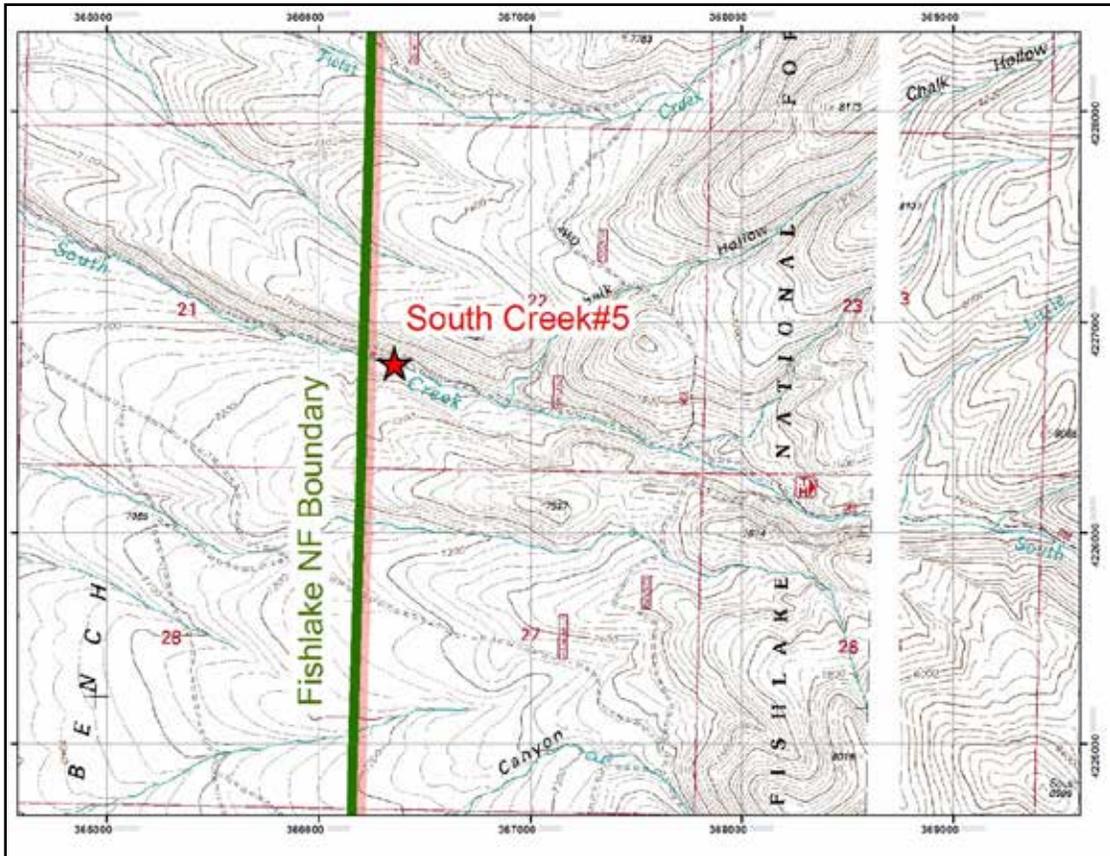


**Pine Creek/Sulphurbeds Allotment
SOUTH CREEK #5(3) (SC5)
Riparian Browse Assessment**

(1) August 30, 2010

(2) October 17, 2010

(3) September 8, 2011



<p>South Creek #5 (SC5) Between incised creek and road</p>	<p>Dates and Surveyors 8/30/2010: Hoskisson/ O'Brien/ Wheeler 10/17/10: Hoskisson/ Wheeler 9/8/2011: Hoskisson/ Young/ Ratcliff</p>
<p>Fishlake NF/Beaver RD</p>	<p>Allotment: South Beaver Pasture: Big Twist</p>
<p>Stake: 12N E 0366360 N 4226803 NAD CONUS 27 Stake on bank, not in channel NAD83:366295E 4227007N</p>	<p>Elevation: 7,163'</p>
<p>Aspect: South</p>	<p>Animal sign: Coyote</p>

Ave. Riparian Width: (2010) Cottonwood sprouts are within an old channel that is about 15-20 wide. Older cottonwoods spanned both the old and active channel (~70' wide).

Dominant vegetation: Narrowleaf cottonwood (*Populus angustifolia*), aspen (*Populus tremuloides*), juniper (*Juniperus scopulorum*), water birch (*Betula occidentalis*), sagebrush (*Artemisia tridentata* var *vaseyana*)

Other notes: There was good recruitment within an old South Creek channel that parallels the active channel. This transect is in Reach A33-3 in the 2003 Level II Riparian Inventory (Petty 2003) for South Creek. Petty points out that the lower reaches of the watershed are suffering from a lack of ground cover on the slopes above riparian areas and that the ground cover that does exist is dominated by annual plants which provide limited protection from erosion.

