CLIFF-NESTING RAPTORS IN BOULDER COUNTY

1998 STATUS REPORT

4303

By Nan Lederer, Boulder County Nature Association December 30, 1998

INTRODUCTION

The mountain front in Boulder County as well as the entire Front Range provides excellent habitat for cliff-nesting raptors such as golden eagles, prairie falcons and peregrine falcons. Precipitous cliffs offer nesting sites that are relatively secure from predators, while the nearby plains and shrublands harbor good populations of prey species such as prairie dogs, rabbits, small rodents and birds. This habitat is also used by humans, who affect the raptors in many ways. Some of their actions may be beneficial to raptors, such as land use practices that encourage increases in prairie dog populations, but more of them are detrimental. Disturbance to nesting birds by rock climbers is a direct impact; indirect impacts such as home building on grasslands that previously supported numerous prey animals are severe threats also.

Fortunately, in Boulder County much of the raptors' habitat, including nest sites and hunting grounds, is protected as parks and open space, where disturbances caused by human activities can be minimized. We have been able to maintain good populations of these birds of prey, thanks in part to the efforts of many land management agency employees and volunteers who have monitored nest sites, worked on mangement policies, and educated other people as to the importance of protecting raptors.

1998 was the sixteenth year of a study of nesting golden eagles and prairie falcons in Boulder County conducted by the Boulder County Nature Association (BCNA), City of Boulder Mountain Parks, City of Boulder Open Space, Boulder County Parks and Open Space, and the Colorado Division of Wildlife. Since 1991, peregrine falcons have been nesting within the study area, and their status has been monitored as well. The study's objectives are to:

• Locate active nests

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- Measure productivity (number of young hatched and fledged)
- Monitor nests to document and prevent human disturbance
- Work with governmental agencies, land managers, and conservation groups to protect the raptors' habitat
- Locate and map important hunting territories

Numerous volunteers as well as ranger staff are involved in nest monitoring. Nests are watched with binoculars and spotting scopes from a sufficient distance so as not to disturb the raptors. Observations of nesting status, the birds' behavior, any disturbance to the birds, and other pertinent information are recorded. Databases of this information are maintained by the Mountain Parks, City Open Space, and the Boulder County Nature Association.

In some previous years, when there was sufficient time and volunteer assistance, many nests in Jefferson and Larimer counties were also monitored, to gain a broader regional perspective of raptor populations. Last year the Jefferson County Open Space Department began its own monitoring program. We did not have the time and personnel to do extensive field work in Larimer County this year.

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they used decades ago. In some instances, such as the Mickey Mouse Wall area of Eldorado Mountain, the two species have been able to nest fairly close to each other and both produce young. In other areas the prairie falcons abandon nest attempts, and we do not know if they successfully relocate to a distant territory. Table 2 summarizes the status of each nesting territory from 1983 to 1998.

- **Bull Gulch** (private). Not investigated. This site is actually in Jefferson County, but is sometimes monitored in this study as it is very close to Boulder County.
- Eldorado Mountain (Mickey Mouse Wall) (City of Boulder Open Space). Active; nesting status unknown.
- Eldorado Canyon (Eldorado State Park). Active; two young fledged from Red Garden Wall.
- Shadow Canyon (Boulder Mountain Parks). Inactive.
- Fern Canyon (Boulder Mountain Parks). Active; three young fledged.
- **Bear Canyon** (Boulder Mountain Parks). Active; three young fledged. This was the first active nest in this territory since 1988.
- Third Flatiron (Boulder Mountain Parks). This territory was used by peregrines.
- Mount Sanitas (private). Not investigated.
- Steamboat Mountain (private). Not investigated.

Some prairie falcon activity has been noted at two additional sites in the county, Hall Ranch and lower South St. Vrain Canyon. No successful nesting has been observed; these areas should be monitored in the future.

Peregrine Falcon

In 1998, three sites were known to be active. One failed, while two successfully fledged a total of 5 young. This species is making a very good comeback to Boulder County. Table 3 summarizes nesting status from 1991 to 1998.

- Eldorado Mountain (Boulder City Open Space). Active; one young fledged.
- Matron (Boulder City Open Space). Active; four young fledged.
- Shadow Canyon (Boulder Mountain Parks). Inactive, as the alternate site at the Matron was used.
- Third Flatiron (Boulder Mountain Parks). Active, but nest failed during incubation (2 eggs laid.)
- Steamboat Mountain (private). Not investigated.

Another site in South St. Vrain Canyon was occupied, but not monitored sufficiently to determine whether nesting occurred; it should be watched more in the future.

