May 2021

PowerPoint - Conducting a Site Assessment

Center for Urban Resilience

CONDUCTING A SITE ASSESSMENT

Module 10 - Garden Ecology
Lesson 1: Assessing the Garden Site, Biodiversity Inventory

KEY SCIENCE VOCABULARY

- Habitat
- Biotic Element
- Abiotic Element
- Human-Built Element
- Weather
- Climate

Why is it important to assess what is at the garden site before planning next steps?

1. **Knowing the physical aspects of the site is important, so next steps in planning the design of the garden can be efficient and informed.**

2. Knowing the biotic, abiotic, and human-built elements will be key in the next planning steps for the vision and impact of the garden on the local ecosystem, including the surrounding flora and fauna.

3. Conducting a survey is always the first step before restoration, planting, or scientific studies can begin.

4. Without a clear understanding of a site, decisions cannot be made about how to use it or study it appropriately.

GARDEN SITE ELEMENTS

(See Site Assessment Data Sheet)

- Available Space
- 2-D Drawing of Site
- Habitat(s) Present
- Biotic Elements
- Abiotic Elements
- Human-Built Elements
- Water Resources
- Trash
- Pollution
- Soil Composition
- Sun and Shade Exposure
- Season, Weather, Climate

Available Space

- **Measure the site**
- Length x width
- Use a tape measure
- Create a draft 2-D drawing of the site
- Finalize the drawing on Day 3 – in class

Habitats

Habitat is the place or type of environment where an organism typically lives.

• **Trees**	• **Open Field / Land**
• Lawn / Grass	• Water Features (pond, stream…)
• Bushes	• Weeds / Plants
• Existing Garden	• Other

Biotic Elements

A biotic element is any living component that affects the population of another organism, or the environment. This includes animals that consume the organism, and the living food that the organism consumes. Biotic factors also include human influence, pathogens, and disease outbreaks..

• **Plant**	• **Animal**
• Fungus	• Bacteria

Abiotic Elements

An abiotic element is a nonliving condition or thing, such as climate or habitat, that influences or affects an ecosystem and the organisms in it. Abiotic factors can determine which species of organisms will survive in a given environment.

Sunlight
Water
Soil
Climate
Habitat
Proper Temperature
Nutrients
Air

Human-built Elements

A human-built element is something that is made by humans that does not occur naturally.

Benches
Lighting
Water Fountain
Drainage Pipes
Tables
Sidewalks
Mulched Path
Buildings

Water Resources

What water resources are available to provide water for the garden plants?

Irrigation System

Sprinklers

Faucet with Water Hose

Nearby Pond / Stream

Trash

It is important to identify trash on the site and make a plan to remove it.

Pollution

It is important to identify any sources of pollution on or near the site, that could affect the garden, or the organisms that visit it. If pollution is identified, it is imperative to work with school and / or city officials to remove the source of pollution before beginning any planting.

Are there any sources of pollution at your garden site?

Soil Composition

Before planting can begin, the type of soil must be determined. Once determined, the proper soil must be prepared for the type of garden chosen to be planted.

See Soil Types Reference Sheets to learn how to assess the soil composition.

Sun and Shade Exposure

The amount of sun and shade at a garden site, will determine the types of plants that can be planted there.

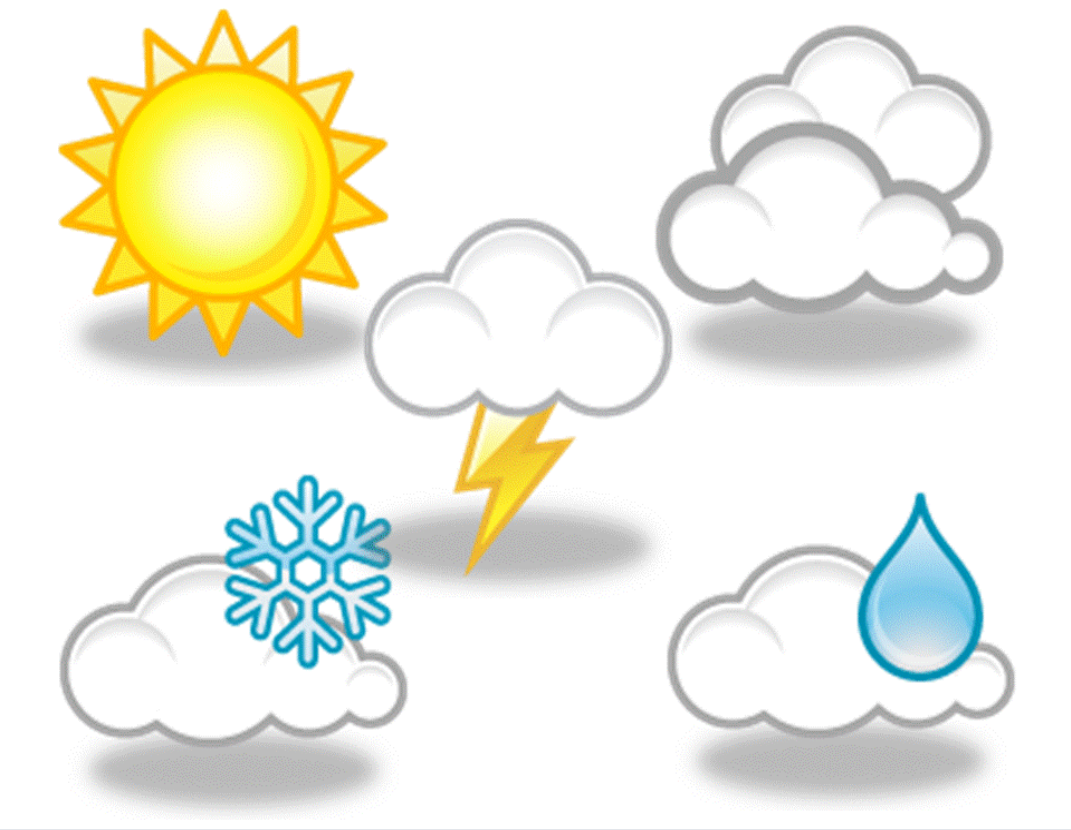
How much sun and shade is at your garden site?

