

VERMILION FLYCATCHER

TUCSON BIRD ALLIANCE

Winter 2026 | Vol 71 No 1



AVIAN ARCHITECTS:
NESTS & NESTING



TUCSONBIRDS.ORG
Winter 2026 | Vol 71 No 1

MISSION

Tucson Bird Alliance inspires people to enjoy and protect birds through recreation, education, conservation, and restoration of the environment upon which we all depend.

TUCSON BIRD ALLIANCE

300 E University Blvd. #120, Tucson, AZ 85705
TEL 520-629-0510 · FAX 520-232-5477

BOARD OF DIRECTORS

Karen Howe, *President*
Milly Lierman, *Vice President*
Lissie Jacquette, *Secretary*
Karen Howe, *Acting Treasurer*

Rick Applegate, Michael T. Bogan, Richard Carlson,
Leslie Cohen, Kathy Jacobs, Saul Macias, Stephanie Montaña

We acknowledge the hard work and dedication of everyone at Tucson Bird Alliance. To see a list of our staff, please visit TUCSONBIRDS.ORG/STAFF.

NATURE SHOP + NATURE CENTERS

Nature Shop: tucsonbirds.org/shop
Mason Center: tucsonbirds.org/mason
Paton Center for Hummingbirds: tucsonbirds.org/paton

VERMILION FLYCATCHER is published quarterly. Email drosenblum@tucsonbirds.org for address changes or subscription issues.

Vermilion Flycatcher Production Team

Matt Griffiths, *Editor-in-Chief*
Melina Lew, *Design*

© 2026 Tucson Bird Alliance
All photos © the photographer

ON THE COVER

Harris's Hawk at its stick nest in a saguaro by Rick Cameron. See more of Rick's work at: [FLICKR.COM/PHOTOS/RICKCAMERON](https://www.flickr.com/photos/rickcameron/).

CONTENTS

- 02 Almanac of Birds
- 05 Where the Chicks Hang Out: Nesting in the Sonoran Desert
- 08 Saguaro Nurseries: Woodpecker Engineers Benefit Many Nesting Creatures
- 10 Structure and Sustenance: Native Plants That Fit the Bill for Nesting Birds
- 12 Supporting Cavity Nesters Across Southeast Arizona
- 13 Homes for Habitat: Supporting Wildlife in Your Backyard with Nestboxes
- 14 The *Arizona Breeding Bird Atlas* Provides a Snapshot in Time
- 16 Normal Birds, Wacky Nests
- 18 Misunderstood Mistletoe
- 20 Sweetwater Sightings
- 21 Paton Center for Hummingbirds
- 22 Short on Space? Try a Container Habitat!
- 23 Habitat Steward Spotlight
- 24 Birds + Community
- 27 Volunteers

Choosing an agent aligned with your values...

Kimberlyn DREW

LONG SMART MOVE.
A RE/MAX REALTY PARTNERSHIP AFFILIATE

KimberlynDrew.com
520.237.1408
MBA • Associate Broker • Birder

MASON CENTER SAGUARO POSTER!

Watch 20 years of growth in this majestic saguaro photographed by Doris Evans and turned into a limited run 18"x24" print. \$15.00 in the Nature Shop

Mason Center Saguaro

tucsonbirds.org 2021-2026 | 11110525121W
Photography by Doris Evans

FRONT ROW SEATS TO THE FIGHT FOR LIFE



While some folks attempt to deter birds from nesting on and around their homes (weirdos!), when a bird nests on or near my house, I tend to feel as if I have been ordained, chosen by the avian powers that be to watch over them, like an urban Snow White.

The construction process alone is marvelous, and once those eggs hatch, I wait on bated breath for them to fledge, at which point I can enjoy a sigh of relief, though I know their battle for survival has just begun. I become so invested in these little Verdin, flycatcher, and woodpecker lives that I can't help but feel a sense of responsibility for those that don't make it, which, inevitably, happens every year, in every clutch, with some losses more disturbing than others. Watching nesting birds is a reminder of birds' vulnerability, even amongst the most adapted and prolific species, and a front row seat to the incredible resilience, ingenuity, and tenacity of even the tiniest birds.

Even the most resilient among us are having their mettle tested by the rapid pace of development, prolonged drought, and climate change we're experiencing here in Southeast Arizona and across the globe, while policymakers continue to fail us—us, meaning all life on earth—miserably. So, let's roll up our sleeves and do what we can on our own!

One of the most impactful things you can do to support nesting birds is to plant a native shrub or tree, or hang a nestbox in a suitable location for cavity-nesting birds (this issue will offer pointers from our knowledgeable staff and volunteers!). Increasing bird habitat doesn't always require large swaths of land. We can build it in our yards, on patios and porches, in friends' yards, in parks and public spaces (demand native plants in your public spaces!), giving birds and their wee ones a fighting chance.

Just beware, if you build it, they will come, and you'll have to set aside everything you're doing to obsess over them.

