

# CHECKLIST OF THE BIRDS OF PINAL COUNTY

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**ABSTRACT:** The Arizona Field Ornithologists (AZFO) is attempting to compile comprehensive, current, and accurate lists of the bird species found in all of Arizona's 15 counties. In 2017, the Coconino list was posted on the AZFO website. Now, the Pinal County list is available ([AZFO 2018](#)), which also notes the species that have bred in the county. These well-researched lists can help birders and field ornithologists know the birds they may encounter in each county and if their observations are unusual. Moreover, they contribute to the natural history of each county, which can be useful to future researchers. Determining that a particular species of bird has been recorded and has bred in Pinal County is not always clear-cut. This article describes the particular characteristics of the county and the process entailed in finding and deciding whether species should be included in the checklist or not.



## INTRODUCTION

Pinal County is third in the number of people per square mile of Arizona's 15 counties and ranks only tenth in land area (OEO 2010). Squeezed between the Phoenix and Tucson metropolitan areas, it had the sixth fastest growing housing market of any county in the United States in 2004, according to a U. S. Census report (Christie 2005). It has a diversity of habitats that offer hospitable conditions for a wide variety of birds, with 422 species recorded to date. Elevations range from 316 m where the Santa Cruz River meets the Gila River in the northwestern part of the county to 2221 m at the northern slope of Rice Peak on the north side of the Santa Catalina Mountains. High-elevation areas comprise a very small part of the county's land area, and most are not readily accessible.



Figure 1. Drainages in the Superstition Mountains (l) 31 January 2016 have a wide variety of trees and shrubs that attract breeding birds, including Gray Vireo, Hepatic Tanager, Dusky-capped Flycatcher and wintering birds, including Olive Warbler, Fox Sparrow, and Townsend's Solitaire (r) 9 November 2014. Photos by Doug Jenness

Biotic communities include the lower Sonoran Desertscrub in the western part of the county, upland Sonoran Desertscrub in much of the eastern and central areas, semidesert grassland north of the Santa Catalina Mountains, chaparral and juniper-pinyon pine-oak woodlands on the north slope of the Santa Catalina Mountains and the south slope of the Superstition Mountains (Figure 1), and small ponderosa pine (*Pinus ponderosa*) areas in isolated parts of the Superstition and Santa Catalina mountains (Brown 1980). Middle-elevation drainages in the Superstition, Galiuro, and Santa Catalina mountains are dominated by Arizona sycamore (*Platanus wrightii*), velvet ash (*Fraxinus velutina*), evergreen oaks (*Quercus* spp.), and in some locations Arizona cypress (*Cupressus arizonica*). Some sections of the riparian corridors along the San Pedro, Gila, and Santa Cruz rivers and Aravaipa, Arnett, and Queen creeks provide cottonwood and willow canopies that are suitable habitat for many nesting species as well as migrants and vagrants.

For many decades Picacho Reservoir, built in the 1920s, was a large body of water that attracted a wide variety of waterbirds, including many rarities seen only once or twice in the county. Among them are Fulvous Whistling-Duck (*Dendrocygna bicolor*) (Phillips et al. 1964), Cackling Goose (*Branta hutchinsii*) (Monson and Phillips 1981), Wood Stork (*Mycteria americana*) (Monson and Phillips 1981), Magnificent Frigatebird (*Fregata magnificens*) (Rosenberg and Witzeman 1998), and White Ibis (*Eudocimus albus*) (Rosenberg and Witzeman 1998).

Ridgway's Rail (*Railus obsoletus*), which formerly occurred at the lake and likely nested (Monson and Phillips 1981, Wise-Gervais 2005, Archaeological Consulting Services 2011) has not been reported recently there or anywhere else in the county. The reservoir is no longer used for water storage and is now dry most of the time. However, in the past 15 years a larger water body, San Carlos Lake, has increasingly become a focus of attention by birders. Much of the southern shore of this large lake is in Pinal County, and some rarities have been reported, including Little Blue Heron (*Egretta caerulea*), Laughing Gull (*Leucophaea atricilla*), Pomarine Jaeger (*Stercorarius pomarinus*), and Iceland Gull (*Larus glaucoides thayerii*) (Jenness 2017).

