Desert Rivers Audubon Magazine

Taking flight with birds in Arizona and abroad

SPRING 2019

Plus Avian Dinosaur Ancestry • Disarming dangerous windows

Presidents Message

By Krys Hammers, President

I can't believe how fast this season has flown by. Soon our board will be planning for next season, then we will spend the summer making those arrangements. But don't forget—this is your Audubon chapter.

We would like to hear from you about what you liked or didn't like about our programming for this year. What topics would you like our speakers to talk about? Where would you like to go on field trips? Who are your favorite field trip leaders? What types of projects would engage you? We would love to hear from you. Please call or email anyone on the board and give them a piece of your mind. How often are you invited to do that?

One of our first events of the new season is the Tour de Bird, always the first weekend in November. This event takes you to bird-friendly back-yards and habitats featuring native plants. These properties are important, because desert plants use very little water—a life-giving resource that becomes scarcer and more precious every day. Our Arizona birds need these habitats, too, because they depend on desert plants and insects to survive. We market this event to the general public with the goal of inspir-ing more people to make their homes faithful to the native environment. Over time, we hope to create a patchwork of yards that are hospitable to the birds we love so much.

But it's hard to find homes and businesses to include on the tour. As we drive around our urbanized East Valley territory, we see many yards land-scaped with grasses and plants that are better-suited to northern climates. We need your help to find good examples of landscapes that reflect the Sonoran Desert. If you have such a yard in the East Valley, won't you consider being on the tour? And if you know someone with an appropriate yard, please let me know. We need to identify locations that will appear on the tour by July so we can finish with the ticket printing by August. It's not too early to start planning.

In closing, I would like to thank everyone who participated in our programs—our birdwalks, owlwalks and field trips—or who helped at the Hummingbird Habitat this year. A sincere thank you goes out to the volun-teers who make all those activities happen. When you're an all-volunteer chapter, nothing happens without these folks! And a special thanks to the board members who work very hard to plan and stage these events, and then turn out to vol-unteer at them as well. Have a great summer!

Cover Photo: Hooded Oriole on Ocotillo branch- Jim Burns

Desert Rivers Audubon Magazine

Educating and inspiring our community to protect and preserve birds, wildlife, and their habitats.

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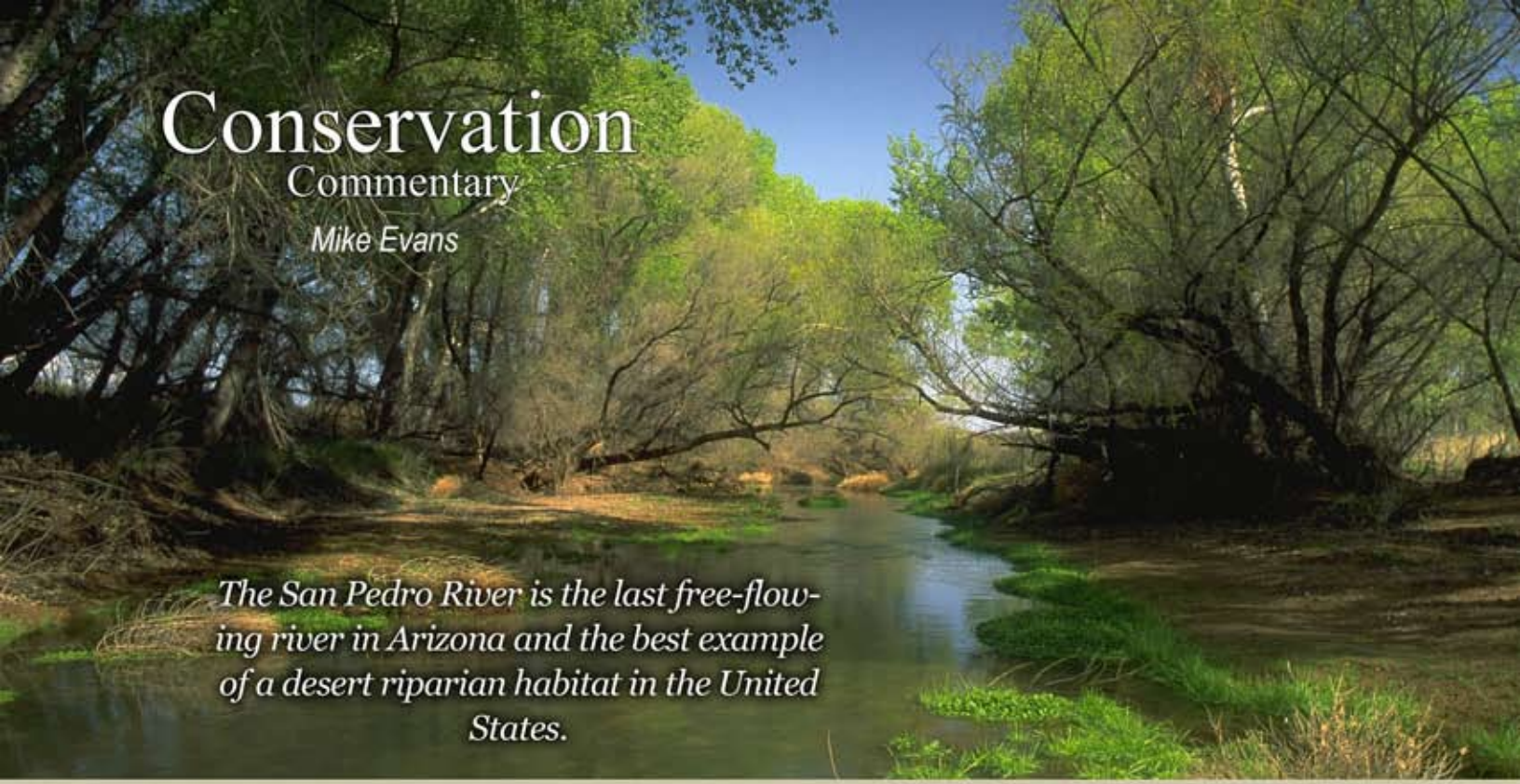
Mike Evans



The San Pedro River is the last free-flowing river in Arizona and the best example of a desert riparian habitat in the United States.

Rising out of the highlands in the Mexican state of Sonora, the San Pedro flows north into Arizona, passing east of Sierra Vista and west of Benson as it heads to its confluence with the Gila River. In 1988, the U.S. Congress created the San Pedro Riparian National Conservation Area and reserved federal water rights for the ecosystem. Audubon has designated it an Important Bird Area.

But developers have had their eyes on a portion of the river valley for over a decade, and currently plans include a massive home development southwest of Benson and across the highway from Kartchner Caverns State Park. The Tucson Audubon website reports that "Villages at Vigneto would fragment 12,817 acres (almost 20 square miles) of high desert grasslands and inter-braided washes southwest of Benson, current population 5,100. Developer El Dorado Benson LLC proposes 29,400 new homes, golf courses, artificial lakes, Italianate non-native vegetation, shopping and recreation centers, and is intended to attract up to 70,000 new residents with a Tuscany in the desert theme. This population explosion would dramatically impact the environment surrounding Benson and significantly alter the San Pedro River watershed."

The developer attempted to use a 2006 Clean Water Act 404 Permit, which would have allowed dredging and filling desert washes during construction. A coalition of environmental groups including the Tucson and Maricopa Audubon Societies, the Grand Canyon Chapter of the Sierra Club, the Center for Biological Diversity and the Cascabel Conservation Association successfully convinced the U.S. Army Corps of Engineers to suspend the 404 Permit in July of 2016, but in November 2018, the Corps authorized El Dorado Benson to resume work. Earthjustice, representing the environmental groups, filed suit in January 2019 in federal District Court in Tucson, contending that that "the Army Corps of Engineers failed to conduct a comprehensive analysis of the environmental impacts of the development." The Arizona Republic reported that "the groups are asking the court to invalidate the permit issued by the Corps and require the government to complete a more extensive environmental review."