For Birds and People,



Melissa Fratello
Executive Director
mfratello@tucsonbirds.org

ALMANAC of BIRDS

January to March

Late winter and early spring in the Sonoran Desert bring the start of the nesting season—it's never too early! A lot of birds such as Anna's Hummingbird, Curve-billed Thrasher, and Great Horned Owl nest before the real heat of summer sets in, and employ a range of nest styles and strategies that enable them to be successful. Two of the most interesting, and favorites of mine, are the Verdin and Brown-headed Cowbird.



Matt Griffiths
Communications Coordinator
mgriffiths@tucsonbirds.org





LIFE IN A FOOTBALL

If you spend any time wandering around the desert you have likely spotted an old or active Verdin nest—they are conspicuous and long-lasting. Busy little Verdins seem to always be working on a nest and it shows, their numerous constructions are difficult to miss, usually located on the outside edges of trees and shrubs. They are unique, football-shaped masses of pokey twigs on the outside, with a small entrance hole that usually faces down and away from the center of the tree. This design and open flight path makes it easier for Verdins to zoom right into the nest and discourages other species from getting in, especially cowbirds. The constant building allows Verdins to make customized nests for breeding and roosting and for any weather condition. Entrance holes of thin-walled nests are oriented toward breezes in summer and away from cold winds in thickly-lined nests during winter. These insulated roosting nests must work well—an event was documented one freezing morning as 30 Black-tailed Gnatcatchers emerged from a Verdin nest! Not surprisingly, juvenile Verdins begin making their own nests shortly after leaving their parents. They especially prefer to place nests in mesquite, palo verde, creosote, and acacia. Providing this thorny, native vegetation in your landscapes will increase the chances of the busy little Verdin taking up residence and providing endless, year-round entertainment.

Verdins are easy to miss since they are a tiny gray bird in almost constant motion. Keep an eye out for their yellow head and little red shoulder patches. They are highly adapted to our desert vegetation and can glean all the water they need from their food. Verdins mostly feed on insects, larvae, and spiders—one study calculated they ate up to 540 per day during winter! When available, they also eat fruits, sugar water from hummingbird feeders, and flower nectar—they seem to really like chuparosa flowers! Because their short tongues can't reach the nectar of most flowers, they “nectar rob” by poking holes in the sides of flowers to access the rich sugar water.



WE DON'T NEED NO STINKIN' NESTS!

Typically a later spring and summer nester, the Brown-headed Cowbird isn't successful because of nest design, but by a nesting strategy. Simply put, they don't use nests, at least not their own. This blackbird is our most common “brood parasite,” meaning the females skip building nests and instead put all their energy into laying a lot of eggs in other species' nests (up to 40 in a season!). They abandon their young to be raised by other birds, a somewhat chilling proposition, but one that seems to work just fine. The cowbirds gain a huge advantage by hatching first and developing faster, and they sometimes toss out the existing eggs and young nestlings. Yes, this is unfair to the host species—you've probably seen photos of tiny warblers feeding giant cowbird nestlings. But Brown-headed Cowbirds are just doing what they've always done. Originally a species of the short-grass plains, these “Buffalo Birds” followed herds of bison and fed on the insects kicked up by the hulking ungulates. Some bird species that evolved with cowbirds can recognize the invaders' eggs and destroy them, but the many species newly exposed to brood parasitism are not prepared, and the effects on some populations can be enormous. Famously, cowbirds have been shown to reduce the numbers of the endangered Kirtland's Warbler and the threatened Black-capped Vireo. In Southeast Arizona, Black-tailed Gnatcatcher, Black-throated Sparrow, Yellow Warbler, and Bullock's Oriole are among the most often targeted host species.

In addition to grasslands, Brown-headed Cowbirds favor agricultural areas, meadows, and lawns where they feed mostly on seeds and also insects as cows and horses kick them up. Interestingly, females also eat snail shells and other birds' eggs to satisfy their large calcium requirement needed to lay so many eggs in a season. The species is present in southern Arizona year-round and can be found in large mixed flocks with other blackbirds in livestock feedlots during winter. Because young are raised by other species, song learning in cowbirds is still a mystery—listen for the male's beautiful, liquidy-gurgle song and the female's chatter call in any open area during summer.

OPPOSITE: Anna's Hummingbird, Laura Stafford Covic
 ABOVE: Verdin peeking out of its pokey nest, Lois Manowitz;
 Brown-headed Cowbird, Mick Thompson



AVIAN ARCHITECTS:
NESTS & NESTING

WHERE THE CHICKS HANG OUT NESTING IN THE SONORAN DESERT



I was hidden, camouflaged under a scrawny mesquite tree, watching the goings on at a Crested Caracara nest. The parent bird had just chased down a rodent and now two, cute baby carcaras with oversized beaks and huge feet sat contentedly in the nest, their crops bulging full. Perhaps the most fun time to observe birds is when they're nesting and raising young, but this is also when they are most vulnerable—they become sitting ducks for predators. Birds and their chicks not only face the threat of predation, but must deal with issues of thermoregulation as well. They have developed ingenious adaptations to these problems, which are often reflected in the form and structure of the nest itself.

