Freshwater Mollusks Conservation Society Scientific and Common Names of Freshwater Mollusks Subcommittee Guidelines (Revised July 2021)

The FMCS supports stability of scientific and common names to promote communication and mollusk conservation to the general FMCS membership, state and federal resource managers, non-governmental organizations, and academics. Taxonomic changes are often difficult to understand and tracking the history of various synonymies or continuing systematics / taxonomic research efforts can be challenging. Systematics research will lead to substantial changes in the current taxonomy of both bivalves and gastropods. An organized effort to review and evaluate these changes facilitates the assimilation of new names and stabilizes taxonomic changes more rapidly. Additionally, the subcommittee evaluation and assimilation of name changes assists ongoing research and publication efforts by better defining problems and highlighting deficiencies. By providing consensus checklists, the FMCS Scientific and Common Names of Freshwater Mollusks Subcommittee promotes ongoing conservation and recovery activities.

Consensus lists include families, genera, species native to the United States and Canada and eventually non-indigenous invasive freshwater species. The geographic scope of the checklists may be expanded to include Mexico and the remaining North American continent. Additionally, the gastropod subcommittee would continue to maintain a checklist of native Hawaiian freshwater snails. The bivalve and gastropod subcommittees are charged with reviewing potential changes and maintaining consensus lists on the FMCS website. The Subcommittees publish consensus checklists and summary appendices of petitions considered by each subcommittee in Freshwater Mollusk Biology and Conservation every six years. The published checklist will include all modifications since previous checklists and provide summary appendices of all Subcommittee decisions. Current composition of the individual subcommittees and FMCS guidelines are presented below.

Bivalve Subcommittee

Chair: John Harris, term expires in 2025.

Members: Art Bogan, Kevin Cummings, Andrew Henderson, Nathan Johnson, John Pfeiffer and Kevin Roe. The terms of Andrew Henderson, Nathan Johnson and Kevin Roe expire in 2025. Terms of Art Bogan, Kevin Cummings and John Pfeiffer expire in 2023. FMCS Common and Scientific Names Subcommittee members may serve multiple terms.

Gastropod Subcommittee

Chair: Paul Johnson, term expires in 2025.

Members: Jeff Garner, Chuck Lydeard, Ken Hayes, Kathryn Perez, Ellen Strong, Nathan Whelan. Jeff Garner, Chuck Lydeard and Ellen Strong terms expire in 2025. Terms of Ken Hayes, Kathryn Perez and Nathan Whelan will expire in 2023. FMCS Names Committee members may serve multiple terms.

Subcommittee Disclaimer Statement: The FMCS Scientific and Common Names Subcommittee maintains interim checklists of North America freshwater gastropods and bivalves primarily based on petitions for taxonomic changes introduced from the scientific literature. Changes are tracked by written petition and decisions of taxonomic opinions help develop consensus checklists. Stakeholders are under no obligation to follow taxonomic recommendations expressed in these interim lists. The subcommittees will publish authoritative, peer-reviewed checklists every 6 years beginning in 2025-2026.

The Scientific and Common Names Subcommittee structure and duties include:

