My oldest memories about nature involve catching and collecting insects. These memories of handling live animals have stuck with me for over two decades. To me, live animals were so interesting; they were the highlight of the day. I think the excitement I felt while catching bugs was what allowed me to keep those memories for so long. For an activity to have some impact, I think it should be both educational and exciting. The activity should be fun while fostering enthusiasm for a topic. The following are a list of games/activities that I have come up with:

1. The pollination game: Pollination is incredibly important and an integral part of our agricultural processes. However, bees don’t seem to talk or draw maps, so how do they communicate flower location to other bees? This game is used to demonstrate how complex honeybee communication is.

   The first part of the game has two kids go out and hide a flower. One of the kids will actually hide the flower and the other participant will watch. Then, the participant who watched will go back to the rest of the group and try to delineate where the flower is without talking or writing (you have two kids so that the participant hiding the flower doesn’t purposely mislead the group). After a minute or so, the group will go out and look for the flower (leaving the two kids who hid the flower out of sight in the “hive”. Once the kids find the flower and bring it back, the waggle dance is explained to them. Then they do the same game but with the waggle dance instead.

   This game should be played with 4+ kids in elementary or middle school. It can last over 30 minutes. Everyone should be able to participate.

2. The metamorphosis game: The metamorphosis game is used to demonstrate what complete metamorphosis is and help the kids remember all the differed forms a holometabolous insect goes through during development. To start, all the kids pretend to be eggs by crouching down, hugging their legs to their chest and placing their feet on the ground (any parents or teachers will permanently be “eggs”). Then the participants will hop over to another “egg” and play a game of “rock-paper-scissors.” The winner becomes a larvae and the loser remains as an egg. In the larval form, the participant will crawl on the ground keeping their held shins together while searching for another larva to play “rock-paper-scissors” with. If they win, they become a “pupa” (standing up with their arms crossed. Legs are kept together) if they lose they go back to being an “egg.” Each form can only play “rock-paper-scissors” with the equivalent form, for example, larvae can only play with larvae, pupa with pupa, etc. Once two pupa compete, the winner becomes a butterfly and the game is over.

   This game will help kids remember the different stages of complete metamorphosis. Additionally, it also gives some insight into insect populations. If you count the number of participants in each form, it should decline with maturity. Most people should be “eggs” then “larvae” followed by “pupa” with only one “adult” or “butterfly.” This pattern holds true with many insect populations. Out of hundreds of eggs, only a few individuals will ever reach adulthood. This game demonstrates this to the kids.
This game should be played with at least 10 kids, grades k-8. This is a short game and it shouldn't last much more than 10 minutes. It might be useful as an icebreaker or a way to change up the pace of the talk. Everyone will participate. The adults act as “eggs” to make sure no participant is stuck without someone to play with.