Ground nesting birds, such as quail, nighthawks, Common Poorwill, and Killdeer, have precocial chicks. When hatched, the chicks arrive covered in down, wide-eyed, ready and able to follow their parents on foot. They generally leave the nest site shortly after hatching since the odor of open eggshells may attract predators. Most ground nesters usually don't construct much of a nest since it will be abandoned at hatching. Such species may rely on camouflaged eggs as nighthawks do, or hide their eggs under vegetation (or in backyard flowerpots) as do quail.

Birds that produce altricial young that are naked, blind, and helpless, need a safe refuge in which their young can develop. Most altricial birds build elevated nests in cup shapes, platforms, or hanging pouches, or they use cavities. Since a nest of baby birds is like a lunch box for predators, concealment is of prime importance. Many nests are small for keeping a low profile and are decorated with plant parts or lichens for camouflage. Another tactic birds use for concealment is building their nests in clumps of mistletoe—the clumps also provide a shaded microclimate.

Thermoregulation is a major issue for most altricial birds, especially as baby birds don't control their body temperature well. An Anna's Hummingbird nests in winter and early spring when storms and freezing temperatures are common. Her thickly insulated and downy nest may be 40° F warmer inside than out. This not only keeps the eggs warm, but also helps the mother



Cactus Wren with nest in cholla, Matthew Studebaker;
Pyrrhuloxia on nest in paloverde, Laura Stafford Covic
LEFT: Great Horned Owl nest, Matthew Studebaker

AVIAN ARCHITECTS: NESTS & NESTING

hummingbird conserve energy since she does not usually enter torpor at night while incubating. Late spring and summer nesting hummers, such as Costa's, are more concerned with shade and seek sites with overhead branches for mottled sun and shadow. Hummingbird's tiny nests are often unnoticed and are also camouflaged with lichens, mosses or plant parts making them even more inconspicuous.

Barn Swallows, which don't hide their nests, deal with predation issues by building their nests on vertical faces within one to two and a half inches of an overhang. The tight space prevents access by most predators, including cowbirds.

Cactus Wrens create multiple large and obvious spherical nests constructed of grasses, not sticks. The nests are most often in cholla cactus, which is a formidable fortress against predators. The wrens are perpetually occupied with nest building, since storms, high winds, and rampaging thrashers destroy many nests. The numerous nests are not dummy nests, as almost all are used at some point during the year for breeding or roosting by adults or fledged young. In early spring, parents carry away the fecal sacs of the nestlings, dropping them away from the nest so as not to alert predators to the nest's location. In summer though, parents leave the fecal sacs in the nest providing additional humidity and evaporative cooling.

Cactus Wrens occasionally build their nests incorporated into the base of the nest of a Red-tailed Hawk or other raptor, often in saguaros. The wrens glean bits of leftover food from the raptor's young and provide an extra measure of safety for their host's chicks by giving an alarm call if predators threaten, which alerts the parent raptors to danger. Nesting here may seem like daredevil behavior, but the wrens are not in danger sub-leasing from the hawks, as raptors usually don't hunt at their own nest site.

The Great Blue Heron does not do well at being inconspicuous, and the bulky platform nests of this species are not subtle, so the birds solve the problem of not being able to hide their nests by nesting colonially in rookeries. With herons coming and going, there is always a pair of eyes to watch for predators and sound the alarm.

Saguaros function as large trees in the desert, providing elevated nest sites for ravens and raptors such as Red-tailed Hawks, Harris's Hawks, and Crested Caracaras. These birds may also utilize a variety of trees or cliff ledges, but saguaros are difficult for most predators to climb, providing a bonus of safety and a high perch for unobstructed views and hunting. The hawks construct large stick nests with an inner bowl of soft, green leaves and vegetation. Caracaras have nearly 100% site fidelity to their saguaro, building a new nest on top of the old one each year. Caracara nests are easy to identify because of the stacked layers of nests and the whitewash at the tops of the saguaro where the parents perch. Raven nests can be identified when whitewash is seen only from the nest down and the saguaro is surrounded by sticks—ravens don't use them once they've hit the ground.

Great Horned Owls forgo all the fuss of making a nest, using rock ledges, hollow tree stumps, undersides of bridges, or usurping a raptor or raven nest in a very large tree or saguaro. The owls begin nesting earlier than most raptors, often in January—when the previous nest owners come back, they find their nest already occupied and fiercely defended. Nests are valuable real estate and there can be a lot of borrowing back and forth from year to year.

Whatever strategies nesting birds use, they are wildly successful, filling nearly every habitat on the planet.



PRECAUTIONS TO TAKE AROUND A NEST SITE

While nesting birds are fun to watch, we have a responsibility not to harm them, even inadvertently, by our viewing of a nest. Parents may abandon nests with eggs when disturbed by people. Once the eggs have hatched the parents are more reluctant to leave, but may still become stressed. Often cowbirds or predators are attracted to the nest by the activity of people or by the bird’s alarm calls. Sometimes older nestlings may jump from the nest at the intrusion and are then lost to predators.

