Site Definition Sheet
*** Required Field**

School Name: _____   Site Name:_____
Choose a unique name based on location,
e.g. "Grassy area - Front of School"

Names of students completing Site Definition Sheet: _____

Date: Year_____   Month_____   Day____   Check one: ❑ New Site   ❑ Metadata Update

*Coordinates: Latitude: _____ ˚ ❑ N or ❑ S   Longitude: _____ ˚ ❑ E or ❑ W
  Elevation: _____ meters

*Source of Location Data (check one): ❑ GPS   ❑ Other _____

Comments: _____

_____

Site Type (select all that apply based on intended measurements, then complete the necessary fields below): ❑ Atmosphere   ❑ Surface Temperature   ❑ Hydrosphere
❑ Biosphere Land Cover   ❑ Biosphere Greening   ❑ Biosphere Phenological Gardens
❑ Biosphere Lilacs   ❑ Soil (Pedosphere) Characteristics
❑ Soil (Pedosphere) Moisture and Temperature   ❑ Soil (Pedosphere) Frost Tube

Cover type (Select one): ❑ Short grass (< 0.5m)   ❑ Tall grass (> 0.5m)   ❑ Barren land
❑ Sand   ❑ Closed Forest (Trees interlocking)   ❑ Woodland (Trees not interlocking)
❑ Shrubs ❑ Dwarf Shrubs ❑ Flowering Plants ❑ Wetland ❑ Cultivated Agricultural
❑ Cultivated Recreational ❑ Open Water ❑ Bare Rock ❑ Urban Residential
❑ Urban Commercial ❑ Asphalt ❑ Concrete ❑ Other   ❑ Land Cover site

If you selected Closed Forest or Woodland, indicate the ground cover (Select one)**:**
❑ Leaf Litter   ❑ Moss   ❑ Peat

Atmosphere

List any obstacles (Check one):   ❑ No obstacles   ❑ Obstacles (describe below)
  (Obstacles are trees, buildings, etc. that appear above 14˚ elevation when viewed from the site)

Description:_____

_____

Buildings within 10 meters of instrument shelter (Check one):
        ❑ No buildings ❑ Buildings (describe below)

Description:_____

_____

Other Site Data:

Steepest Slope: _____ Compass Angle (facing up slope): _____

Rain Gauge Height [____] cm   Ozone Clip Height [____] cm   Thermometer Height [____] cm

*Thermometer Type (Check one):
   ❑ Other, Soil or Air
   ❑ Liquid-filled, Current Temperature Only
   ❑ Digital Single-Day Min/Max
   ❑ Digital Multi-Day Min/Max
   ❑ Reset Digital Multi-Day Min/Max Thermometer

Note: reset is required before data collection and entry, when batteries are changed or every 6 months

School Name: _____Study Site: _____ Date: _____

Date: Year____ Month____ Day___ Universal Time (hour:min): _____

Was this reset due to a battery change? ❑ Yes ❑ No

❑ Earth Networks Station (Automated Station ID _____)

❑ Davis Instrument (Davis Thermometer Type _____)

❑ Data Logger (HOBO)

❑ Rainwise

❑ WeatherHawk

❑ No Thermometer

Surface Cover Description under instrument shelter (Check one): ❑ Pavement
❑ Bare ground   ❑ Short grass (< 10 cm) ❑ Long grass (> 10 cm) ❑ Sand
❑ Roof (describe below)   ❑ Other (describe below)

Description:_____

Overall comments on the site (metadata): _____
_____

Surface Temperature

Homogeneous site size (Select one): ❑ 90m x 90m ❑ 30m x 30m
　　　　　　　　　　　　　　　❑ Smaller than 30 x 30m (specify size: __ m x __ m)

Type of IRT Instrument: ❑ Raytech ST20   ❑ Other (specify instrument manufacturer and
　　　　　　　　　　　　　　　　　model) _____)

Overall comments on the site (metadata): _____
_____

Hydrosphere

*Name of Body of Water: _____ (the name commonly used
on maps; if the body of water does not have a common name, provide a description of the
water body it comes from or flows into or both.)

