

# American Oystercatcher chick development: hatching to fledging

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## INTRODUCTION

### Florida's American Oystercatcher Population

- Statewide population estimated at 350-400 pairs (Douglass and Clayton 2004)
- 15% of Florida's American Oystercatchers (*Haematopus palliatus*) population nests on 3 large dredged spoil material islands in Hillsborough Bay, the northeastern region of Tampa Bay, Florida, USA (Hodgson et al. 2007, 2008, 2010).

### Study Purpose

- Photograph known-age oystercatcher young from hatching to fledging

## STUDY AREA & METHODS

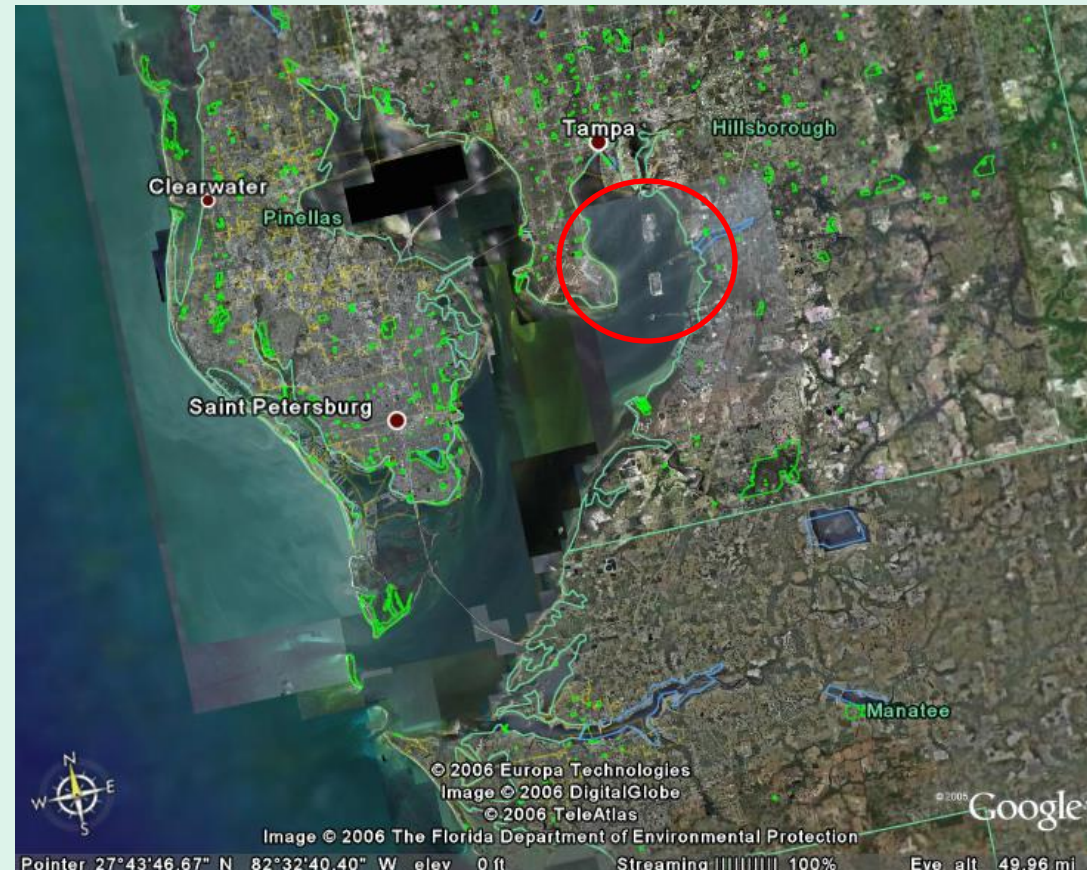
### Hillsborough Bay

Tampa Port Authority's

- Spoil Island 2D  
4.62 km suitable nesting habitat  
32 nesting pairs annually
- Spoil Island 3D  
4.99 km suitable nesting habitat  
16 nesting pairs annually

Audubon's Alafia Bank Bird Sanctuary

- 3.64 km suitable nesting habitat  
17 nesting pairs annually



Tampa Bay

We monitored nesting in association with local dredging and construction projects, and obtained a photographic series of chick development in 2008-2010. We surveyed shorelines from a motor boat about 30 m offshore – at this distance nesting oystercatchers do not flush. Daily surveys ran from the onset of nesting in mid-March through fledging. Pairs that lose their nests re-nest in about 10 days so some clutches hatched in mid-summer.

### Oystercatcher territories on suitable shoreline habitat



## CHICK DEVELOPMENT



## RESULTS

- Photographs of known-age chicks show the morphological development from hatching from day 1 to fledged young-of-the-year approximately 45 days later, and post-fledging development through day 95. Chicks develop through 5 non-flighted stages, each lasting approximately 7 days, for well-nourished chicks. Much inter-individual variation occurs, related to the provision of adequate forage.

development stage	days / stage
small downy	1-7
medium downy	8-15
large downy	16-25
small feathered	26-32
large feathered	33-40
flighted	35-40+

- Fledged young remain with parents at natal territories until days 65-70, and roam dependently with parents through at least day 95, then typically over-winter with adults at several winter roosts on islands, seawalls, and breasting dolphins in ports in Hillsborough Bay.

## CONCLUSIONS

- Development of individual chicks varies with the quality of forage available on their natal territory. Chicks grow faster if invertebrate prey associated with oysterbeds is available for chicks to "harvest" themselves and supplement the food items presented by their parents. Chicks without adjacent forage grow slower and often die by the medium-downy stage of development.
- Oystercatchers in Tampa Bay initiate nesting in late March to early April. Some oystercatcher chicks fledge as late as July in Tampa Bay. Flighted, fledged young continue to be fed by their parents until mid-winter.
- Oystercatcher pairs show high fidelity to territories across nesting seasons. Prime oystercatcher nesting sites with adjacent oysterbeds are consistently occupied every year. Not all available territories in suitable habitat are used every year.

## LITERATURE CITED

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