THE AVIFAUNA OF APACHE COUNTY, ARIZONA

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In general, the distribution and the seasonal status of the avifauna of Arizona are fairly well understood. The Birds of Arizona (Phillips et al. 1964) encompasses the entire state and is fairly complete for all seasons. Large sections of the state, however, have received relatively little ornithological coverage. The entire region of Apache County in northeastern Arizona is one such area. Even though this area is quite interesting ornithologically, before 1976 it received little coverage relative to the many popular birding "hot spots" in other sections of the state. It is possible to assemble a list of those species that breed in Apache County using Phillips et al. (1964), its revision by Monson and Phillips (1981), and several detailed studies (e.g. Carothers et al. 1973, Franzreb 1975). Yet there remain substantial gaps in our knowledge of migrant, wintering, and some nesting species found in Apache County.

Since the mid-1970s, primarily as a result of the "vagrant hunting" boom that swept parts of the West, Apache County has been visited repeatedly during all seasons. A significant increase in knowledge of the status and distribution of birds in northeastern Arizona has resulted. This paper emphasizes the diversity and ornithological uniqueness of Apache County and summarizes the status of the birds found there.

Apache County covers an area of approximately 15,000 km² in the northeastern corner of Arizona. It extends from the White Mountains in the south to the Utah border in the north. The entire eastern border is shared with New Mexico and the county extends about 85 km to its western border shared with Navajo County. Much of the area of Apache County is part of the Navajo Indian Reservation. The elevations range from 1689 m along the Little Colorado River to 3476 m at the summit of Mt. Baldy in the White Mountains. The climate is similar to that of the Great Basin Desert: hot and dry in the summer, cold and wet in the winter. The higher mountainous areas within the county are generally snow-covered from November to April, and sometimes well into May.

HABITATS

Vegetational associations found in the county are very diverse, ranging from sage-dominated grassland in the northern portion up through pinyon-juniper forests, to spruce-fir-aspen forest at the higher elevations. We have divided the environment of Apache County into seven arbitrarily defined categories, mostly on the basis of vegetational association. These categories are labeled according to the dominant perennial plant species found in a given association or for some common feature or features we consider biologically appropriate to the discussion of the distribution of birds in this area.

- 1. Spruce-Fir-Aspen. This association encompasses most of the area located at high elevations in the White and Chuska mountains. The White Mts. reach an elevation of 3476 m at the summit of Mt. Baldy, which is one of only two mountains in Arizona that rise above timberline. The dominant tree species found here are Englemann Spruce (Picea englemanni), White Fir (Abies concolor) and Quaking Aspen (Populus tremuloides). There are numerous grassy meadows with streams bordered primarily by Bebb Willows (Salix bebbiana) and Thinleaf Alders (Alnus tenuifolia). There are many small, and several large, lakes within this elevational range. Most high elevation habitat within Apache Co..is restricted to the White Mts., but a small patch is found in the Chuska Mts. in the northeast section of the county. These mountains are poorly known ornithologically, and, because of their close proximity to the Rocky Mountains in northern New Mexico and southern Colorado, may resemble them more closely than other ranges in Arizona. A recent summer trip to the Chuska Mts. revealed several new local records including a new breeding species for Arizona, the Hammond's Flycatcher. No winter data are yet available for this area.
- 2. Ponderosa Pine. This association covers the area in elevation immediately below the spruce-fir-aspen habitat. The dominant tree species in this habitat is Ponderosa Pine (Pinus ponderosa), but Douglas-fir (Pseudotsuga menziesii) stands are quite prevalent in the wetter drainages. Large expanses in both the White Mountains and the Chuska Mountains are monotypic Ponderosa Pine forests. A pine forest located in the Carrizo Mountains in the extreme northeast corner of Apache County has been visited only once or twice, yet the close proximity of these mountains to the mountains in southwestern Colorado makes them potentially very interesting.
- 3. Pinyon-Juniper. Below the Ponderosa Pine belt is the pinyon-juniper association, which is widespread throughout the county. The dominant tree species in this habitat are the Pinyon Pine (Pinus edulis), the Utah Juniper (Juniperus osteosperma) and the One-seed Juniper (J. monosperma). This habitat has a relatively limited breeding avifauna similar to that of other pinyon-juniper forests in Arizona. Even though this habitat probably covers most of the forested area in the county, it receives relatively little coverage.
- 4. Riparian Woodland, Rivers and Streams. These habitats are very important to many nesting, wintering and especially migrant bird populations in Apache County. The county is arid, with perennial water restricted to those rivers and streams draining the White and Chuska mountains. The Little Colorado River is the main northern drainage for the White Mountains and, along with its tributaries, accounts for most of the perennial water found in the county. Dominant plant species are the Narrowleaf Willow (Salix exigua), the Thinleaf Alder (Alnus tenuifolia) and the American Dogwood (Cornus stolonifera). Narrowleaf Cottonwoods (Populus angustifolia) are also found commonly along some of the larger streams. The most highly visited locality in Apache County (and probably the best known ornithologically) is a section of willow-alder-dogwood riparian woodland along the Little Colorado River at its confluence with the South Fork of the Little Colorado River (hereafter referred to as South Fork). Here the breeding grounds for several more typically "eastern" species, including Veery and American Redstart, reach their southwestern limit. This locality is excellent for migrants during the spring and fall, and especially good for eastern "vagrants." For example, Kentucky Warbler, Worm-eating Warbler, Yellow-throated Warbler and Swainson's Warbler were all found in the same group of trees within a few-week period in spring 1981. Migrants are, in general, highly concentrated around water and its associated vegetation throughout the county.
- 5. Grassland and Rocky Cliffs. This broadly defined category includes the vast majority of the area in Apache County. Most of the land is heavily eroded, overgrazed grassland and is dominated by the shrub Big Sagebrush (Artemisia tridentata) in the north. This habitat is somewhat depauperate for birds; however, winter raptor populations can be quite high.

- 6. Lakes, Reservoirs, Sewage Ponds and Marsh. Apache County contains several small lakes and reservoirs which provide excellent nesting habitat for ducks. Additionally, many species of migrating shorebirds and waterbirds frequent these areas. Many lakes, such as Ganado Lake, have restricted hunting on them and can potentially support large numbers of wintering ducks. Most of the higher elevation lakes, where many of the nesting species of ducks occur, are frozen over during most winters. Lower elevation lakes are irregularly open during the winter. The many sewage ponds throughout the county are particularly good for migrating shorebirds. The American Avocet has recently nested on several of these sewage ponds, providing new breeding localities for Arizona (Witzeman 1982).
- 7. Oases, Towns and Agricultural Land. This catch-all category refers to most of the habitats, such as rows of planted trees and agricultural areas, that appear as lush oases in an extremely arid landscape. These habitats may be somewhat marginal for breeding birds, but their value to migrants is extremely high. Disturbed, wet, grassy fields in the Springerville region serve as the only nesting habitat in Arizona for Bobolink, Common Snipe and possibly Wilson's Phalarope. These oases range in size from a small clump of salt cedars (Tamarix) around a sewage pond at Tez Nez lah to the entire towns of Ganado and Springerville.

