

Great Basin Naturalist

Volume 52 | Number 3

Article 10

12-18-1992

Avifauna of central Tule Valley, western Bonneville Basin

Peter Hovingh
Salt Lake City, Utah

Follow this and additional works at: https://scholarsarchive.byu.edu/gbn

Recommended Citation

Hovingh, Peter (1992) "Avifauna of central Tule Valley, western Bonneville Basin," *Great Basin Naturalist*: Vol. 52 : No. 3, Article 10.

Available at: https://scholarsarchive.byu.edu/gbn/vol52/iss3/10

This Note is brought to you for free and open access by the Western North American Naturalist Publications at BYU ScholarsArchive. It has been accepted for inclusion in Great Basin Naturalist by an authorized editor of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.

AVIFAUNA OF CENTRAL TULE VALLEY, WESTERN BONNEVILLE BASIN

Peter Hovingh¹

Key words: birds, avifauna, desert, aquatic habitat, Great Basin, wetlands.

Fautin (1946) described the flora and fauna of several northern desert biotic communities in Tule Valley, located 80 km west of Delta, Utah, in Millard County of western Bonneville Basin. His study during 1939 (June to September) and 1940 (April to September) included a description of greasewood (Sarcobatus vermiculatus) and pickleweed (Allenrolfea occidentalis) communities. From 1980 through 1991 while inventorying the aquatic habitats of Tule Valley, I noted the avifauna utilizing wetlands, springs, adjacent greasewood and pickleweed communities, and saline flats. This note reports on the avifauna occurring within the two communities and compares the 1980-91 faunal lisiting with that reported previously by Fautin (1946). Comparisons are also made with Fish Springs National Wildlife Refuge, located 50 km north of the Tule Valley springs. This study identifies changes in raptors and songbirds that have occurred over 40 years and notes the differences between natural springs and wetlands and those dedicated to waterfowl management.

DESCRIPTION OF THE TULE VALLEY AQUATIC ENVIRONMENTS

Within the greasewood and pickleweed communities of central Tule Valley are some 25 fissure-fault springs and associated wetlands. Saline flats covered in part by water from saline seepage springs occur to the east and west of these fissure-fault springs. The springs-wetlands vary in size from 100 m² to over 97,000 m² (Coyote Springs) with a total of 195,000 m². Conductivity of the aquatic systems varies from 1200 (spring sources) to greater than 93,000 umhos per cm (some wetlands and saline)

ponds). Three-cornered bulrush (Scirpus americanus) and salt grass (Distichlis spicata) are the dominant emergent species, with Phragmites australis, Typha domingensis, and Scirpus acutus occurring in highly localized stands. Tamarisk (Tamarix ramosissima) is the only shrub growing within some springs-wetlands but was not noted by Fautin (1946).

METHODS

A total of 36 visits were made to Tule Valley between 1980 and 1991, with 10 visits of two-day durations occurring in 1981. Inventories were conducted during each month (except January) with emphasis during March, May, and June. Birds were inventoried by random encounters, and unidentified species were not pursued. Nomenclature follows that of Peterson (1990).

RESULTS AND DISCUSSION

Table 1 lists the 80 species of birds identified during 1980–91, the months they were encountered, and those species also reported by Fautin (1946). Mallard (scientific names noted in Table 1), Northern Harrier, Horned Lark, Common Raven, and Marsh Wren were encountered year-round and are considered permanent residents. Almost half (31) of the species inventoried during this study were observed two or fewer times (dates included in Table 1) and are considered casual or transient visitors. The single Palm Warbler, a casual bird in Utah (Behle et al. 1985), was identified by its characteristic tail movement as previously observed by me on numerous occasions during annual

¹721 Second Avenue, Salt Lake City, Utah 841.03.

migrations in the Midwest. The saline ponds west of the fissure-fault springs hosted gulls, numerous waterfowl, and shorebirds during

migration.

Fifteen species (Great Blue Heron, Turkey Vulture, Sharp-shinned Hawk, Cooper's Hawk, Swainson's Hawk, Red-tailed Hawk, Burrowing Owl, Common Nighthawk, Western Kingbird, Mockingbird, Northern Yellow Warbler, Yellow-breasted Chat, Green-tailed Towhee, Brewer's Sparrow and Lark Bunting) observed by Fautin (1946) were not encountered in this study. Burrowing Owls, while nesting in the adjacent shadscale community, were not observed in the greasewood community. The absence of raptors (in particular the Swainson's Hawk) and the Turkey Vulture ("only occasionally seen, but observed throughout the summer in one community or another," Fautin 1946: 285) could reflect the rangeland predator control programs occurring in Tule Valley since Fautin did his studies. Absence of other species mentioned above could reflect the loss of willows (Salix exigua) which Fautin (1946:257) had noticed as being prevalent. Most of the birds Fautin reported for the greasewood community that were not observed during the present study were considered transients by Fautin (1946).