Also contributing to the wide range of species in Pinal County are extensive human-made habitats. Particularly noteworthy is Boyce Thompson Arboretum State Park, an oasis of mostly nonnative flowering and fruiting shrubs and trees along Queen Creek, which attracts numerous birds, including many of the county's records of rarities. Agriculture has also transformed much of the county's land. A larger proportion of land is devoted to cultivated agriculture in Pinal County than most other counties in the state. It is first in the state for hectares of cotton (*Gossypium* spp.), corn (*Zea mays*) silage, barley (*Hordeum vulgare*), and the number of cattle and calves. It is second in the sales of milk and land used for hay, and third for sales of fruits and nuts (USDA 2012). Agriculture offers a mosaic of water sources, including irrigation ditches, cattle tanks, dairy sludge and evaporation ponds, and often flooded fields that provide foraging habitat for migrant and wintering shorebirds and waterbirds. Tree-lined farm roads, pecan groves, and farmyards with fruit-bearing shrubs and trees offer refuge and food for migrating and nesting passerines. Corn, barley, wheat (*Triticum aestivum*), and alfalfa (*Medicago sativa*) fields attract birds, mammals, and invertebrates that serve as prey for raptors. Sod farms attract plovers, sandpipers, geese, and, irregularly, longspurs (Figure 2).



Figure 2. The cultivated fields at the Santa Cruz Flats attract a wide diversity of species. Mountain Plover (l) 11 March 2008 are found in winter at sod farms; Crested Caracara (r) 24 November 2017 forage in sheep and cattle pastures and disturbed fields. Photos by Pierre Deviche and Doug Jenness

In the county's varied biological environment, professional and amateur field ornithologists have documented a significant record of avian diversity. As long ago as the late 19th century, naturalists visited the county and began recording bird species (Scott 1888, Rhoades 1892). Besides the different common names for many species, the most intriguing report was Rhoades' account of "Audubon's Caracara," now Crested Caracara (*Caracara cheriway*), around the town of Oracle where he stayed for 12 days. He also noted "Scaled Partridge," now Scaled Quail (*Callipepla squamata*), in the grasslands near Oracle. The new checklist includes a phylogenetic-ordered list (AOS 2017) of all species recorded in the county, with notations of abundance, seasonal pattern of occurrence, and breeding.

## CRITERIA FOR INCLUSION ON THE CHECKLIST

As a starting point, this checklist includes only birds that are on the Arizona Bird Committee's (ABC) Checklist of the Birds of Arizona (AZFO 2017). Exotic birds that may have been reported in the county but have not been recognized by the ABC as part of self-sustaining populations, such as Red Bishop (*Euplectes orix*) and Monk Parakeet (*Myiopsitta monachus*), are not included. Published reports provide the basis for inclusion in the list (Phillips et al. 1964, Monson and Phillips 1981, Corman and Wise-Gervais 2005). These publications include the majority of species documented in the county. Rare birds listed on the state Review Species List (ABC 2018) are included if the records were submitted to and accepted by the ABC. Exceptions are Red Knot (*Calidris canufus*) (Figure 3), Pomarine Jaeger, Iceland Gull, Wedge-rumped Storm-Petrel (*Oceanodroma tethys*), Cave Swallow (*Petrochelidon fulva*), and Blue Mockingbird (*Melanotis caerulescens*), for which well-documented reports have been submitted to and are still being reviewed by the ABC.



Figure 3. Red Knot (l), shown with Lesser Yellowlegs (r), 1 September 2017 is one of the most recent species added to the Pinal County checklist. Photo by Doug Jenness

Accepted review list records were accessed through published ABC reports (Speich and Witzeman 1975, Speich and Parker 1973, Rosenberg 2001, Rosenberg and Witzeman 1998, Rosenberg and Witzeman 1999, Rosenberg et al. 2007, Rosenberg et al. 2011), and for more recent submissions the online-accessible records of the ABC (2018). One species included on the list, White-tailed Hawk (*Geranoaetus albicaudatus*), has not been reported in the county since the late 19th century. In 1897, ornithologist G. F. Breninger (1899) discovered a White-tailed Hawk nest between Red Rock and Florence and collected an egg from it. Subsequently, he collected two adult White-tailed Hawks in nearby Maricopa County, one of which is still at the Museum of Northern Arizona. He was an experienced naturalist whose reports were accepted and published in authoritative national journals such as *The Auk* (Brown and Gliniski 2009). A 1996 report of an Eared Quetzal (*Euptilotis neoxenus*), accepted by the ABC (Rosenberg 2001), was erroneously reported from Pinal County and is not included in the checklist. A subsequent review of the location shows that it was actually in Gila County.

