

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

- AWS 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 ____ km²; Average Depth of Standing Water ____ m)
- Lake (Area of standing water ____ km²; Average Depth of Standing Water ____ m)
- Reservoir (Area of standing water ____ km²; Average Depth of Standing Water ____ m)
- Bay (Area of standing water ____ km²; Average Depth of Standing Water ____ m)
- Ditch (Area of standing water ____ km²; Average Depth of Standing Water ____ m)
- Ocean
- Estuary (Area of standing water ____ km²; 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 ___ km²;
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

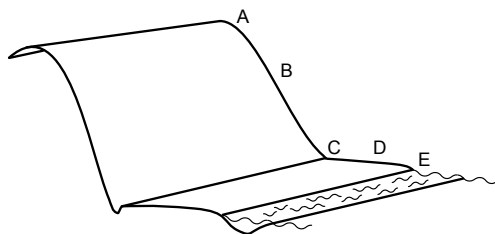
Slope angle (North, Northeast, etc.): _____

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



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, Friable, Loose, Unknown)	Texture Field Estimate (Select one: Unknown, Sandy Clay, Sandy Clay Loam, 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 than 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): _____