Over 157 species with 41 permanent residents (those species that can be found in all seasons) and 54 nesting species have been reported for Fish Springs National Wildlife Refuge (U.S. Department of the Interior 1988). This contrasts sharply with the avifauna of Tule

Valley, which consists of 5 permanent residents and a total of 17 summer residents. The larger number of species at Fish Springs National Wildlife Refuge probably reflects the availability of surface water, the presence of trees and buildings, and the proximity of the springs-wetlands to the mountainous Fish Springs Range. Tule Valley springs-wetlands are undeveloped and lack the man-made features. An additional factor that may contribute to the difference in avifauna constituency of Tule Valley and Fish Springs is the contribution over many years of field ornithologists at Fish Springs National Wildlife Refuge.

Two birds, Western Sandpiper and Lincoln's Sparrow, have not been reported in this region in the Latilong study (Walters and Sorenson 1983); and the Lincoln's Sparrow was not reported at Fish Springs (U.S. Department of the Interior 1988). Fish Springs and Tule Valley are in the same Latilong region, and Fish Springs observations overwhelm the Tule Valley observations within the Latilong study.

CONCLUSIONS

A listing of the avifauna for central Tule Valley is reported. Comparisons are made to the avifauna list reported by Fautin (1946) and to the species list prepared by the Fish Springs National Wildlife Refuge. Differences in species are noted and explanations are offered.

TABLE 1. Distribution of birds in the greasewood-wetland community of Tule Valley.

			Month of Year								96		
	J	F	M	A	М	J	J	A	S	0	N	D	Specific dates**
PODICIPEDIDAE												7.00	
Pied-billed Grebe						x		X		2			8/8/81; 6/12/82
Podiceps nigricollis Eared Grebe Podilymbus auritus						x							6/20/81
ARDEIDAE													05
American Bittern Botaurus lentiginosus Great Blue Heron Ardea herodias									X				9/29/84
Snowy Egret Egretta thula						х							6/13/82
Black-crowned Night Hero Nycticorax nycticorax	n		187					x		x			* 8/18/81; 10/20/90
THRESKIORNITHIDAE White-faced Ibis Plegadis chihi								х					8/21/87; 8/23/91

TABLE 1. Continued.

					, N	Month	of Ye	ar					Specific dates**
	J	F	M	A	M	J	J	A	S	0	N	D	
ANATIDAE													
Canada Goose			X										3/7/87
Branta canadensis								G					
Green-winged Teal				X									4/27/81
Anas crecca *Mallard				**									
Anas platyrhynchos		X	X	X	X	X	X	X	Х	х	X	X	
Northern Pintail			х						x			x	
Anas acuta			**									f#a	
Cinnamon Teal			X	х	х	x	x	X	х				
Anas cyanoptera													
American Wigeon			X						x				
Anas americana													8 8
Canvasback			X										3/22/82
Aythya valisineria													
Redhead			X	X		X							
Aythya americana Merganser			x										
Merganser Mergus sp.			^										
Ruddy Duck			x			x				х			
Oxyura jamaicensis													
CATHARTIDAE													
*Turkey Vulture													
Cathartes aura													
ACCIPITRIDAE													
*Northern Harrier		x	x	x	X	x	x	x	×	x	x	x	
Circus cyaneus													
Sharp-shinned Hawk													
Accipiter striatus													
*Cooper's Hawk													
Accipiter cooperii *Swainson's Hawk													
Buteo swainsoni													
*Red-tailed Hawk													
Buteo jamaicensis													
Rough-legged Hawk			X										3/7/81
Buteo lagopus													
*Golden Eagle			X										3/20/90
Aquila chrysaetos													0.000.000.000.004
*American Kestrel									X				9/25/82;9/29/84
Falco sparverius Prairie Falcon				X	v								4/4/82; 5/11/88
Falco mexicanus				A	Х								2 202, 0/11/00
RALLIDAE													
Virginia Rail			х					х		x			
Rallus limicola			: 27:					040		.55-1			
Sora				X				x	X				
Porzana carolina													
American Coot				X	x	X	х	х	X	x			
Fulica americana													
CHARADRIIDAE													
*Killdeer			Х	X	X	X							
Charadrius vociferus													
ECURVIROSTRIDAE													8 <u>448484</u> 445552
Black-necked Stilt								X					8/21/87
Himantopus mexicanus													

TABLE 1. Continued.