South Creek 5 is located just inside the Forest Service boundary in an old channel of South Creek immediately north of the active channel. The channel likely receives some water during spring melt or intense rain events. The channel was dry in both August and October of 2010 (Figs 1-4). The area was chosen to establish a 6' wide, 163' long belt transect because a large number of cottonwood sprouts had recently become established. If these sprouts are able to get above browse height, they could provide high quality habitat for many species.

The Big Twist Pasture was scheduled for rest in 2010. There was scattered, recent sign of trespass cattle upstream of this area.

(1: 8/30/2010) In August, over 100 cottonwood trees were assessed for browsing. The majority of the saplings were less than 3' in height. Approximately one quarter (24%) of the tall leaders were browsed or dead and 48% of the subleaders had been browsed.

(2: 10/17/2010) In October of the same year, there was a slightly higher level of browse with 37% of the leaders browsed or dead and 67% of the subleaders browsed or dead.

It is likely that most of the browsing done at this site was wild ungulates since this pasture was rested this year. Should this site be fenced in coming years, this information could serve to be very informative to show the wild ungulate browse on cottonwood sprouts

(3:9/8/2011) A drift fence was constructed along South Creek to deter cattle from South Creek. The fence was finished on June 17, prior to the entry date of cattle to Big Twist Pasture (June 14, but this date was delayed). Additionally, cattle use was reduced 23% due to a permittee's decision to take non-use for 2011. Also, cattle spent less time on the pasture due to a delayed entry date because of a cold, wet spring. South Creek #5 did show a reduction in percent browse of the young cottonwood along the transect. In 2010 the pasture was to be rested, but cattle sign indicated significant use. In 2010 there was 0% browse on tall leaders of the 91 narrowleaf cottonwood on the transect (33% in 2010) and 12% browse on subleaders (67% in 2010). Browse of aspen tall leaders in 2011 was 11% (60% in 2010) and 14% on subleaders (76% in 2010).

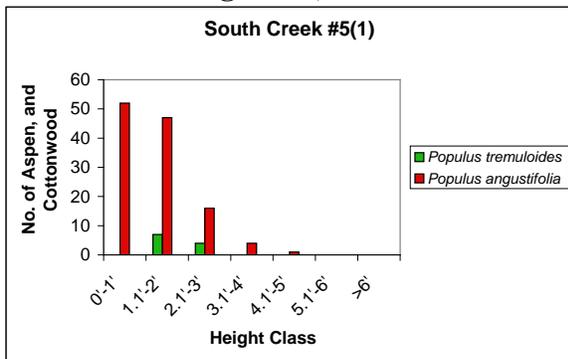
The height distribution of the cottonwood is beginning to move into 4.1-5' tall and many more cottonwood are 3.1-4' tall in 2011 than 2010. The tallest aspen on the transect in 2010 was 2.1-3'; in 2011, one was 3.1-4' and one was 4.1-5' tall.

The number of leaders is generally low (1-2) for aspen, which indicates the leader is being able to grow beyond the subleaders.

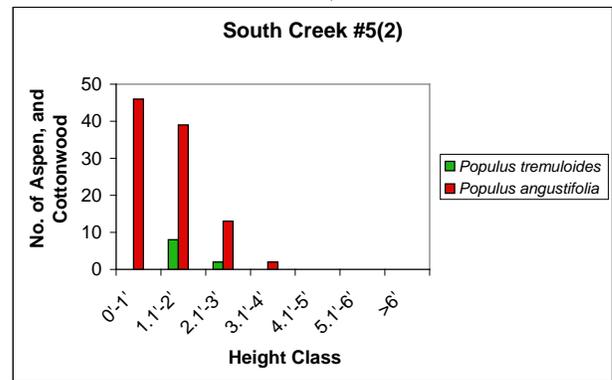
If these cottonwood and aspen can rise above 6' in the next two years, a cottonwood stand will have been established.

