

# Riparian Notes

Note Number 19, January, 2007

Steve Nelle, NRCS, San Angelo, Texas

## Learning from History

Natural resource workers often think about historic vegetation. We wonder what an area might have looked like prior to the 1850's, before the era of European settlement, heavy livestock grazing and fencing of the range. This is relevant thought since historic vegetation gives us important clues to the potential for the site today. Many early explorers left behind some good descriptive accounts of riparian vegetation as they traveled up and down creeks and rivers. This assortment of quotes is taken from: *The Explorers' Texas, The Lands and Waters* by Del Weniger, 1984, Eakin Press, Austin:

Bonita Creek; Potter Co; Capt. Marcy; 1849; "a fine spring creek with a **great abundance of wood and grass**"

South Fork, Canadian River; Oldham Co; A. LeGrand; 1833; "it is a deep and bold stream with a wide bottom of good land. **Timber** - hackberry, cottonwood: **undergrowth**, rough plum bushes, and grape vines..."

Mustang Creek; Andrews, Gaines Co; A. LeGrand; 1833; "**extensive and rich timber** - oak, hackberry, etc.; **undergrowth**, plum, cherry and currant bushes, with much grapevine"

Deep Creek; Nolan Co; J. H. Byrne; 1854; "The banks of this stream are **thickly covered with timber** - mesquite, hackberry, wild china, plum, willow and scrub oak."

Big Wichita River; Capt. Marcy; 1851; "**There are but a few trees** on the borders of the Big Wichita; **occasionally a small grove** of cottonwood and hackberry is seen, but with this exception, there is no timber or fuel near..."

Clear Fork of Brazos; Marcy; 1851; "...bold clear stream of sweet water ...flowing through a valley from one-half to three-fourths of a mile wide, **covered with a luxuriant growth of grass**..."

Sister Creek; Kendall Co; Olmsted; 1854; "The valleys appeared **densely wooded**, with **here and there a green and fertile prairie**..."

Concho River; Tom Green Co; J. B. Leach; 1857; "The banks of the Concho are **thickly wooded** with large oak and pecan trees as well as with a **very dense undergrowth**..."

Grape Creek; Coke Co; J. B. Leach; 1857; "Grape Creek either sleeps quietly in deep dark pools beneath **overreaching boughs** ... or [through] **jungles of matted brush and tangled vines**"

Nueces River; Zavala Co; de Teran; 1691; "we reached the banks of a river ...we **worked our way... through timber** and big pecan trees, **cutting a passage for the troops**"

Frio River; Michler; "Upon examining the bottom land of the Frio, we found it **difficult to penetrate, very heavy timber** being generally found close to the river..."

Rio Grande River; Hudspeth Co.; E. F. Beale; 1857; "...we came in sight of the **green cottonwoods, which mark the line of the river**... We found the river after groping some distance through a **dense undergrowth of weeds, briars and willows**..."

These accounts give us clear indication that woody vegetation was a prominent feature of many creeks and rivers. In many cases, woody vegetation was not sparse nor moderate, but dense and thick. Dense woody vegetation is important in many riparian areas to help dissipate the energy of floodwater and for the large, strong roots to help reinforce banks. Some natural resource workers believe that woody vegetation usually needs to be thinned out in riparian areas. Their perception of the ideal riparian vegetation is one that is dominated by herbaceous vegetation with scattered woody vegetation. These accounts might serve to help us re-calibrate our minds regarding the importance of woody vegetation. Of course, herbaceous vegetation (grasses, sedges, rushes) is also important and can often grow very well in the canopy interspaces and under the deciduous canopy. On some Texas riparian systems, there was an abundance of grass and little or no woody growth.