







Sharks on the Cape: Feeding research into a bigger conversation on ecosystem dynamics and community needs

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Cape Cod Coastal Conference December 5, 2017

#### Cue the JAWS theme music....

#### Shark Sightings Prompt Beach Closures, Concern on Cape Cod

Beachgoers at Nauset Light saw the shark attack the seal at around 4 p.m. Wednesday



DUSTIN WICKSELL

Daily **Mail** 

'It was like Jaws': Cape Cod beaches closed after huge shark attacks seal in cloud of blood just 10ft from shore before spitting carcass onto sand

- Lifeguards on Nauset Light spotted the attack which turned the sea red
- Huge shark spat out carcass of the seal onto shore to horror of beachgoers
- Officials raised the alarm and closed two beaches in Cape Cod for safety

### White sharks actually aren't new to Cape

Henry David Thoreau – Cape Cod, 1865



flux, though it was quite cold and windy. The ocean there is commonly but a tantalizing prospect in hot weather, for with all that water before you, there is, as we were afterward told, no bathing on the Atlantic side, on account of the undertow and the rumor of sharks. At the light-house both in Eastham and Truro, the only houses quite on the shore, they declared, the next year, that they would not bathe there "for any sum," for they sometimes saw the sharks tossed up and quiver for a moment on the sand. Others laughed at these stories, but perhaps they could afford to because they never bathed anywhere. One old wrecker told us that he killed a regular man-eating shark fourteen feet long, and hauled him out with his oxen, where we had bathed; and another, that his father caught a smaller one of the same kind that was stranded there, by standing him up on his snout so that the waves could not take him. They will tell you tough stories of sharks all over the Cape, which I do not presume to doubt utterly, — how they will sometimes upset a boat, or tear it in pieces, to get at the man in it. I can easily believe in the undertow, but I have no doubt that one shark in a dozen years is enough to keep up the reputation of a beach a hundred miles long. I

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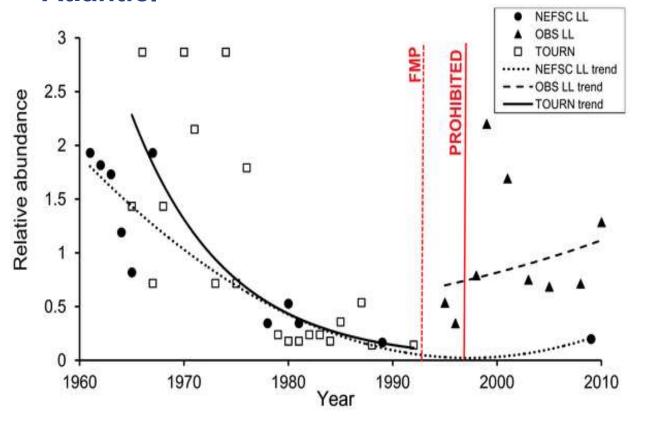
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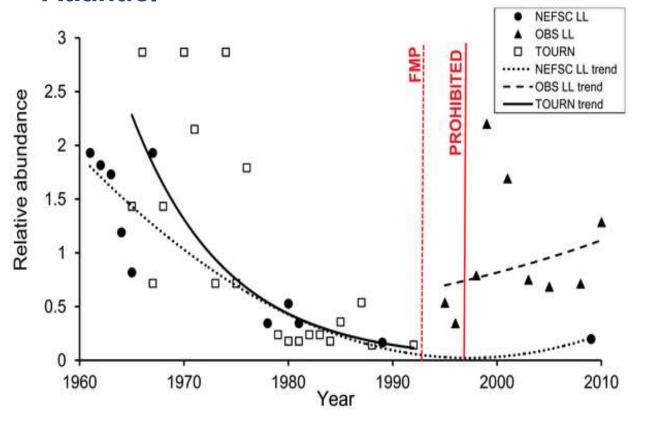
#### So where have they been?

1) The white shark population declined in the western North Atlantic.