Height Distribution

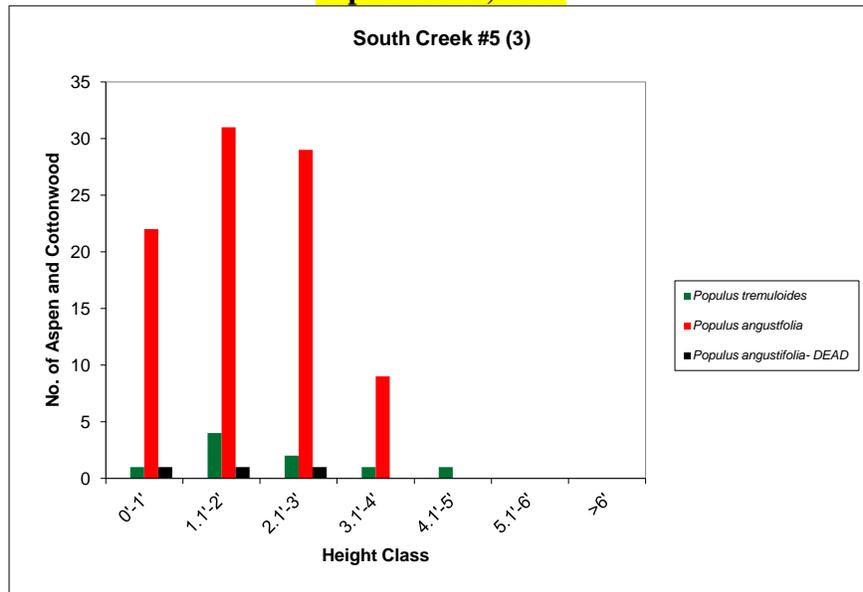
August 30, 2010



October 17, 2010



September 8, 2011



Browse
August 30, 2010
(no CAW >6')

South Creek #5(1)		
11 <i>Populus tremuloides</i> and 120 <i>Populus angustifolia</i> <6'		
	<i>Populus tremuloides</i>	<i>Populus angustifolia</i>
% tall leaders browsed	36.4	22.7
% tall leaders browsed or dead	54.5	23.5
% subleaders browsed	71.4	47.8
% subleaders browsed or dead	71.4	47.8

October 17, 2010
(no CAW >6')

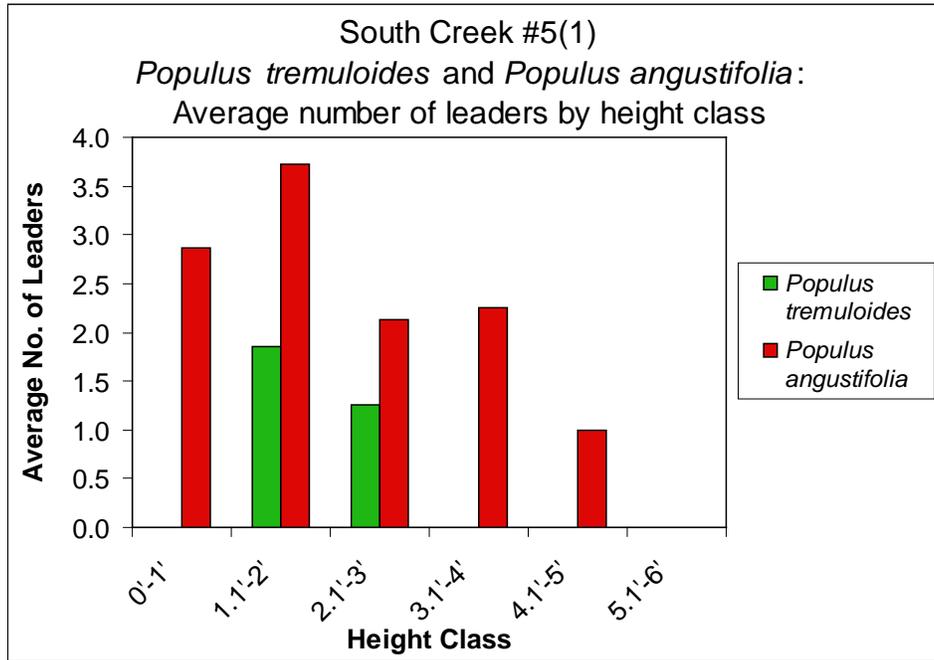
South Creek #5(2)		
10 <i>Populus tremuloides</i> and 100 <i>Populus angustifolia</i> <6'		
	<i>Populus tremuloides</i>	<i>Populus angustifolia</i>
% tall leaders browsed	60.0	33.3
% tall leaders browsed or dead	60.0	36.5
% subleaders browsed	76.0	67.2
% subleaders browsed or dead	76.0	67.2

