



Newsletter of the Michigan Entomological Society

Vol. 66, No. 4

December 2022

MES Website: <http://michentsoc.org>

Facebook: <https://www.facebook.com/michentsoc/>

In This Issue

MES 2022-2023 Governing Board Members

Historical Notes

Call for 2022 New State Arthropod Records

Changes to the MES Constitution and Bylaws
Approved by Members

Synchronous Fireflies

Updated Michigan Entomological Society
Constitution and Bylaws

MES 2022-2023 GB Members

President - Brian Scholtens

Scholtensb@cofc.edu

President-Elect - John Douglass

jfdouglass7@gmail.com

**Immediate Past President - Mark
VanderWerp**

mvande@rosepest.com

Secretary - Adrienne O'Brien

amobrien@umich.edu

Treasurer - Angie Pytel

apytel@hillsdale.edu

Member-at-Large – Ralph Gorton

ralphgorton@gmail.com

Member-at-Large - Robert Haack

haack@msu.edu

Member-at-Large - William Ruesink

wruesink@ruesink.org

Member-at-Large – Martin Andree

martinjandree@gmail.com

Newsletter Editor - Crystal Dailey

daileybugologist@gmail.com

Newsletter Editor - Duke Elsner

elsner@msu.edu

Webmaster - Mark O'Brien

mfobrien@gmail.com

The Great Lakes Entomologist Team:

**Lead Journal Scientific and Production
Editor - Alicia Bray**

brayalic@gmail.com

Associate Journal Editor - Kristi Bugajski

kristi.bugajski@valpo.edu

Associate Journal Editor- Anthony Cognato

cognato@msu.edu

Associate Journal Editor - Julie Craves

jcraves@umich.edu

Associate Journal Editor - David Houghton

dhoughton@hillsdale.edu

Associate Journal Editor - William Ruesink

wruesink@ruesink.org

Associate Journal Editor - William Scharf

wcscharf@charter.net

Associate Journal Editor - Daniel Swanson

drswanny@gmail.com



Coral hairstreak, *Satyrium titus*.
Photo by Duke Elsner.

MES Historical Notes for 2022

Robert A. Haack
PO Box 702, Eastport, MI 49627
Email: robert.haack@usda.gov or
haack@msu.edu

1997 – 25 years ago. In 1997, Dan Herms was President; Leah Bauer was President-Elect; Cathy Bristow was immediate Past-President; Mo Nielsen was Treasurer, Bob Kriegel was Secretary; George Balogh, Tom Wallenmaier, and Owen Perkins were the three Members-at-Large; Mark O'Brien was Journal Editor; and Bob Haack and George Heaton were the Newsletter Editors. The 43rd MES Annual Meeting was held at the Chippewa Nature Center in Midland on May 23, 1997. There were 13 contributed talks and one invited talk by "Skip" Nault of Ohio State University, who spoke on the association of ants with honeydew-secreting aphids, treehoppers and psyllids. The contributed talks covered topics such as gypsy moth (now spongy moth) outbreaks and biocontrol, leafy spurge biocontrol, hemlock woolly adelgid, jumping spiders, disruptive selection, plant-insect interactions, impact of elevated CO₂ on plant-insect-parasitoid interactions, spiders of Gratiot County, insect nutritional indices, mosquito range expansions in Michigan, and Asian longhorned beetle. Some of the stories contributed by members that appeared in the 1997 MES Newsletters dealt with the Hungerford's crawling water beetle, an updated list of Michigan's state-listed insects, Michigan's Lepidoptera Survey, insects intercepted on wood articles at US ports, collecting the hackberry emperor (*Asterocampa celtis*), annual summary of the Michigan Odonata Survey, and a preliminary list of Michigan moths. At the beginning of 1997, MES had 460 members and 175 journal subscriptions. MES annual dues were \$15 per year for active members, \$5 for students, and \$35 for libraries in 1997. Journal page charges were \$35 per published page.

