

# Pine Creek/Sulphurbeds Allotment TWITCHELL CREEK #1 (TWC1)

## Riparian Browse Assessment

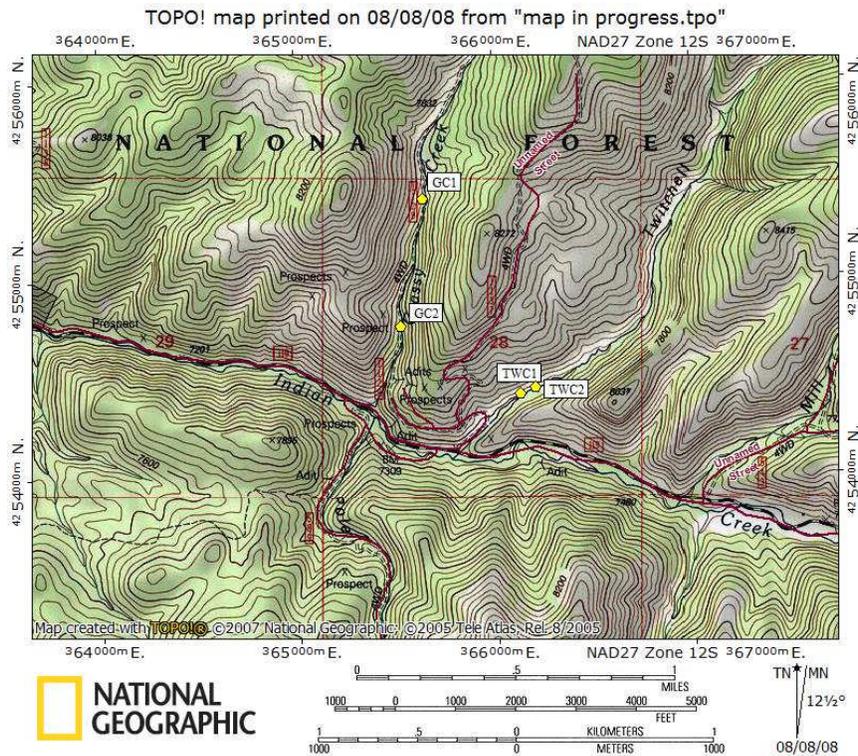
(1) July 16, 2008

(2) October 9, 2008

Twitchell Creek #1 is located in a narrow (30'-40' wide) flat gravel floodplain of Twitchell Creek, which is a tributary to Indian Creek, in the southern portion of Pine Creek/Sulphurbeds Allotment in the Tushar Mountains (Fishlake NF). Booth's willows (*Salix boothii*) – mostly mature plants <6' tall and a few young plants – are growing along the creek and in the gravel (Figs. 1-2). The opposite bank is a steep, sagebrush-covered slope.

(1:7/16/08) 7/As of July 16<sup>th</sup>, 43% of Booth's willow leaders and 47% of subleaders had been browsed. Cattle are scheduled to be in the Wildcat Pasture August 16-Sept 30, but several cattle were observed in this Wildcat Pasture, near the end of the road paralleling Twitchell Creek on July 16<sup>th</sup>.

