

Eelgrass and Bay Scallop Restoration on the Seaside of Virginia's Eastern Shore

Bob Orth

Virginia Institute of Marine Science
College of William and Mary



Background

Eelgrass Distribution in Chesapeake Bay & Coastal Bays

1930



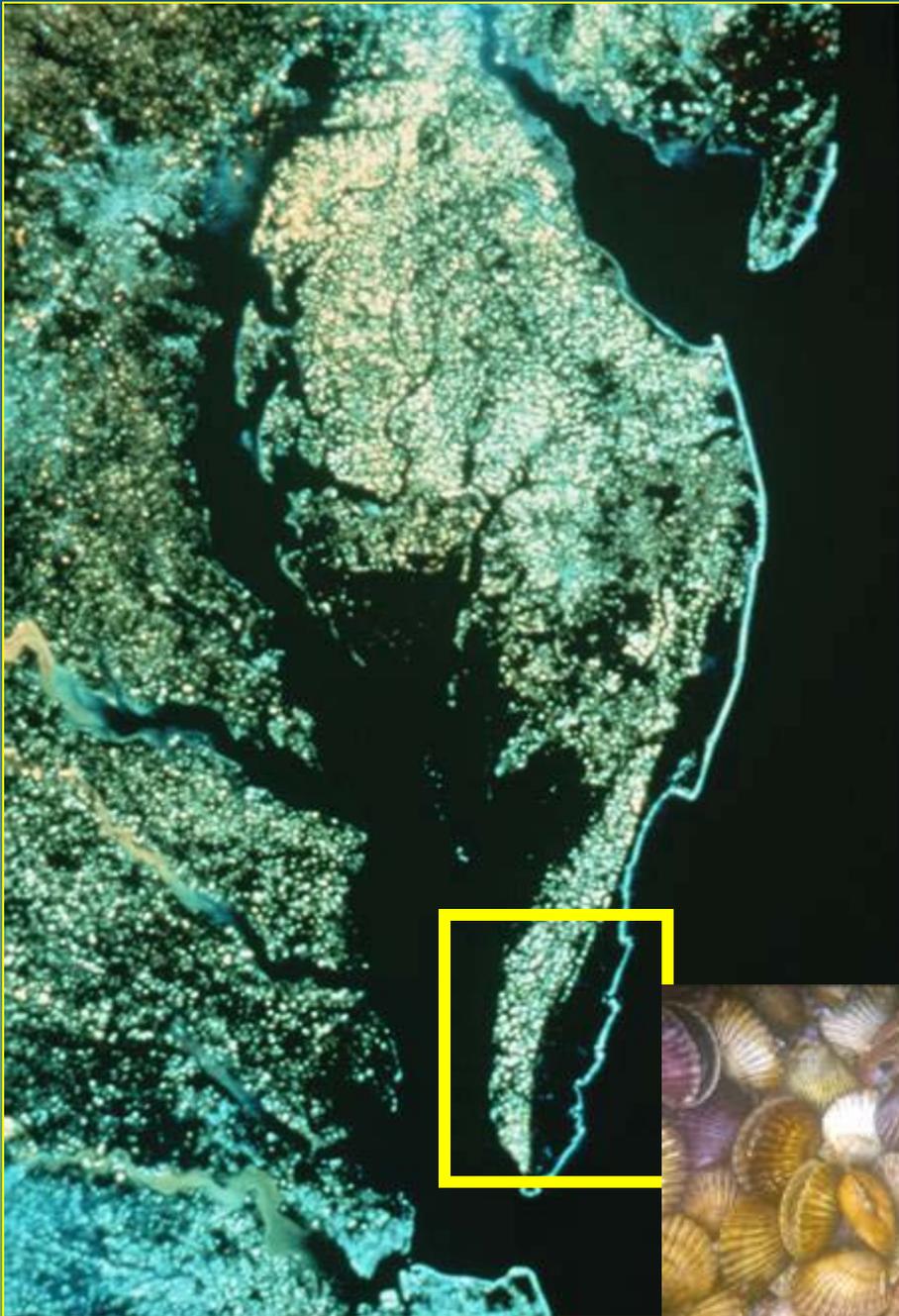
1960'S



1997



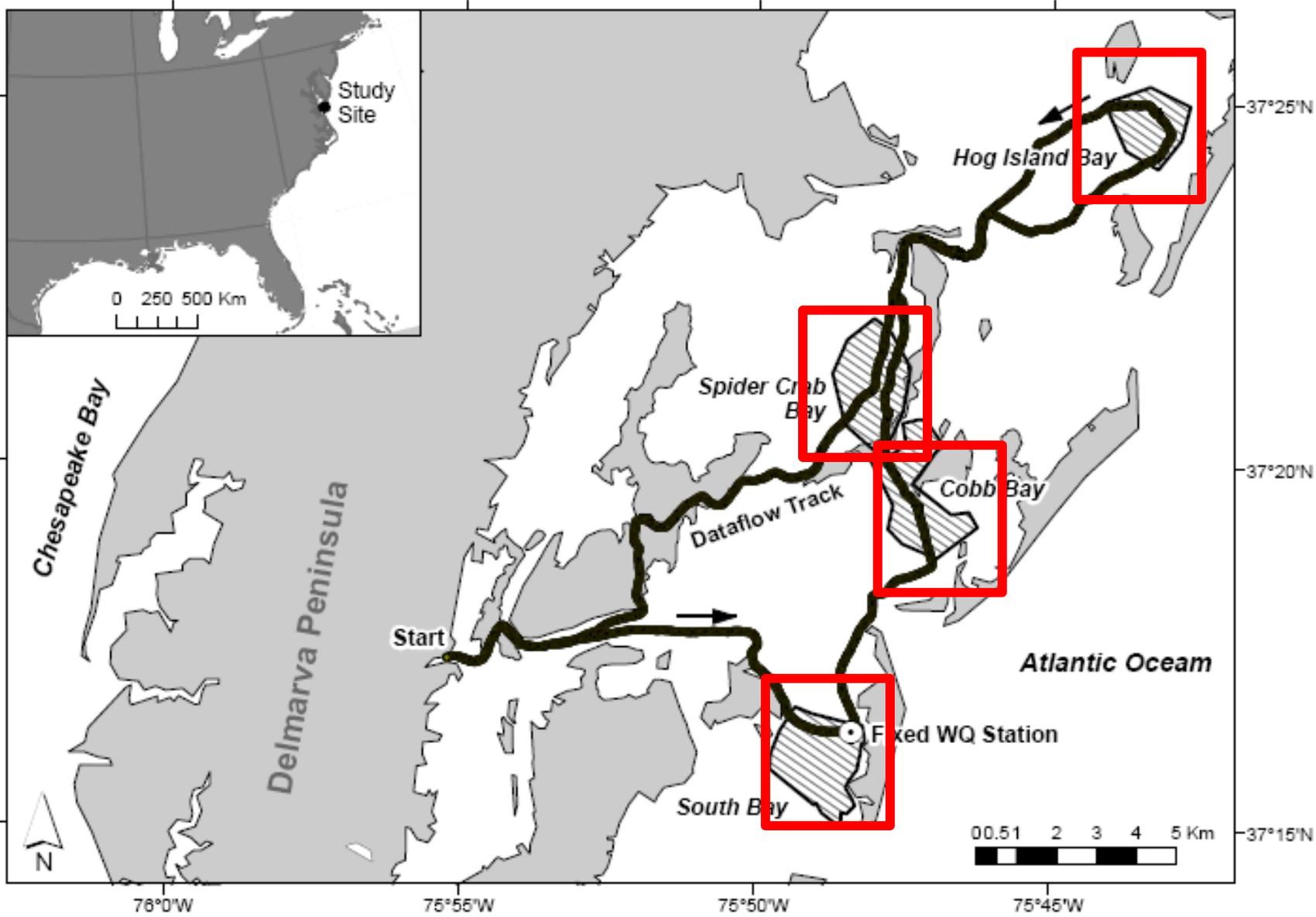
Adapted from: Orth and Moore. 1984. Distribution and abundance of submerged aquatic vegetation in Chesapeake Bay: an historical perspective. *Estuaries* 7:531-540.



GOAL

Re-establishment of eelgrass to the Virginia's coastal lagoons and the ecosystem services this community provided, esp. the bay scallop!

