

# The Joy of Birding in southeast Arizona

PAUL GREEN | EXECUTIVE DIRECTOR

If you live and bird in southeast Arizona, you know that one of the most rewarding birding areas in the United States is right here. Of the 914 or so bird species recorded for the United States and Canada, individuals of more than 400 species spend some time each year in southeast Arizona, with a total recorded list of around 525 species. We are third only to the coastal states of Texas and California in terms of species diversity.

Why do we play host to so many species? The answer lies in a combination of longitude, latitude, varied elevations, and context. Vegetation typical of more northerly regions extends south at high elevations from the Rocky Mountains. It meets flora from more southerly regions coming north at lower elevations from the Sierra Madre Occidental in Mexico. The Sonoran Desert meets the Chihuahuan Desert to the east, and the Mojave Desert to the west.

Being on the west side of the continent at 30 degrees north, our region experiences dry, hot, descending air which, coupled with other desert-making phenomena such as a rainshadow from mountains and distance from the ocean, create deserts around the globe at this latitude north and south.

A combination of climate, weather, and varied elevation give us samples of all of the world's biomes within our Sonoran desert region. We can find tundra, coniferous forest, temperate deciduous



THICK-BILLED KINGBIRD / GEORGE WEST



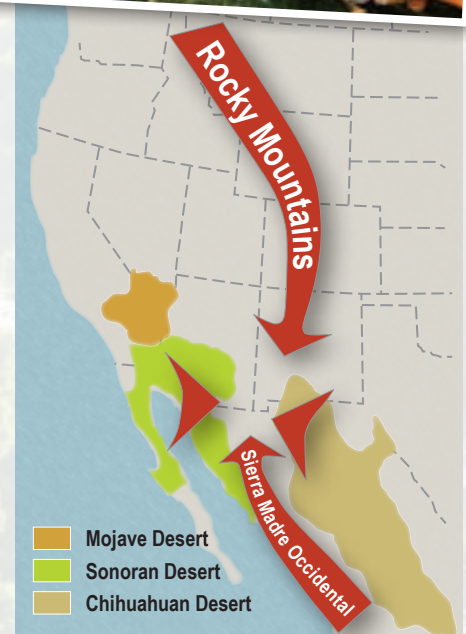
YELLOW-EYED JUNCO / GEORGE WEST

forest, grassland, chaparral, desert, thornscrub, and elements of tropical forest. Moving around our area, in less than a day you can travel the equivalent of 2200 miles, experiencing habitats that occur in places as far apart as Mexico and southern Canada.

Birds found in cool conifer forests farther north breed high in our mountains above those of Mexican origin breeding in oak and pine woodlands (see p 11). Deserts and grasslands, with many distinctive species, separate the mountain ranges. Spring and fall bring migrants passing through with some wintering in the lowlands. This diverse and distinctive avifauna, accessible within a half-day drive from Tucson, draws birders from around the world, helping to drive our economy as you read on page 3.

We celebrate our birds in this issue of the *Vermilion Flycatcher*. In the next two pages, six Tucson Audubon staff members describe some of their favorite species from this region.

Tucson Audubon provides resources that enable birders to make the most of this region including our publication *Finding Birds in Southeast Arizona*, covering in detail an area east of 112 degrees west to the New Mexico



border and south of 33 degrees north to the border with Mexico, and includes information on birding in Puerto Penasco in Sonora. For an in-depth analysis of our region, we recommend *A Natural History of the Sonoran Desert*, edited by Steven J. Philips and Patricia Wentworth Comus, and *Southern Arizona Nature Almanac* by Roseann and Jonathan Hanson. All three books are available in the Tucson Audubon bookstore. So make a point of celebrating our birds this spring.

Around 914 species in North America
620 in Texas
616 in California
<b>525 in Arizona</b>
523 in New Mexico
485 in Florida
465 in Colorado
445 in New Jersey

HAYS CUMMINS, MIAMI UNIVERSITY



ROBERT SHANTZ



DONNA TOLBERT-ANDERSON



## Gray Hawk

"Hooooooweeo!, Hooooooweeo!" Here is a raptor of tropical origin, secretive, mysterious, but seemingly ubiquitous by its "calling" throughout our southeastern Arizona riparian areas. It is found wherever high groundwater levels remain, and human use has allowed cottonwood groves and mesquite bosques to persist.

Gray Hawks are rare in the United States: less than 200 breeding pairs are likely present (March–October). But a real success story for this species is underway due to conservation efforts over the last couple of decades that has allowed Arizona riparian habitat to recover.

The Gray Hawk's greatest U.S. stronghold is southeast Arizona. This species has a dual habitat preference of mature cottonwood/willow for nesting and tall velvet mesquite stands for foraging.