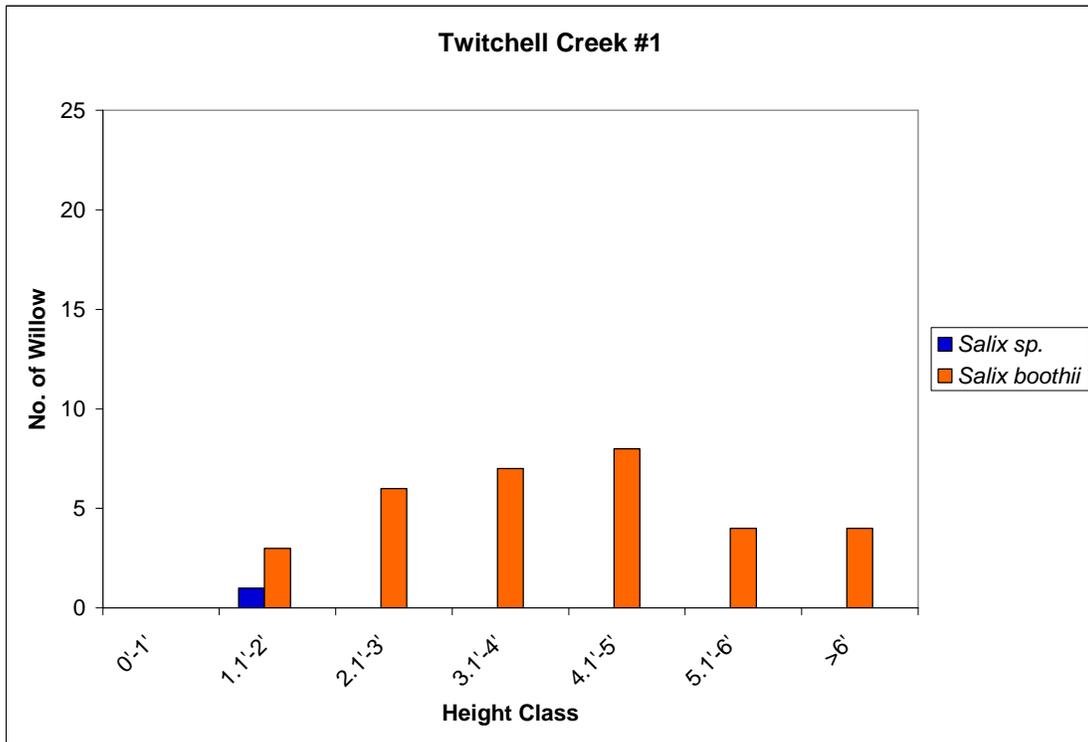
(2:10/9/08) By October 9, 74% of Booth's willow leaders and 89% of subleaders had been browsed (e.g., Figs. 3-4). Cattle were to have been removed from the pasture 10 days earlier, but three cattle were present on Twitchell Creek #1 on October 9 (photo available on request).



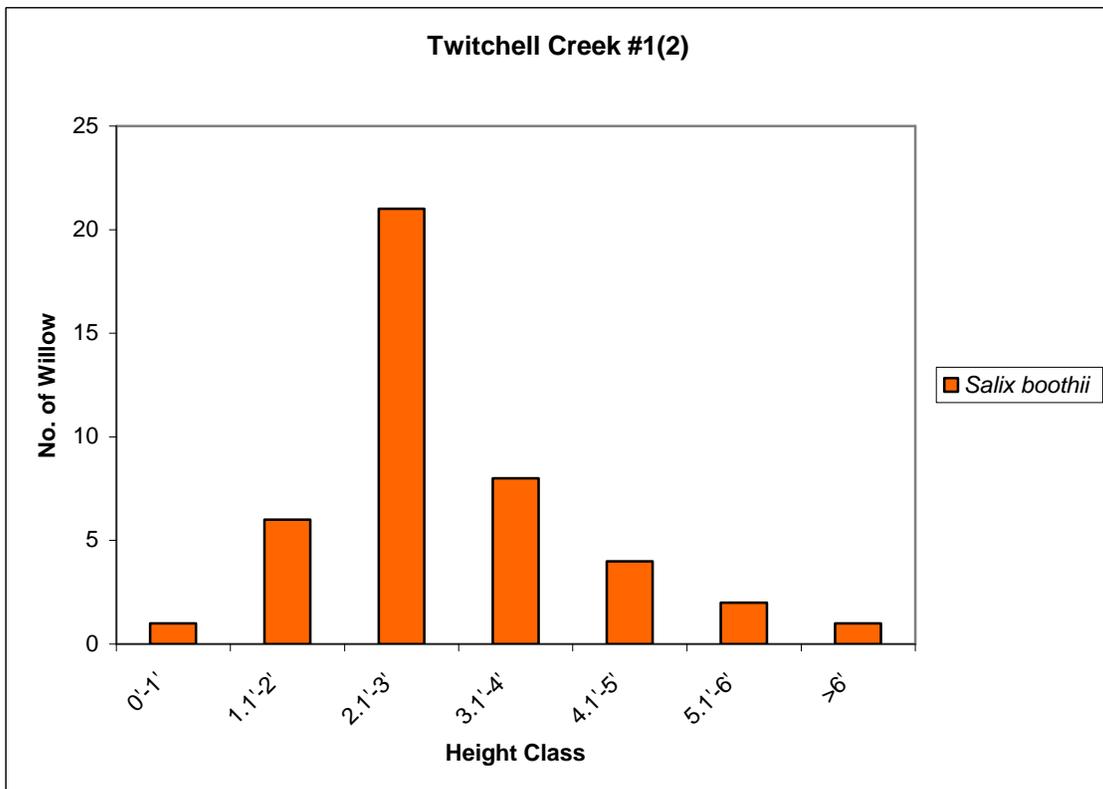
Twitchell Creek #1 (TWC1)

