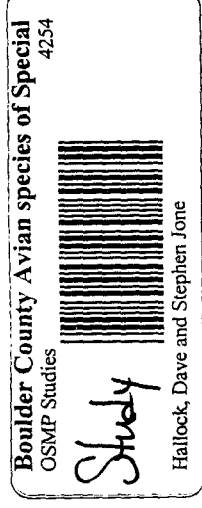


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BOULDER COUNTY AVIAN SPECIES OF SPECIAL CONCERN

BOULDER COUNTY NATURE ASSOCIATION

1999

DAVE HALLOCK AND STEPHEN JONES

HALLOCK + JONES

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BOULDER COUNTY AVIAN SPECIES OF SPECIAL CONCERN 1999

Background

Thomas Say visited what is now Colorado and was one of the first scientists to record observations of Colorado's wildlife. He listed only 11 bird species. During the late 1800's, amateur birder Denis Gale wandered around Boulder County documenting and collecting local avifauna. In the early 20th century, the biology program of the University of Colorado, lead by Dr. Junius Henderson and Dr. Gordon Alexander, made significant contributions to early lists of birds. Since these initial efforts, naturalists, scientists and birders have been conducting studies to document and monitor the well-being of birds in the county.

The Avian Species of Special Concern list attempts to red-flag those species that are of interest due to their rareness, probable decline, and habitat or locational restrictions. Hence, they are more vulnerable and less adaptable to change. It is based on a comparison of historic and current records, studies, and lists that are felt to represent the best available information. The list primarily focuses on breeding status. In addition, the list utilizes regional, state and local assessments.

The first comparative list was compiled by Mike Figgs in 1982 in conjunction with an update to the Environmental Resources Element of the Boulder County Comprehensive Plan. It examined historical bird lists for Boulder County developed by Henderson (1909), Betts (1913) and Alexander (1937). The historic status of each species (resident status {migrant, resident all year, summer resident, etc.} and relative abundance {abundant, common, fairly common, rare, etc.}) was then compared with the recognized current status using the best available information; the Boulder County Wildlife Inventory maintained by Boulder Audubon and the Boulder Audubon Society Birds of Boulder County Field Checklist. Species were then given a comparative status of either extirpated, new, declining, increasing, stable or undetermined.

Species were considered to be declining or increasing if their comparative status changed by two levels of relative abundance; for example from abundant to fairly common or from rare to common. This was done because the historic and recent lists only provided qualitative descriptors. It is not known quantitatively how one list's common compared with another list's fairly common. It was felt that a two level difference was a more likely indication of population change.

Besides the local status and distribution of avian species, which was the focus of the above described comparison, national, regional and state lists have also been utilized in developing a list of species of concern. The Federal Government and the State of Colorado have official lists of endangered, threatened and candidate species, and those of concern. The Audubon Blue List was used during the 1980s, but is now considered outdated. Newer lists, such as those of the Colorado Natural Heritage Program (CNHP), the U.S. Forest Service, and Partners in Flight

(PIF) are utilized to provide a more complete picture of avian species for which we should have extra concern.

The Boulder County Avian Species of Special Concern list has been updated several times since 1982. Updates occurred in 1984, 1986, 1988 and 1993. The update process has involved reviewing new and more recent studies that provide some information on the status and distribution of avian species in the County, as well as consulting with knowledgeable individuals involved with inventories and research. Additionally, changes in Federal, State, CNHP and Forest Service lists are incorporated. New for this update is inclusion of the Partners in Flight (PIF) method for setting bird conservation priorities for Colorado.

The Lists

As described above, the Boulder County Avian Species of Special Concern list combines local, state, regional and national assessments and is found in Attachment 1. Federal Status, Colorado Status, U.S. Forest Service Sensitive Species and Management Indicator Species, Colorado Natural Heritage Program (CNHP) Rare and Imperiled Species, and Partners in Flight (PIF) Bird Conservation Priorities for Colorado are the lists utilized in assessing a species status beyond the county's boundary. The Boulder County Nature Association (BCNA) list provides a local assessment. The BCNA list is further described in Attachment 2.

The Species of Special Concern list has two categories (Attachment 1). This is new for 1999. The species printed in bold type are of primary concern because of factors such as population decline, rareness, and/or habitat restrictions for uncommon species in Boulder County. The other species on the list are "watchlisted;" generally these are species whose numbers in the county are fairly common to common, but due to concerns in the state or region (population decline or threats), or locally (habitat restrictions), or for which the west is an important area for their survival, they should be monitored.

The primary list contains a number species which are rare in the county (found in 3 or fewer known locations). Many of these are peripheral, meaning Boulder County is on the edge of their breeding range, the result of two physiographic regions (Great Plains and Southern Rocky Mountains) meeting in the county. Over the years there has been some debate about retaining these species on the list. We continue to keep them. For most, there is good evidence they have been a part of our landscape since records were first kept, so we conclude that they are established. Their continued well-being may provide information about our stewardship of the land.

In recent times, a number of new species have been found breeding in the county. Most of these have not been added to the list. It is probable that for most of these species, the relationship with the county will be short-term. Only if a species becomes well-established and a regular breeder in the landscape, or if there are concerns at a state, regional or national level, should it be considered for inclusion. Recent breeders not included on the list are Least Flycatcher, Marsh

Wren, Chestnut-sided Warbler, Hooded Warbler and Orchard Oriole. Wood Duck and Great Egret are included on the list. Osprey, also a new breeder to the county, is included because of concerns at the regional level.

Several other species made the list for particular circumstances. Bald Eagle, though not yet confirmed breeding in the county but getting closer, is on the list because of Federal, State and regional interest. American Dipper and Short-eared Owl are on the list because they have significant winter concentrations in a few locations. White-tailed Ptarmigan is also of concern because of greater locational restrictions in the winter.