OCCURRENCE BY HABITAT TYPE

The occurrence of birds in each habitat type during each season was determined using *The Birds of Arizona* (Phillips et al. 1964), *An Annotated Checklist of the Birds of Arizona* (Monson and Phillips 1981), *American Birds* (including *Audubon Field Notes*) and the field notes of many observers (Table 1). Seasons are defined as follows: winter = December through March, spring = April through early June, summer = mid-June through mid-August, fall = mid-August through November. Also calculated are the number of residents and the number of "pure" transients for each habitat during each season (Table 1).

Table 1. Bird species occurrence in seven Apache Co. habitat types. These numbers were calculated from *The Birds of Arizona* (Phillips et al. 1964) and field notes of many observers including the authors. Each number represents the total number of species found within a particular habitat during a particular season. Numbers of perment residents and pure transients were also calculated for each habitat type. The numbers should not be interpreted as absolute. They are useful as comparative values for detecting non-subtle trends.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Winter	27	35	31	39	38	30	63
Spring	42	63	63	97	51	63	121
Summer	51	58	37	53	35	27	25
Fall	43	66	66	105	54	87	149
Residents	: 19	21	15	12	14	6	12
Transients 5		8	7	26	7	49	57

^{(1) =} Spruce-Fir-Aspen; (2) = Ponderosa Pine; (3) = Pinyon-Juniper; (4) = Riparian;

^{(5) =} Grassland; (6) = Lakes and Reservoirs; (7) = Oases and Agriculture

Approximately 328 species of birds have been recorded in Apache County, about 50 of which are considered permanent residents. During the summer season roughly 189 species have been recorded and at least 182 of these are known to have nested. During the winter season at least 128 species have been recorded. Approximately 112 migrant species are considered "pure" transients within Apache County and many of these are considered accidental.

In winter, habitats 4 (Riparian Woodland) and 7 (Oases and Agricultural Land) consistently support the most species. All habitats probably show high degrees of variability in species richness and abundance, not only between winters but within winters, due to climatic variability. Additionally, in some years the coniferous forests have a healthy cone crop and support large numbers of birds during the winter and in other years the cone crop may be relatively poor, resulting in few species using those habitats. Cone crops and seed crops at other locations farther north can also influence species occurrence in Apache County.

It is noteworthy that 70% of the winter species in habitat 1 (Spruce-Fir-Aspen Forest), 60% of the winter species in habitat 2 (Ponderosa Pine Forest) and 28% of the winter species in habitat 3 (Pinyon-Juniper Forest) are permanent residents. In habitats 4 (Riparian) and 7 (Towns, Agriculture), however, far fewer of the species recorded there in winter (20% and 16% respectively) are permanent residents. Christmas Bird Counts conducted in the Springerville-White Mountains region during 1978, 1979 and 1980 recorded 89, 91 and 91 species respectively. These are very high counts considering that the lowest elevation within the circle was 2130 m (7000 ft).

In spring and fall, habitats 4 and 7 again are the most important habitats for passerines. Of the approximately 105 "pure" transients recorded in Apache County, 48 are waterbirds and restricted to habitat 6 (Lakes and Reservoirs). Of the others, 57 species have occurred in habitat 7 and 26 have occurred in habitat 4, compared to 5, 8, 7 and 7 species in habitats 1, 2, 3 and 5, respectively. These values reflect the relative importance of these habitats to migrants. The low number of migrants recorded in the coniferous habitats (see Table 1) may be lower than reality due to the less overall coverage during the spring and fall seasons; nevertheless, not one "pure" transient has been found exclusively in the coniferous habitats.

Of the approximately 182 bird species that have nested in Apache County, fully 37 reach either a southwestern, southwestern interior or northeastern breeding limit in or around the region. The White Mountains and adjacent Mogollon Highlands of western New Mexico form a front of highlands that support extensive spruce-fir-aspen forests. It is along this front that the Rocky Mountains reach their southwest limit. Along with this southward extension of high montane habitat, 30 species reach their southwestern (SW) or southwestern interior (SWI) breeding range limit. Southwest interior is defined as the portion of the Southwest that lies east of California. These species are Blue Grouse (SW), Mountain Plover (SW), Common Snipe (SWI), Wilson's Phalarope (SW), Lewis' Woodpecker (SWI), Red-naped Sapsucker (SW), Williamson's Sapsucker (SWI), Downy Woodpecker (SWI), Three-toed Woodpecker (SW), Hammond's Flycatcher (SW), Tree Swallow (SWI), Gray Jay (SW), Black-billed Magpie (SW), Mountain

Bluebird (SW), Townsend's Solitare (SWI), Veery (SW), Swainson's Thrush (SWI), Gray Catbird (SW), Sage Thrasher (SW), Water Pipit (SW), American Redstart (SW), MacGillivray's Warbler (SW), Wilson's Warbler (SWI), Green-tailed Towhee (SWI) Vesper Sparrow (SWI), White-crowned Sparrow (SWI), Bobolink (SW), Pine Grosbeak (SW) and American Goldfinch (SWI).

Seven typically southeastern Arizona species reach their northeastern breeding limit in this region. These species are Montezuma Quail, Whippoor-will (race arizonae), Greater Pewee, Phainopepla, Red-faced Warbler, Painted Redstart and Olive Warbler. It is interesting that several of these species are expanding their ranges to the northwest through isolated mountain ranges in northwest Arizona and southeast California; their expansion to the northeast appears to be limited by the Mogollon Plateau and the southern limit of the Rocky Mountains. The presence of both Mexican Plateau and Rocky Mountain species in the White Mountains is unique among the patterns of distribution of North American birds.

ANNOTATED LIST OF SELECTED SPECIES

The following is a list of those species that have occurred accidentally in Apache County through 1985. The species included in this list have been backed up either by specimens, by photographs, or by written details submitted to the Arizona Rare Bird Committee. All post-1976 records are still under review by the ARBC. Also included in this list are species of special note for distributional reasons. Nomenclature follows the AOU Check-list (6th-edition).

Pacific Loon — One fall record: one on Becker Lake in Springerville 26 Nov 1981 (AB 36:204).

Horned Grebe — One fall record, one winter record: one at Sunrise Lake in the White Mts. 30 Oct 1984 (AB 39:86) and one at Round Rock 22 Mar 1985 (AB 39:333).

Clark's Grebe — One fall record: one at Ganado L. 7 Oct 1984 (AB 39:86). Although Western "dark-phased" Grebe is a common migrant on lakes in the county, little attention has been devoted in the past to distinguishing between the two types. This record represents the first definitive Clark's Grebe for Apache County.

Great Egret — One fall record: one at Ganado L. 5 Nov. 1984 (AB 39:86).

