How do you judge the health of a Riverbank?

Last month Calgary River Valleys had the opportunity to take a training session conducted by Cows and Fish to help us home our Riparian Health Assessment skills.

A lot of our learning was about how to tune our eyes when observing a natural area, and finding out which characteristics are measured to assess its health.

One of the first considerations is to judge how much of the area is covered by vegetation, as opposed to bare ground, or human installed hardscaping. Vegetation is very important however, not all vegetation is equally desirable.

We learned about weeds, or invasive and disturbance-caused plants, in riparian areas. We learned about why weeds are included in riparian health assessments, learned to identify different types of weeds and their impact in riparian areas.

Other assessments include:

- Preferred tree and shrub establishment and regeneration
- Utilization of preferred trees and shrubs that are native and water-loving
- Decadent (dying and rotting) and dead wood
- Shoreline or bank root mass protection
- Human caused bare ground
- Compaction of the riverbank soil: Pugging, hummocking, rutting
- Shoreline, bank and vegetation altered by human activity like altering the grade of the banks or cutting down trees.

Many of the measurements deal with the element of coverage, that is, how much of the riparian area measured is covered, influenced or affected by vegetation or structural changes. The categories are usually expressed in percentages of the reach area. For example, in the illustration below, weeds cover about 3% of the riparian reach. Of the total canopy cover of trees, 16% is composed of seedlings or saplings. These measurements allow you to assign a score to the land in consideration. The Cows and Fish standard has been adopted by many organizations across the Province. Calgary River Valleys is very appreciative of the opportunity to learn more how to track the progress we are making during our ongoing Riparian Restorations. Thank you to Cows and Fish!

https://cowsandfish.org/product-category/riparianhealthassessment/

PHOTOS

 $\underline{\text{http://nosecreekpartnership.com/wp-content/uploads/2011/07/2009-Nose-and-West-Nose-Riparian-Health-Report.pdf}$