September 8, 2011

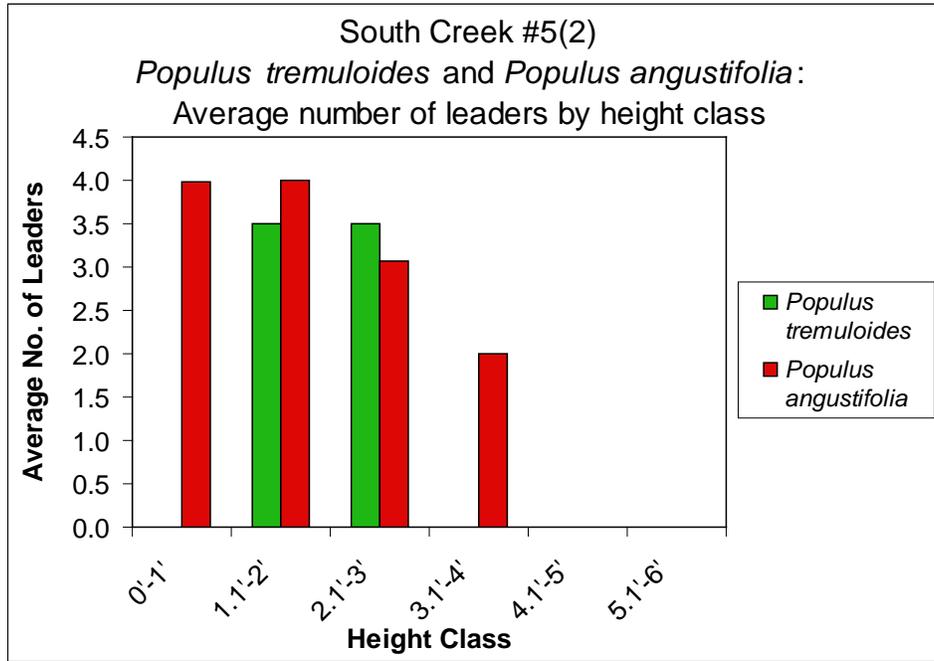
South Creek #5 (3)		
9 <i>Populus tremuloides</i> < 6', 3 dead <i>Populus angustifolia</i> 91 <i>Populus angustifolia</i> <6'		
	<i>Populus tremuloides</i>	<i>Populus angustifolia</i>
% tall leaders browsed	11.1	0.0
% tall leaders browsed or dead	22.2	1.1
% subleaders browsed	14.3	11.6
% subleaders browsed or dead	28.6	15.6

Number of Leaders/Subleaders

August 30, 2010



October 17, 2010



September 8, 2011

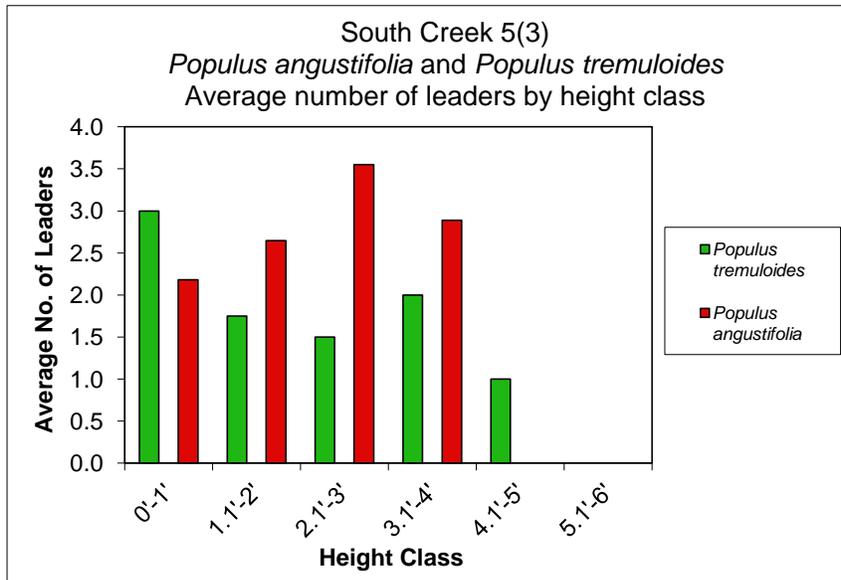




Fig 1 (8/30/2010). Looking down gradient toward beginning of the transect



Fig 2 (8/30/2010) At upstream end of transect along old stream bank



Fig 3. (8/30/2010) Small cottonwoods along transect



Fig 4. (8/30/2010) Looking downstream along transect.



Fig 5 (9/8/2011) South Creek #5 looking west



Fig 6 (9/8/2011) South Creek #5 looking east



Fig 7 (9/8/2011) End of South Creek #5 transect



Fig 8 (9/8/2011) Overview of South Creek #5 in old channel