

barrier versus dredge nesting in North Carolina

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Contributors

Audubon NC

Cape Hatteras National Seashore

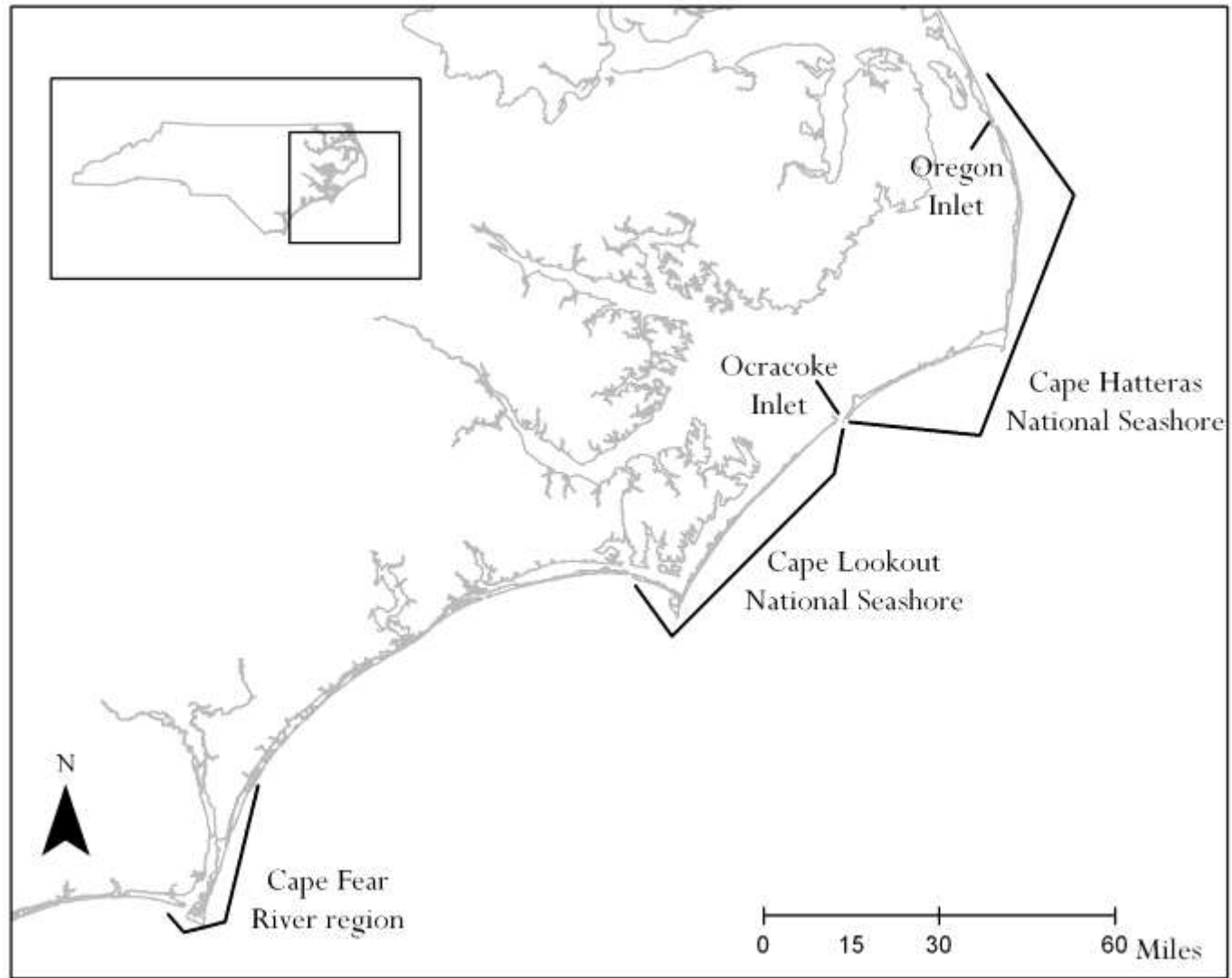
Cape Lookout National Seashore

NC State University

NC Wildlife Resources Commission

Funding