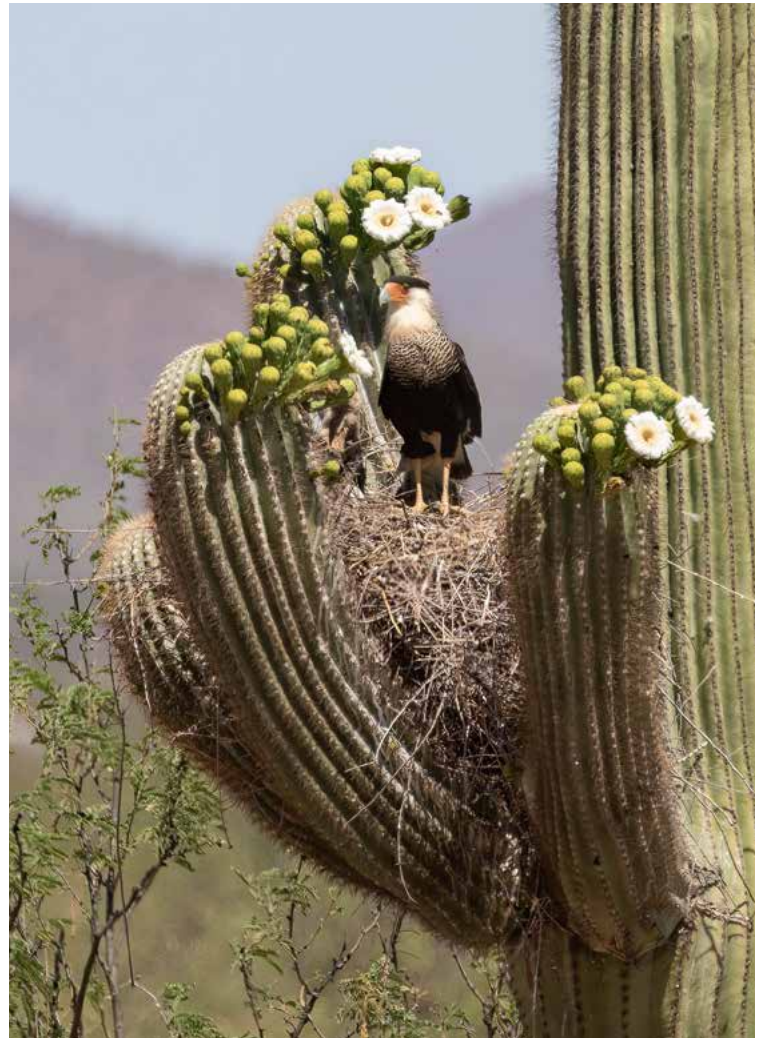
It is best to observe nesting birds with binoculars from a respectful distance, since it provides the observer a chance to watch natural behaviors without disturbing the birds. Even nests that appear inactive should be approached with caution during spring and summer, as parents return with food only every so often.

State law (ARS 17-236) makes it illegal to harass nesting birds or to remove eggs or bird nests—even old ones—from the wild. Remember, some birds re-use nests or the nesting materials that they have taken much time and energy to collect.

When taking photographs, never break or remove branches or foliage from around the nest, as the birds have chosen the site specifically for its concealment and shade.

Birds are especially sensitive during breeding season, so always avoid the use of recorded songs or calls at this time.

Always leave the up-close examination and photography of nests until after the baby birds have fledged.



Pinau Merlin is the author of *A Guide to Southern Arizona Bird Nests and Eggs* and writes frequently about the natural history of the Southwest.

CLOCKWISE FROM TOP LEFT: Great Blue Heron nest, Mick Thompson; Crested Caracara, Scott Olmstead; Lesser Nighthawk with chick, Dan Weisz; Black-tailed Gnatcatcher nest building, Frank Retes; Barn Swallow nest, Francis Morgan; Anna’s Hummingbird nest with chicks, Lois Manowitz



SAGUARO NURSERIES

WOODPECKER ENGINEERS BENEFIT MANY NESTING CREATURES



“Who made all the holes in that saguaro?” is a common question I get on bird walks in Sonoran Desert habitat. It’s a good question, and one we may not think about too much even if we live here. To those of us who see saguaros every day, the holes can seem like a standard feature, but they were carefully created by woodpeckers, specifically Gila Woodpeckers and Gilded Flickers. They create holes for their own nesting purposes, but these cavities are a vital resource for many other species.

Woodpeckers are gifted with the right tools to create cavities in all sorts of plants, mainly trees, but smaller species, such as Ladder-backed Woodpeckers, will use items as slender as an agave stalk. They have chisel-like bills, zygodactyl feet (two toes forward, two toes facing back) to anchor themselves, and a stiff tail to help prop them up in a vertical position. They also have amazing cushioning adaptations in their skulls to prevent injury from literally slamming their faces into hard objects.