The Corps limited its review to a 1,919 acre portion of the project and didn't address the 8,400 acre feet of water that the development plans to pump out of the ground. The groundwater pumping for this project runs the risk of drying up the river and the associated marshes at the St. David Cienega, devastating the wildlife that depend on the water in the river for survival.

Tucson Audubon provided the following talking points for advocacy on this issue: Vigneto poses a significant potential threat to the San Pedro River, two Global Important Bird Areas and a bird migration corridor vital to our hemisphere. As conceived, Vigneto is too large and water-intensive to be sustainable. Vigneto should be significantly down-scaled consistent with the very arid environment in which it is proposed. Vigneto threatens the sustainable world-renowned birding and nature-based economy of the San Pedro River Valley. The 2011 economic impact from wildlife watching activities in Arizona was estimated at $1.4 billion. In 2011, watchable wildlife in Cochise County generated $14,190,743 in retail sales with a total multiplier effect of $24,130,389. In Cochise County alone, watchable wildlife created $7,651,115 in salaries and wages, supported 234 full and part-time jobs; generated $1,570,931 in state and local tax revenues and $1,769,276 in federal tax revenue.

This issue spotlights another troubling environmental issue. The EPA is trying to push authority for some of its programs onto the states, including the 404 permit system. EPA would like authority for this process to rest in the Arizona Department of Environmental Quality, a historically underfunded state agency. Presumably, the Trump Administration wants to do this is because it is easier for business and industry to bully state governments than federal agencies. Unfortunately, the Ducey administration is supportive of this move.

Please continue to follow this issue and talk to your representatives. I'll update our membership as the court case progresses.

Miranda Brandon

Killer Windows

Lynnette Allison

It's an inhospitable world for birds.

Set aside the fact that habitats are disappearing to construction and that climate change is altering the pace of the seasons. Forget about lead and other contaminants that show up in food and water. House cats and their feral cousins lurk. Even something as positive as renewable energy development can mean death to a bird in flight. Let's talk about windows.

One of the leading causes of human-related avian death is windows. Birds see reflections of vegetation in the glass and choose to fly through what looks like open space. Or, a bird sees its own reflection and thinks it is another bird intruding or attacking.

Expert estimates of the number of birds that die after collisions with glass in the U.S. range widely, from 365 to 988 million each year. Shining office towers might seem to be the most lethal, but in fact, low rise structures take far more lives. Buildings four to 11 stories high account for 56 percent of the deaths, or about 339 million. Homes and multi-unit housing structures less than four stories claim 44 percent—a whopping 253 million.

But our residences don't have to be a danger to birds. With modification, our windows don't have to be a threat to their very lives. Here are a few ways you can help.

Audubon at Home

- Hang sheer curtains inside the window or make it a habit to close the drapes during the day. Move inside flowers and potted plants away from windows that attract birds.

- Replace bug and sun screens on the outside of windows to distort or block reflections. You could try colored plastic that covers the window entirely or hang streamers, cord or beads like a curtain to signal that the window is not open space. If a bird is persistent it may be because it is nesting season.

- Place bird feeders three feet or closer to the window or move them 30 feet or more away.

- Let your windows stay dirty on the outside or add designs with water color or poster paints.

- Evenings, outside lighting should be shielded to eliminate glare or brightness that can confuse nocturnal birds or bats.
What if bird is injured or stunned?

What if bird is injured or stunned?

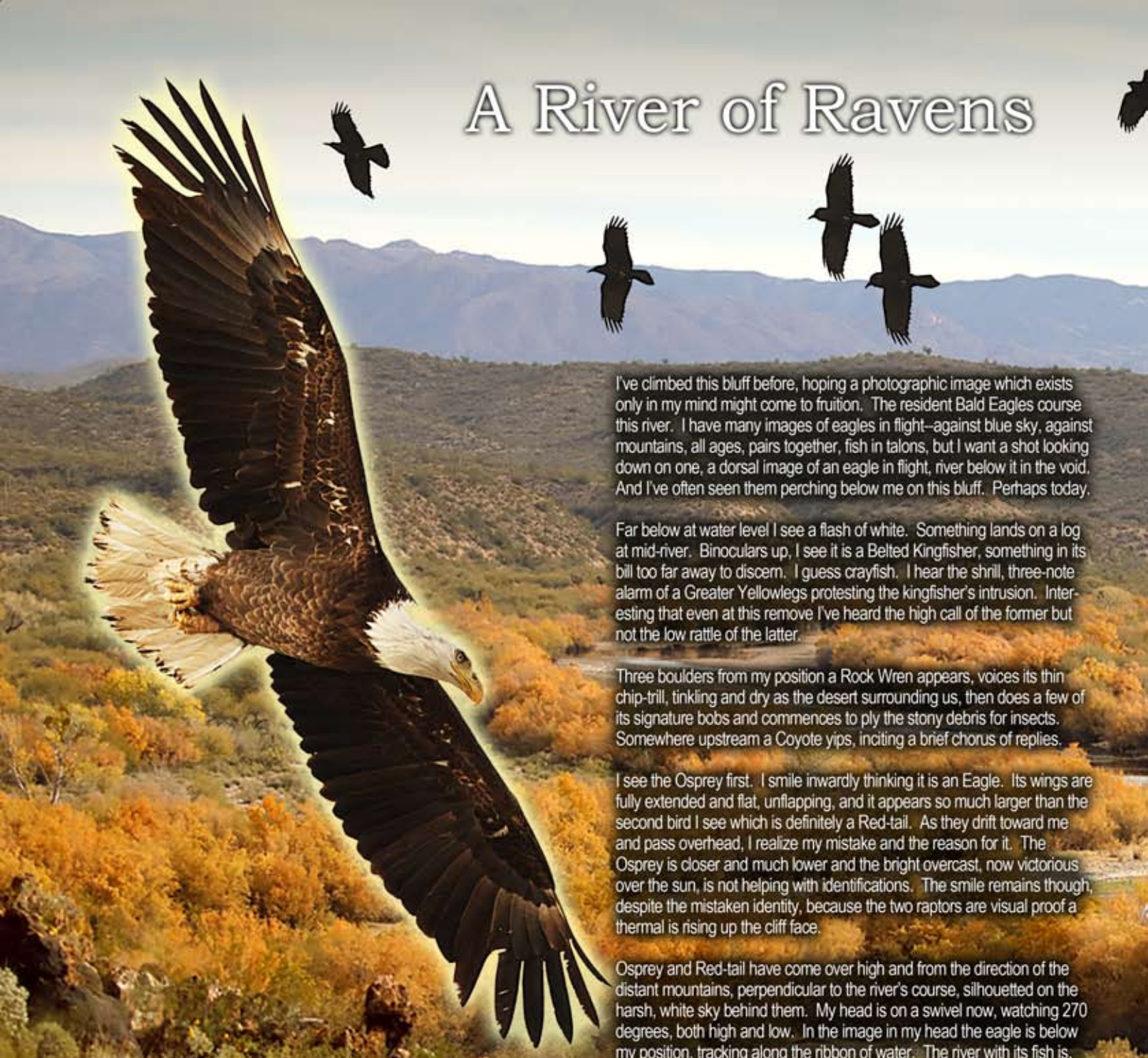
Despite our best efforts, sometimes your yard may be the scene of a bird mishap. When this happens, it's important to assess the situation and take quick action. A dazed bird may be able to recover on its own. If it has no visible injuries, holds its wings properly and its eyes seem normal, see if it can perch on its own. If so, leave it alone. But unfortunately, even birds who fly away after collision die later due to internal bleeding.