Between the extremes of regular, expected birds and ABC-reviewable records, there is a category of birds that is not unusual at a statewide level but represents casual or accidental visitors to Pinal County. Some examples of this kind are Rivoli's Hummingbird (*Eugenes fulgens*), Violet-crowned Hummingbird (*Amazilia violiceps*), Elegant Trogon (*Trogon elegans*), Greater Pewee (*Contopus pertinax*), Pinyon Jay (*Gymnorhinus cyanocephalus*), Clark's Nutcracker (*Nucifraga columbiana*), Pygmy Nuthatch (*Sitta pygmaea*), and Eastern Bluebird (*Sialia sialis*). Each of these is common enough in the state to be unreviewable as a rarity by the ABC, but each is represented in Pinal County by 3 or fewer records. For species in this category, I have utilized various sources, including *North American Birds* and its predecessors, Ganley (1997), AZFO: Seasonal Reports (2016), AZFO: Sightings Database (2015), and personal correspondence.

Of the 422 species documented in Pinal County there are none that have been reported only in that county. Fifty are on the ABC's Review List, and 55 are on the sketch details list. Another way to evaluate unusual records for the county is by their rarity codes assigned by the American Birding Association (2017). Birds with Code 3 are rare, Code 4 are casual, and Code 5 are accidental in the entire ABA region (North America north of Mexico, plus Hawaii). Eleven such species have been recorded in Pinal County (Table 1). These include nine species associated with Mexico: Ruddy Ground-Dove (*Columbina talpacoti*), Buff-collared Nightjar (*Antrostomus ridgwayi*), Northern Jacana (*Jacana spinosa*), Tufted Flycatcher (*Mitrephanes phaeocercus*), Yellow-green Vireo (*Vireo flavoviridis*), Blue Mockingbird, Streak-backed Oriole (*Icterus pustulatus*), Rufous-backed Robin (*Turdus rufopalliatus*), and Ferruginous Pygmy-Owl (*Glaucidium brasillianum*); one Eurasian species: Ruff (*Calidris pugnax*); and one wayward seabird (a Wedge-rumped Storm-Petrel that was found in a weakened condition and died soon after near Eloy in 2016 following Hurricane Newton).

**Table 1 American Birding Association Code 3+ Birds Observed in Pinal County**

Blue Mockingbird (5)
Streak-backed Oriole (4)
Northern Jacana (4)
Tufted Flycatcher (4)
Ruddy Ground-Dove (3)
Buff-collared Nightjar (3)
Yellow-green Vireo (3)
Rufous-backed Robin (3)
Ferruginous Pygmy-Owl (3)
Wedge-rumped Storm-Petrel (3)
Ruff (3)

Source ABA (2017)

Notably, Pinal County registered the first state records for Mississippi Kite (*Ictinia mississippiensis*) in 1970 (Levy 1971), Swallow-tailed Kite (*Elanoides forficatus*) in 1980 (Rosenberg and Witzeman 1998), Pacific Golden-Plover (*Pluvialis fulva*) in 1998 (G. Rosenberg 2001), and Carolina Wren (*Thryothorus ludovicianus*) in 1999 (Rosenberg 2001). It also has the most-northern records in the state for probable nesting of Buff-collared Nightjar (ABC 2018) and Botteri's Sparrow (*Peucaea botterii*) (per. obs.). Although many of the species documented in the county have subspecies, only 5 of the more distinct are included in the checklist.

