

Observational Metrics

Diversity of Macro-Life

Ecological Process:	Community Dynamics, The Nutrient Cycle, The Water Cycle, Energy Flow
Why Monitor This Metric?	Fields that support a diversity of organisms tend to be resilient to environmental stressors and promote nutrient cycling, water cycling and the flow of energy between organisms (including crops). Observing macro-life (organisms that can be seen with the naked eye) above and below ground is a great way to assess how the farm ecosystem is supporting unique ecological niches, which in turn builds vast connections that promote nutrient cycling and effective resource exchange. Observing macro-life above and below ground provides insight into biodiversity and can be an early indicator of the impact of field management.
Tools Needed:	Shovel, Camera, Pen/Pencil, Data Sheet/Paper
When to Monitor:	Observations can be made at any time, but it is best to make observations when soil is moist and warm as macro-life activity will be at its peak.

The Process:

1. Select a starting point in your field or garden and walk several paces in alternating diagonal lines, noting all macro-life observed on the soil surface.
2. Take note of any organisms present on the surface of the soil, on the crop, or in the air.
3. Use your shovel to dig out a hole in the observation area. Note all the organisms in the soil.
4. Take photos of what you see.
5. Add up the number of unique organisms you observed on and in the soil (do not include the ones you found in the air and on the crop).

Use Your Observations to Rate Diversity of Macro-Life (adapted from ROC)

- Poor: less than 2 organisms found.
- Fair: between 2-5 organisms.
- Good: more than 5 organisms.