

**PNW Freshwater Mussel Workgroup agenda**  
**Thursday 14 September 2017, 10 am - 12 pm PDT**

**Present:** Kevin Aitkin (USFWS-WA); Emilie Blevins (Xerces Society); Jodi Bluhm (Samish Tribe); Liz Bockstiegel (WDFW); Julie Campbell (USFWS); John Fleckenstein (WA Natural Heritage Program); Beth Glidewell (CTUIR); Matt Hill (EcoAnalysts); Alexa Maine (CTUIR); Celeste Searles Mazzacano (CASM Environmental); Al Smith (ODFW ret'd); Teal Waterstrat (USFWS-WA); Michele Weaver (ODFW)

**Agenda**

- Welcome and introductions (Celeste Searles Mazzacano, CASM Environmental)
- Update on EcoAnalysts mussel symposium, “What is the state of our Pacific Northwest Unionids?”, 19-20 September 2017 (Anndrea Navesky and Matt Hill, EcoAnalysts)
  - o people are registering, and there is still room for participants
  - o have full roster of speakers; field demo on Deschutes River set up for 2nd day (it’s cold, so bring or rent wetsuit from windsurfing shop in Hood River)
  - o t-shirts came in yesterday
  - o presenters, get your presentations to Matt and Anndrea as soon as you can
- Mussel surveys in the Willamette River during summer 2017 (Travis Williams, Willamette Riverkeeper; Celeste Searles Mazzacano, CASM Environmental)
  - o Travis has been doing “spot surveys” all along the river this summer, especially from Eugene through Corvallis, finding some new Western Pearlshell beds
  - o Willamette Riverkeeper contracted with CASM Environmental this summer to survey ~1 mile side channel behind Norwood Island, around the confluence of the Long Tom with the Willamette
  - o Travis knew for a while that there is a very large population of *M. falcata* there, wanted to quantify it, find out the population structure, etc.
  - o surveyed 3 days at the beginning of August with a team of volunteers (including Emily Davis from the workgroup); didn’t cover as much ground as anticipated because Army Corps of Engineers started letting out water into the river on Aug. 1, and it went from 4200 to 8000 cfs overnight; increased depth and flow made it impossible to access portion of the channel; 107 degree heat also limited work hours
  - o did quadrat surveys with excavation; covered most contiguous area at upstream and downstream end of channel; found thousands of MF, excavation revealed large

numbers also buried, but almost all were large adults of the same size visible at the surface

- o no juveniles, few younger/smaller mussels (though juveniles have been seen at other Willamette River sites Travis surveyed this year)
- o a handful of Anodonta were also found at the upstream end
- o some morphological difference among the MF, with those in the downstream end of the channel having deeply eroded shells, and the concavity at the lower edge of the shell was so pronounced that mussels looked almost kinked
- o data analysis is underway
- Mussel surveys in Chehalis River during summer 2017 (Teal Waterstrat, USFWS-WA; Emilie Blevins, Xerces Society)
  - o went out in early September looking for *Gonidea* in Chehalis basin in SW WA; there are historical records there but recent records are more limited
  - o this seems to be an important basin for this species, one of the few places where you find it in western Cascades, but recent analyses suggest it might be doing more poorly than other western species
  - o looked at about about 10 suites total on Chehalis mainstem, south fork Chehalis, Newaukum, Skookumchuck; surveys done by 2 Xerces staff, Liz Bockstiegel (WDFW), Teal Waterstrat (USFWS-WA); joined by Lewis County Conservation District staff, who were very valuable partners, helped a lot with access
  - o found mussels at most of the sites, mostly Western Pearlshell but 3 had *Gonidea* including a totally new site, a site that Teal knew of previously, and one where they were known but the last record was from 1936; Liz (rock star!) found a few juveniles at a site she and Teal had visited before
  - o The numbers of *Gonidea* aren't huge but they are persisting in Chehalis and Newaukum River; also one large Western Pearlshell site in the Chehalis mainstem, with tens of thousands (Wakefield Bridge site)
  - o documented floaters and pearlshells together in south fork Chehalis for the first time; some *Gonidea* populations found upstream ~30 miles from last known populations, may be more widespread higher up in the system
  - o in less happy, news, a few years ago Teal and Liz had noticed more dead shells at the large Wakefield Bridge site, lots of mussel shells looking like they do in life but

mass grave; did find live juveniles for *Gonidea* and *Margaritifera* as well; 21 living and 46 valves from *Gonidea*

- Celeste: very similar to what we saw for pearlshells in Norwood channel—lots of dead mussels in situ mixed in with live; haven't analyzed data yet to know ratios of live:dead
- John F.: there are also some federally protected rare plants in that area, so might be able to tie mussel work in with other local conservation efforts
- Update on western mussel profiles for FMCS Atlas of Freshwater Mussels of North America (Shelly Miller, City of Eugene; Emilie Blevins, Xerces Society)
  - o project originally started prior to 2015; Shelly started on Western Pearlshell and Western Ridgeshell; when she changed jobs, Emilie and Joe Furnish (now retired) helped with additional profiles; Emilie has finished updating those and shared them with Shelly for review; Emilie, Beth Glidewell and Joe F. are working on *Anodonta* profiles now, if anyone would like to look at them she can share them with you;
  - o FMCS will also edit them further as they are submitted, which should occur in a month or two; the template provided by FMCS is fairly short & concise
    - Al Smith and John Fleckenstein would be glad to take a look at them
- Now accepting nominations for a new chair for the workgroup (Celeste Searles Mazzacano, CASM Environmental):
  - o After three very enjoyable years and with a burgeoning consulting business, I need to step away from the chair position at the end of this year. If you would like to nominate yourself or someone else for the position, please e-mail me at [cmazzacano@gmail.com](mailto:cmazzacano@gmail.com) (before nominating someone, please check with her/him first to be sure that the prospect is acceptable).
  - o Celeste will put together a short blurb about the chair's responsibilities and estimated monthly time requirements to share with the group soon, so people know what they are getting into and what is expected of them.
  - o We will set up an anonymous online voting system as soon as nominations are final. Anticipate voting in November so that new chair can be announced at the December meeting.
- Additional items/announcements
  - o From Heidi Dunn (Ecological Specialists, Inc.): The FMCS Board meeting this summer did not have time to address the question of whether they would be forming