Changes for 1999

As mentioned above, the list has been organized to note primary species of concern and watchlisted species. The concerns for the primary species, because of their low numbers, tend to be site-specific, as well as habitat based. The watchlisted species are more numerous and are best dealt with, for conservation purposes, through habitat retention and/or management.

The CNHP list of Rare and Imperiled Birds is currently undergoing considerable change. They propose to no longer track wide-ranging (eastern and northern North American or holartic) abundant mobile species whose ranges just touch Colorado. Instead, they are placing their emphasis on rare, evolutionary distinct or isolated, and endemic species or populations. Hence, quite a few species of interest to Boulder County have been deleted from their list. Their list is currently being revised and we have been allowed to use a draft of their probable changes, which will officially be printed in 1999.

A new list, which we are using for this update, was developed by Partners in Flight (PIF) for Colorado. It focuses on 7 variables, both global and local in scale, including breeding distribution (breeding range size as a proportion of North America), non-breeding distribution, relative abundance (in appropriate habitat within range), threats to breeding, threats to non-breeding, population trend and area importance (importance of Colorado to a species relative to overall abundance). Primary data sources are distribution maps, Breeding Bird Survey data, and opinions of a technical committee. Each variable is rated on a 1 (low priority) to 5 (high priority) scale. Using their scoring system, we are focusing on two types of species. Type 1 are those species which have a moderate to high overall score, moderate to high area importance, and either significant population declines or high threats to breeding. These species are of concern because of threats or a downward population trend; on-the-ground conservation actions should be considered. Type 2 species are those with high total scores, high area importance and moderate threats and unknown population trends. For Type 2 species there appear to be no immediate concerns but monitoring is warranted. The majority of Type 1 or 2 species are currently on the list, and the PIF list provides additional justification. There are a few additions, including MacGillivray's Warbler and Western Tanager.

There have been changes to Federal and State lists. Federal Status has dropped the C1 and

C2 categories and only has a C (Candidate). Hence, species such as Black Swift, Loggerhead Shrike and Northern Goshawk dropped from their official list. The State list dropped the Undetermined Status category, so American Bittern, Burrowing Owl, Eared Grebe and Least Bittern were deleted from State consideration.

Comments from reviewers have provided additional insight about the status of several species. Accordingly, several changes have been made. Almost all reviewers felt that Ferruginous Hawk needed to be on the list. There is no record of them breeding in Boulder County. However, important winter habitat is present in the form of prairie dog colonies. Because of their winter locational restriction to prairie dog colonies, they have been added as a watchlisted species. Lewis's and Red-headed woodpeckers are now found in fewer locations and have been moved onto the rare and declining category. More Swainson's Hawk nests are being found and they have been moved off the declining list but stay as watchlisted. Recent results of Indian Peaks bird counts suggest that Northern Goshawk populations may be more stable than we thought, so they have been moved off the declining list but retained as watchlisted in recognition of the need for more research. Finally, Great Blue Herons have been moved off the rare list and retained as watchlisted. Colonial nesters, including Great Blue Heron, Double-crested Cormorant and Black-crowned Night-Heron, are only found in a few locations with many nests at each place. Over the years we have debated whether they should be considered rare based on the limited number of nest sites, but most reviewers recommended that we place them on the watchlist.

The results of these changes were the following:

- Added: Ferruginous Hawk, MacGillivray's Warbler and Western Tanager;
- Deleted: Green-winged Teal, Sharp-shinned Hawk, Cooper's Hawk, Least Flycatcher, Chestnut-sided Warbler and Evening Grosbeak;
- Moved to Rare and Declining: Lewis's Woodpecker and Red-headed Woodpecker;
- Moved from Rare, or Declining to Watchlisted: Great Blue Heron, Northern Goshawk and Swainson's Hawk.

Acknowledgment of Reviewers

The following individuals reviewed and commented on the 1999 list of Boulder County Avian Species of Special Concern. Their contribution is greatly appreciated.

Bev Baker, United States Forest Service, Boulder District
Dr. Carl Bock, University of Colorado EPO Biology Department
Virginia Dionigi, Foothills Audubon and Boulder County Nature Association
Joe Harrison, Foothills Audubon and Boulder County Nature Association
Michael Wunder, Colorado Natural Heritage Program

ATTACHMENT 1
BOULDER COUNTY AVIAN SPECIES OF SPECIAL CONCERN - 1999

Information Sources and Explanation of Ranks and Designations

1. Federal Status: U.S. Fish and Wildlife Service, Division of Endangered Species and Habitat Conservation

Categories:

LE - Listed Endangered	PE - Proposed Endangered
LT - Listed Threatened	PT - Proposed Threatened
C - Candidate	

2. State Status: Department of Natural Resources, Division of Wildlife - Colorado Threatened or Endangered Species and Colorado Species of Special Concern

Categories:

E - Endangered	SC - Special Concern
T - Threatened	

3. U.S. Forest Service:

U. S. Forest Service Region 2 - Threatened, Endangered and Sensitive Plants and Animals. Sensitive species are those for which population viability is a concern as evidenced by: a) significant current or predicted downward trends in population numbers or density; or b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

Categories:

S - Sensitive

Arapaho and Roosevelt National Forests Management Indicator Species. Management indicator species are those believed to be characteristic of the management indicator communities and would reflect changes in condition within those communities.

Categories:

M - Management Indicator Species

4. Colorado Natural Heritage Program (CNHP): Rare and Imperiled Animals, Plants, and Plant Communities; Draft Proposed Revisions, Tracking Criteria for Zoological Elements at CNHP (Wunder et al., Dec. 1998). CNHP is proposing to emphasize the tracking of those species which are rare, evolutionary distinct or isolated, and endemic. Factors such as geographic range, habitat specificity, and local population size are evaluated. CNHP is de-emphasizing the tracking of wide-ranging (eastern and northern North American and holarctic) abundant, mobile species whose ranges just touch Colorado.