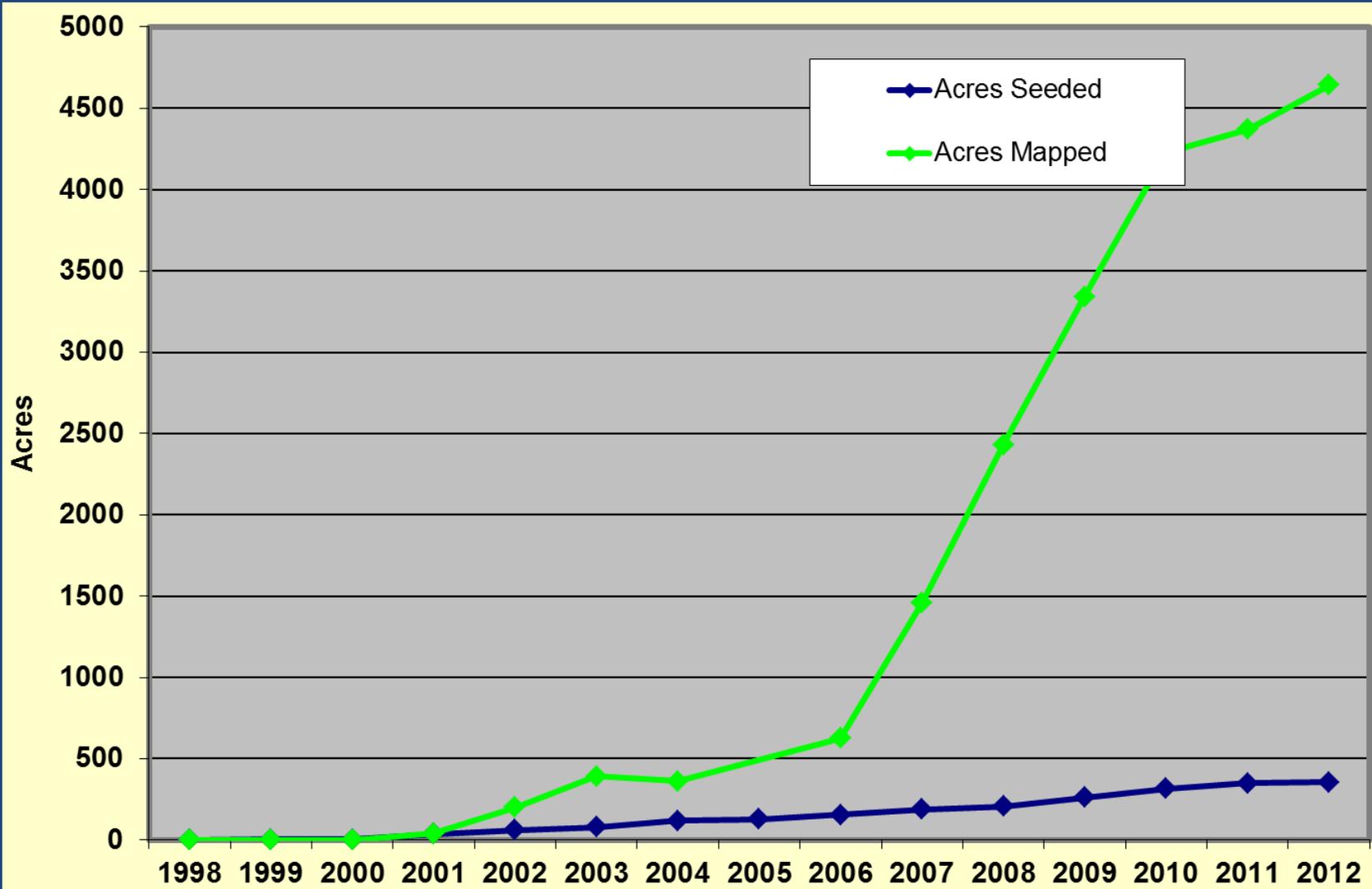




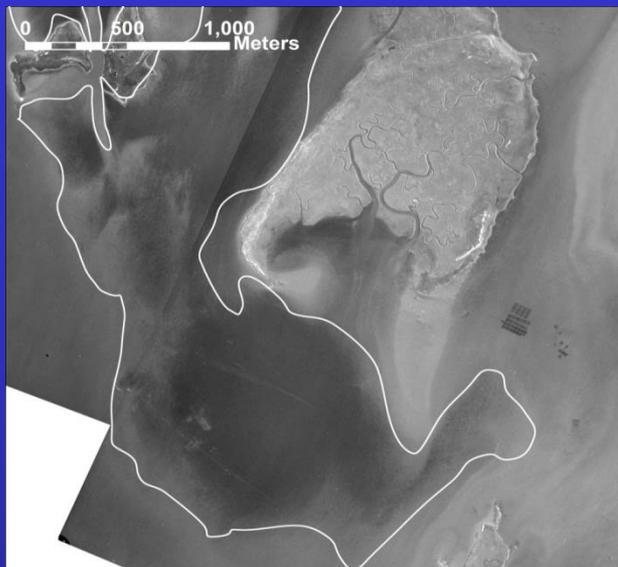
Seed Based Eelgrass Restoration Effort

Volunteers Collecting Eelgrass Seeds

