

**Trumpeter Swan (*Cygnus buccinator*) Restoration in the Blackfoot Watershed of Montana
2017 Update**

From 2005-2017, 213 Trumpeter Swans have been released in the Blackfoot in a partnership program of the U.S. Fish and Wildlife Service and the Blackfoot Challenge. Between 5 and 43 birds were released each year (Table 1), except for 2017 when a scheduled release had to be cancelled due to wildfire activity and smoke. Since 2005 there have been over 3700 sightings of TRUS reported by project personnel and almost 100 additional observers, and at least 35 marked individuals have returned to the watershed in one or more years after their release. Six marked swans were conclusively identified in the watershed in 2017; however, there were very likely several more released birds that were not identified due to having only metal leg bands remaining.

Table 1. Numbers of Trumpeter Swans released in the Blackfoot Watershed of western Montana from 2005-2016.

Year	# Released
2005	10
2006	17
2007	13
2008	43
2009	40
2010	30
2011	11
2012	16
2013	10
2014	5
2015	10
2016	8
All Years	213

There have been 43 confirmed mortalities, most of which occurred in the watershed in the first six years (Table 2). A variety of factors has contributed to mortalities, although causes of several are unknown (Table 3).

Table 2. Known mortalities of Trumpeter Swans released in the Blackfoot Watershed by year from 2005-2017.

Year	# Known Mortalities
2005	3
2006	4
2007	6
2008	7
2009	13
2010	8
2011	1
2012	0
2013	0
2014	1

2015	0
2016	0
2017	0
All Years	43

Table 3. Known causes of mortalities of Trumpeter Swans released in the Blackfoot from 2005-2017.

Causes of Mortalities	Number
Parasites/emaciation	10
Powerline strikes	7
Legal Hunt	3
Illegal shooting	3
Predation	5
Unknown	15

Nesting Activity

In 2010, the first territory was established in the Cottonwood Creek wetland and the first successful nesting occurred in 2011, when the Cottonwood Creek and Alkali Lake nests fledged a total of 6 cygnets. The numbers of pairs and territories have climbed slowly but steadily since 2010 (Table 4). In 2017, there were 13 territories and 8 confirmed active nests in the Blackfoot (Figure 1).