1972 – 50 years ago. In 1972, Dean Dillery was President; Richard Fleming was President-Elect; Richard Snider was immediate Past-President; Mo Nielsen was Executive-Secretary, Irving Cantrall was the journal editor for The Great Lakes Entomologist, and Louie Wilson became the new Editor of the MES Newsletter (taking over from Mo Nielsen). The 18th annual MES meeting was held in Toronto, Canada, at the Royal Ontario Museum on the 19th of May. No details of the talks were published in the 1972 MES Newsletters. However, the brief annual meeting report stated that talks began at 10 am and ended at 5 pm, followed by tours of the museum and insect collection, and also field trips the following day. The MES series "Entomology Notes" began in 1972, with Louie Wilson writing the first two notes (#1 on antlions and tiger beetles and #2 on gall makers). Two items discussed in the 1972 MES Newsletters included new lights for collecting insects at night (the McLean Travel Light and Mercury-vapor lights), and a rearing container for *Chironomus* larvae. Annual dues in 1972 were \$4 per year for active members \$2 for students, and \$6 for library subscriptions. As of early 1972, MES had 437 active members and an additional 198 library subscriptions for the journal. Page charges to publish in The Great Lakes Entomologist were \$18/page.



Northern pearly eye, *Enodia anthedon*.
Photo by Duke Elsner.

Call for 2022 New State Arthropod Records

Find an arthropod never before reported from Michigan? The MES Newsletter is always available to you for announcing new state record reports. Review your 2022 and previous field seasons and see if you have something to boast about.

Submit your record(s) directly to elsner@msu.edu and they will appear in an upcoming 2023 edition of the MES Newsletter. The more information you have regarding your recovery the better. Include as many of the following points that you have: species, common name (if there is one), family, date, location of recovery, method of recovery, identifier, photograph, habitat, and current specimen(s) location. Of course, you will be credited for all your information!



Compton tortoiseshell, *Nymphalis vaualbum*.
Photo by Duke Elsner

***Tired of seeing my photos?
Submit some of yours!***

Changes to the MES Constitution and Bylaws Approved by Members

Robert Haack
PO Box 702, Eastport, MI 49627
Email: robert.haack@usda.gov or
haack@msu.edu

Overall, 45 MES members (about 25% of the membership) voted on the recently proposed changes to the MES Constitution and Bylaws (C&B). All eight major changes were approved by a margin of 96-100%. Briefly, the results were as follows.

- Proposal 1. Broaden the inclusiveness statement (98% approved).
- Proposal 2. Drop all references to Branches (98%).
- Proposal 3. Increase the quorum numbers (96%).
- Proposal 4. Allow the MES Governing Board to set honoraria (100%).
- Proposal 5. Create the Social media Manager (96%).
- Proposal 6. Update role of MES Secretary (100%).
- Proposal 7. Update role of MES Treasurer (100%).
- Proposal 8. Update roles of MES Editors and Social Media Manager (98%).

The MES Governing Board thanks all members who took the time to vote. These changes have now been incorporated in the 2022 version of the MES Constitution and Bylaws, along with a few corrections for typos and inconsistencies. A complete version of the updated MES Constitution and Bylaws is included in this edition of the MES Newsletter. More updates and corrections to the MES C&B will likely occur in 2023.

Big Trees and Synchronous Fireflies at Congaree National Park, South Carolina

Robert A. Haack

robert.haack@usda.gov or haack@msu.edu

This past November, as my wife and I traveled south to spend parts of the winter in Georgia and Florida, we visited the Congaree National Park in central South Carolina (<https://www.nps.gov/cong/index.htm>). The Congaree National Park (simply Congaree hereafter) covers 26,000 acres with about 77% of the area federally designated as wilderness. Congaree encompasses the largest, contiguous, area of old-growth bottomland hardwood forest anywhere in North America. A bottomland forest occurs along rivers and streams that are seasonally or intermittently flooded whereas a true swamp is usually a forested area that is perpetually water-covered. Starting in the 1950s, locals started a campaign to protect large areas of the Congaree River floodplain from logging and development. Finally, in 1976 much of the area received federal protection when designated as the “Congaree Swamp National Monument” and then in 2003 it became the “Congaree National Park.”

