

An update on resighting efforts in Virginia: where do we go from here?

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Photo by Brad Winn

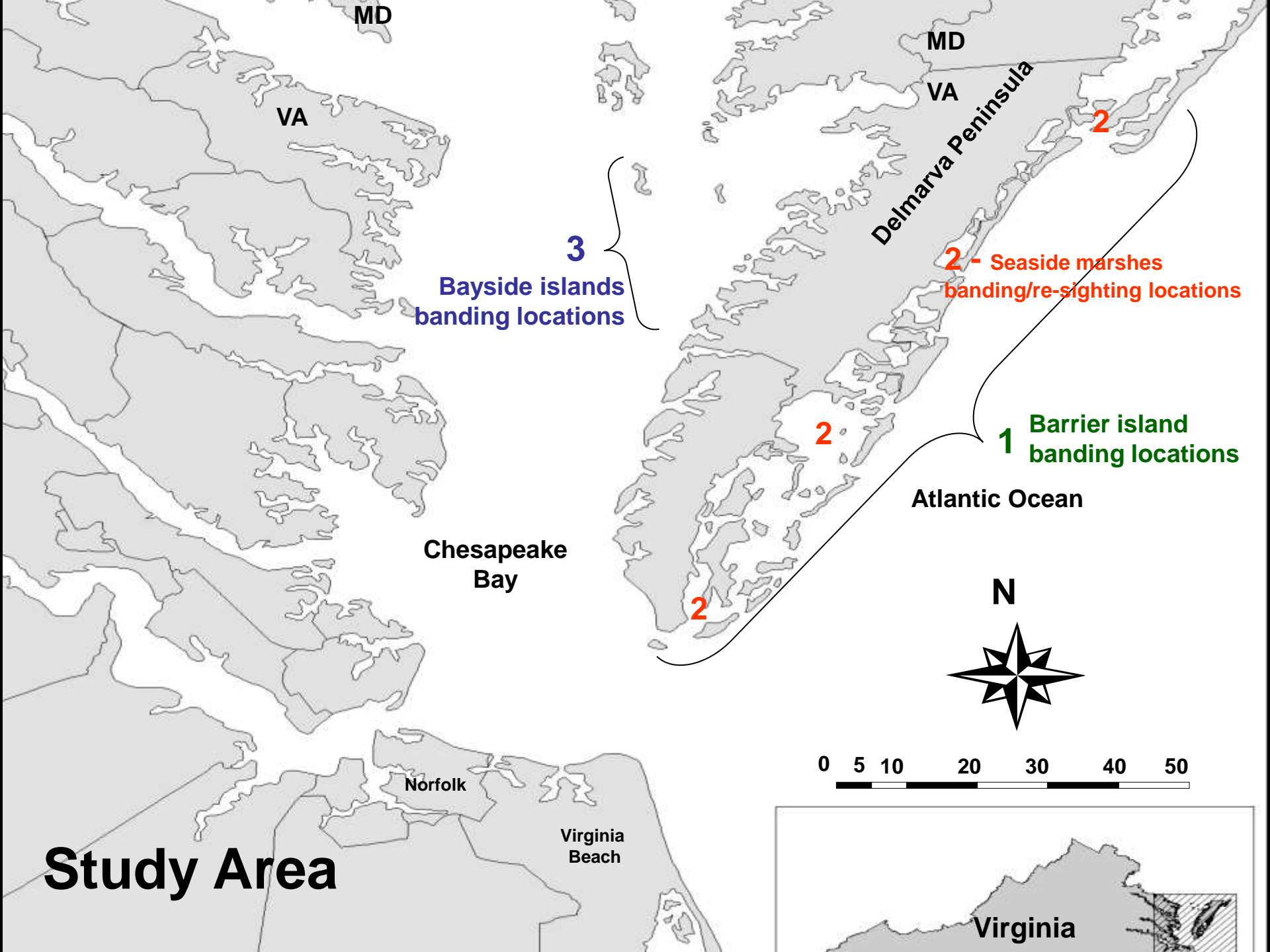


Project Objectives

- **Examine juvenile & adult post-breeding dispersal patterns.**
- **Determine winter, breeding and natal site fidelity.**
- **Monitor the distribution and size of Virginia's non-breeding oystercatcher population.**
- **Quantify juvenile survival in Virginia.**

Photo by Christina Trapani

Photo by P. Leary



Post-breeding Re-sighting Survey Methods, 2004 - 2007

- **Post-breeding re-sighting surveys are conducted in the seaside marshes along established boat routes every 14 days when high tide occurs in the morning from Aug – Nov/Dec.**
- **We use binoculars and spotting scopes to view birds from the boat or land when safe anchorage is available.**
- **Flock size is recorded to monitor intra and inter-seasonal changes in the non-breeding population.**
- **We scan flocks for banded birds using the stalk and creep method.**
- **On most occasions, band readings are verified by two observers.**
- **“Formal” post-breeding re-sighting surveys began in the fall of 2004.**



Chincoteague

Seaside re-sighting routes

Six boat routes encompassing 75 high tide roost sites.

