

DHS AP Biology - Summer Assignment

Welcome to AP Biology! I am so excited for our class next year and this summer assignment is meant to be fun and to get you outside. However, we have a lot of material to get through in our eighty blocks together, so be ready to get to work day one. Your summer assignment is to capture specimens for our first lab over animal behavior. I am sure many of you are familiar with isopods (you might know them as pillbugs or roly-polys), and they will be the subjects of this lab. Your job is to capture 5-10 pillbugs and bring them to the first day of AP Biology (I wouldn't start this assignment until a few days before our first class). Below I have included some information on pillbugs, where to find them, and how to maintain them after capture. Don't worry - we will be releasing our lab subjects back into the wild when our experiments with them are done. If you are having trouble finding pillbugs or are squeamish at the thought of them, no worries, email me at aadams@usd232.org and we can figure something out! I hope you all have a wonderful summer and have some fun hunting for these isopods!

-Mrs. Adams

Obtaining Isopods

Isopods can be found virtually anywhere in the fall, spring or summer where it is dark, warm and damp. They can be found in gardens and yards under rocks and litter, in compost piles, in wood piles, and even in some basements. The Shrub-Steppe Ecology Series website (http://www.pnl.gov/pals/resource_cards/pillbugs.stm) suggests a "potato trap" you can use to collect isopods:

"To make the potato trap, bore a 3/4-inch hole through the potato lengthwise, then close up one end of the hole with a small piece of the potato plug. Place the "trap" in the garden or any other place where sowbugs and pillbugs are abundant. Cover the trap with leaves, and leave it alone a few days. The pillbugs will come and feed inside the hole in the potato. To remove them, place the opening over a jar, and strike the potato to dislodge them. The potato trap is especially useful for collecting small or young isopods and rare species, too."

Maintaining a Lab Colony

Isopods are quite easy to maintain. Place them in a small Tupperware container (1-1.5 liters). Add moistened paper towels to the bottom of the container and various bits of bark and leaf litter for food. Make sure to keep the environment moist, but avoid standing water or significant condensation or the isopods will drown. A vented top will allow air flow but will help retain moisture.