*Water Body Type (Select one): ❑ Unknown   ❑ Saltwater   ❑ Freshwater   ❑ Brackish

Water Body Source (Select one):

　　　　❑ Pond (Area of standing water ___ km^2; Average Depth of Standing Water ___ m)

　　　　❑ Lake (Area of standing water ___ km^2; Average Depth of Standing Water ___ m)

　　　　❑ Reservoir (Area of standing water ___ km^2; Average Depth of Standing Water ___ m)

　　　　❑ Bay (Area of standing water ___ km^2; Average Depth of Standing Water ___ m)

　　　　❑ Ditch (Area of standing water ___ km^2; Average Depth of Standing Water ___ m)

　　　　❑ Ocean

　　　　❑ Estuary (Area of standing water ___ km^2; Average Depth of Standing Water ___ m)

　　　　❑ Stream (Width of Moving water ___ m)

　　　　❑ River (Width of Moving water ___ m)

　　　　❑ Marsh/Swamp

　　　　❑ Agriculture

School Name: _____Study Site: _____ Date: _____

❑ Puddles, animal and vehicle tracks

❑ Other (Width of Moving water ___ m; Area of standing water ___ km^2;
    Average Depth of Standing Water __ m)

Water Sample Location: ❑ Outlet   ❑ Bank   ❑ Bridge   ❑ Boat ❑ Inlet   ❑ Pier

Can you see the bottom?   ❑ Yes   ❑ No

Channel/Bank Material: ❑ Soil   ❑ Rock   ❑ Concrete   ❑ Vegetated Bank

Bedrock: ❑ Granite   ❑ Limestone   ❑ Volcanics   ❑ Mixed Sediments   ❑ Unknown

Freshwater Habitats Present: ❑ Rocky Substrate   ❑ Vegetated Banks   ❑ Mud Substrate

❑ Sand Substrate   ❑ Submersed Vegetation   ❑ Logs

Saltwater Habitats Present: ❑ Rocky Shore   ❑ Sandy Shore   ❑ Mud Flats/Estuary

Overall comments on the site (metadata): _____
_____

_____

Biosphere
Land Cover

MUC Description: Level 1: _____   Level 2: _____

Level 3: _____   Level 4: _____

*MUC Code: _____ **Note:** *Use the MUC Guide to determine the greatest level possible within the MUC system*

Overall comments on the site (metadata): _____
_____

Greening

Are there multiple dominant species? ❑ Yes   ❑ No

Primary Plant

Is this plant in the understory? ❑ Yes   ❑ No

Vegetation Type (Select one): ❑ Grass Genus: _____

❑ Tree Genus: _____ Species: _____

❑ Shrub Genus: _____ Species: _____

Label: _____

Secondary Plant

Is this plant in the understory? ❑ Yes   ❑ No

Vegetation Type (Select one): ❑ Grass Genus: _____

❑ Tree Genus: _____ Species: _____

❑ Shrub Genus: _____ Species: _____

Label: _____

Tertiary Plant

Is this plant in the understory? ❑ Yes   ❑ No

School Name: _____ Study Site: _____ Date: _____

Vegetation Type (Select one): ❏ Grass Genus: _____

❏ Tree Genus: _____ Species: _____

❏ Shrub Genus: _____ Species: _____

Label: _____

If additional plants will be monitored record the information on another sheet or in your Science Log.

Overall comments on the site (metadata): _____
_____

Phenological Gardens

Soil Texture (Select one): ❏ Unknown ❏ Sandy Clay ❏ Sandy Clay Loam
❏ Sandy Loam ❏ Silty Clay ❏ Silty Clay Loam ❏ Silt Loam ❏ Loamy Sand ❏ Sand
❏ Silt ❏ Clay ❏ Clay Loam ❏ Loam ❏ Organic

Soil pH: _____; **pH Method**: ❏ pH Maper ❏ pH Meter

Shrub Name	Date Planted
Witch Hazel 'Jelena'	
Witch Hazel 'Genuine'	
Lilac	
Mock-Orange	

Shrub Name	Date Planted
Forsythia	
Heather 'Allegro'	
Heather 'Long White'	
Snowdrops	

