









What did you see in all  
these photographs?



# The Riparian Zone!

- Riparian zones or areas is the land that is adjacent rivers and lakes.
- Riparian zones are areas where water-loving plants grow because the soil is saturated with water (groundwater from the lake or river).
- Riparian zones are areas of high BIODIVERSITY (lots of different species of plants and animals).
- Riparian zones are also places where humans like to build towns, farms and transportation routes (eg. roads and railroads).

# The Riparian Zone

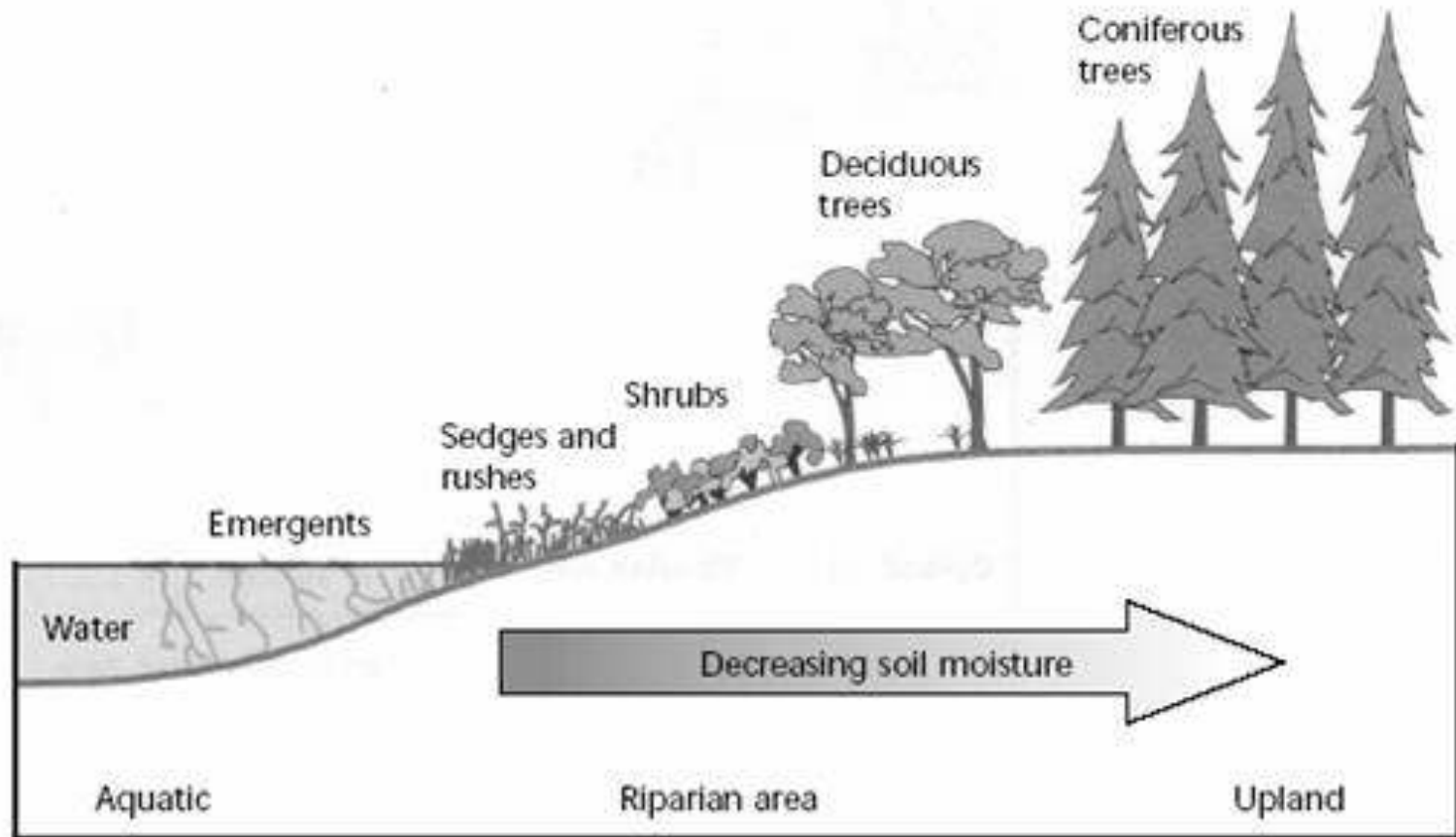


FIGURE 1 *Illustration of the moisture gradient in a typical riparian ecosystem (from Stevens et al. 1995:2).*

**Plants play a huge role in the riparian zone and are key for maintaining the link between land and water.**





# Why are they Important?



## For Wildlife:

- Provide habitat for many plant and animal species. 80% of wildlife depend on riparian zones for at least some part of their life cycle or habitat.
- Plants provide homes and food for wildlife, and birds and mammals in turn disperse seeds.
- Invertebrates help break down plant and animal matter into nutrients for other organisms and soil.
- Transportation corridors for wildlife.
- Complex predator-prey relationships occur in the riparian zone and help maintain a healthy balance.

# Why are they Important?

## For Fish:

- Trees and plants that grow in the riparian zone keep the water cool and clean for fish
  - Shade
  - Filter overland flow
  - Stabilize the soil with roots (reduce erosion)
- Leaves, twigs and needles provide nutrients to aquatic invertebrates, which nourish fish.
- Trees fall into the water reduce the energy of the water, protect stream banks, and create pools and cover for fish.
- Salmon need healthy streams to spawn. They bring back nutrients from the ocean that add to riparian zone health.



# Why are they Important?



## For Humans:

- Riparian zones reduce energy during floods.
- Provide productive areas for agriculture.
- Provide low-lying areas that are easier to develop for roads and communities.
- Trap sediments and contaminants
- Provide scenic places to walk, camp, and simply enjoy.

What does a healthy riparian zone look like?



# Two Creeks

## What are the differences?

Healthy



Unhealthy



WHITE STURGEON



RECOVERY INITIATIVE

Let's go back and see those riparian zones again.

Why are they healthy or unhealthy?



**Healthy or Unhealthy?**





**Healthy or Unhealthy?**





**Healthy or Unhealthy?**



**Healthy or Unhealthy?**