

Supplement A: Information on Wetlands

What makes a wetland? Wetlands are defined by three factors: **Water, Soil and Plants**. Different types of wetlands are defined by the types of water, soil and plants that are found in that area.

WATER: A wetland must have standing water present for at least part of the year. There must be some kind of water source to provide needed water to the wetland. Most wetland areas contain a high level of standing water.

- Spongy or mushy ground
- Mud or dried mud cracks in low spots
- Water staining on tree trunks, objects

SOIL: A wetland must have a type of soil that is considered “hydric” or that can hold water. Sand and other highly permeable soils do not make good wetland soils. Soils that have a high clay content or have low permeability are the typical types of soil found in most wetland areas. Wetland soil is saturated with water. The soil may appear muddy and thick due to its low oxygen levels and the decaying organic matter that makes up a large part of wetland soil.

- Sulfurous (rotten egg) smell due to decaying plant material
- Color: green, dark gray, brown or black
- Water collects in hole; soil has wet feel

HABITAT: A wetland must have the right kind of biology. Plants and animals that are identified as “wetland” varieties should live in the vicinity of the defined wetland area. There are many different types of plants that can define a wetland area (in other words, they cannot grow unless the water levels are right). The biology of the area is just as important as the type of soils and the hydrology of the area. The wetland is home to thousands of plants that thrive in excess water.

- Shallow roots
- Plants with hollow tubes or sacs that transport oxygen to the roots (reeds, grasses, sedges)
- Floating plants

Names of Wetlands: Marsh, Bog, Fen, Swamp

- What *is* a fen? A fen is a type of wetland similar to a bog in that they are peat forming areas but differ in water, soil, and plant types.

Fen	Bog
Water: comes from ground water	Water: comes from precipitation
Soil: Non acidic	Soil: Acidic
Plants: More biodiversity	Plants: Less biodiversity

Why Wetlands are important:

- helps clean the environment
- resting place for migratory birds
- absorbs excess water caused by runoff, retains moisture, helps minimize flooding
- provides a nursery for young wildlife
- strains debris and impurities from the water
- provides nutrient-rich food for wildlife and humans
- acts as a buffer to help stop erosion protects the shore from erosion (forms a “wall”)
- resting place/home for many species of animals – habitat

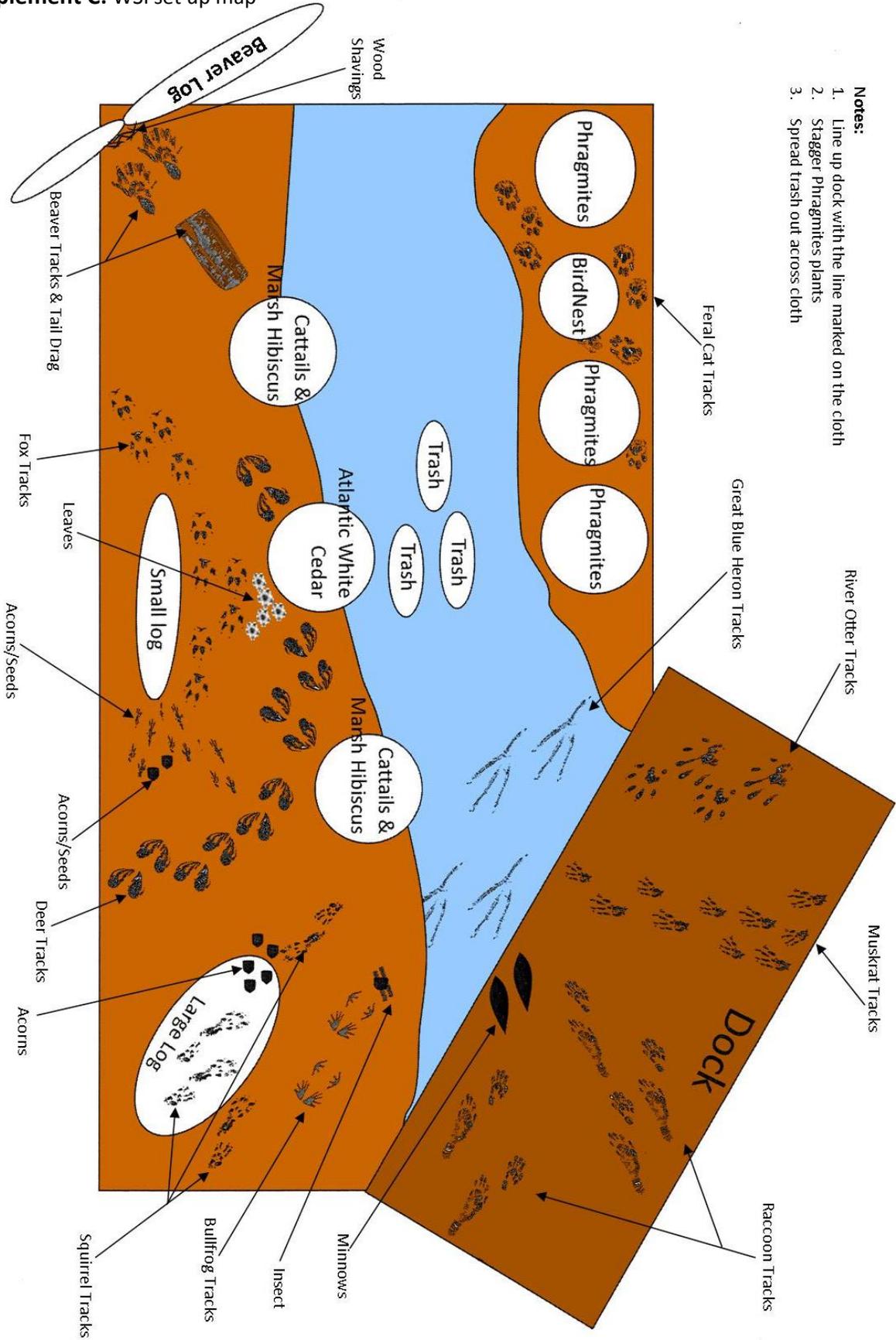
Supplement B: Wetland Scene Investigation Sheet

**Wetland Scene Investigators
Incident Report Sheet**
(For Official WSI Use Only!)



Animal (s) Involved:	Evidence Observed:	Conclusion:

Supplement C: WSI set up map



Notes:

1. Line up dock with the line marked on the cloth
2. Stagger Phragmites plants
3. Spread trash out across cloth

Supplement D: Vocabulary Words

Wetland: an area where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year. Wetlands may support both aquatic and terrestrial species. Have many defining factors. (Supplement A)

Marsh: an area of low-lying land that is flooded in wet seasons or at high tide, and typically remains waterlogged at all times.

Phragmites: an invasive tall reed which commonly grows in marshy areas.

Scat: scientific name for animal droppings.

Native: plants that are indigenous to a local area; from a certain state, region, or country

Non-native: plants that are not originally from the area where they have ended up; usually brought in from other locations. Could be harmful to the native species.

Invasive: harmful to native plants; can spread rapidly and undesirably and takes over a growing area.

Habitat: the natural home or environment of an animal, plant, or other organism.