In saguaros, both Gila Woodpeckers and Gilded Flickers carve an entry hole, then go into the saguaro and continue excavating downwards. The openings they create, usually in February, will then become covered with tough scar tissue as a defensive response from the saguaro. When the woodpeckers are ready to nest later in the spring, they have a dry, custom-made nesting cavity. If you’ve ever seen a “saguaro boot,” this is a former woodpecker nesting cavity that is left after the saguaro has died and decomposed. Gilded Flickers are larger than Gila Woodpeckers, so they make larger nest cavities with larger entrance holes. The birds that create the cavities are referred to as “primary cavity nesters.” Many other species that are not equipped to create such a cavity, but are dependent on them, are considered “secondary cavity nesters.” A long list of birds and other creatures use cavities in saguaros for nesting, including American Kestrel, Western Screech-Owl, Ash-throated and Brown-crested Flycatchers, Elf Owl, and Desert Purple Martins.

When I try to describe to visitors what’s going on behind the visible woodpecker hole, I often go to the same description of, “it’s like a natural nestbox.” The more I think about this, the truer it seems—most nestboxes are trying to imitate what woodpeckers create. When Tucson Bird Alliance held a nestbox design contest for Desert Purple Martins, we went back to the original architects. We measured the entrance holes of actual martin cavities, and used a weight on a fishing line from our utility poles to plumb the depth. We also measured saguaro boots to get approximate widths. Using these measurements, we had a much better idea of how saguaro nesting cavities are made by the professionals: the woodpeckers!

One of the most interesting components of these saguaro nests, and the hardest to replicate, is the temperature insulation properties of these cavities. We did a temperature study during the summer months, and found that the temperatures within a cavity were buffered at least 6–10 degrees Fahrenheit. This was true both during the day as well as overnight. This means that the cavity was cooler during the hottest part of the day, but also warmer during the coldest part of the night. This regulation is profoundly helpful for nesting birds, and very difficult to replicate in human-built nestboxes. We are still working on it though!



Gila Woodpeckers at nest entrance, Dan Weisz;
Mature saguaro filled with nest cavities, Ned Harris



Applied Conservation Program Manager Olya Weekley and the submitted nestbox designs; Collecting cavity measurements; Desert Purple Martin poking out of nest cavity, Francis Morgan

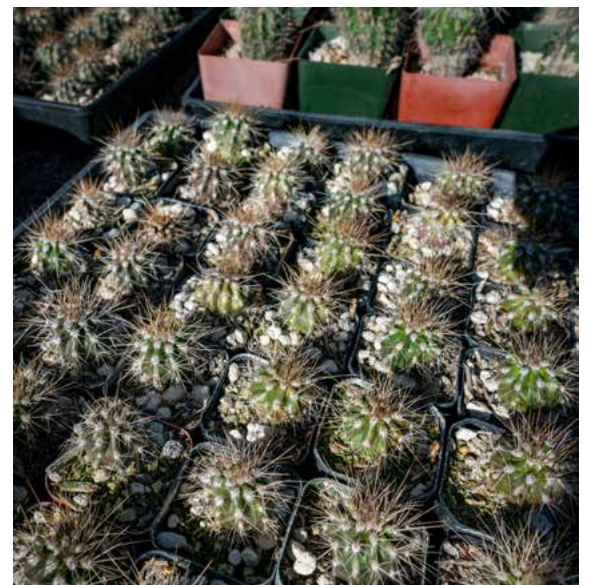
One of the main conservation drivers for the effort to create prototype nestboxes for Desert Purple Martins is their exclusive use of cavities in saguaros and cardon cacti to nest. They have never been known to nest in anything else. While saguaros and cardon cacti are currently abundant and many have suitable nesting cavities, there is cause to worry about the saguaros themselves. Clearing of habitat and increased fire danger from invasive plants have created a situation where concern about saguaro loss is growing. Saguaros need at least 70 years to become large enough to grow arms, and Desert Purple Martins usually nest in large, old saguaros with lots of arms. If something catastrophic happened to an area of Sonoran Desert, it would take at least a century for new saguaros to grow large enough to provide nests in a best case scenario. That was our drive on the nestbox idea, and what still drives us.

Tucson Bird Alliance has also undertaken huge efforts to plant more saguaros. Approximately 8,000 have been planted, half of which in current saguaro range, and half in predicted future range due to climate change. The goal of this work is to give saguaros a head start in suitable, and hopefully soon-to-be suitable, habitat, creating future nesting opportunities as the current saguaros die out.

So, if someone ever asks you who made the holes in a saguaro, you will have quite a lot to share with them!



Jennie MacFarland,
Director of Bird Conservation
jmacfarland@tucsonbirds.org



Gilded Flickers at nest cavity, Laura Stafford Covic; Western Screech-Owl, Dan Weisz; Saguaro cacti ready to be planted, Deirdre Rosenberg

STRUCTURE AND SUSTENANCE: NATIVE PLANTS THAT FIT THE BILL FOR NESTING BIRDS

From dense, thorny shrubs, to tall canopy trees, the structure of a landscape shapes which birds choose to call it home. Native plants offer dependable shelter, protection from predators, and secure nesting real estate. During the breeding season, adult birds must also locate thousands of soft-bodied insects—mostly caterpillars—to feed their young. While fruit, nectar, and seeds help round out the menu, insects remain the backbone of a nestling’s diet. Together, these native plant species provide both the structure and the sustenance that our nesting birds rely on to successfully raise their young in Southeast Arizona.



