

## Collection notes

**Egg Collection:** In order to get a census of invasive mosquito populations, students are asked to collect eggs and send the eggs to the USDA. Doing so will give the USDA a good figure of invasive mosquito population distributions across the United States which can help with public health.

**Procedure:** See “Egg Collection Procedure” handout

**Placement:** Each student will set out 2 cups, one labeled “A” and the other labeled “B”. Cup A is to be placed in a sunny location and Cup B is to be placed in a protected shady location. On the egg collection paper, students are encouraged to write about the surroundings of the cup (such as flowering vegetation nearby, shade sources, and cover plants, trees, etc).

**Safety:** *Aedes* mosquitoes feed throughout the day, therefore students should wear long sleeves, long pants, and insect repellent when near the oviposition cups. These precautions will limit exposure to potential mosquito bites and encourage good behavior and personal protection. Also, students should only place cups around their homes—traveling is not required for this process and will reduce the risk of travel-related injury.

**Collection:** After a week of letting the oviposition cups sit outside, the collected eggs will be dried with the egg paper and sent to the USDA in Manhattan, Kansas. If desired,  $\frac{1}{4}$  of the eggs may be raised to adulthood as part of a second lesson plan where students will learn more about scientific protocols and the life stages of mosquitoes.

**Counting and Shipping:** When all the eggs have been collected, students should count the number of eggs on each paper and record on their personal record sheet as well as contribute to class data for shade vs. sun egg collection. Students may input their information from their personal recording sheets into the website so it may be viewed by everyone. Students should observe the difference between eggs (a magnifying glass or microscope will be useful for this) and record information with class data. Class data can be basis for discussion (why one location might have more eggs than another). When observations and discussion have ended, send  $\frac{3}{4}$ <sup>th</sup> of slightly damp paper (paper should not crinkle) and eggs to a local collaborator (within the same city) who can do the identifications or the USDA in Manhattan, Kansas (USDA-ABADRU – Invasive Mosquito Project, 1515 College Ave., Manhattan, KS 66502). Please be careful when shipping eggs; do not send them to other locations because these are invasive species and can colonize locations quickly and easily. If desired,  $\frac{1}{4}$  of the eggs can be reared to adulthood as part of a 2<sup>nd</sup> lesson that will also discuss in more detail the mosquito life-cycle, mosquito adaptations, transovarially transmitted mosquito diseases, and scientific protocol.