Categories:

- Y - Species is a conservation concern. It meets criteria for tracking with regard to their populations in Colorado. All occurrences are maintained in their data system. (Y = Yes)
- P - Only those occurrences of high quality or of a specified population are tracked. (P = Partial)
- W - Species do not meet the criteria for tracking nor harbor substantial conservation concern, but still should be monitored. (W = Watchlisted)

5. Partners in Flight (PIF): Methods for setting bird conservation priorities for states and physiographic areas of North America (Carter et al., Feb. 1998). PIF evaluates 7 variables on a 1 (low priority) to 5 (high priority) scale using range maps, Breeding Bird Survey data and opinions of a Prioritization Technical Committee. Each species gets a score on each variable and a total score (ranging from 7 to 35). We have taken the scores for Colorado (scores from 2/12/98) and, as suggested by PIF, focused on two groups of species. Type 1 are species for which direct on-the-ground conservation actions are needed because of threats or downward population trends. Type 2 are species for which a planning unit should assume conservation responsibility because Colorado is a significant area in terms of the species overall distribution and population.

Categories:

- Type 1 - Moderate to high total score (15+), moderate to high area importance (2+), and high downward population trend (4+) or high threats to breeding (4+). Modifiers: D - downward population trend, T - threats to breeding
- Type 2 - High total score (20+), high area importance (4+), moderate threats to breeding (3) and unknown population trend (3)

6. Boulder County Nature Association (BCNA): Boulder County Nature Association Avian Species of Special Concern (1999). BCNA maintains a list of species for the county which are rare, appear to be declining and/or are restricted in distribution to a few locations or habitats. Rarity is defined as 3 or fewer known sites. The list generally focuses on breeding status.

Categories:

- 1 - Rare and Declining
- 2 - Declining (but not yet rare)
- 3 - Rare
- 4 - Isolated or Restricted Populations (Species that are found only at certain locations and/or have narrow habitat niches)
- 5 - Needs Research
- 6 - Extirpated
- W - Winter

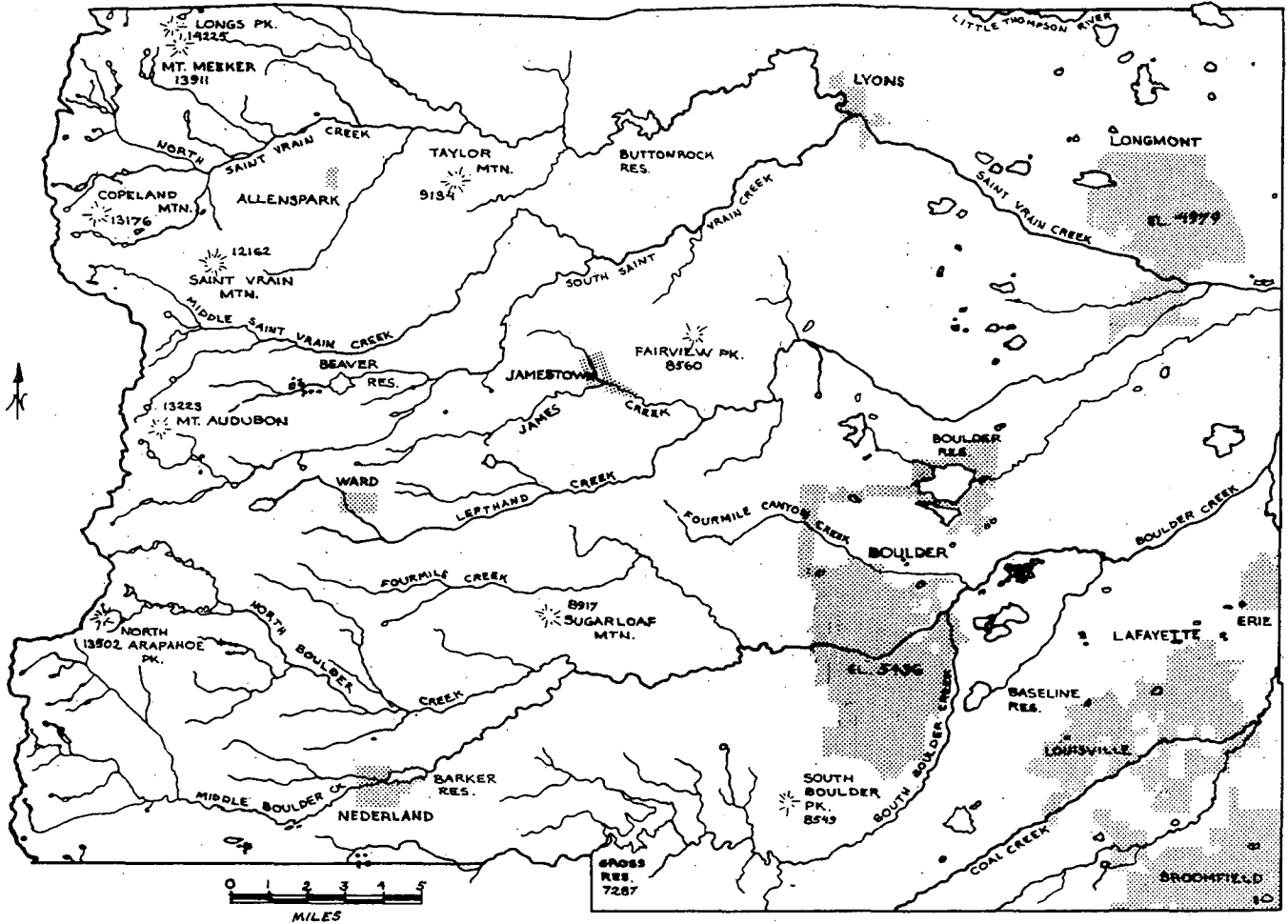
**BOULDER COUNTY AVIAN SPECIES OF SPECIAL CONCERN
1999**

(Bolded species are of primary concern, non-bolded species are watchlisted)

