

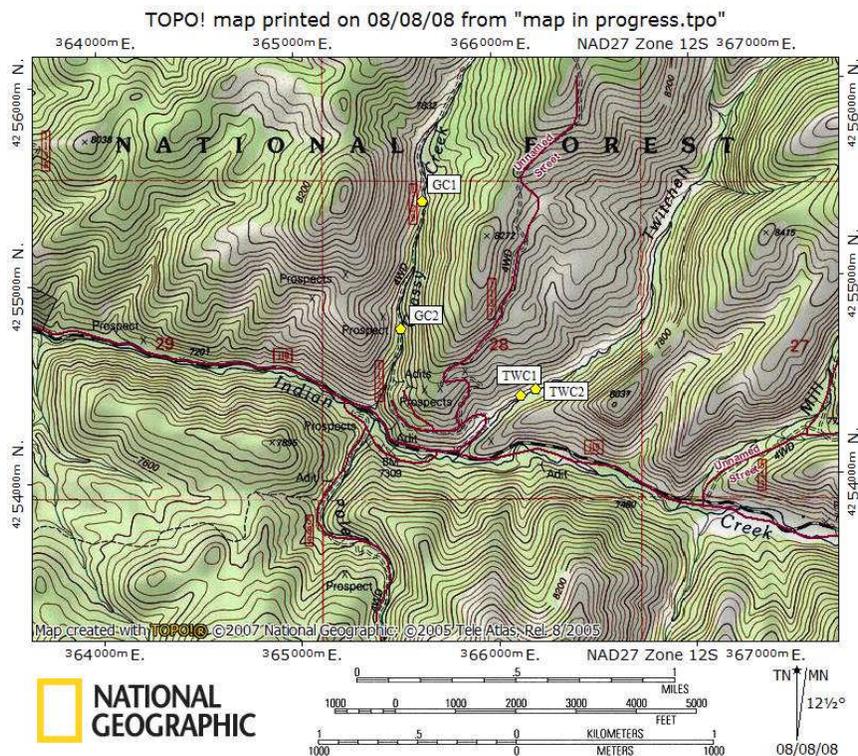
Pine Creek/Sulphurbeds Allotment
Grassy Creek #2
Riparian Browse Assessment
(1) July 16, 2008
(2) October 10, 2008

Grassy Creek is a tributary to Indian Creek, running roughly parallel to and west of Twitchell Creek in the southern portion of Pine Creek/Sulphurbeds Allotment. Grassy Creek #2 runs through a narrow (14'-24') cottonwood gallery along the creek. The site is dominated by large, mature narrowleaf cottonwoods (Fig. 1) and short sprouts growing from the roots of the mature trees. No recruitment cottonwoods (>6' but less than 75% as tall as overstory cottonwoods) were present. The riparian area at the site, and along the entire creek, is narrow (50' or less), and a significant portion of that is covered by the road that winds up the canyon (Fig. 2). At several places the creek flows across the road.

(1: 7/16/08) As of July 16, 30.4% of cottonwood leaders and 60.2% of subleaders were browsed (Fig. 3). Cattle are scheduled to be in the Wildcat pasture from August 16 through September 30; however, cattle were in the canyon on July 16.

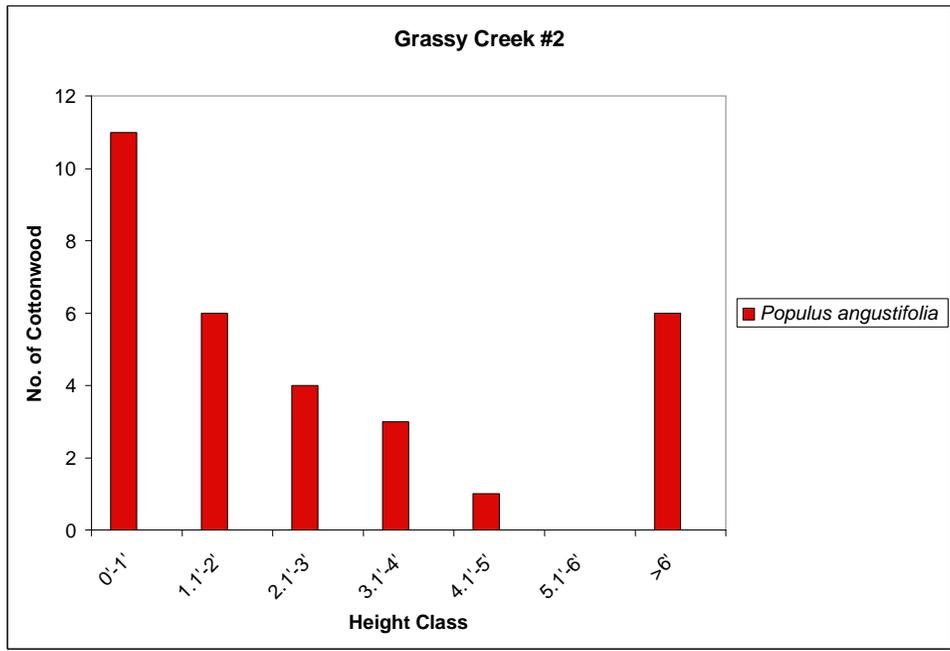
(2: 10/10/08) By October 10, **73.3%** of cottonwood tallest leaders and **92.2%** of subleaders were browsed (Fig. 4). One young cottonwood was >6' because it was inaccessible to ungulates due to some fallen branches (Fig. 5). Sprouts from one old cottonwood were being heavily browsed (Fig. 6). Several cattle were in the pasture (near Twitchell Creek) the night of October 9.

