

<b>Shellfish Lease Investigation Report</b>	
<b>Investigation Date</b>	4/13, 4/26, 4/27, & 4/29
<b>Applicants name</b>	Middle Sound Mariculture - James Hargrove
<b>Lease Number</b>	385
<b>County</b>	Onslow
<b>Waterbody/location</b>	Permuda Island Bay/1302030000
<b>Proposed Lease Size (acres)</b>	5.04
<b>Lease Type</b>	Bottom
<b>Investigation Team</b>	A. Frost/D.Walters/S. Tripp/A. Wells
<b>Gear Used</b>	766 - Patent Tong
<b>Sediment Type</b>	7 - Sandy Mud
<b>Bottom Composition</b>	O - no grass
<b>Depth (m)</b>	0.75
<b>Tidal Stage</b>	Rising
<b>Water Temperature (°C)</b>	21.4
<b>Salinity (ppt)</b>	29
<b>Dissolved Oxygen (mg/L)</b>	4.2
<b>Comments on SAV in or around Proposed Lease location</b>	none
<b>Other Species Collected</b>	
<b>In PNA?</b>	Yes
<b>In Polluted Area?</b>	No: Conditionally Approved - Open
<b>In Mechanical Clam Harvest Area?</b>	No
<b>In Mechanical Methods Prohibited Area</b>	Yes
<b>Other Comments</b>	

Application Coordinates		Modified Coordinates		Actual Coordinates		Post Investigation Modification	
34.46320000	-77.50890000	34.46483600	-77.50676000	34.46550517	-77.50790367	34.46504858	-77.50712170
34.46353333	-77.50776667	34.46212900	-77.50650300	34.46352033	-77.50868433	34.46395256	-77.50697847
34.46261667	-77.50713333	34.46231402	-77.50743131	34.46384767	-77.50746700	34.46343843	-77.50744098
34.46356667	-77.50566667	34.46356385	-77.50745482	34.46230217	-77.50737550	34.46384084	-77.50746480
34.46508333	-77.50710000	34.46376448	-77.50775881	34.46212300	-77.50651350	34.46351350	-77.50868213
34.46478333	-77.50758333	34.46353131	-77.50867632	34.46484350	-77.50675650	34.46549834	-77.50790147
34.46506667	-77.50873333	34.46519600	-77.50823000				
34.46408333	-77.50870000	34.46552420	-77.50792857				

## Proposed Shellfish Lease Biological Investigation Sampling Data

**Applicant:** Middle Sound Mariculture - James Hargrove

**Proposed Lease #:** 385

**Date:** 4/13, 4/26, 4/27, & 4/29

**Lease size:** 5.04 acres **# of Samples:** 122

Sample #	Presence of SAV/ Density class	# of Oysters (Eastern Oyster)	# of Clams (Quahogs)	# of Scallops	Date collected	Comments	Bottom Comp.	Sediment Type
1	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
2	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
3	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
4	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
5	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
6	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
7	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
8	0	0	2	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
9	0	1	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
10	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
11	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
12	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
13	0	1	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
14	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
15	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
16	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
17	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
18	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
19	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
20	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
21	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
22	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
23	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
24	0	0	4	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
25	0	0	3	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
26	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
27	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
28	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
29	0	0	2	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
30	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
31	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
32	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
33	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
34	0	0	4	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
35	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
36	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
37	0	1	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
38	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
39	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
40	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
41	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
42	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
43	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
44	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
45	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
46	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
47	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
48	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
49	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
50	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
51	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
52	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
53	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
54	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
55	0	0	2	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
56	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
57	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
58	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud

## Proposed Shellfish Lease Biological Investigation Sampling Data

**Applicant:** Middle Sound Mariculture - James Hargrove

**Proposed Lease #:** 385

**Date:** 4/13, 4/26, 4/27, & 4/29

**Lease size:** 5.04 acres **# of Samples:** 122

Sample #	Presence of SAV/ Density class	# of Oysters (Eastern Oyster)	# of Clams (Quahogs)	# of Scallops	Date collected	Comments	Bottom Comp.	Sediment Type
59	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
60	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
61	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
62	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
63	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
64	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
65	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
66	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
67	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
68	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
69	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
70	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
71	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
72	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
73	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
74	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
75	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
76	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
77	0	1	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
78	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
79	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
80	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
81	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
82	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
83	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
84	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
85	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
86	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
87	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
88	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
89	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
90	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
91	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
92	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
93	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
94	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
95	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
96	0	1	2	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
97	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
98	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
99	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
100	0	1	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
101	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
102	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
103	0	0	2	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
104	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
105	0	1	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
106	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
107	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
108	0	1	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
109	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
110	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
111	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
112	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
113	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
114	0	0	1	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
115	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
116	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud

## Proposed Shellfish Lease Biological Investigation Sampling Data

**Applicant:** Middle Sound Mariculture - James Hargrove

**Proposed Lease #:** 385

**Date:** 4/13, 4/26, 4/27, & 4/29

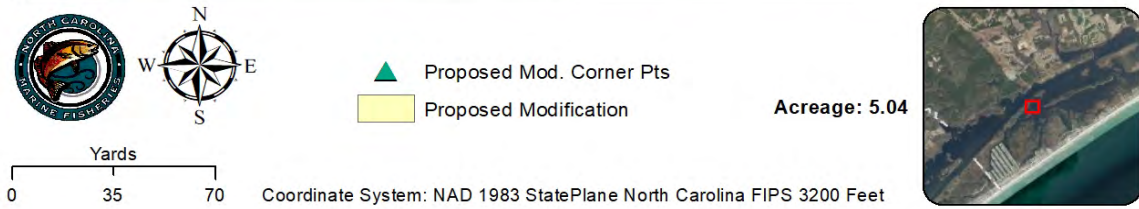
**Lease size:** 5.04 acres

**# of Samples:** 122

Sample #	Presence of SAV/ Density class	# of Oysters (Eastern Oyster)	# of Clams (Quahogs)	# of Scallops	Date collected	Comments	Bottom Comp.	Sediment Type
117	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
118	0	0	3	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
119	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
120	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
121	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
122	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
	<b>SAV</b>	<b>Oysters (Eastern Oyster)</b>	<b>Clams (Quahogs)</b>	<b>Scallops</b>				
	0				0%	OF SAMPLES CONTAINED SAV		
<b>TOTAL OF EACH SPECIES</b>		8	35	0				
<b>TOTAL BUSHELS PER SPECIES</b>		0.02666667	0.0875	0	3.79	<b>TOTAL BUSHELS OF SHELLFISH PER ACRE</b>		

# Proposed Lease ID/Number: 385 Middle Sound Mariculture - James Hargrove

Date: 12/10/2021

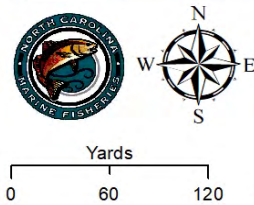


Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 12/13/2021



Imagery Year: 2012



Adj. Proposed Lease Area

Acreage: 5.04

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet






# Proposed Lease ID/Number: 385 Middle Sound Mariculture - James Hargrove

Date: 12/13/2021

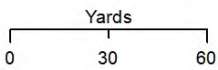


Imagery Year: 2012



-  No Bivalve Shellfish Present
-  Bivalve Shellfish Present
-  Adj. Proposed Lease Area

Acreage: 5.04



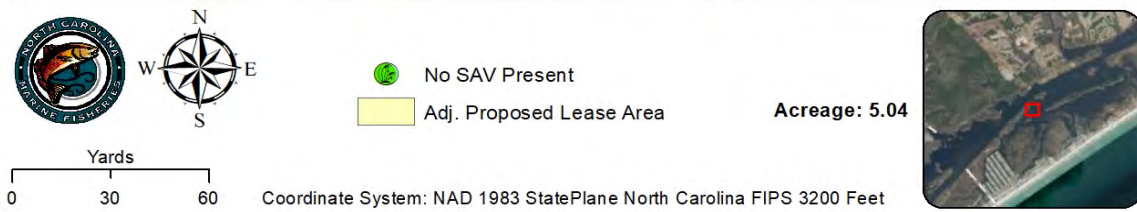
Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet





Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 12/13/2021

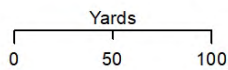


Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 12/13/2021



Imagery Year: 2012



- Submerged Aquatic Vegetation
- Adj. Proposed Lease Area

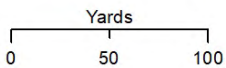
Acreage: 5.04

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet



Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 12/13/2021



- Conditionally Approved - Open
- Adj. Proposed Lease Area

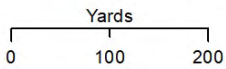
**Acreage: 5.04**

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet







Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 12/13/2021

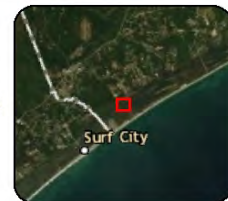


**Planting Sites (Year)**

-  2009
-  2010
-  2012
-  Adj. Proposed Lease Area

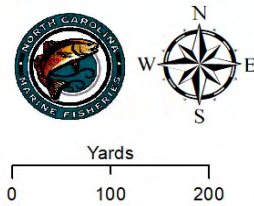
Acreage: 5.04

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet



Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

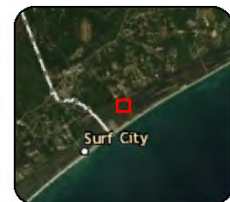
Date: 12/13/2021



- Adj. Proposed Lease Area
- Leases**
- Water Column
- Bottom
- Terminated

Acreage: 5.04

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet















### Proposed Shellfish Lease Biological Investigation Sampling Data

Applicant: Middle Sound Mariculture - James Hargrove

Proposed Lease #: 385

Date: 4/13, 4/26, 4/27, & 4/29

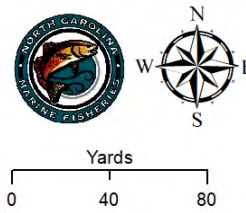
Lease size: 9.15 acres # of Samples: 247