If the bird is visibly injured, move it to a warm, dark place such as a ventilated shoebox or paper bag, and get it to rehab facility immediately. In the Phoenix area, Liberty Wildlife provides excellent medical care to wild animals.

Try going to www.birdsavers.com for a very simple solution or visit www.flap.org for more information.

See National Audubon website at bit.ly/2VWT0ct. for a related article on this topic.

A River of Ravens



A ribbon of riparian color, the leftover ambers, umbers, and golds of autumn, runs along the river as it wends its way, circuitously, from Four Peaks. Behind me, downriver, is the north wall of Granite Reef, a tapestry of dull reds and greens on this day when the sun is losing its battle with overcast. A stiff breeze blows out of the northeast, buffeting the façade of the cliff on which I stand. It won't be long now.

I've climbed this bluff before, hoping a photographic image which exists only in my mind might come to fruition. The resident Bald Eagles course this river. I have many images of eagles in flight--against blue sky, against mountains, all ages, pairs together, fish in talons, but I want a shot looking down on one, a dorsal image of an eagle in flight, river below it in the void. And I've often seen them perching below me on this bluff. Perhaps today.

Far below at water level I see a flash of white. Something lands on a log at mid-river. Binoculars up, I see it is a Belted Kingfisher, something in its bill too far away to discern. I guess crayfish. I hear the shrill, three-note alarm of a Greater Yellowlegs protesting the kingfisher's intrusion. Interesting that even at this remove I've heard the high call of the former but not the low rattle of the latter.

Three boulders from my position a Rock Wren appears, voices its thin chip-trill, tinkling and dry as the desert surrounding us, then does a few of its signature bobs and commences to ply the stony debris for insects. Somewhere upstream a Coyote yips, inciting a brief chorus of replies.

I see the Osprey first. I smile inwardly thinking it is an Eagle. Its wings are fully extended and flat, unflapping, and it appears so much larger than the second bird I see which is definitely a Red-tail. As they drift toward me and pass overhead, I realize my mistake and the reason for it. The Osprey is closer and much lower and the bright overcast, now victorious over the sun, is not helping with identifications. The smile remains though, despite the mistaken identity, because the two raptors are visual proof a thermal is rising up the cliff face.

Osprey and Red-tail have come over high and from the direction of the distant mountains, perpendicular to the river's course, silhouetted on the harsh, white sky behind them. My head is on a swivel now, watching 270 degrees, both high and low. In the image in my head the eagle is below my position, tracking along the ribbon of water. The river with its fish is, after all, why the eagles have taken up residency here. Nonetheless, a Bald Eagle coming from any direction at any height will trigger my eagle-in-flight addiction.

Facing the river and watching downward, I hear the ravens before I see them. The vocal repertory of the Common Raven has been deemed "limitless," and upwards of 30 categories of the species' sounds have been catalogued. The one I first hear is the one most familiar to me,

the deep, guttural croaking. I turn to the promontory of the cliff, looking directly into the brightest area of the overcast behind me, where the sun would be if it were out. Multiple ravens, silhouetted, are boiling up over the ridge.

From force of long and unexplained habit I begin counting, subconsciously knowing it will be easier to sort them as they clear the wall by ones and twos than after the break out over the river basin en masse. Fifteen.

Article and photos by Jim Burns

Undoubtedly you've heard the term "murder of crows." Ravens together are called an "unkindness of ravens." Regardless of the ancient origins of this sobriquet I've often thought it unseemly, for the groups of ravens I've encountered over a lifetime of birding have always appeared to be enjoying themselves, gamboling on the thermals, having fun. The show I am about to witness is unprecedented, unlike any other I've ever seen—ninety minutes(!) of constant aerobatics. Indeed, it is a rave of ravens.

This is a river of ravens, flowing together, splitting apart, ebbing, surging, diverging and coalescing again, like the braided waters below them. They seem to be working in pairs, sometimes multiple pairs together in formation, though the pairings appear to be promiscuous, the formations ephemeral and amorphous.

It is breathtaking! Free falling dives, steep ascents, one-wing tucks into loops, double-wing tucks into rolls, double loops, double rolls. I am exhausted, first by the sheer energy and length of the show, then by holding camera and lens up for minutes on end to capture something, anything, of this natural phenomenon. The action is spectacular, though the light is terrible for photography.

I am seeing a black river of feather and bone flowing over a white canvas of cloud and ether, all the while accompanied by croaking, knocking, gurgling, and the whisper of wings in the wind: I see one grab another's wing; I see another grab one's talon; I see one carrying a large, white mushroom(!) being chased by three others—endlessly.

Once as they swirl out over the river I notice, suddenly out of nowhere, a Bald Eagle is flying in their midst, neither the black river nor the dark raptor paying one another any mind. I manage only one frame of the eagle and realize, as camera and lens continue tracking upward to follow the billowing, boiling black spiral, I don't care about the eagle right now! Ruefully I laugh to myself.

Every time the ravens fly off, nearly out of sight toward the distant wall of Granite Reef and I think the show is over, they reappear in the distance in a totally unexpected direction, black wraiths, returning again and again as if to recharge in the thermal over the cliff face behind me. I know "black wraith" is contradictory. I know eagle trumps raven. I can't help myself. But finally they are gone. I wait, hopeful. They do not return. I glance at my watch. Ninety minutes, but it seems only a moment.

That moment is gone. That in-the-moment trance where only the ravens, the camera, and I exist, is broken, has fled with the black, winged, feral river in the sky. I feel the chill from the breeze, the tightness in my legs from the climb, the regret that my eagle vision is still unrequited. Binoculars up one more time before I leave, I glass upstream and see a dark, distant speck soaring above the desert against the backdrop of Ord. As the raptor banks, I catch a flash of white, both fore and aft. I'll be back.

Feathers as Habitat

By Jerry Lang

What do you think of when hearing the word habitat? Most of us think big in terms of things like pine forests, wetlands, tidal pools or prairies, because that's where big and well-known species like grizzly bears, Red-cockaded Woodpeckers and whales are found. However, the habitats of most of the organisms on earth—which include insects, arachnids and others, all the way down to microscopic organisms—are correspondingly small, like beneath a rotting log, the interior of a leaf, and even individual bird feathers.

For feather mites, their entire world, the only habitat in which they are found, is on and in bird feathers. These feather microhabitats provide a home for thousands of species of mites. The evolution and speciation of feather mites has been in lockstep with that of their bird hosts over the millennia, going all the way back to the dinosaurs

Family history: birds and mites

Feathers apparently began their evolution long before they were used in flight. Primitive feathers on various theropod dinosaurs may have served for insulation, camouflage, display in sexual selection or other purposes. The first feathers appeared to be more like thin filaments. These early feathers eventually evolved into more complex forms like the quill feathers of modern birds with a vane of barbs and barbules extending from a central rachis or quill.

The dinosaur-bird evolutionary linkage is strong. A clade is a grouping of organisms believed to have evolved from a common ancestor. The clade Avialae includes one group of theropod dinosaurs, called maniraptorsas well as our modern birds. They have in common over 100 distinct anatomical features, including hollow bones.