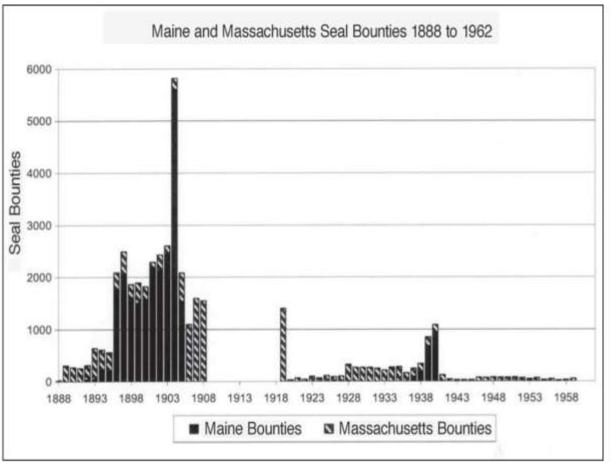


#### So where have they been?

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2) Seal populations were really low.

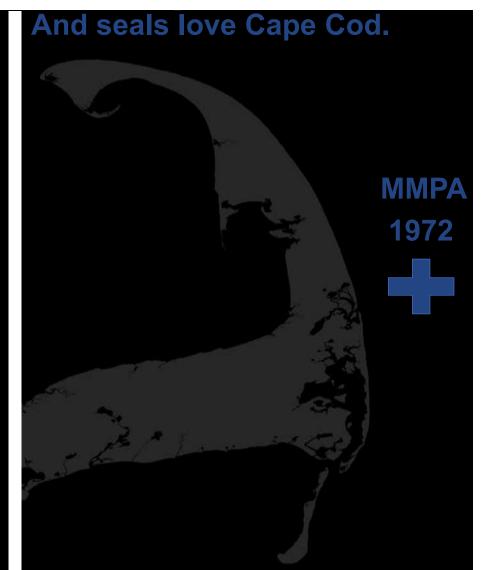


Lelli et al. 2009

Curtis et al. 2014

### The re-emergence of Cape Cod as a

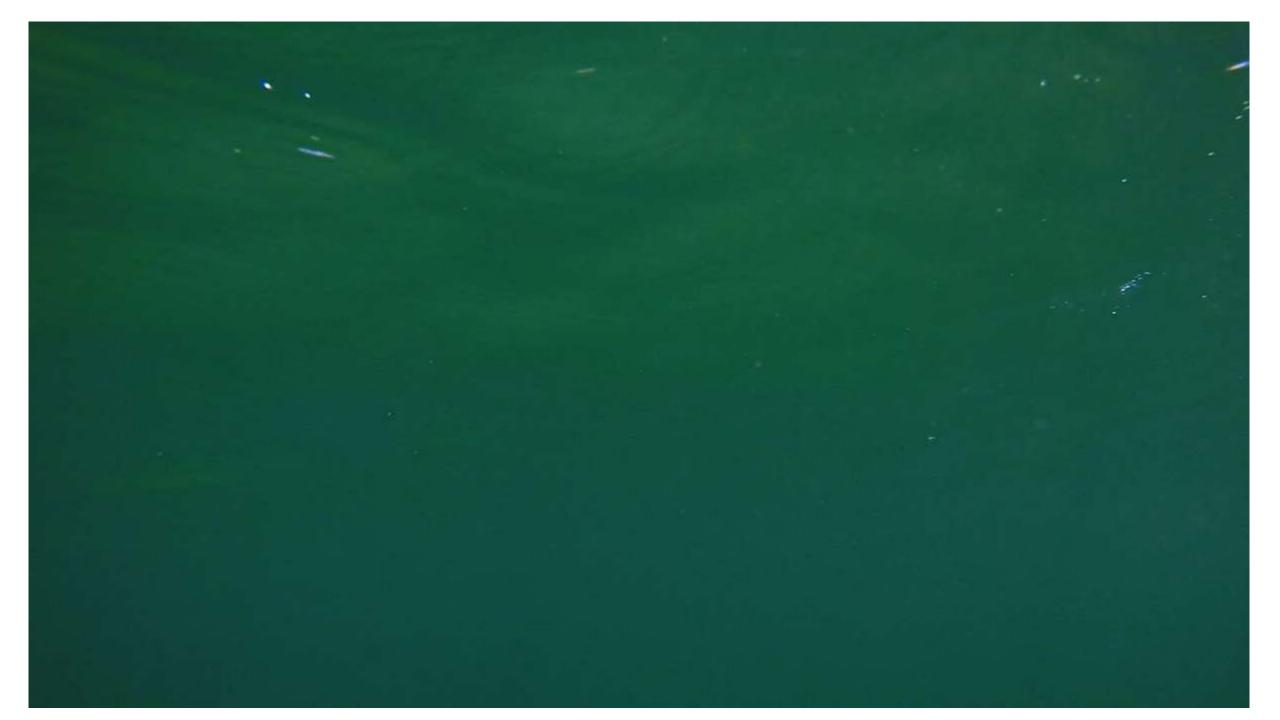
White sharks love to eat seals.