					A	1onth	of Ye	ar					Specific dates**
	J	F	M	A	M	J	J	A	S	О	N	D	
SCOLOPACIDAE													
Spotted Sandpiper Actitis macularia								X					8/21/87
Western Sandpiper Calidris mauri				x									4/20/86
Dunlin Calidris alpina				x									4/20/86
Common Snipe Gallinago gallinago			X	X	x			х	x	х	X		
Laridae Gulls			x										
Larus sp.													
°Mourning Dove Zenaida macroura					x	x	х	x	x				
STRIGIDAE "Burrowing Owl Athene cunicularia													
CAPRIMULGIDAE *Common Nighthawk Chordeiles minor													<u> </u>
APODIDAE White-throated Swift Aeronautes saxatalis				x	x	x							
PICIDAE Northern Flicker <i>Colalptes auratus</i>										x		x	10/25/81; 12/6/81
TYRANNIDAE "Western Kingbird Tyrannus verticalis													27
ALAUDIDAE "Horned Lark Eremophila alpestris		х	х	x	X	x	x	x	x	x	x	x	
HIRUNDINIDAE Violet-green Swallow						x		х					8/8/81; 6/13/82
Tachycineta thalassina *Barn Swallow Hirundo rustica									x				9/19/81
°Common Raven Corous corax		x	x	x	x	x	x	x	x	х	x	x	
TROGLODYTIDAE Marsh Wren		x	x	х	X	x	x	x	x	x	x	x	
Cistothorus palustris MUSCICAPIDAE Mountain Bluebird										x			8/24/81
Sialia currucoides MIMIDAE *Northern Mockingbird													
Mimus polyglottos *Sage Thrasher Oreoscoptes montanus						x	x	x	x				21
MOTACILLIDAE American Pipit Anthus rubescens		x	x	x	x								
ANIIDAE *Loggerhead Shrike Lanius ludovicianus								x	x		x		

TABLE 1. Continued.

	Month of Year												
	J .	F	M	A	M	J	J	A	S	О	N	D	Specific dates**
Ser donation of													
STURNIDAE Starling		X	x										2/21/81;3/7/81
Sturnus vulguris		A.C.	143										
EMBERIZIDAE													
*Yellow Warbler													
Dendroica petechia													
*Yellow-rumped Warbler				X	X				X	X			
Dendroica coronata													725 266 270 250
Palm Warbler									X				9/19/81
Dendroica palmarum													
*Common Yellowthroat					X	x	X	х					
Geothlypis trichas													
*Yellow-breasted Chat													
Icteria virens													
*Green-tailed Towhee													
Pipilo chlorurus													0/16/00 10/6/01
American Tree Sparrow											X	X	9/16/80; 12/6/81
Spizella arborea													
Brewer's Sparrow													
Spizella breweri													0/20/91
*Vesper Sparrow									X				9/20/81
Pooecetes gramineus													5/2/87
Lark sparrow					X								0/4/01
Chondestes grammacus													
*Black-throated Sparrow				X	X	X	X						
Amphispiza bilineata					8210.2		214						
*Sage Sparrow		X	X	X	X	X	X						
Amphispiza helli													
*Lark Bunting	25												₩.
Calamospiza melanocorys	S		¥250	3225	393	10	v	· V	v	Y	X	X	25
Savannah Sparrow	i.		X	X	X	x	X	X	Х	X	1.		
Passerculus sandwichensi	.5									x			10/20/90
Fox Sparrow										Satt			
Passerella iliaca												X	12/5/81
*Song Sparrow												2003	
Melospiza melodia				X									4/4/81
Lincoln's Sparrow				· A									257
<i>Melospiza lincolnii</i> *White-crowned Sparrow				x					X				
Zonotrichia leucophrys				80					200				
				. x									
Junco sn				84 M									
<i>Junco sp.</i> •Red-winged Blackbird			X	х	X	x	X						
Agelaius phoeniceus			355	8.8	246								
Western Meadowlark		*	X					X	X	X	X	X	
Sturnella neglecta			1555										
*Yellow-headed Blackbird	i i			Х	х	X	X		X				
Xanthocephalus xanthoce	enho	ılus											
Brewer's Blackbird	T	· control (Till)	x						X				
Eurhagus cuanocenhalus	S												
Euphagus cyanocephalus *Brown-headed Cowbird				X	X	X	Х	X	X				¥.
Molothrus ater.													
FRINGILLIDAE													10/0/01
American Goldfinch												X	12/6/81
Carduelis tristis													
PASSERIDAE													10/05/01
House Sparrow										X			10/25/81
Passer domesticus													

^{*}Identified by Fautin (1946).
**Dates in right column are for two or fewer observations.

ACKNOWLEDGMENTS

I wish to thank David E. Joyner and Clayton M. White for reviewing the manuscript and for subsequent discussions.

REFERENCES

Behle, W. H., E. D. Sorensen, and C. M. White. 1985. Utah birds: a revised checklist. Occasional Publication #4. Utah Museum of Natural History, Salt Lake City. 108 pp.

- FAUTIN, R. W. 1946. Biotic communities of northern desert shrub biome in western Utah. Ecological Monographs 16: 251–310.
- Peterson, R. T. 1990. A field guide to western birds. Houghton Mifflin Co., Boston. 432 pp.
- U.S. DEPARTMENT OF THE INTERIOR. 1988. Birds of the Fish Springs National Wildlife Refuge, Dugway, Utah. RF6-65531-2.
- WALTERS, R. E., and E. SORENSEN, EDS. 1983. Utah bird distribution: Latilong study 1983. Utah Division of Wildlife Resources Publication 83-10. 97 pp.

Received 10 November 1991 Accepted 22 June 1992