

Freshwater Mollusk Conservation Society



Procedures Manual

2025

Revision 5: April 2025

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1.0 History and Purpose

The Freshwater Mollusk Conservation Society (FMCS, Society), incorporated as a 501(c) (3) in June 1999, is dedicated to the conservation of and advocacy for freshwater mollusks, North America's most imperiled animals. Membership in the Society is open to anyone interested in freshwater mollusks who supports the stated purposes of the Society which are as follows: 1) Advocate conservation of freshwater molluscan resources, 2) Serve as a conduit for information about freshwater mollusks, 3) Promote science-based management of freshwater mollusks, and 4) Promote and facilitate education and awareness about freshwater mollusks and their function in freshwater ecosystems.

The purpose of this operations manual is to provide guidance to Society officers, Committee Chairs, and the general membership for the efficient operation of the Society. The duties of the Society officers, Committee Chairs, and general membership are detailed in the bylaws (available at <https://molluskconservation.org/ByLaws.html>). This manual provides guidance to officers and Committee Chairs so that they may effectively carry out the duties of their positions and meet necessary deadlines. This is intended to be a dynamic document, and as such each officer and committee chair should review his or her section of the manual annually and recommend any necessary changes to the Past-President. This manual was first approved in 2013 and revised in 2025, and it is recommended that it be reviewed and updated at least every 5 years to provide for the effective management of the Society. The immediate Past-President is charged with coordinating the review and update to this manual.

2.0 Code of Conduct

This Code of Conduct was approved by the Board of Directors in 2019. It will appear in the Symposium Program and on the registration form for future symposia and workshops.

Code of Conduct: The Freshwater Mollusk Conservation Society (FMCS) is an international scientific organization whose purpose is to conserve and advocate for freshwater mollusks. FMCS members and attendees of FMCS-sponsored symposia, workshops, meetings, or other FMCS activities (events) are expected to adhere to this Code of Conduct. FMCS is committed to providing a safe, productive, and welcoming environment for all participants and staff. All participants including, but not limited to, members, guests, attendees, speakers, volunteers, exhibitors, service providers, and others are expected to abide by this Code of Conduct. This Code of Conduct applies to in-person, electronic (text, email, social media), and written communications. The FMCS leadership encourages anyone to contact FMCS Executive Committee regarding ways in which the Society can improve inclusion and diversity and encourage a stimulating and supporting atmosphere.

Expected Behavior

- Communicate openly with respect and consideration for others, valuing a diversity of views and opinions.
- Avoid personal attacks directed toward other attendees, participants, suppliers, or vendors.
- Be mindful of your surroundings and of your fellow participants.
- Speak up, intervene, or alert an FMCS board member if discriminatory or inappropriate behavior directed at others is observed or you notice a dangerous situation or someone in distress.
- Abide by the rules and policies of the event venue, hotels, FMCS-contracted facility, or any other venue.
- Request permission from speakers before recording or taking photographs during their presentations. Turn off any ringers or other disrupting devices during oral and poster sessions.

Unacceptable Behavior - It is important that our events be places where no attendee or staff is ever belittled, harassed, or made to feel unsafe. The following behaviors will not be tolerated:

- Harassment, intimidation, or discrimination in any form.
- Physical, written, or verbal abuse of any attendee, speaker, volunteer, exhibitor, service provider, or other event participant.

Examples of unacceptable behavior include, but are not limited to, unwelcomed physical contact; verbal comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, or national origin; inappropriate use of nudity and/or sexual images in public spaces or in presentations; and threatening or stalking any attendee, speaker, volunteer, exhibitor, service provider, or other event participant.

Reporting Unacceptable Behavior & Consequences- All members, event attendees, and event staff are expected to abide by the FMCS Code of Conduct. Anyone experiencing or witnessing behavior that constitutes an immediate or serious threat to public or personal safety should locate a house phone and ask for security. If a security officer is not available contact 911. Once the person is out of danger, contact an FMCS executive officer. Anyone requested to stop unacceptable behavior is expected to comply immediately. If you are the victim of unacceptable behavior or have witnessed any such behavior, please immediately notify an FMCS executive officer. Notification can occur by emailing, calling, or texting your concern to the FMCS President or the event services representative. After receiving a report of inappropriate behavior, the FMCS President, Executive Committee, and event services representative will assess the report and work with the complainant to determine the relevant facts, evidence, and most appropriate response. Anyone filing a complaint concerning a suspected violation of the Code of Conduct must be acting in good faith and have reasonable grounds for believing the information disclosed indicated a violation of the Code of Conduct. Any allegation made with a malicious intent will be viewed as a Code of Conduct violation. FMCS is committed to protecting the privacy of all individuals involved in the incident to the greatest extent practicable. The FMCS Executive Committee reserves the right to take any lawful action deemed necessary in response to a violation of this Code of Conduct. This includes, but is not limited to, the immediate removal of the violator from the event without warning or refund. The FMCS Executive Committee may also elect to suspend the violator from future events. Repeated violations could result in loss of FMCS membership and a permanent ban on attendance at FMCS events. Failure to adhere to the Code of Conduct is cause for removal from an event and/or suspension from membership in FMCS at the discretion of the Executive Committee. A Member may be suspended or removed from FMCS membership with cause by vote of two-thirds of the Board of Directors only after reasonable notice and an opportunity to be heard.

3.0 Board of Directors

The self-perpetuating Board of Directors (Board) of the FMCS is responsible for managing the affairs of the Society, and consists of the President as the presiding officer, the President-Elect, Past-President, Secretary, Treasurer, and the Chairs of Functional and Technical Committees as defined in the By-laws (see Section 3). A committee may have Co-Chairs but only one vote on the Board of Directors.

The duties of the Board of Directors are:

- To manage the business, functions, programs, and activities of the Society.
- To establish dues and support levels for Active Members, Emeritus Members, Student Members, and Contributing Members.

- To establish policy and promote the purposes of the Society.

The Board of Directors has 2 regular meetings per year. To keep the time reasonable for Board Meetings and allow in depth discussions where needed, committees submit reports to the board at least one week prior to the board meeting. During the board meeting, Committee Chairs will bring up any items needing discussion or a vote. Reports should be ready to be printed in *Ellipsaria*.

Spring meeting – in person meeting concurrent with the Symposium or Workshop, if possible, but can be a teleconference.

Fall meeting – Teleconference.

4.0 Officers

The officers, President, Past-President, President-Elect, Secretary, and Treasurer make up the executive committee (EXCOM) and conduct the day-to-day business of the Society. Officers can set up a DreamHost Society email upon being elected. President, President-Elect, and Past-President may want firstname.lastname@molluskconservation.org. Treasurer could be treasurer@molluskconservation.org and Secretary could be secretary@molluskconservation.org. These emails can be forwarded to other email account.

4.1 President

The President is the chief executive officer of the Society. The President presides at all meetings of the Board of Directors, transacts all the usual, necessary, and regular business of the Society as may be required, and with prior authorization of the Board, executes contracts, deeds, bonds and other evidence of indebtedness, leases and other documents required by the Society. Presidential duties and event timing are outlined as follows (timeline assumes an April Symposium). The President assumes his or her duties after the April Symposium (odd years).

Year 1 (April to April)

- Write President's Messages for *Ellipsaria*, as needed/desired.
- Organize and preside over the required Board Meetings (in person or by conference call), and any other meeting or conference call required to conduct the business of the Society. Work with the EXCOM to plan the Board Meeting agenda.
- Work on various personal initiatives
- Appoints ad hoc committees and task forces as needed and dissolves them when the tasks are completed.
- Ensure that Committee Chairs make progress on their tasks, keep their respective pages on the FMCS website updated, and report progress via *Ellipsaria*.
- Sign letters from the Environmental Quality and Advocacy Committee, as needed and after getting consensus and comments from the EXCOM if required.
- Communicate regularly with the EXCOM and Full Board or as needed on specific actions.

Year 2 (April to April)

In addition to Year 1 Duties, during Year:

- Preside over the Workshop

- Assist Elections Committee with securing candidates for President-Elect, Secretary, Treasurer (December-January)
- Ensure electronic election is carried out in conjunction with publication of the March *Ellipsaria*

4.2 President-Elect

The President-Elect acts as chief executive officer in the absence of the President. The President-Elect chairs the Symposium and Workshop Committee (See Section 5.1.10). As the Chair of the Symposium and Workshop Committee, the President-Elect:

- Helps secure location, hosts, and topic for the even-year Workshop.
- Ensures Workshop planning proceeds on schedule.
- Helps secure location and hosts for the odd-year Symposium; and
- Ensures Symposium planning proceeds on schedule and that the first call for abstracts is distributed in the August *Ellipsaria*, second call in December *Ellipsaria*, with an early January abstract deadline (see Appendix A for symposium and workshop planning guidelines).

4.3 Past-President

The Past President assists the President, President-Elect, Secretary, and Treasurer on an as needed or assigned basis and acts as chief executive officer in the absence of the President and President-Elect. The Past-President is charged with coordinating the review and update to the Society Bylaws and Procedures Manual, fundraising for the Society, and is the Society representative to the Consortium of Aquatic Science Societies (CASS).

4.4 Treasurer

The Treasurer is responsible for all finances, accounting, initial membership processing, and tax reporting of the Society.

A. Basic tasks that require attention include:

- a) Entering all financial transactions in the accounting program. FMCS books are currently managed in QuickBooks (QB). Accounts are set up to track all income and expenses. We operate on a cash accounting basis.
- b) Income
 - i. Transactions include memberships, registration for symposiums/workshops, donations, miscellaneous items (hats, symposium/workshop proceedings, t-shirts), interest
 - ii. Income payments
 1. Members must initiate membership or workshop/symposium payments on our webpage (www.molluskconservation.org). The system generates an invoice. The invoice can be paid through the webpage with AffiniPay or manually.
 2. AffiniPay (3rd Party Payment Processing)
 - a. AffiniPay is set to deposit collected fees automatically and automatically withdraw service fees on at least a monthly basis.
 - b. Refunds: Must be issued within 60 days of the transaction by logging into the AffiniPay website and following the “Refund” prompts.
 3. Manual payments

- a. Credit cards. Some organizations cannot use a third-party payment processing systems such as AffiniPay, so we have an account with Square to process credit card payments over the phone using a mobile device (e.g., smartphone, tablet). This system can accept Mastercard, Visa, AMEX, and Discover cards. To manually enter card numbers, you will need the following:
 - i. CC number
 - ii. Expiration date
 - iii. Security code
 - iv. Billing zip code
 - b. Once the credit card transactions are entered in Square, enter the transaction(s) in the WildApricot system and settle the invoice. If the payment is for a non-member symposium/workshop registration, you must credit them with a membership.
 - c. Check payments: Deposit funds in a bank account, enter a transaction in QuickBooks, and settle the invoice on our website.
- c) Paying bills: Bills can be paid online through our Bank of America account, by check, or with our Bank of America debit card. Several accounts are set up in QBs to track our outgoing funds.
- d) Reconciling accounts. Accounts to be reconciled monthly include:
 - i. Checking account
 - ii. Savings account
 - iii. Square credit card (income) account
 - iv. AffiniPay income account
 - v. Certificates of DepositIn QBs, go to Banking: Reconcile accounts and follow directions.
- e) Taxes
 - i. Taxes for 501(c) (3) organizations are due May 15 each year.
 - ii. After January 1, reconcile all transactions and generate a Profit-Loss statement and Balance sheet to be reviewed and approved by the Finance Committee and Executive Committee
 - iii. After Finance Committee approval, generate a preliminary 990-EZ (unless gross receipts are greater than \$200,000) to be reviewed and approved by the finance and Executive Committee.
 - iv. File the 990-EZ, usually using an online service (Tax990) to file our federal taxes.
 - v. Previous year's spreadsheets can be used to guide calculations.
- f) Biennial State of Missouri Registration Report
 - i. We use Northwest Registered Agent as a registered agent, and Northwest Registered Agent handles our registration.
 - ii. Physical Address for FMCS under Northwest Registered Agent
 - 1. 117 S Lexington Street, STE 100, Harrisonville, MO 64701
- g) Government SAM account
 - i. Because we do business with the federal government, we are registered with SAM (System for Award Management, www.sam.gov)
 - ii. This registration needs to be updated periodically
 - iii. An email notification is sent as a reminder
- h) Membership tracking
 - i. Membership is initiated and paid on our web page.
 - ii. Members log in with their email and password to create or renew their membership.

- iii. Note: members make several common errors you will need to correct. The most common is creating a new account by logging in with a different email. Accounts can be merged (follow directions within the web page).
- iv. Membership dues are due on January 1 every other year. Dues can be paid with the symposium/workshop registrations (all non-member registrants receive a two-year membership for symposiums and a one-year membership for workshops). A membership will need to be activated or renewed by the Treasurer for non-member registrants.
- v. Membership can also be paid separately from the workshop/symposium
- vi. Any memberships that are paid after November 1 should be credited to the next year
- vii. Following the symposium/workshop, notify the webmaster to inform all lapsed members that their membership is due.
- i) Symposium/workshops
 - i. Budget
 - 1. Works with symposium/workshop chair(s) and President-Elect to establish a preliminary budget and review the associated finances and contracts.
 - ii. Registrations
 - 1. Work with the symposium chair and webmaster to set up the online registration system.
 - 2. Settle all accounts that are paid manually.
 - 3. Set up memberships or renewals for those that pay as non-members.
 - 4. Check the system to make sure it credits each member properly.
 - 5. Generate periodic reports for the symposium chair.
 - iii. Other
 - 1. Sign any contracts.
 - 2. Pay deposits and final bills.
 - 3. Assist the chair with getting state tax-exempt status if needed.
 - iv. On-site
 - 1. Assist with registration setup.
 - 2. Train registration personnel on the Square register operation. (The Square credit card app is a cash register system; all transactions can be processed and tracked using this app).
 - 3. Provide cash boxes and change.
 - 4. Check in with the registration desk periodically.
 - 5. Collect all cash and credit card receipts at the end of the day.
 - v. Post-meeting
 - 1. Pay the bills.
 - 2. Enter all on-site transactions.
 - 3. Reconcile money vs. records.
- j) Treasurer's report. A Treasurer's report is given at each board meeting and the symposium business meeting. Reports can easily be generated in QBs. Go to Reports, Company, and Financial, Profit, and Loss. This report summarizes all transactions for the current fiscal year. A balance sheet (Reports, Company and Financials, Balance Sheet Standard) can also be generated. This report summarizes all assets and liabilities of FMCS since inception.
- k) Budget items. The Treasurer also keeps track of budget items and the availability of funds for special projects and funding requests. Current budget items include:
 - i. Web page expenses (\$5000 budgeted per year) and FMBC (expenses \$5000 per year) are typically funded through membership dues.

