
✓Grunt?	O 1	<u> </u>	<ul><li>11-100</li></ul>	O 101+	Length (inches)	Comments Pigfish
☐ Hogfish	O 1	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
Hogfish-Spanish	<u> </u>	<u> </u>	<u> </u>	○ 101+	Length (inches)	Comments
☐ Jack-Almaco-Lesser-AJ	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Jack-Blue-Runner	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
<b>√</b> Jack-Greater-Amberjack	O 1	O 2-10	<ul><li>11-100</li></ul>	O 101+	Length (inches)	Comments
<u> □Jack-Lookdown</u>	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Jack-Rainbow-Runner	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Jack-Round-Scad-Cigar- Minnow	O 1	<u> </u>	<ul><li>11-100</li></ul>	O 101+		
□Jack?					Length (inches)	Comments
Jack:	O 1	<u> </u>	O 11-100		Length (inches)	Comments
Lionfish	○ 1 ○ 1		<ul><li>11-100</li><li>11-100</li></ul>	<u> </u>		
		O 2-10		<ul><li>○ 101+</li><li>○ 101+</li></ul>	Length (inches)	Comments
Lionfish	O 1	<ul><li>2-10</li><li>2-10</li></ul>	<u> </u>	<ul><li>101+</li><li>101+</li><li>101+</li></ul>	Length (inches)	Comments
Lizardfish?	○ 1 ○ 1	<ul><li>2-10</li><li>2-10</li><li>2-10</li></ul>	<ul><li>11-100</li><li>11-100</li></ul>	<ul><li>101+</li><li>101+</li><li>101+</li><li>101+</li></ul>	Length (inches)  Length (inches)  Length (inches)	Comments Comments
Lionfish  Lizardfish?  Mackeral-King	<ul><li>1</li><li>1</li><li>1</li></ul>	<ul><li>2-10</li><li>2-10</li><li>2-10</li><li>2-10</li><li>2-10</li></ul>	<ul><li>11-100</li><li>11-100</li><li>11-100</li></ul>	<ul><li>101+</li><li>101+</li><li>101+</li><li>101+</li><li>101+</li></ul>	Length (inches)  Length (inches)  Length (inches)  Length (inches)	Comments  Comments  Comments  Comments
Lionfish  Lizardfish?  Mackeral-King  Mackeral-Spanish	<ul><li>1</li><li>1</li><li>1</li><li>1</li><li>1</li></ul>	<ul><li>2-10</li><li>2-10</li><li>2-10</li><li>2-10</li><li>2-10</li></ul>	<ul><li>11-100</li><li>11-100</li><li>11-100</li><li>11-100</li></ul>	<ul> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> </ul>	Length (inches)  Length (inches)  Length (inches)  Length (inches)  Length (inches)	Comments  Comments  Comments  Comments  Comments
Lionfish  Lizardfish?  Mackeral-King  Mackeral-Spanish  Mahi	<ul><li>1</li><li>1</li><li>1</li><li>1</li><li>1</li><li>1</li></ul>	<ul> <li>2-10</li> <li>2-10</li> <li>2-10</li> <li>2-10</li> <li>2-10</li> <li>2-10</li> </ul>	<ul><li>11-100</li><li>11-100</li><li>11-100</li><li>11-100</li><li>11-100</li></ul>	<ul> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> <li>101+</li> </ul>	Length (inches)  Length (inches)  Length (inches)  Length (inches)  Length (inches)  Length (inches)	Comments  Comments  Comments  Comments  Comments  Comments
Lizardfish?  Mackeral-King  Mackeral-Spanish  Mahi  Minnows-Glass-Small-Fry	<ul><li>1</li><li>1</li><li>1</li><li>1</li><li>1</li><li>1</li><li>1</li></ul>	<ul> <li>2-10</li> <li>2-10</li> <li>2-10</li> <li>2-10</li> <li>2-10</li> <li>2-10</li> <li>2-10</li> </ul>	<ul> <li>11-100</li> <li>11-100</li> <li>11-100</li> <li>11-100</li> <li>11-100</li> <li>11-100</li> </ul>	<ul> <li>101+</li> </ul>	Length (inches)  Length (inches)  Length (inches)  Length (inches)  Length (inches)  Length (inches)  Length (inches)	Comments  Comments  Comments  Comments  Comments  Comments  Comments  Comments