Congaree is known for Big Trees and Fireflies. The conservation organization *American Forests* (Americanforests.org) maintains an official list of Champion Trees for over 560 tree species in the US. The score for a Big Tree is based on its circumference, height, and crown spread. Over the years, Congaree has claimed as many as 15 National Champion Trees (each for a different tree species) as well as 25 State Champion Trees for South Carolina. Among their current National Champions is a Loblolly Pine that stands over 180 ft tall, and a state champion Bald Cypress at over 132 ft tall. Some of the other Congaree National Champions have been species of Laurel Oak, Swamp Tupelo, Sweetgum, and Water Hickory. Only a



Base of South Carolina state champion bald cypress at Congaree: over 28 ft in circumference and over 132 ft tall (Photo: Joe Kegley).

few of these Champion Trees can be viewed near to existing trails at Congaree.

As for the 2200 or so known species of fireflies (Coleoptera: Lampyridae) worldwide (Martin et al. 2019), only a few are known to synchronize their flash pattern, with most synchronous species occurring in southeast Asia and North America. Of the 170 North American lampyrids only three species are now known to synchronize: *Photinus carolinus* Green and *Photuris frontalis* LeConte in the East, and



***Photuris frontalis* LeConte (Photo: Lynn Faust)**

Photinus knulli Green in the Southwest. One of the earliest reviews on firefly flash synchronization was by Buck (1938), who worked primarily on Asian fireflies, and in that paper the author cited an account of firefly synchrony by a naturalist working in Thailand in 1727! Some of the first detailed measurements on synchronization by fireflies were published by Buck and Buck (1968). Synchronization in fireflies is often described as coordinated rhythmic group flashing where the flash bursts start and stop at the same time among individuals of the same species (Buck 1988, Copeland and Moiseff 1995). In Southeast Asia males of the synchronous fireflies tend to congregate in trees, whereas in North America the males synchronize while in flight, usually within 1-2 m of the ground (Cicero 1983, Copeland and Moiseff 1995, Moiseff and Copeland 2000).

Photuris frontalis is the star attraction at Congaree (NPS 2018, 2021). Depending on local temperatures, adults are active for about a 2-week period during late May to early June. Males fly about 2 to 4 ft. (0.6 to 1.2 m) above ground in forested sites and display a synchronized flash pattern of quick single flashes for which they have been given the nickname “snappy syncs” (Fallon 2022). Males begin to flash soon after sunset and continue for about an hour, with the synchronous flashes occurring every 0.6 to 1.0 sec. depending on temperature (NPS 2018).

An excellent field guide to the fireflies of the East is now available (Faust 2017). In recent years, interest in firefly tourism (Lewis et al. 2021) as well as firefly conservation (Fallon et al. 2021; see <https://xerces.org/endangered-species/fireflies> and <https://www.firefly.org/>) have increased greatly. In fact, public interest to view the synchronous fireflies at Congaree has become so popular in recent years that Congaree now holds a “lottery” that allows just 120 vehicles per night into the park for ranger-led walks (NPS 2022, <https://www.recreation.gov/ticket/facility/300008>). A similar lottery now takes place for firefly viewing in the Great Smoky Mountains National Park near Elkmont, TN, where there are large populations of the synchronous firefly *Photinus carolinus* (<https://www.recreation.gov/ticket/facility/233374>). Both National Parks found it necessary to regulate the number of people viewing fireflies to reduce physical crushing of firefly larvae and adult females (which are on the ground) by people walking, especially if they go off trail, as well as limiting light pollution from flashlights and head lamps that can disrupt firefly courtship (Fallon 2022).

In hopes of promoting sustainable firefly tourism in the US, the Xerces Society has recently published a set of guidelines for managers to implement at firefly viewing hotspots as well as etiquette guidelines for the viewing public (Fallon 2022). It should be noted that firefly tourism is growing worldwide, and many of the problems witnessed with increased tourism at Congaree and Great Smoky Mountains are occurring in other countries (Lewis et al. 2021).

Firefly research has been supported at Congaree in recent years with studies focusing primarily on the *P. frontalis* flash sequence and mechanism and importance of synchrony (NPS 2018). Future research will focus on the behavior and response of adult females to the flash pattern of males, as well as other aspects of courtship and mating. Similarly, many firefly



Synchronous fireflies (*Photuris frontalis*) at Congaree National Park (Photo: NPS)

studies have taken place at Great Smoky Mountains National Park on *Photinus carolinus*, especially in regard to natural history and flash synchrony (e.g., Faust 2010, Faust and Weston 2009, Safarti et al. 2021).