Bird ancestors and feathered theropods probably coexisted for millions of years. Archaeopteryx, a bird-like dinosaur capable of powered flight, is recognized as the animal that began the transition to the modern bird. Scientists consider birds as the only dinosaur lineage to survive the Cretaceous-Paleogene Extinction 66 million years ago.

Mites are arthropods. Other arthropods include insects, ticks, scorpions, spiders, crustaceans, and other groups. Arthropods have a hardened exoskeleton, segmented body, jointed appendages, and bilateral symmetry. Mites have two main body parts – the cephalothorax (containing the mouthparts and eight legs) and the abdomen. Among the 30,000 known mite species, great variation occurs in types of mouthparts and leg structures that are adapted to the thousands of microhabitats in which mites are found.

Ancestral feather mites probably evolved from free-living nest inhabitants that adapted to the wide variety of microhabitats on and in feathers of non-avian dinosaurs in the early Cretaceous era. As feathers and modern birds evolved, scientists hypothesize mites first invaded the skin and then moved to the down or plumose feathers, where there was maximum protection requiring the fewest morphological changes from their old free-living existence. Eventually, some mite groups adapted to inhabit the much more environmentally exposed quilled feather vanes and then finally invaded the interior of the quill.


Hummingbird feathers


Peacock feathers

Life in a feather universe

Feather mites are not parasites. They are considered relatively harmless commensals— organisms that are not benefitted from a host or harmed by the relationship. They feed on uropygial (preen) gland secretions, skin flakes, lymph, bacteria, etc. None of the mites feed directly on blood.

Small, soft-bodied feather mites don't fossilize well so their phylogeny is difficult to trace directly. However, species of mites are highly host-specific, with almost every bird species having a somewhat unique feather mite fauna indicating that the mites largely coevolved with their bird hosts.

Mite reproduction is sexual with developmental stages of egg-larva-pronymph-tritonymph-adult. Female mites lay eggs near those portions of a feather that will be inhabited by the developing immature stages. The females of some species of mites lay their eggs on feather lice using these insects for transport (a behavior called phoresy).

Mite species living in down feathers are soft-bodied whereas species inhabiting the outside surfaces of feathers have much harder exo-skeletons to withstand conditions of strong air flow, and constant movement of feathers during flight. New infestations of feather mites usually involve a transfer of mites from one conspecific bird host to another during mating and nesting.

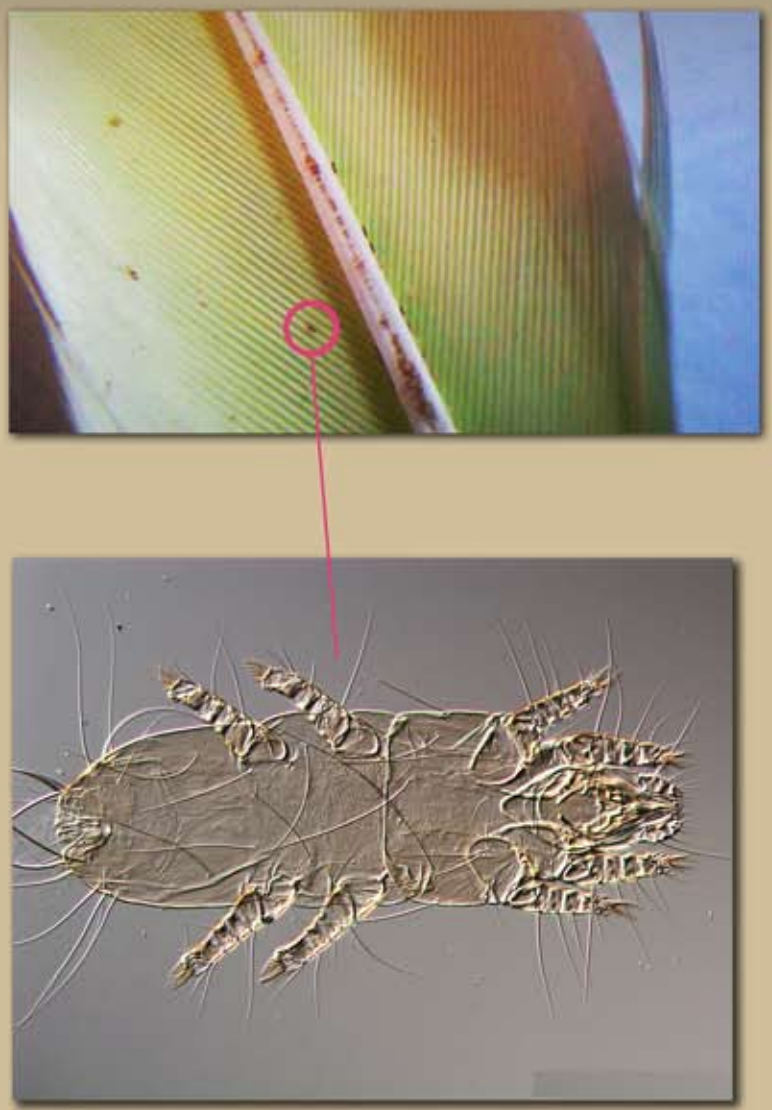
Quill mites have evolved to avoid many external environmental forces on the feather surface by occupying the lumen (interior) of feathers. Quill mites infest the feathers through the umbilicus superior (an opening at the feather base) or by chewing a tiny hole through the shaft. In the nest, female quill mites enter the open area at the base of the nestlings' quills and are subsequently sealed inside as the feather matures.

Molting provides a particularly serious challenge to feather mites. Scientists have hypothesized that female mites can sense a change in a flight feather's vibration, or an airflow change that identifies that the feather will soon fall out. The females avoid laying eggs on these feathers. In ducks and other waterfowl where all the flight feathers are molted simultaneously, the mites apparently sense the coming molt and move down into the skin at the base of the feather. They then re-infest the new maturing feathers as they grow out.

Various mite species are very specific about which feathers on their hosts they inhabit. A recent study in California of 753 hummingbirds (Anna's, Allen's Black-chinned, Calliope, and Rufous) found the feather mite Proctophyllodes huitzilopochtlii only on the tail feathers with a strong preference for the outer vs. the inner feathers.