Kim Matsushino
Habitat at Home Program Manager
kmatsushino@tucsonbirds.org

When we plant strategically with nesting birds in mind, we do more than decorate our landscapes—we stitch together pockets of habitat, tree by tree and garden by garden. By choosing native plants that offer both structure and sustenance, we invite the next generation of birds to find habitat at home.

VELVET MESQUITE

ASCLEPIAS LINARIA

Form & Size: Tree, 20–25' × 20–25'

Nesting Value: The dense, spreading canopy of velvet mesquite offers excellent nesting and roosting habitat for insectivorous birds such as Lucy’s Warblers and Verdins, while many other species seek refuge from the intense summer heat in its shade.

Food Value: Clusters of tiny yellow flowers provide nectar and pollen for numerous native pollinators, and the protein-rich seed pods are relished by both birds and mammals. Its foliage also supports many moth and butterfly species as a larval host plant.



Lucy’s Warbler in mesquite, Martin Molina

DESERT HACKBERRY

CELTIS PALLIDA

Form & Size: Small tree or large shrub, 8–10' × 8–10'

Nesting Value: Dense growth and thorny branching offer excellent structural cover, giving birds a safe, cool, and protected place to nest.

Food Value: Small reddish-orange fruits attract a wide variety of birds, including Northern Mockingbird, thrashers, Phainopepla, Northern Cardinal, Pyrrhuloxia, and White-crowned Sparrow.



Pyrrhuloxia feeding on hackberry, Dan Weisz

FOOTHILLS PALOVERDE

PARKINSONIA MICROPHYLLA

Form & Size: Tree, 15' × 15'

Nesting Value: Forking, horizontal branches create ideal nesting sites for Phainopepla, White-winged Dove, and especially Verdin.

Food Value: Sunshine-yellow blooms draw a wide range of pollinators, the foliage supports moth and butterfly caterpillars, and the seed pods provide a consistent seasonal food source for many species.



Phainopepla nest in paloverde, Lois Manowitz

DESERT HONEYSUCKLE

ANISACANTHUS THURBERI

Form & Size: Shrub, 4–6' × 3–5'

Nesting Value: Its upright, shrubby form offers sheltering structure that small birds may use for cover and occasional nesting.

Food Value: Masses of red, orange, or yellow blooms are highly attractive to hummingbirds and nectar-loving Verdin. The foliage also serves as a larval host plant for several checkerspot butterflies, supporting insect abundance for feeding nestlings.



Desert honeysuckle, Sue Carnahan

CHAIN-FRUIT CHOLLA

CYLINDROPUNTIA FULGIDA

Form & Size: Cactus, 4–12' × 4–12'

Nesting Value: Heavily armed branches make this cholla a favored and well-protected nesting site for Cactus Wren, Verdin, doves, House Finch, and Curve-billed Thrasher.

Food Value: Showy blooms attract native cactus bees, and the plump, persistent fruits provide an important food source for many birds and mammals.



Cactus Wren nest in cholla, Laura Stafford Covic

GRAYTHORN

SARCOMPHALUS OBTUSIFOLIUS

Form & Size: Large shrub, 6–9' × 6–9'

Nesting Value: Its impenetrable, thorn-laden structure offers ideal nesting cover for birds such as Pyrrhuloxia and Greater Roadrunner.

Food Value: The shrubs is a larval host plant for the Pyrrh's prominent moth. It provides nectar and pollen for native bees and butterflies, and produces dark berries favored by many fruit-eating birds.



Nest in graythorn, Kim Matsushino

FOURWING SALTBUCH

ATRIplex CANESCENS

Form & Size: Shrub, 4–6' × 5–6'

Nesting Value: Twisting stems and a low, dense form make it a valuable nesting habitat for ground-nesting species like Gambel's Quail.

Food Value: Its seeds are a preferred food of Gambel's Quail, and the foliage supports caterpillars of numerous moth and butterfly species.



Saltbush, Jerry Oldenettel

CREOSOTE BUSH

LARREA TRIDENTATA

Form & Size: Shrub, 5–7' × 5–7'

Nesting Value: A wide diversity of native bees and other insects rely on creosote for nectar, pollen, and even nesting opportunities.

Food Value: Verdin, wrens, and gnatcatchers frequently forage among its branches, feeding on the abundant insect life that creosote supports.



Creosote, Andy Blackledge

USING NATIVE PLANTS IN THE LANDSCAPE

Creating habitat for nesting birds is less about perfection and more about intention. A few simple choices transform a typical yard into a safe haven:

- Create diverse layers of vegetation: Trees, shrubs, groundcovers.
- Use thorny shrubs as walls of defense for nesting birds.
- Leave leaf litter under shrubs; it hosts the insects nestlings depend on.
- Plant for year-round blooming: A diverse garden with native plants blooming throughout the year will provide food resources for birds and pollinators throughout the seasons.
- Plant in patches to make your habitat more readily located and usable. Overhead birds are far less likely to notice individual plants scattered throughout the landscape than large splashes of color and scents that patches produce.