References

- Buck JB. 1938. Synchronous rhythmic flashing of fireflies. *The Quarterly Review of Biology* 13: 301-314.
- Buck J. 1988. Synchronous rhythmic flashing of fireflies. II. *The Quarterly Review of Biology* 63: 265-289.
- Buck J and E Buck. 1968. Mechanism of rhythmic synchronous flashing of fireflies. *Science* 159: 1319-1327.
- Cicero, JM. 1983. Lek assembly and flash synchrony in the Arizona firefly *Photinus knulli* Green (Coleoptera: Lampyridae). *The Coleopterists Bulletin* 37: 318-342.
- Copeland J and A Moiseff A. 1995. The occurrence of synchrony in the North American firefly *Photinus carolinus* (Coleoptera: Lampyridae). *Journal of Insect Behavior* 8: 381-394.
- Fallon C. 2022. Sparking a sustainable firefly tourism movement. Online at: <https://xerces.org/blog/sparking-sustainable-fire-fly-tourism-movement>
- Fallon CE, AC Walker, S Lewis, J Cicero, L Faust, CM Heckscher, CX Pérez-Hernández, B Pfeiffer, and S Jepsen. 2021. Evaluating firefly extinction risk: Initial red list assessments for North America. *PLoS ONE* 16(11): e0259379.
- Faust LF. 2010. Natural history and flash repertoire of the synchronous firefly *Photinus carolinus* (Coleoptera: Lampyridae) in the Great Smoky Mountains National Park. *Florida Entomologist* 93: 208-217.
- Faust LF. 2017. Fireflies, glow-worms, and lightning bugs: identification and natural history of the fireflies of the eastern and central United States and Canada. University of Georgia Press; Athens, GA
- Faust LF and PA Weston. 2009. Degree-day prediction of adult emergence of *Photinus carolinus* (Coleoptera: Lampyridae). *Environmental Entomology* 38: 1505-1512.
- Lewis SM, A Thancharoen, CH Wong, T López-Palafox, PV Santos, C Wu, L Faust, R De Cock, AC Owens, RH Lemelin, H Gurung, WFA Jusoh, D Trujillo, V Yiu, P Jaramillo-López, S Jaikla, and JM Reed. 2021. Firefly tourism: Advancing a global phenomenon toward a brighter future. *Conservation Science and Practice* 3(5):e391.
- Martin GJ, Stanger- KF Hall, MA Branham, Da LF Silveira, SE Lower, DW Hall, XY Li, AR Lemmon, EM Lemmon, and SM Bybee. 2019. Higher-level phylogeny and reclassification of Lampyridae (Coleoptera: Elateroidea). *Insect Systematics and Diversity* 3(6): 11.
- Moiseff A. and J. Copeland. 2000. A new type of synchronous flashing in a North American firefly. *Journal of Insect Behavior* 13: 597-612.
- NPS (National Park Service). 2018. Synchronic firefly research at Congaree. Online at: <https://www.nps.gov/rlc/ogbfrac/synchronic-fire-fly-research-at-congaree.htm>
- NPS. 2022. Synchronous fireflies at Congaree. Online at: <https://www.nps.gov/cong/fireflies.htm>
- Sarfati R, JC Hayes, and O Peleg. 2021. Self-organization in natural swarms of *Photinus carolinus* synchronous fireflies. *Science Advances*, 7(28): p.eabg9259.

CONSTITUTION AND BY-LAWS OF THE MICHIGAN ENTOMOLOGICAL SOCIETY

ARTICLE I – NAME

Section 1. This organization shall be known as THE MICHIGAN ENTOMOLOGICAL SOCIETY.

ARTICLE II – PURPOSE

Section 1. Promote the science of entomology in all its branches and by all feasible means and to advance cooperation and good-fellowship among persons interested in entomology.

ARTICLE III – MEMBERSHIP

Section 1. Any individual or organization interested in the purpose of the society shall be eligible for membership without regard to race, creed, color, religion, gender, gender identity, sexual orientation, national origin, ancestry, disability, or age.

Section 2. The classes of membership shall be Active, Honorary Life, Student, Sustaining, Institutional, and Life.

Section 3. Active: For individuals.

