

Riparian Notes

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Finding the Right Parts

Finding parts is one of the challenges of fixing up old pickup trucks. Time, friction, heat and vibration take their toll. Some parts wear out gradually, while other parts break suddenly. Sometimes the failure of parts is due to abuse and sometimes it is just due to normal wear and tear. When old parts wear out or break, it is necessary find replacement parts.

The auto parts places sometimes look at you funny when you inquire about a part for a 1950 Dodge pickup. Some will tell you immediately that they don't carry such parts. Others will do their best to look in their catalogs and order the part. Most of the time, the right parts are available if you look hard enough. The other option is to find an old "parts truck" somewhere and strip the needed parts off of it.

With creeks and riparian areas, there is also the need to replace missing or broken parts. A careful evaluation of riparian areas may reveal that certain key parts are missing or at least not in top working condition. The PFC checklist (listed in Note Number 17) is a good place to start when evaluating what general kinds of parts are needed for a properly functioning riparian area.

The wonderful thing about creeks and riparian areas is that they usually have the capacity to fix themselves and find their own parts. In most settings, especially creeks that run through native rangeland, human intervention is usually only needed to tweak the management, not to do a major overhaul. If creek bottom areas have been subjected to concentrated or continuous grazing for many years, the plant community is probably in need of repair. The large dense colonies of riparian grasses and sedges needed to dissipate energy and protect banks may no longer be present or may be present only in isolated patches. Desirable and necessary woody plants may be lacking in seedling recruitment due to deer or livestock browsing.

If appropriate changes in grazing management are made, "natural regeneration" usually takes over. During out-of-bank flooding, plant materials from upstream float down and some of it lands in the right spot to become established. Stolons (runners) from riparian grasses such as **knotgrass** tear loose and move downstream. As these sprigs get lodged in some wet mud, *voila* – the stolons take root and a new colony begins. Likewise, chunks of sod containing live roots or rhizomes of **spikerush**, **switchgrass**, **Emory sedge**, or **bulrush** tumble down the channel or the floodplain during high flow and provide new living transplant material for establishment. Plants with stolons or rhizomes are very important in riparian areas. A small clump can become a large clump or even a colony in a short period of time.

Seed of **bald cypress**, **buttonbush**, **little walnut** and **sycamore**, float downstream and get deposited in silt, sand or gravel bars. Seed of **black willow**, **cottonwood**, and **baccharis** are dispersed by the wind and can travel long distances to new sites.

If **channel sinuosity** is lacking, new depositional bars can form from upstream bank erosion. These bars help increase meandering and decrease channel slope and water velocity. **Large trees** fall into the channel and get lodged in the floodplain providing the large stabilizing wood needed in most streams. Deeply entrenched channels that lack access to a floodplain can build their own **new floodplain** by catching sediment from upstream and stabilizing it with vegetation. This catching of sediment also helps build or enlarge the **riparian sponge**.

Creeks often have missing parts which causes them to operate poorly. Fortunately they usually have the ability to heal themselves under the right kind of management.