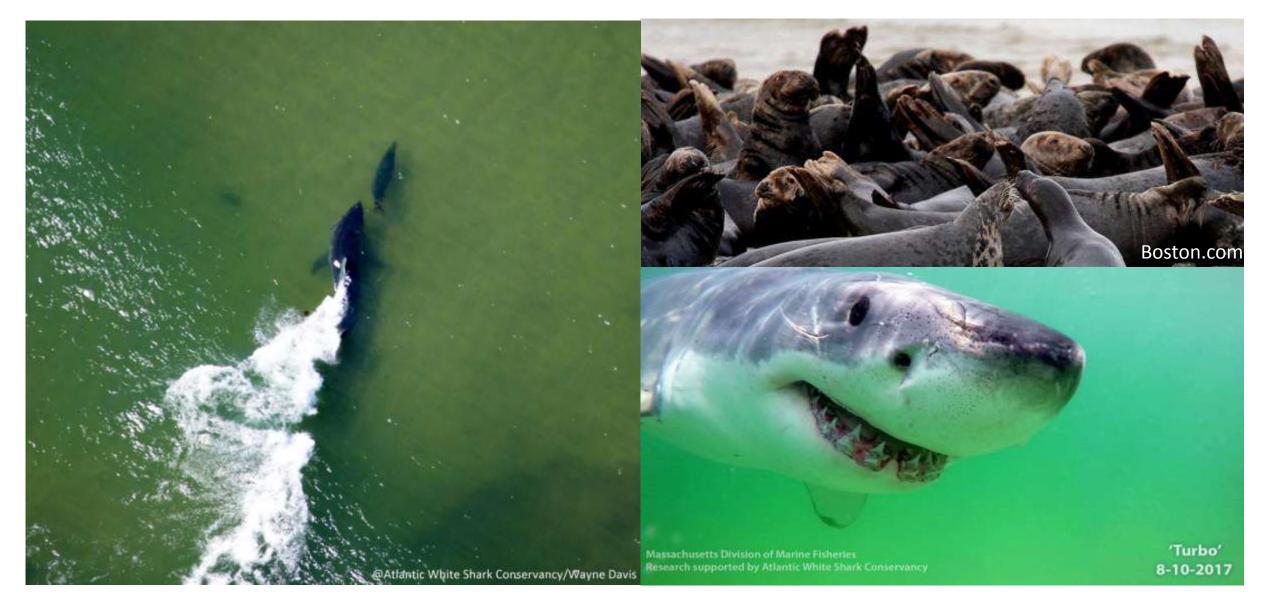
## White shark population study

ID: WS 14-20 (Lumpy) 'Lumpy' Sex: Male WS 14-20 8-31-2015 Est. Length: ft ID Date: 8/25/2014 Tagged: NA Tag Type: NA Comments: This shark has a big lump on its caudal peduncle that makes it twist to the left. Looks like it may have been bitten by another shark. Atlantic White Shark Cons