- 1. Establish criteria for Subcommittee organizational structure (number of Subcommittee members, length of term, and frequency of meetings).
 - a. Each Subcommittee shall be composed of 7 appointed FMCS members with taxonomic expertise (bivalves and gastropods). Individuals may have simultaneous appointments on both subcommittees.
 - b. Subcommittee meetings shall be held at 2-year intervals in conjunction with the FMCS biennial symposium. Subcommittee meetings are open to any FMCS member interested in observing and/or participating in the proceedings, but only subcommittee members may vote on respective petitions.
 - c. Chairperson for each subcommittee (gastropod and bivalve) will serve one 6-year term and may not be reelected for 2 consecutive terms. Chairpersons shall be nominated and elected at biennial meetings by subcommittee members.
 - d. Chairs shall present to the FMCS Board of Directors a list of members that have expressed interest in serving along with recommendations. Subcommittee member changes require approval by the FMCS Board of Directors.
 - e. To ensure continuity of subcommittee composition, 3 members will be appointed to 4-year terms and the remaining 3 positions for 2-year terms. Once the initial 2-year terms conclude in 2021, all members volunteer to serve another 4-year term. Individual subcommittee members may be reappointed to consecutive terms. After initial terms are completed, and appointments require approval of the FMCS Board of Directors. The subcommittee Chairs (member 7) have a 6-year appointment.
 - f. If at any point during their 4-year term, a subcommittee member decides they can no longer serve, the Chair shall recommend a replacement to serve the remainder of the open term. New appointments will require approval of the FMCS Board of Directors.
 - g. If a subcommittee member is unresponsive to repeated requests, ignores deadlines, or fails to register votes with the appropriate subcommittee Chair, a quorum may vote by majority to remove the unresponsive member. Removal cannot be initiated by the Chair, but by fellow subcommittee participants. The Chair will recommend a replacement member to complete the term of the removed member. Final approval of a replacement member would be subject to approval by the FMCS Board of Directors.
- 2. Maintain a consensus checklist of names on the FMCS website.

- a. Consensus checklists of freshwater bivalve and gastropod scientific and common names as determined by the respective subcommittees shall be open access on the FMCS website. Links to the list of names shall appear on the FMCS main webpage.
- b. The Johnson *et al.* (2013) and Williams *et al.* (2017) publications shall constitute starting points for respective checklists and modifications were formally initiated at the 2019 biennial symposium. Additional changes were completed during the 2021 biennial symposium and additional changes anticipated for the 2023 and 2025 Symposia. Formal publication of the initial FMCS checklists in Freshwater Mollusk Biology and Conservation (FMBC) would appear in late 2025.
- c. Subcommittee decisions will be cited in individual petitions (form attached) to guide future decisions.
- d. Subcommittee Chairs will notify the FMCS general membership of possible taxonomic changes each subcommittee will consider 30 days prior to the Names Subcommittee meeting.
- e. Subcommittee Chairs will maintain a record of decisions from each meeting. Subcommittee Chairs are responsible for maintaining records in a format similar to Appendix 1 of Turgeon et al., 1998 (Common and Scientific Names of Mollusks, 2nd edition). Subcommittees will agree to a citation format prior to the 2025 meeting.
- f. Subcommittee Chairs will be responsible for providing proposed changes to subcommittee members 60 days prior to the biennial meeting for comment. Any proposed changes will be accompanied by a formal petition detailing the anticipated change(s). A formal petition should provide justification and cite appropriate references in support of a specific taxonomic change or newly included taxon.
- 3. Periodically publish checklists as an FMCS special publication, or in FMBC.
 - a. Update both lists (gastropod and bivalve) every 2-years on the FMCS website.
 - b. Updated checklists would be published in FMBC or as a special FMCS publication every 6-years. Since the Subcommittees were formally initiated in 2019, the first published lists would appear in 2025.
- 4. Establish a process for reviewing proposed name changes (scientific and common)

The Subcommittees evaluate proposed taxonomic changes usually from peer reviewed literature or careful review of historical literature. The Subcommittee tracks changes in scientific names via formal petitions for new species descriptions, formal synonymies, reassigned generic designations, changes in family classification or other taxonomic acts. Authorship revisions, publication date corrections, parenthesis errors, or spelling changes due to gender agreement error are examples of changes that do not require a formal petition.

a. For a scientific name to be taken into consideration by the Subcommittee it must fulfill all requirements of the International Code of Zoological Nomenclature with respect to availability and validity of nomenclatural acts.