As in July, the cottonwood height classes of 4.1'-6' were essentially absent, and the cottonwoods >6' were large and old, with an average diameter of 1.8'-2'. Recruitment is basically not occurring in this stand (p. 3). Cottonwood 2.1'-3' average 8-9 leaders within 6 vertical inches from the tallest leader (p. 4)

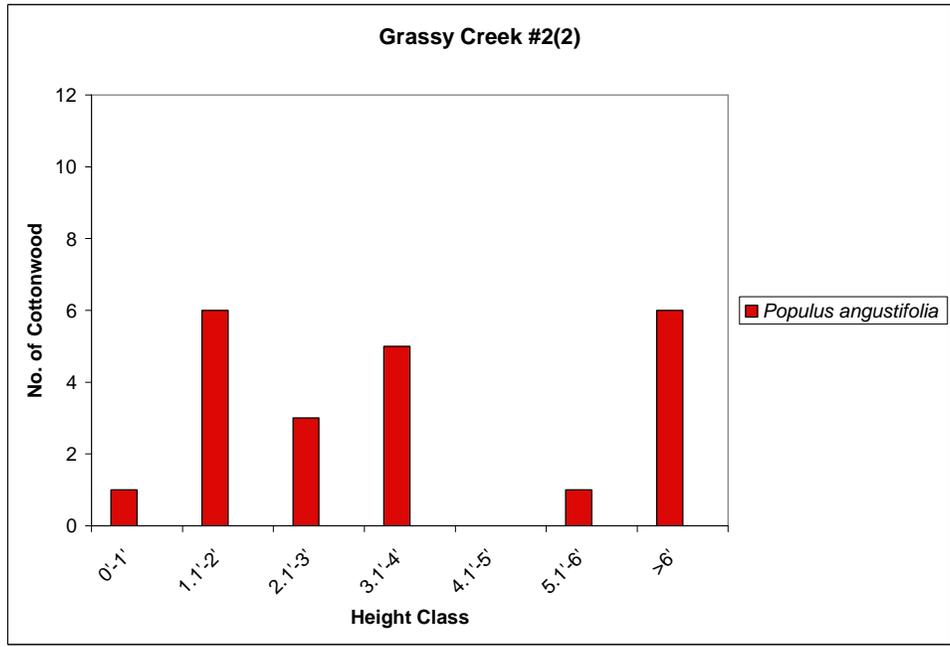


Grassy Creek #2 (GC2) Cottonwood gallery between road and creek	(1) 7/16/2008 Martin/David (2) 10/10/2008 O'Brien/Hoskisson
Fishlake NF/Beaver RD	Allotment: Pine Creek-Sulphurbeds Pasture: Wildcat
Stake: 12N E 0365526 N 4254749 NAD CONUS 27 Alongside road and between 2 rocks 6' in from road edge, upstream end of cottonwood gallery	Elevation: 7,460'
Aspect: West	Animal sign: Cattle
Ave. Riparian Width: Narrowleaf cottonwood sprouts are present within 7' of the creek, and mature overstory cottonwoods are found within 12' of the creek.	
Dominant vegetation: Narrowleaf cottonwood (<i>Populus angustifolia</i>), chokecherry, Rocky Mountain juniper, rose, horse mint, intermediate wheatgrass, Kentucky bluegrass (<i>Poa pratensis</i>), snowberry, stinging nettle, <i>Veronica biloba</i> , yarrow, and <i>Cerastium</i> sp.	
Other notes: Cattle were in the canyon during our survey. No water in the creek at the time of the survey. To our knowledge no Level II Riparian Inventory has been conducted on Grassy Creek.	

July 16, 2008



October 10, 2008



July 16, 2008

6 *Populus angustifolia* >6': Ave. DBH 23.6"

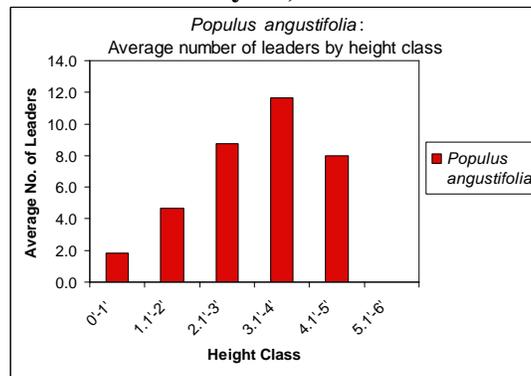
Grassy Creek #2 25 <i>Populus angustifolia</i> <6'	
	<i>Populus angustifolia</i>
% tall leaders browsed	30.4
% tall leaders browsed or dead	34.8
% subleaders browsed	60.2
% subleaders browsed or dead	64.1