## ABUNDANCE AND SEASONAL OCCURRENCE

The notations on abundance and seasonal occurrence in the checklist were guided by data from TAS (2015), particularly the bar graphs, the Superior and Dudleyville Christmas Bird Counts (National Audubon Society 2018), the North American Migration Count/Global Big Day (AZFO: Censuses 2004-2017), the AZFO Seasonal Reports (2008-16), the Santa Cruz Flats Raptor Survey (AZFO: Censuses 2006-2018), and eBird. There are 7 categories of abundance that refer to current status. They are common, fairly common, uncommon, rare, casual, irregular, and accidental. The dividing lines between the first three categories are not always clear, and I have tried to use my best judgment. If a species is expected to be present in most places in the county at the right season, it is considered common. Good examples are Gila Woodpecker (*Melanerpes uropygialis*) and Common Raven (*Corvus corax*). Fairly common refers to species that are often present in correct habitat, such as Lincoln's Sparrow (*Melospiza lincolnii*) and Bendire's Thrasher (*Taxostoma bendirei*). If a species is expected at certain times of the year but may not be detected, they are considered uncommon, such as Bonaparte's Gull (*Chroicocephalus philadelphia*) or Green Heron (*Butorides virescens*). Rare denotes species seen infrequently, such as Rufous-backed Robin and Sanderling (*Calidris alba*) or species found only in a few specific localities, such as Mexican Jay (*Aphelocoma wollweberi*), Arizona Woodpecker (*Picoides arizona*), Whiskered Screech-Owl (*Megascops trichopsis*), and Hairy Woodpecker (*Picoides villosus*). Casual indicates species that are out of their usual range and not seen annually, but where there are more than 5 records. It includes species such as Varied Thrush (*Ixoreus naevius*), Red-faced Warbler (*Cardellina rubrifrons*), and Harris's Sparrow (*Zonotrichia albicollis*). Irregular describes unpredictable species that show up some years in the county but not others or in varying abundance. Examples are Lawrence's Goldfinch (*Spinus lawrencei*), Red Crossbill (*Loxia curvirostra*), and Lark Bunting (*Calamospiza melanocorys*). Accidental refers to species where there are 5 or fewer records, such as Red Knot, White Ibis, Tufted Flycatcher, and Blue Mockingbird.

The seasonal status—permanent resident, summer resident, winter resident, migrant—is fairly straightforward. Ladder-backed Woodpecker (*Picoides scataris*) is a permanent resident, Summer Tanager (*Piranga rubra*) is a summer resident, and Ruby-crowned Kinglet (*Regulus calendula*) is a winter resident. Many species, such as waterfowl and sparrows, may be present in winter but also migrate through the area, and this is noted.

## BREEDING

At least 154 species are known to have bred or currently breed in the county. The source for most of the confirmed breeding species is the Atlas (Corman and Wise-Gervais 2005). The criteria used there include detecting a nest with young, a nest with eggs, adults feeding young, adults carrying food, an occupied nest, downy young incapable of flight, or nest building. Species known to have bred in the county prior to the Atlas were documented using the same sources that were used for determining the number of species recorded in the county. Such species include LeConte's Thrasher (*Toxostoma lecontei*) and Scaled Quail. Resident species or those present regularly during the breeding season are considered to be breeding, if they meet the Atlas standards for probable nesting. This includes such species as Yellow-billed Cuckoo (*Coccyzus americanus*), Western Screech-Owl (*Megascops kennicottii*), and Cassin's Sparrow (*Peucaea cassinii*). Since the Atlas surveys, a few species not previously confirmed breeding have been documented. Inclusion of these records is based mainly on personal observation or personal correspondence. Among them are Ruddy Ground-Dove, American Avocet (*Recurvirostra americana*) (Figure 4), Turkey Vulture (*Cathartes aura*), Swainson's Hawk (*Buteo swainsoni*), Northern Pygmy-Owl (*Glaucidium gnoma*), Hairy Woodpecker, Chihuahuan Raven (*Corvus cryptoleucus*), and Painted Redstart (*Myioborus pictus*). Downy young of Clark's and Western grebes (*Aechmophorus clarkii* and *A. occidentalis*) have been observed along the southern shore of San Carlos Lake in Pinal County, but the most hospitable habitat for nesting is found at the eastern end of the lake in Gila and Graham counties and the only nests found have been in Gila County.



Figure 4. American Avocet chick at a dairy farm near Maricopa 17 June 2018. This is the first confirmed nesting of this species in Pinal County. Photo by Nancy Lange

## CONCLUSION

In the past 2 years, 6 species have been added to the Pinal County checklist bringing the current total to 422. Although this rate of change may not be repeated, we can expect new additions, either vagrants or species expanding their range. Possible candidates are Green Kingfisher (*Chloroceryle americana*), which has already been documented from neighboring Maricopa County; Short-tailed Hawk (*Buteo brachyurus*), reported farther north in Gila County; Sulphurbellied Flycatcher (*Myiodynastes luteiventris*), which has been reported nearby on the south side of the Santa Catalina Mountains in Pima County and in the Pinal Mountains in Gila County; Pacific Loon (*Gavia pacifica*), reported from several adjacent counties; and Black Scoter (*Melanitta americana*), found in lakes in Maricopa and Gila counties.