SPECIES	Federal Status	State Status	USFS	CNHP	PIF	BCNA
Eared Grebe						1
Double-crested Cormorant						4
American Bittern			S			1,4
Least Bittern						3,4
Great Blue Heron						4
Great Egret						3,4
Black-crowned Night-Heron						4
Wood Duck						4
Ring-necked Duck						4
Barrow's Goldeneye		SC		Y		6
Osprey			S			3,5
Bald Eagle	LT	T		Y	1T	
Northern Harrier					1DT	1,4
Northern Goshawk			S	W		4,5
Swainson's Hawk					2	4
Ferruginous Hawk		SC	S	Y	1T	4W
Golden Eagle						4
Peregrine Falcon	LE			Y	1T	3,4
Prairie Falcon						4
White-tailed Ptarmigan					2	4W
Sharp-tailed Grouse		E		Y	1T	6
Northern Bobwhite						1

SPECIES	Federal Status	State Status	USFS	CNHP	PIF	BCNA
Mountain Plover	PT	SC	S,M	Y	1T,2	6
Long-billed Curlew		SC	S	Y	1D	6
Barn Owl						3
Flammulated Owl			S,M			4
Burrowing Owl		T	S,M	W	1T,2	1,4
Long-eared Owl						1
Short-eared Owl				Y	1T	3,4W
Boreal Owl			S	P		4,5
Black Swift			S	Y		3,4
Lewis's Woodpecker			S			1,4
Red-headed Woodpecker						1,4
Three-toed Woodpecker			S,M			4
Olive-sided Flycatcher			S			4
Willow Flycatcher						2,4
Loggerhead Shrike			S		1T	1,4
Western Scrub-Jay						4
Bank Swallow						3,4
Bushtit						4
Pygmy Nuthatch			S,M			4
American Dipper						4W
Golden-crowned Kinglet			S,M			4
Veery						3
Gray Catbird						4
Northern Mockingbird						3,4

SPECIES	Federal Status	State Status	USFS	CNHP	PIF	BCNA
Sage Thrasher						3,4
Brown Thrasher						1,4
Cedar Waxwing						4
American Redstart						3
Ovenbird				Y		3,5
MacGillivray's Warbler					1D	
Western Tanager					1D	
Lark Bunting					1T,2	1
Savannah Sparrow						4
Grasshopper Sparrow						4
Fox Sparrow			S			4
Bobolink				W	1T	4
Brown-capped Rosy-Finch				P		4
Yellow-headed Blackbird					1T	4
White-winged Crossbill				W		5



MAP BY BILL GINEVICH 1986

ATTACHMENT 2
BOULDER COUNTY NATURE ASSOCIATION
AVIAN SPECIES OF SPECIAL CONCERN
1999

BCNA Category 1. Rare and Declining

EARED GREBE

Habitat: Breeds on marshes, ponds and lakes. A colonial nester, they build platform nests of marsh growth in shallow areas of water bodies.

Historic Status: Rare Breeder.

Field Notes: *Summer resident about the plains, lakes, not common. One in University collection. Gale found its nest in or near the county. (Henderson 1908)*

Numerous early records indicate these grebes were once regular breeding birds, but unstable water levels and increased use of the lakes and reservoirs by man contributed to the elimination of nesting communities. (Bailey and Niedrach 1965)

Current Status: Uncommon Migrant and Winter Visitor.

Field Notes: No recently confirmed nesting sites. Fluctuating water levels and recreational use of reservoirs continue to be a management concern for the nesting success of this species throughout the state.

BCNA Category 1. Rare and Declining

AMERICAN BITTERN

Habitat: Breeds in marshes. Their nests are constructed from marsh vegetation placed in a platform on the ground, on mud, or occasionally over water.

Historic Status: Fairly Common Breeder.

Field Notes: *Summer resident; common in the marshes of the Plains zone. Full-grown young observed July 27, 1912. (Betts 1913)*

Current Status: Uncommon/Rare Breeder. Declining.

Field Notes: Most consistent nesting locations are Walden Ponds and White Rocks (S. Jones). Nesting occurred at these sites in 1998. In 1993, they were observed during the breeding season at Coot lake (S. Jones).

BCNA Category 1. Rare and Declining

NORTHERN HARRIER

Habitat: Breeds around marshes. Nest of sticks and/or grass is constructed on the ground, generally in moist areas.

Historic Status: Fairly Common Breeder.

Field Notes: *Common summer resident of plains.* (Henderson, 1908)

Infrequent to common summer resident, but may occur in winter. Most common on plains, but occasionally seen up to 10,500 feet. (Alexander 1937)

Current Status: Rare Breeder. Declining.

Field Notes: Boulder Reservoir is the most consistent breeding location, with nesting occurring throughout the 90s, most recently in 1998 (S. Jones). Lagerman Reservoir has been an historic nesting site and it is probable they continue nesting in the vicinity as a pair have consistently been seen during the breeding season (M. Sanders). As a ground nester they are exposed to threats from predation, livestock trampling, human disturbance, flooding, and the loss of wetlands (Finch 1992).

BCNA Category 1. Rare and Declining

NORTHERN BOBWHITE

Habitat: Breeds in grasslands, stream bottom thickets, and cultivated fields. Nests consist of a shallow depression generally lined with grass and concealed by an arch of vegetation.