October 10, 2008

6 *Populus angustifolia* >6': Ave. DBH 20.8"

Grassy Creek #2(2) 16 <i>Populus angustifolia</i> <6'	
	<i>Populus angustifolia</i>
% tall leaders browsed	73.3
% tall leaders browsed or dead	73.3
% subleaders browsed	92.2
% subleaders browsed or dead	92.2

July 16, 2008



October 10, 2008

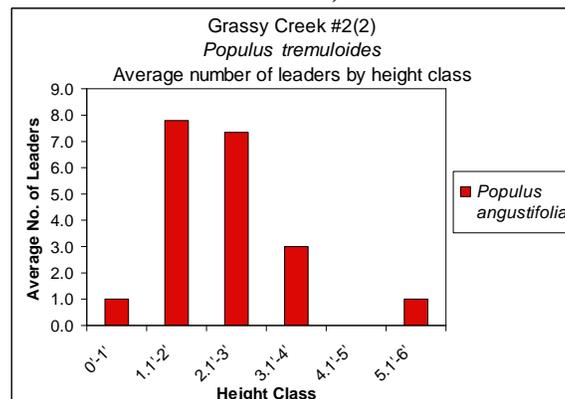




Fig. 1 (7/16/08) Mature cottonwoods, DBH 3' (left).



Fig. 2 (7/16/08) Cottonwood gallery and adjacent road that could be part of the riparian area.



Fig. 3 (7/16/08) Heavily browsed, multi-leader cottonwood.



Fig. 4 (10/10/08) 4' cottonwood browsed



Fig. 5 (10/10/08) Young cottonwood attaining >6' due to fallen branches surrounding it.



Fig. 6 (10/10/08) Browsed cottonwood sprouting from old cottonwood.

**Grassy Creek #2 (GC2)
Riparian Grass/Grasslike Utilization
October 10, 2008**

Allotment: Pine Creek/Sulphurbeds

Pasture: Wildcat

Creek/Stream: Grassy Creek

2008 Annual Operating Instructions dates of livestock entry/exit: Aug 16-Sept 30

Surveyors: O'Brien and Hoskisson

Grassy Creek #2 is a tributary to Indian Creek, running roughly parallel to and west of Twitchell Creek in the southern portion of Pine Creek/Sulphurbeds Allotment. Grassy Creek #2 runs through a small cottonwood gallery along the creek. The site is dominated by large, mature cottonwoods (Fig. 1) and short sprouts growing from the roots of the mature trees. This transect was read approximately ten days after cattle were to be moved from the pasture. The only grass encountered was Kentucky bluegrass, and it was sparse. Grass was encountered within 3" of the transect at only 27% of the 63 transect points; forbs were rare.

Grass/Grasslike Utilization: 10/10/2008											
Kentucky Bluegrass (<i>Poa pratensis</i>)				Other Grasses				Sedges and/or Rushes			
Ave. ht(in) Accessible	N	Ave. ht(in) Inaccessible	N	Ave. ht(in) Accessible	N	Ave. ht(in) Inaccessible	N	Ave. ht(in) Accessible	N	Ave. ht(in) Inaccessible	N
2.2"	16	5.0"	1	NA	0	NA	0	NA	0	NA	0

Methodology note

The average height (inches) of a grass, sedge, or rush plant was measured every 2' from one side of the narrow (14'-24') riparian area. The grass nearest to, but no farther than 3" from, the transect point was recorded. Kentucky bluegrass was the only grass encountered, to which a Fishlake NF utilization standard (1.5" rather than 4" for hydric grass/grasslike species) is applied¹.

¹ The four inch stubble height for hydric (i.e., adapted to a wet, but not flooded habitat) plants is part of the allowable forage utilization criteria that were revised through a Fishlake National Forest Plan amendment in 2002. These revised forage utilization criteria prescribe allowable use levels for both upland and riparian sites. As the Fishlake NF explains this: "The description for riparian areas is a uniform 4" stubble height. Reaching the 4" stubble height triggers the time to move livestock, either between units or off the allotment. These criteria allow no manipulation to plan use of expected regrowth—once the 4" stubble height is reached, livestock are moved, without the opportunity for twice-over use. Livestock are moved to the next pasture or removed from the allotment when any utilization threshold (upland forage utilization, stream bank alteration, riparian forage utilization, riparian vegetation stubble height, or riparian woody browse utilization) is reached. Meeting or exceeding one of these threshold levels initiates a

The height of plants accessible to large ungulate grazing was recorded separately from the height of plants inaccessible to grazing, e.g., at the base of a rock.

move of livestock.” (USFS 2006)

Fishlake National Forest riparian utilization standards include (USFS 2006):

Riparian hydric species:

4” triggers the time to move livestock between units or off the allotment

Riparian Emphasis Management Areas

6” triggers the time to move livestock between units or off the allotment

Non-hydric Sod-Forming Grass Species in Riparian Areas

1 ½ “ Primarily Kentucky bluegrass--Triggers the time to move livestock between units or off the allotment