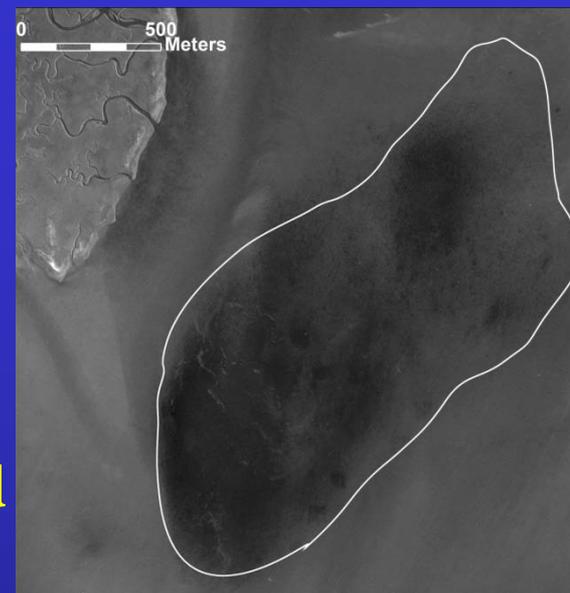




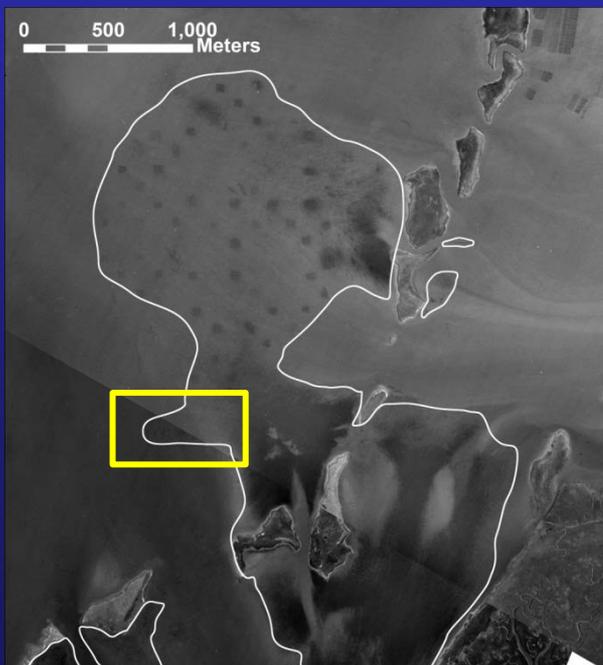
June 2012



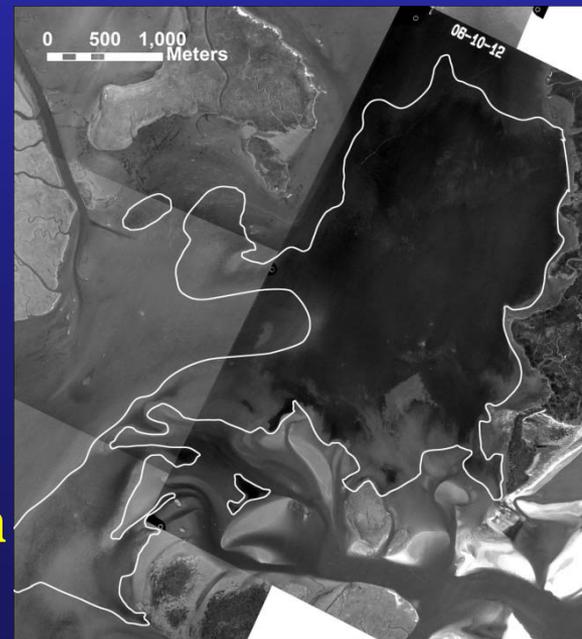
**Cobb
Bay**



