

Observational Metrics

Crop Health

Ecological Process:	Energy Flow, The Nutrient Cycle
Why Monitor This Metric?	Monitoring crop health provides a first look at what a crop is experiencing above and below ground. A plant's ability to photosynthesize, uptake nutrients from the soil, and defend against pest and pathogen pressure all influence crop health.
Tools Needed:	Pen/Pencil, Data Sheet/Paper

The Process:

It is important to observe crop health several times throughout the growing season. Observations should be taken after germination, during vegetative growth stage, and at the flowering/reproductive stage.

1. Enter the area in which you are assessing crop health.
2. Visually identify changes in the appearance of the crop(s).
3. Examine the leaf colour:
 - a. What is the colour of the leaves?
 - b. Is there any discoloration?
 - c. If so, what parts of plant are affected and to what extent?
 - d. Is this isolated to a few plants or is it widespread?
4. Examine the plant height:
 - a. Is there poor germination?
 - b. Is there variability of height in the crop?
 - c. Is there stunted growth in the crop?
5. Record your observations on your data sheet. Make sure to take pictures that reflect what you are seeing.

Use Your Observations to Rate Crop Health (adapted from ROC)

- Poor: discolored leaves, stunted growth, poor germination and/or variable height.
- Fair: growth adequate but variable, light green-colored leaves.
- Good: dark green leaves, even growth, good germination.