Riparian Rx Station Script

1. The intro/objective

Host: This video is going to help guide you through the process of hosting the Riparian Ramble Station.

The objectives of the Riparian Station are:

a. Define riparian zone, and gain a basic understanding of riparian zone values and how human use may affect the stream and floodplain.

b. Learn about transects and ways to measure vegetation; gain experience estimating percent canopy cover and composition by vegetation type (shrub, grass, forb, or no veg.) in two types of plots.

c. Understand definitions and examples of plant adaptations and functions within the riparian zone and identify at least five species of riparian vegetation common to our area.

e. Understand origins and transport of sediments (geomorphology) to create riparian features, and changes in vegetation over time (succession).

2. The bullet list / steps

Host: Introduction

- When the students arrive, introduce yourself and the other station members (name, career, and agency).

- Ask them to define "riparian" and ask a question that prompts students to understand why this station is important to the stream?

- State "The goals and objectives of the Riparian Station are:

The Goal: Improve the students understanding and appreciation of the functions and values of the riparian zone. Also to reinforce the functions of vegetation on the floodplain and along the stream as addressed in the other stations.

1. Divide students into 2 groups, if necessary. Walk and identify riparian plants on the way to the transect station (other group goes to another activity location). Identify plants throughout the activities, ask students to know five species.

a. Define "transect" and the methods used to measure vegetation – why measure?; and what can you measure?

b. Estimate percent cover by species (type) composition (shrub, grass, forb, non-veg) on two contrasting plots at selected intervals along the transect.

c. Estimate percent cover by species (type) composition (shrub, grass, forb, non-veg) on 100 square foot circle plot (selected).

2. Proceed to selected overhead canopy site and demonstrate the use of spherical densitometers – allow everyone to try it if they want to.

a. Have students make an estimate beforehand and compare to the results of the densitometer; explain variations from different locations and how this is remedied by four estimated averaged from cardinal directions.

b. What are we really measuring? (Light penetration) Why measure overhead canopy? (use examples like spotted owl, dry forest management).

3. Have suitable spot(s) along trail to explore the following concepts:

a. Plant adaptation
b. Functions of riparian zone vegetation
c. Plant succession
d. Larger scale floodplain functions and values

3. Conclusion/outro

Host: In conclusion, summarize the lessons learned at the Riparian Station:

a. Riparian zone is an interaction of three major factors; soils, water, and vegetation.

b. Identify five plant species identified and any functions/values they provide – or adaptations.

c. There are many reasons to measure vegetation and ways to do it – depends on data need.

d. Humans may have considerable influence in riparian zones.

Whether we are recreating, harvesting timber, grazing, farming, or planning some development, we should decide which riparian functions and values of stream, floodplain, and watershed we may impact as we put our planning into action. What are we affecting at the watershed scale?