

Metadata for file browsing_data_2003_2020.csv

Description of column headings for for data on browsing intensity data in experimental and observational plots. Experimental layout and procedures for data collection in experimental plots are described in Bilyeu, D. M., D. J. Cooper, and N. T. Hobbs. 2008. Water tables constrain height recovery of willow on Yellowstone's northern range. *Ecological Applications* 18:80-92. Sampling design and procedures for data collection for observational plots are described in Marshall, K. N., D. J. Cooper, and N. T. Hobbs. 2014. Interactions among herbivory, climate, topography and plant age shape riparian willow dynamics in northern Yellowstone National Park, USA. *Journal of Ecology* 102:667-677.

Column name	Description
site_full	Identification code for a site. Components are site code and treatment code. Code for treatment: cc = experimental unfenced, undammed; cx = experimental undammed, fenced; dc = experimental dammed, unfenced; dx = experimental dammed, fenced; obs = observational. Sites names, codes and locations are given in Site_codes.pdf
willid	Identification code for an individual plant. Components are site-treatment-plant number. For example eb1-cc-614 is plant number 614 in the control plot of site eb1. Treatment codes are given above. Site codes and their spatial coordinates are given in the document "Site Locations.pdf".
year	The year that the measurement was taken.
willid_full	Identification code for an individual plant. Components are site-treatment-plant number. For example eb1-cc-614 is plant number 614 in the control plot of site eb1. Treatment codes are given above. Site codes and their spatial coordinates are given in the document "Site Locations.pdf".
site_id	Identification code for site (without treatment code) Sites names, codes and locations are given in Site_codes.pdf

treat	Code for treatment: cc = experimental unfenced, undammed; cx = experimental undammed, fenced; dc = experimental dammed, unfenced; dx = experimental dammed, fenced; obs = observational
exp	Indicator variable for membership in experiment = 1 if a experimental plot and 0 otherwise.
plantht	Height of tallest stem in plant (cm)
N_shoots	Number of shoots sampled on the plant spring sampling
N_browsed	Number of sampled shoots on the plant that were browsed at the spring sampling
N_unbrowsed	Number of sampled shoots that the plant were not browsed
N_deep_browsed	Number of sampled shoots that the plant were browsed below the previous year's bud scar
p_browsed	proportion of sampled shoots that were browsed
p_deep_browsed	proportion of sampled shoots that were deep browsed
fence	Indicator variable for presence of fence, 1 if fence present, 0 otherwise
dam	Indicator variable for presence of dam, 1 if dam present, 0 otherwise
browse	Indicator variable for open to browsing, 1 if open present, 0 otherwise
n.plants	Number of plants in the plot
n.years	Number of years the plant was observed
min.year	First year that plant was marked and measured
max.year	Last year that plant was measured