A landscape photograph showing a wide, flat grassy field in the foreground. In the middle ground, there is a calm body of water, possibly a lake or a wide river, surrounded by green trees and shrubs. In the background, a range of blue mountains stretches across the horizon under a bright blue sky with scattered white clouds.

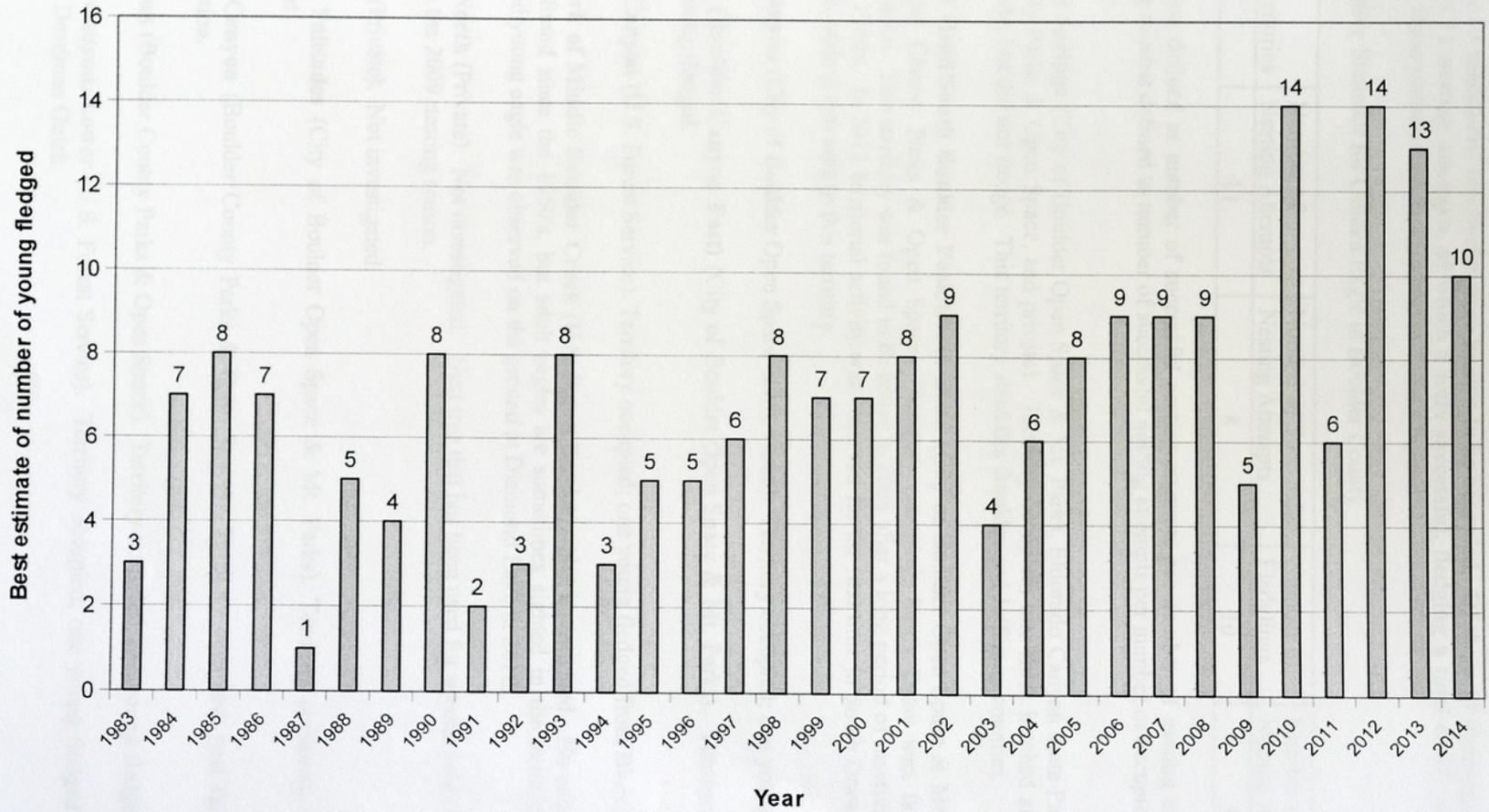
# Resource Inventory Priorities for North Trail Study Area