Cattle Egret — Two spring records, three fall records: One at Ganado 30 May 1979, one at Richville May 1981 (AB 35:850), 26 at Many Farms Lake 6 Nov 1984, 19 at Moaning Lake near Chinle 9 Nov 1984, 6 near Many Farms 13 Nov 1984 (all AB 39:86) and two at St. Johns 11 Aug 1985 (AB 40:150).

Wood Stork — One fall record: one near St. Johns 29 Aug 1934 (Phillips et al. 1964). A late summer, post-breeding wanderer into southwestern Arizona.

Greater White-fronted Goose — One fall record: a flock of six at Ganado L. 21 Sep 1985 (AB 40:150).

Wood Duck — One spring record, one fall record: one at Round Rock 14 Apr 1985 (AB 39:334) and one 10 mi. N Springerville 9 Aug 1984 (AB 39:86).

Eurasian Wigeon — One fall record: a male with over 1000 American Wigeon on Ganado L. 6 Oct 1979 (AB 34:188).

Surf Scoter — One fall record: one on Nelson Reservoir 12 Nov 1973 (Speich 1975).

White-winged Scoter — Two fall records: one on Nelson Reservoir 12 Nov 1974 and one there $24 \cdot 26 \text{ Nov } 1979$ (AB $32 \cdot 240$).

Hooded Merganser — One fall record: one 28 Nov 1982 W of Springerville (AB 37:209).

Red-breasted Merganser — Two fall records: seven on Many Farms L. 2 Nov 1985 and one on Tsaile L. 10 Nov 1985 (AB 40:150).

Common Moorhen — One fall record: one at Becker L. in Springerville.

Sandhill Crane — Formerly an uncommon summer resident on the Apache Indian Reservation in the White Mts. (Phillips et al. 1964); one recent fall record at Many Farms L. 26 Oct 1985 (AB 40:151).

Mountain Plover — Status uncertain: suitable habitat for this grassland nesting species exists in the Springerville region where several flocks were observed in Aug 1914 (Phillips et al. 1964). Although these birds may have represented early migrants, this species was found nesting on the Arizona-New Mexico border only 37 km E of Springerville on 12 Jun 1978 (Johnson and Spicer 1981).

Lesser Golden-Plover — One fall record: one at Many Farms L. 14 Sep 1985 (AB 40:151).

Black-necked Stilt — One fall record: one at Ganado L. 30 Sep 1984 (AB 39:86).

American Avocet — A common migrant on lakes throughout the county; recently found nesting at sewage ponds at Petrified National Park and at Chinle (AB 36:1004).

Ruddy Turnstone — One spring record, two fall records: one seen during a violent storm at Ganado L. 20 May 1981 (AB 35:850), one at Tsaile L. 1-3 Sep 1985 and one at Round Rock L. 8 Sep 1985 (AB 40:151). One nearby at Zuni, New Mexico, 10 May 1981 is the only record for northwestern New Mexico (AB 35:850). Most Arizona records are from late summer and fall.

 $Red\ Knot - A\ fall\ record$ of two at Ganado L. 6 Oct 1979 (AB 34:188), one of which was killed by a Prairie Falcon, is the only northern Arizona record.

Sanderling — Two fall records: two at Ganado L. 23 Sep 1979 and two at Chinle 14 Sep 1980 (Monson and Phillips 1981).

Semipalmated Sandpiper — Probably a rare fall migrant at lakes in Apache Co. Definite records are for juveniles: three photographed at Ganado L. 17 Aug 1980 (AB 35:212) and one photographed at Ganado L. 11 Sep 1981 (AB 36:204). The fall 1980 record coincides with a record number of 65 individuals in southern California (Garrett and Dunn 1981).

Dunlin — Two spring records, one fall record: one at Round Rock L. 16 Apr 1985, two at Many Farms L. 21 Apr 1985 (AB 39:334) and two at Many Farms L. 4 Nov 1984 (AB 39:86).

Common Snipe — A rare and local summer resident in disturbed, wet fields in the Springerville region. Summer records include one 7 Jul 1979, two 7 Jul 1980, and one flushed from tall, wet grass and observed performing a broken wing act on 12 Jun 1981, all at Springerville. This locality represents the southwestern interior breeding limit for Common Snipe.

Wilson's Phalarope — Recent nesting records for this species from Pintail L. near Show Low, Navajo Co., in Jun 1982 (AB 39:86) support the possibility that pairs near Springerville in suitable nesting habitat in Jun 1979 and 7-8 Jun 1980 (AB 34:919) may have been breeding rather than late transients. The Show Low birds represent the southwesternmost nesting record for this species.

 $Red\ Phalarope$ — One fall record: one photographed on Becker L. in Springerville 5 Oct 1978 (AB 33:203).

Pomarine Jaeger — One fall record: one at Becker L. in Springerville 14 Nov 1985 (AB 40:151).

Sabine's Gull — Two fall records: one imm. on Many Farms L. 15 Oct 1978 (AB 34:188) and two (one ad., one imm.) on Tsaile L. 13 Sep 1985 (AB 40:151).

Caspian Tern - A fall record of two photographed at Ganado L. 17 Aug 1980 (AB 35:212) is the only record for northeastern Arizona.

Common Tern — A rare fall transient on lakes throughout the county. Three spring records, one on Ganado L. 29 May 1979 (AB 33:796), one on Lyman L. 20 May 1981 (AB 35:850) and one on Many Farms L. 24 May 1984 (AB 38:943) are three of only four acceptable spring records for Arizona (Monson and Phillips 1981).

Band-tailed Pigeon — Although this pigeon is an uncommon summer resident in the White Mountains, and probably the Chuska Mts., the only record in Apache Co. away from known breeding areas is of seven seen at Teec Nos Pos 27-30 May 1979 (AB 33:796).

Inca Dove — A fall record of one seen at Eagar 13 Oct 1979 (AB 34:188) is the only record for northeastern Arizona.

Black-billed Cuckoo — One summer record: one at Many Farms L. 9 Jul 1985 (AB 39:947).

Groove-billed Ani — One fall record: one seen at Lyman L. near St. Johns 24 Oct 1967 (Monson and Phillips 1981).

Chaetura sp. — The status of the species of this genus in Apache Co. is uncertain because of the difficulty in distinguishing the Chimney Swift from Vaux's Swift. Records include one at Ganado 30 May 1979 (thought to be a Chimney), one at Chinle 31 Aug 1980 and one at South Fork 10 Sep 1980. Either species is possible in this region of Arizona: there is only one reliable sight record of Vaux's from New Mexico (Hubbard 1978).

Magnificent Hummingbird — Four late spring and summer records: one seen at a feeder in Greer 14 May 1973, another at Greer 3-11 Jun 1978, one at a feeder at South Fork 16 Jun-3 Sep 1978 (Monson and Phillips 1981) and one at a feeder in Eagar in early Aug 1983 (AB 38:232).