Roost site habitats:

- Shell rakes
- Exposed sand/mud flats
- Marsh edges/sand ridges
- Inlet beaches/shoals/spits

Roost site distribution varies between the northern and southern routes.

Route coverage and survey effort varied within and among years.

Metompkin

Wachapreague

Quinby

Oyster

Fisherman Is.

44 km

Image NASA
Image © 2007 DigitalGlobe

Image © 2007 TerraMetrics

Summary of Survey Effort, 2004 - 2007

Year	Survey period	No. sites surveyed (%)
2004	Sept. 2 – Dec. 5	27 (36)
2005	Aug. 5 – Dec. 3	53 (71)
2006	Aug. 9 – Dec. 10	73 (97)
2007	Aug. 13 – Nov. 1	75 (100)

General Summary of results, 2004 - 2007



Number of individuals banded with “Haggie” bands: 297

- 284 banded as chicks
- 13 banded as adults

Number of re-sightings of birds banded in VA: 757

Number of individuals re-sighted at once during post-breeding surveys: 153 (51%)

% of VA's banded pop. that exhibited within-year route fidelity: 86%

% of VA's banded pop. that was observed after October: 86%

Total number of individuals banded out-of-state that were re-sighted during the survey period: 46

- | | |
|-------------------|-------------------|
| - 15 banded in MA | - 5 banded in SC |
| - 6 banded in NJ | - 17 banded in GA |
| - 3 banded in NC | |

Chincoteague Route

Total number of sites: 14

Yrs. of coverage: 2005 - 2007

No. of birds obs. on route: 90 – 146.



Year	No. Surveys	No. sites sampled	No. VA banded inds.	No. out-of state inds.
2005	1	13/14	1	3
2006	3	14/14	0	0
2007	2	14/14	0	0