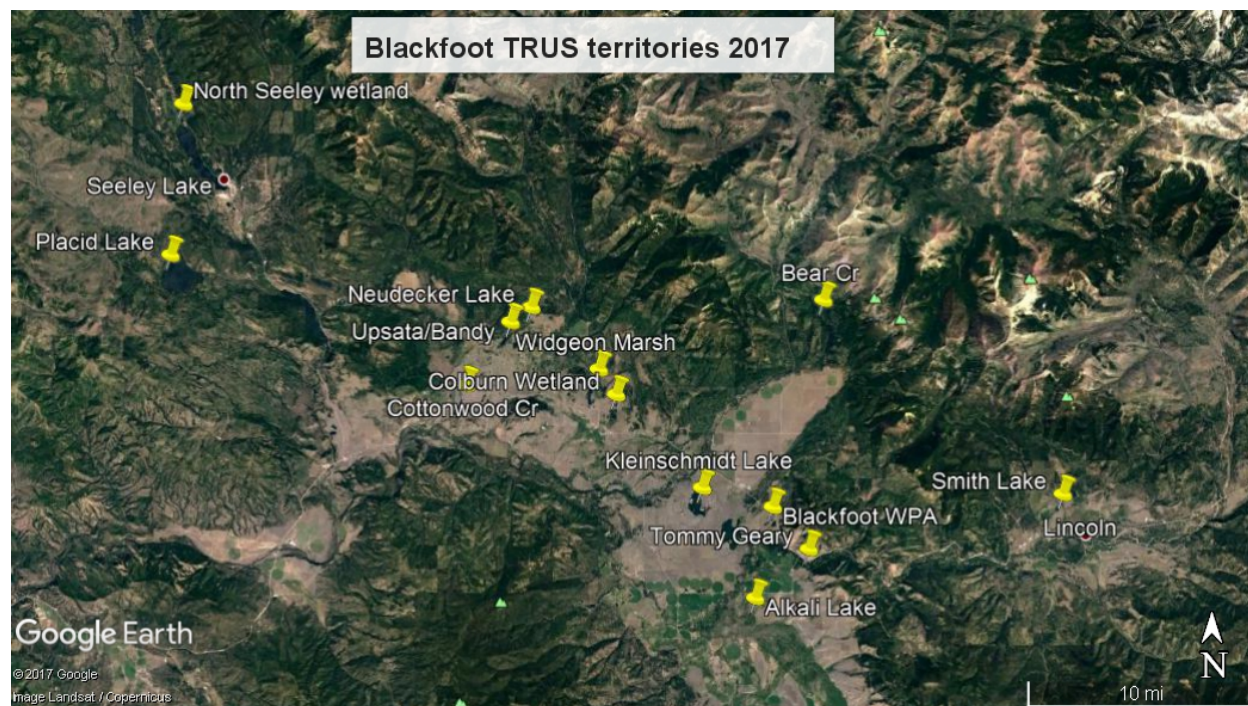


Fig 1. Blackfoot Watershed Trumpeter Swan territories in 2017

Nest success and cygnet production has varied year to year, but the overall trend has been a steady increase in numbers of both (Table 4; Fig 2). Although there were only five active nests in the Blackfoot in 2017, those five nests hatched 20 cygnets and fledged 19, the highest number of cygnets fledged in any year so far (Fig 2). Nesting swans have included birds released every year from 2007-2013 (Table 5).

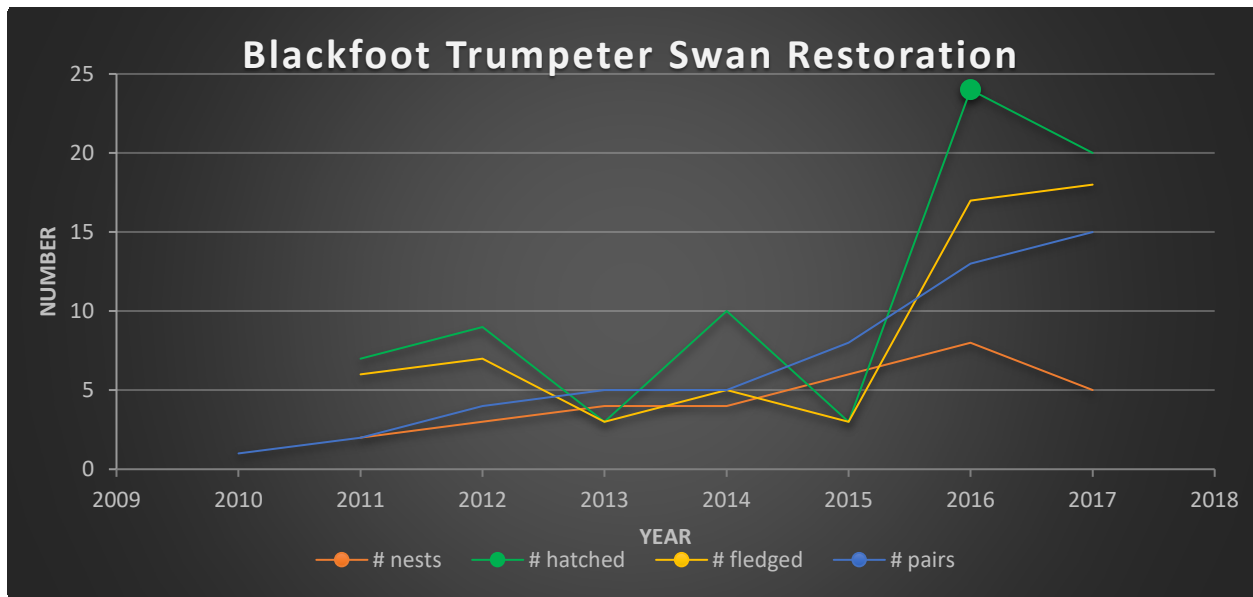


Fig 2. Nesting trends in the Blackfoot from 2010 to 2017

Table 4. Numbers of Trumpeter Swan territories, nests, and cygnets in the Blackfoot Watershed from 2010-2016.

Year	# pairs	# territories	# nests	# hatched	# fledged
2010	1	1			
2011	3	3	2	7	6
2012	4	4	3	9	7
2013	5	5	4	3	3
2014	5	5	4	10	5
2015	8	8	6	3	3
2016	13	11	8	24	17
2017	16	13	5	20	19
All Years	38	35	27	76	60

Table 5. Identities and release years of nesting/territorial swans (where known).