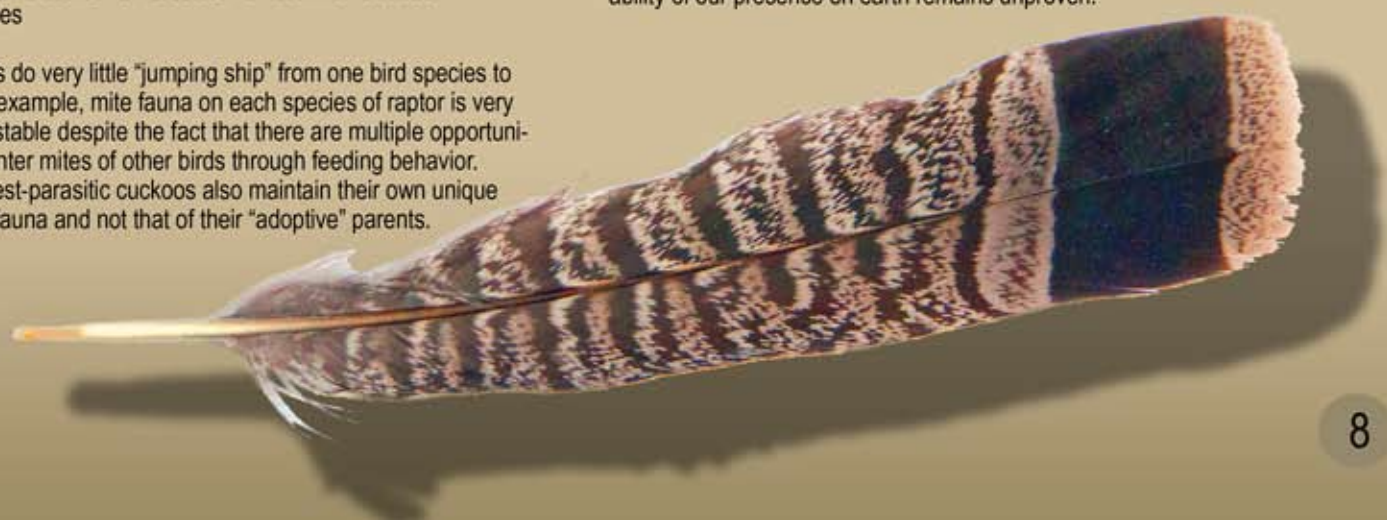
10,000 Species

Feather mites do very little "jumping ship" from one bird species to another. For example, mite fauna on each species of raptor is very uniform and stable despite the fact that there are multiple opportunities to encounter mites of other birds through feeding behavior. Species of nest-parasitic cuckoos also maintain their own unique feather mite fauna and not that of their "adoptive" parents.



Acarologists estimate that there are over 10,000 species of feather mites, most of which have not been taxonomically described. Because of their host specificity, feather mite systematics may also be valuable as another tool along with DNA analysis and other technologies to determine what is or isn't a recognized individual bird species.

Birds, our present-day dinosaurs, have been accompanied by their feather mite fauna in ever-evolving relationships over millions of years. Studying these multimillion-year relationships between mites and birds can remind us of how recently we humans have arrived on the scene and how the sustainability of our presence on earth remains unproven.



An Island Adventure

Peter Butler

Lifelong birder Peter Butler lives in Worcestershire on the River Severn in the United Kingdom. His drawings have been included in a local field guide, "Birds Around the Malverns."

Back in January, I happened upon a retweet by Rare Bird Alert, seeking volunteers for the North Ronaldsay Bird Observatory in Scotland. A respectful enquiry of my wife raised no objections and so I emailed to express an interest.

Six months later I was on my way – a two legged flight to Kirkwall, Orkney, and then the short hop by small plane made it seem a proper adventure.

Eurasian Wryneck

Volunteering entailed assisting the wardens with bird censuses and ringing, while the "paying your way" part was doing shift-work for the Observatory functions of guest house; hostel; campsite; shop; bar; restaurant and croft.

North Ronaldsay is the most northerly island of the Orkneys, from which you can just about see Fair Isle and the Shetlands further to the north. It's four miles long, flat, and contains scattered crofts, many of them derelict, among a patchwork of dry stone-walled fields. There are a few shallow lochs generally being invaded by large beds of flag iris. The coast is of low cliffs, rocky foreshores and wide sandy bays. An encircling sea wall completely separates the shore from the interior and the famous North Ronaldsay sheep live outside this wall surviving on seaweed.

The highest point is occupied by Holland House, the laird's house, surrounded by stunted sycamores, the only trees on the island, where rare birds are regularly trapped for ringing, including last year's Scops Owl and this spring's Veery.

And, of course, it's the birds I was keen to see, and which now give me my best memories.

The daily censuses are the mainstay of Observatory work and coverage of the whole island is essential to track the comings and goings of the large numbers of birds that pass through. My induction to the census rota was to go out in the company of Mark "Laser Eyes" Warren, the permanent warden. He strode ahead, pointing out birds, whilst keeping up a running commentary of the rarities seen on that particular stretch of stone wall. Meanwhile, I stumbled along behind concentrating on keeping my feet.

I did at times get to do the sitting and watching sort of birding: my favourite memory is of seeing the Skuas harassing their quarry: the powerful Bonxies going after, and bringing down Gannets; and the Arctic Skuas chasing down Arctic Terns and Black Guillemots. At any time a "boiingg" from my phone could mean a text possibly announcing a rarity. One would cease what one was doing, race back to the road and leap aboard the Land Rover to go off and see whatever it was, say Bee-eater or White-rumped Sandpiper.

Ringing duties were a lot more varied than I'm used to: during July we chased after wader chicks; tried to avoid standing on Arctic Tern chicks and eggs in their colonies whilst being dive bombed by their parents; and, in August, extracted young Black Guillemots from their smelly hole. The Fulmars were late though, which meant that I didn't have to cope with their projectile vomiting. The best bit was staying up through the short light nights attracting storm Storm Petrels with a PA system and trapping them in mist nets. They are absolutely charming little birds in the hand with a slight smell of fishy hay. When you've finished ringing them you set them down on top of the sea wall and after a moment to get their bearings, they flutter unsteadily off into the night.

In early August the pastures are mown for silage and passage waders descend in large flocks.

The odd passing raptor will set them off and the sky fills with thousands of birds: Golden Plover; Lapwing; Oystercatcher; Redshank; Dunlin and Curlew with smaller numbers of Snipe, Ruff, Godwits and Ringed Plovers – a magical spectacle.

Common Redshank

Transport to and from the island can be a problem. For my departure, I got up early for a lift to the airfield only to hear, but not see, the plane approach, circle and then depart in the low cloud. Luckily it was Friday and a ferry was due and, as the morning wore on, we watched it approach, heave to off the jetty and sit there for half an hour in the heavy swell – only to depart without landing. All seven seats were taken on the lunchtime plane and the evening one would be too late for my connecting flights, so some frantic phone calls persuaded Loganair to put on an extra flight - crisis averted.

I half wish I'd been stuck though. Two days after I'd left, the Observatory blog notes: "one of the most impressive August 'falls' in recent years with passerine migrants quite literally everywhere!" It records Greenish Warbler; 6 Wrynecks; Common Rosefinch; Corncrake; 2 Barred Warblers; Marsh Warbler; American Golden Plover; and high numbers of commoner species including 17 Pied Flycatchers.

Getting Ready for Africa!

Kathe Anderson
Photos by David Rosenberg

In November 2018, Larry (my spouse, or SOB, Spouse of Birder) and I were lucky to join a flock of birding buddies on a Road Scholar birding adventure to four countries: South Africa, Zambia, Zimbabwe and Botswana. While most normal people would be thinking about flights, malaria pills and what to pack, I was thinking about birds.

Egrets and eagles, and plovers and pipits would be familiar, but what about eremomelas and pytilas? How about the confusing boubous, bulbuls and brubru?

How does one even start to prepare for a birding trip to southern Africa? I started early, with a trip to Amazon—the online merchant, not the great South American river. I googled "South Africa field guide" and Birds of Southern Africa, a Princeton field guide, got the best reviews. My generous daughter purchased it for Christmas for me, in 2017.

I studied the Road Scholar itinerary which, in addition to detailing meals, lodging, laundry services and boat rides, listed the national and local parks we'd be visiting, and what bird species we'd be likely to see. I duplicated the list, looked up each species in my new book, and made brief notes of diagnostic marks. I glossed over species like the Pied Avocet; anyone familiar with the American Avocet, with its upturned bill, would immediately recognize this similar bird.

Thankfully, a few birds were immediately recognizable, even if out of context, including:
Barn Swallows. They are known in southern Africa as European Swallows, because Europe is where they breed. They were just starting to arrive for the winter in Africa, to take advantage of the impending buggy rainy season.
Cattle Egrets. These birds are native to Asia and Africa, but relatively recent additions to the New World, arriving in South America as early as 1877, and moving north to Florida about 1953.
Glossy Ibis. In Arizona we see the closely-related White-faced Ibis, but their East Coast cousins are the Glossy Ibis, the most widespread ibis species in the world, present in the Caribbean, Europe, Asia and Australia, as well as the United States and Africa.