regional chapters in the future, and the item was tabled until their November 2017 meeting. The outcome of this decision will affect whether the workgroup decides to pursue non-profit status independently.

- Teal: This is a good opportunity for us to review their bylaws, etc. just to see whether there are any items that we would find limiting or not able to integrate with our own practices; Teal is willing to do this, Celeste also
- Emilie B.: Does the workgroup having non-profit status impact our decision to host the annual FMCS symposium in 2021? No, the workgroup has committed to that, and FMCS handles related money transactions, so it's not a requirement for us.
- o Diane Waller (USGS-WI) approached Emilie Blevins (Xerces Society) to ask about the workgroup's interest in participating in the FMCS workshop "Freshwater Mollusk Health and Disease Assessment," in La Crosse, Wisconsin, 12-15 March 2018. The workshop will cover: 1) bivalve diseases/state of knowledge; 2) case studies of die-offs; 3) discussions on propagation and disease concerns; 4) tools for health assessments and responses to die-offs. Diane is hoping people from the workgroup could present and participate. The cost will be ~\$200 per person, though Diane is looking into sponsorships to help offset costs.
  - Emilie: Diane was hoping we could send some presenters, especially considering that we have some larger and more publicized die-offs (ie Bear Creek); Beth Glidewell will be attending the workshop. Is there any partner we could reach out to or anyone who would be able to address this? Info on workshop is in September Ellipsaria (<http://molluskconservation.org/PUBLICATIONS/ELLIPSARIA/EllipsariaSept2017.pdf>); she didn't give any deadlines, registration closes January 19 so there is time. Early registration opens on 17 November 2017 and closes 19 January 2018; only space for 120 registrants.
  - Al will contact pathology people at ODFW—they work on fish, but may know of work being done on mussels
  - Teal forwarded it to their USFWS fish health people earlier, will do that again, also try to find folks to contact at WDFW
  - Liz: should contact people from universities who do mussel work around here

- Univ of WA has a lot of shellfish aquaculture work, lots is marine but may be interest there and funding to attend
  - Beth: CTUIR is working with ODFW fish pathology staff in LaGrand, will share with them
  - Teal: thinking about the larger picture, these sort of warning signs (die offs) have been going on for a long time in other groups (fish, amphibians)...does mussel disease fit into this larger picture? Is there a broader effort being coordinated anywhere?
- o Portland State University course EPP 725 (Freshwater Mussels of the Pacific Northwest), an elective in the PSU Environmental Professional Program, will be taught again by Celeste Searles Mazzacano (CASM Environmental) on 6-7 August 2018. This is a 2-day course that includes classroom and field experience; fee is \$550. See course description at <http://tinyurl.com/yd4h3jrs>.
  - o Emilie Blevins: mussel extinction risk assessment paper has been accepted by freshwater mollusk conservation society journal, should be out next month; similar to summary of work done for IUCN red list assessment; thank you to everyone who has shared records with the western mussel database. If anyone interested in providing technical review for western mussel BMP document, let Emilie know ([emilie.blevins@xerces.org](mailto:emilie.blevins@xerces.org)), will be ready for technical review next month.
  - o Kevin Aitkin: will be sending out request to find out where we have field guides and posters; time for us to see how we are doing on numbers, might need to reprint
    - still waiting to find out who at Vancouver office will be official liaison with workgroup; Kevin will be talking to them soon about posters so maybe he can find out
  - o Teal: Liz asked last week if we knew anything about mussels in White Salmon River pre- and post-Condit dam removal as she had received an inquiry; Teal thinks there were some studies but doesn't know where the data are—does anyone in the workgroup know anything about this?
    - Kevin and Al thought they found floaters in the lake before the dam was removed; had assumed Margaritifera were downstream, but limited access to get in those places, and weren't allowed immediately downstream of dam due to threat of pulses of water coming down

- USGS did most of the data collection for the Elwah; Condit data might have been collected by Vancouver office (?);
  - according to the June, March, and September 2007 workgroup minutes (quickly hunted up by several people on the call): Nancy Duncan, Molly Hallock, and Al Smith snorkeled, found very poor habitat and no mussels, concluded no dam surveys needed
- Teal (or Kevin?) e-mailed the relevant minutes to Liz
- o Sandra Smith (USGS) initiated study/workgroup on assessing the impacts of road salt on freshwater mussels in Klamath-Siskiyou region; she has been in contact with Al, and he is going down in October to look for mussels in two streams that will be in the study (tributary of Immigrant Reservoir and tributary of Bear Creek [which is a tributary of the Rogue]); her funding is not yet assured, hopes to have it next month

Meeting adjourned at 11:15 am. The next workgroup meeting will be in December; Celeste will send out a Doodle poll early in November for scheduling.