Section 4. Honorary Life: May be conferred upon any member who has performed long and distinguished service in the field of entomology to the State of Michigan or to the Society. Proposals for Honorary Life Membership shall be made in writing with a supporting statement by two Active Members and shall be acted upon by the Governing Board and submitted to the society for vote by electronic mail ballot. Nominees must receive four-fifths of the ballots cast to be elected. The total number of Honorary Life Members shall not exceed five at any one time and not more than two shall be elected in any one year. Honorary Life Members shall be exempt from payment of dues but shall have all the privileges of active membership.

Section 5. Student: An individual attending school through graduate school.

Section 6. Sustaining: Any person or organization supporting the aims of the society by submitting an annual fee set by the Board.

Section 7. Institutional: Any institution, society, school, museum, or other organization desiring to support the aims of the Society, but not to the extent of a sustaining membership.

Section 8. Life: A one-time individual fee.

ARTICLE IV – OFFICERS

Section 1. The officers of this Society shall be President, President-Elect, Past President, Secretary, and Treasurer.

Section 2. President-Elect/President/Past President. The President-Elect shall be elected by electronic mail ballot as specified in the By-Laws. He/she shall serve one year as the President-

Elect, second year as President and third year as Past President. He/she shall assume the office of President-Elect at the close of the annual meeting next following his/her election.

Section 3. Secretary and Treasurer. The Secretary and Treasurer shall be appointed by the Board and shall serve for three years. They shall assume office at the close of the annual meeting next following his/her election.

ARTICLE V – GOVERNING BOARD

Section 1. The Board shall consist of the following members: President, President-Elect, Past President, one of the most recent available Past-Presidents, Secretary, Treasurer, four elected Members-at-Large, Associate & Journal Editors, Associate & Newsletter Editors, Webmaster, and Social Media Manager.

Section 2. The Governing Board shall conduct the business of the Society, interpret, and implement Society policy.

ARTICLE VI – GENERAL GUIDELINES

Section 1. Notwithstanding any provision of the Constitution or By-Laws which might be susceptible to a contrary construction:

- (a) The Society shall be organized and operated exclusively for scientific and educational purposes;
- (b) No earnings or use of the Society name shall be incurred to the benefit of any private individual;
- (c) No substantial part of the activities, funds, or publications of the Society shall be made to influence legislation or a public office candidate;
- (d) The Society shall not be organized or operated for profit;
- (e) The Society shall not:
 - (1) Lend any part of its income or corpus, without the receipt of adequate security and reasonable rate or interest;
 - (2) Pay any compensation, in excess of a reasonable allowance for salaries or other compensation for personal services actually rendered;
 - (3) Make any part of its services available on a preferential basis;
 - (4) Make any purchases of securities or any other property for more than adequate consideration in money or money's worth;
 - (5) Sell any securities or other property for less than adequate consideration in money or money's worth.

The prohibitions contained in this subsection do not mean to imply that the Society may make such loans, payments, sales or purchases to anyone else, unless such authority be given or implied by other provisions of the Constitution or By-Laws.

Section 2. No officer or committee of the Society shall solicit in the name of the Society contributions for use in obtaining or paying for specialized entertainment.

ARTICLE VII – FUNDS

Section 1. Society funds shall be the responsibility of the Treasurer as specified in the By-Laws.

Section 2. A permanent fund shall be established to include donations and bequests. The fund shall be in custody of the Governing Board. Funds shall be invested and may be expended only by the Governing Board. Loans may be made to other established funds of the Society for self-liquidating projects.

ARTICLE VIII – PUBLICATIONS

Section 1. The publications of the Society will be a journal, a newsletter, and computer webpage.

ARTICLE IX – STANDING COMMITTEES

Section 1. Standing Committees shall be identified by the Governing Board. Their duties and election are set forth in the By-Laws.

ARTICLE X – MEETINGS

Section 1. The annual meeting shall be at such time and place as may be decided upon by the President-Elect. Special meetings may also be called by the Governing Board.

ARTICLE XI – AMENDMENTS

Section 1. Changes to the Constitution and By-Laws may be proposed by any Society member at any time. All proposed amendments, and all proposed changes to the Constitution or By-Laws involving existing Articles, shall be communicated in writing to the President and Secretary, preferably by electronic means. The President shall at that time appoint a committee to consider the amendment(s) or other change(s). The committee shall report its recommendations to the Governing Board within a stated period, normally six (6) weeks. Depending upon the proposal's merits as determined by the Governing Board, it may then be communicated to the entire membership, preferably by individualized electronic mail and postings on the Society's website. Comments from members shall be invited in the announcement, and they will be considered by the committee provided that the comments are received no more than thirty (30) days following the posting of the announcement. The amendment shall then be referred by electronic ballot to the entire membership. If two-thirds of the votes cast are in the affirmative, the amendment shall be adopted.

