

# Freshwater Mussels Working Group

## Issues and Concerns

*March 25, 2008*

The Freshwater Mussels Public Working Group identified the following issues and concerns as being important considerations as they developed management goals and objectives for freshwater mussels for the period 2008 – 2023.

---

### Conservation Issues and Points of Clarification

1. More research is needed on basic biology/life history of FW mussels
2. There are distribution gaps for most of the FW mussel species– mostly fine scale (vs. coarse)
3. Baseline Monitoring
  - Vigorous protocols are lacking
  - Statewide monitoring is overwhelming
  - Is there a body of theory that can work with just presence/absence data?
  - Current surveys are qualitative – presence/absence and relative abundance
  - Expensive and time-intensive to do quantitative surveys
4. Threats
  - Need to be better documented
  - Effects of climate change? *Margaritifera* potentially sensitive because of coldwater fish hosts
  - Toxins from cyanobacteria blooms?
5. Fish host movements/identification
  - Dams
  - Perched culverts – MDOT can help
  - Shouldn't we also be monitoring fish host populations?
  - Need more field (vs. lab) verified testing
  - Fish host lists should be refined to ID high value (successful) hosts
6. Water quality and aquatic habitat integrity – threats
7. Rare spp. mapping needs to be improved
  - GPS and GIS technology helps
  - Current surveys have “typical” but not standardized protocols
8. Landowner notification
  - Not yet in place
  - What are the protocols for when and where notification occurs?
  - Notification of species presence and management guidelines are needed
  - IFW needs a more standardized approach toward environmental review – region-specific review is variable
  - Consider a real-time, web-based environmental review tool
9. Need management standards and guidelines (and cooperative agreements) for managed water bodies
10. Riparian management standards are needed

*Freshwater Mussels Working Group Issues and Concerns – March 25, 2008*

11. Recommendations during incidental take process need to be standardized
  - Approx. 5-6 projects to date
12. Ditto above regarding relocation protocols
  - More research needed on this
  - Some literature exists to help
  - Post monitoring is key
13. What are the effects of dam removal on and significance of impoundments to Yellow Lampmussels and Tidewater Muckets?
14. Lack of public knowledge/appreciation of FW mussels
  - Life history message is powerful
  - Water quality filtering message is powerful
15. Invasive spp. (e.g., zebra mussels)
  - Need more proactive public messaging
16. No protection from commercial harvest
  - Mussels can be harvested in large numbers for sale to Biological supply companies, and they have (its not the companies doing the harvest, I believe, but more likely individuals selling to the companies)
  - MESA only protects 3 ET species from commercial harvest
17. Current Departmental funding for nongame efforts poor and getting worse
18. No comprehensive conservation strategy for mussels statewide – perhaps management system can serve this purpose
19. Disease – how much of an issue for FW mussels?
20. What other species or taxa could FW mussels be packaged with in our comprehensive planning? – Aquatic biodiversity compliments and priorities?
  - Aquatic reserve/focus area component needed for Beginning with Habitat program
  - TNC is starting a process of identifying high priority biodiversity waters in the State
21. Lack of strategy for reintroductions into historical waters – e.g., brook floater in Presumpscot and Dennys Rivers
  - Need to work out methods and techniques
  - Consider experimental reintroductions/restoration
22. Where does conservation genetics fit into the conservation strategy? Do we need more info before we translocate FW mussels?