Gila Woodpecker — A fall record of one seen in a cottonwood grove in Eagar 26 Nov 1978 (AB 33:203) is the only record of this resident species in northeastern Arizona.

Least Flycatcher — Three probable spring records (all involving calling birds): one at Becker L. in Springerville 26 May 1979 (AB 33:797), one at Chinle 19 May 1981 (AB 33:203) and one at Petrified Forest N.P. 20 May 1984 (AB 38:943).

Hammond's Flycatcher — Common transient throughout the county. Reaches its southernmost breeding limit in the spruce-fir habitat of the Chuska Mts. where a nest was photographed about 7.5 m high in a Douglas-fir on 4 Jul 1980 (AB 34:919). This site is the only confirmed nesting locality in Arizona.

Eastern Phoebe — One seen at South Fork 19-26 May 1979 (AB 32:1041) represents one of only three spring records for Arizona, all from northern Arizona in late May.

 $Vermilion\ Flycatcher\ -$ One winter record: an imm. male observed at 2130 m elevation in Eagar 25 Dec 1980 (AB 35:325).

Eastern Kingbird — Rare early fall and late spring transient at oases and in riparian woodland; about 15 records in all. Summer records suggest that this species may nest locally in Apache Co. August records do not necessarily represent transient birds as this species has been found nesting as late as 14 August in Lassen Co., California (Manolis 1973).

Scissor-tailed Flycatcher — One summer record: one at Many Farms L. 2 Jul 1985 (AB 39:948).

Tree Swallow — Reaches its southwesternmost interior breeding limit in the White Mts. (Monson and Phillips 1981). Two were carrying nesting material at Lee Valley Res. 28 May 1978, a pair was feeding young at Crescent Lake 15 Jul 1979 (Monson and Phillips 1981) and nesting was noted at Lakeside in May and Jun 1981 (Terrill pers. obs.). A summer record for the Chuska Mts. 4 Jul 1980 (Monson and Phillips 1981), may represent another nesting locality in the county.

Blue Jay — One spring record: one seen at Teec Nos Pos 30 May 1977 (AB 31:1033). The only other Arizona record is also from northern Arizona.

Black-billed Magpie — Reaches its southernmost breeding limit along Chinle Wash in the northeastern portion of Apache Co. where it is a common breeder in cottonwoods and Russian Olives south to Many Farms, and north to Dennehotso.

Black-capped Chickadee — Only one published record: one seen in riparian woodland at Teec Nos Pos 26 Nov 1976-5 Feb 1977 (Monson and Phillips 1981). This species' accidental status in Arizona (particularly Apache Co.) is perplexing as this chickadee nests commonly in southern Utah and along the San Juan River in northwestern New Mexico only 40 km E of Teec Nos Pos.

Veery — A rare and local breeder in riparian woodland along the South Fork of the Little Colorado River (Monson and Phillips 1981). This site is the only known nesting

locality in the Southwest, south of south-central Colorado (AOU 1983). An intensive search of similar habitat in the Chuska Mountains and the mountains of western New Mexico may turn up more nesting localities for this species.

Swainson's Thrush — The race swainsoni reaches its southwestern breeding limit along the Little Colorado River at the confluence with its South Fork, and in fir habitat in the White Mts. (Monson and Phillips 1981). Nesting in these areas appears to be a recent phenomenon and has yet to be fully documented. Hubbard (1978) lists this species as casual in summer in the Mogollon Mts. of New Mexico.

Wood Thrush — A fall record of one photographed at Sanders 6 Oct 1978 (AB 33:202) is the only northern Arizona record.

Gray Catbird — Nests commonly along the Little Colorado River in riparian habitat between Eagar and Greer, at the southwestern breeding limit for the species. Although individuals have been seen into late November (Terrill and K.V. Rosenberg pers. obs.), there is but one winter record: one seen and heard singing along the Little Colorado River at South Fork 25 Dec 1980 (AB 35:325). Extralimital records include: one at Petrified Forest N.P. 22 May 1980 (AB 35:968) and one at Chinle 22 Sep 1984 (AB 39:88).

Brown Thrasher — Two spring records, two fall records, one winter record: one at Sunrise 22 Jun 1974 (AB 28:935), one at Petrified Forest N.P. 14 Jun 1981 (AB 35:968), one at Teec Nos Pos 15 Oct 1977 (AB 32:242), one at Springerville 8 Oct 1980 (Betty Jones) and one at Springerville 24 Dec 1978.

Water Pipit — Reaches its southwestern breeding limit in a small expanse of tundra habitat on Mt. Baldy in the White Mts. Nests in Arizona only here and on the San Francisco Peaks near Flagstaff (Phillips et al. 1964).

Sprague's Pipit — One fall record: one seen and heard at Teec Nos Pos 5 Oct 1980 (AB 35:213).

Bohemian Waxwing — One winter record: about 40 at Ganado 18 Feb 1979 (Monson and Phillips 1981).

White-eyed Vireo — One fall record: one seen at Round Rock 11 Oct 1980 (AB 35:213).

Philadelphia Vireo — One fall record: one seen at Richville 5 Oct 1978 (AB 33:102). Most Arizona records are for October, as are all interior southern California records (Monson and Phillips 1981, Garrett and Dunn 1981).

Blue-winged Warbler — A fall record of one seen at Eagar 9 Oct 1982 (AB 37:210) is only the second Arizona record.

Golden-winged Warbler — Two summer records: one adult male 26 Jul 1972 and one adult female 28 Jun 1973, both near Springerville (Monson and Phillips 1981).

Tennessee Warbler — Two spring records, three fall records: one at South Fork 19 May 1978 (AB 32:1042), a singing male there 29 May 1979 (Terrill pers. obs.), one 10 Aug and one 12 Aug 1976, both at South Fork (AB 31:210), and one at Eagar 22 Oct 1978 (AB 33:202).

Northern Parula — Two spring records: a singing male at South Fork 30 May-4 Jun 1978 (Monson and Phillips 1981) and one there in May 1981 (B. Jones) represent two of only three northern Arizona records.

Chestnut-sided Warbler — Two spring records, one fall record: one at Teec Nos Pos 23 May 1977 (AB 31:1034), one at Round Rock 1 Jun 1979 (AB 33:797) and one at Many Farms L. 22 Sep 1985 (AB 40:152).

Magnolia Warbler — One spring record, four fall records: one female at Ganado L. 24 May 1984 (AB 38:944), one at South Fork 22 Oct 1979 (AB 33:202), one at Tez Nez Iah 2 Sep 1979 (AB 34:189), one at Round Rock 11 Oct 1980 (AB 35:214), and one at Becker L. in Springerville 15 Sep 1984 (AB 39:88). The 2 Sep record is the earliest fall record in Arizona and only 2 out of at least 75 fall records from southern California precede this early date (Garrett and Dunn 1981).