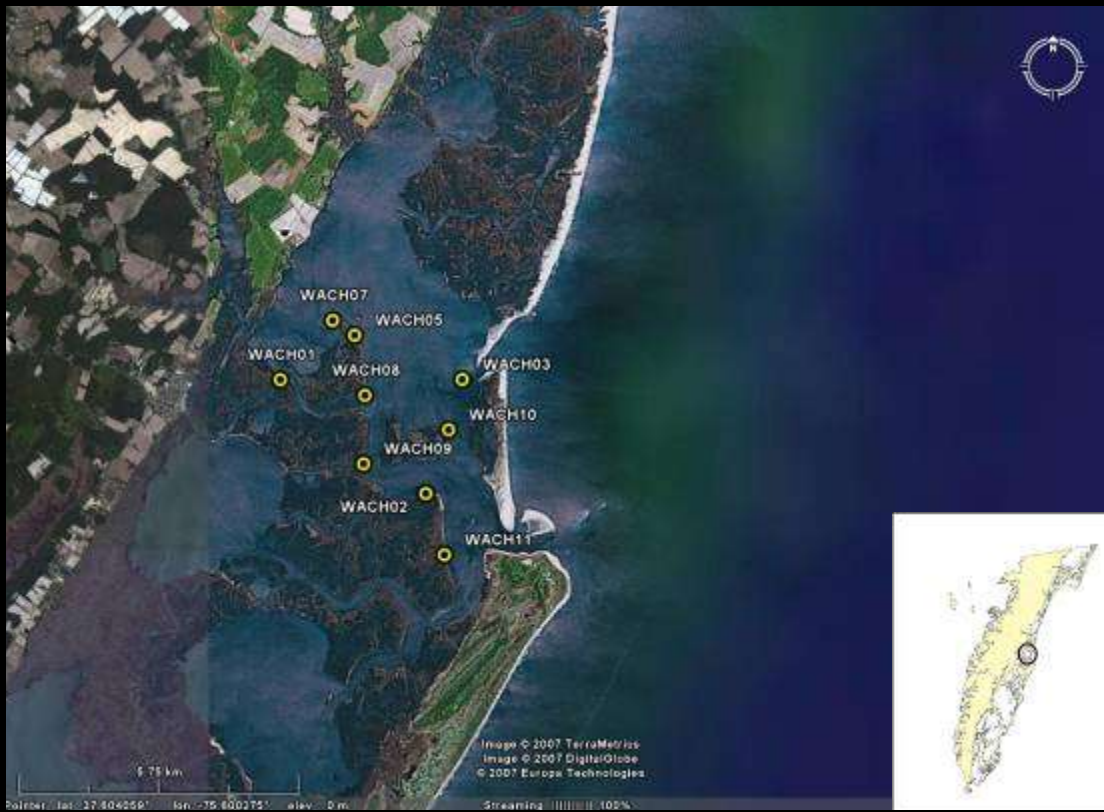
Metompkin Route

Total number of sites: 8

Yrs. of coverage: 2005 - 2007

No. of birds obs. on route:
73 – 181.

Year	No. Surveys	No. sites sampled	No. VA banded inds.	No. out-of state inds.
2005	8	7/8	16	1
2006	8	7/8	25	5
2007	5	8/8	21	1



Wachapreague Route

Total number of sites: 12

Yrs. of coverage: 2004 - 2007

No. of birds obs. on route:
109 – 360.

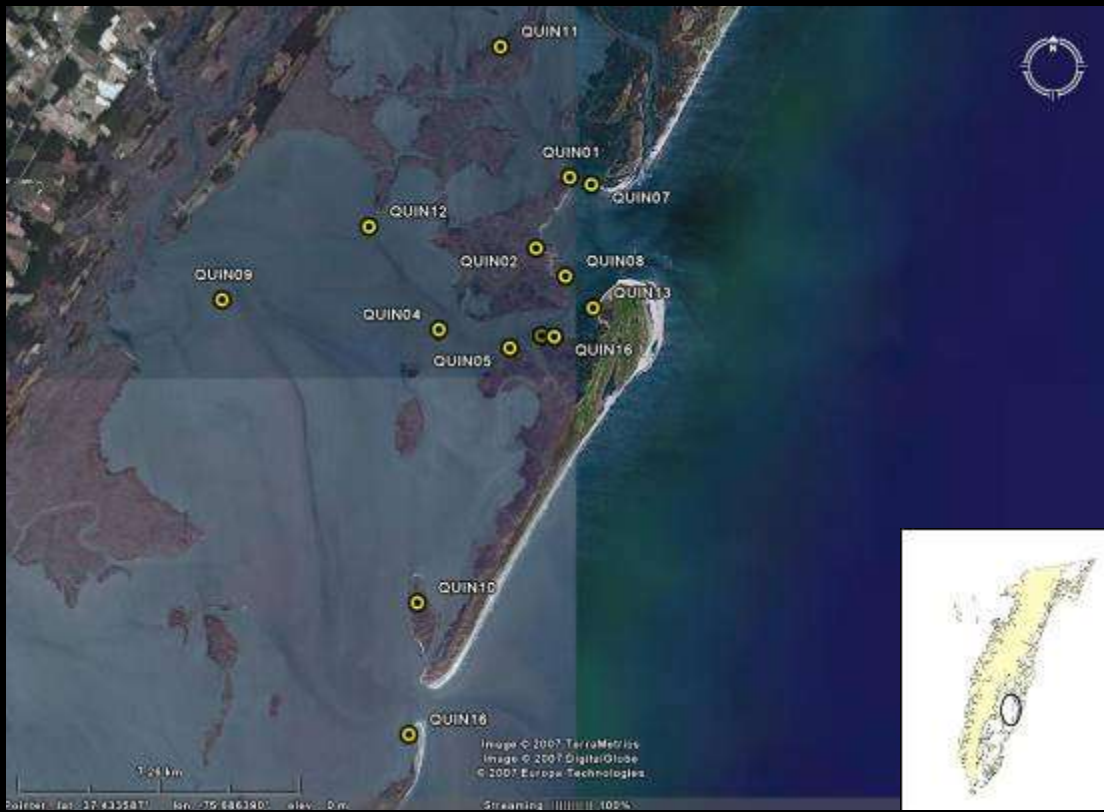
Year	No. Surveys	No. sites sampled	No. VA banded inds.	No. out-of state inds.
2004	5	9/12	9	0
2005	7	11/12	21	1
2006	8	12/12	34	7
2007	6	12/12	36	7

Quinby Route

Total number of sites: 17

Yrs. of coverage: 2004 - 2007

No. of birds obs. on route:
143 - 789.