7/16//2008 Martin/David

Gravel floodplain and willow community between creek and trail	10/9/2008 Hoskisson/O'Brien
FLNF/Beaver RD	<b>Allotment:</b> Pine-Creek Sulphurbeds <b>Pasture:</b> Wildcat
<b>Stake:</b> 12N E 036619 N 4254405 NAD CONUS 27 Next to a juniper (downstream end)	<b>Elevation:</b> 7,386
<b>Aspect:</b> Southeast	<b>Animal sign:</b> Cattle
<b>Ave. Width Riparian Area:</b> Young willows are present 17' from the creek, while mature willows are present 26' from the creek.	
<b>Dominant vegetation:</b> Rocky mountain juniper, common juniper, Booth's willow ( <i>S. boothii</i> ), <i>Salix sp.</i> , yarrow, dandelion, Kentucky bluegrass ( <i>Poa pratensis</i> ), dagger-leaf rush ( <i>Juncus ensifolius</i> ), wooly mullein and clover.	
<b>Other notes:</b> To our knowledge no Level II Riparian Inventory has been conducted on Twitchell Creek.	



**July 16, 2008**



**October 9, 2008**

**July 16, 2008**

4 *Salix boothii* >6': Ave. width 2'

No *Salix sp.* >6'

Twitchell Creek #1			
1 <i>Salix sp.</i> ; 28 <i>Salix boothii</i> <6'			
	Total willow	<i>Salix sp.</i>	<i>Salix boothii</i>
% tall leaders browsed	44.8	100.0	42.9
% tall leaders browsed or dead	44.8	100.0	42.9
% subleaders browsed	47.8	66.7	47.0
% subleaders browsed or dead	51.0	66.7	50.3

**October 9, 2008**

1 *Salix boothii* >6': Width 2'

Twitchell Creek #1(2)	
42 <i>Salix boothii</i> <6'	
	<i>Salix boothii</i>
% tall leaders browsed	73.8
% tall leaders browsed or dead	81.0
% subleaders browsed	89.1
% subleaders browsed or dead	89.1



Fig. 1. (7/16/08) Gravel floodplain and Booth's willow.



Fig. 2. (7/16/08) Twitchell Creek and willows on both banks.



Fig. 3 (10/9/08) Heavily-browsed mature willow, 15" tall



Fig. 4 (10/9/08) Booth willow heavily browsed



Fig. 5 (10/9/08) Sparse, browsed willow along Twitchell Creek; note closely-browsed sedge/grass component.