Black-throated Blue Warbler — One spring record, three fall records: one male at Richville 28 Jun 1981 (AB 35:968), one male photographed at Sanders 2 Sep 1978 (AB 33:202), one female at Ganado L. 6 Oct 1978 (AB 33:202) and one male at Sanders 4 Oct 1980. The September record is one of the earliest fall records for the Southwest.

Black-throated Green Warbler — Three fall records: one at Teec Nos Pos 3 Sep 1978 (photo), one at Ganado L. 21 Oct 1978 (both AB 33:202), and one at Chinle 11 Oct 1980 (AB 35:214). The 3 Sep record is earlier than any California record in fall (Garrett and Dunn 1981).

Blackburnian Warbler — Five fall records: one photographed at South Fork 5 Oct 1978 (AB 33:202), one at Ganado L. 6 Oct 1978 (AB 33:202), one at South Fork 3 Oct 1980, one at Ganado 4 Oct 1980 and one photographed at Teec Nos Pos 5 Oct 1980 (all AB 35:214).

 $Yellow-throated\ Warbler$ — One spring record: a singing male at South Fork 22 May-7 Jun 1981 (AB 35:851).

Palm Warbler — Two fall records: one seen at Richville 22 Sep 1979 (AB 34:189) and one at Ganado L. 7 Oct 1984 (AB 39:88).

Bay-breasted Warbler — One spring record, one fall record: an adult male at South Fork 1-3 Jun 1980 (AB 34:805) and one photographed at Ganado L. 6 Oct 1978 (AB 33:202).

Blackpoll Warbler — Two fall records: one at Ganado 14 Sep 1980 (AB 35:214) and one there 16 Sep 1984 (AB 39:88). The 1980 record was one of seven individuals that were recorded in Arizona in that year and coincided with a record number of interior southern California records that same fall (Garrett and Dunn 1981).

American Redstart — Rare but regular migrant, irregular summer resident: found in summer in riparian habitat along the Little Colorado River where it is a rare, irregular breeder. This locality is far south of the closest regular breeding populations in northern Colorado and northern Utah. Although there are numerous summer records from New Mexico, as of the late 1970s, no nesting had been documented (Hubbard 1978). In California, the only breeding record is from the extreme northwestern part of the state (Binford and Stallcup 1972).

Prothonotary Warbler — One spring record, one fall record: a singing male at Springerville 12 Jun 1981 (AB 35:968) and one photographed at Ganado L. 17 Aug 1980 (AB 35:213).

Worm-eating Warbler — Two spring records: one at South Fork 23 May 1981 (AB 35:851) and one seen at Richville 28 Jun 1981 (AB 35:968) were both later than any previous Arizona spring records.

Swainson's Warbler — One spring record: a singing male seen and song recorded at South Fork 12 Jun 1981 (AB 35:968) represents the only record of this "southeastern" warbler west of the Rocky Mountains.

Ovenbird — One spring record, six fall records: one at Teec Nos Pos 24 May 1984 (AB 38:944), five seen at once at Teec Nos Pos 15 Oct 1977 (AB 32:243), one at Teec Nos Pos 7 Oct 1978 (AB 33:202), one at Springerville 22 Oct 1978 (AB 33:202), one at Richville 10 Oct 1982 (AB 37:210) and one at Ganado 6 Oct 1985 (AB 40:152). The record of five is the largest concentration reported from the Southwest.

Kentucky Warbler — One spring record, one fall record: one photographed at South Fork 18-21 May 1981 (AB 35:851) and one at South Fork 1 Sep 1978 (AB 33:202). There are only two other fall records from Arizona.

Mourning Warbler — One fall record: one seen at Ganado 15 Sep 1985 (AB 40:152) is under review by the ARBC and if accepted would represent only the second record for Arizona.

Scarlet Tanager — One spring record: two seen at Petrified Forest N. P. 3-4 Jun 1979 (AB 33:888) represent one of only two northern Arizona records.

Painted Bunting — One spring record, one fall record: an adult male seen at Sanders 13 Jun 1981 (AB 35:969) and a female-plumaged bird photographed at Ganado 17 Aug 1980 (AB 35:214).

Dickcissel — One spring record, six fall records: one seen at Teec Nos Pos 30 May 1977 (AB 31:1035), one at Springerville 23 Nov 1978 (AB 33:204), one at Becker L. in Springerville 15 Sep 1984 (AB 39:88), one at Rough Rock 19-20 Sep 1984 (AB 39:88), one at Becker L. 14 Sep 1985 (AB 40:152), one N of Springerville 14 Sep 1985 (AB 40:152) and two at Ganado 15 Sep 1985 (AB 40:152).

Cassin's Sparrow — One summer record: "numerous" 30 Jun-1 Jul 1976 along Highway 61, 31 mi. N of St. Johns (Monson and Phillips 1981). May breed irregularly in grassland north of the White Mts. as it is known to breed, sometimes in numbers, in similar habitat in adjacent New Mexico.

Clay-colored Sparrow — Although records for the region have been considered as unsubstantiated (Monson and Phillips 1981), perfectly reliable records indicate that this species is a sparse transient throughout the county. Records include a singing male at Teec Nos Pos 19 May 1981 (AB 35:852), as well as numerous fall records.

Field Sparrow — A winter record of one photographed at a feeder in Ganado 10-17 Jan 1980 is the only Arizona record (Monson and Phillips 1981).

Baird's Sparrow — A fall record of one collected near Eagar 14 Oct 1934 (Phillips et al. 1964) is the only northern Arizona record.

Grasshopper Sparrow — A fall record of one photographed at Teec Nos Pos 13 Sep 1981 (AB 36:205) is apparently the only record for northern Arizona.

Golden-crowned Sparrow — Two spring records: one at Springerville 25 Apr 1953 (Phillips et al. 1964) and one at Many Farms Spring 19 Apr 1985 (AB 39:335).

McCown's Longspur — Four fall records: one 3 Oct and another 16 Oct 1976 (Witzeman 1977), two 11 Nov 1977 (Terrill and K.V. Rosenberg pers. obs.) and two 27 Oct 1983 (AB 38:232). All records are, amazingly, from the barren ground of the parking area at Becker L. in Springerville!

Lapland Longspur — One fall record: one seen at Round Rock 10 Oct 1980 (AB 35:2143). Winter records from nearby Navajo Co. suggest that this species may turn out to be more regular than the paucity of records indicates.

Smith's Longspur — One collected in the White Mts. 25 Apr 1953 (Phillips et al. 1964) provides the only Arizona record of this species.

Bobolink — Rare spring and fall transient: in Arizona, nests only irregularly in disturbed, wet, grassy fields in the Springerville-Eagar region. Formerly bred near Show Low, Navajo Co., in 1937 (Phillips et al. 1964) but was unrecorded as nesting in Apache Co. until a nest with eggs was located with up to six individuals present 16 Jun-7 Jul 1979 (AB 33:888). A pair was present at the same locality 7 Jul 1980 (AB 34:920). These records represent the southwestern breeding limit for this species.

