Observational Metrics
Rhizosheath

Ecological Process:	The Nutrient Cycle, Community Dynamics
Why Monitor This Metric?	The rhizosheath is a layer of soil that is glued to plant roots as a result of rhizosphere activity, creating a "dread loc" appearance. Strong presence of rhizosheaths on all roots is indicative of high levels of biological activity in the soil and strong plant-microorganism interactions that facilitate nutrient exchange and protect plants from disease pressures. Monitoring the rhizosheath helps to determine the level of interaction between the plant and the soil microbiome.
Tools Needed:	Camera, Shovel, Pen/Paper, Data Sheet/Paper

The Process:

1. Enter the area in which you are assessing rhizosheaths.
2. Choose a site where there are plants of interest that you would like to sample.
3. Take a picture of the plant you are assessing with your camera or phone and identify the GPS coordinates. Record this on your data sheet or paper.
4. Use your shovel to dig up some roots (no wider than the width of the shovel).
5. Gently shake out the soil and look for soil aggregates clinging to the roots.
6. Take note of white roots and record your observations on your data sheet.
7. Take a picture of roots for future reference.

Use Your Observations to Rate Rhizosheath (adapted from ROC)

- Poor: white roots, no coating at all.
- Fair: some white roots, some roots are covered.
- Good: all roots are covered, no roots are white.