Sample #	Presence of SAV/ Density class	# of Oysters (Eastern Oyster)	# of Clams (Quahogs)	# of Scallops	Date collected	Comments	Bottom Comp.	Sediment Type
232	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
233	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
234	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
235	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
236	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
237	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
238	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
239	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
240	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
241	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
242	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
243	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
244	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
245	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
246	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
247	0	0	0	0	4/13, 4/26, 4/27, & 4/29	NA	O - no grass	7 - Sandy Mud
	SAV	Oysters (Eastern Oyster)	Clams (Quahogs)	Scallops				
	0				0%	OF SAMPLES CONTAINED SAV		
TOTAL OF EACH SPECIES		8	45	0				
TOTAL BUSHELS PER SPECIES		0.026666667	0.1125	0	2.28	TOTAL BUSHELS OF SHELLFISH PER ACRE		

# Proposed Lease ID/Number: 385

## Middle Sound Mariculture - James Hargrove

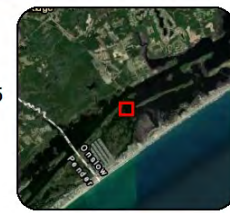
Date: 4/30/2021



▲ Proposed Corner Points  
 ■ Proposed Lease Area

**Acreage: 9.15**


Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet



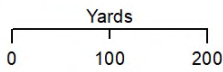
Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 4/30/2021

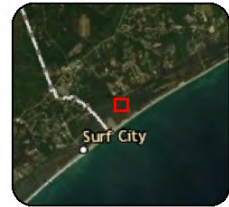


 Proposed Lease Area

Acreage: 9.15

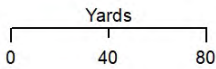


Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet



Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

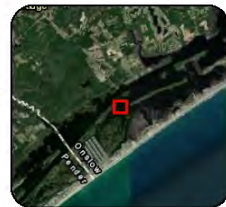
Date: 4/30/2021



- No Bivalve Shellfish Present
- Bivalve Shellfish Present
- Proposed Lease Area

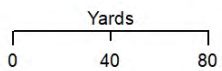
Acreage: 9.15

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet



# Proposed Lease ID/Number: 385 Middle Sound Mariculture - James Hargrove

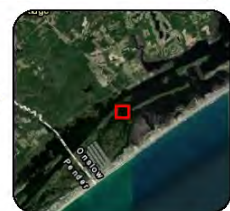
Date: 4/30/2021



- No SAV Present
- Proposed Lease Area

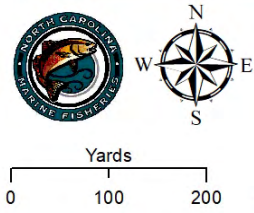
Acreage: 9.15

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet



Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

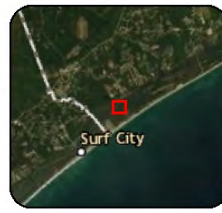
Date: 4/30/2021



Submerged Aquatic Vegetation  
Proposed Lease Area

Acreage: 9.15

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet





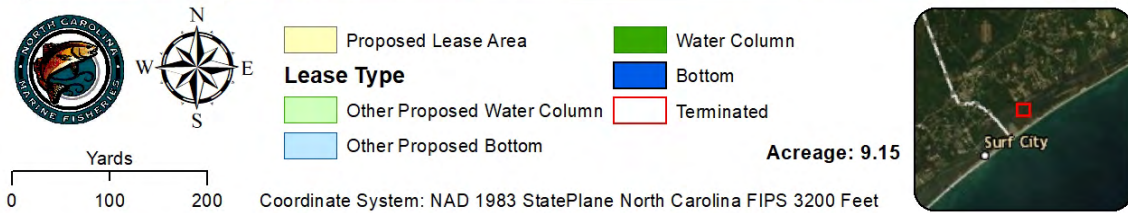
Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 4/30/2021



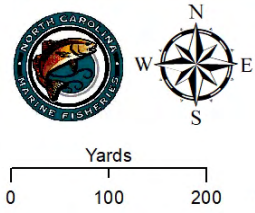
Proposed Lease ID/Number: 385  
 Middle Sound Mariculture - James Hargrove

Date: 4/30/2021



Proposed Lease ID/Number: 385  
Middle Sound Mariculture - James Hargrove

Date: 4/30/2021



- Proposed Lease Area
- Planting Site (Year)**
  - 2009
  - 2010
  - 2012
- Cultch Planting Permit Area

Acreage: 9.15

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200 Feet