Rusty Blackbird — One spring record: a female seen at Becker L. in Springerville 31 May 1981 (AB 35:852) was very late; possibly the only May record for the Southwest.

Purple Finch — Two spring records: one at Ganado 31 May 1981 (AB 35:852) and one at Richville 13 Jun 1981 (AB 35:969). This species is very rare in Arizona in spring.

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LITERATURE CITED

American Ornithologists' Union. 1983. Check-list of North American birds. 6th ed. Am. Ornithol. Union, Washington, D.C.

Binford, L.C. & R.W. Stallcup. 1972. American Redstart breeding in California. Calif. Birds 3:87-90.

Carothers, S.W., R.P. Balda & J.R. Haldeman. 1973. Habitat selection and density of breeding birds of a coniferous forest in the White Mountains, Arizona. *In S.W. Carothers, J.R. Haldeman & R.P. Balda. Breeding birds of the San Francisco Mountain area and the White Mountains, Arizona. Mus. Northern Arizona Tech. Ser. No. 12.*

Franzreb, K.E. 1975. Avian densities in mixed-coniferous forests, Thomas Creek. White Mountains, Arizona. West. Birds 6:101-105.

- Garrett, K. & J. Dunn. 1981. The birds of southern California: status and distribution. Los Angeles Audubon Soc., Los Angeles.
- Hubbard, J.P. 1978. Revised check-list of the birds of New Mexico. New Mexico. Ornithol. Soc. Publ. No. 6.
- Johnson, N.K. & K. Garrett. 1974. Interior bird species expanding breeding ranges into southern California. West. Birds 5:45-56.
- Johnson, T.B. & R.B. Spicer. 1981. Mountain Plovers on the New Mexico-Arizona border. Continental Birdlife 2:69-73.
- Manolis, T. 1973. The Eastern Kingbird in California. West. Birds 4:33-44.
- McCaskie, G. 1970. The Blackpoll Warbler in California. Calif. Birds 1:95-104.
- Monson, G. & A.R. Phillips. 1981. Annotated checklist of the birds of Arizona, 2nd ed. Univ. Arizona Press, Tucson.
- Phillips, A., J. Marshall & G. Monson. 1964. The birds of Arizona. Univ. Arizona Press, Tucson.
- Speich, S. 1975. Arizona bird records, 1973, with additional notes. West. Birds 6:145-155.
- Witzeman, J. 1977. Field observations. The Roadrunner 28(1):8.

APPENDIX

The following is a list of the species of birds known to have occurred in Apache Co., with their relative abundance, seasonal status and general habitat preference. Nesting determined from *The Birds of Arizona* (Phillips et al. 1964), *An Annotated Checklist to the Birds of Arizona*, 2nd ed. (Monson and Phillips 1981) and various field notes. Species in brackets are hypothetical.

KEY TO SYMBOLS

Abundance

C = Common, regularly seen in moderate to high numbers; U = Uncommon, regularly seen in low numbers or irregularly in moderate numbers; R = irregular in low numbers; A = Accidental, recorded five or fewer times; * = nests in Apache Co.; *? = possibly nests in Apache Co.

Seasonal Status

P = Permanent resident; S = Summer resident; W = Winter resident; M = Migrant; f = fall; sp = spring; i = introduced. Habitat

1 = spruce-fir-aspen; 2 = Ponderosa Pine; 3 = pinyon-juniper; 4 = riparian; 5 = grassland and rocky cliffs; 6 = lakes, reservoirs, sewage ponds; 7 = oases, towns, agriculture; + = three or more of the above

Pacific Loon A,fM,6 Common Loon R.M.6

- Pied-billed Grebe C,P,6 Horned Grebe A,fM,6
- * Eared Grebe U.S.6 (C.M.6)

 Western Grebe C,M.6

 Clark's Grebe A?.fM.6

 White Pelican C.M.6
 - Double-crested Cormorant R.M.6

- *? American Bittern R,S?,6 (R,M,6)
- * Great Blue Heron U.P.4.6 Great Egret A.fM.6 Snowy Egret U.M.6 Cattle Egret A.M.4.6 Green-backed Heron R.M.4
- Black-crowned Night-Heron U.P.6 White-faced Ibis C.M. + Wood Stork A.fM.6

Tundra Swan R,fM,6 Greater White-fronted Goose A,fM,6 Snow Goose U,fM,6 Ross' Goose R,fM,6

- Canada Goose U,Si,6 (U,fM,6)
 Wood Duck A,M,6
- Green-winged Teal U,S,6 (C,M,W,6)
- Mallard U,S,6 (C,M,W,4,6)
- Northern Pintail U,S,6 (C,M,W,6)
- ? Blue-winged Teal R,S,6 (U,M,6)
- Cinnamon Teal U,S,6 (C,M,6)
 Northern Shoveler C,M,W,6
- Gadwall U,S,6 (C,M,W,6)
 Eurasian Wigeon A,fM,6
 American Wigeon C,M,W,6
 Canvasback C,M,W,6
- * Redhead R,S,6 (C,M,W,6)
- Ring-necked Duck U,S,6 (C,M,W,6)
 Lesser Scaup C,M,W,6
 Surf Scoter A,fM,6
 White-winged Scoter A,fM,6
 Common Goldeneye U,M,W,6
 Bufflehead C,M,W,6
 Hooded Merganser A,fM,6
- * Common Merganser U,S,4,6 (U,M,W,6)

Red-breasted Merganser A,fM,6

- Ruddy Duck U,S,6 (C,M,W,6)
- * Turkey Vulture U,S, + (C,M, +)
- Osprey R,S,6 (U,M,6)
 Bald Eagle C,W,4,6
- *? Northern Harrier R,S?,5 (C,M,W,+)
 * Sharp-shinned Hawk U,S,1,2
 - (C,M,W,+) Cooper's Hawk C,M,W,+
- * Northern Goshawk U,P,1,2 (U,W,+)
- * Swainson's Hawk U.S.5 (C.M. +)
- * Red-tailed Hawk U,S, + (C,M,W,+)
- *? Ferruginous Hawk R,S,5 (U,M,W,+)
- Rough-legged Hawk U,W, +
- Golden Eagle U,P,5
- American Kestrel C,S, + (C,M,W, +) Merlin, U,M,W, + Peregrine Falcon R,M, +
- Prairie Falcon U.P.5 (R,W,7)
- Chukar U,Pi,4,5
- Blue Grouse U,P,1
- Wild Turkey R,P,1,2
- Montezuma Quail U,P,2,3
- Scaled Quail C,Pi,5
- California Quail C,Pi,4,5
- * Virginia Rail U,S,6 (U,M,W,6)
- Sora U.S.6 (U,M,W,6)