Reptiles account for up to 70% of its prey, with whiptail and spiny lizards leading the list. Abundant populations are now nesting along the San Pedro and Santa Cruz Rivers, as well as Arivaca and Sonoita Creeks. New nesting has been very notable near Patagonia (now in oaks!), and in the far eastern Tucson basin, including Tanque Verde, Rincon, and Cienega Creeks; even lower Sabino Creek has had recent sightings!

My first trip to the San Pedro, on my first Southwestern trip, yielded my first encounter, a gray ghost skimming the cottonwood gallery. Gaining a sighting of this elusive bird often can be challenging, and finding a particular bird's nest has proven maddening for this biologist many a time. Here is one bird that takes you out of the dry heat and puts you directly into the Neotropical realm of shrouded dense humid forests right here in Arizona.

*Scott Wilbor, Important Bird Areas Program Conservation Biologist*



## Montezuma Quail

Montezuma Quail are the birds that birders long to see, and probably have seen once or twice without even knowing it, simply because the bird has mastered the art of remaining undetected. Yet, when these quail are startled, they explode into the air in quite a wing-flapping show.

These cryptic birds can be found into the southeastern area of Arizona, southwestern New Mexico, and west Texas. They inhabit open woods of oak to pine-oak and juniper, and prefer grassy hillsides in these areas.

The Montezuma Quail is one of the shortest of the quails in North America, sizing in at approximately 8.75 inches. Of course, with short sometimes comes plump, and these quail can be proud of their plumpness weighing in at average of 6 oz. The adult male has a striking, swirling face pattern, while the rest of his body remains in camouflage mode. The female face pattern slightly resembles that of the male, but not in such a striking way. These quail come with a special tool for digging—their long, sickle-shaped claws.

I saw my first Montezuma Quail while on a Christmas Bird Count in Madera Canyon. I'd always wanted to see one, but never had the luck of coming across one of these secretive, stunning birds until we were leisurely walking and counting. There in front of us, standing perfectly still and trying to hide, were a male, female, and what looked like younger birds. They were not five feet away from me and I stood captivated by their appearance and moved by their stillness. Since then, I've had a streak of Montezuma Quail luck while in Madera Canyon—once watching a covey cross the road as we drove into the canyon, and another time watching a pair foraging along the side of the road about halfway up the canyon. I feel so fortunate!

*Sara Pike, Nature Shop Manager*



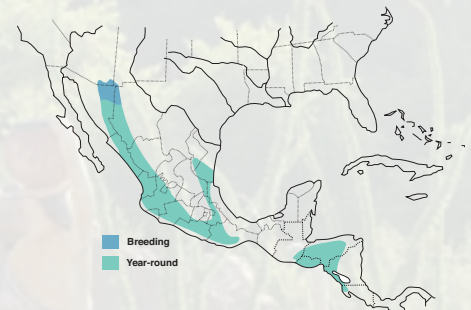
## Elegant Trogon

The possibility of seeing a trogon has lured many birdwatchers to southern Arizona. Most of these charismatic birds arrive in April and May and depart during September and October. There, among the mountain forests, pine-oak or sycamore canyons, they perch seeking a wide variety of insects, especially katydids, cicadas, walking sticks, large caterpillars, and small lizards. During the summer months, you may find them eating small fruits and berries. Trogons often nest in tree cavities, usually in an old flicker hole in dead trees or limbs, especially in sycamores. Cared for and fed by both parents, the young leave the nest about 20–23 days after hatching but are dependent on their parents for a few more weeks. In the fall, most migrate south to Mexico, but some will spend the winter along a lowland stream in southeastern Arizona.

Formerly known as the Coppery-tailed Trogon, the male's head, chest, and upper parts are a deep glossy green separated from the red belly by a narrow white band across the breast. The tail is square-tipped, moderately long, and the bill is yellow. The female is brown, not green, with less red on the under parts. If you would like to view a picture, go to [www.tucsonaudubon.org](http://www.tucsonaudubon.org) and click on the cover of the July–August 2009 issue of *Vermilion Flycatcher*.

As a new birder, my first experience with seeing an Elegant Trogon was in the 2008 Birdathon. We were off Sweetwater Wetlands/Roger Road with our binoculars tilted to the trees. "Hey, Sara, what is that?" Would you believe, it was an Elegant Trogon! Carrie called the shop to report the sighting to the rare bird alert. We gazed at the elegant bird for several minutes. Later that day, the female was spotted in Sweetwater Wetlands Park. We ventured on to Mt. Lemmon but nothing topped the morning's find.

