Earthworms & Soil Building

Epigeic - Red Worms (Bohlen et al 2004)
- reddish in color
- live and feed exclusively in the surface litter of the soil
- limited mixing of mineral and organic soil layers

Endogeic (Bohlen et al 2004)
- whitish gray and live and feed only in the soil or under logs.
  - They almost never come to the surface
  - Feed on leaves or other organic material
  - Soil (i.e. excrement) they leave behind are called casts.
  - Reside in the mineral or mixed soil layers

Aecic or Night crawlers (Bohlen et al 2004)
- 10 to 15 centimeters in size.
- Eat fresh litter at the surface of the soil
- Make burrows, sometimes up to 2 meters deep.
- Incorporate litter into the soil
- Bring mineral soil from different depths to the surface
- Soil mixing that is very different from worms

April 29, 2014 evaluating soil of the cover crop field:
Worms underneath decomposing cow pie.
165 worms per cubic foot. 7.2 million worms per acre.
(Ref.: Marlon Winger)

There are ~3000 Species of Earthworms

- Litter Dwelling (Epigeic) Species
- Shallow Burrowing (Endogeic) Species
- Deep Burrowing (Aecic) Species
  - Construct burrows that extend 2 to 3 feet deep
  - Cannot tolerate dry or frozen soil
  - Come to the soil surface to feed, breed, and migrate

Do you have “Crumbly” Soil?

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