



Oysters as an Environmental Indicator
In Lemon Bay

Oysters as an Environmental Indicator

- Oysters are considered a keystone species due to their wide array of habitat functions and values.
- Oyster health responds to changes in salinity regime.
- Oyster colonies are common in the creeks and estuaries in our region.
- Oysters are sessile organisms that are relatively easy to monitor.

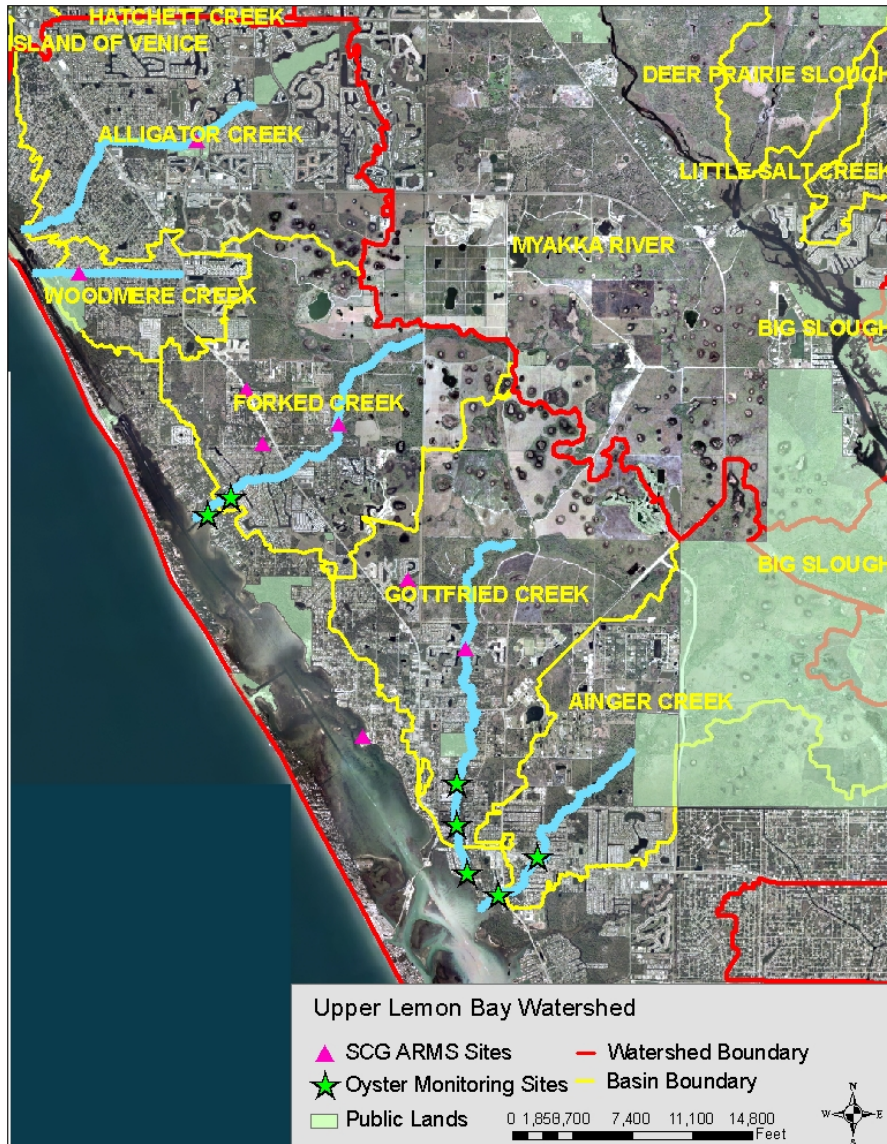


Monitoring Methodology



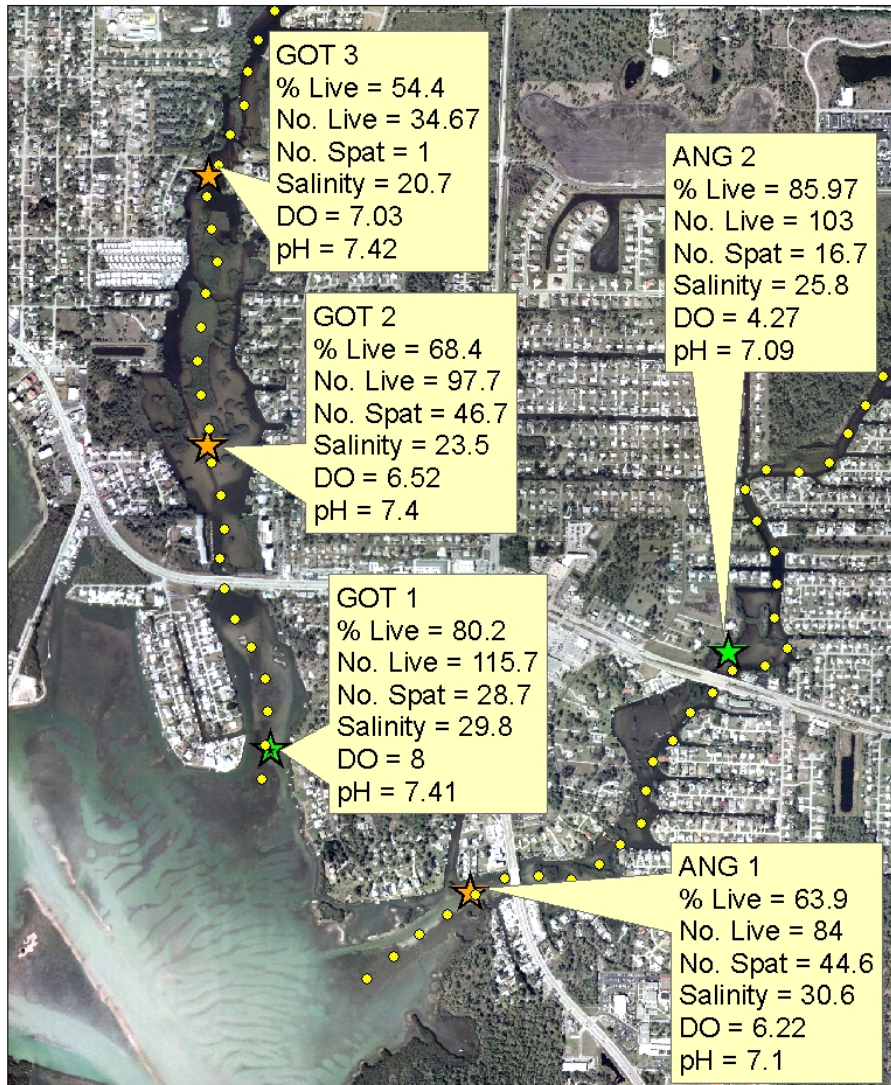
- **Collect oysters from three semi-randomly tossed 0.25m x 0.25m weighted PVC quadrats at each station.**
- **Record No. of Live, No. of dead (dead oysters still have both shells attached), No. of spat, and record heights of 3 largest oysters.**
- **Record salinity, Sp.Cond., DO, pH, and Temperature.**