- Common Moorhen A,fM,6
- American Coot C,P,6 (C,M,W,6) Sandhill Crane R,S,fM,5 Black-bellied Plover R,fM,6

Snowy Plover U,fM,6 Semipalmated Plover U,fM,6

Killdeer C,P,M, +

Mountain Plover R,S?,5 (R,M,5)

Black-necked Stilt A,fM,6

American Avocet U,S,6 (C,M,6)
 Greater Yellowlegs C,M,6

Lesser Yellowlegs C,M,6
Spotted Sandpiper C,S,4,6
(C,M,W,4,6)

Long-billed Curlew R,spM,6 Marbled Godwit C,spM,6 (R,fM,6)

Ruddy Turnstone A,M,6

Red Knot A,fM,6

Sanderling R,fM,6

Semipalmated Sandpiper A,fM,6

Western Sandpiper C,M,6

Least Sandpiper C,M,6 (R,W,6)

Baird's Sandpiper U,fM,6 Pectoral Sandpiper U,fM,6

Dunlin A,M,6

Stilt Sandpiper U,fM,6

Short-billed Dowitcher R,fM,6 (A,spM.6)

Long-billed Dowitcher C,M,6

Common Snipe R,S,5,7 (C,M,W,+)

*? Wilson's Phalarope R,S,6,7 (C,M,6)

Red-necked Phalarope R,M,6

Red Phalarope A,fM,6 Pomarine Jaeger A,fM,6

Franklin's Gull R,M,6

Ring-billed Gull C,M,6

California Gull R,M,6

Sabine's Gull A.fM.6

Caspian Tern A.fM.6

Common Tern A.spM,6 (U,fM,6)

Forster's Tern C.M.6

Black Tern C.M.6

Rock Dove C,Pi, 7

* Band hailed Disease II

 Band-tailed Pigeon U,S,1,2 (A,spM,7)

Mourning Dove C.S, + (U,M,W.+)
Inca Dove A,fM,7

Black-billed Cuckoo A,S,7 Yellow-billed Cuckoo U,fM,4,7

Roadrunner U.P.3,5

Groove-billed Ani A,fM,7

- Common Barn-Owl U.P.7
- * Flammulated Owl U,S,1 (R,M,4)
- Great Horned Owl C,P, +

- Northern Pygmy-Owl C,P,2,3
- *? Burrowing Owl R,S?,5 (R,M,W,5)
- Spotted Owl R.P.1,2
- Long-eared Owl R,S,4,6 (R, spM, W, 4, 7)
- Short-eared Owl R,spM,5
- Northern Saw-whet Owl U.S.1
- * Common Nighthawk C,S, + (C,M, +)
- Common Poorwill R,S,2,3
- Whip-poor-will U,S,2,3
- Chaetura swift R.M. +
- White-throated Swift C,S,5 (C,M,+) Magnificent Hummingbird A.spM.S.2.7
- Black-chinned Hummingbird U.S.M.4 Calliope Hummingbird U,fM, +
- Broad-tailed Hummingbird C,S,M, + Rufous Hummingbird C,fM, +
- *? Belted Kingfisher R,S,4 (C,M,W,4,6)
- Lewis' Woodpecker U,S,2,4
- Acorn Woodpecker C,S,2
 - Gila Woodpecker A,fM,7 Yellow-bellied Sapsucker R,M,W,4,7
- Red-naped Sapsucker C,S, + (C,M,W,+)
- Williamson's Sapsucker C,P,1,2 (R,fM,7)
- Downy Woodpecker U.P.1,2 (U,fM,W,4,7)
- Hairy Woodpecker C,P, +
- Three-toed Woodpecker U.P.1.2
- Northern Flicker C,S, + (C,M,W, +)
- Olive-sided Flycatcher C,S,1 (U,M,+)
- Greater Pewee R.S.2
- Western Wood-Pewee C,S,2,4 (C.M. +)[Eastern Wood-Pewee] A,fM,7
- Willow Flycatcher U,S,4 (C,M,4,7) Least Flycatcher A, spM, 7
- Hammond's Flycatcher R,S,1 (C,M,+)
- Dusky Flycatcher C,S,1,4 (C,M,+)
- Gray Flycatcher U,S,3 (U,fM,7)
- Western Flycatcher C,S,+ (C,M,+)
- Black Phoebe C,S,4 (R,M,W,4,7) Eastern Phoebe A,spM,4
- Say's Phoebe C,S,M,+(R,W,5,7)Vermilion Flycatcher A,spM,W,7 Ash-throated Flycatcher C,M, +
- Cassin's Kingbird C,S,M, +
- Western Kingbird C,S,4,7 (C,M,+) Eastern Kingbird R,S,M,7 Scissor-tailed Flycatcher A,S,7

- Purple Martin U.S.1.2 (R,spM,6)
- Tree Swallow U.S.1 (C.M. +)
- Violet-green Swallow C.S.1.2 (C,M,+)
- Northern Rough-winged Swallow U.S.4(C.M.+)
 - Bank Swallow C,M, +
- Cliff Swallow C,S,+ (C,M,+)
- Barn Swallow C,S,7 (C,M,+)
- Grav Jav C.P.1
- Steller's Jau C.P.1.2 (R.M.7) Blue Jay A.spM.7
- Scrub Jav C.P.2.3
- Pinyon Jay C.P.3 (R,fM,7)
- Clark's Nutcracker C.P.1 (U.W.2.3)
- Black-billed Magpie C.P.4.7
- American Crow C,P,2,3 (C,W,+)
- Common Raven C,P,5 (C,W,+)
- Black-capped Chickadee A,M,W,4,7 Mountain Chickadee C,P,1,2
- (R, M, W, 4, 7)
- Plain Titmouse C,P,3 (R,M,7)
- Bushtit C.P.3 (U.M.W.4.7)
- Red-breasted Nuthatch C,P,1,2 (R.M.4.7)
- White-breasted Nuthatch C,P,1,2 (U.M.W.4.7)
 - Pygmy Nuthatch C.P.2
- Brown Creeper C,P,1,2 (C,M,W,+)
- Rock Wren C,P,5
- Canvon Wren U.P.5
- Bewick's Wren C,S,3,4 (U,W,+)
- House Wren C,S,M, + Winter Wren R,W,4
 - Marsh Wren C.M.W.4.6
- American Dipper C.P.4 Golden-crowned Kinglet C.P.1
- Ruby-crowned Kinglet C,S,1 (C,M,W,+)
- Blue-gray Gnatcatcher U,S,3 (R,M,7)
- Western Bluebird C,P,2,3 (U,W,+)
- Mountain Bluebird C,S,3,5 (C,M,W,+)
- Townsend's Solitaire C,S,2,3 (C,W,+)
- Veery U.S.4
- Swainson's Thrush U,S,1,4 (U,M,4,7)
- Hermit Thrush C,S,1,2 (C,M,W,+) Wood Thrush A,fM,7
- American Robin C,P,2,3 (C,W,+)
- Gray Catbird C,S,4 (A,fM,W,4,7)
- Northern Mockingbird C,S, + (R,W,7)
- Sage Thrasher C,S,3,5 (R,W,5)

