

2019 Broomfield Bald Eagle Watch Data Sheet

Site Code	Date	Start Time	End Time	Observer	Observation Pt.	Sky Code	
SL	3/25/2019	8:40	12:40	NH	A	OC/PC	
Noise	Start	44.6	End	48.6	Temp (F)	36	58

Number of adult Bald Eagles detected	2
Number of nestlings detected	1
Number of fledglings detected	0

Behaviors ^A
P- Perched ¹ (A)
NI - Nest Incubating (L)
NB - Nest Brooding (1)
NC - Nest Const/Maint. (D)
FS - Feeding Self (C)
FY - Feeding Young (M)
PR - Preening (B)
BR - Branching
FL - Fledging
SL - Sleeping (E)
AI - Aggressive Interact. (F)
Fly - to/from Nest/Perch (7)
TE- Territory Flight (8)
NV - Not Visible (9)
C - Courtship (G)
Cop - Copulate (H)

Disturbance Indicators (DI)	
1	Staring Intently
2	Raised hackles
3	Alert posture
4	Distress calls ² (three distinctive calls of nesting birds in response to humans)
	a. "chatter call" à 3-4 intro notes w/ short gasps of silence (<1s) followed by rapid sequence of descending notes, usually 6-9 notes (kwit kwit kwit kwit kee-kee-kee-kee-kee)
	b. "peal" high-pitched, prolonged, gull-like cry, repeated 3-5 times
	c. "wails" (rare)
5	Flushing
6*	Standing over their eggs (For an extended period > 10 min. notify super; > 20 minutes Stop Work)
7*	Standing on the side of nest (For an extended period > 10 min notify super; > 20 minutes Stop Work)
8*	Absence from the nest for an extended period
9	Direct flight toward construction, particularly if vocalizing while flying
10	Vocalization during flight in the vicinity of construction

². Any distress call must be investigated to determine cause and **any construction or human activity that may be responsible for the distress call, must be halted or modified immediately.**

*. Applies to incubation /brooding periods - once chicks hatch standing in or on the side of the nest is normal. Absence from nest also common

^A. The alpha-numeric codes in parenthesis correspond to FRNBES behavior codes

Please include additional notes and comments below:

Both adults present through majority of observation time; construction was consistent over most of the site in progress; adult on nest at all times; coyote approached nest, causing adults to flush and dive at it to drive off; no disturbance due to construction observed

Plumage
Y - Young
JU - Juvenile
SU- Sub Adult
AD- Adult

Eagle ID Examples
A1 - Adult 1
A2 - Adult 2
Y1 - First Eaglet
Y2 - Second Eaglet
Y3- Third Eaglet

Sky Codes	
CL	Clear
PC	Partly Cloudy
OC	Overcast
DR	Drizzle
RA	Rain
SN	Snow
SL	Sleet/hail
FH	Fog/Haze

Wind Codes	Speed (mph)	Description
0	0	Smoke rises vertically
1	1-3	Wind direction visible in smoke
2	4-7	Wind felt on face, leaves rustle
3	8-12	Leaves and smaller twigs in constant motion
4	13-18	Small branches sway
5	19-24	Smaller trees sway
6	25-31	Large branches in motion
6+	31+	Whole trees in motion

Used as a back-up to anemometer

Photo (s)



Adult in nest



Both adults on nest

Time (Continuous)	3 min. obs.	Behavior					Disturbance ³		Notes /comments/Loc ²	Wind	
		A1	A2	Y1	Y2	Y3	Type	DI		Spd.	Dir.
	8:40	NB	NV				Constr.	0	Construction in various locations on site; Male present	1.11	N
	8:43	NB	NV				Constr.	0	no change		
	8:46	NB	NV				Constr.	0	no change		
	8:49	NB	NV				Constr.	0	no change		
	8:52	NB	NV				Constr.	0	no change		
8:53		FY	NV	FS			Constr.	0	A1 feeding young		
	8:55	NB	NV				Constr.	0	no change		
	8:58	NB	NV				Constr.	0	no change		
	9:01	NB	NV				Constr.	0	no change		
	9:04	NB	NV				Constr.	0	no change		
	9:07	NB	NV				Constr.	0	no change		
	9:10	NB	NV				Constr.	0	no change		
9:11		NB	P2				Constr.	0	A2 (female) returned	1.95	NW
	9:13	NB	P2				Constr.	0	no change		
9:14		NB	P1/FS				Constr.	0	A2 to side of nest, feeding self		
9:15		P3	NB				Constr.	0	Nest switch, A1 on Perch A		
	9:16	P3	NB				Constr.	0	no change		
	9:19	P3	NB				Constr.	0	no change		
	9:22	PR	NB				Constr.	0	A1 preening while on P3		
	9:25	PR	FY				Constr.	0	A2 feeding young		
	9:28	P3	FY				Constr.	0	A1 on P3		
9:30		TE	FY				Constr.	0	A1 flew north		
	9:31	NV	FY				Constr.	0	no change		
9:33		P1	FY				Constr.	0	A1 return		
	9:34	P1	FY				Constr.	0	no change		
	9:37	NB	TE				Constr.	0	Nest switch, A2 flying to Perch A		
	9:40	NB	P3				Constr.	0	no change	1.15	N
	9:43	NB	PR				Constr.	0	no change		
	9:46	NB	P3				Constr.	0	no change		