- b. The source of a published report should be carefully considered by a petitioner. For example, efforts to utilize citations from predatory journals or individual websites should generally be discouraged.
- c. Proposed changes shall be submitted for subcommittee review on the attached form 60-90 days prior to the next biennial symposium. Submissions for consideration may be submitted by any FMCS member.
- d. Subcommittee members should register their initial petition votes with the respective subcommittee Chair approximately 7-days prior to the beginning of the FMCS Biennial Symposium. An initial tally facilitates subcommittee deliberations on complex petitions and members may change their initial vote after debate has concluded. This pre-vote technique is advantageous when petitions before a subcommittee are unusually complex or total petitions reviewed exceed 20 in number.
- e. Proposed changes can be considered by the entire subcommittee, but only gastropod or bivalve subcommittee members may vote on changes to their respective checklists. In the case of a tie vote, the Chair will be asked to cast the tie breaking vote.
- f. If a subcommittee member cannot attend the meeting, they may vote in absentia. Members voting in absentia should register their votes with the respective subcommittee Chair, at least 7-days prior to the meeting.
- g. Final votes on individual petitions will be recorded by the appropriate subcommittee Chair and the final votes recorded on a tally sheet. The final vote record will be verified by all subcommittee members. Final petitions will include an appropriate space (support or do not support) to register member votes. Tally of the ballots and maintaining voting records of each meeting will be the duty of each respective Chair.
- h. A summary of meeting proceedings and any resulting changes to the list shall be drafted by the subcommittee Chairs for approval by subcommittee members and published online as Appendices to the final published checklists. A standard format will be developed prior to 2025 and resemble Appendix 1 in Turgeon et al. AFS Common and Scientific Names of Mollusks publication (1998). The detailed lists of decisions will be published as Appendices with the new checklists in 2025.

Literature Cited

- Johnson, P.D., A.E. Bogan, K.M. Brown, N.M. Burkhead, J.R. Cordeiro, J.T. Garner, P.D. Hartfield, D.A.W. Lepitzki, G.R. Mackie, E. Pip, T.A. Tarpley, J.S. Tiemann, N.V. Whelan, and E.E. Strong. 2013. Conservation Status of Freshwater Gastropods of Canada and the United States. Fisheries: 38(6):247-282.
- Page, L. M., H. Espinosa-Pérez, L. T. Findley, C. R. Gilbert, R. N. Lea, N. E. Mandrak, R. L. Mayden, and J. S. Nelson. 2013. Common and scientific names of fishes from the United States, Canada, and Mexico, 7th edition. American Fisheries Society, Special Publication 34, Bethesda, Maryland. 243 pages.

- Turgeon, D.D., A.E. Bogan, E.V. Coan, F.G. Hochberg, W.G. Lyons, P.M. Mikkelsen, R.J.
 Neves, C.E.F. Roper, G. Rosenberg, B. Roth, A. Scheltema, F.G. Thompson, M.
 Vecchione, and J.D. Williams. 1998. Common and scientific names of aquatic invertebrates from the United States and Canada: Mollusks. Second Edition. American Fisheries Society, Special Publication 26, Bethesda, Maryland. 526 pages.
- Williams, J.D., A.E. Bogan, R.S. Butler, K.S. Cummings, J.T. Garner, J.L. Harris, N.A. Johnson, and G.T. Watters. 2017. Revised list of the freshwater mussels (Mollusca: Bivalvia: Unionida) of the United States and Canada. Freshwater Mollusk Biology and Conservation 20:33–58.

Freshwater Mollusk Conservation Society Names of Freshwater Mollusk Subcommittee Petition for Proposed Scientific or Common Name Change

Title:

Provide a brief statement of the proposed change along with a full literature citation for the paper on which the proposal is based.

Background:

This section shall summarize the specific proposal including a detailed justification, along with required references. Information shall be a succinct history and summary of the proposed changes.

Supplemental Information:

This section shall reference any data (e.g., proposed phylogeny, character analyses) to be considered in support of the case for reassignment. Generally, formal petition changes reference peer reviewed literature, but that is not a necessary requirement. This section must also include a justification statement summarizing the rationale for the petition.

Specific Recommendation:

Using the evidence provided, the presenter should provide the clear description of the action or question(s) the Subcommittee is being asked to review.

Literature Cited:		
Include all supporting references used	in the summary.	
Submitted By:		
Proposal Date:		
Petition Number:		
Subcommittee Member Voting:		
I support the petition	I do not support the petition	

In the event of rejection, Subcommittee members should provide a detailed summary of their consensus opinion.