Stephen Jones, Environmental Consultant  
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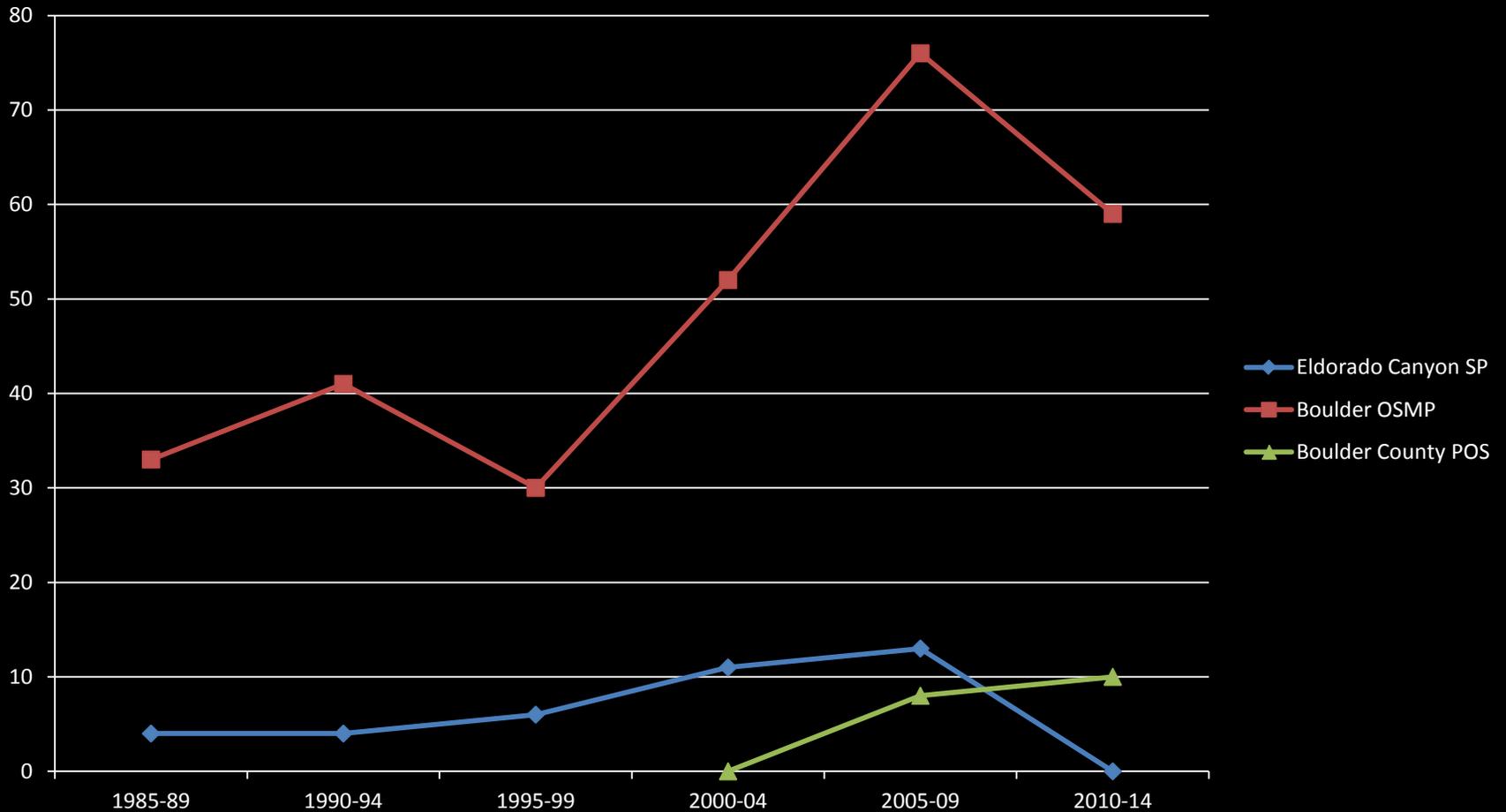
# Resource Inventory Approaches