Several species appear to have declined in the past several decades. Scaled Quail, once reportedly fairly common in upland grasslands, especially the area northeast of Oracle Junction (Monson and Phillips 1981, Brown 1989), is now rarely reported. LeConte's Thrasher was reported in saltbush (*Atriplex* spp.) habitat in a strip from the northwest part of the county as far east as Picacho Reservoir and the Coolidge-Florence area (Monson and Phillips 1981, Rea 1983), and a pair was reported breeding at the Santa Cruz Flats in 1996 (Corman 2005a), but it has not been reliably reported in

the county in more than a decade. There are likely pockets in the northwestern part of the county where this thrasher may still be found. Ferruginous Pygmy-Owl, reported nesting in the county during the Atlas surveys in the 1990s (Corman 2005b), has sharply declined and may have disappeared from the county as it has from many other locations in the state. Black-bellied Whistling-Duck (*Dendrocygna autumnalis*), also reported nesting along the San Pedro River during the Atlas surveys (Corman 2005c), has been rarely reported anywhere in the county since 2000. Many pairs of Mississippi Kites nested along the lower San Pedro River and the Gila River in the 1970s (Glinski and Ohmart 1983) but are now rarely reported from the county and may be declining. The current status of this species deserves study.

On the other hand, several species have expanded in the county, including Eurasian Collared-Dove (*Streptopelia decaocto*). First reported in the county in 2001 (Jenness 2004), it is now widespread and numerous throughout the county, although its population may be leveling off. Crested Caracara (Jenness 2015a) and Tropical Kingbird (*Tyrannus melancholicus*) (Jenness 2015b) are also both extending their ranges. Species such as Buff-collared Nightjar and Ruddy Ground-Dove that are on the northern edge of their range exhibit an unstable status as they appear for awhile in certain locations in the county and then retreat for a time before showing up again. The Pinal County checklist can serve as a standard to measure future changes to the avifauna in the county, as well as a record of those species already documented.

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## LITERATURE CITED

- American Birding Association. 2017. Checklist. [http://listing.aba.org/checklist/ABA\\_Checklist-8.0.1.pdf](http://listing.aba.org/checklist/ABA_Checklist-8.0.1.pdf).
- American Ornithological Society. 2017. Fifty-eighth supplement to the American Ornithological Society's Check-list of North American Birds. *Auk* 134:751-773.
- Archaeological Consulting Services, Ltd. 2011. Yuma Clapper Rail Project Clearance Surveys at Picacho Reservoir, Pinal County, Arizona. Transcon Environmental. Mesa, AZ.
- Arizona Bird Committee. 2018. ABC reports public view. [http://abc.azfo.org/ABCVote/\\_ABCReports\\_Public\\_View\\_list.aspx](http://abc.azfo.org/ABCVote/_ABCReports_Public_View_list.aspx).
- Arizona Field Ornithologists. 2018. Pinal County checklist. <http://www.azfo.org/checklist.html>.
- Arizona Field Ornithologists: Sightings database: 1992-2015. [http://www.azfo.org/ASPReports/speciesView\\_list\\_only.aspx](http://www.azfo.org/ASPReports/speciesView_list_only.aspx). [Accessed 1 February 2018]
- Arizona Field Ornithologists: Censuses. 2004-2017. <http://azfo.org/namc/aznamc.html> [Accessed 1 February 2018]
- Arizona Field Ornithologists: Censuses. 2006-2018. Santa Cruz Flats Raptor Survey. <http://azfo.org/namc/IndexsantaCruzRaptor.html> [Accessed 1 February 2018]
- Arizona Field Ornithologists: Seasonal Reports. 2008-16. <http://www.azfo.org/reports.html> [Accessed 1 February 2018]
- Arizona Field Ornithologists. 2017. Checklist of the Birds of Arizona. <http://azfo.org/checklist.html>.
- Brown, D. E. Arizona Game Birds. 1989. University of Arizona Press, Tucson, AZ and Arizona Game and Fish Department.
- Brown, D. E., C. H. Lowe, and C. P. Pase. 1980. A digitized systematic classification for ecosystems: with an illustrated summary of the natural vegetation of North America. U.S. Dep. Agric., For. Serv. Gen. Tech. Rep. RM-73.
- Brown, D. E. and R. L. Glinski. 2009. The status of the White-tailed Hawk in Arizona and Sonora, Mexico. *Journal of Arizona-Nevada Academy of Sciences* 41:8-15.