Territory	1982	1983	1984	1985	1986	1987	1988	1		
(south to north)	1700	1705								
(South to hor th)	+									
Eldorado Springs	1 adult seen	Incub., Mouse	Terr. active*		Terr. active	Undetermined	Undetermined	Terr. a		
(Eldorado Canyon)		Ears; failed		N. of Mouse E.				ļ		
······································										
Skunk Canyon	Not investigated	2 yg. fledged,	1 yg. fledged,	2 yg. fledged,	2 yg. fledged,	Terr. active,	Terr. active,	2 yg. f		
		Inferno	Inferno	Superpower	Inferno	did not nest	did not nest	Inferno		
						IT-ditional	Incub. Eag.	l yg. fl		
Boulder Canyon	Terr. active	Terr. active	2 yg. fledged,	1 yg. fledged,	At least 1 yg.	Undetermined	Rock; failed	Blob R		
			Eagle Rock	Eagle Rock	fledged, Bitty		ROCK, IAIRO	yg. die		
				L	Buttress			10.010		
North Foul	Tom active	Terr. active	2 subadults seen	Not investigated.	Undetermined	Undetermined	Undetermined	Not in		
North Fork	Terr. active	ICIT. BOUVE	2 subaunts secu	HOL HIVESHEARD.				1		
Boulder North	Not investigated	Not investigated	Not investigated	Not investigated	Not investigated	Not investigated	Not investigated	Not in		
	1 TOL III VOSLIGATOU	1. OL INTOOLEHOU			_	××				
Lefthand Palisades	1 yg. fledged	Terr. active	2 yg. fledged	2 yg. fledged	1 yg. fledged	Incub.; nest	1 yg. fledged	Nest fa		
						failed		<u> </u>		
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Lower St. Vrain	Terr. active	New mate; late	2 yg., nest fell	2 yg. fledged,	2 yg. fledged,	1 yg. fledged	Terr. active	Теп. а		
			off cliff; fate	"Cracking	"Cracking			taken		
		unsuccessful	unknown	Dome" nest	Dome" nest	ļ	<u></u>	ravens		
					Terr. active	Terr. active	2 yg. S. Sheep	Теп. а		
Upper St. Vrain	Terr. active	1 yg., S. Sheep Mtn.***	Terr. active	Terr. active	Terr. active	Tell. active	Mtn.	1-0m. u		
		Mtn.***		<u> </u>	·	<u> </u>				
I vone	Not investigated	Not investigated	Not investigated	Not investigated	1 vg., tree nest	Pair carry-	2 yg.	At lea		
Lyons	1100 mresugated	1. O. HIVOSTBAIOU	literation		Stone Canyon	ing sticks		fledge		
	_ <u></u>	<u>↓</u>	<u> </u>							
Rabbit Mtn.	Not investigated	Not investigated	Not investigated	Not investigated	Not investigated	Not investigated	Not investigated	Not in		
		1					l			
Total young presumed							ļ	- 		
fledged from 10 territories	1	3	7	88	7	<u> </u>	5			
		L	L		_	<u> </u>	<u> </u>			
†Undetermined means insuffici	ent field work to est	tablish territory st	atus.	·	· [<u> </u>	┿━╾━━━┼━╸			
*Territory active means frequent *Young fledged means either	nt sightings of eagle	s in territory, but i	no active nest fou	<u>na.</u>	L	L	<u></u>			

***If fledging not specified, means that young were seen early in the season and later visits were not made to confirm fledging.

