## Putnam Soil and Water: 5th Grade Programs

The following programs are designed for 5th grade classes and align to the state standards. All materials are provided and programs are free. To schedule a program email Bonnie Brooks at bonnie.brooks@putnamcountyohio.gov

- 5th Grade: 5.LS.1: Organisms perform a variety of roles in an ecosystem. Populations of organisms can be categorized by how they acquire energy. Food webs can be used to identify the relationships among producers, consumers and decomposers in an ecosystem. Topic 2: 5.LS.2 All of the processes that take place within organisms require energy.
- 1. Break Out Boxes: Ecosystems. Students participate in a team to solve problems to break open boxes that test their understanding on ecosystems. Answers will lead them to a specific ecosystem that is endangered and was once an integral part of our history in Putnam County.
- 2. Oh Deer!: First we will take a look at a map of Ohio species of wildlife over time. Then students play a game and become either a part of the environment or herd of deer (also called a bunch, mob, parcel, or ragale). Through a series of events, students process how the resources and other factors in the environment effect the deer population and vice versa. We will utilize words like population, limiting factor, predator, prey and carrying capacity. This is a very active game. We will need an outdoor space or 15 minutes or so in the gym, outside or other open space. The teacher will keep track of the deer population from one round to the next. After the game we will debrief together what happened, why and graph the data. We will also look at 1800 numbers of lynx and hares and check out predator/prey relationship.
- 3. Web of Life: Students will become a part of the ecosystem and find out how important each part is to the survival of the whole. We will first talk about what energy is and where each living thing in the environment gets it. Student teams will put together a simple food chain. Afterward, as a class, we will make a food web made up of living and non-living things in the environment to see how they are each connected to one another. After the activity we will talk about what happened and why.



- **4. Worm Bin:** There is so much life in a worm bin. Students will identify living and non-living parts of the bin with 1000 x magnifiers and see if they can create a food chain with the inhabitants.
- <u>5. Wildlife CSI:</u> Who murdered rabbit?! Students work in a team that represents a specific animal to cross examine other teams and utilize clues to figure out who committed the crime. Adaptations

and predator/prey relationships are explored.

**<u>6. Trees</u>**: Project Learning Tree Activities: Tree Factory: Kids play a game and learn the parts of a tree and how it makes its own food. Tree Cookies: Look at a cross section of a tree to look at the parts they just portrayed in the game. What type of roles do trees play in their environment?