Observational Metrics
Soil Smell

Ecological Process:	The Nutrient Cycle, Community Dynamics
Why Monitor This Metric?	Soil smell is an important indicator of the biological processes occurring in the soil. Strong, earthy smells are indicative of active soil ecosystems while putrid and pungent smells are indicative of anaerobic conditions likely caused by compaction.
Tools Needed:	Shovel, Pen/Pencil, Data Sheet/Paper

The Process:

1. Enter the area in which you are assessing soil smell.
2. Use a shovel to dig a hole in a sample area.
3. Grab a sample of soil and smell it.
4. Take note of how the soil smells, and record your observations on your data sheet/paper:
    a. Does it smell sweet?
    b. Does it smell earthy?
    c. Does it smell rotten or sour?
    d. Can you smell it from six inches away?
5. If the soil smells rotten or sour, this could potentially be waterlogged soil, and the smell is resulting from anaerobic processes.
6. If the soil smells minerally, this could mean there is a lack of organic matter.
7. If there is no smell, this is neutral.
8. If the soil smells sweet from up close, this suggests fair soil biological processes.
9. If the soil smells sweet from six inches away, this suggests good soil biological processes.

Use Your Observations to Rate Soil Smell (adapted from ROC)

- Poor: sour, rotten, overall bad smell.
- Fair: no strong smell, not bad but also not earthy or fresh-smelling.
- Good: pleasant, sweet, earthy.