- Landscape/Zone Management: Using the best available information, designate management areas based on their biological richness and sensitivity to disturbance.
- Coarse Filter: Use selected indicator species to map and designate habitats and to ascertain potential impacts of various trail alignments.
- Fine Filter: Map breeding locations and critical foraging areas of species of special concern. Use Colorado Parks and Wildlife, Colorado Native Plant Society, and other recommended buffer zones for individual species to determine which trail alignments will have the least impacts on species of concern.

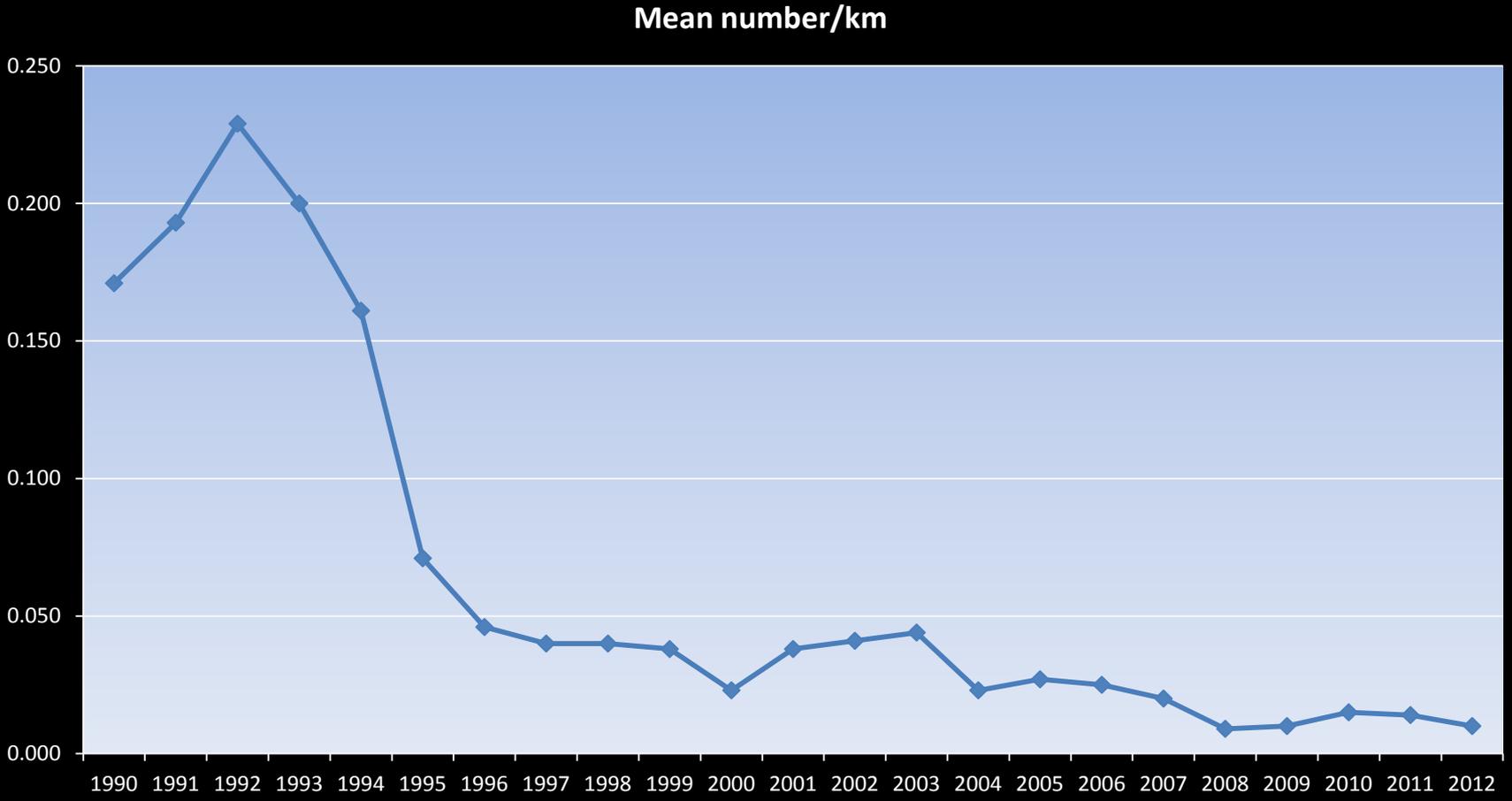
Fig. 1. Golden eagle productivity in Boulder County from 1983 to 2014



