

Location:				Plot:	Location within plot:
Weather description:					
	Day/Time	Day/Time	Day/Time		Notes:
	8/14	8/15	8/16		
Air temp					
Soil temp					
Soil moisture					
Soil pH					
Light level					
Soil hardness					

Location:				Plot:	Location within plot:
Weather description:					
	Day/Time	Day/Time	Day/Time		Notes:
	8/14	8/15	8/16		
Air temp					
Soil temp					
Soil moisture					
Soil pH					
Light level					
Soil hardness					

Location:		Plot:	Locations within plot:		
Date:	Weather description:				
Tree Species:		Tree Species:			
Diameter Tree 1:	cm.	Location of cobalt chloride paper	Diameter Tree 2:	cm.	Location of cobalt chloride paper
Leaf Transpiration rate:			Leaf Transpiration rate:		
Leaf Transpiration rate:			Leaf Transpiration rate:		
Leaf Transpiration rate:			Leaf Transpiration rate:		
Tree biomass:		(kg)	Tree biomass:		(kg)
Mass of stored carbon:		(kg)	Mass of stored carbon:		(kg)
*Mass of CO ₂ taken in:		(kg)	*Mass of CO ₂ taken in:		(kg)

*This number represents the amount of CO₂ your single tree removed from the atmosphere and stored in its biomass to date. 1 kilogram=2.2 pounds

Use <https://serc.carleton.edu/eslabs/carbon/1b.html> to work out your calculations.

Field Observations

Each day spend time closely observing your plot. Sketch, photograph, clip samples, check traps, take measurements, write your observations and impressions, ask questions. Try to identify plants. Date everything, label what you can, note your surroundings. Each day will bring a new layer of observation to build upon what you see.

Day 1: Focus on leaf shape and size, texture (hairs, wax, thick, thin, coarse, rough..)

1. Within tree, note differences between sun and shade leaves.
2. Within tree, note differences according to position on tree branch.
3. Within tree, note differences according to location along trunk height.
4. Among meadow plants, note differences in leaves and leaf positions.
5. Among meadow plants, note differences between sun and shade leaves.

Day 2: Focus on ground cover within your plot.

1. What is covering the ground/soil?
2. What percentage is covered by plants?
3. What percentage is covered by woody plants vs. herbaceous plants?
4. Feel the soil. Describe its texture.

Day 3: Focus on animal-plant interactions.

1. What evidence of animal activity do you see?
 - Webs
 - Scat/frass
 - Holes/tunnels
 - Chewed plants
 - Galls
 - Cocoons
 - Sounds
2. Keep track of all animals you see that interact in your plot.

Day 4: Focus on health of ecosystem.

1. Is there evidence of stress on plants? Fungus, spots, dead parts
2. What do your abiotic data measurements reveal?