**Hogg
Island
Bay**

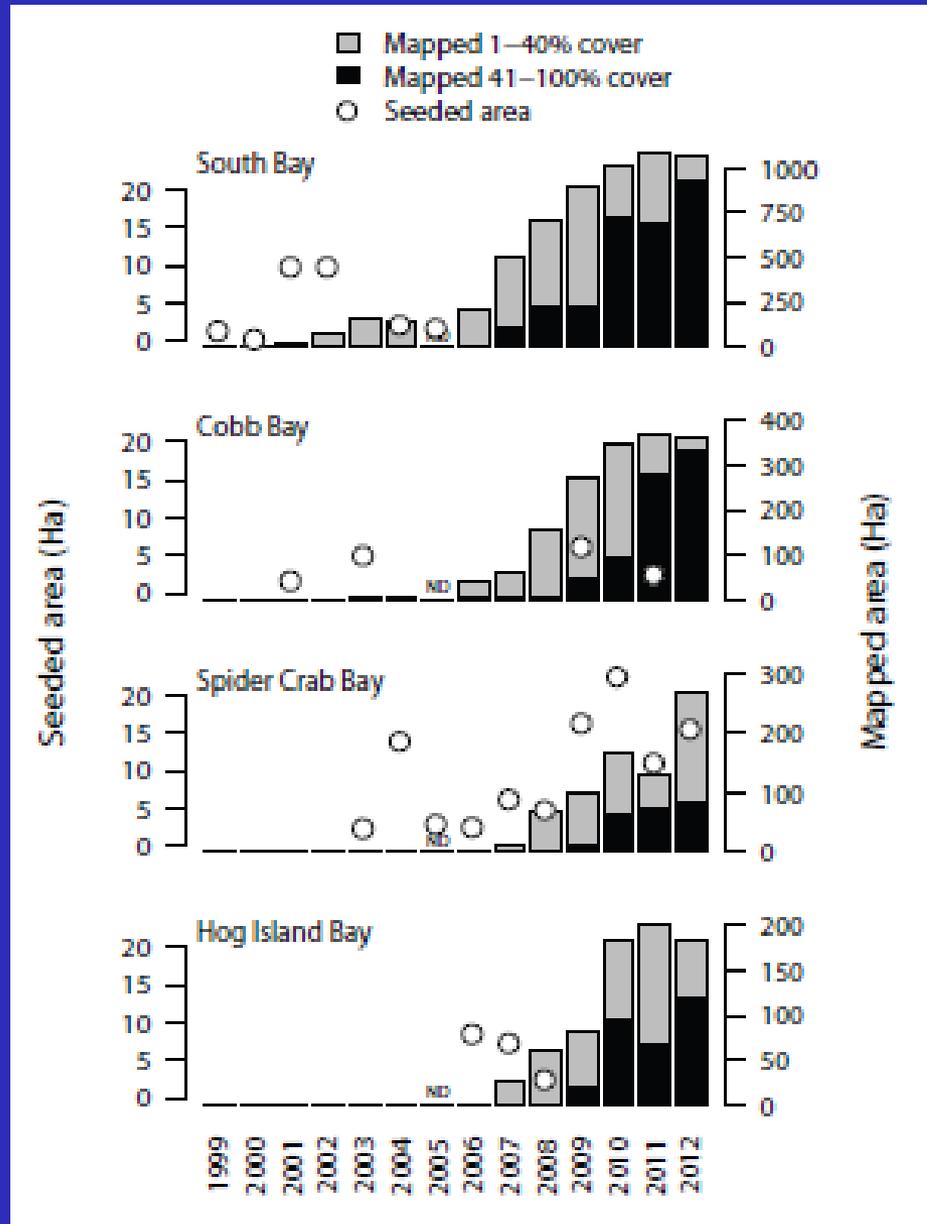


**Spider
Crab
Bay**

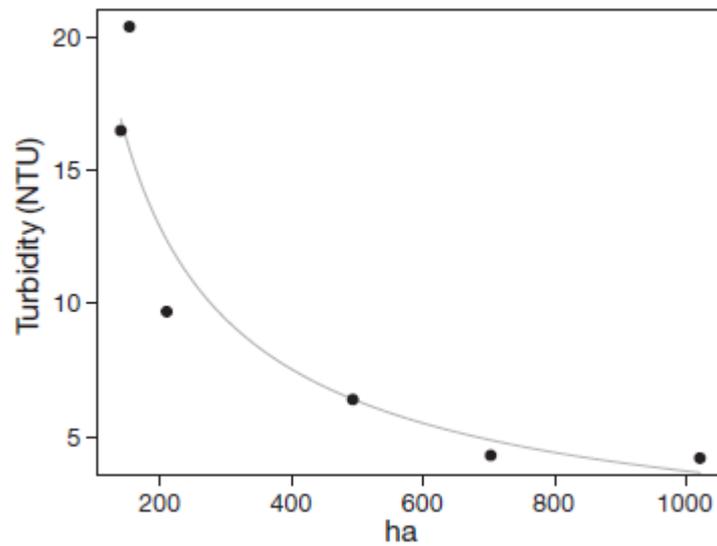
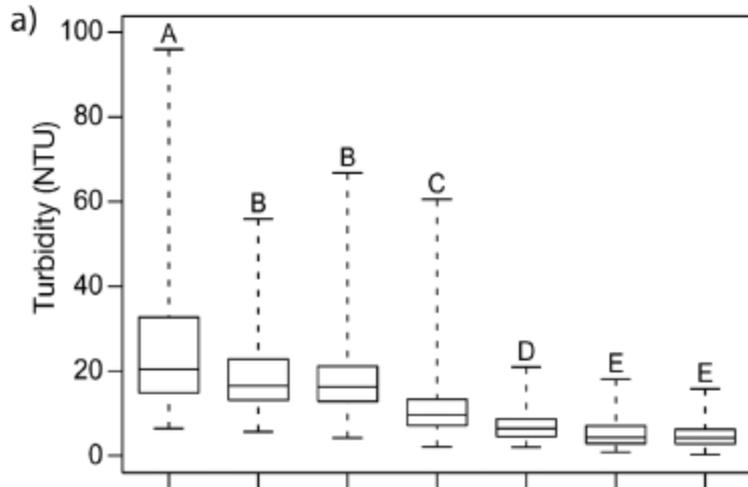