SUPPORTING CAVITY NESTERS ACROSS SOUTHEAST ARIZONA



Tucson Bird Alliance's nestbox program supports numerous cavity-nesting birds that face increasing threats due to decreasing nest habitat. The program includes several "nestbox trails" designed to easily monitor activity. Along the De Anza Trail in Tubac, we continue to maintain 55 monitoring points outfitted with nestboxes for Lucy's Warblers. This stretch of the Santa Cruz River has served as our study site since 2017, and Lucy's Warblers continue to thrive there each spring.

In Gardner Canyon near Sonoita, our trail of 20 nestboxes supports the "Azure" subspecies of Eastern Bluebirds. The site also hosts ongoing research by University of Arizona PhD student Matt Jenkins, who studies the eco-evolutionary drivers of bluebird plumage variation: how coloration signals behavior, and how those signals may shape species' range dynamics. This season's bluebird activity offered valuable data to his long-term research.

Across Southeast Arizona, our experimental nestboxes are testing new ways to support Desert Purple Martins. This year, we added martin decoys and audio playback to encourage prospecting birds to investigate the boxes. While we haven't had martins use them yet, several other secondary cavity nesters have: four Brown-crested Flycatcher nests, five American Kestrel nests, and one Western Screech-Owl. This represents

a notable shift from last year's nest total of three Cactus Wren, seven flycatcher, and one kestrel, and shows how dynamic and opportunistic these communities can be.

HOW VOLUNTEERS STRENGTHEN OUR CONSERVATION IMPACT

None of this work would be possible without our remarkable volunteers. From building and installing, to monitoring, they bring skill, enthusiasm, and problem-solving to every step. Our woodworking volunteers take on any nestbox design we throw their way, selecting the right lumber and constructing durable boxes built to rigorous specifications. Installation days are no small feat either: hauling ladders, hardware, and nestboxes into rugged terrain for research and habitat restoration projects.

Once the boxes are in place, volunteers monitor them weekly throughout the breeding season. Their careful data collection allows us to estimate nestbox use and nesting success, track year-to-year trends, and refine our conservation strategies.

To all our nestbox volunteers: thank you for your commitment, creativity, and countless hours in the field. Your work truly multiplies the impact of this program!

CLOCKWISE FROM TOP LEFT: Lucy's Warbler feeding nestling in one of our triangle nestboxes, Paula Redinger; Eastern Azure Bluebird eggs in a nestbox, Michelle Sogge; Volunteers Tim Morey and Don Larson with Olya Weekley; Volunteer Dalton Sonnenberg; Volunteer Rick Tyler; Volunteer Randy Smith

Olya Weekley
Applied Conservation Program Manager
owweekley@tucsonbirds.org



HOMES FOR HABITAT: SUPPORTING WILDLIFE IN YOUR BACKYARD WITH NESTBOXES

One of the core elements of the Habitat at Home program is to create safe and nurturing environments for birds, pollinators, and other wildlife. This includes providing essential components such as native plants, water sources, protection from anthropogenic threats, and suitable homes. Homes can be created naturally through the use of native plants and plant debris or artificial nesting structures. Both options provide excellent nesting opportunities, depending on available resources and space.

In southern Arizona, the removal of large trees such as willow, cottonwood, walnut, oak, hackberry, pine, and mesquite, along with saguaro cacti and dead tree snags, has created intense competition for nesting sites among various species. Over-pruning of mature trees has exacerbated this issue, negatively impacting cavity-nesting birds, bees, and bats, leading to increased competition among bird populations.

In response to these challenges, Tucson Bird Alliance developed a suite of nestboxes and best practices for their installation, specifically designed for secondary cavity nesting birds. These nestboxes can be easily integrated into your outdoor spaces, fulfilling the need for secure homes.

NESTBOXES AVAILABLE IN OUR NATURE SHOP

Enhance your backyard habitat with a handmade nestbox available at our Nature Shop, in-store or online. If you prefer to build your own, we also offer detailed building plans on our website at: TUCSONBIRDS.ORG/NESTBOX.

- **Lucy's Warbler nestbox — \$12**
Lucy's Warblers are found in mesquite bosques, riparian areas, and urban areas especially where mesquite trees occur.
- **Flycatcher nestbox (also suitable for bluebirds, Elf Owls, nuthatches, chickadees, titmice, and wrens) — \$40**
This size of nestbox is suitable for many species in just about any habitat.
- **Western Screech-Owl / American Kestrel nestbox — \$65**
Kestrels prefer semi-open country of all kinds (including urban), especially with available hunting perches. Western Screech-Owls inhabit thorn-scrub desert and Arizona suburbs with at least half-acre house lots and natural vegetation.
- **Barn Owl nestbox — \$120**
Barn Owls are found in open country that offers nesting and roosting spots: Sonoran Upland, agricultural fields, and lowland riparian woodlands. They typically avoid high elevations and dense forests.
- **Cavity-Nesting Native Bee nestbox — \$20**
Bee hotels are suitable to install in any habitat.