I concentrated on unfamiliar families and species, trying to squeeze them into familiar categories. So cisticolas, prinias and camaropteras are really warblers, sort of like our redstarts and waterthrushes are also warblers. But there are 19 cisticolas alone, including those named Chirping, Croaking, Rattling, Singing, Tinkling, Wailing and Zitting ... and Lazy. Is a Lazy Cisticola one that does not chirp, croak, rattle, sing, tinkle, wail or zit? This is why we pay professional guides—and even they argued about which cisticolas we were seeing!

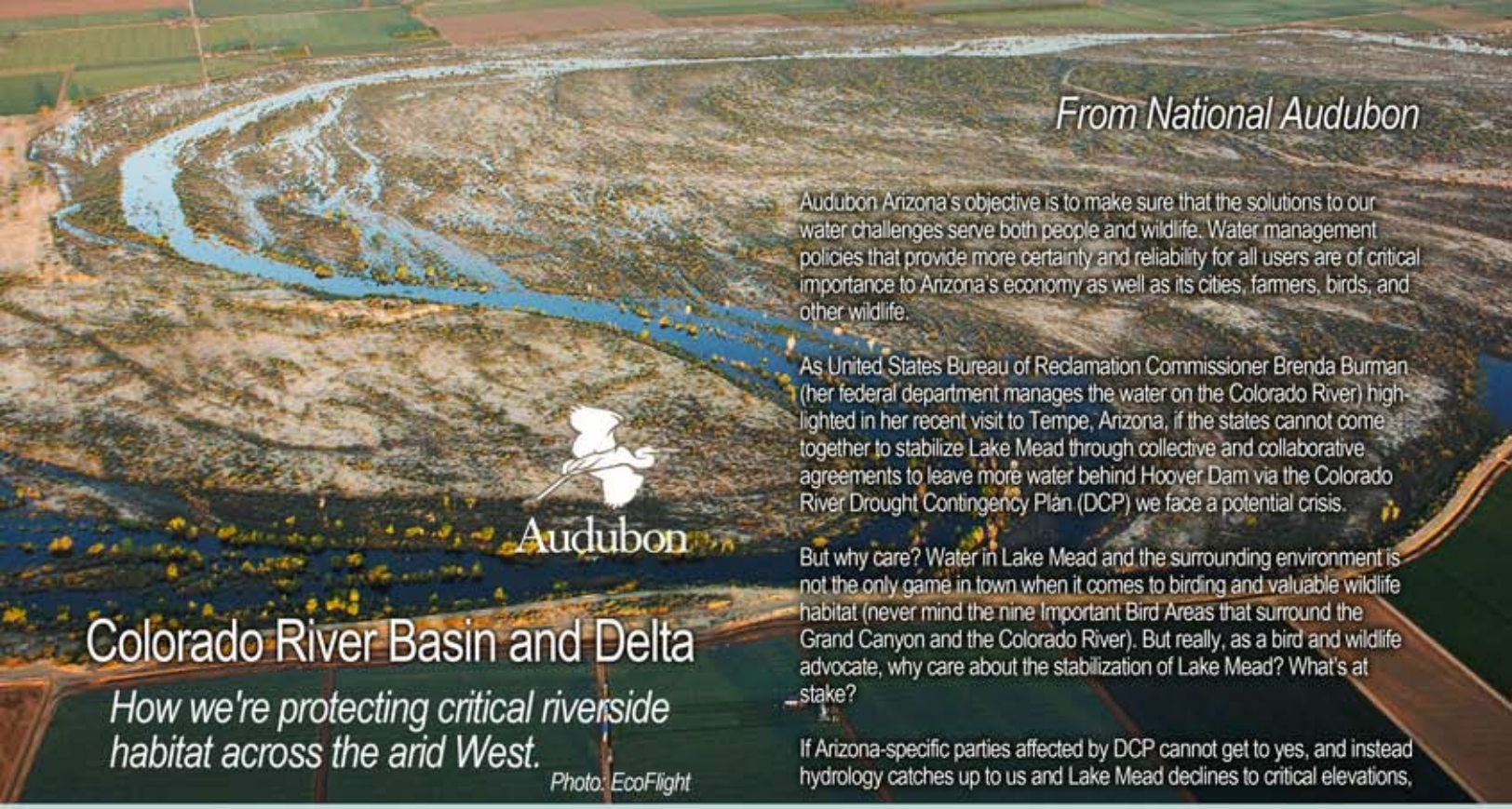
Those B birds, the boubous, bulbuls and brubru, represent two diverse families. The bulbuls, according to the guide book, are locally known as "toppies" and "are notoriously difficult to identify." For Americans, bulbuls are represented by the Red-Whiskered Bulbul, a tropical Asian bird that has established populations in Los Angeles, Hawaii and Florida. In Sibley's field guide, this bulbul sports an impressive crest and is sandwiched between our Phainopepla and Cedar Waxwing.

As for the boubous and brubru, they are bushshrikes. "Shrike" is something familiar, even though the African field guide says they are only superficially related to "true shrikes" and are more closed related to batises and vangas (say what?). Still, a shrike is a stocky songbird with a thick bill, and that works for me!

Lastly, Road Scholar provided YouTube links to four videos of southern Africa birds, each about 15 minutes long, taken by an excellent videographer with labels of each bird. Wow! To see the birds in their habitats, to hear them vocalize and to note their behaviors was almost like being there. It was a great preview! If you're lucky enough to take an organized trip to an exotic land to see birds, ask the trip sponsor about links to videos of birds you might see.

One excellent reason for studying the birds before you go somewhere exotic has little to do with their visual identification. For me, listening to guides who speak excellent English, but with an accent, requires a lot of concentration. Our guides were great, but English was their second language from any number of southern African languages. Zambia has seven major languages, and over 70 ethnic groups with their own traditions. Zimbabwe has 16 official languages. People probably learn English with an Afrikaans accent—and tribal language influences. We learned early that what we pronounce Cape Town, our guides call Cap Town. So Cape Canary sounded like Capped Canary to my ear. You can imagine our confusion with the B birds! However, with some study, familiarity with the exotic bird names really helps.

With lots of preparation, many unusual birds became a bit familiar and identifiable on sight. But it was still thrilling to see them in person, and still amazing to experience surprises every day. Could I have been better prepared? Probably. Do you have other methods of learning about birds before you see them? I'd sure like to hear from you!



Colorado River Basin and Delta

How we're protecting critical riverside habitat across the arid West.

Photo: EcoFlight

From National Audubon

Audubon Arizona's objective is to make sure that the solutions to our water challenges serve both people and wildlife. Water management policies that provide more certainty and reliability for all users are of critical importance to Arizona's economy as well as its cities, farmers, birds, and other wildlife.

As United States Bureau of Reclamation Commissioner Brenda Burman (her federal department manages the water on the Colorado River) highlighted in her recent visit to Tempe, Arizona, if the states cannot come together to stabilize Lake Mead through collective and collaborative agreements to leave more water behind Hoover Dam via the Colorado River Drought Contingency Plan (DCP) we face a potential crisis.

But why care? Water in Lake Mead and the surrounding environment is not the only game in town when it comes to birding and valuable wildlife habitat (never mind the nine Important Bird Areas that surround the Grand Canyon and the Colorado River). But really, as a bird and wildlife advocate, why care about the stabilization of Lake Mead? What's at stake?