- ii. Awards given at the symposium are funded from the previous symposium auction. The budget depends on the revenue from the previous symposium's auction. This can be found by generating a profit/loss statement for the previous symposium year. Auction income is entered as an income line item. We also keep a spreadsheet with a running total of award funds, as not all award funds are used up each year.
 - iii. Funds available for special projects depend on the funds generated throughout the year from the symposium/workshop.
 - iv. At the end of each year, 1/3 of Society funds should be invested, 1/3 should be available for current expenses, and 1/3 should be available for committee projects. The committee project funds should be divided over four years.
- B. Useful numbers
 - a) Physical Address: 117 S Lexington Street, STE 100, Harrisonville, MO 64701
 - b) Tax ID 43-1855280
 - c) DUNS No. 602409901
- C. Useful webpages
 - a) www.molluskconservation.org
 - b) FMCS WildApricot: <https://fmcs.wildapricot.org/Sys/Login?ReturnUrl=%2fadmin%2f>
 - c) Bank of America: https://www.bankofamerica.com/smallbusiness/?page_msg=signoff&body=signoff
 - d) AffiniPay: <https://secure.affinipay.com/login>
 - e) Tax 990: <https://secure.tax990.com/>
 - f) www.sam.gov
 - g) Northwest Registered Agent: <https://www.northwestregisteredagent.com/login>
 - h) Usernames and passwords can be obtained from the previous Treasurer
- D. General schedule of tasks (note: many of these may be needed earlier or later depending on the timing of the workshop or symposium)
 - a) January
 - i. Ensure all the previous year's income and payments are recorded
 - ii. Check for errors
 - iii. Reconcile accounts
 - iv. Enter all transactions in QBs
(QBs automatically resets income/expenses to 0 on January 1, however all transactions are available on the report for the previous Fiscal Year)
 - v. Enter all memberships and symposium/workshop registrations
 - vi. Update QB and webpage accounts
 - vii. Communicate with the symposium/workshop chair to ensure they have funds to pay bills or that invoices are sent to the Treasurer and paid promptly
 - viii. Generate a Profit-Loss and Balance Sheet for the previous year and have the Finance Committee and Executive Committee review and approval the previous year's finances
 - b) February, March, April
 - i. Finalize the previous year's finances with the Finance Committee and Executive Committee and draft a preliminary 990 for review
 - ii. Check financials for errors
 - iii. Reconcile accounts
 - iv. Enter all transactions in QBs
 - v. Assist symposium/workshop chair as needed
 - vi. Generate a Treasurer's report for the board meeting

- c) May
 - i. Check for errors
 - ii. Reconcile accounts
 - iii. Enter all transactions in QBs
 - iv. Reconcile workshop/symposium- Make sure all bills are paid, and all income is received.
 - v. Send out dues notice
 - vi. Taxes due by May 15 (we will not owe any taxes, but fines are substantial if you miss this deadline for filing)
- d) June, July
 - i. Check for errors
 - ii. Reconcile accounts
 - iii. Enter all transactions in QBs
 - iv. Assist symposium/workshop chair as needed
- e) August
 - i. Same as June/July
 - ii. Every other year (odd years), renew registration with Missouri SOS (if this is late, we will no longer be considered a non-profit)
- f) September, October
 - i. Check for errors
 - ii. Reconcile accounts
 - iii. Enter all transactions in QBs
 - iv. Assist symposium/workshop chair as needed
- g) November, December
 - i. Same as September/October
 - ii. Generate a Treasurer's report for the November board meeting
 - iii. Check web page accounts to make sure memberships are credited to the next year
- E. Credit Card Security Requirements
 - a) When credit card information is received by either phone or email:
 - i. Information must be marked as CLASSIFIED
 - ii. Information must be locked in a secure place while awaiting processing.
 - iii. Once processed, information must be destroyed by shredding.
 - b) Only the Treasurer is allowed to receive credit card numbers. The Treasurer is responsible for securing information until payments are processed. The Treasurer is responsible for destroying information immediately after processing.
 - c) This policy needs to be reviewed and updated annually.

An outgoing Treasurer is responsible for ensuring the new Treasurer is aware of and trained in these security procedures.

4.5 Secretary

The Secretary records and preserves the minutes of the meetings of the Board of Directors and Business Meetings of the Society, coordinates with the webmaster to post notices of all meetings of the Board of Directors and committees and records and maintains records of all proceedings of the Members and Directors. The Secretary is also the contact person for sending out most FMCS email announcements, such as meeting notices, requests for *Ellipsaria* and FMBC input, and other important requests to the membership. Notices for upcoming workshops or symposiums should also be forwarded to the Outreach

chair for posting to social media (e.g., Twitter and Facebook). Minutes of the Board and Business meetings, whether conducted in person or virtually, should be compiled and distributed to the Board for edits and corrections within two weeks of the meeting. Once corrected, the Secretary will forward them to the editor of *Ellipsaria* for publication. Meeting minute formats can be found in the past issues of *Ellipsaria*. The Secretary is also responsible for coordinating annually with the Treasurer to update the membership list of the Society, and maintain the membership database, including reviewing and updating the status of members. The Secretary also reports on the current status of the membership at Business Meetings. In addition, the Secretary shall maintain copies of all official correspondence of the Society (comment and advocacy letters, etc.). Upon the election or appointment of a new Secretary, the past Secretary shall organize and transfer all hard copy files, notebooks, and digital copies of all official correspondence to the new Secretary.

FMCS Website / User Interface

The FMCS website (<http://www.molluskconservation.org>) has an add-on “Widget” imbedded into the site, called “Wild Apricot” (<http://www.wildapricot.com/>). FMCS added this functionality as a more automated and effective way to manage the membership database. The site can be accessed at:

<http://www.fmcs.onefireplace.org/> with the Secretary or other authorized user’s FMCS username and password. The FMCS Webmaster will have to manually assign the appropriate site access privileges to the new Secretary in Wild Apricot for that user to be able to access the interface, in the event of a change in Secretary.

One important note, the FMCS online database is a great asset but needs to be managed with care and confidentiality. The new system has many advantages over the old paper system; namely the credit card information for individuals is secured in a 3rd party system and not stored on hard copy membership and workshop forms. However, to date the database contains the emails of nearly 800 current and past members, as well as personal, confidential information that needs to be protected in strict confidence, so admin user passwords should be complex and requests for the membership lists need to be evaluated for merit before delivery.

Once access to the site is granted, the user should see the dashboard screen:

Gregory Zimmerman | Change password | To public view | Logout

Dashboard | Contacts | Web pages | Events | Members | Donations | Finances | Emails | Settings

Overview | Support

Current version is 4.6.6, released on 12 April 2014 ([See release history](#))

Help | Support | Account 33136

Contacts database

Contact type	Current	New in last 7 days	New in last 30 days
Total Contacts	778	2	7
Members	755	2	10
Donors	2	-	-
Event attendees	431	-	4

Next 3 events

Date	Title	Confirmed	Pending	Total
24 Apr 2014	Non Member Registration	18	3	21
24 Apr 2014	FMCS Member Registrati	48	6	54

The website is relatively user friendly from this point on. The main **Dashboard** screen provides a quick snapshot of the membership. The tabs at the top of the page provide access to other categories. The

primary page used to compose emails and retrieve membership information, such as contact lists of the membership and committees, is the **Contacts** tab. In the Contacts tab, the simple search function can quickly find any member, and their status. This is useful for when a member needs to know the status of their membership, what email address is associated with it, etc. Contact lists based on search criteria can be exported to *.xml format, which can be opened in MS Excel or another spreadsheet program.

The Contacts screen can also be used to compose emails to the entire membership or other sub-set(s) of the membership such as committees; these email lists are based on search criteria. Search criteria can also be saved for future use. Email templates are available from the library or in sent messages for FMCS emails. These templates allow the user to add in images and improve the production value of emails by changing font sizes, colors, etc. A key advantage of the templates is that they automatically re-format for mobile devices. Also, by turning on link-tracking, statistics on member usage of embedded links in emails, such as how many members log in to the newsletter, can be tracked.

5.0 Committees

The FMCS is divided into Functional, Technical, and Ad hoc committees.

Functional Committees conduct the daily functions of the Society.

Technical Committees will be established to meet the goals and objectives of the National Strategy. Broad committees consist of subcommittees that function to address specific projects outlined in the current National Strategy. The National Strategy Committee will recommend changes to these committees based on their five-year evaluation. These recommendations will be voted on the by Board of Directors and communicated to the membership before the symposium following the review.

Ad hoc committees are formed by the President and Board to explore specific issues. These committees will be evaluated by the Executive Committee at least every five years and either dissolved (if task is complete) or made into a Functional or Technical subcommittee.

Each committee elects a Chair and alternate during the Symposium. If a chair is vacated, the Executive Committee will select an interim chair.

Subcommittees should develop their own set of operating procedures and have a chair that reports to the chair of the parent committee, who then reports to the board. The management of subcommittees is under the discretion of each Functional or Technical committee. Each subcommittee will dictate to its parent committee what its specific goals are and how it will operate, including the term-length of its chair position. For example, the MusselApp subcommittee has expressed an interest in extending the subcommittee chair terms to not only maintain continuity of the group, but also because others may not have the qualifications needed to implement their tasks. The by-laws state that Committee Chairs can serve no more than three consecutive terms, but do not dictate the term limits for Subcommittee Chairs. Term limits were placed on Committee Chairs to encourage more participation and provide more opportunities to participate in Society leadership roles. We would recommend that Subcommittee Chairs limit terms to three terms (6 years), but if there is a good reason to extend terms when working on a specific project, the subcommittee is free to do so.

Only the Chairs (or their designees) of the Functional or Technical committee report to and have a vote on the Board. Concerns were expressed that some subcommittees might not be adequately represented, and that information might be omitted during Board meetings. We remind our members that our Board

meetings are open so anyone can attend. Therefore, a subcommittee chair could attend to address and discuss any contentious topics.

5.1 Functional committees

Functional committees as of 2024 are as follows

Awards
Chapters
Diversity, Equity, and Inclusion
Elections
Finance
National Strategy
Outreach
Professional Development
Publications
Symposia and Workshops

5.1.1 Awards

Society awards are divided into professional and student categories. FMCS presents three professional awards, including the Clench Award, the Lifetime Achievement Award, and the Meritorious Service Award. The Society also provides a Regional Mollusk Meeting Assistance Award. FMCS grants four types of student awards, including student travel awards, FMCS Diversity, Equity, and Inclusion Student Welcome Award, best platform presentation, and best poster presentation. The Society also offers an Early Career Professional Travel award. Details on each of these eight award types can be found on the Society's website at [http://molluskconservation.org/under the society: Committees: Awards](http://molluskconservation.org/under-the-society/Committees:Awards). Each award category is evaluated by separate guidelines but maintains the intent of the Society's award process. Unless an award specifies otherwise, candidates may:

- Be self-nominated or nominated by an individual or group;
- Be from any geographical area;
- Be FMCS members or non-members.

Recipients of these awards are announced every two years at the Symposium during the awards ceremony at the Business Meeting.

The FMCS Awards Committee is responsible for the administration and oversight of all FMCS awards. The duties of the Awards Committee are to:

- Solicit nominations and recommend recipients for each professional award given by the Society;
- Administer awards to students, including selecting the awardees in conjunction with a panel of independent judges;
- Coordinate all award activities with the FMCS Treasurer and EXCOM to ensure the timely and smooth implementation of award programs.

Professional Awards

About 5 months prior to the symposium, place an announcement in *Ellipsaria* to solicit professional awards.

About 5 months prior to the symposium, post an announcement through the FMCS email and Unio Listserv to solicit professional awards.

Assemble professional award packets and ensure that they are complete.

Send the completed award packets to the EXCOM for their approval and record their votes.

Notify the EXCOM that votes for the professional awards were accepted unanimously, or otherwise.

Notify those individuals who nominated an individual for a professional award that they (and their support crew) are expected to give a brief (5 min) presentation on why the award recipient deserves this award during the business meeting.

Make up plaques to present at the meeting (1 for each professional award, 1 for the Past-President (outgoing President)).

Announce the winners of the professional awards at the business luncheon during the symposium. Take photos of scientists receiving awards for *Ellipsaria*.

Student Travel Awards

About 5 months prior to the symposium, place an announcement in *Ellipsaria* to announce the student travel awards.

About 5 months prior to the symposium, post an announcement through the FMCS email and Unio Listserv to announce the student travel awards.

Determine how many awards can be offered (work with the symposium program chair to determine the total cost of the lodging and the Treasurer to determine the funds available to support student travel).

Assemble the student award packets and ensure that they are complete.

Send the completed award packets and an excel file with award criteria to the award's committee members.

Send an email to the Secretary to check if all student award applicants are indeed FMCS members.

Have all members of the award committee independently rank all applicants.

Have a conference call to discuss results of the independent ranking.

Notify all students (with a cc: to their advisor) of their status with respect to the awards. Make sure to include a note to the award winners that their award covers lodging only (not movies, internet, etc...).

Send an email to the Treasurer and request that reservations get made in the names of the student awardees. Make sure that confirmation numbers are sent to the students.

Announce the winners of the student travel awards at the business luncheon during the symposium. Take photos of students receiving awards for *Ellipsaria*.

Early Career Professional Travel Awards

About 5 months prior to the symposium, place an announcement in *Ellipsaria* to solicit Early Career Professional Travel awards.

About 5 months prior to the symposium, post an announcement through the FMCS email and Unio Listserv to solicit Early Career Professional Travel awards.

Determine how many awards can be offered (work with the symposium program chair to determine the total cost of the lodging and the Treasurer to determine the funds available to support Early Career Professional Travel travel).

Assemble Early Career Professional Travel award packets and ensure that they are complete.

Send the completed award packets and an excel file with award criteria to the award's committee members.

Send an email to the Secretary to check if all award applicants are indeed FMCS members.

Have all members of the award committee independently rank all applicants.

Have a conference call to discuss results of the independent ranking.

Notify all early professionals of their status with respect to the awards. Make sure to include a note to the award winners that their award covers registration only.

Send an email to the Treasurer and request that registration is waived.

Announce the winners of the Early Career Professional Travel awards at the business luncheon during the symposium. Take photos of winners receiving awards for *Ellipsaria*.

Best Student Platform and Poster Awards

Once we receive the tentative symposium program, place an announcement through the FMCS email and Unio Listserv to solicit judges and ask the Secretary to send an email to the entire FMCS membership.

Assign judges to presentations (includes platform and posters). Try to accommodate judge's session preference and arrival/departure times. Goal is to have a minimum of 3-4 judges secured for every presentation in advance of the meeting (in some years, we were unable to secure enough judges in advance, so we sent an announcement to session moderators and asked them to request judges at the beginning of each session).

Request a small meeting room to go over the student judging packets (usually on the second night of the symposium from 5-7 pm). Make sure to arrange this with the symposium committee chair (President-Elect) early in the Symposium planning process.

Notify judges of their assignment via an email in advance of the meeting. This email should also tell them when and where to turn in their completed forms.

Place judging forms, pre-labeled with the student's name and session #, in the registration materials for each judge (for folks that arrive early to the meeting, you can hand the forms out during the opening night mixer).

Set up a labeled box at the registration table for judges to turn in their completed forms.

Make up plaques/certificates to present at the meeting (1 for the best student platform and 1 for the best student poster).

Announce the winners of the best student platform and poster awards at the business luncheon during the symposium. Take photos of students receiving awards for *Ellipsaria*.

FMCS Diversity, Equity, and Inclusion Student Welcome Award

About 5 months prior to the symposium, place an announcement in *Ellipsaria* to solicit DEI Welcome awards.

About 5 months prior to the symposium, post an announcement through the FMCS email and Unio Listserv to solicit DEI Welcome awards.

Assemble DEI Welcome award packets and ensure that they are complete.

Send the completed award packets and an excel file with award criteria to the DEI committee members.

Send an email to the Secretary to check if all award applicants are indeed FMCS members.

Have all members of the DEI committee independently rank all applicants.

Have a conference call to discuss results of the independent ranking.

Notify all applicants of their status with respect to the award. Note to the winners that their registration is waived and FMCS will pay up to \$365 in travel costs via reimbursement.