Territory	male	year released	female	year released	Notes
Alkali Lake	5P8	2008	9P8	2009	* Genders not confirmed. Identities not confirmed for several years.
Bear Creek	0V9	2013	unmarked		
Blackfoot WPA - 2	2A5	2012	unmarked		
Colburn Lake	6A6	2011	2A8	2014	*2A8 replaced unmarked female in 2016; 2A8 was identified as male at release; has not yet nested

Cotton Wood Creek	6P8	2008	3P6	2007	* Genders not confirmed. Identities not confirmed for several years.
Neudecker Lake	6P3	2008	unmarked		
Placid Lake	unmarked		unmarked		
Smith Lake	unmarked		unmarked		
Tommy Geary Pond	7A6	2012	unmarked		
Upsata Lake/Bandy	0A5	2010	0A6	2010	* Genders not confirmed. Identities not confirmed since 2015.
Widgeon Pond	0V6	2013			
NSC/Kleinschmidt Lk	unk		Unk		
Seeley Lake	unk		unk		

Wintering Locations

Most winter sightings of swans released in the Blackfoot have been in southwestern Montana and southeastern Idaho (Figure 3). Most marked wintering swans (19) have been sighted in the Ruby River valley near the town of Sheridan, just a little over 100 k from the Blackfoot. The longest movement confirmed was that of Swan 6A5, which was observed in the early spring of 2012 on the Colorado River near the town of Blythe in southern California.

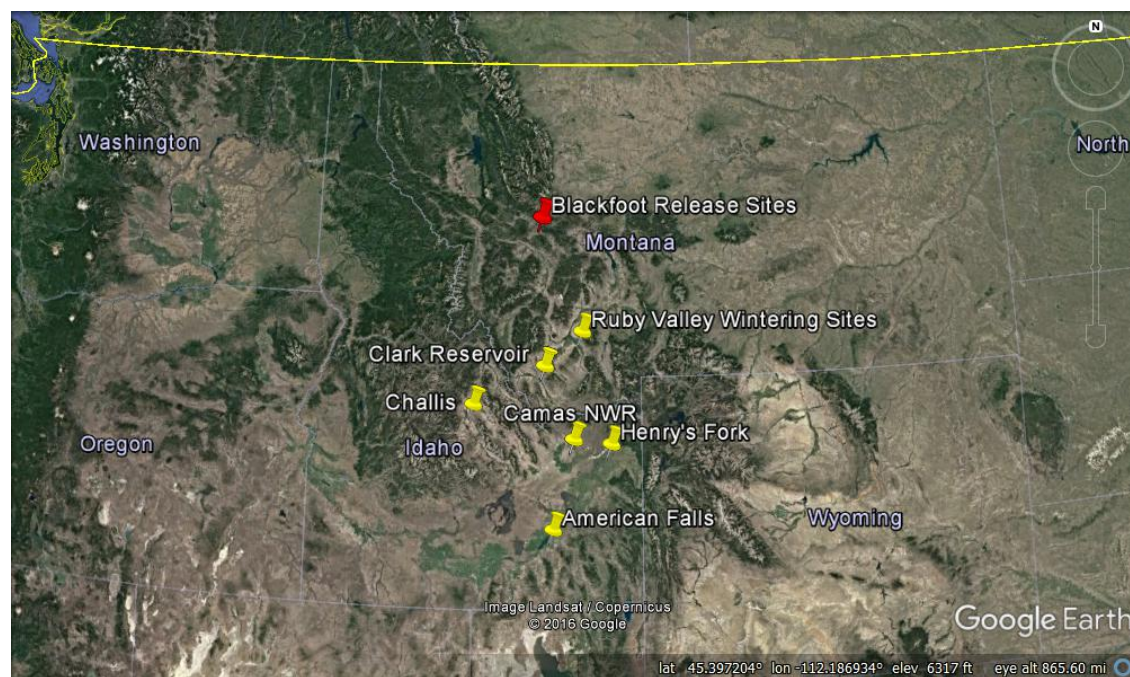


Figure 3. Primary winter locations of Trumpeter Swans released in the Blackfoot Watershed 2005-2016.

Other Migration Movements

Swan 7A8 was released in 2012 in the Blackfoot, was sighted in Idaho in the winters of 2012-2013 and 2013-2014, and was sighted in the St. Mary Lake area near Kimberley, B.C. in the summer of 2014. 7A8 spent the summers of 2015 and 2016 with a mate in the St. Mary Lake wetland. In 2017, 7A8 returned to the wetland alone and spent the summer without a mate.