¹. Perch type = 1. On nest; 2. In nest tree (outside of nest); 3. < 50 m. outside of nest tree; 4. >51-200 m from nest; 5. 201-1000 m. from nest; 6. >1k from nest. mark locations on

³. Mark disturbance on BBC property on attached map (Figure 2)

Disturbance Type includes: construction, highway/traffic, train, aircraft, pedestrians, horseback riders, other

Time (Continuous)	3 min. obs.	Behavior					Disturbance ³		Notes /comments/Loc ²	Wind	
		A1	A2	Y1	Y2	Y3	Type	DI		Spd.	Dir.
	9:49	NB	P3				Constr.	0	no change		
	9:52	NB	P3				Constr.	0	no change		
	9:55	NB	P3				Constr.	0	no change		
	9:58	NB	P3				Constr.	0	no change		
	10:01	NB	P3				Constr.	0	no change		
	10:04	NB	P3				Constr.	0	no change		
	10:07	NB	P3				Constr.	0	no change		
	10:10	NB	P3				Constr.	0	no change	1.74	N
	10:13	NB	P3				Constr.	0	no change		
	10:16	NB	P3				Constr.	0	no change		
	10:19	NB	P3				Aircraft	0	no change		
	10:22	FY	P3	FS			Constr.	0	no change		
	10:25	NB	P3				Constr.	0	no change		
	10:28	NB	P3				Constr.	0	no change		
	10:31	NB	P3				Constr.	0	no change		
	10:34	NB	P3				Constr.	0	no change		
	10:37	NB	P3				Rail vehicle	0	no change		
	10:40	NB	P3				Constr.	0	no change	2.13	N
	10:43	NB	P3				Constr.	0	no change		
	10:46	NB	P3				Constr.	0	no change		
	10:49	NB	P3				Constr.	0	no change		
	10:52	NB	P2				Constr.	0	A2 fly to nest tree		
	10:55	NB	P2				Constr.	0	no change		
	10:58	NB	P2				Constr.	0	no change		
10:59		NB	TE				Constr.	0	A2 circling nest		
11:00		NB	P2				Constr.	0	A2 to nest tree		
	11:01	NB	P1				Constr.	0	A2 to edge of nest		
11:02		NB	P2				Constr.	0	A2 to nest tree		
	11:04	NB	PR				Constr.	0	no change		
	11:07	NB	P2				Constr.	0	no change		
	11:10	FY	P2	FS			Constr.	0	no change	1.67	N
	11:13	NB	P2				Constr.	0	no change		

Time (Continuous)	3 min. obs.	Behavior					Disturbance ³		Notes /comments/Loc ²	Wind	
		A1	A2	Y1	Y2	Y3	Type	DI		Spd.	Dir.
	11:16	NB	P2				Constr.	0	no change		
	11:19	NB	P2				Constr.	0	no change		
	11:22	NB	P2				Constr.	0	no change		
11:23		NB	P2				Aircraft	0	no change		
	11:25	NB	P2				Constr.	0	no change		
	11:28	NB	P2				Constr.	0	no change		
	11:31	NB	P2				Constr.	0	no change		
	11:34	NB	P2				Constr.	0	no change		
	11:37	NB	P2				Constr.	0	no change		
	11:40	NB	P2				Constr.	0	no change	2.47	N
	11:43	NB	P2				Aircraft	0	no change		
	11:46	NB	P2				Constr.	0	no change		
	11:49	NB	P2				Constr.	0	no change		
	11:52	NB	P2				Constr.	0	no change		
	11:55	NB	PR				Aircraft	0	A2 preening while on P2		
	11:58	NB	P2				Constr.	0	A2 on P2		
	12:01	NB	P2				Constr.	0	no change		
	12:04	FY	P2				Constr.	0	A1 feeding young		
	12:07	FY	P2				Constr.	0	no change		
12:08		AI	AI				Constr.	0	Coyote approached nest, both adults flushed and dove to drive off		
12:09		FY	P3				Constr.	0	A2 to Perch A, A1 feeding young		
	12:10	NB	P3				Constr.	0	A1 brooding, A2 on perch 3	1.00	N
	12:13	NB	P3				Constr.	0	no change		
	12:16	NB	P3				Constr.	0	no change		
	12:19	NB	P3				Constr.	0	no change		
	12:22	NB	P3				Constr.	0	no change		
	12:25	NB	P3				Constr.	0	no change		
	12:28	NB	P3				Constr.	0	no change		
	12:31	NB	P3				Constr.	0	no change		
	12:34	NB	P3				Constr.	0	no change		
	12:37	NB	P3				Constr.	0	no change		
	12:40	NB	P3				Constr.	0	no change	2.60	E



Broomfield Eagle Evaluation



-  Nest Location
-  Disturbance Zone Boundary

Image Source: DigitalGlobe© October 10, 2017

0 200 400
 Feet



Figure 2
Title

Prepared for: City of Broomfield
 Open Space and Trails
 File: 6950 Figure 2.mxd (WH)
 November 13, 2018