Porgy-Sheepshead	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Porgy?	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Puffer-Bandtail	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Puffer-Sharpnose	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Puffer?	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Ray?	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Shark?	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Sharksucker-Sharksucker	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Sharksucker-Whitefin	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
✓ Sand-Perch	O 1	<u> </u>	<ul><li>11-100</li></ul>	O 101+	Length (inches)	Comments
✓ <u>Seabass-Bank</u>	O 1	O 2-10	<ul><li>11-100</li></ul>	O 101+	Length (inches)	Comments
✓ Seabass-Belted-Sandfish	O 1	<ul><li>2-10</li></ul>	<u> </u>	O 101+	Length (inches)	Comments
Seabass-Black	<u> </u>	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Seabass-Pygmy	O 1	O 2-10	<u> </u>	O 101+	Length (inches)	Comments
Seabass?	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
✓ Snapper-Gray	O 1	<u> </u>	<ul><li>11-100</li></ul>	O 101+	Length (inches)	Comments
Snapper-Lane	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
✓ Snapper-Red	O 1	<ul><li>2-10</li></ul>	<u> </u>	O 101+	Length (inches)	Comments
Snapper-Vermillion	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Snapper?	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Soapfish-Whitespotted	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Spadefish-Atlantic	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Toadfish-Leopard	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Triggerfish-Gray	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
<b>✓</b> Wrasse-Slippery-Dick	O 1	<u> </u>	<ul><li>11-100</li></ul>	O 101+	Length (inches)	Comments
✓ Unlisted-See-Comments	O 1	<ul><li>2-10</li></ul>	<u> </u>	O 101+	Length (inches)	Comments Blueheads
Unlisted-See-Comments	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments
Unlisted-See-Comments	O 1	<u> </u>	<u> </u>	O 101+	Length (inches)	Comments

## Growth on Reef (Click on the hyper-links below for identification) Algae 1-25% 26-50% 51-75% 76-100% Size (inches) Describe ✓ Anemone Describe ○ 1-25% **③** 26-50% ○ 51-75% ○ 76-100% Size (inches) ■ Barnacles Describe **▼** Bivalves Describe ○ 1-25% ○ 26-50% ○ 51-75% ○ 76-100% Size (inches) Coral-Colorful-Sea-Whip Describe Coral-Hard-Unkown ○ 1-25% ○ 26-50% ○ 51-75% ○ 76-100% Size (inches) Describe ○ 1-25% ○ 26-50% ○ 51-75% ○ 76-100% Size (inches) Coral-Gorgonian Describe ○ 1-25% ○ 26-50% ○ 51-75% ○ 76-100% Size (inches) Coral-Occulina Describe Coral-White-Telesto 1-25% 26-50% 51-75% 76-100% Size (inches) Describe Feather-Duster-Worms 1-25% 26-50% 51-75% 76-100% Size (inches) Describe Sponges ○ 1-25% ○ 26-50% ○ 51-75% ○ 76-100% Size (inches) Describe ✓ Unlisted-See-Comments Describe Tunicates Invertebrates at Reef (Click on the hyper-links below for identification) Cowry-Spotted-Cyphoma 1 O 2-10 O 11-100 O 101+ Size (inches) Comments Cowry-West-Indian-Simnia 1 O 2-10 O 11-100 O 101+ Comments Size (inches) Crab-Swimming O 2-10 O 11-100 O 101+ $\bigcirc$ 1 Size (inches) Comments Crab-Stareye-Hermit $\bigcirc$ 1 ○ 2-10 ○ 11-100 ○ 101+ Comments Size (inches) Crab-Stone O 2-10 O 11-100 O 101+ $\bigcirc$ 1 Comments Size (inches) $\bigcirc$ 1 ● 2-10 ○ 11-100 ○ 101+ Size (inches) Comments $\bigcirc$ 1 O 2-10 O 11-100 O 101+ Crab? Size (inches) Comments Lobster-Shovelnose $\bigcirc$ 1 O 2-10 O 11-100 O 101+ Size (inches) Comments Lobster-Spiny ○ 2-10 ○ 11-100 ○ 101+ $\bigcirc$ 1 Size (inches) Comments Octopus ○ 2-10 ○ 11-100 ○ 101+ $\bigcirc$ 1 Size (inches) Comments Sea-Cucumber O 2-10 O 11-100 O 101+ $\bigcirc$ 1 Size (inches) Comments Sea-Slug $\bigcirc$ 1 O 2-10 O 11-100 O 101+ Comments Size (inches) Sea-Star $\bigcirc$ 1 O 2-10 O 11-100 O 101+ Comments Size (inches) Sea-Urchin O 2-10 O 11-100 O 101+ $\bigcirc$ 1 Comments Size (inches)