Lemon Bay Oyster Monitoring

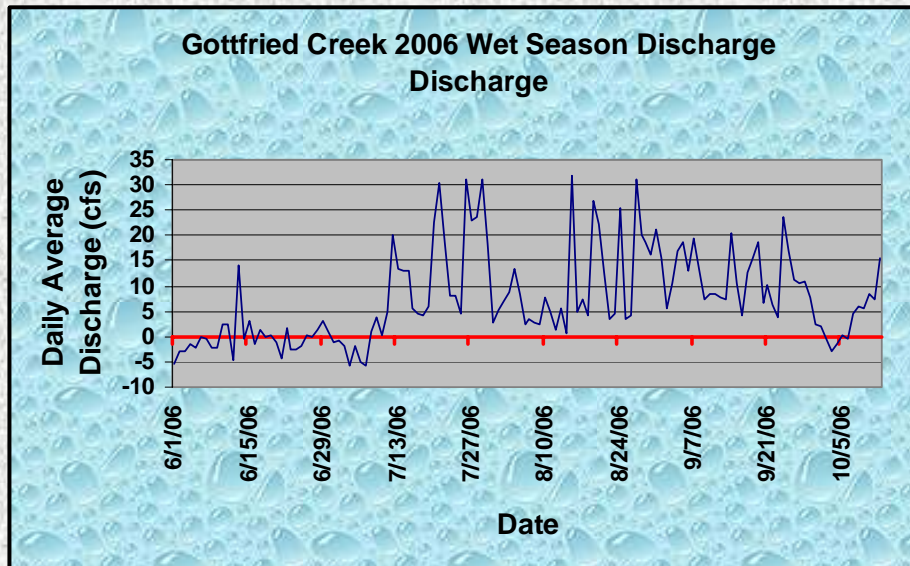
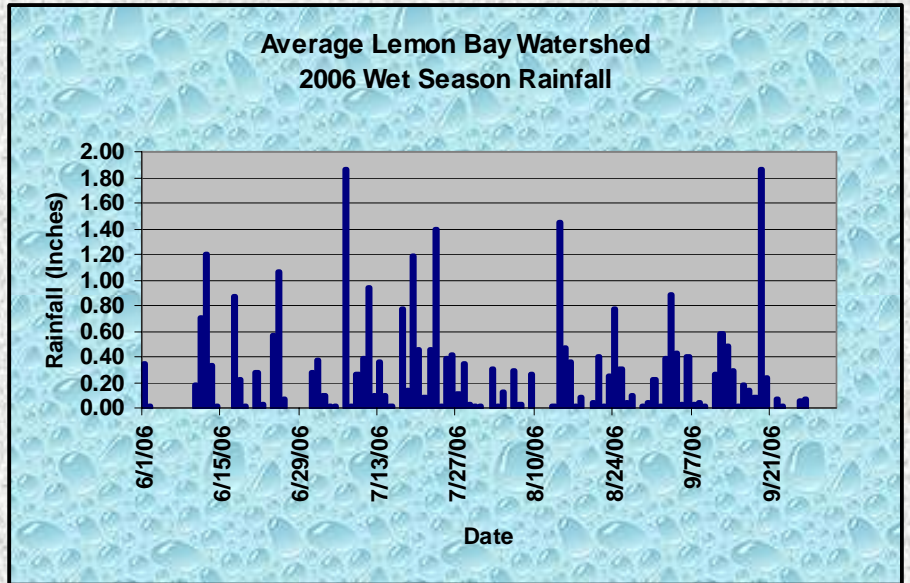
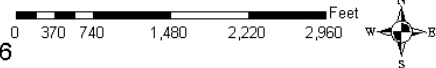


- County % live oysters as a key performance indicator for SCG objective “Ensure fishable swimmable water bodies”
- Monitoring Commenced in October 2006
- Lemon Bay stations on Alligator (?), Forked (2), Gottfreid (3), and Ainger (2) Creeks
- Updated Scoring System
 - 80% + = Excellent = A (green) 4.0
 - 70-79.9% = On Target = B (yellow) 3.0
 - 50-69.9% = Fair = C (Orange) 2.0
 - 20-49.9% = Poor = D Pink 1.0
 - < 20% = Very Poor = F Red 0.0