Historic Status: Common Breeder.

Field Notes: *On account of the introduction of eastern birds, its status as a native is not known. Gale recorded a nest with thirteen eggs, May 17, 1888. (Betts 1913)*

Cooke states that quail were introduced from Pueblo north to Fort Collins, but it seems likely that at the time of Gale's observations in 1888, introduced birds had not become established, and we are inclined to believe that the range of native Bobwhite extended to the foothills. (Bailey and Niedrach 1965)

Current Status: Casual Breeder. Declining.

Field Notes: It is debatable whether Northern Bobwhite is native to Boulder County. At least some of the population was documented as being introduced. Boulder County appears to be peripheral to normal range.

BCNA Category 1. Rare and Declining

BURROWING OWL

Habitat: Breeds in grasslands, especially prairie dog colonies. Nests are made in mammal burrows, generally lined with ungulate dung, dried grass, weeds and feathers.

Historic Status: Common Breeder.

Field Notes: *Our most abundant owl on the plains, perhaps less common in winter. (Henderson 1908)*

Summer resident; common on the Plains. Gale was informed of their presence as early as March 10; October 13 is the latest date noted by the writer. Fresh eggs were found by Gale on May 10 near Valmont (three nests running from 20 to 30 inches in depth below the surface and having burrows about six feet long). He also found young just hatched on June 10. (Betts 1913)

Once exceedingly common birds, Burrowing Owls have vanished from many areas of the state, their disappearance coinciding with the poisoning of prairie dogs. (Bailey and Niedrach 1965)

Current Status: Casual Breeder. Declining.

Field Notes: There is currently only one known nesting site, located near Broomfield (M. Sanders). Other sites have had activity over the past 15 years, but none with any consistency. Declines in populations are attributed to eradication of colonial burrowing rodents, particularly prairie dogs (Finch 1992).

BCNA Category 1. Rare and Declining

LONG-EARED OWL

Habitat: Breeds in deciduous and coniferous forests, generally near water. They will usually nest in abandoned nests of crows, magpies, ravens, hawks, and squirrels.

Historic Status: Common Breeder.

Field Notes: *Permanent resident: common. Gale took many sets of eggs between April 13 and May 16, apparently in the creek valleys in the Yellow Pine zone and at the western edge of the Plains. (Betts 1913)*

Current Status: Casual Breeder. Declining.

Field Notes: Only two known nest locations in last 15 years. Nesting sites during last 15 years include Skunk Canyon (1985-8; S. Jones) and White Rocks. (1985; Strauch and Thompson 1986). Competition with Great Horned Owls, who fare better in urbanizing landscapes, may be related to decline (Kingery 1998).

BCNA Category 1. Rare and Declining

LEWIS'S WOODPECKER

Habitat: Riparian woodlands of the plains and foothills, ponderosa pine woodlands and shrublands. Cavity-nesters, usually using newly excavated holes or old sites in dead trees and limbs.

Historic Status: Common Breeder.

Field Notes: *Permanent resident; common in summer in the Yellow Pine zone; infrequent as a wintering bird in the orchards and cottonwoods of the Plains. Eggs have been found from May 28 to June 20 (10 records, mostly Gale's). (Betts 1913)*

Common resident, largely confined to the foothills and wooded areas on the plains. (Alexander 1937)

Current Status: Rare Breeder. Declining.

Field Notes: Only consistent active nest during this decade is near Lyons (D.W. King). Decline might be attributed to increased density of ponderosa pine forests and competition for nest sites in plains riparian habitat. In Colorado during the twentieth century their habitat has seen a shift from ponderosa pine woodlands to foothill and plains riparian (Kingery 1998). There is also indication that on the plains they avoid riparian habitats if Red-headed Woodpeckers are present.

BCNA Category 1. Rare and Declining

RED-HEADED WOODPECKER

Habitat: Breeds in riparian habitat of the plains and foothills. Nests in tree cavities in cottonwoods and willows.

Historic Status: Common Breeder.

Field Notes: *Summer resident; common on the Plains and infrequent in the Yellow Pine zone. Eggs have been found from May 25 to June 28 (4 records). (Betts 1913)*

Fairly common summer resident on the plains, middle of May to October. (Alexander 1937)

They may drill holes, or use old sites, but with the increasing abundance of Starlings, there is intense competition for lodging space, and the woodpeckers often are sorely pressed by would-be invaders. (Bailey and Niedrach 1965)

Current Status: Rare Breeder. Declining.

Field Notes: There is only one known active nest site in the county during this decade, located along Lefthand Creek at 41st Street and Oxford Road (S. Jones). Primary concerns include competition for nesting sites from European Starlings and habitat loss from snag removal (Kingery 1998).

BCNA Category 1. Rare and Declining

LOGGERHEAD SHRIKE

Habitat: Breeds in grassland, agricultural areas, wooded stream bottom, mountain meadow, and dry shrub habitat. They are birds of open country, but their nests are placed in trees and shrubs. The nests are generally bulky, constructed of twigs or bark strips and lined with finer material, and placed in the crotch or on a large branch near the trunk.

Historic Status: Fairly common breeder.

Field Notes: *Summer resident; rather common in the dry eastern portions of the county. Gale found eggs between May 20 and June 25. (Betts 1913)*

Fairly common summer resident on plains, April to September. (Alexander 1937)

Current Status: Rare Breeder. Declining.

Field Notes: No known active nest sites. There have been sharp population declines throughout the west attributed to the consumption of contaminated prey and the loss of nesting sites (Finch 1992).

BCNA Category 1. Rare and Declining

BROWN THRASHER

Habitat: Breeds in streamside riparian habitat, and hedgerows or thickets of agricultural areas. Their nests consist of coarse twigs lined with finer material and placed near the center of a shrub or small tree.