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														(fron of fluos)
	Potenitourni told		Panimaotoball	Facimotoball	boabell ou b	Posto R N N		+Lagingetehal I	heatell av 2	#evites HeT	**hanhall by £	hateniteavai IOV	heiserisevni toV	Bull Gulch
TANK KOAT	Not investigated	Juachve	Undetermined	Dadetermined	4 yg. fledged	4 yg. fledged	pəspəli A Lissanıv	†bənimmətəbaU	5 yg. fledged	- DADOR '110 L	mainau ar c	DOIP DESAULION	Not investigated	<u>uwno 900</u>
Est 37 yr	Теп. асйve	4 yg. fledged	4 yg. fledged		Теп. асйve	4 yg. fledged	At least 2 yg.	Inactive	Inactive	***svdoenl	Теп. асйче	Теп. асйvе	Теп. асйче	Eldorado Mtn.
EOLER		E. of RR tracks	South Tower	ductivity unk.			1edged				[┝────┤	(Isw serom val)
Inactive	Inactive	Inactive	Inactive	Inactive	2 yg., Red	2 Yg., Upper	Undetermined	Inactive	Inactive	Inactive	4 yg. Redged	Not investigated	Not investigated	Eldorado Canyon
					Garden Wall	Peanuts								(State Park)
Ten. acti	Inactive	Теп. асйve	Displaced by	At least 1 yg.	Теп. асйve	At least 2 yg.	Yg. heard, not	Теп, асйvе	2 yg. fledged	Теп. асйve	Теп. асйve	hauhall av b	Not investigated	поуна) wobade
nop	04 DOMIN	24 0 28 11 2 1	peregrines	ALL REPORT	ALINOR	Dedged	Seen	24028 (112 T	10900U 96 *	34838 110 1	04808 110 1	Participant of the	Party Page 4 HI 1011	NOTING ASSESS
3 Y8. fled	3 ys. fiedged	5 YR. Dedged	Nest active, pro-	At least 2 yg.		Est 2 yg. fidgd,	Svitosal	Svitobal	3 yg. fledged	1 yg. on ground;	5 yg. fledged	3 yg. fledged	Not investigated	fern Canyon
			THE ARADOND	fledged, E. Ridge		by calls; nest				bnuol ton tean	·			
						Dinglison		·- · · · · · · · · · · · · · · · · · ·			 			
Теп. асц	Теп. асйvе	Inactive	Inactive	Inactive	элітэваІ	Inactive	Vest used by	4 yg. fledged	4 yg. Aedged	Incub,; failed	4 yg. fledged	Теп. асйve	Not investigated	Bear Canyon
nest Back		1		·			SUDARI							
Occupiec	Occupied by	Pair displaced	Nest active, pro-	4 yg. fledged,	5 yg. fledged,	At least 3 yg.	At least 3 yg.	Terr. active	hashan av b	Not investigated	I yg. fledged,	Теп. асйve	Tett. active	Third Flattron
peregrine	peregrines	by peregrines	ductivity unk	Queen Anne's		Redged, West			West side		e'snaA neen Anne's			
Not inve	Inactive	Inachve	Svitzeni	SVDDBRI	3 yg. fledged,	4 Yg. fledged,	Теп. асйvе	Not investigated	Not investigated	Not investigated	Not investigated	baleguzavni jov	Not investigated	entines Jiv
			·		S. Cedarbrook	S. Cedarbrook							<u> </u>	·····-
Not inve	Іпасйче	Inactive	Inactive	Briefly occupied	vd baiauco atig	At Least 3 ye	At least 2 yg.	Undetermined	bateatizavni 10N	Not investigated	3 yg. Redged	i yg. ffedged	Not investigated	Steamboat Min.
				by I peregrine		Ded ged	Dedged		9		9			
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									01	·			+	Cotal young produced
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										.bnuol iza	y, but no active no	falcons in territor	lo egnitigiz insup	Territory active means fre
								.bomussa saw	gnigbell lulesecon	y feathered and su	or they were full	e observed flying	at either young wei	*Young fledged means th
								<u> </u>		peidnocoun aq				wes aw ansam avitabilit
·····		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	1				r	1	Supers Alo	to establish territ	Ilicient field work	uzni znasm banimetebaU

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Undetermined means	insufficient field	work to establish	n territory status					
w ansem evitosni*	saw no peregrine	falcons during ou	ur visits and assu	imed territory to				
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erritory active mean	ijhdis jneupent sighti	ngs of falcons in	territory, but no	active nest foun	d.			
of 4 territories	3	l	2	5	0	t	6	S
otal yg. known out								
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	falcons	falcons	falcons			hybrid & eggs		
nird Flatiron	Used by prairie	Used by prairie	Used by prairie	2 yg. fledged	Nest failed	Active; fenale	3 yg. fledged	Nest failed.
.ntM tsodmse	Terr. active*	Inactive	Inactive	Inactive	Inactive	1 Dndetermined†	Undetermined	Undetermined
THM teodmen	*evitae moT				evit2ent	thenimetoball	benimseteball	hegimieteholl
				bəsu əjiz		site used	bəsu əjis	bəsu ətis
noyne) wober	Inactive	ן אַמּ. fledged	2 yg. fledged	Alternate	Nest failed	Alternate	Alternate	Alternate
		bəsu əjis	bəzu əjis	bəlist tean	bəsu əjis			
atron	3 yg. fledged**	Alternate beau etia	Alternate	2 yg. hatched,	Alternate	3 yg. fledgid	3 yg. fledged	4 yg. fledged
· · · · · · · · · · · · · · · · · · ·						(sốbə Z)		
dorado Mtn.	Inactive***	Inactive	Inactive	Inactive	Inactive	ן אם נופקסים: נוסיקים:	3 yg. fledged	7 yg. fledged
Τειτίτοιχ	1661	266 L	£661	7994	566 L	9661	2661	8661
able 3. Boulder Cou	inty Peregrine Fa	sutete teat nooie						