**South
Bay**

Hectares seeded and mapped each year in each of the four coastal bays

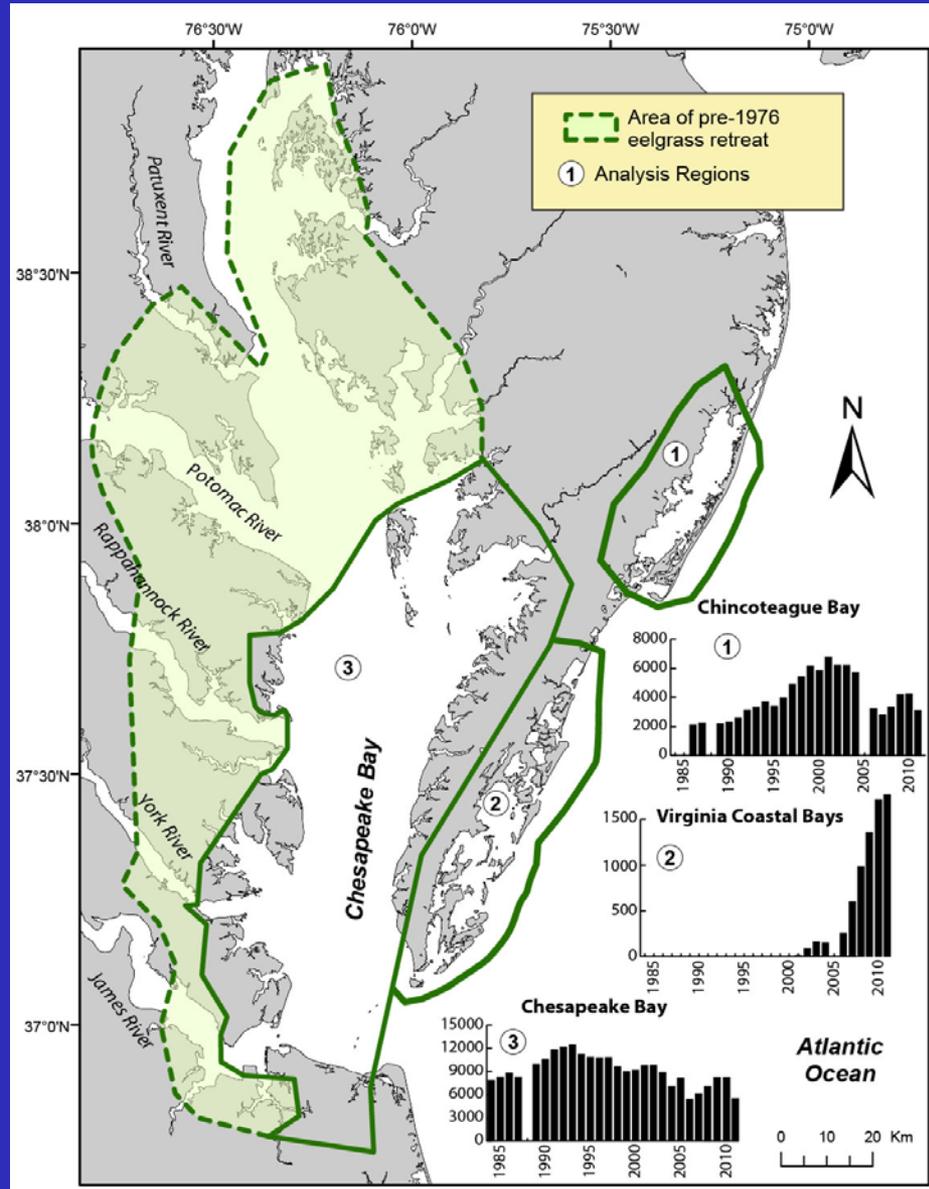


South Bay Turbidity Trends



<http://www.ysieconet.com/public/WebUI/Default.aspx?hidCustomerID=154>

Changes in eelgrass abundance in Chesapeake Bay, Chincoteague Bay, and the Virginia Coastal Bays - 1984-2011.