Historic Status: Rare Breeder.

Field Notes: *Summer resident; rare on the Plains. Gale found a nest with four eggs on June 25, 1883, and several nests May 31, 1886. (Betts 1913)*

Rare summer resident on plains. The writer observed one at Boulder, May 16, 1936. (Alexander 1937)

Current Status: Uncommon Migrant, Winter Visitor. Declining.

Field Notes: No recently confirmed nesting records. Through much of eastern Colorado they appear well established and may have expanded their range as manmade habitats, including shelterbelts and rural residences, have expanded (Kingery 1998).

BCNA Category 1. Rare and Declining

LARK BUNTING

Habitat: Breeds in grasslands and meadows. Their nests are generally placed in small depressions on the ground and made of grasses and forbs.

Historic Status: Abundant Breeder.

Field Notes: *Summer resident; abundant on the dry mesas of the Plains. Eggs have been found between June 1 and 22. (Betts 1913)*

A common summer resident on the plains, May to September. (Alexander 1937)

Current Status: Uncommon/Rare Breeder. Declining.

Field Notes: The only recent nesting area is in the vicinity of Greenbelt Plateau south of Boulder. (G. Hayes). Declines are attributed to loss of habitat, grazing practices and grasshopper control practices (Finch 1992). They appear to have declined near most of the urban centers along the Front Range but are still abundant farther east on the plains (Kingery 1998).

BCNA Category 2. Declining (but not yet rare)

WILLOW FLYCATCHER

Habitat: Breeds in plains and foothill riparian areas, generally in the shrub layer. Nest is constructed of bark and stems of vegetation, lined with finer material, and placed in a fork of shrub branches.

Historic Status: Common Breeder.

Field Notes: *Common summer resident of plains and perhaps lower mountains. Five nests in Gale collection, all from the plains, and three contained a cowbird egg each. Felger has one bird taken by Gale at 5,500 feet, July 3, 1890. (Henderson 1908)*

Summer resident; common on the Plains (and probably extending to some extent up the creeks into the Yellow Pine). Gale found eggs from June 3 to July 3. The nests were in low bushes near creeks and were "invariably pensile." (Betts 1913)

Moderately common summer resident on plains and along streamas of foothills, first of May to last of September. (Alexander 1937)

Current Status: Uncommon/Rare Breeder. Declining.

Field Notes: Considered uncommon during the breeding season, though specific nest sites are unknown. Major threats are loss of riparian habitat and nest parasitism by Brown-headed Cowbirds (Finch 1992). Most of Boulder County's foothill riparian habitat has been heavily impacted by road development.

BCNA Category 3. Rare

LEAST BITTERN

Habitat: Breeds in freshwater marshes of the plains. The nests are placed near or over water and constructed of sticks or folded marsh vegetation.

Historic Status: Casual Breeder.

Field Notes: *Summer resident; probably occurs regularly though easily overlooked. A pair found by the writer nesting in a marsh on the Plains near Boulder June 5, 1910, and July 9, 1911. These are the only county records (and apparently the second and third nesting records for Colorado). (Betts 1913)*

Near Boulder on 2 July 1979, Horst Droger discovered a nest with five eggs, perched in cattails over water 2 feet deep. A photograph taken on 21 July showed an adult with five young. (Kingery 1998)

Current Status: Rare/Casual Breeder.

Field Notes: Most consistent site for observation during the breeding season is Sawhill Ponds (Boulder County Audubon Society 1978-99). There was also a breeding season observation during the current decade near Hygiene (Kingery 1998).

BCNA Category 3. Rare

GREAT EGRET

Habitat: Breeds in cottonwood groves on the plains; also in marshes. Nests are constructed of sticks and placed in shrubs or trees.

Historic Status: Not Found.

Current Status: Rare Breeder.

Field Notes: They have been nesting in Boulder County since at least 1972, mixed in with the main Great Blue Heron rookery along Boulder Creek. This is one of only two known nesting locations in Colorado (Kingery 1998).

BCNA Category 3. Rare

OSPREY

Habitat: Breeds along rivers and lakes. Nests are constructed of sticks and other assorted materials and generally placed in a tree or on a pole not far from water.

Historic Status: Not Found.

Current Status: Rare Breeder.

Field Notes: They are new breeders to the county, only recently being successful. Their primary centers of nesting activity (both successful and unsuccessful nests) are Lagerman Reservoir, Boulder Reservoir and Valmont Reservoir. Though technically not meeting our criteria of being well established, they make it to the list because high public interest.

BCNA Category 3. Rare

PEREGRINE FALCON

Habitat: Nests on cliffs, particularly in the foothills. Nests are scraped into debris on rock ledges.

Historic Status: Rare Breeder.

Field Notes: *There are two specimens in the cabinets at the State Capitol labeled "Longmont," one taken September 11, 1898, by Harry Holland, the other by B. Hayward. Gale observed a pair at their nesting site just north of the county, April 2, 1889. (Betts 1913)*

(Regarding nesting) The only other published reference seems to be that of French (1951), who visited an eyrie on the third "Flatiron," a prominent rock formation near Boulder. The nest was on a ledge sixty feet from the ground, and on Apr. 26, 1950 contained four eggs. Three of the young were hatched in early June, and were banded. It is interesting that a nest of Prairie Falcons was on a ledge about two hundred yards away, and apparently there was no conflict between the species. The Peregrines continued to use this eyrie although subjected to interference, until late June 1958 when, unfortunately, an inexperienced would-be falconer removed two of the three full-grown young on the ledge, the third taking flight. The birds were placed in a haversack where they were smothered. Fortunately, Dr. Robert Stabler heard of the event and the specimens were sent to this Museum. (Bailey and Niedrach 1965)

Current Status: Rare Breeder.