# Numbers of Prairie Falcons Fledged from Boulder County Nests, 1985-89 to 2010-14



# Mean Numbers of Ferruginous Hawks observed on Boulder County Nature Association Wintering Raptor Survey Routes



# Colorado Natural Heritage Program Tracking Format

State Scientific Name	State Common Name	Global Rank	State Rank	Fed List Status	BLM/ USFS Sensitive Status	State List Status	CNHP Element Sensitive	CNHP Tracking Status
<i>Accipiter gentilis</i>	Northern Goshawk	G5	S3B	-	BLM, USFS	-	Y	Watchlisted Only
<i>Aegolius funereus</i>	Boreal Owl	G5	S2	-	USFS	-	N	Partial Tracking
<i>Aimophila cassinii</i>	Cassin's Sparrow	G5	S4B	-	USFS	-	N	Watchlisted Only
<i>Aimophila ruficeps</i>	Rufous- crowned Sparrow	G5	S2	-	-	-	N	Fully Tracked
<i>Amphispiza belli</i>	Sage Sparrow	G5	S3B	-	USFS	-	N	Partial Tracking
<i>Asio flammeus</i>	Short- eared Owl	G5	S2B	-	USFS	-	N	Fully Tracked
<i>Athene cucularia</i>	Burrowing Owl	G4	S4B	-	BLM, USFS	ST	N	Watchlisted Only

**BOULDER COUNTY AVIAN SPECIES OF SPECIAL CONCERN - 2010**

(Bolded species are of primary concern in Boulder County; non-bolded are on watch list)

SPECIES	Federal Status	State Status	USFS	CNHP	PIF	BCNA
Wood Duck						4
Ring-necked Duck						4
<b>Barrow's Goldeneye</b>				S2B; Y		6
White-tailed Ptarmigan			S	S4; P	P	4W
<b>Plains Sharp-tailed Grouse</b>		E		S1; Y	P	6
<b>Northern Bobwhite</b>						1
<b>Eared Grebe</b>						1
Double-crested Cormorant						4
<b>American Bittern</b>			S			4
<b>Least Bittern</b>						3, 4
Great Blue Heron						4
<b>Great Egret</b>						3, 4
Green Heron						4, 5
Black-crowned Night-Heron						4
<b>Osprey</b>						4
<b>Bald Eagle</b>		SC	S	S1B; S3N; Y		4
<b>Northern Harrier</b>			S		P	1, 4
<b>Northern Goshawk</b>			S3b; W			4, 5
Swainson's Hawk					P	4
Ferruginous Hawk		SC	S, M	S3B; S4N; Y	P	4W
Rough-legged Hawk						4W
<b>Golden Eagle</b>						4

# Colorado Natural Heritage Program Listed Birds Documented Nesting in North Trail Study Area

<u>Species</u>	<u>Status</u>
Bald Eagle	State threatened, BLM/USFS sensitive
Burrowing Owl	State threatened, BLM/USFS sensitive
Prairie Falcon	Isolated and restricted
Bobolink	Isolated and restricted