✓ Snail-Atlantic-Hairy-Triton	O 1	O 2-10	<ul><li>11-100</li></ul>	( 101+	Size (inches)	Comments
Snail-Murex	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Snail-Netted-Olive	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Snail-Florida-Horse-Conch	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Unlisted-See-Comments	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Turtles and Air Bre	athers/	Mamn	nals (Clic	k on the	hyper-link	ks below for identification)
Turtle-Green	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Turtle-Leatherback	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Turtle-Loggerhead	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Turtle?	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Whale?	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Unlisted-See-Comments	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Unlisted-See-Comments	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
Unlisted-See-Comments	O 1	<u> </u>	<u> </u>	O 101+	Size (inches)	Comments
✓ Other Observatio	ns/Pho	tos:				
Observations Juvenile Re	d Snappers	and a juve	nile Lane Sna	apper		
Photos? Yes Attached	Yes					



lmage Field







Image Field

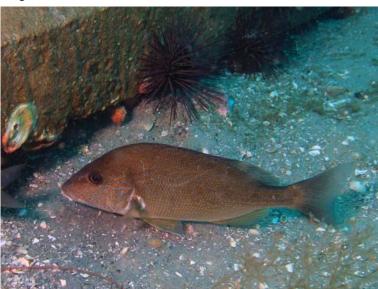


Image Field

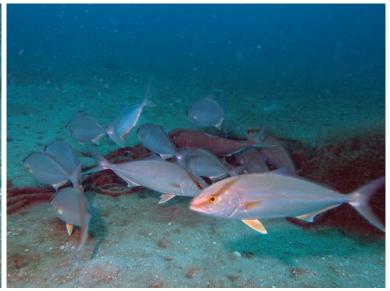


Image Field Image Field



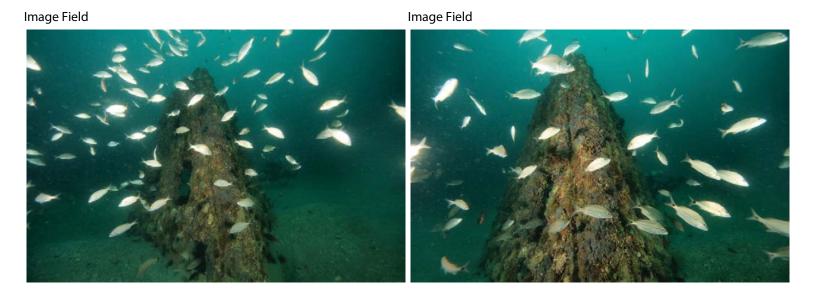


Image Field Image Field



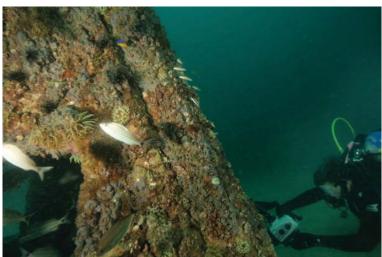


Image Field Image Field



Image Field Image Field

Image Field Image Field

Image Field

Image Field

Image Field

Image Field

Image Field Image Field