Field Notes: After a long absence of nesting in the county, they have returned to four known sites in the foothills west of Boulder and Lyons.

BCNA Category 3. Rare

BARN OWL

Habitat: Breeds on the plains, utilizing riparian areas, cliffs and caves, agricultural areas, and buildings. Will nest in cavities and on ledges; the nests are often unlined.

Historic Status: Rare Breeder.

Field Notes: *One was found in a deserted prospect hole on the Plains by the writer, October 31, 1909, and again on November 7. Though an attempt to secure the bird was unsuccessful, there was every opportunity to make certain of its identity. (Betts 1913)*

Malcolm Jollie (1945) found a young-of-the-year at "White Rocks," seven miles east of Boulder, on Nov. 27, 1941, indicating nesting, and a short time later an adult was found dead in the same location. Niedrach and John Murphy located a nest in a cavity of these cliffs in June 1947, and photographed the old birds with their seven young by throwing reflected light with a mirror into the dark cavity. (Bailey and Niedrach 1965)

Current Status: Rare Breeder.

Field Notes: There may be more than three nesting sites in the county, but probably not many more. Nesting sites during the 90s include White Rocks (various observers), Rock Creek (J. Mckee), Table Mountain (J. Coss) and east of Lafayette (R. Davis). Throughout Colorado it is probable that this species has benefitted from human settlement as many nests are found in ranch and farm buildings (Kingery 1998).

BCNA Category 3. Rare

SHORT-EARED OWL

Habitat: Winters on the plains near freshwater marshes, grasslands, and agricultural areas.

Historic Status: Rare Winter Visitor.

Field Notes: *One in University collection taken by Bragg at Boulder in 1903. Noted by Rockwell near Niwot, March 26, 1904, and at Longmont, December 30, 1906. (Henderson 1908)*

Winter resident; common in the meadows on the Plains. Arrives, September 15 - November 20 (2 records); leaves, February 22 - March 31 (3 records). (Betts 1913)

Six near Broomfield, Boulder Co., Nov. 11, 1958 (Jack Putnam). (Bailey and Niedrach 1965)

Current Status: Rare Winter Visitor.

Field Notes: Principal wintering locations are Lagerman Reservoir and Boulder Reservoir.

BCNA Category 3. Rare

BLACK SWIFT

Habitat: Mountain cliffs near waterfalls or dripping caves. Cone-shaped nests are constructed of grass, mud, moss and twigs and placed in a cave or on a ledge near a moist area.

Historic Status: Hypothetical Breeder.

Field Notes: *Gale includes this in his manuscript list of Boulder County birds, but nowhere in his notes mentions actually taking or even seeing it. Therefore, as it is a species of southwestern Colorado, the record cannot be safely accepted without further information. (Henderson 1908)*

Gale lists this species for the region but without data. Widmann includes it in his list of birds seen at Estes Park (just north of the county) in the summer of 1910 (Auk, 1911). (Betts 1913)

Current Status: Rare Breeder.

Field Notes: This species has been confirmed breeding in the county; Gale's notes were correct. There are three known nesting locations: Columbine Falls, Diamond Lake Falls and Ouzel Falls (M. Figgs and N. Lederer).

BCNA Category 3. Rare

BANK SWALLOW

Habitat: Colonial breeder, generally of the plains, along banks of washes, streams, ponds and lakes. Their nests are placed in tunnels and constructed of grass, small sticks and feathers.

Historic Status: Rare Breeder.

Field Notes: *Summer resident: common locally on the Plains. Arrives, April 24 (1 record, Gale). The writer observed a colony nest-building on May 19, 1912, and incubating June 12, 1910. Birds were still at their nesting-sites, July 27 and August 13 (the latest date seen). (Betts 1913)*

Rare summer resident - locally common on the plains. (Alexander 1937)

Current Status: Rare Breeder.

Field Notes: Most consistent area over the past 15 years has been Sawhill Ponds (S. Jones).

BCNA Category 3. Rare

VEERY

Habitat: Breeds in mountain riparian habitat, including foothills riparian and montane willow carrs. Nests are placed in shrubs and the lower portions of trees and are constructed of grasses and mosses and lined with finer material.

Historic Status: Casual Breeder.

Field Notes: *The only record for the county is that of a nest taken by Gale, June 13, 1884, near Gold Hill; later in his notes, however, he describes the same nest as being that of a Wood Thrush. Widmann saw several of this species near Long's Peak Inn, 9,000 feet (only a short distance north of the county line), in July 1910, and Dean Babcock informed the writer that they were frequently seen there in the summer of 1912. It has probably been overlooked in the county, though it does not appear to be common in Colorado. (Betts 1913)*

Status uncertain, probably a regular summer resident in the mountains. The only record is of a nest near Gold Hill, June 13, 1884. There seems no ground for Bett's statement that Gale referred to this as a Wood Thrush's nest. (Alexander 1937)

The only other record is a nest taken by Gale in Boulder County, on June 13, 1884. It was in a low evergreen about three feet from the ground in a shady, wooded canyon near Gold Hill, and was composed of weeds, mosses and grasses, lined with finer material. There were four light blue eggs. (Bailey and Niedrach 1965)

Current Status: Rare Breeder.

Field Notes: No recent confirmed nesting sites. They are found irregularly on the Indian Peaks Breeding Bird Count in montane willow carrs.

BCNA Category 3. Rare

NORTHERN MOCKINGBIRD

Habitat: Breeds in a variety of habitats including plains riparian, foothills and plains shrublands and agricultural sites. Nests are constructed of twigs, grasses and rootlets and placed in shrubs or the lower portion of trees.

Historic Status: Rare Breeder.