If Arizona-specific parties affected by DCP cannot get to yes, and instead hydrology catches up to us and Lake Mead declines to critical elevations, water users may look elsewhere for water to make themselves whole. Water resources like groundwater, and existing Arizona regulations that promote sustainable water planning, may come under increased scrutiny and pressure. Arizona's valuable rivers, streams, and the habitats they provide for birds could be at risk if groundwater pumping increases. Not to mention the negative headlines that are sure to result if we cannot agree on a plan to use less Colorado River water.

As opposed to unmitigated shortages that leave people out on the hunt to solve their water supply problems, a much better option is a plan that everyone agrees to. Some of what that currently looks like in Arizona is monetary compensation to use less water, and changes in the way accounting is done on Lake Mead so that willing water users can leave more of their water behind the dam. Through careful negotiation with the affected water users, people can get to yes, and there can be faith in the process and the result.

Another reason to care? We'll take Commissioner Burman's lead on this one: Because if Lake Mead gets low enough, "dead pool" could be reached and that means no water is getting past the dam. No Colorado River water is flowing out of Mead. That's a scary scenario for farmers, cities, and wildlife. Commissioner Burman is clearly worried about a situation like that—hence her urging of the states to commit to Drought Contingency Plans ASAP.

We'd like to thank Commissioner Burman for amplifying the message on this critical issue. We anticipate more information in the weeks and months ahead from the Arizona Department of Water Resources and the Central Arizona Water Conservation District on progress toward a DCP. Then, it will be in the hands of state lawmakers and Governor Ducey to construct and pass legislation that allows Arizona to participate in getting DCP done.

At Audubon Arizona, we'll be watching and participating as the process continues. Being involved in the conversation when policymakers are talking water—one more way we are advocating for our rivers and the wildlife, habitat, and humans who depend on them.

The Colorado River is the lifeblood of the American West, and the wetlands and riparian forests along its banks provide critical habitat for hundreds of species of birds. That habitat is rapidly drying up. Increased water demand from growing cities and agriculture, in combination with decreasing river flows—a symptom of climate change and drought—has drastically degraded ecosystems along the Colorado River.

And it's not just wildlife that is being affected by water scarcity: the 36 million people who rely on the Colorado River and its tributaries are facing the prospect of shortages as the demand for water now exceeds supply.

With Audubon's expertise in both Western water policy and conservation science, we are uniquely positioned to identify long-term water-management solutions that will secure a reliable water supply for wildlife and for people throughout the West. Our commitment to collaborating with water users, farmers, and other stakeholders allows Audubon to identify solutions that align habitat protection and restoration with improved water supplies for communities.

With this sophisticated approach, our solutions have real appeal at the negotiating tables where these new water-sharing agreements are being worked out. But crafting a solid framework is just the first step; with an engaged grassroots network of members, local chapters and state offices throughout the West, Audubon will also ensure that the policies it helps create are implemented to produce positive outcomes for birds and their habitats. Through strong collaboration and strategic, science-based conservation measures, we can ensure that every drop of water is used to maximize its benefit to both birds and people.

Audubon's work on water is for all of us – taking care of people and their water supply is taking care of the birds and the environment. And the converse is true too: taking care of birds and the environment is taking care of people and their water.

Arizona Sightings

Information on rare sightings can be obtrained from the Arizona Field Ornithologists site at: azfo.org Photo documentation page

Red-necked Grebe (Podiceps grisegena), Lake Pleasant, Yavapai County. This Red-necked Grebe was found and photographed by Mary McSparen on 19 November 2018. Two seen together with at least one representing a new individual. An individual was found by Melanie Herring on 16 November 2018 and this appears to be a different bird. Possibly as many as three on the lake. Casual (though increasing) migrant and winter visitor, primairly to the LCRV and lakes around Phoenix.

Gray-crowned Rosy-Finch (Leucosticte tephrocotis), Echo Cliffs, Coconino County. One Gray-crowned Rosy-Finch was found among a flock of Black Rosy-Finches by Chuck LaRue on 9 December 2018, and a second was found by Chuck LaRue, Jason Wilder, Tom Linda, and Gerry Nealon on 10 December. They were photographed by Brian Johnson on 9 December, by Jason Wilder on 10 December, by Deanna Bibbee on 15 December, and by Chris Rohrer on 21 December 2018. Casual, with two prior records: one from 2013 and one from 1967.

Lesser Black-backed Gull (Larus fuscus), Katherine Landing, Lake Mead NRA, Mohave County. This Lesser Black-backed Gull was found and photographed by Michelle Brock on 11 January 2017. Currently nine accepted records for the state with two others pending. This species is increasing with the first state record occuring in 2006, and nearly annual records in the past five years. A bird still in juvenile plumage.

Black Rosy-Finch (Leucosticte atrata), Echo Cliffs, Coconino County. This flock of Black Rosy-Finches (up to 70 reported) was found by Gerry Nealon on 8 December 2018 and photographed by Jason Wilder on 10 December. Casual in Arizona and irruptive, with four records accepted by the ABC but an unknown number of occurrences prior to ABC records. This species may occur more regularly in Arizona than currently known, as most have been found in remote areas with little birder coverage.

Harris's Sparrow (Zonotrichia querula), Palo Duro Golf Course, Santa Cruz County. This Harris's Sparrow was found and photographed by Bill Lisowsky on 11 December 2018. Rare transient and winter visitor in Arizona.

Black-legged Kittiwake (Rissa tridactyla), Arrowhead Ranch Lakes, Maricopa County. This Black-legged Kittiwake was found by Emma Vedock-Gross on 25 December 2018 and photographed by Steve Hosmer on 27 December 2018. Casual late fall and winter visitor to Arizona with 20 prior accepted records (and 2 pending).

Rusty Blackbird (Euphagus carolinus), Near Red Rock Feedlot, Pinal County. This Rusty Blackbird was found by Jennie MacFarland on 31 December 2018 and photographed by Richard Fray on the same date. There are currently 36 accepted records for the state. Populations of Rusty Blackbirds have seriously declined throughout its range due to unknown causes.

Eurasian Green-winged Teal (Anas crecca crecca), Phoenix Federal Prison, Maricopa County. This Eurasian Green-winged Teal was found and photographed by Ryan O'Donnell on 03 January 2019. If confirmed, this would be the third documented record for Arizona. See here, here and here for information on the previous records. Currently the AOS checklist committees consider Eurasion Green-winged Teal and American Green-winged Teal to be subspecies. However, other authorities consider them to be full species.

Trumpeter Swan (Cygnus buccinator), The Shield Ranch - Nature Conservancy (private), Yavapai County. This Trumpeter Swan was found by Kay Hawklee, Lisa Grubbs, and Kristen Rothrock and photographed by Kay Hawklee on 02 January 2019. Though apparently increasing, Trumpeter Swan remains very rare in Arizona, with nine accepted records and several more pending.

Sooty Fox Sparrow (Passerella iliaca unalaschcensis Group), Buckeye, Maricopa County. This Sooty Fox Sparrow was found and photographed by Lyndie Mason Warner on 26 October 2017. The status of this subspecies group in Arizona is poorly known. Since the ABC began reviewing the group in the early 2000s, there have been two accepted records, as well as one pending review, in addition to a historical specimen listed by Monson and Phillips (1981). The Sooty Fox Sparrow appears to be casual at best in the state, with most birds belonging to the Slate-colored group and a larger minority being in the Red group, which was removed from the review list in 2015.

ANNOUNCEMENTS

See DRAS website calendar for ***more comprehensive information.***
See our website at desertriversaudubon.org for a calendar of activities and field trips.