ACKNOWLEDGEMENTS



The Nature Conservancy 
Protecting nature. Preserving life.™

 Virginia Coastal Zone
MANAGEMENT PROGRAM

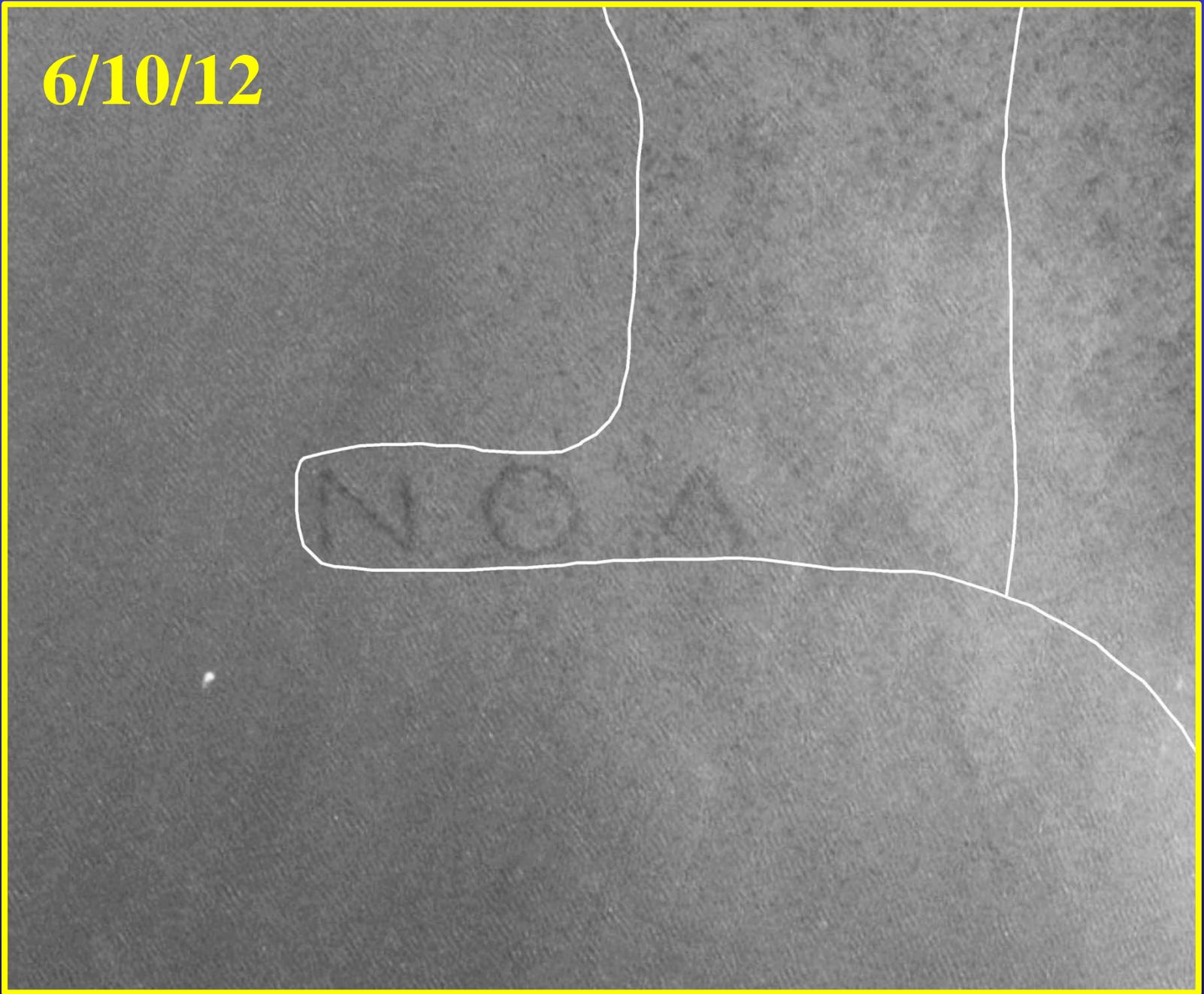
NOAA

 50m

Oblique aerial imagery acquired in May, 2009 over Spider Crab Bay on the seaside of Virginia's Eastern Shore. The four letters "NOAA" were formed by eelgrass plants that grew from 50,000 seeds distributed by the VIMS SAV Restoration Program on 10/16/07 as part of a 6 year effort by the Virginia CZM Program's Seaside Heritage Program. Funding was provided by NOAA. (Photo by B. Watts)

6/10/12

NOVA



Bay Scallop Harvest Accomac and Northampton Counties Seaside!

Year	Harvest (lbs)	Dollars	Today's \$\$
1925	360,732	74,272	902,405
1929	1,145,598	207,883	2,554,882
1930	1,824,948	147,564	1,773,719
1931	1,226,478	78,990	1,031,609
1932	658,584	80,090	1,153,296
1933- present	0	0	0

Take Home Fact

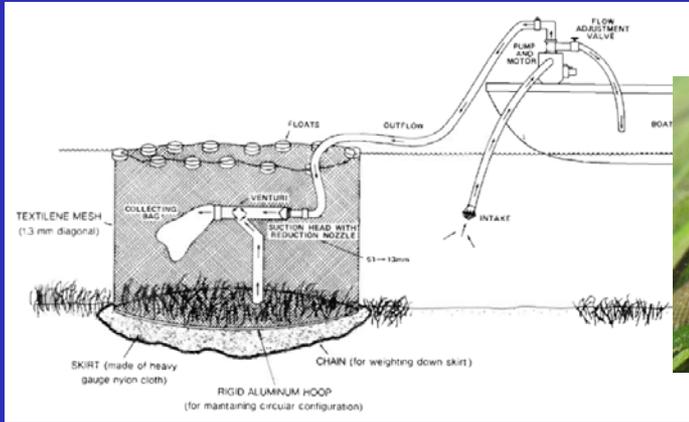
- **2008 – 131,000 pounds of bay scallops landed domestically in the United States**
- **1930 – 1,800,000 pounds of bay scallops landed in Accomac and Northampton counties**



Bay Scallop Restoration Initiated 2009 (NOAA-ARRA Funds)