# Boulder County Breeding Birds of Primary Concern Documented Nesting in North Trail Study Area

<u>Species</u>	<u>Status</u>
Northern Bobwhite	Rare and declining
American Bittern	Isolated and restricted
Osprey	Isolated and restricted
Bald Eagle	Isolated and restricted
Northern Harrier	Rare and declining
Golden Eagle	Isolated and restricted
Burrowing Owl	Isolated and restricted
Red-headed Woodpecker	Rare and declining
Prairie Falcon	Isolated and restricted
Loggerhead Shrike	Rare and declining
Lark Bunting	Rare and declining
Grasshopper Sparrow	Isolated and restricted



# Northern Harrier Nesting Locations near Boulder Reservoir, 2004-13



# Mammals and Birds Believed Extirpated from North Foothills Trail Study Area

Mammals: White-tailed Jackrabbit, Gray Wolf, Grizzly Bear, Black-footed Ferret, Pronghorn, American Bison.

Birds: Long-billed Curlew, Mountain Plover.

# Resource Inventory Priorities Before Completing Trail Planning Process

1. Map breeding areas and foraging areas for vertebrate species of special concern.
2. Map rare plant communities, rare insect communities, and other critical resources.
3. Determine desirable buffers using Colorado State Parks and Wildlife recommendations and available recommendations from scientific studies.
4. Engage recreational community to identify most desirable trail corridors.
5. Engage recreational community to design informational signage; involve all recreational users in ongoing resource inventory and monitoring.

# Wildlife Closure Area

enforceable protection of  
nesting and roosting raptors and species of special concern



**NORTHERN HARRIER**  
*rare and declining*

**AMERICAN BITTERN**  
*isolated and restricted*



**BURROWING OWL**  
*isolated and restricted*



**OSPREY**  
*isolated and restricted*

American Bitterns and Northern Harriers have nested in wetlands west of Coot Lake and west of Boulder Reservoir. These are the only recently successful Northern Harrier nest sites in Boulder County. (Hallock and Jones 2010, Jones 2011)

Boulder Reservoir is one of only two locations in the county where Burrowing Owl nesting activity has been reported within each of the past four decades. (Hallock and Jones 2010, Jones and Mahoney 2003)

The Little Dry Creek site was the first documented Osprey nesting site in Boulder County. (Boulder County Nature Association, unpublished data)