Monthly Speaker Series

Monthly Speaker Series programs are held at the Southeast Regional Library at the southeast corner of Greenfield and Guadalupe Roads in Gilbert. Browse our book table for the latest birding guides and more! Doors open at 6:30 p.m. and the program starts at 7 p.m. Watch the calendar at *desertriversaudubon.org* for announcements of future speakers.

September 10: Birds of Central Arizona - Jim Ripley
Jim Ripley, retired editor of the East Valley Tribune, travels widely to capture birds in action. In addition to areas of Arizona, he has traveled to Texas, Ohio's Magee Marsh, Minnesota's Sax-Zim Bog and Northumberland in Wales, where he photographed Atlantic Puffins. For our season opener, Jim focuses on Central Arizona. Join us as he shares the beautiful images he created close to home.

October 8: Landscaping for Birds – Kirti Mathura.
Kirti Mathura has a bachelor's degree in botany and environmental biology from the University of Montana. After completing her degree, she worked as a Peace Corps volunteer in Costa Rica, running a tree nursery and teaching environmental education in public schools. In 2010, Kirti was named Master of the South West by Phoenix Home and Garden Magazine for her contribution to public horticulture.

November 12: Birds of Arizona – Charles Babbitt.
Take a tour around Arizona to some of our most productive and interesting birding spots, featured in Charles Babbitt's new book "Birding Arizona: What to Know, Where to Go." Learn about Arizona's habitats and bird migrations, including the summer influx from the Gulf of California, the fall hawk and shorebird migrations, and great places to watch. Charles will be signing his book before the program.

December 10: Birds Bringing Reluctant Neighbors Together – Dr David Pearson
For 20 years the. Gila River Indian Community (GRIC) has invited outsiders to help with their annual winter bird count. This rare opportunity has opened a door to better understanding between community members and those living outside their borders. In this talk we will try to understand how birds and conservation efforts are providing common ground for better relations. Speaker David Pearson, a professor at ASU's School of Sustainability, studies the interaction of ecology, conservation, ecotourism and education to develop methods that promote sustainable use of biodiversity.

January 14: Arizona's Pygmy Owls – Stephen Vaughan.
Arizona has two species of Pygmy Owls: the Northern Pygmy-Owl and the endangered Ferruginous Pygmy-Owl. These two species are far from typical owls. What is it that makes them so unique? Find out with Steve Vaughan, who will share stunning photographs and fascinating stories what it took him months to learn in the field. Vaughn is an ornithologist and professional photographer living in Tucson.

Field Trips

Check out field trips at ***desertriversaudubon.org/field trips***

Join us in the field!
You can expand your knowledge of birds and make new friends by going along on a field trip sponsored by Desert Rivers Audubon Society. These walks are a great way to experience the excellent birding in and around the metropolitan area and in the state.

Join us for part or all-day excursions or explore further away on overnight expeditions. Some of our outings are formal, with expert guides in the lead. We also organize pop-up trips, pooling our expertise and learning from each other. There is no fee, however some may require participants to share the cost of gas; individuals are always responsible for entrance fees.

Keep up to date by checking the Desert Rivers Audubon calendar, just one click away at desertriversaudubon.org. Use the registration button at the bottom of the home page to sign up for our e-newsletter, where you will find a complete list of upcoming birdwalks, both guided and pop-up. The number of participants in each trip is limited, so you must register. For details on formal excursions contact the guide directly. For information about pop-up trips, reach out to our Field Trip Director, Gwen Grace, at gwengellen@gmail.com.

So, whether you are an expert or a novice, grab your bins and join us in the field!

Owl Walk and Talk
Desert Rivers Audubon's public birdwalks at Gilbert Riparian Preserve and Veterans Oasis Park are on hiatus until fall, but our owl walks run year-round on the fourth Saturday of the month (April 27, May 25, June 22 and July 27). Join a guide at the ramada at Zanjero Park on Lindsay Road south of the 202 one hour before sunset and learn about burrowing owls. Desert Rivers Audubon constructed the habitat with our partner, Wild at Heart, in 2012.

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Here's an easy way to support Desert Rivers Audubon Society. Access Amazon.com by going through smile.amazon.com. When you buy qualifying products, Amazon donates a portion of your purchase to Desert Rivers. It doesn't cost you anything, plus the selection and prices are the same. So, bookmark the link and use it whenever you shop. We thank you and the birds will too!

Bird Nest Identification

Young Birders'

Anne Leight

"Whose nest is that?" is one of the most comment questions I get on springtime bird walks in the Gilbert Riparian Preserve. Here we have images of six common nests and descriptions of their shape, material used and location.

Vireos: Size/Shape: Basket-like cup of grass. *Material:* Straw-like stems, plant fibers, small skeletonized leaves. *Location:* Suspended from forks of low branches of small trees.

Bell's Vireo on nest – Kevin Bergersen

Hawks: Size/Shape: Nests are tall piles of dry sticks up to 6.5 feet high and 3 feet across. *Materials:* Outer cup woven of dry sticks; inner cup made of bark strips fresh foliage, and dry vegetation. *Location:* Crowns of tall trees where they have a commanding view of the landscape.

Red-tailed Hawk nest

Orioles:Size/Shape: Gourd- or pouch-shaped with a depth of 5-15 inches. *Materials:* Woven from fibers such as hair, twine, grasses; lined with soft materials such as the "cotton" from cottonwoods. *Location:* 10 to 25 feet above the ground in isolated trees or at the edge of a woodland, commonly near water; suspended from the ends of flexible branches to discourage predators.

Bullock's Oriole nest -Anne Leight

Verdin: Size/Shape: Large sphere with a hole usually located near the bottom. *Materials:* Outer shell of sticks, lined with leaves and smaller twigs. *Location:* Shrubs or small tree.

Verdin nest (Anne Leight)

Lucy's Warbler: Size/Shape: Woven nest in cavity. *Materials:* Twigs, weed stalks, straw, mesquite leaf stems; lined with fine bark, plant fibers, hair, and feathers. *Location:* Mesquite and willow thickets along riparian corridors.

Wilson's Snipe: Size/Shape: In a shallow scrape in moist soil, weaves a lining of coarse grasses to build a nest up to 7 inches across and 3 inches deep. *Materials:* Female adds fine grasses to the inside, creating a more elaborate nest than the simple scrapes most shorebirds make. *Location:* On the ground close to water.

Photo by Levi Plummer

Blue Grosbeak: Size/Shape: Compact, cup-shaped nest. *Materials:* Woven from twigs, bark strips, rootlets, cotton, rags, string, snakeskin, dead leaves. *Location:* Low in small trees, shrubs, tangles of vines.

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It's Personal

Audubon chapters create a culture of conservation in local communities. Desert Rivers Audubon Society focuses on our neighbors in the East Valley, opening eyes one person at a time to birds and nature though our speaker series, our guided birdwalks and our annual native landscaping tour.

For us, it's personal. Join today and please, bring a friend!

How to Join Desert Rivers

Membership in Desert Rivers Audubon Society helps support our chapter's outreach activities and operating costs. Annual membership entitles you to our quarterly magazine, priority status for field trips and events, and discounts on products and services. See desertriversaudubon.org/membership.

Students/Senior (65+)	$25	Individual	$30
Senior Couples	$40	Family	$50
Corporate	$300+		

The National Audubon Society and local Audubon chapters are separate entities. All Desert Rivers Audubon dues are dedicated to local programs. You may hold concurrent memberships in National Audubon and any number of local chapters. If you are a National Audubon member, you may assist this chapter by designating Desert Rivers (Chapter B08) as your assigned chapter by emailing

audubon@emailcustomerservce.com

Spring desert in Phoenix