Announce the winners of the DEI Welcome awards at the business luncheon during the symposium. Take photos of winners receiving awards for *Ellipsaria*.

5.1.2 Chapters

This section is reserved for the Chapter Committee if the Society elects to form chapters or subunits.

5.1.3 Diversity, Equity, and Inclusion (DEI)

The mission statement of the Society's DEI Committee is to encourage participation by all individuals regardless of age, culture, ethnicity, gender identity or expression, national origin, physical or mental difference, politics, race, religion, sex, sexual orientation, socio-economic status, or subculture. We aim to cultivate a Society built on mutual respect and strive for a welcoming environment for all. FMCS promotes diversity in all areas of societal activity, including fostering diversity in membership, leadership, committees, outreach, public engagement, and recruitment. The goals of the DEI Committee are to diversify the FMCS membership base, entrench diversity and inclusion as a core value of FMCS, and provide resources to encourage participation of underrepresented groups.

Ongoing duties of the DEI committee include but are not limited to:

- Supporting attendance of students from underrepresented groups at symposia and workshops;
- Facilitating discussions on DEI-related topics during and outside of symposia and workshops;

- Participating in planning of events to ensure inclusive and equitable spaces and vendors;
- Providing a safe space for members to discuss and/or report DEI-related concerns or issues within the Society; and
- Maintaining a demographic survey and sharing results with membership, on an every-other-year cycle.

5.1.4 Elections

The purpose, composition, and duties of the Elections Committee will be evolving as the Society continues to grow. As such, updates and/or changes to this section will be made as needed.

Purpose: The purpose of the Elections Committee is to seek and publish candidates for three positions with the Executive Committee, including the President-elect (who, after two years, goes on to serve as President for two years, then as Past President for an additional two years), Secretary (2 - year term), and Treasurer (2 - year term). The Elections Committee will collect and distribute candidate biographical sketches and statements within *Ellipsaria* prior to elections. Elections for Executive Committee positions are to be held every-other-year (e.g., 2025, 2027, 2029, etc.) prior to Society Symposia.

Composition: The Elections Committee is to be composed of, at minimum, a Chair and Co-Chair, with support from Executive Committee members. If necessary, a search committee shall be composed of the aforementioned individuals and willing Society members.

Duties: The duties of the Elections Committee are to, with assistance from participating Executive Committee members and a potential search committee, seek viable candidates for and facilitate election of the various offices of the Society's Executive Committee. Supporting the Chair and Co-Chair of the Committee, Executive Committee members and any willing Society members may assist the Elections Committee as needed throughout the nomination and election process.

Solicitation and Selection of Candidates

The Election Committee Chair and/or Co-Chair will request written job descriptions of available Executive Committee roles, including duties and anticipated time commitments, no later than 8 months prior to the upcoming Symposium. If there have been no changes to the role's responsibilities or time commitments since the last election, previous descriptions may be used. Following receipt of updated role descriptions, the Committee Chair and/or Co-Chair will solicit candidates for each of the available Executive Committee positions no later than 6 months prior to the next Symposium. Candidates can be solicited through a variety of methods, including but not limited to; in person self- or peer-nomination, self- or peer-nomination following a nomination request via the FMCS listserv, or direct contact by the Election Committee Chair and/or Co-Chair. Nominations will be closed during November of the year prior other next Symposium and a nomination deadline will be distributed to Society members via e-mail. Candidates that accept nominations will be required to provide a biographical sketch and statement of candidacy prior to publication of the December issue of *Ellipsaria* for distribution to Society members as part of that publication prior to the election.

Distribution of Candidate Biographies

Biographical sketches and candidate statements should be provided to Society members prior to the election. Sketches and candidate statements can be distributed either via an issue of *Ellipsaria* or the FMCS listserv prior to distribution of the ballot. If candidates are limited, or the candidate selection

process is delayed, sketches and candidate statements may be distributed in tandem with the election ballot.

Preparation and Distribution of Ballot

An election ballot will be created using an electronic form format (e.g., Google Docs) during the January prior to the upcoming Symposium. The following information shall be included within the ballot: name of voter, email address of voter, list of each Executive Committee role included within the election, and the names of each candidate for each role included in the election. The completed ballot will be distributed to Society members via email through the FMCS listserv during the January prior to the upcoming Symposium.

Holding of Election and Tabulation of Election Results

Following distribution of the ballot, polls will be open for a period of at least 30 days but not longer than 45 days. Exact polling opening and closing dates may be adjusted to accommodate weekends, holidays, etc. as appropriate. Following poll closure, the Election Committee Chair and/or Co-Chair will tabulate the election results for each available Executive Committee position and determine winners for each election. Prior to notifying election winners, the Election Committee will notify the current Executive Committee members of election results.

Announcement of Election Results and Assumption of Roles

The Elections Committee will notify election winners and losers of the results of their races within 2 weeks of poll closure. When notifying winning candidates, the Committee Chair and/or Co-Chair will request that they update or revise, if they wish, their biographical sketches for the Society and provide updated sketches to the Election Committee prior to announcement of election results to Society members. The Chair will forward materials to the editor of *Ellipsaria* so that new officers can be announced to Society members. Newly elected individuals will be announced in the March edition of *Ellipsaria* prior to the Symposium and will be presented to Society Members at the Symposium following the election.

5.1.5 Finance

The purpose of the FMCS Finance Committee is to provide oversight of Society finances and ensure the financial stability of the Society. The Committee shall operate with a minimum of 3 members in good standing. Members of the Committee will elect a Chair and Vice Chair, each of which will serve 2-year terms. Ex officio and non-voting members of the Committee will include the President-Elect, Past-President, and current Treasurer, Secretary, and President.

Duties of the Committee will include, but not be limited to:

- Develop a process for review and granting of new funds solicited by internal or external entities and review funding requests on a quarterly basis.
- Conduct a yearly audit/review of all Society finances by reviewing the profit and loss statements and balance sheets and recommend needed changes in revenue, losses, and reporting.
- Review line items of existing income and expenses and suggest options for a sustainable budget.
- Assist with the drafting and promotion of a yearly Society budget.
- Assist Treasurer with completing all necessary IRS filing needs and keeping track of deadlines and due dates by reviewing the following items. These activities may include, but not limited to:

- End of year committee chair listing ExCom/Web page: due by the fall board annually (report for inclusion in *Ellipsaria* and listing on the 990EZ)
- End of year membership report to ExCom due January 15th annually (needed for the 990EZ and other record keeping)
- End of Year Profit & Loss and Balance sheet to Finance Committee due January 31st annually- vote of approval needed in the minutes
- Profit and Loss and Balance sheet review by Finance Committee and ExCom due February 15th annually- vote of approval needed in the minutes
- Profit and Loss and Balance sheet approval by vote of the Board due February 28th annually
- First Draft Form 990, Schedule A, Schedule O to ExCom/Board/Finance Committee due March 15th annually- vote to be recorded in minutes
- IRS Submission of Form 990, Schedule A, and Schedule O due May 15th annually
- Explore opportunities to invest Society funds.

Currently, the Finance committee recommends that 1/3 of Society funds be invested, but available by the next Symposium in case of an overrun of expenses, 1/3 of funds be available for day-to-day Society expenses, and 1/3 available for committee projects. The 1/3 for committee projects is divided over 4 years and re-evaluated annually after approval of the Balance Sheet. The following is the process a committee can use to access these funds.

FUNDING REQUESTS

Funding of Society or Committee initiatives or projects may formally be solicited in writing to the Finance Committee at any time of the year, but at least 60 days prior to the nearest semi-annual (Spring or Fall) Board meeting. Any Society member in good standing or a Committee Chair or Co-Chair may request funding provided it meets the following criteria: (1) The funding request will be used for mollusk or aquatic resource-oriented projects; (2) Funding requests will not be used for politically oriented activities; and (3). The funded activity is conducted through the Committee, a collaborative non-profit conservation organization, or an entity that qualifies as a 501(c) 3 organization.

Written requests for funding, at a minimum, should (1) identify the requestor, (2) state the funding activity or request, (3) state the amount of funding requested and whether further funding may be needed in the future, (4) provide a brief overview of the expected results and how they will benefit the Society, and (5) state how funds meet the specified criteria listed above. A Society member or Committee can only make one funding request annually and continuation of any multi-year projects are subject to availability of funds and project performance. Funding requests from outside the Society, such as those from other Societies or other conservation organizations, can be considered subject to the availability of funds, real or perceived benefits, and other Society funding obligations, if the requests are consistent with Society Mission and Goals. These requests should meet the criteria and requirements set forth for requests for funding Society initiatives and projects.

The Finance Committee will review all funding requests and upon unanimous vote will advise the Executive Committee of the funding decision. The Executive Committee can directly fund the request up to \$1,000. If the funding request is greater than \$1,000, the Executive Committee will present the request for approval by the Full Board of Directors at the semi-annual Board meeting. If a funding request requires approval by the Full Board, the Executive Committee will make the proposal available for review by Board members at least 15 days prior to the Board meeting. A majority vote will be necessary to approve the

requested funding. All funding requests that are approved by the Executive Committee or the Full Board will be identified to the membership at the Biennial Symposium during the Treasurer's Report.

All funding recipients are required to submit an annual progress report and a final report to the President and Executive Committee detailing disbursement of funds and results and impacts of the funded activity. The Board reserves the right to provide incremental funding for projects approved for greater than \$1,000 in total costs, pending satisfactory progress, and to terminate disbursement of funds to non-performing projects.

5.1.6 National Strategy

The purpose of this National Strategy is to conserve our nation's native freshwater mollusk fauna and ensure that their ecological, social and economic values to Society are maintained at a sustainable level. Specifically, the goal of this document is to identify conservation, management, research, and monitoring actions necessary to maintain and recover mollusk fauna.

The National Strategy is updated every 15 years. The review process should start 10 years following the last publication (2016). The committee's charge is to review the Strategy for items that have been completed and add items that are needed to move the conservation of freshwater mollusks forward.

The committee is also responsible for reviewing the existing subcommittees under the Technical Committees every 5 years to ensure tasks being undertaken are in line with the National Strategy.

Committee members will be selected by the ExCom and approved by the board of directors.

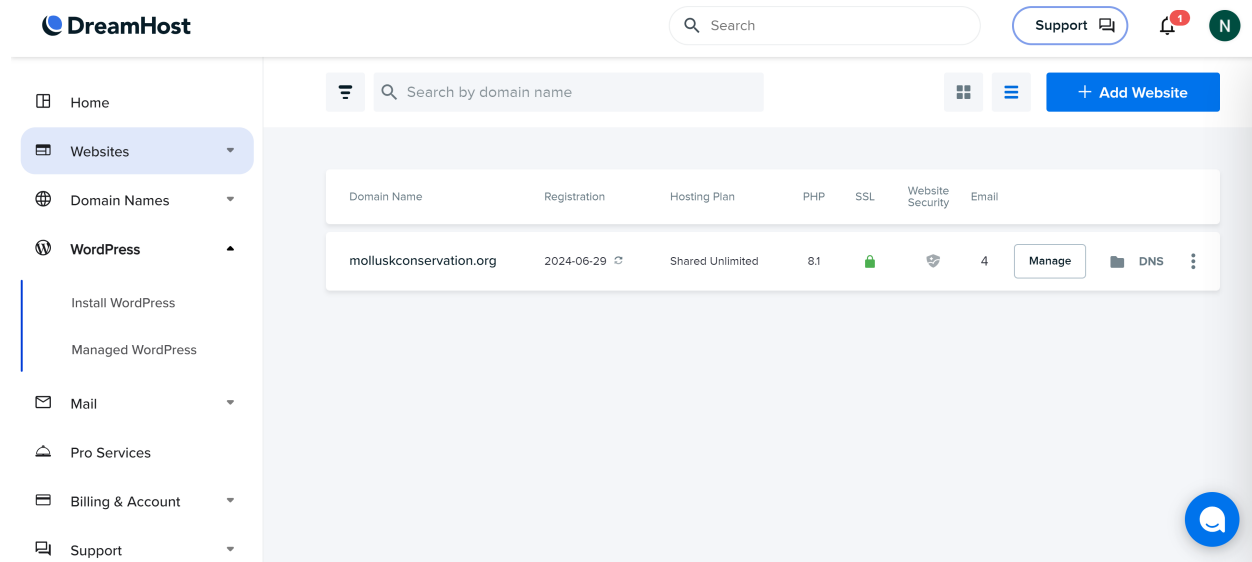
5.1.7 Outreach

The Outreach Committee has oversight of FMCS web pages and social media accounts.

Website

The FMCS maintains a web presence at <http://molluskconservation.org>. This website serves the outreach and education needs of the Society, providing information about the biology, ecology, and conservation of freshwater mollusks. This website also serves as the membership portal for the Society, where members are provided secure access to the *Freshwater Mollusk Biology and Conservation- The Journal of the Freshwater Mollusk Conservation Society*, *Ellipsaria*, and other mollusk publications. The website is maintained by a webmaster (currently Sophie Binder). Nora Straquadine (nrstraquadine@gmail.com) is currently website manager. If you need (want) something posted on the website, contact Nora.

The Webmaster that FMCS uses is Sophie Binder (preferred email: s.binderdesigns@gmail.com). Other contact information is sbinder@sbinderdesigns.com and +1-314-640-7841). The website was built through DreamHost, and the Webmaster needs to give the Website Manager access to the DreamHost Web Hosting account for viewing purposes. On the DreamHost account, the Website Manager will be able to see the registration date, hosting plan, PHP, SSL, Website Security, and emails associated with the site.



The Website Manager is not able to change the site themselves but can write out the changes for what needs to be deleted, added, or altered. An email laying out the changes can be sent to Webmaster with a subject line starting with “FMCS” and clear directions that list the updates. The Committee Chairs should correspond with the Website Manager about changes rather than directly contacting the Webmaster. Changes are expected to be completed by the end of that week, with the Website Manager following up with the Webmaster regarding any additional changes. Some Board Members and Committee Chairs have been corresponding with the Webmaster about routine changes (i.e., *Ellipsaria* uploads) and those communications are expected.

Website changes should be made as needed. Committee Chairs can contact the Website Manager at any time for updates to their pages. The symposia and workshop planning committees typically correspond directly with the Webmaster for event specific pages. The officer and chair changes need to be updated at least yearly. The Website Manager periodically checks in for closed job postings and will ask the Webmaster to remove them. Because the Webmaster and/or the Website Manager do not attend all meetings, it is important that they be made aware of critical Society changes that affect the website. This mostly pertains to Committee updates and any disbanding or name changes of committees.

The website’s tabs are Home, The Society, Freshwater Mollusks, Events, Join, Publications, Opportunities, and Contact Us. It is important to note that the FMCS’s website has exponentially grown over the years and there are some pathways and links that are in the process of being fixed. The FMCS’s Home page typically states the mission of the website, details new updates to the Bivalve and Gastropod name lists, and any new information regarding the symposium registration and travel awards. The Society page features an About Us, the members page, and the committees. The Events page details the upcoming symposia and workshops as well as programs of the past symposia and workshops. The Join page has the WildApricot plugin for the membership database. The Website Manager does not have access to this page, and will direct any emails to the Webmaster, the Secretary, or the Treasurer. The Publications page has past articles and a brief history of FMCS reports. Finally, the Contact Us page lists the FMCS officers, and the Website Manager contact information. Email addresses are advised to not have active links on the Contact Page of the website (<https://molluskconservation.org/Contact.html>) to decrease phishing attempts.

