

## NW Native Freshwater Mussel Workgroup

### Quarterly Meeting

Monday, September 12, 2022 14:00 Pacific Time

### Zoom Meeting

Attendees: Emilie Blevins (Xerces), Jim Holley (Xerces), Alexa Maine (CTUIR), Jen Poirier (USFWS), Paul Benton (ODOT), Julie Tyson (WDFW), Emily Johnson (BLM), Patty Morrison, Linnea Gullickson (USFWS), Ron Twibell, Ralph Lampman (Yakama Fisheries), Al Smith, Courtney Newlon (USFWS), Laura McMullen (ICF), Stephen Bollens (WSU), Marie Winkowski (WDFW), Hanna Barbe (Xerces), Sean Gibbs, Celeste (Zee) Searles Marcazano, Michele Weaver (ODFW), Ann Gannam (USFWS), Andy Lawrence, Travis Williams (Willamette Riverkeeper), RJ Hemingway, Cole (WDFW Fisheries), Lusha Tronstad (Wyoming Natural Diversity Database), Alyssa Bangs (USFWS)

### Meeting Minutes

- FMCS Symposium planning. Emilie shared the Ellipsaria announcement (PDF). April 10-14 2023. Doubletree Hotel, Portland, OR. Patty-schedule: Mon: introductions and workshop, Tues-Thurs: plenary and presentations, Fri: Field trips. Online option available using WHOVA. Tech savvy volunteers requested.
  - Workshop for underwater photography, Freshwater Illustrated.
  - Marie and Travis interested in assisting as volunteers.
- Society for Freshwater Science meeting 10/19-21/22 Caldwell, ID
  - Zee: assistance for funding to attend conferences available
- Travis Williams: OCRF eDNA proposal for 12 major tributaries funded
  - Monitoring grant through OWEB ranked #1
  - Private funding for eDNA analysis 2023-24 submitted
  - Desire to get people into field, citizen science and acquainting public with local freshwater mussel species
  - Publication Willamette Riverkeeper and Zee:  
<https://www.northwestscience.org/page-1844575>

- Crabtree Creek has many W Pearlshell where Willamette Riverkeeper is acquiring property. Thomas Creek has many W Pearlshell too. S Santiam tributaries. Many juveniles in that stretch.
  - Goal to fill in gaps of distribution of mussels on Willamette River
  - Would like to help plan a field trip for conference
- Emilie: reshared the workgroup spreadsheet for where sampling is occurring exists to minimize repeat work and increase collaboration: <https://docs.google.com/document/d/1dLVWzPg8IMq95CEHX8k75NepoFMV42Hlm6mZlB8cbng/edit>
- Workgroup chair position: Emilie will transition out following the 2023 FMCS symposium.
- Workgroup transition to FMCS chapter/division: Emilie has been working through the idea with FMCS leadership and membership since 2020, following initial workgroup interest and discussions in 2019. There have been multiple conversations about regional groups becoming chapters, but no other regional groups in North America are interested in pursuing at this time. Currently on hold.
- Protocol development effort: Presentation by Emilie on behalf of core team: Xerces, BLM, Confederated Tribes of Umatilla Reservation, USFS, and USFWS.
  - Presented on current effort to develop a standard visual protocol for western freshwater mussels
    - Reasons: No species listed, but ranges are declining. Limited efforts to survey for mussels in time and space, increased interest in mussels with petition for listing, requests for guidance and standardized protocol increase and make surveys comparable, drought/fire can alter habitat quickly, useful for tracking regional trends, still finding mussels during restoration instead of prior to disturbance
    - Challenges: Waterbody variability-whitewater to small creeks, instream habitat type variation, Variability in density and quantity, single species or several
    - Incorporate existing survey frameworks, legal cultural and scientific perspectives, 2020 reviewed existing methods, 2021 tested some methods, since 2021 developed protocol framework

- Adaptable Approach-modular and nested: Exploratory, Reach, Incidental, Quadrat & Transect. Covariates collected
  - Reach (50m)-midpoint and 25m up and downstream
  - Incidental: during other surveys or not associated with another project, minimal info required. Opportunistic.
  - Exploratory (1km recommended) but other factors allow for other distances. Can be incorporated into Redd surveys
  - Transect surveys-random and non-random sampling
  - Quadrat-requires excavation and disturbance of mussel beds. Provides info on size of individuals and condition
- Soft rollout. Determining covariate data to collect. Goal to have protocol prepared for publication by 2024
- Zee asked about the need for new protocols. Emilie reviewed the types of individuals, their level of expertise, and time commitments that all factor into a need for succinct and easy to interpret guidance.
- Laura asked about where it will be published. Emilie discussed the development of a manual for BLM and future peer reviewed publication. Intend to be available widely for others to use.