October 2006 Results

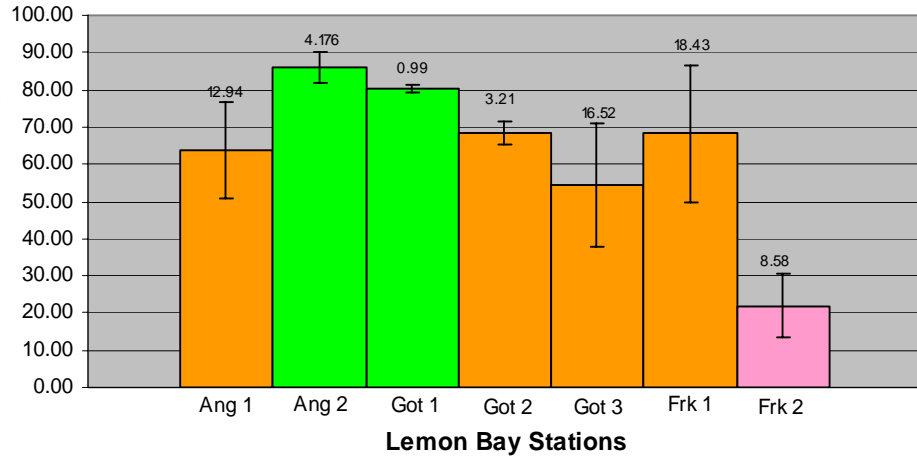


Lemmon Bay Oyster Monitoring
 Gottfried & Ainger Creeks October 2006

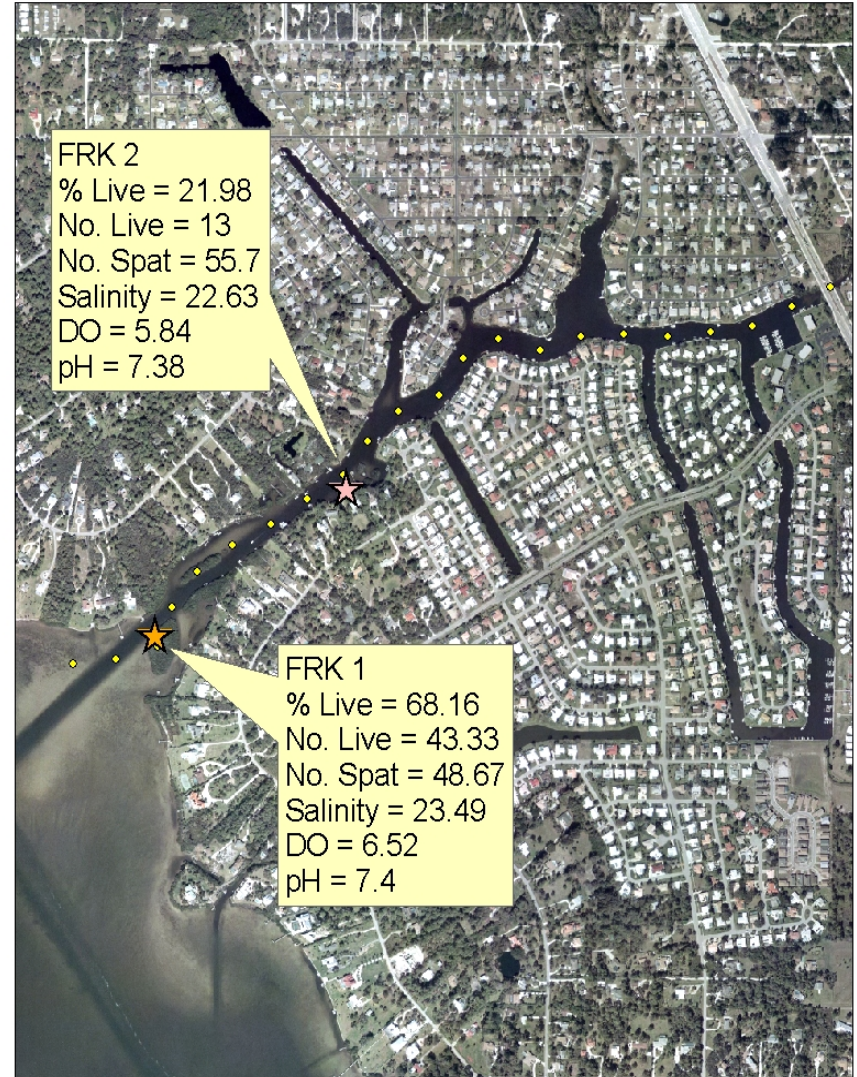
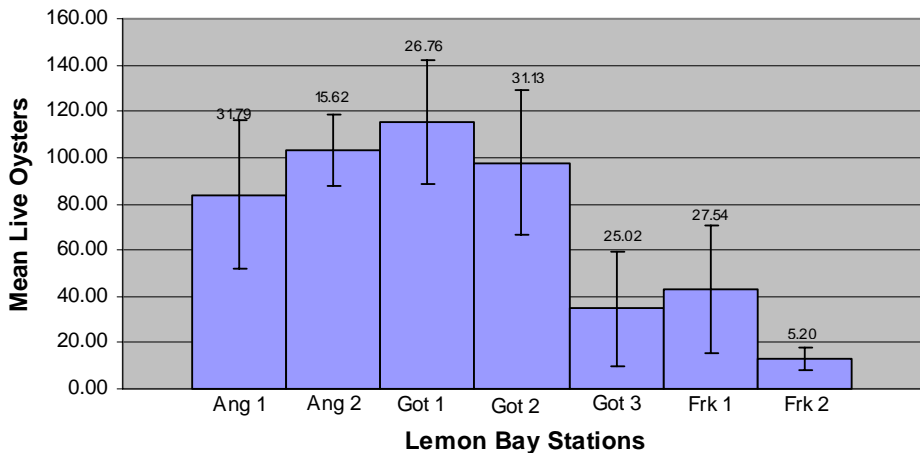


Results Continued

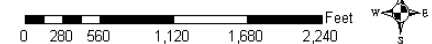
Estimated Marginal Means of Percent Live Oysters



Estimated Marginal Means of Live Oysters



Lemon Bay Oyster Monitoring
 Forked Creek October 2006



THE END

- SUGGESTIONS? / QUESTIONS?