Season

Be sure to match plants to the season in which planting will be done (winter, spring, summer, or fall).

Weather

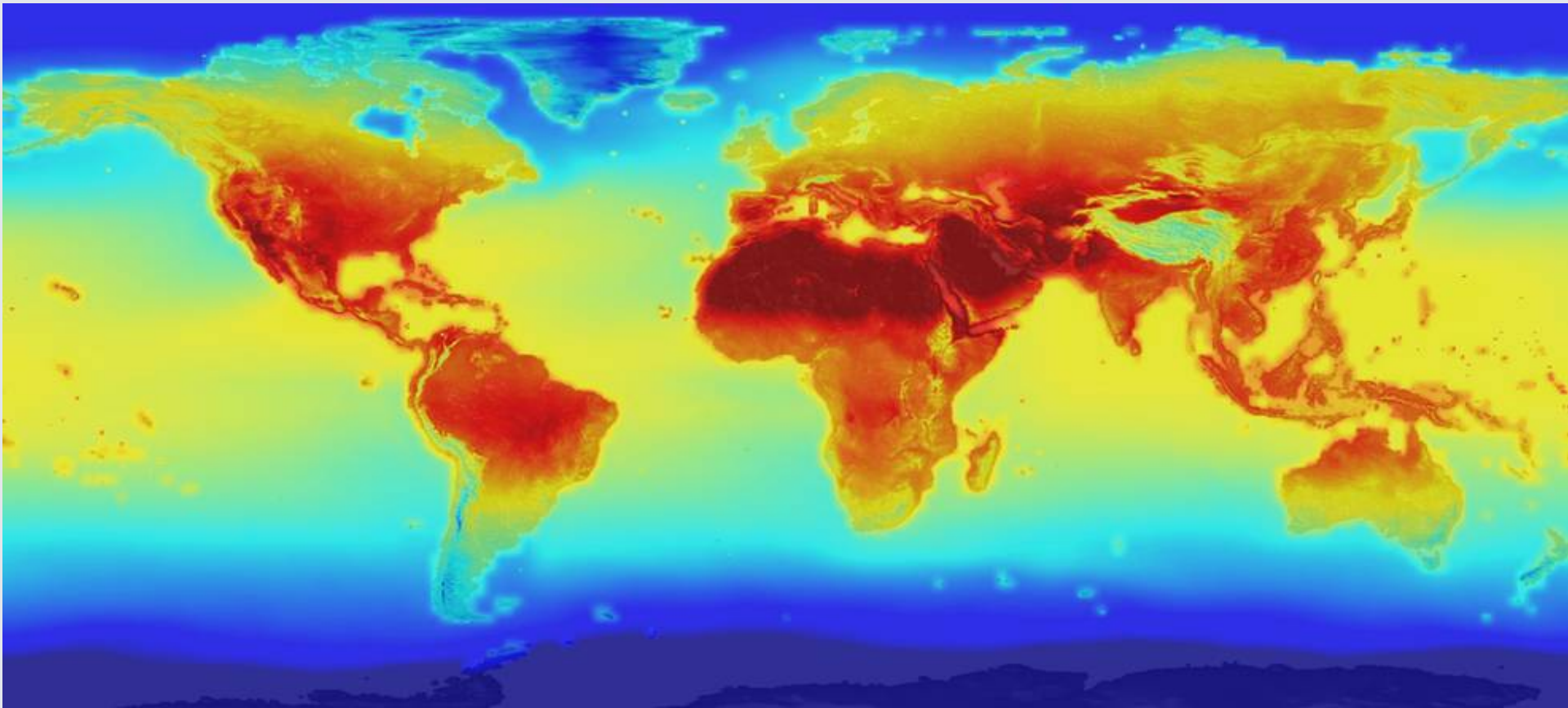
The atmospheric conditions on any given day, such as sunny, rainy, cloudy, partly cloudy.



Climate

The prevailing weather conditions in an area in general or over a long period.

Research the climate of your area over the past ten years.



FIELD GUIDELINES

Tape into your field notebook.

DO …

Make sure you have all your materials
Stay with your group

Keep quiet voice level
Be observant and thorough

Respect the space, each other, and any organisms you may encounter
Dispose of trash in the proper receptacles

Use proper safety at all times
Ask questions!

Enjoy your outdoor field experience!

DO NOT …

Do not touch any plants, animals, or anything in the school garden site
Do not eat anything from plants or from the school garden site

Touching or eating some plants could cause an allergic reaction, which is a safety issue.

TEAM MEMBER ROLES

DATA COLLECTOR	TIME KEEPER / FACILITATOR	OBSERVER	SCRIBE / RECORDER
Responsible for the collection of the numeric and other measurable data. The observer and data collector will work very closely together, to provide information to the scribe/recorder during the assessment.	Responsible for assessing the data to be collected, setting a time for each task, keeping track of the time schedule, and keeping the team members on task.	Observes what is happening at the site, such as weather conditions, animals moving into, on, or off the site, etc. Will determine the type of habitat. Makes general observations for the scribe to write on the data sheet.	Writes down all data on the Site Assessment Data Sheet that will be shared with the whole group on Day 3. Will sketch a draft two-dimensional drawing of the site, and consult team members for completion of the final version.