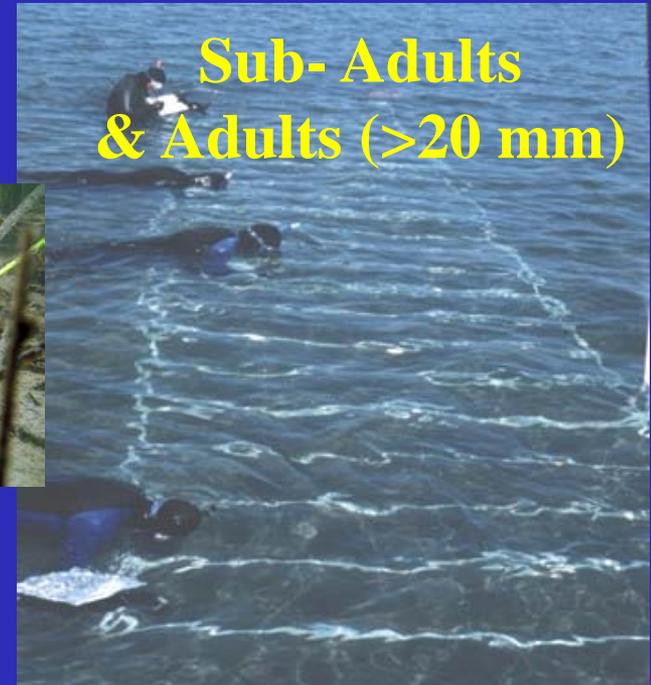
Bay Scallop Assessment July, 2012



Juveniles (<20 mm)



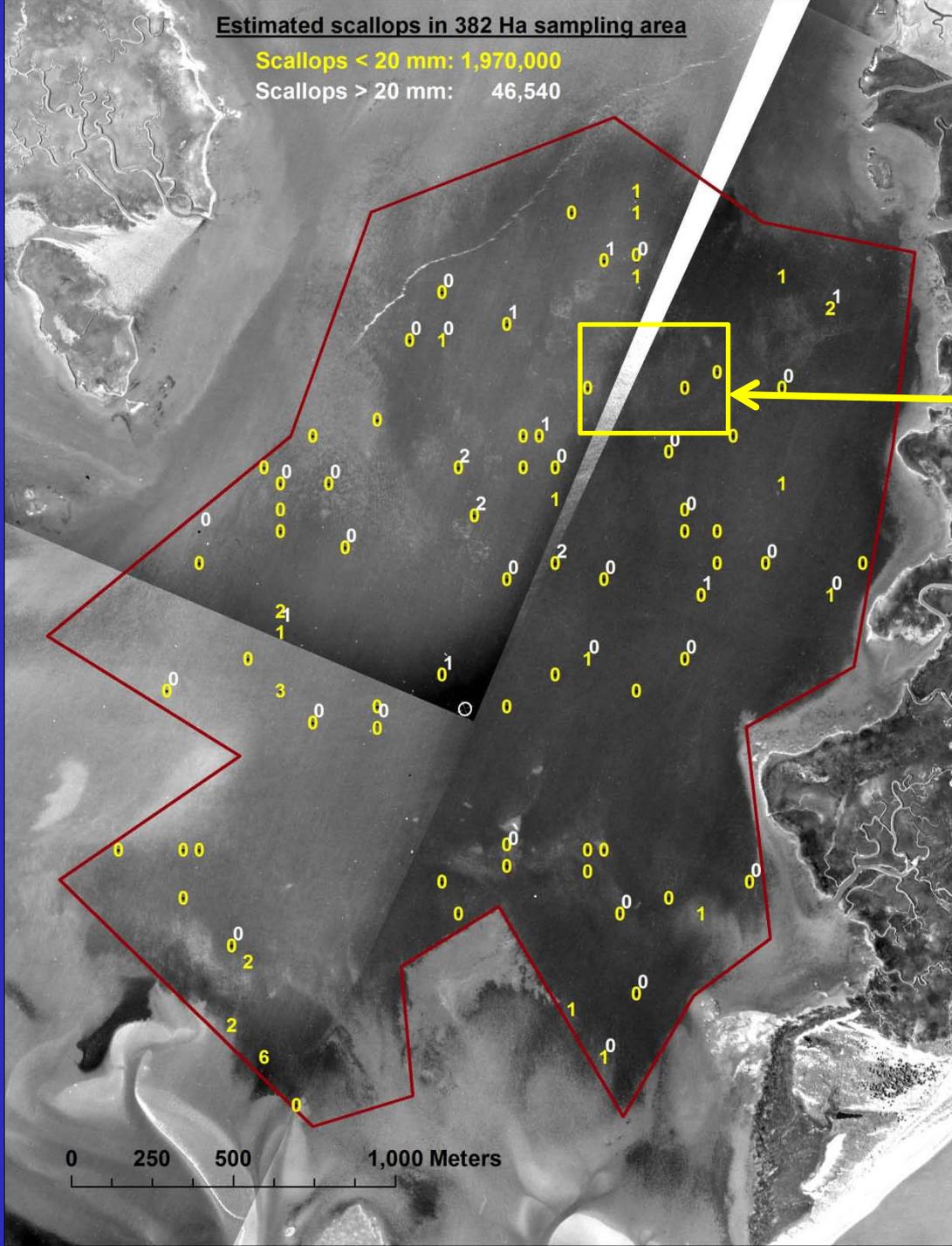
**Sub- Adults
& Adults (>20 mm)**



Estimated scallops in 382 Ha sampling area

Scallops < 20 mm: 1,970,000

Scallops > 20 mm: 46,540



**Caged
Scallops**

0 250 500 1,000 Meters



Thank You!
Questions?



