

Monitoring of Clam Health during Summer Months of 2007-8 at High-density Lease Areas in Cedar Key

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Purpose

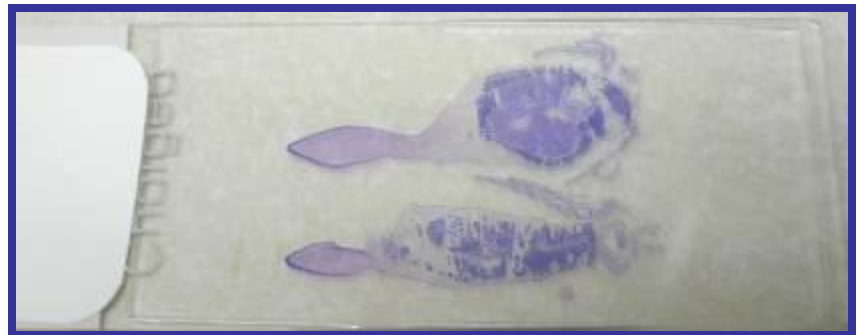
- To determine the health of market-size clams during the summer time months when mortality events of this group are most common
 - Environmental stressors
 - High temperature
 - Low salinity
 - Disease

Summertime Mortality Methods

- Collected 6 market size clams from 12 growers July, August, September, and October 2007
- Collected 6 market size clams from 12 growers May, June, July, and August 2008
- Total: 576 clams
 - 2002 clam health assessment: 180 clams

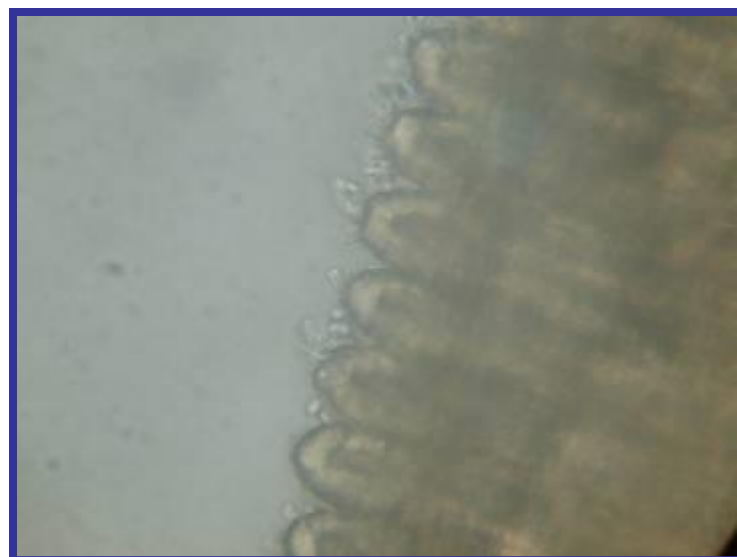
Methods continued:

- Clams were measured (length, width, weight)
- Opened and examined for obvious lesions
- Gill biopsy examined under light microscope
- Two sections of body prepared for routine histologic slides.



Results

- Copepods observed within mantle cavity
- Gill biopsies – within normal limits
- Histologic results still pending
 - So far, no significant pathogen observed