Since 2021, there have been discussions of moving the FMCS's website to WordPress. For that to happen, the Webmaster would need to send the Board a quote. The Board will need to discuss and vote on a final decision. The Society's membership is through WildApricot, so the website may not be changed to a platform that conflicts with the WildApricot plugin.

Social Media

The Outreach chair is encouraged to post announcements, such as meeting announcements and publication releases, to social media (e.g., Twitter and Facebook). If a member would like something posted on Social Media, contact the chair of the Outreach Committee.

5.1.8 Professional Development

The mission of the FMCS Professional Development Committee is to oversee the Mollusk Professional Certification Program (hereafter, Program). The goal of the Program is to provide a minimum standard of experience and education for freshwater aquatic mollusk professionals and acknowledge these achievements by bestowing certification.

The Program was designed to recognize an individual's education, career, and involvement pertaining to the field of malacology. It is meant to provide a means for which mollusk professionals may be measured and awarded defined levels of certification, thereby promulgating their level of expertise. The program is also meant to encourage participation in the mollusk community and be a source for knowledgeable and proficient mollusk scientists, regardless of one's race, religion, culture, sex, or other factors.

One of the important roles of the committee is to oversee the Program process and connect the FMCS membership with Issue 8 of the National Strategy for the Conservation of Freshwater Mollusks: "Educate and train the conservation community and future generations about the importance of mollusks to ensure conservation efforts continue, Strategy 1 - Develop and recommend a list of key skills and competencies for mollusk conservation biologists and the supporting disciplines such as communication."

The certification provides four levels of recognition: Early Career Mollusk Professional, Associate Mollusk Professional, Certified Mollusk Professional, and Mollusk Professional Emeritus with each designation targeting different levels of skill and involvement in malacology as well as career stage.

The committee oversees the Program through processing of new and renewing applicants and routine audit of competencies and skills for certification levels. This program will be fully implemented at the 2025 symposium. The program is currently housed on a shared Google Drive (under fmcs.pdcomm@gmail.com), with the Co-Chairs curating content. Members of the committee utilize this drive to access applications and process certification scoring recommendations.

Committee member responsibilities: attend meetings, be active, contribute to the actions and activities needed for routine and periodic support and maintenance of the Certification program. Procedures of the Professional Development Committee are expected to change as the Certification Program it evolves.

Professional Development Committee (Committee) and Review Board (Board) structure and duties:

1. Structure

- a. The Committee will consist of at least a Committee chair and co-chair and Review Board. Other FMCS members in good standing can also participate on the Committee.

- b. An election for Committee chair and co-chair will be held every 2 years at the Symposium, with term limits of 3 consecutive terms. A term is 2 years. Chairs and Co-Chairs will alternate terms to provide continuity Committee operations.
- c. The Review Board will be selected by the Committee.
- d. The Review Board will consist of at least four appointed FMCS members with at least 10 years' experience in the field of Malacology. The review board members should consist of a combination of representation from the private sector, non-profit organizations, academia, tribal entities, state government, and federal government. Geographic representation of individuals is also considered.
- e. Appointments to the Review Board require approval of the FMCS board of directors.
- f. To ensure continuity of the Review Board, half of the members will serve a 4-year term and half a 2-year term. When the initial 2-year term is complete (2027), members may volunteer to serve an additional 4-year term.
- g. After the initial terms, if Review Board members wish to continue, the Committee will review these review board members and if appropriate, recommend them to the FMCS board for a vote at the bi-annual symposium board meeting.
- h. If any point during their 4-year term, a Review Board member decides they can no longer serve, the Committee will recommend a replacement to serve the remainder of the open term. New appointments will require approval of the FMCS Board of Directors.
- i. If a Review Board member is unresponsive to repeated requests, ignores deadlines, or fails to review submissions, the Review Board may vote by majority to remove the unresponsive member. Removal must be initiated by fellow Review Board members. The Committee will recommend a replacement to serve the remainder of the open term. New appointments will require approval of the FMCS Board of Directors.

2. Duties

- a. Review Board members will be responsible for reviewing applications for Professional Certification as outlined in "Guide for Reviewers" and "Professional Development Certification Procedures" on an annual basis.
- b. Applications received by December 15 each year will be reviewed by February 15 of the following year, with certifications issued by March 1.
- c. The Review Board will meet in February each year to discuss any problems with applications and/or the application process.
- d. Recommendations for any changes to the application process will be submitted to the Committee for revisions. Any revisions must be approved by the FMCS board of directors.

Guidelines and Procedures for Professional Certification are in Appendix D.

Guide for reviewers is provided in Appendix E.

5.1.9 Publications

The development and distribution of scientific, technical, and non-technical information among Society members, natural resource managers, policy and other decision makers, and to the public at-large are vital functions of this committee. Specifically, the Publications Committee has oversight of the Society's journal (Freshwater Mollusk Biology and Conservation) and the newsletter (*Ellipsaria*).

Freshwater Mollusk Biology and Conservation, the Society Journal

Walkerana, initially founded in 1980 and edited by Dr. John Burch, was published by the University of Michigan until it transitioned to FMCS in 2011 and was published as *Walkerana – The Journal of the*

Freshwater Mollusk Conservation Society from 2012 through 2014. The Society's online-only journal began publishing under the name *Freshwater Mollusk Biology and Conservation* (FMBC) in 2015 through an expansion of journal services and collaboration with Allen Press, now Knowledge Works Global, Ltd. FMBC publishes original papers that advance the knowledge of freshwater mollusk biology and enhance the conservation of these animals. Issues are published two times per year, in March and September. The journal is open-access, and anyone may submit a manuscript; however, all non-member authors are encouraged to join the Society to help defer the costs of publication. Articles addressing all aspects of the biology of freshwater mollusks are welcomed, including but not limited to, ecology, physiology, toxicology, reproduction, propagation, conservation, and restoration. Status and distributional surveys are acceptable if they have heuristic value and are used to compare previous studies and results. The Instructions to Authors, published current and back issues of the journal, and list of editorial board members and policies are maintained on the Society's Publication webpages.

Editorial Board

The editorial board is composed of an Editor in Chief (EIC), a Managing Editor (ME), and an unspecified number of Associate Editors (AE). As of this writing (May 9, 2024), there are 6 AEs. The number of AEs shall be based on the number necessary to ensure a reasonable workload for each AE and a reasonable turn-around time for submissions. The composition of the AEs shall represent the broad disciplinary areas covered by the scope of the journal and the diversity of the membership including 1) professional affiliation (e.g., academia, government, non-government, and other private organizations), and 2) geographic and demographic considerations. Bearing in mind the previous considerations, the EIC and ME shall identify, invite, and select AEs.

The EIC and ME will work together closely, but the specific duties assigned to each shall be determined by discussion between the EIC and ME. In general, the EIC is expected to be the final arbiter in 1) matters of scientific merit and content and style for all submissions; 2) setting the tone for the philosophy, scope, and production values of the journal; and 3) disseminating, promoting, and advancing the journal. However, all decisions should be made with input from the ME and AEs. In general, the ME is expected to administer day-to-day operations of the journal, which may include initial handling and assignment of submissions; managing deadlines for reviews, revisions, and production; coordinating review and correction of proofs; manuscript transmittal and other routine communication with Allen Press; and posting of Early View papers and final issues to the FMCS website. Fewer or additional duties can be assigned to ME based on discussion with the EIC.

The term length of service for the EIC, ME, and AEs is not specified. Any person wishing to resign a position on the editorial board is asked to provide two months' notice. A person resigning their position is asked to see to completion any submissions or other tasks in progress, but no new submissions will be assigned to them after announcement of their resignation.

Handling of submissions and the review process

Initial submissions

Incoming submissions are assessed initially by the ME or EIC for subject matter appropriateness, general standards of scientific rigor and merit, and adherence to author instructions. Submissions not meeting those standards are returned to the author along with an explanation of the reasons. Submissions may be reconsidered after deficiencies are corrected, but the ME and EIC have discretion to reject submissions without review if they judge the deficiencies cannot be corrected.

Submissions meeting the standards of initial review will be assigned by the ME or EIC to an AE for peer review. Those assignments are made based on subject matter expertise and current workload. AEs (or the EIC) should not be assigned, nor should they accept, a submission with which they have a conflict of interest, such as being a co-author. If the EIC has a conflict of interest, she/he should enlist a guest EIC to handle the submission. Using the provision for this in Editorial Manager (the online submission system), the ME or EIC shall blind an editor with a conflict of interest to all correspondence regarding the submission.

Once a submission is assigned to an AE, that AE will make their own initial assessment of the submission. At that time, the AE has discretion to reject without review a submission that does not meet subject matter appropriateness, general standards of scientific rigor and merit, or other standards of the journal, and for which those deficiencies cannot be corrected. If the AE judges that the submission meets those standards, the AE will identify and invite reviewers. The AE shall attempt to find two reviewers for each submission. If obtaining two reviews would unduly delay handling of a submission (e.g., a non-responsive reviewer), it is at the AE's discretion to proceed with a single review, but such cases should be in the minority. The AE may solicit a third review when necessary and if this does not unduly delay handling of a submission.

AEs should invite reviewers based primarily on subject matter expertise. Authors are required to suggest reviewers for each submission. It is at the AE's discretion whether to invite any of those suggested reviewers, but it is best practice to invite only one and to invite another reviewer chosen independently by the AE. Editorial Manager allows AEs to see the review history of potential reviewers. To avoid reviewer fatigue, AEs generally should avoid inviting reviewers who have reviewed another submission for FMBC within the last 6 months. It is the AEs responsibility to ensure timely reviews and to communicate with reviewers who are tardy.

After receiving and considering all reviews, the AE shall make their own detailed assessment of the submission. Based on that assessment, the AE shall recommend a decision as either: accept, accept pending minor revision, accept pending major revision, resubmit, or reject. The AE is expected to consider the reviewers' comments and recommendations about acceptance, but they are not bound by them, and the decision about acceptance is entirely at the discretion of the AE. *The AE should not reveal to authors the reviewers' recommendations about acceptance.* In addition to a recommended decision, the AE should provide to the authors detailed and specific comments about improving a submission, particularly if the AE identifies issues not identified by the reviewers or if the AE's decision departs widely from the recommendations of the reviewers. If an initial submission (as opposed to a revised submission) is acceptable or acceptable with minor revision, the AE should at that time edit the submission for style (clarity, conciseness, grammatical correctness), in addition to providing substantive comments. Edits should be made in Tracked Changes to the Word document, not the pdf, so that authors may simply accept the changes. It is always more efficient and expedient to make style edits directly, rather than suggesting changes or providing guidance.

Once the AE has made their decision and provided comments and edits, they shall submit a draft decision to the EIC via Editorial Manager. *The AE should not communicate this decision directly to the authors.*

After receiving a draft decision from the AE, the EIC shall make their own detailed assessment of the submission and make a final decision about acceptance. The EIC is not bound by the AE's recommended decision. However, if the decisions of the EIC and AE differ, the EIC shall discuss the matter with the AE and attempt to reach consensus. If consensus cannot be reached, the final decision is at the discretion of the EIC. In addition to providing a decision, the EIC should provide to the authors detailed and specific

comments for improving the submission if they identify issues not identified by the reviewers or AE. If an initial submission is acceptable or acceptable with minor revision, the EIC should at that time edit the submission to correct any style issues not corrected by the AE. Once the EIC has decided and provided comments and edits, they shall notify the author of the decision via Editorial Manager. It is a courtesy to the reviewers to also notify them of the decision, either by blind-copying them on the decision letter or by forwarding the decision letter in a separate email.

After receiving a decision of “accept pending revision” (major or minor), authors shall have three months from the date of the decision letter to return a revised submission. It is the responsibility of the ME and EIC to ensure that deadlines for submission of revisions are met. Authors may request in writing an extension of up to three months beyond the initial deadline. Approval of these requests is at the discretion of the AE or EIC, but one extension should be granted in most cases, and additional extensions may be made. If a revision is not received in six months from the date of the initial decision letter and no request for extension is received from the author, the ME will contact the author and notify them that their submission will be withdrawn. At that time, it is at the discretion of the AE and EIC whether to grant an additional extension. All submissions for which a revision has not been received within one year will be withdrawn. Withdrawn submissions can be resubmitted at any time but must undergo a new round of review.

Manuscripts receiving a decision of “resubmit” must be submitted as a new submission and shall undergo a new round of review. A resubmitted manuscript shall be assigned to the AE who handled the initial submission except in extenuating circumstances. The AE may solicit reviews from the original reviewers or different reviewers.

Submissions receiving a decision of “reject” shall not be accepted for resubmission unless they are substantially different than the original submission. The AE shall determine whether a resubmission of a previously rejected manuscript warrants review.

Revised submissions

When a revision is received, the ME or EIC shall make an initial assessment of the submission, like the initial assessment. Revised submissions meeting initial standards shall be assigned to an AE. Revised submissions shall be assigned to the original AE unless extenuating circumstances prevent the AE from accepting the assignment.

It is at the discretion of the AE whether to solicit a second round of reviews of a revised submission. However, to avoid reviewer fatigue, a second round of reviews should be avoided except when necessary. After receiving a revised submission, the AE shall make a detailed assessment of the submission, paying particular attention to how well the authors have addressed comments by the reviewers, AE, and EIC on the initial submission. Based on that assessment, the AE should recommend a decision, and, if additional revision is needed, provide detailed and specific comments for addressing remaining issues. The AE may reject a revised submission that has not adequately addressed reviewer or editor comments and if the AE determines those deficiencies cannot be corrected; however, such cases should be uncommon. If the AE recommends acceptance, they should undertake comprehensive editing for style, including checking the format of Literature Cited and cross-checking citation entries against in-text citations.

After deciding and providing additional comments, as needed, the AE should submit a draft decision in Editorial Manager, including the edited Word document as an attachment if applicable.

After receiving a draft decision from the AE, the EIC shall make their own detailed assessment of the revised submission and make a final decision about acceptance, as described for initial submissions. The EIC will then transmit the decision to the author. It is not necessary to inform reviewers of the decision on the revised submission unless a second round of reviews was requested.

Final acceptance and copyediting

When a submission is accepted, the EIC should undertake a final, thorough editing of the submission for style, grammar, etc. The copy editor will correct these issues, but FMCS is charged by the hour for copy editing, and it saves the Society money if manuscripts sent to the copy editor are as clean as possible. After a submission is accepted, authors no longer can access it in Editorial Manager. Any last questions about the submission or revisions that require the author's input or approval should be communicated directly to the author via email. Final editing or revision to address matters of style or grammar is at the discretion of the EIC and does not require approval from the author unless there is a potential for changing meaning or introducing inaccuracies.

When the EIC has produced a final manuscript, it should be sent for copy editing. As of this writing, our copy editor is Cecilia Franz (twoheronsconsulting@gmail.com). The copy editor will return the edited manuscript with all comments and changes in Tracked Changes. When the EIC receives the edited manuscript, they should reconcile the changes recommended by the copy editor. It is at the EIC's discretion whether to accept changes recommended by the copy editor.

Transmittal of accepted submissions and issue production

After the EIC has reconciled the copy editor's recommendations, the EIC or ME should upload the final manuscript version to Editorial Manager, including all final figure files, and replacing older files. Then, the EIC or ME should transmit all current, required files to Allen Press. Transmittal to Allen Press initiates preparation of galley proofs.