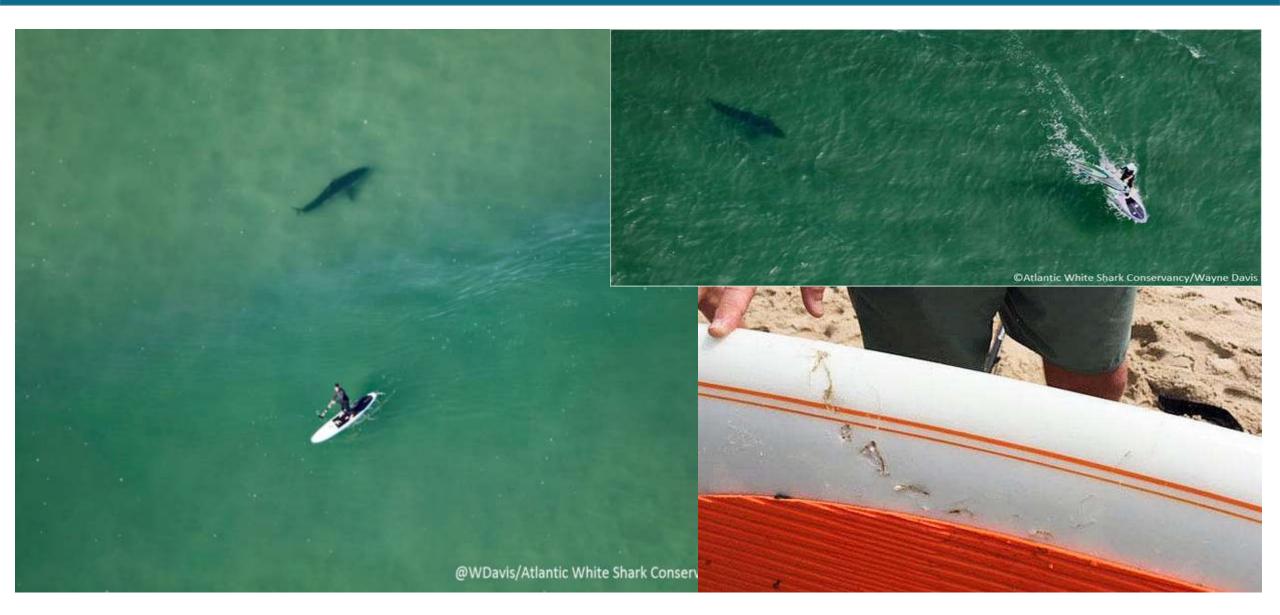
#### Sharks and seals – a conservation success



# Seal population control



# Public safety concerns



## Regional Shark Working Group





#### Outreach and education

#### Gills Club Science Team

One day, you could be on this very list. If you put in the time, the effort, and the dedication, you can very well find yourself on this list, inspiring the next generation of researchers!



DR. SHANNON CORRIGAN -COLLEGE OF CHARLESTON



DR. TRICIA MEREDITH -UNIVERSITY OF MIAMI



DR. MICHELLE HEUPEL -JAMES COOK UNIVERSITY



DR. MISTY PAIG TRAN -ARIZONA STATE UNIVERSITY



DR. SUSAN THEISS -OCEANIA CHONDRICHTHYAN SOCIETY



DR. TOBY DALY-ENGEL -UNIVERSITY OF WEST FLORIDA



#### Responsible ecotourism





SEPTEMBER 6, 2017 11:41AM

You Can Help Scientists Study Great White Sharks Off the Coast of Cape Cod



### White sharks are bringing people to Cape Cod

#### CHATHAM SHER CENTER

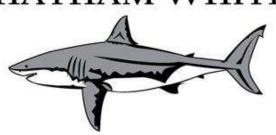


The Chatham Shark Center opened in June -2015 with shark cage for visitor photos



Artist: Jerry Evans

#### **CHATHAM WHITES**





#### We couldn't do any of this without you!

Our research is funded mostly by donors.







# Check out our website and social media pages!

- www.mass.gov
- www.atlanticwhiteshark.org
- www.gillsclub.org
- Facebook
- Twitter
- Instagram

## Thank you!

**Atlantic White Shark Conservancy** 

- Cynthia & Ben Wigren
- Marianne Long
- Heather Marshall
- John & Pam King
- Wayne Davis
- Donors and Volunteers!

Contact Information: mwinton@umassd.edu