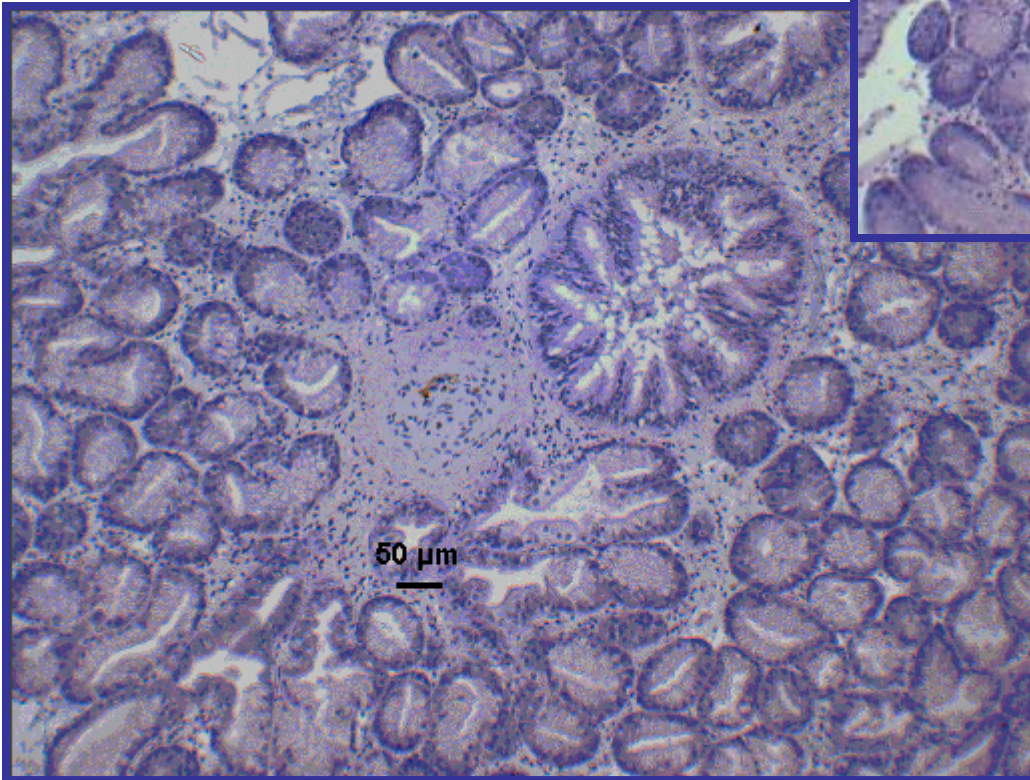
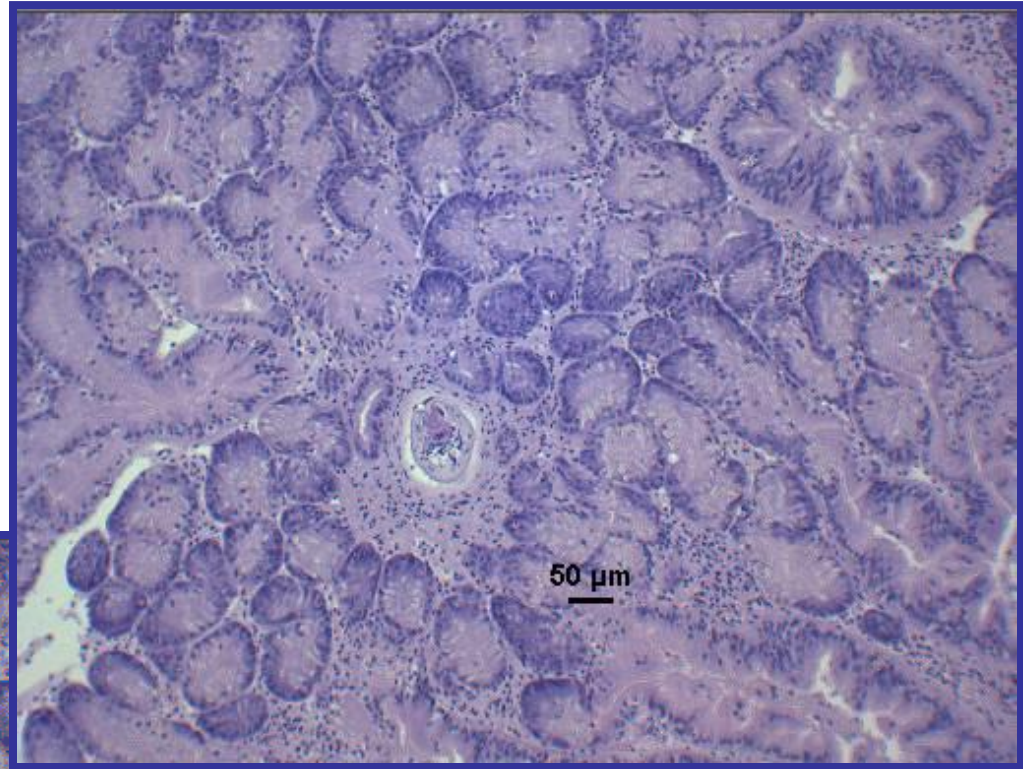


Copepods

- Identified as *Leptinogaster major*
 - Reported to be a parasite of bivalve molluscs
- No evidence of parasitic induced damage in clam tissues examined so far



Histologic Exam



Hatchery Problems

- 9 hatcheries visited December 2007-February 2008
- Specimens voluntarily submitted for histologic examination and bacterial culture
 - Broodstock
 - Seed
 - Larvae
 - Algal cultures
 - Source water

Hatchery Problems

- Most common issue, if any:
 - Bacterial contamination of algal cultures

Summary

- Still have hundreds of slides of clam tissues to analyze
- No significant problems observed in market size clams examined
- Bacterial contamination of larvae/algae cultures a problem in some hatcheries