

## Public Education Committee

**Committee Members:** L. C. Arias, K. Bell, G. Feldhamer, D. Ginnett, A. Joachim, R. Larsen, V. Mathis, M. Merrick, D. K. Odell, J. R. O'Neill, P. Owens, V. Naples, B. D. Sasse, L. Schlitter, B. J. Shaw (Chair), S. Sheffield, K. K. Thorington, J. Varner, and T. Wood.

### **Mission:**

Established as a standing committee by the Board of Directors in 1993, the Public Education Committee seeks to make education about mammals accessible to grades K-12. Committee members foster outreach projects to raise awareness about mammals for students in their formative years. The committee coordinates its efforts with the assistance of other ASM committees, sister societies as well as elementary and high school science teachers.

### **Responsibilities:**

The Public Education Committee conducts several activities including the Public Education Partnership (PEP) that is an initiative to encourage activity and visibility of ASM members in their local K-12 classrooms. This initiative was launched at the 1995 Annual Meeting at the University of Vermont with 64 charter members.

### **Information Items:**

(1) State Lists of Mammals: (J. R. O'Neill and B. J. Shaw)

One of the PEC's long-term projects is to provide A State List of Mammals for all 50 states.

**Mammal Species of the World: A Taxonomic and Geographic Reference (3rd ed; MSW) was published in 2005, and the state mammals lists are aligned to this taxonomic system.**

Members of PEC completed 25 State Mammal Lists prior to 2005. In addition, an additional 4 states were completed with information in 2005 but were not posted online. None of these state lists have been updated with **the 2005 MSW, and all states need either writing or revising to reflect those changes.**

In the 2009 meeting in Fairbanks, Alaska, the committee determined that the most reasonable course of action was to completely revise the way state lists are written. In place of the individual state spreadsheets, we are developing a single database of all species found within the United States.

The species lists have been completed, and all spreadsheets have been standardized for insertion into a single database, which now is being populated with all of the species information in the spreadsheets. We anticipate that the database will be fully populated by end of May. PEC is working with the Informatics Committee to develop an online searchable database system, and we hope that it will be running by the time of the 2013 Annual Meeting.

By the time of the meeting, we ask the membership to verify that the information we have posted is correct and current regardless of the format (static lists or database). We therefore are requesting that the membership visit the state lists website at (URL) and verify that the

information provided is correct, and that your state list is complete and accurate, and you include information on specific species that would enhance the information provided.

The next step is to link all the images of each species available to the mammal species lists and correct and edit information as it comes in from the membership. To make this database K-12 student/teacher friendly, we will be adding specific terms as pull down menus, including “State,” “Diet,” “Habitat,” “IUCN Status,” “Order,” and “Family.” In addition, we will have a box to type in searches, like “bat” or “Colorado.” The selections will be common names with the scientific names in parentheses after the common name. Our goal is to complete this portion of the mammal lists by the Annual Meeting in 2014.

Our final goal is to incorporate mammals of Canada and Mexico, completing the North American Mammal Species database. At this point, we have not set a timeframe for completing this phase of the state lists.

There are multiple benefits to this system.

- With the completion of the database, all 50 states are essentially completed.
- When the Mammal Species of the World: A Taxonomic and Geographic Reference is revised to the 4<sup>th</sup> edition, it will be a matter of making the appropriate species changes in the database (one time rather than 50 times for each state), and the list will be current within a matter of weeks (rather than years) after publication.
- The new ASM internet website can support a searchable database system. In that case, mammal species of the United States can become a flexible tool for searching not only state mammal lists, but also individual species, genera, or families throughout the United States. This becomes a powerful tool for further PEC projects and programs.

**(2) Science Fair Certificates (B. J. Shaw):**

The Public Education Committee provides recognition to students participating in Science Fairs with a project related to mammals by awarding a Certificate of Achievement. Certificates were requested this year for the Blue Ridge Highlands Regional Science Fair, and 6 certificates were awarded to the participants. We would like to remind the membership to request the Certificate of Achievement if you participate in a science fair, for any student who conducts research on mammals. Please email the chair.

**(3) Clearinghouse for K-12 Teachers:**

This program connects classroom teachers with mammalogists but is not used. We had no requests this year. We anticipate that this will change as the PEC is able to utilize the newly upgraded website.

**(4) Citizen Science (K. K. Thorington (lead), J. Varner and B. J. Shaw) Public outreach and tracking (hopefully a component of E-Mammal):**

One of the challenges of education through modern technology is how to get folks off of the computer looking at and exploring the natural world. The proposed project aims to heighten awareness of the mammals that share our neighborhood and landscapes by making tracking and track ID more accessible to the general public.

A very little bit of knowledge about track and gait structure can be a powerful tool for both a scientist and an amateur naturalist. More exposure to tracking techniques and track and sign identification of course gives people a better understanding of the stories animal trails tell and better understanding of what the animal that left the tracks or signs was doing. The beginning steps of this process, how to measure and identify a track, how to find the next piece of information (footprint scrape mark etc.) should be readily accessible to the public.

The goals of this project are to find and implement ways that people can use photographs and descriptions to identify tracks and signs and get help with those identifications and/or confirmations of their identifications so that the tracking skills can improve. With the collective knowledge on passive track and hair trap's within the ASM, we should be able to provide instructions potentially including YouTube videos on how to make and use these traps. These tools should be aimed at both children and adults to get them tracking in their neighborhoods and sharing what they find with each other and the scientific community. To share this project with the membership attending the 2013 Philadelphia Meeting, we have developed a poster to begin the discussion with you and to solicit involvement from the membership of the Society.

**(5) Teacher Workshop** (G. Feldhamer (lead), A. Joachim, V. Mathis, V. Naples, B. J. Shaw, and J. Varner):

PEC is not presenting a teacher workshop this year (2013). Our collaborator at the Franklin Institute dealt with a health issue, and by the time he had returned to work, it was too late to present the workshop.

PEC has had several discussions with Sam Noble Museum education staff and J. Braun, Program Committee, and we are committed to collaborating with the museum to present a teacher workshop at our Annual Meeting in Oklahoma in 2014. PEC anticipates offering continuing education credit with the host institution. The workshop would be over 2 days, including attending one day of the Annual Meeting (both papers and poster session) and the second day a workshop on engaging science in the classroom with a material presentation on incorporating good mammal science.

One of the lessons will be scientific presentation through posters. We would like to ask members to donate their posters with ASM logo as well as their own university logo to the teachers taking the workshop. The posters would be used in the lesson as well as “parting gifts” from ASM to be displayed at the local schools.

**(6) Other Projects in initial development:**

As the state list project is in the final phase of completion, PEC committee members have determined new goals of direction to support the mission statement of this committee. The projects are:

- **Conservation Education** (L. C. Arias, S. Sheffield (lead), J. Varner): Initial steps have been taken to work with the Conservation Committee to develop resources for K-12 educators, informal educators, and the general public on conservation issues. Now that Phase 1 of the upgrades is completed, we can begin to develop this collaboration for K-12 and the public and the ASM Conservation Committee’s projects.

**Action Items:**

In preparation for the teacher workshop in 2014, the Public Education Committee requests funds to develop and purchase the materials for presentation (\$200), copying curricula (\$100) to deliver to teachers, and postage (\$25) to advertise this event in Oklahoma Department of Education and the Sam Nobel Museum. We therefore respectfully request a \$325.00 budget to cover these costs.

**Respectfully submitted,**

Barbara J. Shaw, Chair

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