

## **2018 PARASITOLOGY B/C**

1. **DESCRIPTION:** This event will test student knowledge of parasites in local and global ecosystems.

**A TEAM OF UP TO: 2**

**APPROXIMATE TIME:** 50 minutes

2. **EVENT PARAMETERS:**

Teams may bring the official National List of parasites (which will be posted on the National SO website) and one 3-ring binder (any size) containing pages of information in any form from any source.

3. **THE COMPETITION:**

- a. Each team will be given an answer sheet on which they will record answers to each section.
- b. The competition may be run as stations and/or as a PowerPoint presentation
- c. Specimens/pictures will be lettered or numbered at each station. The event could include live and preserved specimens and slides or pictures of specimens.
- d. Participants should be able to do basic identification to the level indicated on the Official List. No more than 50% of the competition will require providing common or scientific names.
- e. Each specimen/picture will have one or more questions accompanying it on some aspect of the organisms life history, distribution, anatomy and physiology, reproduction, hosts, ecological niche, behavioral adaptations, epidemiology and transmission.
- f. Only the Official National List will be used for taxonomy questions.

4. **SAMPLE TASKS/STATIONS/QUESTIONS:**

- a. Place in order the life cycle pictures of *Plasmodium falciparum*.
- b. How do populations attempt to deter *Plasmodium falciparum* transmission?
- c. A trophozoite is the feeding stage of what type of parasite?
- d. Primary Amebic Meningoencephalitis (PAM) is caused by which parasite?
- e. Discuss how *Euhaplorchis californensis* changes the behavior of its host, the California killifish, thereby increasing its transmission.

5. **SCORING:**

The teams with the highest number of correct answers will be the winners. Points will be awarded for the quality and accuracy of responses. Selected questions may be used as tiebreakers.