National Fish and Wildlife Foundation

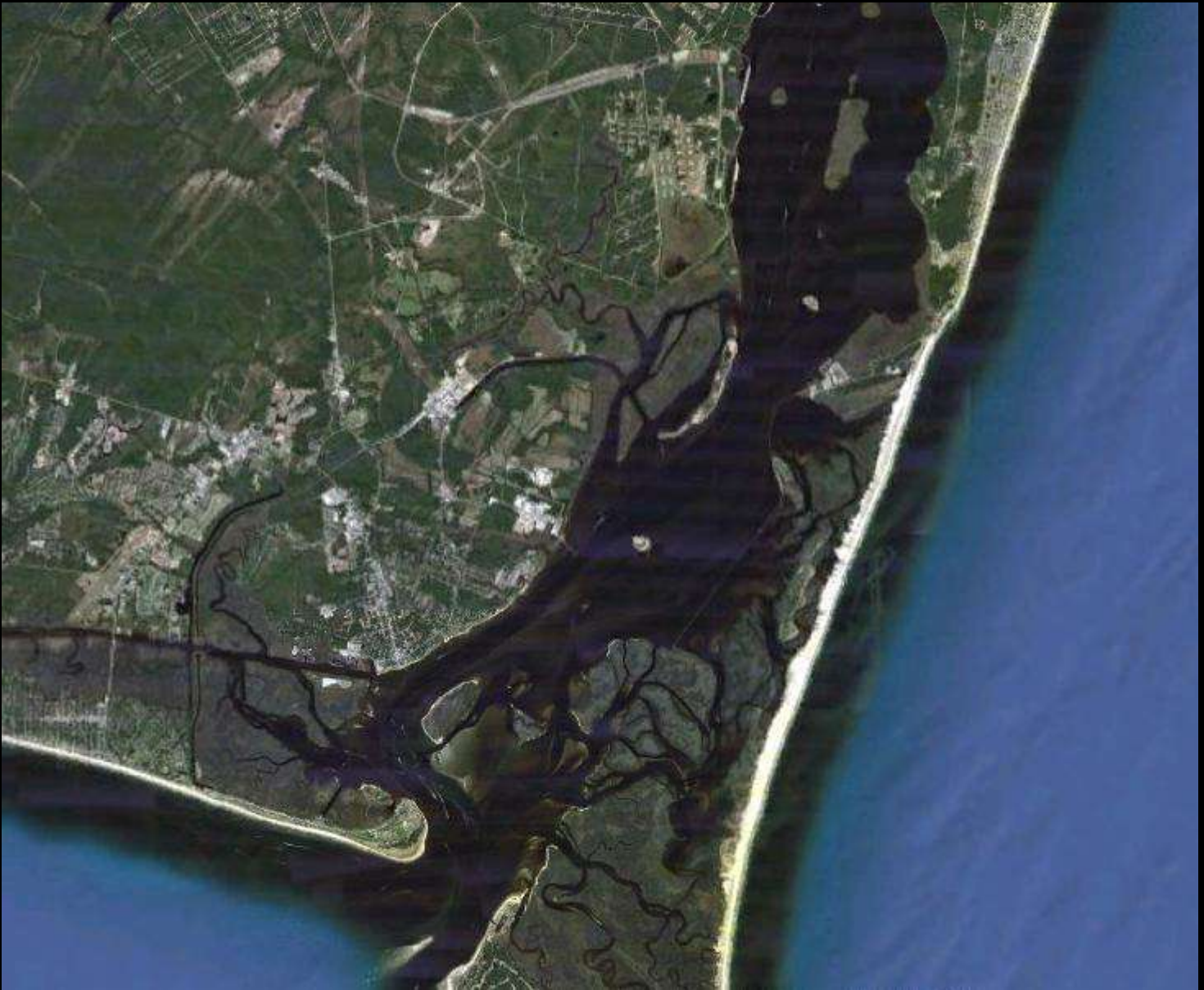


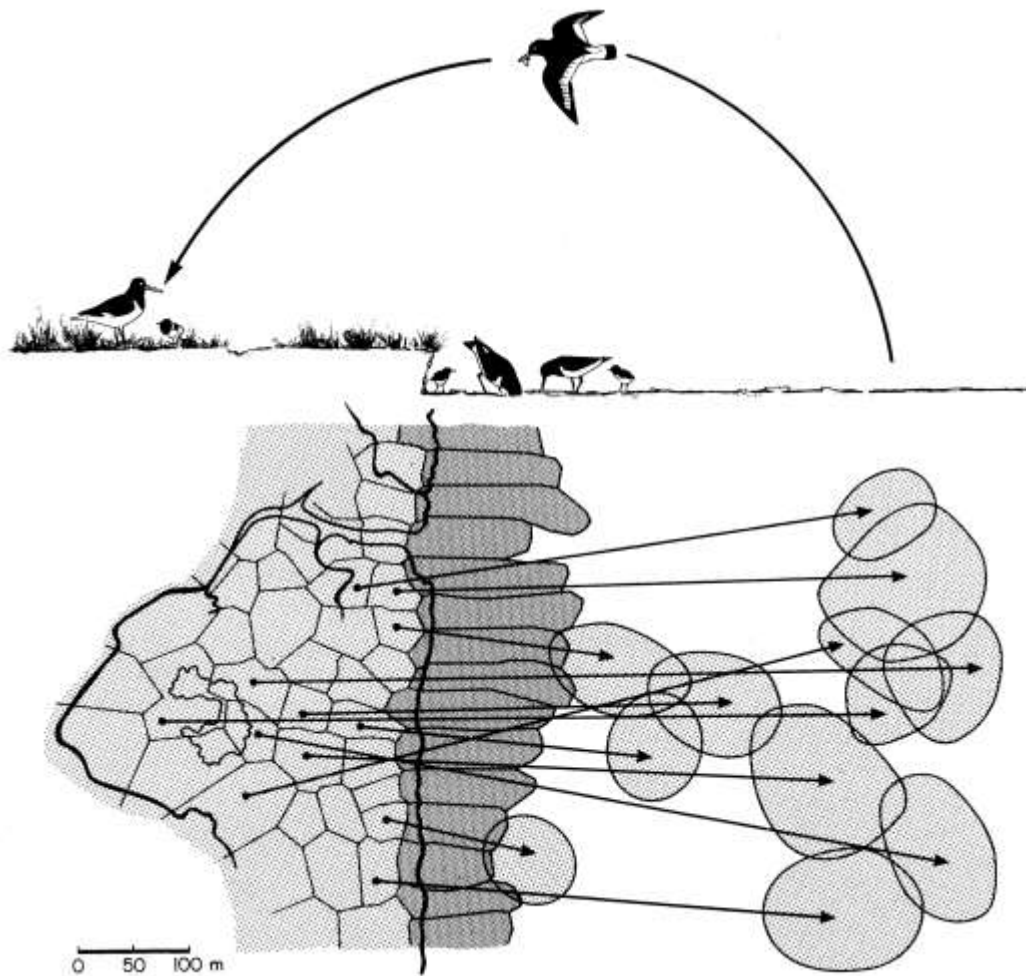
oystercatchers

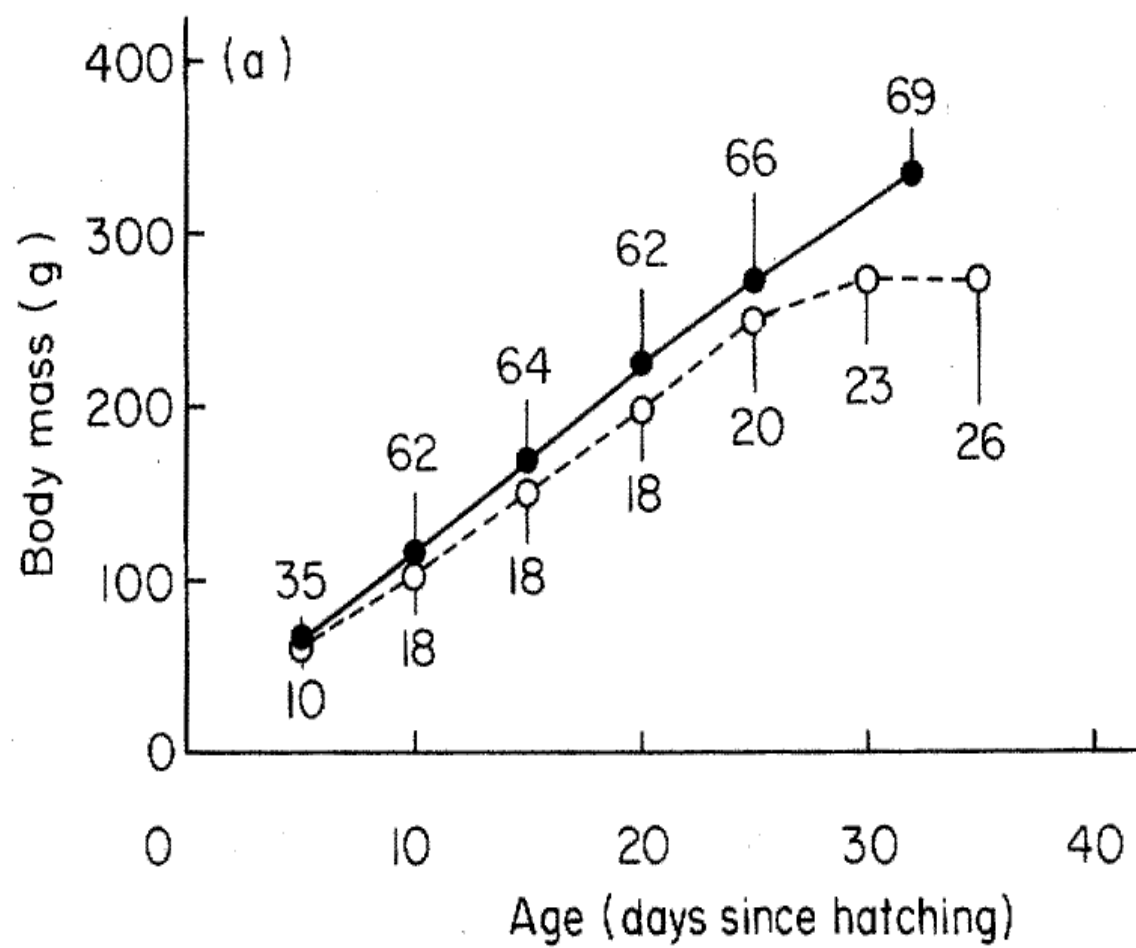


- Post and Raynor (1964)
- Frohling (1965)
- Shields and Parnell (1990)
- Toland (1992)
- McGowan et al. (2005)
- Virzi (2008)