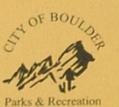


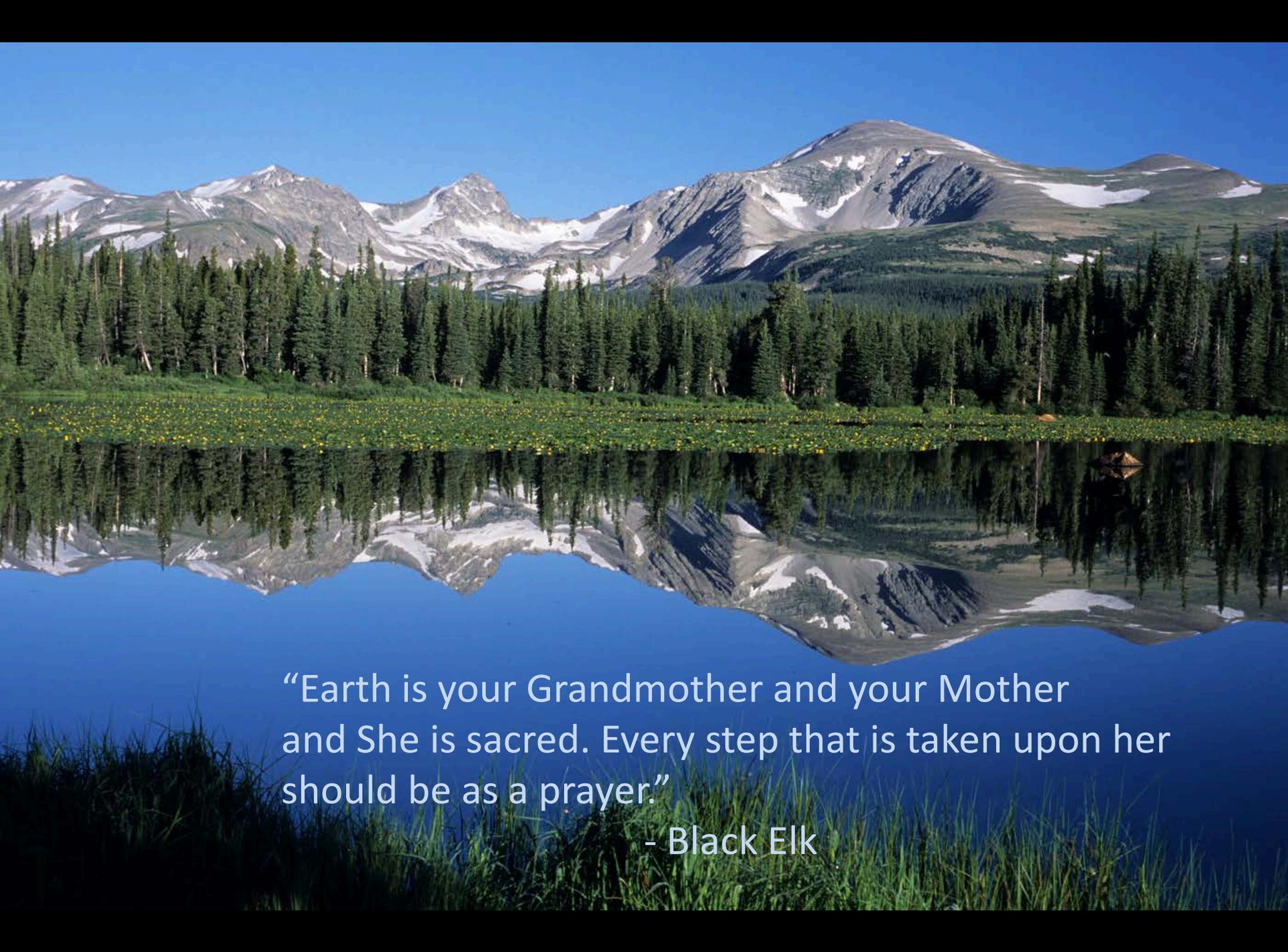
Coot Lake Wetland  
Wetland area closed with additional consideration  
March 15 - September 10  
for raptors and species of special concern



**Please use extra caution near closure area Mar 15 - Sept 10**

**Northern Harriers, American Bitterns, and Burrowing Owls are ground nesters which make them particularly vulnerable to disturbance by roaming hikers and their pets.**





“Earth is your Grandmother and your Mother  
and She is sacred. Every step that is taken upon her  
should be as a prayer.”

- Black Elk

# Sources

- Boulder County Nature Association. 2013. Wintering raptor survey route 2012 data summary. [www.bcna.org](http://www.bcna.org).
- Boulder County Parks and Open Space. 2015. Boulder County Comprehensive Plan Environmental Resources Element list of wildlife species of special concern:  
<http://www.bouldercounty.org/doc/landuse/bccp-wssc.pdf>
- Colorado Natural Heritage Program. 2015. Conservation status handbook (tracking lists): <http://www.cnhp.colostate.edu/download/list.asp>
- Hallock, D. and S. Jones. 2010. Boulder County avian species of special concern. Boulder County Nature Association: [www.bcna.org](http://www.bcna.org).
- Lederer, N. and Mike Figgs. 2014. Cliff-nesting raptors in the northern Front Range: 2014 status report. Boulder County Nature Association: [www.bcna.org](http://www.bcna.org).