

Intro to Permaculture The Beaver Watershed Engineer Video Transcript

Music

So here we are back at the watershed again, when we deforest the upper watershed, we have loss of soils above and flooding down below. So understanding where you are in the watershed will tell you what kind of events and conditions you need to design for, and where you need to start to improve your conditions.

In much of the temperate world, there is this amazing creature who performs the function of watershed engineer and that's the beaver. The beaver builds dams in the waterways and slows the flow of water; trapping sediments and filling the watersheds with sponges that slow and sink the flow. That's what the watershed looked like when European colonization happened, and as Europeans moved across this continent, they hunted and trapped the beaver at every turn. There were so many beaver, in every valley across this continent; their pelts were used as currency.

But when the beaver were removed, the watershed and ecosystem were never the same. The speed at which the water flows through the watershed is accelerated, and the land is more dehydrated because of it. But as Permaculture practitioners, we can take on the function of the beaver and restore the hydrologic cycle to enhance the health of the entire ecosystem. You may have noticed that OSU's mascot is the beaver. This seems a fitting emblem to me!

So in order for us to take on the function of the beaver and restore the watersheds, we need to start at the top. When we slow water at the top and work our way down, then we slow water at each step along the way and rehydrate the landscape. If we begun at the bottom of the watershed, we would need to build massive structures to intercept the swift and powerful flow. But when we start at the top of the watershed, smaller structures will do the job to slow, sink and spread the water. So in Permaculture we become the beavers, the watershed restorers. This is needed in Haiti and a thousand other places, and this is a very tangible way to restore the health of communities and the planet.