When the final files are uploaded, Editorial Manager will produce a final pdf, including the manuscript, tables, figures, and appendices. The EIC or ME should add a watermark to each page saying: "Uncorrected proof". The watermarked pdf should then be sent to the FMCS webmaster for posting on the Early View section of the FMBC webpage. After posting, the EM or EIC should notify the author of availability of their paper on the website.

Galley proofs typically are received two to three weeks after transmittal to Allen Press. The EIC and ME will receive the proofs. Upon receipt of proofs, the EIC or ME should review the proofs, mark any errors, and send the proofs to the author for their review as soon as possible. Along with the proof, attach the Allen Press Guide to PDF Annotation. Authors should be asked to return proofs within three days. Upon receipt of corrected proofs from the author, the EIC or ME should reconcile any last issues with the proofs and return them to Allen Press. Allen Press will return corrected proofs in two to three weeks. The EIC or ME should review the proofs, mark any remaining corrections, and return them to Allen Press. If no further corrections are needed, return the proofs to Allen Press and indicate that the proofs are approved. It is not necessary to send revised proofs to the author unless substantial changes are required.

Once final proofs are approved, they should be sent to the FMCS webmaster for uploading of the Early View page, replacing the pdf version of the manuscript.

Allen Press sends out each year a schedule for issue production, including deadlines for receipt of final files. Meeting these deadlines ensures timely issue production, but they are not set in stone. For example,

the issue usually can be produced on time (i.e., by March 31 for issue 1 and September 30 for issue 2) if all approved article proofs are returned to Allen Press by late February and late August, respectively.

After all proofs for an issue are approved, the ME or EIC should prepare a table of contents for the upcoming issue and submit it to Allen Press, along with back matter. The table of contents need not be paginated; page numbers will be added by Allen Press. After receipt of the table of contents, Allen Press will prepare a proof of the cover and back matter and send it to the EIC and ME. The EIC and ME should examine the proof and return it to the press either with needed revisions or with a note indicating that the proof is accepted.

After the cover proof is accepted, Allen Press will send to the EIC and ME all final files, including cover files and all article files. These files should be sent to the FMCS webmaster for posting as the final issue. At that time, all Early View articles should be removed.

After posting to the FMCS website, the responsibilities of the EIC and ME are complete for the issue. Allen Press transmits the issue to BioOne and any other indexing services.

Ellipsaria

Ellipsaria is the newsletter of the FMCS. Its primary purpose is to keep members informed about Society activities by publishing minutes of Society Board Meetings, requests and reports from the various committees, and announcements and other information about Society functions. *Ellipsaria* also includes meeting notices of other pertinent societies, announcements and summaries from pertinent regional meetings, new publication notices, and informal research articles or comments on current issues affecting freshwater mollusks. This last purpose of the newsletter evolved from the Triannual Unionid Report, an informal newsletter distributed for several years prior to the formation of the FMCS.

In its present on-line only form, *Ellipsaria* is posted on the FMCS web site quarterly, by the first of March, June, September, and December. Contributions may be submitted by e-mail to the editor at Ellipsaria@gmail.com at any time but are due by the 15th of the month before each issue is posted (i.e., February 15, May 15, etc.). Contributors should expect to receive an e-mail acknowledgement of their submission from the editor.

When each contribution for an issue of *Ellipsaria* is received, it is logged into an issue-specific checklist and placed in an e-mail folder dedicated to that issue. At present, each issue of *Ellipsaria* is assembled in a Word document set up in two sections: basically, Society items and announcements, and contributed articles and last pages. Consistent formats for the newsletter masthead, headers and footers, page margins, and section headings are maintained by inserting all material into a standard template. The text of each contribution is converted into the newsletter text font [presently Bookman Old Style] and pasted into its likely position in the developing issue. Tables are adjusted to fit the font, font size, style, and page constraints of the newsletter. Graphics typically are evaluated in PhotoShop, and then pasted into the Word file as Windows Metafile images. When all contributions have been entered into the draft issue, the entire document is spell-checked, and then adjustments in article order and line spacing are made to minimize page break disruptions. The final version of the Word document is then converted into a PDF file that, at present, is sent by e-mail to the Society webmaster for posting on the FMCS website.

The present editor of *Ellipsaria* has chosen to provide two additional services to members of the Society. To help members remember the publication schedule for the newsletter, he typically drafts -- and asks the Society Secretary to distribute -- a reminder that all input for the upcoming issue will be due in 30 days, and an announcement when the latest issue has been posted on the website. The present editor

also has developed an Author Index for all contributed articles published in *Ellipsaria* that he updates annually. The most up-to-date version of this Author Index is posted on the Society website adjacent to the issues the newsletter.

5.1.10 Symposia and Workshops

The Symposium Committee is responsible for the planning and execution of all workshops and symposia, including selection of the symposia/workshop location, local hosts, and topics to ensure that a smooth transition of files, memory and mode of operation, and lessons learned are transmitted. Member terms expire after the next subsequent Workshop or Symposium and as new officers are elected.

Meanwhile, while the local hosts (i.e., chair(s) and committees; aka “Organizers”) enjoy substantial freedom in the organization and running of the symposia/workshop, however, the organizers work closely and in coordination with the President-Elect (for overall activities and guidance) and the Treasurer (for budget, income, and expenses). Furthermore, preliminary budgets (income, expenses, and registration) and symposia/workshop schedules (i.e., before venue contract signing and registration opening) are presented to the Executive Committee through the President-Elect for approval, and the Treasurer executes any contracts and credit authorizations.

Organizers should note that as of 2023, ExCom has decided to use and pre-purchase Whova as our event management platform. Whova provides registration, agenda, event information, speaker and attendee features, in-person and remote access features, and event promotion and social networking features.

The Treasurer has developed a budget template for both Symposia and Workshops for local committees to help build a budget. We can also share previous workshop or symposia budgets to help guide the budget building process.

The Guidance documents for the planning and execution of symposia and workshops are found in Appendices A and B, respectively. Appendix C is a “symposia/workshop host responsibilities acknowledgment” form to be filled out and signed by the local host chair(s), the FMCS President-Elect, and the FMCS Treasurer at the beginning of the process after reviewing and discussing the guidance documents.

Symposia Committee Composition

Chair: President-Elect

Members:

- Treasurer- Ensure the Treasurer is involved at the very beginning; they have budget/spending information from previous events
- Chair/Co-Chair of Immediate Past Workshop
- Chair/Co-Chair of Immediate Past Symposium
- Chair/Co-Chair of Upcoming Workshop
- Chair/Co-Chair of Upcoming Symposium

5.2 Technical committees

Technical committees as of 2025 are as follows

Conservation and Restoration
Environmental Quality and Advocacy
Field Studies and Ecosystems

Genetics

Mollusk Status and Distribution

5.2.1 Conservation and Restoration

This committee combines the previous Propagation committee and Mollusk valuation ad hoc committee. It also includes Habitat Restoration.

The Conservation and Restoration Committee develops recommendations for best science and management practices for the various mollusk conservation strategies, including propagation and reintroduction projects.

5.2.2 Environmental Quality and Advocacy (previously environmental quality and affairs)

The Environmental Quality and Advocacy Committee identifies and reviews current environmental issues and develops official comments and position statements for the Society. Comments have ranged from developing support letters for conservation initiatives to review of Environmental Impact Statements. It typically draws from the expertise of Society members, as well as like-minded members from other societies. The Co-Chairs of the committee maintain a database of committee member areas of expertise to facilitate this process. The committee reviews issues brought forth by members of the Society, and with approval of the President, drafts letters for the Presidents' (or their designee) signature. Steps to follow in the process include:

- Member(s) of the committee review the issue and discuss options for responding with the President or Board of Directors (as necessary).
- A draft letter is provided to the President or Board of Directors for review.
- The final letter is provided to the President, who signs the letter and forwards an electronic copy to the committee.
- The committee forwards the letter to the proper entity.
- An electronic copy of the letter is provided to the website developer for inclusion on the website and to the Society Secretary to be retained as part of the Society's official records.

The past President serves as the FMCS representative to the Consortium of Aquatic Science Societies (CASS).

5.2.3 Field Studies and Ecosystems

This committee combines the previous Ecosystem Services ad hoc committee and the Guidelines and Techniques committee, which are both currently subcommittees. The Field Studies and Ecosystem Services committee established the following Statement of Purpose following the inception of the committee at the 2023 FMCS Symposium:

Statement of Purpose

The Field Studies and Ecosystem Services Committee exists to promote the use of best practices in study design and data collection, and the quantification of ecosystem services in freshwater mollusk research. This includes increasing the standardization of data collection, storage, and sharing across the FMCS membership. It also includes recommending standardized terminology and methods and identifying research gaps and future directions.

The scope of the Field Studies and Ecosystem Services committee encompasses and integrates the previously established goals of both Ecosystem Services and Guidelines and Techniques, which can be found below:

Ecosystem Services

The Ecosystem Services Committee was formed to review, disseminate and translate information regarding the various benefits that freshwater mollusks provide to natural ecosystems and people. Some of these benefits are their utility as ecological indicators, maintenance of water quality via biofiltration, biotransformation and biodeposition processes that can enrich aquatic food webs, “ecosystem engineers” that boost the complexity and stabilize bottom habitats, and potential future medical applications. Public awareness and support for freshwater mollusk conservation and restoration can be strengthened by information on the important role that they usually play in sustaining clean water and healthy habitats when the mollusks themselves are healthy and abundant. Ecosystems service studies have been limited. Outcomes can be difficult to convey to the public, often saddled with complex jargon. Therefore, the goals of the committee are to:

- Develop outreach products for the Society to share that translate ecosystem benefits into understandable terms and graphics.
- Inventory and track scientific information regarding ecosystem service assessments and studies, so that outreach materials are substantiated.
- Identify high priority actions and needs related to ecosystem service research or valuation.

Guidelines and Techniques

The Guidelines and Techniques Committee was formed to develop consistent best practices for freshwater mollusks because of a lack of standard practices for surveying, handling, and vouchering species among different organizations, agencies and individuals. The goal of the committee is to review and disseminate information regarding guidelines and techniques that minimize harm to freshwater mollusks.

5.2.4 Genetics

The main duty of the genetic committee is educating the Society on the value and uses of genetic techniques for the conservation of freshwater mollusks. The genetics committee also has a role in disseminating genetic information to the members of the Society relating to systematics and population genetics and genomics. The committee also serves as a source of expertise and guidance on genetics issues for academics, government and non-government organizations, and the Society in general. The genetics committee has hosted and co-hosted several FMCS workshops, including the Conservation Genetics workshop at NCTC in 2016 and the Species Status Assessment in San Antonio, TX in 2019 and welcomes the opportunity to collaborate with other FMCS committees to better serve our Society.

5.2.5 Mollusk Status and Distribution

This committee combines the previous gastropod and mussel atlas committees, mussel app committee, and Scientific and common names committees. These are all currently subcommittees.

Mussel atlas subcommittee

The duties of the Mussel Distribution and Status committee are to promote:

- A periodic review of the conservation status of North American freshwater mussels.
- A database of current distributional information/changes for mussels.
- Promote and assist regional fauna recovery efforts.

Gastropod atlas subcommittee

The goal of the Gastropod Distribution and Status Committee is to disseminate information about the conservation status of aquatic gastropods. Information is gathered from experts and then distributed through committee publications and the FMCS website. The duties of the Gastropod Distribution and Status committee are to promote:

- A periodic review of the conservation status of North American freshwater gastropods.
- A database of current distributional information/changes for gastropods.
- Promote and assist regional fauna recovery efforts.

Common and Scientific Names

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.

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, subcommittee appointments require approval of 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 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, 2023, and 2025 biennial symposium and additional changes anticipated at future Symposia. Formal publication of the 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-like 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. Because 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 primarily 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, parens errors or spelling changes due to gender agreement error are examples of changes that do not require a formal petition.

- a. For a scientific or common 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.

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5.3 Ad-hoc Committees

From time to time, the President can appoint ad-hoc committees to undertake a specific task or project. Those committees serve at the will of the President and can be dissolved when the tasks are accomplished, or the work of the committee has otherwise ceased.

Appendix A – Guidance for Organizing and Hosting FMCS Symposia**LOGISTICS (18 months prior)**

1. Read the Symposia/Workshop and Appendix A or B, and C documents, meet with the President-Elect and Treasurer, and sign the Local Host Responsibilities Acknowledgement Form
2. Establish the core committee- President-Elect and Treasurer must be included at the start
3. Determine date of meeting based on fewest conflicts with other professional Society meetings (e.g., Freshwater Science).
4. Determine meeting location based on suitable local facilities and competitive bids. Request written estimates of costs from several prospective meeting facilities which includes an itemized breakdown of charges for rooms, food (meals, breaks), and audiovisual equipment. Compare prices to those of previous meetings and consult with the FMCS Executive Committee (EXCOM), if necessary.
5. Establish a program committee.
6. Establish an auction/sponsorship committee.
7. Establish a field trip committee.
8. Contact keynote speakers, if appropriate.
9. Determine whether the symposium will have a remote attendance component and accompanying remote moderation staffing (independent of traditional session moderators).
10. Develop a preliminary budget using the FMCS Symposia/Workshop budget template.

Facility Considerations

1. Ease of accessibility from major routes and modes of travel.
2. Size of the meeting facility--meeting room size and layout, adjoining lodging for approximately 300 to 400 people.
3. Does the meeting facility offer government rates for lodging?
4. Does the meeting facility have maps, restaurant guides etc.?
5. Is the facility handicap accessible?
6. What are room rental costs? Are room rental costs waived if food service is purchased from the facility? Does the room cost include necessary audiovisual equipment (e.g., lighted podium with microphone, computers, pointers)?
7. Location and layout of space for morning and afternoon breaks.
8. Location of the registration desks. Is there enough adjoining space for job boards, welcome signs, sponsor signs?

Meeting Room Considerations

1. What is the primary meeting room layout? Will the speakers' podium, and microphone be on a riser or on the floor? What is the proximity of the podium to the projection screen? Is the projection screen large enough and hung from the ceiling (i.e., can the projected images be easily seen from all areas of the room)? If there are windows in the room, can they be covered to prevent light interference with visuals?
2. Specify room set-up requirements. Classroom style has been the preferred set-up.
3. Discuss access to and from the meeting room. Ensure that access points are not disruptive of speakers.
4. Discuss control of room lighting for raising and lowering of lights between speakers.

5. Does the facility provide back-up audiovisual equipment?
6. Is the room temperature controlled individually by thermostat?

LOGISTICS (12 months prior)

1. Finalize decision on meeting location, facilities, and dates.
2. Finalize venue expenses through a contract(s) or quotes of services for meeting location, hotel room rates, catering, Audio-visual/IT needs, etc,
3. Finalize a preliminary budget, including registration fees, using the FMCS budget template.
4. Prepare a progress report outlining the meeting theme, potential keynote speakers, estimated budget using the FMCS budget template, meeting schedule, and timelines for abstract submittal and registration and present this information to the FMCS EXCOM (work closely with EXCOM leaders on when the next EXCOM meeting is scheduled).
5. Develop meeting theme.
6. Develop ideas and list of potential contacts for short course, if appropriate.
7. Place a “save the date” announcement in *Ellipsaria*.
8. Finalize registration rates after ExCom budget approval.
9. Prepare an announcement for the FMCS workshop, if appropriate.