*Jean Barchman, Membership Coordinator*



ALL MAPS PROVIDED BY "BIRDS OF NORTH AMERICA ONLINE" - [HTTP://BNA.BIRDS.CORNELL.EDU/BNA](http://bna.birds.cornell.edu/bna) MAINTAINED BY THE CORNELL LAB OF ORNITHOLOGY



## Costa's Hummingbird

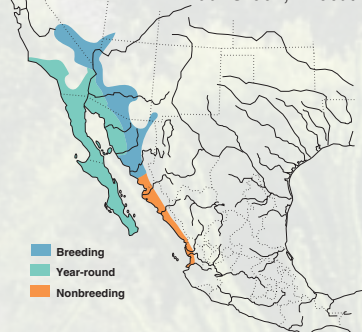
Newly arrived in the U.S., I remember my first male Costa's Hummingbird: it was at a feeder just outside the hummingbird enclosure at the Arizona-Sonoran Desert Museum. The gorget had me transfixed. Years later, now living in Arizona, I have come to love this species for its strong spirit, the combination of the male's brilliantly iridescent purple, flared gorget, and its apparent love of the dry, desert scrub. It's not a bird of lush, verdant, gardens but the bird I see when walking the wash where I live. Anna's, its probable closest relative, seems to adapt better to our modification of habitat and provision of feeders.

Costa's annual migratory movements help give me a sense of the essence of the bird. Its "early" appearance here in the fall (October, November) and subsequent breeding (March, April), is followed by its disappearance from our area in May and June. Our birds head west then, to the Pacific Coast of California and Baja California, to join others of the same species that breed in that region. It's not clear if the birds follow clear migratory corridors or migrate across a broad front.

As one of the smaller hummers, Costa's uses flowers with shorter floral tubes, especially Chuparosa, which has a long flowering period and is also the most reliable and productive of midwinter nectar sources when the bird returns to us in October. Chuparosa reaches its peak flowering activity in March, the time when the Costa's is breeding. In areas where both Ocotillo and Chuparosa are in flower, there is a super-abundance of nectar for the breeding birds.

One question that interests me is whether Costa's is better adapted to the drier, hotter desert habitats, or whether competition from other species, which are generally socially dominant, forces it to live in these habitats.

*Paul Green, Executive Director*



## Verdin

Verdins are the prettiest birds that most Tucsonans have never seen. Tiny and fast-moving, they challenge the birder to follow them with binoculars, and they present a fleeting gray blur to most others.

Verdins live in desert areas from southern California and Nevada east to western Texas. Their distribution goes south to the tip of Baja California and to central Mexico, excluding the western Sierra Madre.

Verdins are non-migratory, year-round residents throughout their distribution. They prefer thorny desert scrub, especially mesquite, palo verde, and acacias. Providing thorny native vegetation in Tucson landscapes will assure their little yellow faces will adorn your yard.

Highly desert-adapted, Verdins can derive all the water they need from what they eat. They eat mostly insects and spiders, sometimes holding leaves with their feet while searching them for prey.

One study calculated they ate up to 540 insects, spiders, or larvae per day during winter. When available, they also eat fruits, pulp from seed pods, flower nectar, or they sip from hummingbird feeders.

Believe it or not, Verdin was once a nemesis for me. Living in central Mexico—at the very south end of their range—in the early '90s, I searched for them in vain. I found my first one in a mesquite thicket and almost immediately learned what they sound like, since they vocalize so frequently. From then on I saw (or at least heard) them quite often, and they have become one of my favorite avian friends.

*Kendall Kroesen, Restoration Program Manager*



## Red-faced Warbler

The flash of the bright red face and breast of a Red-faced Warbler against the green forest canopy is hard to miss. The seemingly random pattern of red face and white nape interrupted by a black "bonnet" has given rise to a list of entertaining nick names, including clown face and Coloradito in Mexico. Preferring mid- to high-elevation forests (6000–9200 ft), these warblers would not occur in southeast Arizona were it not for our "sky islands." Because of its restricted distribution in remote areas, birds may be difficult to locate, creating a mystique for people hoping to catch a glimpse of one of the region's most sought-after birds.

Red-faced Warblers arrive to breed in southeast Arizona by late April, taking advantage of the insects they glean from oak, pine, or fir tree limbs. They depart in early September to winter in the highlands of southern Mexico, Guatemala, El Salvador, and Honduras.

Red-faced Warblers share an interesting adaptation with another red-splashed warbler of roughly the same habitat, Painted Redstart; they nest on the ground, with females placing a well-hidden cup nest in a small hole or hollow, often with a rock or vegetative overhang to protect and conceal it.

I, too, experienced the mystique of "Coloradito" until a summer day high up in the spruce/fir of the Pinaleno Mountains. I was scanning for a different "red," that of the Mt. Graham red squirrel, when I caught sight of two Red-faced Warblers scurrying low and carrying nest material. What a treat, to see two individuals and find a nest! Or so I thought. After an intense search, I never did find that nest, and the mystique lives on.