- Christie, L. 2005. Fastest growing housing markets. <http://money.cnn.com/2005/08/08/markets/stockwatch>.
- Corman, T. E. 2005a. LeConte's Thrasher. In: Arizona Breeding Bird Atlas. Corman, T. E. and Wise-Gervais, C., editors). University of New Mexico Press, Albuquerque, NM.
- Corman, T. E. 2005b. Ferruginous Pygmy-Owl. In: Arizona Breeding Bird Atlas. Corman, T. E. and Wise-Gervais, C., editors). University of New Mexico Press, Albuquerque, NM.
- Corman, T. E. 2005c. Black-bellied Whistling-Duck. In: Arizona Breeding Bird Atlas. Corman, T. E. and Wise-Gervais, C., editors). University of New Mexico Press, Albuquerque, NM.
- Ganley, S. 1997. Arizona Birds Database: 1970-1997. [http://www.azfo.org/AZHistoricalDB/AZhistorical\\_list.aspx](http://www.azfo.org/AZHistoricalDB/AZhistorical_list.aspx).
- Gliniski, R. L., and R. D. Ohmart. 1983. Breeding ecology of the Mississippi Kite in Arizona. *The Condor* 85:200-207.
- Jenness, D. 2005. Eurasian Collared-Doves in Arizona. *Vermilion Flycatcher* 49: 24, 27.
- Jenness, D. 2015 (a). Recent expansion of Tropical Kingbird in Arizona. *Arizona Birds*. [http://arizonabirds.org/sites/default/files/articles/arizona-birds-recent-expansion-tropical-kingbird-arizona\\_0.pdf](http://arizonabirds.org/sites/default/files/articles/arizona-birds-recent-expansion-tropical-kingbird-arizona_0.pdf).
- Jenness, D. 2015 (b). Crested Caracara in Arizona: background and recent expansion. *Arizona Birds*. <http://arizonabirds.org/sites/default/files/articles/arizona-birds-crested-caracara-expansion.pdf>.
- Jenness, D. 2017. Birding San Carlos Lake. *Arizona Field Ornithologists*. <http://www.azfo.org/birding/documents/birding-san-carlos-lake-finalrevised.pdf>.
- National Audubon Society. The Christmas Bird Count Historical Results [Online]. Available <http://www.christmasbirdcount.org> [accessed 1 February 2018]
- Office Economic Opportunity. 2010. Arizona Census Data. [Population.az.gov/census-data](http://Population.az.gov/census-data).
- Rea, M. A. 1983. *Once a River*. University of Arizona Press. Tucson, AZ.
- Rhoades, S. N. 1892. The birds of southwestern Texas and southern Arizona observed during May, June, and July 1891. *Proceedings of the Academy of Natural Sciences of Philadelphia* 41: 98-126.
- Rosenberg, G. H. 2001. Arizona Bird Committee report: 1996-1999 records. *Western Birds* 32:50-70.
- Rosenberg, G. H., and R. M. Jones. 2001. Arizona. *North American Birds* 55:332-335.
- Rosenberg, G. H., K. Rademaker, and M. M. Stevenson. 2007. Arizona Bird Committee report, 2000-2004 records. *Western Birds* 38:74-101.
- Rosenberg, G. H., K. Rademaker, and M. M. Stevenson. 2011. Arizona Bird Committee report, 2005-2009 records. *Western Birds* 42:198-232.
- Rosenberg, G. H., and D. Stejskal. 1992. The autumn migration. August 1-November 30, 1991. Southwest Region. Arizona. *American Birds* 46:130-133.
- Rosenberg, G. H., and J. L. Witzeman. 1998. Arizona Bird Committee report, 1974-1996: part 1 (nonpasserines). *Western Birds* 29:199-224.
- Rosenberg, G. H., and J. L. Witzeman. 1999. Arizona Bird Committee report, 1974-1996: part 2 (passerines). *Western Birds* 30:94-120.
- Speich, S. M., and T. A. Parker III. 1973. Arizona bird records, 1972. *Western Birds* 4:53-57.
- Speich, S.M., and J. L. Witzeman. 1975. Arizona bird records, 1973, with additional notes. *Western Birds* 6:145-155.
- Scott, W. E. D. 1888. On the avifauna of Pinal County, with remarks on some birds of Pima and Gila counties. *The Auk* 5: 29-36.
- Tucson Audubon Society. 2015. *Finding birds in southeast Arizona* (revised eighth edition). Tucson Audubon Society. Tucson, AZ.
- U. S. Department of Agriculture. 2012. Census of Agriculture. County Profiles (Pinal County). [https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/County\\_Profiles/Arizona/cp04021.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/Arizona/cp04021.pdf).