LOGISTICS (10 months prior)

1. Send out the first call for papers to the Unio listserver, on social media, and in *Ellipsaria* (coordinate with *Ellipsaria* editor closely on lead time needed).
2. Complete organization of all committees. Extend planning meeting invitations to the FMCS Secretary and an Outreach Committee representative to facilitate dissemination of upcoming announcements.
3. Finalize conference theme and potential keynote speakers.
4. Finalize decision on short course title and instructors, if appropriate.
5. Communicate with awards committee regarding their needs for room space to tally student award winners.

LOGISTICS (6 months prior)

1. Finalize registration forms
2. Set up website for registration and open it for early registration.
3. Finalize decisions on menu and schedule with the meeting facility.
4. Send out a second call for papers to the Unio listserver and to *Ellipsaria* (coordinate with *Ellipsaria* editor closely on lead time needed).

LOGISTICS (3 months prior)

1. Abstracts should be due to program committee.
2. Review abstracts after abstract submittal deadline.
3. Notify authors of receipt of abstract by email.
4. Provide the chair(s) of the awards committee with a list (name and email) of students who will be making platform and poster presentations at the meeting so that judging criteria can be mailed to each participant.
5. Finalize the program/agenda. Presentations should be organized by appropriate subject (e.g.,

conservation, culture, toxicology). The program should be developed based on the total number of abstracts received, subject areas covered, and the overall program schedule desired. It is important that the program committee schedule all student platform presentations and the poster presentations on the first 2 days of the conference to allow the Awards Committee enough time for tabulation of results.

6. Make contacts and selections for session moderators based on the expertise of the person as related to the session topic, their ability to be authoritative and keep the meeting on schedule and facilitating the attendance of people who otherwise may not be able to attend the meeting.
7. Prepare a detailed map with directions to the meeting site.

LOGISTICS (2 months prior)

1. Contact the meeting facility and verify details for the conference (e.g., meeting rooms, audiovisual equipment, food needs and schedule, providing appropriate materials--office dividers or bulletin boards--for the poster displays, and boards for job listings and photos from the previous meeting).
2. Finalize needs for poster boards for poster session(s).
3. Send out reminder via Unio listserver, social media, and the FMCS Secretary that the deadline for early registration is about to close.
4. Close early registration, open regular registration.

LOGISTICS (1 month prior)

1. Open the Whova EMS Agenda to the public.
2. Email letters to all platform presenters and session chairs reminding them of their presentation time, session, guidelines, and duties.
3. Finalize all audiovisual needs and identify the audiovisual person for each session.
4. Contact the meeting facility and verify details for the conference (e.g., meeting rooms, audiovisual equipment, food needs and schedule, providing appropriate materials (office dividers or bulletin boards) for the poster displays).
5. Finalize insurance needs with the convention center.
6. Prepare the final draft of the meeting program and proceedings and submit for duplication.
7. Inform the local press about the upcoming meeting if desired.
8. Contact the local chamber of commerce or visitor and convention center to see if they will provide name tags for meeting participants free of charge and to gather general information on restaurants etc. for meeting participants.
9. As registration forms and payments are processed, sort alphabetically and prepare receipts for each person.
10. Send out reminder via Unio listserver, social media, or the FMCS Secretary that the deadline to reserve a hotel room at the discounted rate is quickly approaching.

LOGISTICS (3 weeks prior)

1. Place food order with hotel/convention center.
2. Prepare name tags for participants (if not provided by the local convention center) or provide list of participants to local convention center for name tag preparation.
3. Collate meeting proceedings, participant receipts, and other registration materials for ease at registration table. Communicate with awards committee on getting judging forms into judges'

registration packets.

4. Purchase or gather needed office supplies (e.g., push pins/Velcro for posters and signs).
5. Prepare numbered cards for identification of poster locations.
6. Get money for registration cash box, coordinate with Treasurer.
7. Hold meeting with registration and audiovisual volunteers to discuss procedures and for troubleshooting lights and projectors.
8. Prepare all meeting signs, sponsor banners etc.
9. Pack all needed supplies in boxes for transport (e.g., programs, guides, forms, name tags, registration supplies, meeting signs, banners, audiovisual equipment and pointers (if needed), and camera).

LOGISTICS (2 weeks prior)

1. Meet with local facility coordinator/event planner to review the items needed for the meeting and to provide a final count of pre-registered attendance for meals and breaks (based on the lead time needed by the facility).
2. Regular registration closes.
3. Finalize field trip transportation and lunches.
4. Sign event resume, and final balance for credit card authorization guaranteeing payment.

LOGISTICS (3 days prior)

1. Provide the convention center a final number for meals and provide them a total head count for meeting spaces.

LOGISTICS (1st day of meeting)

1. Set up registration desk with programs, name tags, and other materials (box to return judging forms). Work with the Treasurer to set up credit card machine, etc.
2. Set up meeting signs.
3. Greet participants with a warm welcome and respond professionally to all requests.
4. Get all speakers to provide their presentation for uploading to the computers at least the night before their talks, if possible.

LOGISTICS (last day of meeting)

1. Remove registration materials.
2. Transfer all funds (money from registration, t-shirt sales, etc.) with corresponding accounting materials to the Treasurer.

LOGISTICS (1-2 weeks after the meeting)

1. Provide copies of bills from the meeting facility and others to the Treasurer for prompt payment.
2. Prepare thank you letters for key-note speakers, if appropriate.
3. Prepare an article summarizing the meeting for *Ellipsaria*.
4. Provide hard copies and electronic files of all program documents, letters, etc. to the Program Chairs of the next FMCS symposium.

Appendix B – Guidance for Organizing and Hosting FMCS Workshops**LOGISTICS (12 months prior)**

1. Read this document, meet with the President-Elect and Treasurer, and sign the Local Host Responsibilities Acknowledgement Form.
2. Establish the core committee- President-Elect and Treasurer must be included at the start
3. Determine date of meeting based on fewest conflicts with other professional Society meetings or popular holidays.
4. Determine meeting location based on suitable local facilities and competitive bids. Request written estimates of costs from several prospective meeting facilities which includes an itemized breakdown of charges for rooms, food (meals, breaks), parking, internet access, shuttle service from/to nearby airport, and audiovisual equipment. Compare prices to those of previous workshops and consult with the FMCS Executive Committee (EXCOM).
5. Establish a program committee.
6. Establish a poster session committee, if appropriate.
7. Establish a sponsorship committee.
8. Establish a field trip and/or special event committee.
9. Develop meeting theme.
10. Brainstorm potential keynote speakers.
11. Determine whether the workshop will have a remote attendance component and accompanying remote moderation staffing (independent of traditional session moderators).

Facility Considerations

1. Ease of accessibility from major routes and modes of travel.
2. Size of the meeting facility--meeting room size and layout, adjoining lodging for approximately 125 people.
3. Does the meeting facility offer government rates for lodging?
4. Does the meeting facility have maps, restaurant guides etc.?
5. Is the facility handicap accessible?
6. What are conference room rental costs? Are conference room rental costs waived if food service is purchased from the facility or a minimum number of booked hotel rooms? Does the room cost include necessary audiovisual equipment (e.g., lighted podium with microphone, computers, pointers)? Will they provide a complimentary business room?
7. Location and layout of space for morning and afternoon breaks (Note: these should not be in the same room as the speakers due to noise levels).
8. Location of the registration desks. Is there enough adjoining space for job boards, welcome signs, sponsor signs?

Meeting Room Considerations

1. What is the primary meeting room layout? Will the speakers' podium, and microphone be on a riser or on the floor? What is the proximity of the podium to the projection screen? Is the projection screen large enough and hung from the ceiling (i.e., can the projected images be easily seen from all areas of the room)? If there are windows in the room, can they be covered to prevent light interference with visuals?
2. Specify room set-up requirements. Classroom style has been the preferred set-up.

3. Discuss access to and from the meeting room. Ensure that access points are not disruptive of speakers.
4. Discuss control of room lighting for raising and lowering of lights between speakers.
5. Does the facility provide back-up audiovisual equipment?
6. Is the room temperature controlled individually by thermostat?
7. Will they provide easels for posters (if a poster session is planned) and are they an additional cost or will they allow you to bring them in.

LOGISTICS (10 months prior)

1. Finalize decision on meeting location, facilities, and dates.
2. Finalize venue expenses through a contract(s) or quotes of services for meeting location, hotel room rates, catering, Audio-visual/IT needs, etc.
3. Finalize a preliminary budget, including registration fees, using the FMCS budget template.
4. Prepare a progress report outlining the meeting theme, potential keynote speakers, estimated budget using the FMCS budget template, meeting schedule, and timelines for abstract submittal and registration and present this information to the FMCS EXCOM (work closely with EXCOM leaders on when the next EXCOM meeting is scheduled).
5. Prepare a progress report outlining the meeting theme, potential keynote speakers, estimated budget, meeting schedule, and timelines for abstract submittal and registration and present this information to the FMCS EXCOM (work closely with EXCOM leaders on when the next EXCOM meeting is scheduled).
6. Place a “save the date” announcement in *Ellipsaria*.
7. Contact and line up keynote speakers.

LOGISTICS (8 months prior)

1. If a contributed poster session is planned, send out the first call for papers to the Unio listserver, on social media, and in *Ellipsaria* (coordinate with *Ellipsaria* editor closely on lead time needed).
2. Coordinate with FMCS President to schedule a date, time, and location for the EXCOM meeting during the workshop.
3. Complete organization of all committees. Extend planning meeting invitation to the FMCS Secretary and an Outreach Committee representative so that they may facilitate dissemination of upcoming announcements.
4. Finalize potential keynote speakers.
5. Prepare a draft budget and draft registration forms. Think about if you are going to waive registration fees for invited speakers.

LOGISTICS (4-6 months prior)

1. Work with the Society website contact and FMCS Treasurer to set up website for registration and open it for early registration.
2. Work with the hotel to decide when they need final decisions on menu and schedule.
3. Send out a second call for papers to the Unio listserver, on social media, and in *Ellipsaria* (coordinate with *Ellipsaria* editor closely on lead time needed)

LOGISTICS (3 months prior)

1. Abstracts due.
2. Review abstracts after abstract submittal deadline.
3. Notify authors of receipt of abstract by email.
4. Finalize the workshop program/agenda, and post updates on the FMCS website
5. Finalize details on field trips and other events.
6. Prepare a detailed map with directions to the meeting site.

LOGISTICS (2 months prior)

1. Contact the meeting facility and verify details for the conference (e.g., meeting rooms, audiovisual equipment, food needs and schedule, providing appropriate materials--office dividers or bulletin boards--for the poster displays, and boards for job listings and photos from the previous meeting).
2. Finalize needs for poster boards for poster session(s).
3. Send out reminder via Unio listserver, social media, or the FMCS Secretary that the deadline for early registration is about to close.
4. Close early registration, open regular registration.

LOGISTICS (1 month prior) depending on events or activities may need to confirm bus reservations, etc.

1. Open Whova event management platform to the public.
2. Email letters to all platform presenters and session chairs reminding them of their presentation time, session, guidelines, and duties.
3. Finalize all audiovisual needs and identify the audiovisual person for each session.
4. Contact the meeting facility and verify details for the conference (e.g., meeting rooms, audiovisual equipment, food needs and schedule, providing appropriate materials (office dividers or bulletin boards) for the poster displays).
5. Finalize insurance needs with the meeting venue.
6. Prepare the final draft of the meeting program and proceedings and submit for publication.
7. Inform the local press about the upcoming meeting, if appropriate.
8. Contact the local chamber of commerce or visitor and convention center to see if they will provide name tags for meeting participants free of charge and to gather general information on restaurants etc. for meeting participants.
9. As registration forms and payments are processed, sort alphabetically and prepare receipts for each person.
10. Send out reminder via Unio listserver, social media, or the FMCS Secretary that the deadline to reserve a hotel room at the discounted rate is quickly approaching.

LOGISTICS (3 weeks prior)

1. Place a preliminary food order with hotel/convention center.
2. Prepare name tags for participants (if not provided by the local convention center) or provide list of participants to local convention center for name tag preparation. This may be set up to do automatically after regular registration closes.
3. Collate meeting proceedings, participant receipts, and other registration materials for ease at registration table.
4. Purchase or gather needed office supplies (e.g., push pins/Velcro for posters and signs).

5. Prepare numbered cards for identification of poster locations.
6. Get money for registration cash box, credit card machine, coordinate with Treasurer.
7. Hold meeting with registration desk and audiovisual personnel to discuss procedures for registration, and for troubleshooting lights and projectors.
8. Prepare all meeting signs, sponsor banners etc.
9. Pack all needed supplies in boxes for transport (e.g., programs, guides, forms, name tags, registration supplies, meeting signs, banners, audiovisual equipment and pointers (if needed), and camera).

LOGISTICS (2 weeks prior)

1. Meet with local facility coordinator/event planner to review the items needed for the meeting and to provide a final count of pre-registered attendance for meals and breaks (based on the lead time needed by the facility).
2. Regular registration closes, now you can produce the name tags.
3. Finalize field trip or event transportation and lunches.
4. Sign event resume, and final balance for credit card authorization guaranteeing payment.

LOGISTICS (3 days prior)

1. Provide the convention center a final number for meals and provide them a total head count for meeting spaces. Each venue may have its own deadlines for this.

LOGISTICS (1st day of meeting)

2. Set up registration desk with programs, name tags, and other materials (box to return judging forms).
3. Set up meeting signs.
4. Greet participants with a warm welcome and respond professionally to all requests.
5. Get all speakers to provide their presentation for uploading to the computers at least the night before their talks.

LOGISTICS (last day of meeting)

1. Remove registration materials.
2. Transfer all funds (money from registration, t-shirt sales, etc.) with corresponding accounting materials to the Treasurer.

LOGISTICS (1-2 weeks after the meeting)

1. Provide copies of bills from the meeting facility and others to the Treasurer for prompt payment.
2. Prepare thank you letters for keynote speakers.
3. Prepare an article summarizing the meeting for *Ellipsaria*.
4. Provide hard copies and electronic files of all program documents, letters, etc. to the Program Chairs of the next FMCS workshop.

Appendix C – Symposia/Workshop Hosting Responsibilities Acknowledgement

I/we _____ [Print full host(s) names]

Volunteering to host the _____ (Year) FMCS _____ (workshop/symposium) located in or near _____ (City, State/Province, Country), on or near the dates of _____

have read and generally understand the symposia/workshop guidelines. I/we also met with the FMCS President-Elect and FMCS Treasurer and went over the guidelines and expectations of hosting an FMCS symposia/workshop event. I/we understand that while the major organizational aspects of the meeting fall under the responsibilities of the host, FMCS is responsible for the financial underwriting of the meeting, providing registration and event management platforms, and having official business to conduct at the meeting. Thus, the FMCS Executive Committee, particularly the President-Elect and the Treasurer, are heavily involved in overall agenda items, decision-making as part of the local committee, and executors of contracts and financial transactions.

I/we acknowledge the above by signing this form:

Host Signature

Date

Co-host Signature

Date

FMCS President-Elect Signature

Date

FMCS Treasure Signature

Date

Appendix D– Mollusk Professional Certification Guidelines and Procedures

Disclaimer: Certification is not intended to certify an individual's ability nor is it an endorsement for an individual's specific knowledge, skills, or competency in any facet of mollusk science. An individual having met Certification requirements indicates that the person has achieved a minimum standard of experience and education as a freshwater aquatic mollusk biologist and/or professional.