culmen



tarsus



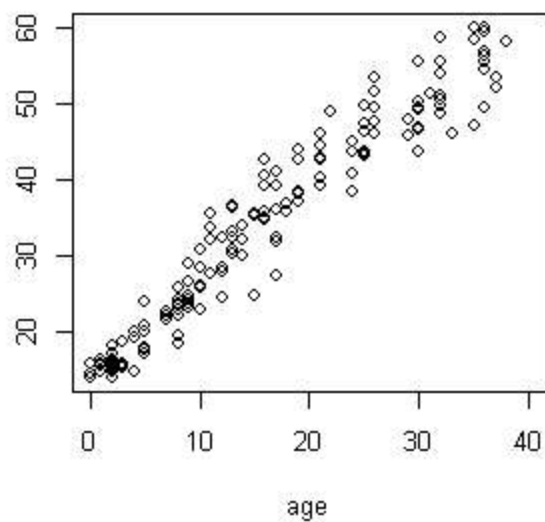
wing chord



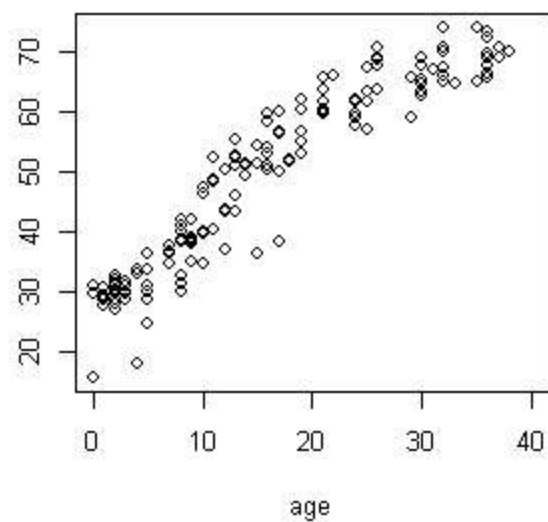
weight



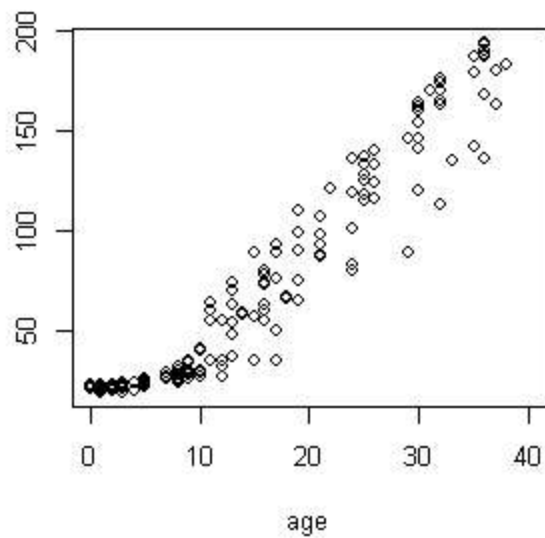
culmen



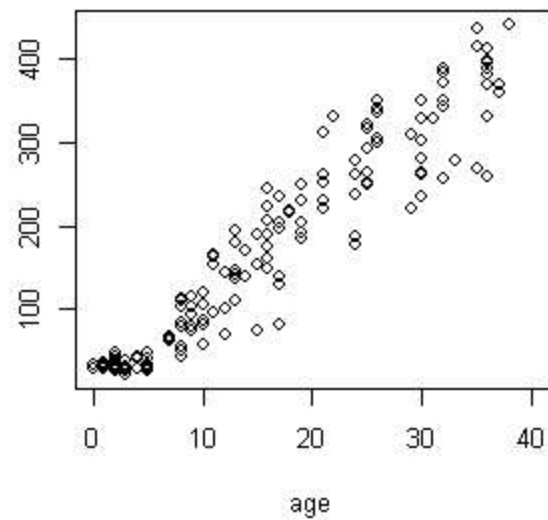
tarsus



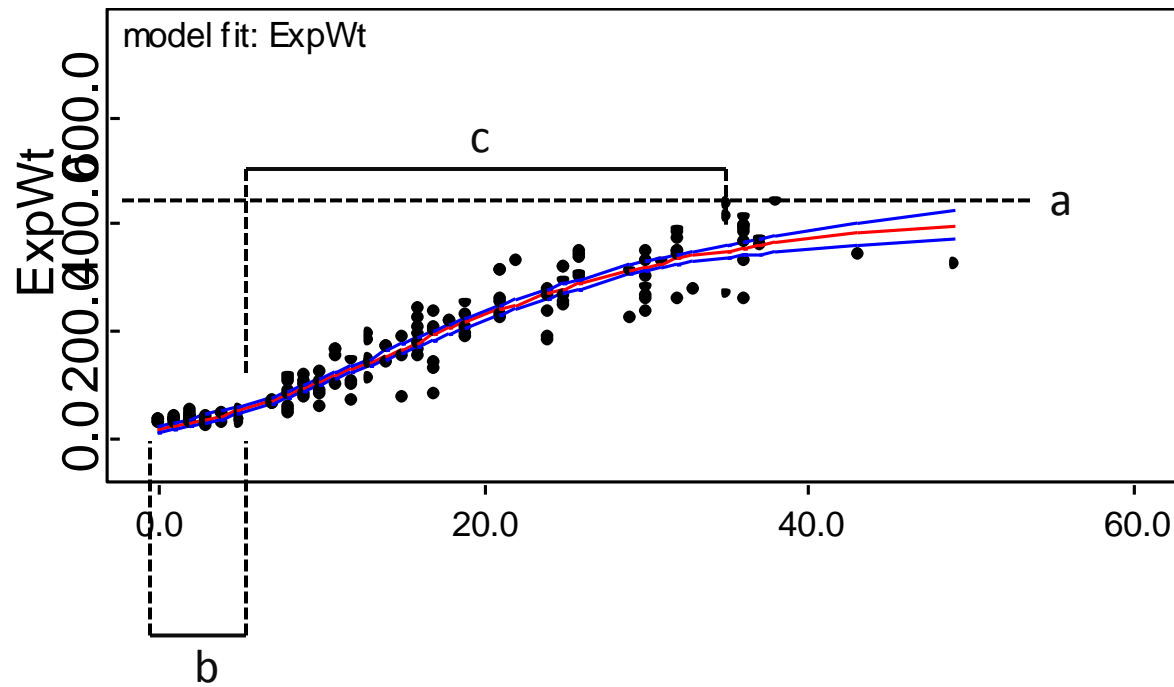
wing chord



weight



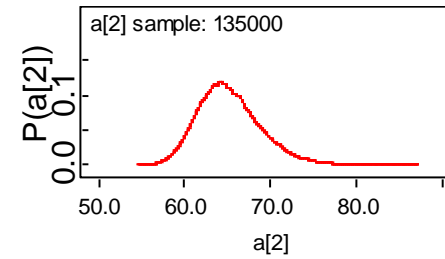
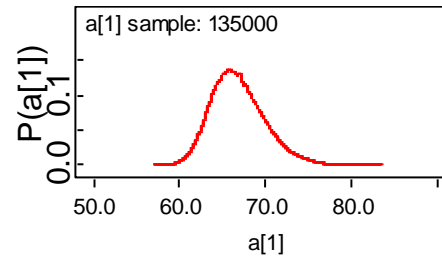
Gompertz curve



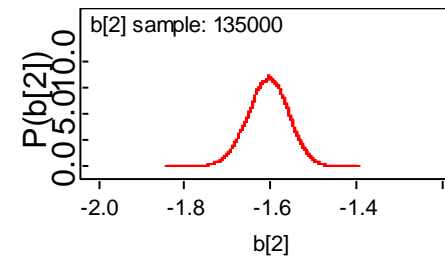
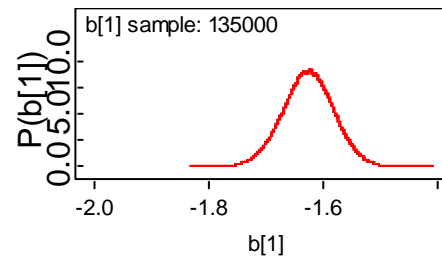
barrier

dredge

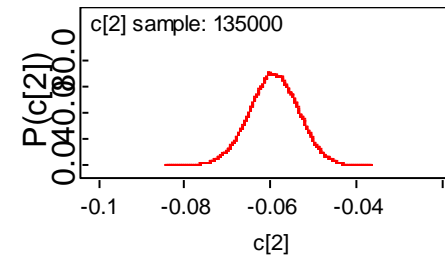
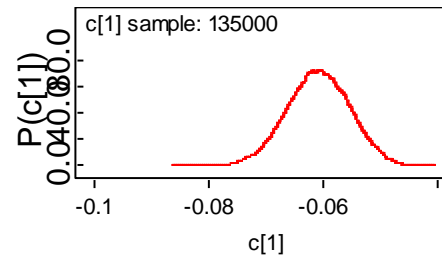
asymptote (a)



displacement (b)



slope (c)



reproductive comparison

2009 - 2011

	Nests	Pairs	Eggs	Nests Hatched	Eggs Hatched	Naïve nest success	Fledged
STATE	760	539	1898	327	605	0.4303	308
BARRIER	437	297	1094	136	279	0.3112	154
DREDGE	143	101	358	84	144	0.5874	51
NATURAL	180	141	446	107	182	0.5944	103

reproductive comparison

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all site types had same average
clutch size (2.5 eggs/nest)

reproductive comparison

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naïve nest success was twice as high for dredge and natural nests than barrier nests

reproductive comparison

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barrier and dredge sites fledged equal numbers
of chicks per pair

reproductive comparison

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barrier sites fledged twice as many chicks per
successful nest as dredge sites