Cloned and Common Lilac

Lilac Shrub Name	Cloned or Common	Date Planted/Died	Height (cm)

Soil (Pedosphere)
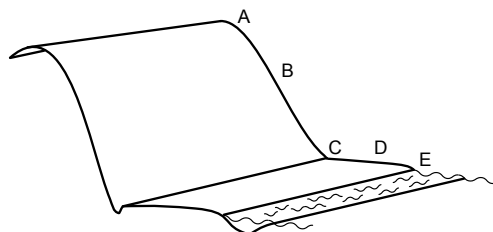## Soil Characteristics

Slope angle (North, Northeast, etc.): _____

Method (select one): ❏ Soil Pit   ❏ Auger Hole   ❏ Near Surface   ❏ Excavation
❏ Road Cut   ❏ Erosion Cut

Land Use (Select one): ❏ Urban   ❏ Agricultural   ❏ Recreation   ❏ Wilderness
❏ Other _____

Landscape Position (Select one):

❏ A. Summit
❏ B. Slope
❏ C. Depression
❏ D. Large Flat Area
❏ E. Stream Bank

* Required Field

School Name: _____ Study Site: _____ Date: _____

Soil Horizon Definitions

Horizon Number	Date (YYYY, MM, DD)	*Top Depth (cm)	*Bottom Depth (cm)	Moisture Estimate (Select one: Unknown, Dry, Moist, Wet)	Structure Estimate (Select one: Unknown, Granular, Blocky, Platy, Prismatic, Columnar, Single Grained, Massive)	Main color (code from soil color book)	Secondary Color (code from soil color book)	Consistence Estimate (Select one: Extremely Firm, Firm, Friable, Loose, Unknown)	Texture Field Estimate (Select one: Unknown, Sandy Clay, Sandy Clay Loam, Sandy Loam, Sandy Loam, Silty Clay, Silty Clay Loam, Silt Loam, Loamy Sand, Sand, Silt, Clay, Clay Loam, Loam, Organic)	Root Quantity Estimate (Select one: Unknown, None, Few, Many)	Rock Quantity Estimate (Select one: Unknown, None, Few, Many)	Carbonates (Select one: Unknown, None, Slight, Strong)

Note: The Top Depth of any horizon must be the same depth or lower than the Bottom Depth of the horizon above it; it cannot be higher that the bottom depth above it.

Comments on the site (metadata): _____

School Name: _____Study Site: _____ Date: _____

Parent Material (Select one): ❑ Bedrock   ❑ Organic Material   ❑ Construction Material ❑ Marine Deposits ❑ Lake Deposits ❑ Stream Deposits (Alluvium) ❑ Wind Deposits (Loess) ❑ Glacial Deposits (Glacial Till) ❑ Volcanic Deposits ❑ Loose Materials on Slope (Colluvium) ❑ Don't Know ❑ Other _____

Distance from Major Features: _____

Soil Moisture and Temperature

Surface State (Select one): ❑ Natural ❑ Plowed ❑ Graded ❑ Backfill ❑ Compacted ❑ Other _____

Canopy Cover (Select one): ❑ Open ❑ Some Trees (within 30m) ❑ Canopy Overhead

Overall comments on the site (metadata): _____
_____

Frost Tube:

We recommend you also complete the atmosphere and surface temperature sections.

Date installed: _____

Height above ground (cm): _____ Depth below ground (cm): _____ Total length (cm): ____

Water body within 100m of site: ❑ No   ❑Yes (complete below)

Water body type (Select one): ❑ Unknown ❑ Saltwater ❑ Freshwater ❑ Brackish

Direction to closest point of water: ❑ N ❑ NE ❑ E ❑ SE ❑ S ❑ SW ❑ W ❑ NW

Landscape Position (Choose one, see above in **Soil Characteristics**)

Overall comments on the site (metadata): _____
_____

Site Photos
(record the appropriate photo number for easy identification during data entry)

North	South	East	West
Photo number _____	Photo number _____	Photo number _____	Photo number _____

Overall comments on the site (metadata): _____
_____