- Bendire's Thrasher U.S.3 (U.fM.3.7)
- Water Pipit C,S,1 (C,M,W,5,7)
 Sprague's Pipit A,fM,7
 Bohemian Waxwing A,W,7
 Cedar Waxwing C,M, + (R,W,7)
- Phainopepla R,S,3,7
 Northern Shrike R,W, +
- Loggerhead Shrike C,S, + (R,M,W, +)
- European Starling C,P,7
 White-eyed Vireo A,fM,7
- Solitary Vireo C,S,2,4 (C,M,+)
- * Warbling Vireo C,S,+ (C,M,+)
 Philadelphia Vireo A,fM,7
 Red-eyed Vireo A,S,1 (R,M,4,7)
 Blue-winged Warbler A,fM,7
 Golden-winged Warbler A,S,4,7
 Tennessee Warbler R,M,4,7
- Orange-crowned Warbler C,S,1,4 (C,M,+)
 - Nashville Warbler C,M,4,7
- Virginia's Warbler C,S,2,3 (C,M,+)
 Lucy's Warbler R,M,7
 Northern Parula A,spM.7
- Yellow Warbler C,S,4,7 (C,M,+)
 Chestnut-sided Warbler A,M,7
 Magnolia Warbler A M 4 7
- Magnolia Warbler A,M,4,7 Black-throated Blue Warbler A,M,7 Yellow-rumped Warbler C,S,1,2
- (C,M,+) (R,W,7)

 * Black-throated Gray Warbler U,S,3
 (U,M,+)
 - Townsend's Warbler C,M, +
 Hermit Warbler U,M,1,2 (R,M,7)
 Black-throated Green Warbler A,fM,7
 Rhadkhurnian Warbler A, fm, 4,7

Blackburnian Warbler A,fm,4,7 Yellow-throated Warbler A,spM.4

- Grace's Warbler C,S,2
 Palm Warbler A,fM,7
 Bay-breasted Warbler A,M,4,7
 Blackpoll Warbler A,fM,4,7
 Black-and-white Warbler R,M,7
- * American Redstart R,S,4 (U,M,4,7) Prothonotary Warbler A,M,4,7 Worm-eating Warbler A,spM,4,7 Swainson's Warbler A,spM,4 Ovenbird R,fM,4,7 (AspM,7) Northern Waterthrush R,M,4,7 Kentucky Warbler A,M,4 [Mourning Warbler] A,fM,7
- ' MacGillivray's Warbler U,S,4 (C.M. +)
- Common Yellowthroat C,S,6 (C,M,+)

- Wilson's Warbler U,S,4 (C,M,+)
- Red-faced Warbler U.S.2
- Painted Redstart U.S.2
- Yellow-breasted Chat U,S,4 (C,M,4,7)
- Hepatic Tanager R,S,2 (R,fM,4,7)
- *? Summer Tanager R,S,4 (R,fM,4,7) Scarlet Tanager A,spM,7
- Western Tanager C,S,2 (C,M, +) Rose-breasted Grosbeak U,fM,4,7
- Black-headed Grosbeak C,S,2,4 (C.M. +)
- Blue Grosbeak C,S,4 (C,M,4,7)
- Lazuli Bunting C,S,4 (C,M,4,7)
 Indigo Bunting U,M,4,7
 Painted Bunting A,M,7
 Dickcissel A,spM,7 (R,fM,7)
 - Green-tailed Towhee C,S,1,4
- (C,M,+)
 * Rufous-sided Towhee C,S,2,4
 (C,M,W,+)
- Brown Towhee C,P,3,5
- Rufous-crowned Sparrow R,S,3
- *? Cassin's Sparrow R,S,5
- American Tree Sparrow R,W,4,7
 Chipping Sparrow C,S,1,2
 - (C,M,W,+) Clay-colored Sparrow A,spM,7 (R,fM,7)
- Brewer's Sparrow C,S,5 (C,M, +) Field Sparrow A,W,7
- Vesper Sparrow C,S,5 (C,M,W,5,7)
 Lark Sparrow C,S,M,5,7
- * Black-throated Sparrow U,S,5
- Sage Sparrow U,S,5 (R,M,1) Lark Bunting U,M,5
- * Savannah Sparrow U,S,5 (C,M,W,5) Baird's Sparrow A,fM,7
 - Grasshopper Sparrow A,fM,7 Fox Sparrow R,M,W,4,7
- * Song Sparrow C,S,4 (C,M,W,+)
- * Lincoln's Sparrow C,S,1,4 (C,M,W,+)
 - Swamp Sparrow U,fM,W,4 White-throated Sparrow R,M,W,4,7
- Golden-crowned Sparrow A,spM,7
 *? White-crowned Sparrow U,S,1,4
 (C,M,W,+)
 - Harris' Sparrow R.M.W.4.7
- Dark-eyed (Gray-headed) Junco C,S,1,2 (C,M,W,+)
 - Dark-eyed (Slate-colored) Junco R,M,W, +
 - Dark-eyed (Oregon) Junco C,M,W, + McCown's Longspur A,fM,5,7

- Lapland Longspur A,fM,7 Smith's Longspur A,spM,5? Chestnut-collared Longspur C,M,W,5
- * Bobolink R,S,7 (R,M,7)
- Red-winged Blackbird C,S,6 (C,M,W,+)
- * Eastern Meadowlark C,P,5,7
- Western Meadowlark C.P.5.7
- Yellow-headed Blackbird C,S,6 (C,M, +)
- Rusty Blackbird A,spM,7
- Brewer's Blackbird C,S,4,6 (C,M,+)
- Great-tailed Grackle U,S,P?,7
- Brown-headed Cowbird C,S,M, + (R,W,7)
 - Orchard Oriole A,fM,7
- *? Hooded Oriole R,S,4 (R,fM,7)

- Northern (Bullock's) Oriole C,S,4 (C,M,4,7)
 - Northern (Baltimore) Oriole A,fM,7
- Scott's Oriole U,S,3 (U,M,3,7)
- Pine Grosbeak U,P,1 Purple Finch A,spM,7
- Cassin's Finch C,S,1,2 (R,M,W,+)
- * House Finch C,P, +
- Red Crossbill U,S,1,2 (U,W,1,2)
- Pine Siskin C,S,1 (C,W,+)
- * Lesser Goldfinch U,S,4,7 (C,M,W,4,7)
- *? American Goldfinch R,S,4 (U,M,W,4,7)
- Evening Grosbeak U,S,1 (U,M,W,+)
- House Sparrow C,P,7

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Veery

Sketch by Brian Evans



Gray Catbird Sketch by Brian Evans
Use of skin for drawing courtesy of Museum of Southwestern Biology (Albuquerque, New Mexico)