Field Notes: *Summer resident; rare on the Plains. Gale found a few nests, May 31, 1886, and June 1-10, 1887. (Betts 1913)*

Rare summer resident on plains, probably more common formerly. Seen by the writer July 11, 1927, at Valmont Butte; and May 19, 1933, near Baseline Reservoir. In the former case the pair seen seemed to be nesting. (Alexander 1937)

Current Status: Casual Breeder.

Field Notes: Recent nesting location is along Coal Creek near SH 93 (S. Severs). Some feel this should be listed as a decliner because it was a very regular rare breeder, whereas now it is an irregular nester. Statewide, fewer are being found near Front Range cities (Kingery 1998).

BCNA Category 3. Rare

SAGE THRASHER

Habitat: Breeds in foothill shrublands. Nest is bulky and made of coarse twigs, grass and forbs, and lined with fine material. The nest is placed on the ground or low in a shrub.

Historic Status: Uncommon/Rare Breeder.

Field Notes: *Summer resident; rare along the base of the foothills; rather common in fall migration on the Plains. Though no nests have been taken in the county, the writer observed them in July (9-21) in 1910, 1911 and 1912. Gale found eggs between April 28 and June 27. The writer saw young in the nest at 8,500 feet, July 28. (Betts 1913)*

Infrequent summer resident, chiefly along edge of foothills. (Alexander 1937)

Pair, male in song imitating Western Meadowlark, in hills west of Lyons July 9, 1960 noted by Hugh Kingery. (Bailey and Niedrach 1965)

Current Status: Rare Breeder.

Field Notes: Nesting locations during the 1990s include Coal Creek (near SH 93) (J. Bachant) and Hall Ranch west of Lyons (D. Hallock). The Hall Ranch location was the approximate area where Hugh Kingery heard them singing in 1960.

BCNA Category 3. Rare

AMERICAN REDSTART

Habitat: Breeds in plains riparian habitat, and in deciduous and coniferous woodlands near water. Nests are cup-shaped, made of plant fibers, grass and rootlets, and placed in the fork of a low tree or shrub.

Historic Status: Uncommon/Rare Breeder.

Field Notes: *Fairly common transient and infrequent summer resident along streams of plains. Nested on University campus (along Boulder Creek) in 1927. (Alexander 1937)*

This species has nested irregularly in the Boulder-Longmont area on at least six occasions - near Longmont in 1925, on the University campus at Boulder in 1927, near Loveland for three successive years starting with 1930, and, finally, a nest found by Niedrach June 5, 1943 - again on the campus at Boulder. (Bailey and Niedrach 1965)

Current Status: Rare Breeder.

Field Notes: Probable breeding locations in this decade are near Lyons and Eldorado Springs (Kingery 1998).

BCNA Category 3. Rare

OVENBIRD

Habitat: Breeds in ponderosa pine woodlands or mixed conifer forests of pine and Douglas fir, with shrub understories. Considered an interior forest species. Nests are placed on the ground and constructed of dried-grass, leaves, moss and other vegetative matter.

Historic Status: Hypothetical Breeder.

Field Notes: *Minot believed he heard the notes of this species at Boulder and Nederland in 1880. (Betts 1913)*

Current Status: Rare Breeder.

Field Notes: The most consistent location for finding Ovenbirds during the breeding season is Long Canyon (S. Jones, W. Weber). This species has never been confirmed as breeding in the county, but makes the list because of its presence over a long period of time. It appears there is a small Colorado population, separated from the rest of the species' range, along a narrow strip of the Front Range from Larimer County to the New Mexico line (Kingery 1998).

BCNA Category 4. Isolated or Restricted Populations (Species that are found only at certain locations and/or have narrow habitat niches).

Double-crested Cormorant	White-tailed Ptarmigan	Pygmy Nuthatch
American Bittern	Flammulated Owl	American Dipper
Least Bittern	Burrowing Owl	Golden-crowned Kinglet
Great Blue Heron	Short-eared Owl	Gray Catbird
Great Egret	Boreal Owl	Northern Mockingbird
Black-crowned Night-Heron	Black Swift	Sage Thrasher
Wood Duck	Lewis's Woodpecker	Brown Thrasher
Ring-necked Duck	Red-headed Woodpecker	Cedar Waxwing
Northern Harrier	Three-toed Woodpecker	Savannah Sparrow
Northern Goshawk	Olive-sided Flycatcher	Grasshopper Sparrow
Swainson's Hawk	Willow Flycatcher	Fox Sparrow
Ferruginous Hawk	Loggerhead Shrike	Bobolink
Golden Eagle	Western Scrub-Jay	Brown-capped Rosy-Finch
Peregrine Falcon	Bank Swallow	Yellow-headed Blackbird
Prairie Falcon	Bushtit	

BCNA Category 5. Needs Research

Osprey:	New breeding species in county. Need continued monitoring to determine whether they breed regularly.
Northern Goshawk:	There have been concerns about possible population decline and need for remote nesting sites. Need more research regarding population changes and habitat specifics of nest site location.
Boreal Owl:	Need to confirm nesting in county. Need more research about population levels and fluctuations.
Least Flycatcher:	First found nesting near Lyons in 1988 (B. Prather). Need continued monitoring to determine whether they breed regularly.
Chestnut-sided Warbler:	Have nested near Boulder (first discovered nesting in 1975) and possibly near Eldorado Springs (Kingery 1998). Need continued monitoring to determine whether they breed regularly.
Ovenbird:	Need to confirm nesting in county. Need more research about population.
White-winged Crossbill:	Need more research about populations levels and fluctuations.

BCNA Category 6. Extirpated

Barrow's Goldeneye	Mountain Plover
Sharp-tailed Grouse	Long-billed Curlew

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