Acknowledgements

The Mollusk Professional Certification has been a long endeavor and was initiated in 2016. The Professional Development Ad-hoc Committee was established at the 2017 Symposium in Cleveland, Ohio to evaluate the efficacy of implementing a professional certification program. As the restructuring of Society committees went into effect, the Professional Development Committee was established as a full-functioning committee. Committee members have dedicated many hours of information gathering, writing, evaluation, meetings, and collaborative engagement within and outside of FMCS. The Committee acknowledges the FMCS Executive Committee (past and current officers) for their continued support of the Mollusk Professional Certification; the Diversity, Equity, and Inclusion Committee for reviewing guidelines and procedures, as well as various FMCS Board members for their time to offer suggestions and provide content for inclusion into the current draft.

Mission Statement

The mission of the Freshwater Mollusk Conservation Society (FMCS) Mollusk Professional Certification Program (hereafter, Program) is to provide a minimum standard of experience and education for freshwater aquatic mollusk biologists and professionals.

The program was designed to recognize an individual's education, career, and involvement pertaining to the field of malacology. It is meant to provide a means by which mollusk professionals may be measured and awarded defined levels of certification, thereby promulgating their level of expertise. The program is also meant to encourage participation in the mollusk community and be a source for knowledgeable and proficient mollusk scientists, regardless of one's race, religion, culture, sex, or other factors.

Program Overview

The objectives of the FMCS are to advocate freshwater mollusk conservation, serve as a source and conduit of information on freshwater mollusks, promote science-based management of freshwater mollusks, and facilitate education about and awareness of freshwater mollusks and their importance to freshwater ecosystems. The Program's process will promote standards of competence of professionals to establish mutual confidence and respect, and to bring credit to their profession, employers, and community. It will also serve to provide guidance for emerging professionals in the field as to what training and professional opportunities they may wish to pursue in building their careers in the mollusk field.

The Mollusk Professional Certification (Certification) addresses Issue 8 and Strategy 1 of the National Strategy for the Conservation of Freshwater Mollusks: "Educate and train the conservation community and future generations about the importance of mollusks to ensure conservation efforts continue, Strategy 1 - Develop and recommend a list of key skills and competencies for mollusk conservation biologists and the supporting disciplines such as communication."

Certification is widely practiced by scientific, technology, engineering, and mathematic professions as one means of setting standards and guidelines for professional recognition. It serves to promote the

professional image and demonstrates achievements. Certification also is a means to establish credibility and accountability in the field of freshwater mollusk science. The specific objectives of certification are to:

- (1) provide governmental and nongovernmental agencies and organizations, private firms, courts, and the public with a definitive standard of experience and education for Mollusk Professionals,
- (2) foster broader recognition of Mollusk Professionals as uniquely educated and experienced, and
- (3) recognize FMCS as a leading Society in recognizing professionals in their field of study.

Applications for certification are to be evaluated by the FMCS Certification Committee. Below is a description of the evaluation process to determine the level of certification warranted. The point system described in this document is in place to provide impartial guidelines for applicants and the committee, while maintaining the flexibility required to encompass the range of qualified professionals involved in mollusk management, research, and education; however, the committee reserves the right to return *any* application deemed incomplete to the applicant with suggestions for improvement (with refund). Further, if an applicant believes their unique background does not conform well to our scoring system, but their experience warrants a higher level of certification than their score suggests, they are invited to discuss their application with the committee and include in their application written justification for a higher tier for the committee's consideration.

Certification Description

Specific information regarding Education/School, Professional Qualifying Experience, and Professional Performance mentioned in the tier structures are discussed in subsequent sections. There are four levels of certification. They are:

- Early Career Mollusk Professional (ECMP) – 10 to 40 points
The ECMP level of certification is for individuals who have *not yet accrued 5 years of Professional Qualifying Experience*. The ECMP is intended for individuals who are either in school or early in their career, but this certification level may also capture individuals who are non-degreed or hold a non-relevant degree but have accrued the necessary number of points through Professional Performance but have not yet met the 5-year minimum of Professional Qualifying Experience needed for the AMP.
- Associate Mollusk Professional (AMP) – 40 to 70 points
The AMP level of Certification is for individuals who have a *minimum of 5 years of Professional Qualifying Experience*, but not the total amount of points required for the CMP. The AMP is intended to represent mollusk professionals establishing themselves within the field of malacology but have not amassed sufficient professional development or involvement in the field of malacology. However, this certification level may also represent individuals who are non-degreed or do not hold a relevant degree but have accrued the necessary points through Professional Qualifying Experience and Professional Performance points.
- Certified Mollusk Professional (CMP) – 70+ points
The CMP level of Certification is for individuals who have both the *minimum 5 years of Professional Qualifying Experience*, as well as accrued 70+ overall points. The CMP is

intended for established professionals who have exhibited professional development and involvement within the field of malacology.

- Mollusk Professional – Emeritus (EMP)

The EMP level of certification is only for those individuals who have 25+ years' worth of Professional Qualifying Experience. No Professional Performance points are required if the applicant has met the Professional Qualifying Experience requirement. The EMP is intended to represent professionals who have dedicated their careers to mollusks.

The certification levels ECMP, AMP, and CMP require a combination of three categories: Education/School, Professional Qualifying Experience, and Professional Performance. Each of these categories will render a numeric score based on the applicant's merits within that category. The accumulated score from the three categories will be the applicant's final score and will place them either as not certified, or within the ECMP, AMP, or CMP certification level. The EMP level of certification level will be awarded only to applicants with 25+ years of Professional Qualifying Experience.

Although the same application form is used, applicants must designate the certification category for which they are applying. If uncertain, applicants are encouraged to discuss their application with a member of the Certification Review Team (see below for contact information) to identify which certification tier best fits the applicant's education and experience. Questions regarding the application process may also be directed to fmcs.pdcomm@gmail.com.

Certification may be retained for a maximum of five years, at which time the applicant may renew without change or upgrade their tier level, if warranted. The applicant must submit a new application with all the new qualifying education, experience, and professional performance; previously submitted coursework, experience, etc. does not need to be re-submitted, only new qualifying information that has been completed. EMP is a lifelong certification that does not require renewal. Refer to the Documentation Required for Application Process below for more details.

Guidelines for Mollusk Professional Certification

The Program identifies three overarching categories for applicants to demonstrate their skill and competency within fields of malacology. The three overarching categories are Education/School, Professional Qualifying Experience, and Professional Performance. Applicants will render a score for themselves as well as be scored by the Certification Review Team to determine the appropriate certification tier that best suits the applicant. Categories and applicable points are defined below.

Education/School

This category reflects the applicant's education that has resulted in an earned degree from a university or college. Points given based on an applicant's highest level of degree earned are based only on the highest degree earned and not a combination of degrees. For example, if an applicant has earned both a B.S. and an M.S., they would receive 15 points for the M.S., not 10 points for the B.S. plus 15 points for the M.S.

If the applicant is non-degreed or holds a non-relevant degree but wishes to claim relevant coursework to add points in this category. Completion of courses within biological sciences and related fields would grant the applicant **1 point** per completed course with a maximum of **5 points** for applicants within this category. see Appendix 1 for more details.

If an applicant has an earned, relevant degree and additional coursework post-degree that did not cumulate into an additional degree, they may earn credit for the post-degree completed coursework. These courses may add up to an additional **1 point** per completed course (with a maximum of **3 points**) on top of the points accrued from an earned degree. The maximum number of points for certification allowed from this category is **20 points**.

B.S./B.A. is the highest degree within a relevant discipline in the Natural Sciences or Resources = **10 points**.

Examples of applicable degrees include Biology, Forestry, Wildlife Management, Wildlife Biology, Environmental Science, Natural Resource, Ecology, Zoology, Aquatic Biology, Fisheries, and similar degrees.

M.S. is the highest degree within a relevant discipline in the Natural Sciences or Resources = **15 points**.

Examples of applicable degrees include Biology, Forestry, Wildlife Management, Wildlife Biology, Environmental Science, Natural Resource, Ecology, Zoology, Aquatic Biology, Fisheries, and similar degrees.

PhD is the highest degree within a relevant discipline in the Natural Sciences or Resources = **20 points**.

Examples of applicable degrees include Biology, Forestry, Wildlife Management, Wildlife Biology, Environmental Science, Natural Resource, Ecology, Zoology, Aquatic Biology, Fisheries, and similar degrees.

Professional Qualifying Experience

The types and examples of qualifying experience in the sub-categories below are based on the Professional Development Committees' research and networking with experts in a variety of malacological professions. Professional Qualifying Experience is where the applicant applies current knowledge in science within the context of mollusk management, research, and education, including administration within these categories. The malacology profession encompasses a variety of specializations; therefore, the categories provided below are not all-encompassing.

Qualifying experience is based on the number of years that the experience has occurred outside of Education/School. This experience may accrue over the applicant's lifetime. For a year to qualify as the appropriate experience, the relevant area needs to have been the responsibility of that applicant for >50% during the year. Each year of demonstrable qualifying experience will earn the applicant **2 points**. The maximum number of points for certification allowed from this category is **30 points**. It is possible an applicant can exceed the maximum allowable points. In this instance, the applicant will be assigned the maximum points; points over 30 do not count toward the total accumulated score.

- **Management**
 - Management involves the application of aquatic science principles (e.g., population dynamics, aquatic biology, limnology, habitat assessment and manipulation, human dimensions, systematics) toward the accomplishment of specific goals and objectives. The applicant should have responsible charge or supervision over the planning, implementation, and assessment of projects. Responsible charge or supervision is defined as the direction of work such that the successful completion of the work depends on decisions made by the professional with limited oversight, direction, or

approval of others. Qualifying experience requires that the applicant use independent judgment and action. Examples include performing mollusk habitat or species assessments for mollusks to inform regulatory documents (e.g., ESA or other state protective regulations, analyzing the impacts for mollusks, and work-related projects on mollusks). Qualifying experience related to management can also include disseminating funding for mollusk-related needs, managing museum collections of mollusks, writing, reviewing, or issuing scientific permits for mollusks, and mollusk planning documents facilitating mollusk recovery groups.

- Research
 - Research involves responsible charge or supervision of field, museum, or laboratory research projects associated with mollusks. Qualifying experience includes oversight responsibility for design, implementation, analysis, and report writing. Research projects should either be published in a recognized, peer-reviewed journal or used by others in the scientific community for the purpose of improved scientific methodology, scientific or regulatory decision-making, or resource management practices.
- Education
 - Qualifying experience in education involves college-level teaching of mollusk-specific courses and/or related responsibilities (e.g., preparation for classwork, grading assignments, field trips, etc.). Education also may involve the development and delivery of educational programs for dissemination to the public or stakeholders. **Attending education opportunities does not count within this subcategory of Professional Qualifying Experience. This type of education will be accounted for within the Professional Performance category*.*

Professional Performance

When applying for an initial certification and then every five (5) years thereafter (except EMP), each applicant must submit evidence of continued activity and development by accumulating a minimum number of Professional Performance points. The maximum number of points for certification allowed from this category is **50 points**.

After a level of certification has been achieved, **10 new Professional Performance points per five-year rotation must be accrued to retain the existing certification status**. If the additional Professional Performance points would push the applicant into the next higher certification tier, they may apply for an upgrade instead of a renewal.

Points and specific activities within the categories are listed below.

- Continuing Education (**Maximum 10 points**)
 - Applicable continuing education includes participation in short-courses or training programs sponsored or conducted by commercial organizations, professional organizations/agencies, employers, or universities. The name of the course, date(s) attended, and instructor must be submitted. These courses/trainings must result in a tangible product (e.g., certification, CEUs, or accredited college/university hours). **If the course results in accredited hours at a college or university, the applicant may choose whether to include the course within this Continuing Education sub-category or the category of Education/School. The course may not be counted for both**

- Only activities that have occurred within the previous 10 years of the applicant's submittal may be included within this sub-category.
- There are two levels of participation within this sub-category: attendance and contributing. Taking continuing education (attendance) in subjects directly related to mollusk science or management will earn the applicant **2 points per training/workshop**. Teaching and/or leading (contributing) a course will double the points assigned above to **4 points per training/workshop**.
- Examples of a course or training directly related to malacology include mollusk species identification, mollusk management, mollusk habitat management, field methods (focused on mollusks), mollusk propagation/aquaculture, mollusks diseases, aquatic ecology, etc.
- If an applicant has completed coursework or continuing education not directly related to malacological science for which they feel relevant, but is not captured in the list above, the applicant is encouraged to submit the course with a justification statement of relevance. Continuing education completed but not directly related to malacology also consists of two tiers of involvement: attendance and contributing. Attending this type of continuing education will render **1 point per training/workshop** while contributing will render the applicant **3 points per training/workshop**. Examples of courses that would be considered relevant are captured within Appendix 1.
- It is possible an applicant can exceed the maximum allowable points for the continuing education category. In this instance, the applicant will be assigned the maximum points; points over 10 do not count toward the total accumulation.
- **Involvement in the Mollusk Community (Maximum 10 points)**
 - Being active and involved in the mollusk community is a necessity for any applicant. This involvement includes activities such as participation at annual or semiannual meetings or special conferences of professional societies, educational organizations, acting on a mollusk-related committee, etc.
 - Only activities that have occurred within the previous 5 years of the applicant's submittal may be included within this sub-category.
 - Involvement wherein attendance is the level of participation (e.g., attending a conference) would yield the applicant **1 point** per activity.
 - Involvement wherein contribution is the level of participation (e.g., serving as an officer or chair of a committee) would yield the applicant **3 points** per year of involvement. If the activity lasts for multiple years, the points will be given each year the activity is performed (e.g., serving as the FMCS Secretary for 2 years would yield 6 points).
Presenting mollusk-related research/information is accounted for in the sub-category of Demonstrated Professional Performance
 - All activities within this subcategory must be directly mollusk related.
- **Demonstrated Professional Performance (Maximum 40 points)**
 - For some applicants, professional performance can be demonstrated through normal job duties or special activities that require more immersion than those listed previously. Examples of these activities and the associated points earned are presented below.
 - Authoring a published, mollusk-related article
 - **5 points** per peer-reviewed publication as a first author or supervised student author.
 - **2 points** per publication for all other peer-reviewed publications.

- Peer reviewing mollusk-related paper for journal = **1 point per article**
- Other published outlets excluding social media (e.g., newsletters, non-peer-reviewed articles, and technical reports) = **1 point per report/publication (max of 10 points)**
- Being the responsible party for mollusk field surveys (the responsible party may be the person responsible for identification of species or the person coordinating the entire survey effort) = **1 point per survey (max of 10 points).**
- Presenting research on mollusk-related information = **1 point per presentation**
- Performing outreach to the public = **1 point per event**
- Approved permit holder for any mollusk = **2 points overall**
- Other mollusk-related performances are TBD and will be reviewed by the committee.
- Only activities that have occurred within the previous 5 years of the applicant's submittal may be included within this sub-category.

Professional performance activities not specifically stated here may be proposed to the Certification Review Team and applicants are encouraged to discuss these in advance of submitting certification documentation. Submit other professional performance activities to fmcs.pdcomm@gmail.com.

Pathways for Professional Performance

The Professional Development Committee works closely with FMCS Biennial Meeting and Workshop organizers to implement continuing education opportunities and will provide pathways for information exchange for involvement in other professional societies' continuing education opportunities.

