## 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 were 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
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 below. Site codes and their spatial coordinates are given
	in the document "Site Locations.pdf".
year	The year that the measurement was taken.
treat	
	dammed, fenced; obs = observational
site_id	Identification code for site (without treatment code)
exp	Indicator variable for membership in experiment $= 1$ if a experimental plot and $0$
	otherwise.
willid	Plant number
species_id	$egin{aligned}  ext{Identification code for species: geyer} &=  ext{\it Salix geyeriana; beb} &=  ext{\it Salix bebbiana;} \end{aligned}$
	$oxed{egin{aligned} egin{aligned} egin{aligned\\ egin{aligned} egin{aligned$
	boothii
fence	Indicator variable for fence $= 1$ if a fenced plot and 0 otherwise.
dam	Indicator variable for dam $= 1$ if a dammed plot and 0 otherwise.
browse	$ \   \hbox{Indicator variable for browsed} = 1 \hbox{ if unfenced or observational plot}, 0 \hbox{ 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
site_full	Identification code for site including site abbreviation and treatment code.
	Treatment codes are given the treat row above. Site codes and their spatial
	coordinates are given in the document "Site Locations.pdf".
N_shoots	Number of shoots sampled on the plant during spring
N_browsed	Number of sampled shoots that were browsed
N_deep_browsed	Number of sampled shoots that were browsed below the previous year's bud scar