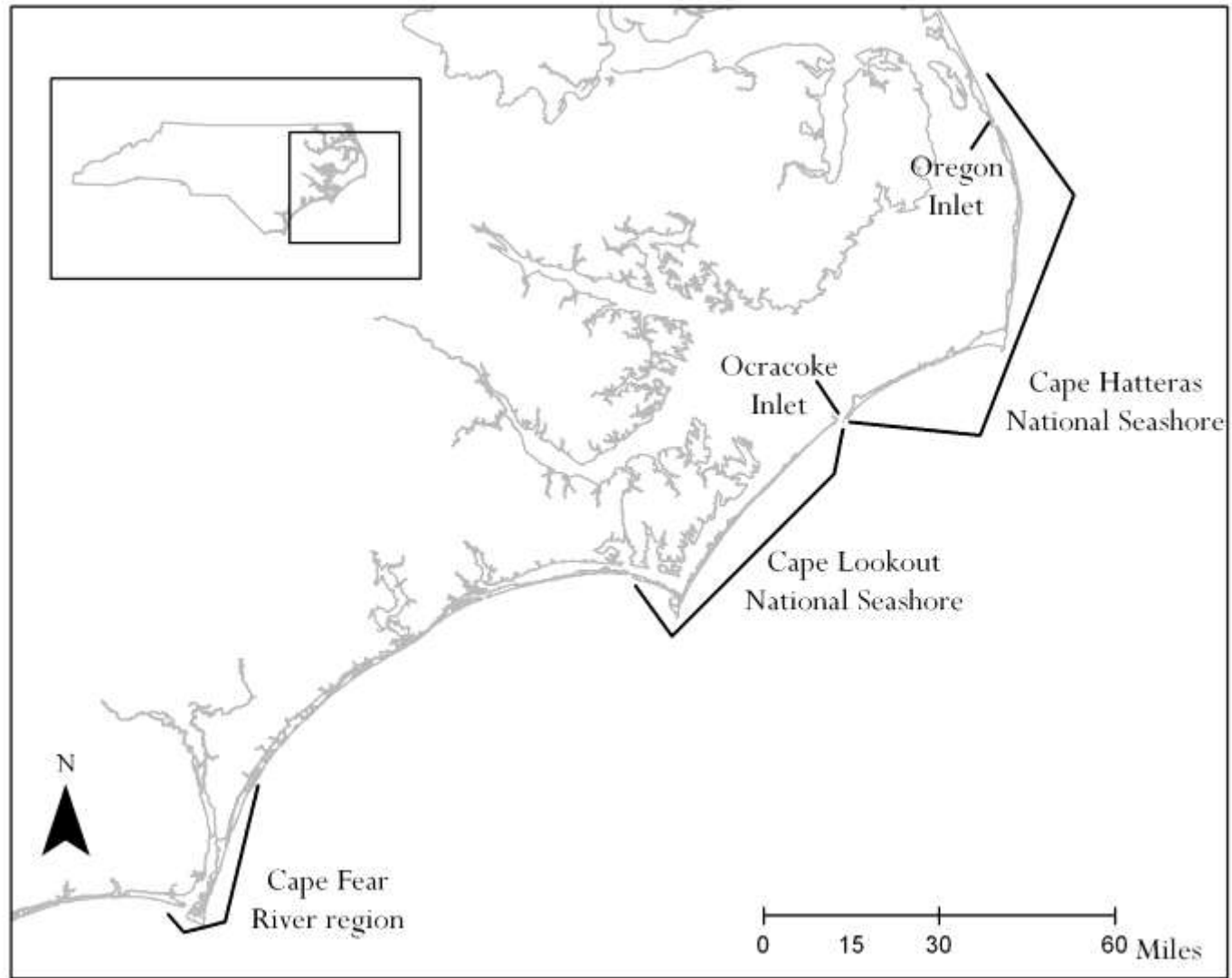
so, what does this all mean?