Application Submission

An applicant must work through the self-evaluation (example provided in Appendix 2) and provide the evaluation form to facilitate the Committee's review. Applicant forms are provided upon request from fmcs.pdcomm@gmail.com or from the web link on the Committee website. For Demonstrated Professional Performance scoring, each activity for which the applicant wishes to receive credit must be individually entered into a single row within the excel form. Examples and worksheets to facilitate applicant entries and point assignment are provided in the applicant forms. Applicants can submit the form and requested documentation to fmcs.pdcomm@gmail.com. Only electronic copies of applications will be accepted. If the applicant is unable to submit electronically, please contact a member of the Certification Review Team to discuss other submission options available. If an applicant believes their unique background does not conform well to our scoring system, but their experience warrants a higher level of certification than their score suggests, they are invited to discuss their application with the committee and provide the committee with written justification for a higher tier of certification for their consideration.

Annual Deadline for applications: December 15

Anticipated Decision will be made by March 1. If the application is deemed incomplete, insufficient, or requires additional detail, applicants will be notified by email.

Documentation Required

Documentation	New Certification	Upgrade	Renewal	EMP
Cover Letter	X	X	X	X
Curriculum Vitae/Resume	X	X		X
Letter of Recommendation (1) and 2 References	X			
List of Completed Coursework/Degree	X	X (if applicable)		
Professional Qualifying Experience, Activity and Certifications	X	X (if applicable)	X	

Only electronic submissions will be accepted in Word or PDF format. Documentation may be compressed into a zipped folder or sent as a complete PDF package to fmcs.pdcomm@gmail.com. Please indicate your submission in the subject line as follows: Mollusk Certification Application - Last Name.

New Certification

- Cover Letter: the applicant's cover letter must clearly list each of the qualifying categories and identify clearly how the applicant meets the criteria.
- Curriculum Vitae/Resume (attachment) not to exceed 5 pages.
- 1 Letter of Recommendation from a member of the mollusk community, employer, or fellow certified Mollusk Professional.
- Contact information for two personal and/or professional references. References should be from individuals that can vouch for the applicant's experience such as current or past employer, academic advisor, or co-worker.
- List of completed coursework or copy of unofficial transcripts (attachment) or degree details (institution, degree, date(s) conferred)
- Professional Qualifying Experience and Publications (can be listed on CV/Resume)

Upgrade

- Cover letter
- Curriculum Vitae highlighting new Professional Qualifying Experience and Publications **not** provided with original application and any additional indicators qualifying the upgrade from AMP to CMP.
- List of completed coursework or copy of transcripts (attachment) or degree (institution, degree, date(s) conferred) not included or accounted for in your original application.
- Updated Professional Qualifying Experience/Publications, Professional Activities, and/or any certifications acquired since original certification.

Renewal

- Cover Letter
- Provide only that which was not included or accounted for in your original application.

Mollusk Professional – Emeritus/Emerita

- Cover Letter: the applicants cover letter must clearly list each of the qualifying categories and identify clearly how the applicant meets the criteria.
- Curriculum Vitae/Resume (attachment) not to exceed 5 pages.

Additional Information

Certification fee is \$40.00. Fees for Certification are designated for student development, awards, and travel assistance to attend FMCS sponsored workshops and biennial symposia. To renew or update Certification, the fee is \$20.00; no renewal fee is required for emeritus certification. Certification is valid for 5 years, at which point an application for re-certification must be submitted; this ensures that certified Mollusk Professionals remain active and engaged in the field. Applicants meeting the criteria for MP-E level pay a one-time fee of \$40.

Applicants must sign and adhere to the FMCS Code of Conduct. Applicants must be an FMCS Member to apply for certification.

Certification Revocation

Although unlikely, FMCS Certification Review Team may revoke certifications in certain circumstances. These include failure to comply with the FMCS Code of Conduct, discovery of misrepresentation of experience and education, and/or the applicant is engaged in activity or conduct that the FMCS Certification Review Team determines violates a provision of the Code of Conduct.

Certification Review Team

Certification review panel will be appointed by the FMCS Board and overseen by the Committee. The review panel will be composed of representatives from academia, private sector, and government agencies.

APPENDIX 1 – EDUCATIONAL ADDITIONS FOR NON-DEGREE SEEKING, RELEVANT COURSEWORK

If an applicant has completed coursework for which they feel relevant, the applicant is encouraged to submit the course with a justification statement.

Coursework Additions

For mollusk professionals who are non-degreed or have a degree in a non-natural science field, additional points can be obtained through the completion of specific coursework. Completion of courses within biological sciences and related fields would grant the applicant **1 point** per completed course with a maximum of **5 points** for applicants within this category. Examples of relevant coursework may include:

- Malacology,
- Fisheries and aquatic sciences courses, such as:
 - fisheries science, ichthyology, fisheries management, fish ecology, aquaculture or fish culture, fish diseases, principles of fisheries science and management, limnology, aquatic entomology, stream ecology
- Water Chemistry, Water Quality
- Wildlife Biology, ecology, zoology
- Genetics
- Environmental Policy, Administration, and Law
- Statistics and Quantitative Biology

APPENDIX 2 – Blank Self-Evaluation – Score Sheet

Mollusk Professional Certification					
			Applicant	Validation	Included in Application
Education/School	Points	NTE 20			
	Points Earned				
B.S. or B.A. degree					
M.S. degree					
PhD degree					
Degreed Applicants with additional post-degree courses					
Non - Degreed Applicants: See example list in "Coursework Additions" Appendix 1 of Guidelines					
Sub-total		0			
Professional Qualifying Experience	Points	NTE 30			
	Points Earned				
<i>Years of Qualifying Experience (>50% of the year)</i>		2 points per year			
Management					
Research					
Education					
Sub-total		0			
Professional Performance (Past 5 Years)	Points	NTE 50			
	Points Earned				
<i>Continuing Education (10-year max)</i>		10 Points Maximum			
<u>Related to Malacological Science</u>					
Attendance		2 pts per activity			
Contributing: teaching/leading course/training		4 pts per activity			
<u>Not directly related to malacological science</u>					
Attendance		1 pt per activity			
Contributing: teaching/leading course/training		3 pts per activity			

<i>Involvement in the Malacological Community (5 year max)</i>		10 Points Maximum			
Attendance level of participation		1 pts per activity			
Contributing level of participation		3 pts per activity			
<i>Demonstrated Professional Performance (5 year max)</i>		40 Points Maximum			
<u>Authorship</u>					
Author Published Article		5 or 2 depending on level			
Peer Review		1 pt per article			
Other published outlets		1 pt per publication; NTE 10 points			
<u>Other</u>					
Being the responsible party for mollusk field surveys		1 pt per survey; NTE 10 points			
Presenting research		1 pt per presentation			
Performing outreach to the public		1 pt per event			
Approved permit holder for any mollusk		2 pts overall			
Other related performance (define in narrative)		TBD			

Education range = 0 to 20

Professional Qualifying Experience range = 0 to 30

Professional Performance range = 0 to 50

Grand Total

Appendix E - Guide for Certification Reviewers

Purpose of this guide

The purpose of this guide is to instruct reviewers of certification applications on how to score and assess the applicants. The terms “score” and “assess” will be used differently within this guide. To “score” means to render a numeric rating. An example of this would be to score someone 10 points for having a pertinent bachelor’s degree. To “assess” means to evaluate qualitative or other measures, perhaps not clearly ascertained. An example of this would be to assess an applicant’s qualifying experience to determine if the experience is relevant and/or represents enough of the applicant’s working time to count towards their qualifying experience.

As a result of this review, the applicants will be placed into one of the following certification levels: not certified, Early Career Mollusk Professional (ECMP), Associate Mollusk Professional (AMP), Certified Mollusk Professional (CMP), or Mollusk Professional – Emeritus (EMP). Once the applicant is scored and given a level of certification, the reviewer will then review the applicant’s self-assessment and compare the outcomes. If the reviewer and applicant do not agree upon the outcome, then a second reviewer will review the applicant’s submittal package. If both reviewers come to the same result – even if that result differs from the applicant’s – then the level of certification decided by the reviewers will be the official certification for the applicant. If a second reviewer is brought in to review an applicant’s submittal package and differs from the original reviewer, but the second reviewer comes to the same result as the applicant, then the certification result proposed by the applicant and confirmed by the second reviewer shall be the official certification result.

In the event the certification requested by the applicant does not align with the decision after two reviewers have assessed the applicant’s submittal, they may submit an appeal to better understand why they were denied the level of certification requested. The Review Board panel will revisit the submitted information and provide their determination with suggestions for how to improve the submittal in the areas of deficiency.

Scoring and Assessing Education

Scoring for the Education category is as follows: B.S./B.A. = 10 points; M.S. = 15 points; Ph.D. = 20 points; and up to 5 points for relevant additional coursework not captured within the degree programs or for a non-degreed person. The maximum number of points available for the Education category is 20 points.

To assess an applicant for education, determine if the achieved degree is relevant for the certification. Examples of applicable degrees include Biology, Forestry, Wildlife Management, Wildlife Biology, Environmental Science, Natural Resources, Ecology, Zoology, Aquatic Biology, and Fisheries. The reviewer will have to determine if another degree outside of these listed is pertinent to the category and justifies receiving points.

For applicants that are non-degreed, have a non-relevant degree, or have a relevant B.S./B.A. or M.S., additional points can be accrued through the completion of specific coursework. For those with a relevant degree, the additional points may only be accrued for classes outside of the earned degree. Example: an applicant has earned a B.S. degree in biology, and thus earns 10 points for the degree. The applicant also completed relevant coursework when pursuing an M.S. degree, but never completed the degree. Therefore, the coursework they completed outside of their earned B.S. would accrue more points for the Education section.

Completion of courses within biological sciences and related fields would grant the applicant 1 point per completed course with a maximum of 5 points for applicants within this category. Examples of applicable courses include malacology, fisheries science, ichthyology, fisheries management, fish ecology, aquaculture or fish culture, fish diseases, principles of fisheries science and management, limnology, aquatic entomology, stream ecology, water chemistry, water quality, wildlife biology, ecology, zoology, genetics, environmental policy, environmental administration, environmental law, and statistics/quantitative biology. The reviewer will have to determine if another course outside of these listed is pertinent to the category and justifies receiving points.

Scoring and Assessing Professional Qualifying Experience

Professional Qualifying Experience is based on the number of years that applicable experience has occurred. For a year to qualify as relevant experience, mollusk-related tasks need to have been the responsibility of that applicant for >50% during the year. Scoring for this experience is simply 2 points per year of qualifying experience. Example: it is determined by the reviewer that the applicant has 10 years of relevant qualifying experience, therefore, the applicant would receive 20 points for this category.

To assess an applicant for Professional Qualifying Experience, the reviewer will have to examine the type of experience that the applicant has completed. To aid both the reviewer and the applicant, three types of qualifying experiences have been identified that will likely encompass most applicant's types of experience. The three categories are Management, Research, and Education.

Management involves the application of aquatic science principles (e.g., population dynamics, aquatic biology, limnology, habitat assessment and manipulation, human dimensions, and systematics) toward the accomplishment of specific goals and objectives directly related to mollusks. Research involves responsible charge or supervision of field, museum, or laboratory research projects associated with mollusks. Education involves college-level teaching of mollusk-specific courses and/or related responsibilities (e.g., preparation for classwork, grading assignments, field trips...). Education also may involve the development and delivery of educational programs for dissemination to the public or stakeholders.

These three categories are not all-inclusive, as another type of experience may qualify. It is up to the reviewer to assess the applicant's experience and determine whether it is valid to the category and merits points. In general, as long as the experience is mollusk-focused and represents more than 50% of the applicant's duties for the year, then the experience likely qualifies and justifies the accrual of points.

Scoring and Assessing Professional Performance

When applying for initial certification and then every five (5) years thereafter (except EMP), each applicant must submit evidence of continued activity and development by accumulating a minimum number of Professional Performance Points. The number of points earned depends upon the activity that the applicant has undertaken. Different activities yield different points. The maximum number of points for certification allowed from this category is 50 points. Ten points per five-year rotation must be maintained to retain existing certification status.

To assess an applicant's professional performance, the reviewer will assess any activity undertaken by the applicant that demonstrates the applicant's accomplishments and/or involvement within the world of malacology. These activities may be directly linked to the applicant's job (e.g., publishing of a mollusk-related article in a scientific journal by a researcher) or pertain to mollusk outside of the applicant's scope of work for their job (e.g., volunteering on a committee within FMCS).

To aid both the reviewer and the applicant, three types of professional performance activities have been identified that will likely encompass most applicant's types of activities. These are Continuing Education, Involvement in the Malacological Community, and Demonstrated Professional Performance. Continuing Education involves formal training or courses related to mollusks. The maximum number of points allowable for this activity is 10 points. Involvement in the Mollusk Community involves participation in events, outreach, committee involvement, or other activity not counted as training/education and is mollusk related. The maximum number of points allowable for this activity is 10 points. Demonstrated Professional Performance involves the accomplishment of goals related to mollusks. This may include publishing mollusk-related articles in scientific journals, being the responsible party for mussel surveys, and holding state/federal permits for threatened or endangered mollusks. The maximum number of points allowable for this activity is 40 points.

In general, if an applicant has demonstrated success in completing ongoing activities with a discernable outcome (e.g., publishing articles, performing surveys, completing training, attending meetings ...), then the applicant likely warrants credit for the activity. It will be up to the reviewer to determine if the activities performed by the applicant are relevant and justify scoring.

Cumulative Scoring and Certification Level Determination

Based on the reviewer's assessment and scoring, the applicant will be given an overall score which is the sum of their scores from the three categories of Education, Professional Qualifying Experience, and Professional Performance. If this total score falls below 10 points, then the applicant is not certified. If the points total falls between 10 to 40, then the applicant has earned the certification level of Early Career Mollusk Professional (ECMP). If the points total falls between 40 to 70, then the applicant has earned the certification level of Associate Mollusk Professional (AMP). If the points total is 70+, then the applicant has earned the certification level of Certified Mollusk Professional (CMP). In order for an applicant to receive the certification level of Mollusk Professional – Emeritus (EMP), they must have more than 25 years of Professional Qualifying Experience; there is no accrual of points necessary.

Scheduling and Time Commitments

Applications will be accepted between August 15th December 15th of every year. A primary facilitator will receive the applications and disperse them among the review board to a specific reviewer based on the application type (e.g., government). The reviewer will have until February 15th of the following year to complete their review and submit the certification recommendation. If further reviews are needed based on a disagreement between the applicant's and reviewer's resulting certification level, then the completion date of the certification may extend beyond the February 15th timeframe.

It is estimated that each reviewer on the review board will assess and score 30(?) applications during the first year, with less in subsequent years. Generally, the reviewer can expect each application review to take between 30 minutes and one hour. Each review board member will be on the board for a three-year commitment.

Conclusion

This document gives general guidance to the reviewer on how to score and assess applicants for their mollusk professional certification. Once the three categories of Education, Professional Qualifying Experience, and Professional Performance have been assessed and scored, an overall score will be given to the applicant. The reviewer's score and the applicant's self-score will be compared. If they agree with one another as to the level of certification achieved, then that level of certification will be granted. If the

outcomes of the certification level differ, then a second reviewer will be brought in to review the applicant's submittal information. Whomever of which the second reviewer agrees with as to the level of certification that should be awarded – the applicant or the first reviewer – then the certification level that has been agreed upon by two of the three parties shall be awarded. If, after these steps have been taken, the applicant wishes to appeal the result, they may do so, and the Review Board will assess the applicant's submittal package and provide feedback as to why the applicant received the certification level the reviewers awarded them, as well as provide information on how to improve their submittal information for future reviews.