*Matt Griffiths, Restoration and Communications Specialist*



# The Vulnerability of U.S. Birds to Climate Change

## —a new report by the U.S. Fish and Wildlife Service

SCOTT WILBOR | IMPORTANT BIRD AREAS PROGRAM CONSERVATION BIOLOGIST



LESSER NIGHTHAWK / JIM & DEVA BURNS, WWW.JIMBURNSPHOTOS.COM

*The State of the Birds: 2010 Report on Climate Change*, a report produced by the U.S. Fish and Wildlife Service in partnership with experts from numerous national conservation organizations, including the National Audubon Society, was released in March 2010. This new report focuses on predicting which groups of birds are most threatened by climate change and its multiple effects on ecosystems and species. The report follows last year's *The State of the Birds*, which found nearly a third of the U.S. avifauna is endangered, threatened, or in significant decline. The new report focuses on biological aspects of species' sensitivity to climate change as well as the exposure of each species' habitat to climate change in the near future, and scores species to rank both species groups (those of: oceans, coasts, arctic, islands, aridlands, wetlands, grasslands, forests-western & eastern, waterfowl and gamebirds), and individual species within these groups.

The report found the most threatened bird groups were those of oceans, islands (notably the Hawaiian Islands), coasts, arctic/alpine areas, and waterfowl. The primary driving threat for oceanic birds was shifting of ocean productivity patterns and ocean chemistry, and seabirds' low reproductive potential. For the other highest vulnerable groups, the loss, degradation, or the changing condition

of habitats was a common thread. In our region, **Arizona and the Southwest**, three species groups are represented:

1) **Grassland birds**, more than half (57%) show "medium vulnerability" as a group, primarily due to predicted increased drought conditions and shrub encroachment (e.g., Swainson's Hawk);

2) **Aridland birds**, many bird species (44%) exhibit medium vulnerability, but the Lesser Nighthawk stands out for "high vulnerability" because of its reliance on large flying insects that may face declines due to drought. Invasion by non-native species, fire threat to habitats, floral and fruit resources' mis-timing to species' needs, water stress on riparian systems, and species' physiological heat tolerance limits, were the driving vulnerability factors of species ranked as medium vulnerability; and

3) **Western Forest birds**, many species were ranked as medium vulnerability to climate change, including Montezuma Quail, Spotted Owl, Thick-billed Kingbird, many flycatchers (e.g., Cordilleran), many hummingbirds (e.g., Blue-throated), and some warblers (e.g., Virginia's). Western forest birds' vulnerability was primarily attributed to increased drought conditions, insect outbreak and forest health, and length and severity of fire seasons.

The report presents "key steps" to help avian species cope with climate change. In our region the report recommended providing for habitat conservation both in latitudinal and elevation aspects (particularly for forest ecosystems). Additional steps include managing invasive species, managing shrub encroachment in grasslands (particularly with fire), grassland conservation through holistic ranching, and restoring and conserving riparian areas, including springs, with reference to groundwater conservation and providing for natural hydrologic function.

What is the Tucson Audubon Society doing to take these key steps? Through

our Habitat Restoration Program we are engaged in non-native invasive species removal projects and habitat enhancement projects, in riparian, grassland, mesquite bosque, and ironwood/saguaro ecosystems (e.g., Simpson & Martin project sites—lower Santa Cruz River, Esperanza ranch—upper Santa Cruz River, Esperero & Sabino Canyons, Atterbury Wash, Tucson Audubon's Mason Center, and other new projects coming on line as well). Through the Arizona Important Bird Areas (IBA) Program, we are pursuing landscape conservation of the San Pedro River basin (particularly along the unprotected lower reach), focusing on gathering bird and habitat information, and advocating for water and habitat conservation/protection. For our "sky island" borderland IBAs we are focused on achieving key avian habitat protection, particularly for cool canyons, springs, and habitat connectivity across elevation gradients (e.g., Patagonia and Santa Rita Mountains). And, in our lowland riparian IBAs we are focused on preventing riparian habitat degradation and promoting groundwater conservation (e.g., Sabino & Tanque Verde Creeks). Through our environmental leadership in the community we continue to act at the local, regional, and state level, working to promote sustainability practices (e.g., water harvesting), urban habitat, habitat connectivity, and regional planning (e.g., Sonoran Desert Conservation Plan, and groundwater protection zoning), all to conserve native regional biodiversity. We also advocate at the state and national levels for strong renewable energy standards to achieve a "greener" and more secure energy portfolio for the United States.

The complete U.S. Fish and Wildlife Service report can be viewed and downloaded by going to the excellent website [www.stateofthebirds.org](http://www.stateofthebirds.org).



VIRGINIA'S WARBLER / JIM & DEVA BURNS, WWW.JIMBURNSPHOTOS.COM