we're not seeing the tradeoff in the growth of the chicks but possibly in the reproductive strategies

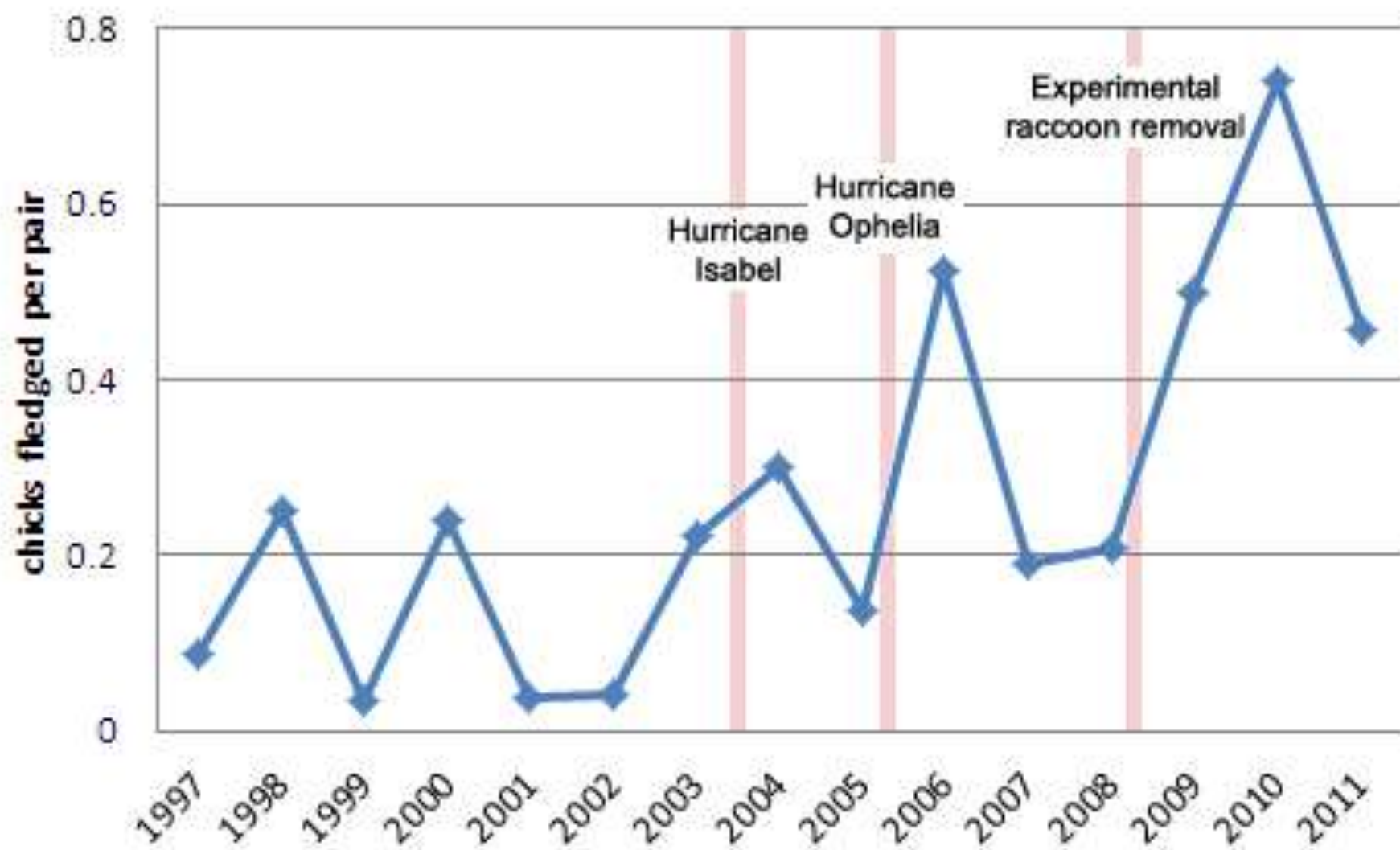
it appears that dredge birds are laying as many eggs and hatching as many nests but then only fledging about half as many chicks

prey response to predator removal at Cape Lookout National Seashore











thank you.