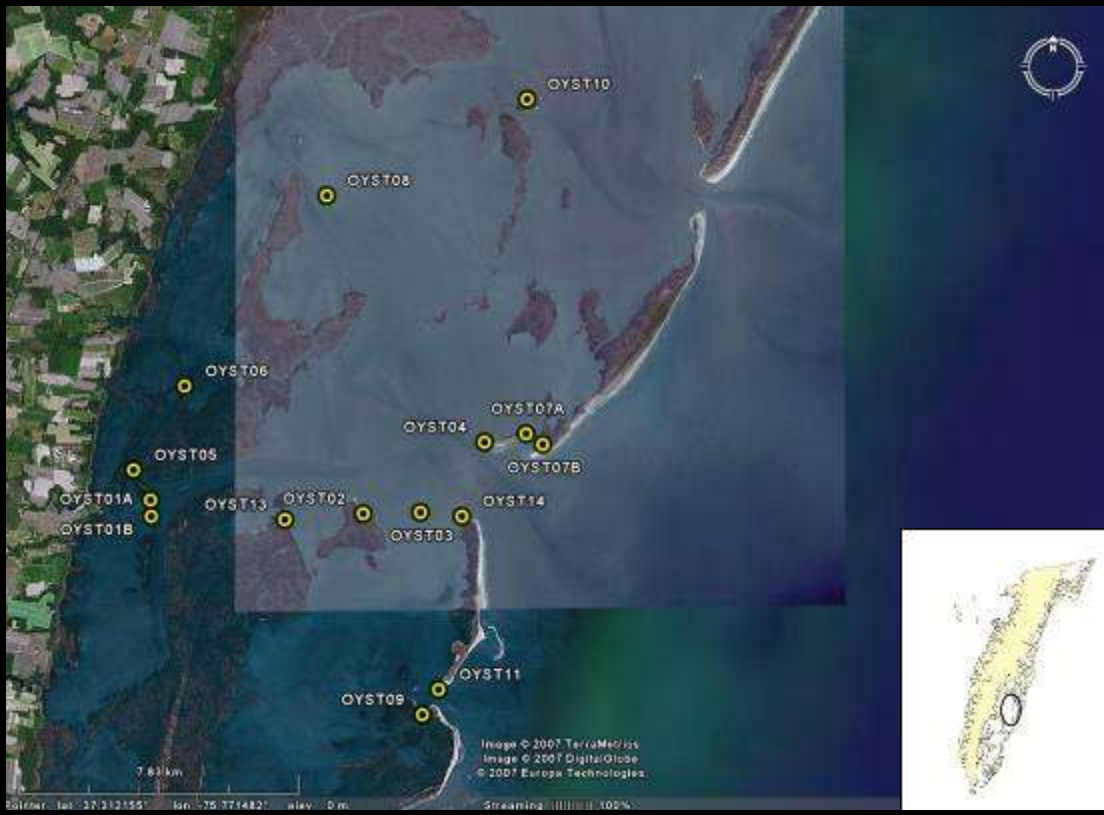
Year	No. Surveys	No. sites sampled	No. VA banded inds.	No. out-of state inds.
2004	6	9/17	2	3
2005	7	16/17	3	4
2006	9	17/17	14	16
2007	5	17/17	20	13

Oyster Route

Total number of sites: 16

Yrs. of coverage: 2004 - 2007

No. of birds obs. on route:
179 -542.



Year	No. Surveys	No. sites sampled	No. VA banded inds.	No. out-of state inds.
2004	6	8/16	2	4
2005	7	13/16	9	6
2006	8	16/16	15	8
2007	6	16/16	18	11

Fisherman Is. Route

Total number of sites: 8

Yrs. of coverage: 2005 - 2007

No. of birds obs. on route:
47 -164.



Year	No. Surveys	No. sites sampled	No. VA banded inds.	No. out-of state inds.
2005	3	6/8	4	1
2006	4	7/8	5	3
2007	6	8/8	15	1

Annual number of re-sightings of birds banded in Virginia by age class, 2004 - 2007.

Year	# banded	# re-sighted (%)	Age classes				
			HY(%)	2Y¹ (%)	3Y² (%)	4Y³ (%)	AD (%)
2004	65	12 (18)	10 (17)	--	--	--	2 (40)
2005	63	48 (38)	24 (41)	18 (30)	--	--	6 (60)
2006	86	77 (36)	38 (44)	15 (26)	20 (33)	--	4 (40)
2007	83	102 (34)	34 (43)	22 (26)	18 (31)	26 (43)	2 (15)

¹ 2Y = year that falls between first and second January of the bird's life.

