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THE PLATTE AS A WOODED RIVER: A RESPONSE TO CURRIER AND DAVIS

W. Carter Johnson and Susan E. Boettcher

This dialogue in *Great Plains Research* (GPR) is most welcome. It increases visibility of the historic status and significance of woodlands in the Platte River. In our article, we bring together the bulk of the information available on pre-settlement woodlands of the Platte River. We submitted to GPR because of its geographic focus and to invite peer-review of our work. Our paper is the most comprehensive treatment of the subject available. Despite protestations to the contrary by Currier and Davis, we remain convinced that the evidence presented supports the wooded river concept. We purposely chose the word “wooded” rather than “forested,” incorrectly attributed to us by Currier and Davis (2000). “Wooded” was chosen to represent the naturally more open-grown nature of the woody plant communities along the Platte River, in contrast to more closed forest communities with higher tree densities and overlapping canopies that occur in more humid regions such as the eastern US. The more open communities of the Platte River in pre-settlement times—with scattered trees on outermost banks plus heavy timber on the large islands and willow thickets sprinkled with trees on small islands—clearly qualify as woodland in plant community parlance, even if interspersed with grassland on the higher, large islands.

The peer reviewers of our article apparently decided that the wooded river conclusion was warranted by the data we presented. These reviewers were anonymous to us, and presumably were selected because they were specialists and disinterested parties. We believe that this is best gained through strict, anonymous peer-review.

The purpose of our research is to provide the land managers of the Platte River Valley with the most accurate historical baseline from which to make management decisions. We believe our research corrects a distorted, crane-centered perspective on ecological history that dominates the popular and management literature. The revisionist view of ecological history represented by Currier and Davis (2000) is sometimes used to justify the clearing of woodlands in the Platte River drainage because they are considered to be insignificant, unnatural, or alien. Unfortunately, this view often makes its way into the popular press, which is the main way our citizenry learns about environmental issues. For example, an article in the *Kearney Hub* (Humpert

1998), written by a staff member of the Nebraska Game and Parks Commission, is representative:

. . . Deforestation is taking place along Nebraska's Platte River. Unlike the tropical deforestation that is occurring elsewhere, here it is being done by conservation groups in the name of protecting biodiversity. To understand this paradox, one must step back a hundred years in time.

Before the Platte River was tamed by man, spring brought torrents of mountain runoff and ice flows that scoured and reshaped the river's stream bed each year. Vegetation that took root during the low flows of summer was scraped away and carried downstream during the spring. Most woody vegetation, like willows and cottonwood trees, had little chance of becoming established. If they were not severed by ice or drowned by floods, then a summer prairie fire would offer the final lethal blow. The Platte was mostly a wide, shallow river that blended into an endless sea of prairie grasses and forbs.

While this story makes for exciting reading, we believe the evidence now suggests that this interpretation misrepresents the facts regarding the success of riparian woodland in the pre-settlement river, and that it fails to fully educate the public on the pros and cons of clearing riparian trees. We believe that the Platte River management community is in need of a new paradigm, updating the old paradigm of the early 1980s with the new data. For example, in the 1990s we determined that open channel (un-vegetated) habitat has been in general equilibrium with woodland since the 1960s (Johnson 1997). Thus, we concluded that roosting habitat for cranes is relatively stable, and that it is actually increasing in some unmanaged reaches. Clearing of wooded islands began in the early 1980s. It was a response to concerns that the channels were continuing to narrow to the point where cranes may abandon the river for roosting. However, since channel area is relatively stable and since populations of cranes remain high or are increasing, we suggest that clearing should be reevaluated, especially in light of some possible negative consequences. The potential negative consequences include downstream sedimentation and channel narrowing, stimulation of invasive weeds, and loss of prime woodland nesting and migratory habitat for many songbirds. We argue that the foundation for this new paradigm should be that woodland was a natural element in the Platte

River, one that has contributed significantly to its biodiversity, its functioning as a whole ecosystem, and its aesthetic qualities. After all, the cottonwood is the state tree of Nebraska.

References

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