ARTICLE XII – DISSOLUTION

Section 1. Upon dissolution of the Society, the Governing Board shall distribute the assets and accrued income to one or more organizations as determined by the Board but which organization or organizations shall meet the limitations prescribed in Section 1 of Article VI, immediately preceding.

BY-LAWS

ARTICLE 1 – MEMBERSHIP

Section 1. Privileges. All members shall have equal privileges, except as otherwise herein specified.

Section 2. Membership of persons who are accepted before July 1 shall begin with the preceding January 1; membership of those accepted at a later date shall begin in the following January 1, unless the earlier date is requested and the required dues have been paid.

ARTICLE II – OFFICERS’ DUTIES

Section 1. President shall have and exercise such powers as are reasonably necessary to carry out his/her official duties, including: preside at Governing Board meetings and annual business meeting; arrange with Secretary in setting date of fall Governing Board meeting and agenda; appoint special committee members and Chair, specify their charge and time to report recommendations.; with Governing Board approval, fill vacancies in the standing committees, such appointees to serve until the next annual meeting; appoint representatives to other organizations and meetings as needed.

Section 2. President-Elect. shall serve as Annual Meeting Chair, determine site, date, and agenda and act as President if President cannot serve.

Section 3. Past President shall Chair the Nominating Committee, solicit nominees from the Board and from the membership by Newsletter notice, obtain needed information from all nominees, and notify the Secretary of those results; tabulate votes; notify all candidates of election results.

Section 4. Secretary shall record minutes of Governing Board and annual business meetings and submit them for publication in the Newsletter; prepare and send Governing Board members their meeting agenda; prepare electronic ballots; respond to routine mail requests; maintain an up-to-date membership list and make it available to the membership in a secure form, either continuously (accessible online) or as an annual email; and prepare membership meeting notices for the Newsletter.

Section 5. Treasurer shall maintain Society incomes and expenses; submit a report of Society’s financial status at Annual and Governing Board meetings; file Non-profit organization forms with IRS and State of Michigan as required; maintain checking and other accounts; pay all bills in a timely manner; maintain current dues status of all members; purchase needed business supplies and equipment; prepare and send author invoices. The Treasurer shall be bonded to assure Society liquidity.

ARTICLE III - GOVERNING BOARD DUTIES

Section 1. Shall interpret and implement policies of the Society.

Section 2. Print the dues schedule in the Society’s publications and review the dues schedule each odd numbered year to determine if a change is needed for the next year.

Section 3. Provide recommendations to the President in his appointment and charge for Special Committees.

Section 4. Fill a vacancy in the office of the President-Elect by the candidate in the most recent election who received the next highest number of votes for that office; if such candidate is not available the Board shall form a committee of it own members with the President as Chair.

Section 5. Shall, in the event the Secretary or Treasurer cannot continue duties, fill that vacancy by appointment until the next regular election.

Section 6. General responsibility for the publications of the Society, and setting of honoraria for the Lead Journal Editors, shall rest with the Governing Board.

Section 7. Appoint Editors of the Journal and Newsletter, and associate editors for each, and a Webmaster.

Section 8. Duties of Lead Editors for The Great Lakes Entomologist. The lead Scientific Editor shall: (1) receive and track authors' submissions; (2) seek reviewers or assign each manuscript to an Associate Editor; (3) correspond with authors during the review stage; and (4) make the final decision on the acceptance or rejection of each manuscript. The lead Production Editor shall: (1) oversee copy-editing and proofing, with assistance from the Associate Editors; (2) correspond with authors during the production stage; (3) arrange and oversee layout and online posting of the journal; and (4) communicate page charges for each published article with the authors and Treasurer.

Section 9. The Newsletter Editor's duties shall include: prepare at least 3 issues per year and report status at the Governing Board and Annual meetings.

Section 10. Associate Editors duties shall include: assist Editors; assume duties of respective Editors in their absence.