² 3Y = year that falls between second and third January of the bird's life.

³ 4Y = year that falls between third and fourth January of the bird's life.

Breeding sites within 10 km of northern post-breeding roosts



Metompkin Is.

54 banded inds. re-sighted
43% within route
57% outside of route

Cedar Sandbar

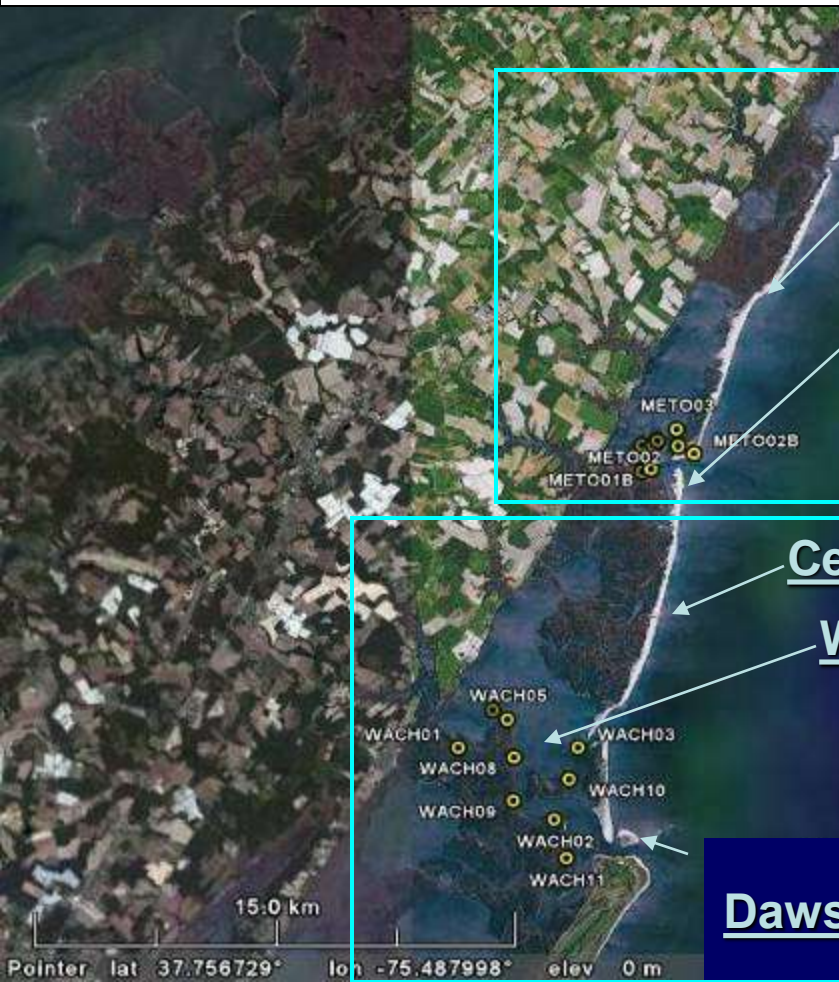
15 banded inds. re-sighted
67% within route / 7% outside of route
27% within & outside of route

Cedar Is.

Wachapreague Marshes

27 banded inds. re-sighted
70% within route
11% outside of route
18% within and outside of route

Dawson's Shoal



Breeding sites within 10 km of southern post-breeding roosts



Quinby marshes

7 banded inds. re-sighted
100% within route
3 bayside birds

Oyster Marshes

Cobb Is.

Little Cobb Is.

Wreck Is.

Ship Shoal Is.

Myrtle Is.

Smith Is.

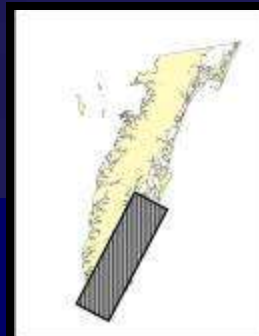
13 banded inds. re-sighted
77% within route
8% outside of route
15% within and outside
of route

Fisherman Is.

13 banded inds. re-sighted
85% within route
15% outside of route
1 bayside bird

16.9 km

Pointer lat 37.301800° lon -75.827417° elev 0 m



Where do we go from here?

- **Determine level of banding effort necessary to adequately address research questions.**
- **Determine level of re-sighting effort necessary to adequately address research questions.**
- **Establish re-sighting field protocols that are common to all states, habitats, etc.**
- **Determine level of detectability of banded individuals.**

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Bart Paxton produced the study area figure.

No. 28 – missing “Haggie” band

