

# LEARNING JOURNEY

## REGENERATION THROUGH AGRICULTURE



## 5 KEY PRINCIPLES TO SOIL HEALTH

### 1. Soil Cover

Keep soil covered as much as possible, preferably year-round with plants and a layer of decaying plant litter. Soil cover protects soil life from heat, pounding rain, and wind.

### 2. Minimize Disturbance

Manage soil more by disturbing it less. Reduce or eliminate tillage (plowing) whenever possible, to maintain the structure and function of the soil. Minimize physical, chemical, and biological stresses on the landscape, such as excessive use of biocides, compaction, undergrazing, overgrazing, etc. Reducing soil disturbance and degradation can decrease the oxidation of soil carbon.

### 3. Plant Diversity

Use plant diversity to increase diversity in soil microorganisms, beneficial insects, and other species. A diverse system is more resilient than a monoculture, stores and filters water, cools the surrounding atmosphere, creates mist and clouds, and is resilient to flooding and drought.

### 4. Continual Live Plant Roots

Keep plants growing throughout the year to feed the soil. This allows soil life to provide its own food and protection by maintaining living roots in the ground and plant cover, year-round.

### 5. Livestock Integration

Mimic nature to integrate and manage a diversity of animals, birds, and insects into the system. Animals help cycle nutrients, create small and large pores in the soil, manage flows of water, pollinate crops, balance predator/ prey relationships, and replenish soil microbes.