

## **Common misconceptions about earthworms**

### **1. All earthworms are the same**

- There are over 3000 species of earthworms
- Three functional groups (anecic, endogeic, epigeic)
- Earthworms arrived to Finland after the latest ice age

### **2. Earthworms have only positive impacts on their surroundings**

- Earthworms improve the quality of soil by burrowing which aerates the soil and increases the flow of water and breaking down organic matter.
- These effects are very helpful in gardens and agricultural lands
- Earthworms may have a negative effect on environments that are not adapted to the presence of earthworms. The removal of leaf litter layer is harmful to the species that depend on it.
- The loss of leaf litter layer may also increase the carbon emissions from the soil because of increased microbial activity.

### **3. Earthworms eat only soil**

- Earthworms process the soil when they burrow through it. Different earthworm species have different diets. Earthworms eat for example decaying plants or animals, leaf litter, fungi and minerals in the soil.

### **4. When it rains earthworms rise to the ground because otherwise they drown**

- Earthworms can survive in water for many weeks as long as there is dissolved oxygen in the water. It is easier for earthworms to move above ground when the environment is moist. Earthworms need moist environment because they breathe through their skins which requires a moist surface.

### **5. If you cut an earthworm in half, it results in two earthworms**

- The front half of the earthworm may be able to survive and regenerate a tail, if enough segments remain, However, the rear portion will not survive. Flatworms have the ability to regenerate to two worms if they are cut in half.

<http://www.nsta.org/elementaryschool/connections/201302SmithWormMisconceptionsTable>