

KNOPF, FRITZ L. National Ecology Research Center, USFWS, Fort Collins, CO 80525-3400, USA.
Livestock impacts on riparian avifaunas.

Streamside vegetation provides habitats for more species of migratory birds than other vegetation types in the West. Native riparian herbivores tended to be browsers, and riparian systems evolved in the absence of significant grazing. Excessive grazing by cattle has led to severely degraded, decadent age structures within woody plant populations at many locales. Grazing in riparian ecosystems has the greatest impacts upon subcanopy bird habitats. Historical analyses indicate that grazing during the growing season is especially disruptive to an avifauna, causing many species to drop out of local assemblages. New species do not colonize a site to replace species extirpated locally. Experimental studies reveal that livestock/grazing disturbances to riparian avifaunas can be minimized substantially by shifting the timing of grazing within riparian allotments. The ecological role of cattle can be shifted towards that of a decomposer if synchronized with the deciduous event of the leafing phenology.