Section 11. The Members-at-Large duties shall include: attend Governing Board and Annual meetings; participate in discussions of agenda items; serve on committees as requested by the President; assist other Board members as needed.

Section 12. The Webmaster duties shall include: creation and maintenance of the Society Webpage.

Section 13. The Social Media Manager's duties shall include: creation and maintenance of the Society's social networking webpages such as Facebook.

ARTICLE IV – DUES

Section 1. Dues for the Life membership class shall be at 20 times Active class, payable within one calendar year.

Section 2. Members in arrears at the end of the calendar year shall be dropped from membership.

Section 3. Sustaining shall be greater than Active and set by the Board.

ARTICLE V – COMMITTEES: STANDING AND SPECIAL

Section 1. Terms of Office and Rotation. Unless otherwise indicated, members of standing committees shall serve for periods of three years each. Their elections shall be so arranged that one-third of the terms shall expire each year. Special Committees shall be limited to one year unless extended by the President.

Section 2. Election of Standing Committees. The Governing Board shall serve as the nominating committee to propose a slate of candidates for election to positions on standing committees not filled in other ways. The candidates nominated by the Board, together with any nominated from the floor, shall be voted upon at the annual meeting. The Board shall designate which member of each standing committee shall serve as chair.

Section 3. Function of Special Committees. Develop and make recommendations to the Board on specific issues, normally within one calendar year. The committee is dissolved when final recommendations are accepted.

ARTICLE VI. VOTING PROCEDURE

Section 1. Voting and holding office shall be open to all individual members. The Society's elections, and voting on ballot initiatives, shall typically be carried out electronically, by means of confidential on-line voting by members

Section 2. The President-Elect, and Members-at-large shall be elected by electronic mail ballot by the following procedure: Membership shall be solicited by notice in the Newsletter and at least six months preceding the next election for nominees to fill vacancies. At least four months prior to each annual meeting the Governing Board shall meet to consider nominations. Nominees are apprised of office responsibilities, their approval to serve obtained, and notify the Secretary of candidate names. Names shall be placed alphabetically on an electronic ballot, transmitted to each member not later than two months before the annual meeting, for the return of the votes. A return date of at least thirty days after issue shall be specified for the return of the ballots. Ballots received later than the specified date shall not be counted. The votes shall be tabulated by the Past President and two other non-candidate members s/he selects. The candidate or issue receiving the most votes shall be declared approved. The Governing Board and all candidates shall be promptly notified of the outcome.

Section 3. Terms of service of the four Members-at-large shall be staggered over two years.

Section 4. If only one nominee accepts candidacy for a vacancy the Board shall declare that candidate winner without a vote.

Section 5. If two candidates for any office tie for high vote the winner shall be decided by the membership through secret ballot vote at the next annual business meeting.

ARTICLE VII – QUORUMS

Section 1. Fifteen (15) active members shall constitute a quorum for the transaction of the business of the Society, both for in-person and online meetings, provided that all active members have been informed of the intent to meet.

Section 2. A simple majority of Governing Board members shall constitute a quorum for the transaction of the business of the Society, both for in-person and online meetings, provided that all members of the Board have been informed of the intent to meet.

Section 3. Prior to convening any virtual/online meeting of the Governing Board, a quorum (simple majority) of participants shall be established, as follows: 1) by announcing, via electronic mail to each Governing Board member, the planned meeting's date and time, and 2) by the convening Governing Board member's receipt of confirming electronic messages ('announcement received' notices) from a simple majority of Governing Board members.

Section 4. The recognition of voting outcomes ("majority vote" and "2/3 vote") on any issue considered during virtual/online meetings of the Governing Board or their follow-up discussions shall be defined as the proportion of votes actually cast by Governing Board members, with the

quorum number (simple majority) as the minimum acceptable number of total votes cast; any Governing Board member's vote not cast shall be counted as an abstention.

ARTICLE VIII – AMENDMENTS

Section 1. The procedures for consideration of proposed amendments to the By-Laws, or changes in existing Articles, shall be as outlined in Article XI, Section 1, of the Constitution.

ARTICLE IX. PARLIAMENTARY AUTHORITY

All business, unless stated otherwise in the Constitution or By-laws, shall be conducted according to Robert's Rules of Order, revised edition.

Revised: October 2022