**Twitchell Creek #1 (TWC1)  
Riparian Grass/Grasslike Utilization  
October 9, 2008**

**Allotment:** Pine Creek/Sulphurbeds

**Pasture:** Wildcat

**Creek/Stream:** Twitchell Creek

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

**Surveyors:** O'Brien and Hoskisson

Twitchell Creek #1 is located in a flat gravel floodplain of Twitchell Creek. Booth's willows (*Salix boothii*) – mostly mature plants <6' tall and a few young plants – are growing along the creek and in the gravel. The gravel site is rather sparsely vegetated with heavily-browsed grass/grasslike species (Figs 4-5 above). Kentucky bluegrass dominates, with a sedge species also present.

This transect was read 10 days after cattle were to be moved from the pasture. Both the Kentucky bluegrass and sedge averaged 1.5" tall (Fig. 6, below).

<b>Grass/Grasslike Utilization: 10/9/2008</b>											
<b>Kentucky Bluegrass (<i>Poa pratensis</i>)</b>				<b>Other Grasses</b>				<b>Sedges and/or Rushes</b>			
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
1.5"	35	5.5"	4	1.1"	7	NA	0	1.5"	12	NA	0

**Methodology note**

The average height (inches) of a grass, sedge, or rush plant was measured every 2' from the 0' site to the road (30-40' from the creek), beyond which an upland slope rose (see accompanying cottonwood/aspen/willow riparian assessment). The grass/grasslike species nearest to, but no farther than 3" from, the transect point was recorded. Kentucky bluegrass was recorded separately from other grasses, as a different Fishlake NF utilization standard (1.5") is applied to Kentucky bluegrass as opposed to hydrophytic grass/grasslike species (4").

The height of grass/grasslike plants accessible to large ungulate grazing was recorded separately from the height of grass/grasslike plants inaccessible to grazing, e.g., inside the base of a large willow, in a channel of water.

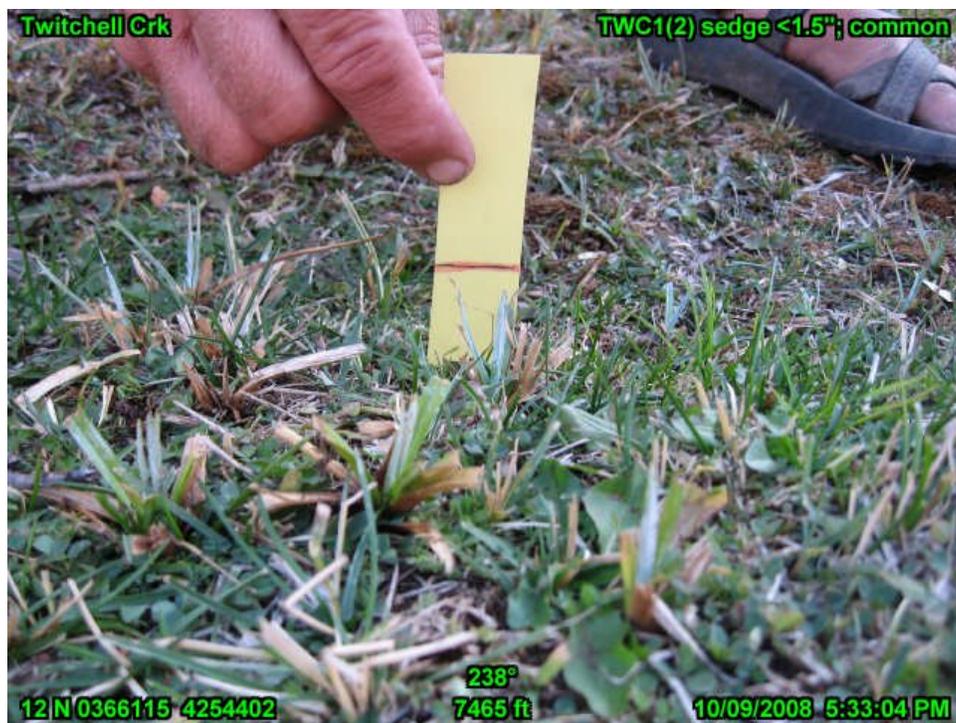


Fig. 6 (10/9/08). Patch of sedge browsed to less than 1.5" (red line on 4" yellow tab).