Nestboxes for: Lucy's Warbler, Amy Edwards; Flycatcher; Screech-owl/kestrel, Doris Evans; bees, Kim Matsushino



To learn more about our nestbox program, visit: TUCSONBIRDS.ORG/NESTBOX.

Habitat at Home members can now certify their yards as Cavity-Nester Approved!

Check out our Habitat a la Carte menu and guidelines at:

TUCSONBIRDS.ORG/HABITAT-AT-HOME.

Kim Matsushino
Habitat at Home Program Manager
kmatsushino@tucsonbirds.org



The Arizona Breeding Bird Atlas Provides a Snapshot in Time



Northern Mockingbird nest in saguaro, Scott Olmstead; Curve-billed Thrasher nest, R.C. Clark / Dancing Snake Nature Photography

Finding an active bird's nest is like finding a hidden treasure. No less precious than gold coins, eggs or baby birds rest ensconced in secret safety, guarded by vigilant parents. Like intrepid (but respectful) treasure-hunters, the *Arizona Breeding Bird Atlas* (Atlas) field crew scoured the state for eight years (1993–2000) seeking out nests and other evidence of breeding. Talk about an enlightening adventure! We endured brutal 4x4-only roads, hiked thousands of miles, climbed, canoed, camped in awful, as well as amazing places, and regularly found ourselves lurking in the bushes. The outcome? The *Arizona Breeding Bird Atlas* was published in 2005, documenting 300+ bird species that nest (or have nested) in the state.

The project was coordinated by the Arizona Game and Fish Department (Heritage Fund) and financially/logistically supported by state and federal land managing agencies. It also relied on regional experts and knowledgeable volunteers to advise on access and help survey. Nearly 700 volunteers devoted time and talent to gathering data, and without them, this massive project would not have been possible. Were you an "Atlaser?" If so, thank you!

Although the fieldwork for the Atlas is now over 25 years old, it established a wealth of baseline information which can now be used to compare current conditions and future changes to the breeding bird distribution and nest timing within the state. Read on for some key findings!

Timing: Many Arizona birders have accidentally flushed incubating birds at surprising times of the year, unaware that in some of our low desert and adjacent urban regions, a few species begin nesting in November and December. Other species typically do not initiate nesting until summer monsoons begin in July and August, with some feeding fledglings into October. So,

it is likely that, any given year, there is some breeding bird activity every month.

In Arizona especially, birds must pay attention to resources that vary by habitat and elevation, even for the same species. For example, some pairs of Bald Eagles can begin laying eggs in December and January in the desert regions, but at higher elevations may not lay until April or later. Because Atlas data were collected solely in Arizona, breeding phenology information gained here on cosmopolitan species like Bald Eagle can be much more useful to local land managers and conservationists.

Rain is Everything: Closely related to timing is rainfall. Not surprisingly, wet years saw more extensive and more successful nesting attempts. Remember, though, that rain and snowfall can be highly localized in our large state, and with the continuing trend of a hotter and drier climate in Arizona, the timing and success of nesting hangs in the balance, especially for resident, desert species. If recruitment of young into the population is low for several consecutive years, local populations can noticeably decline.

During wetter winters, we noted species like Black-throated Sparrow, Cactus Wren, and Curve-billed and LeConte's Thrashers initiated nesting in January or February and often attempted to pull off two or even three broods per season. In contrast, during dry winters, many postponed their first attempts, sometimes until April or May, and when they did finally nest, they had smaller clutch sizes. Additionally, in some dry years, Black-throated Sparrows and Gambel's Quail did not pair off, but remained in small flocks well into the spring. We suspected that some of the population may not have attempted nesting until summer monsoon rains kicked in.



It was a surprise to learn that Northern Mockingbirds could be common and widespread nesters in our desert washes after a wet winter, only to have them retreat to likely higher elevations or more northern regions to breed following a dry one. During those poor precipitation winters, Atlasers noted they would become sparser nesters, or absent altogether in much of the Sonoran Desert away from the irrigated urban areas.

FUN AND NOTABLE NESTING BEHAVIOR:

Lucy’s Warbler: These shallow tree cavity nesters were found to be quite resourceful! They were documented nesting in rock face and drainage bank cavities, abandoned Cliff Swallow and Verdin nests, and in flood debris caught in trees.

Northern Beardless-Tyrannulet: Most nests discovered during Atlas surveys were uniquely placed in dense leaf/twig clusters held together by masses of webworm silk, but we also found two nests in flood debris clumps, dangling from small saplings. Go, you little guys!

White-tailed Kite: Uncommon and rather nomadic raptors for the state, an Atlaser discovered one of their nests near the top of a tall cane cholla. It contained eggs and a recently hatched nestling!

Yellow-breasted Chat: On the darker side, a chat nest was noted to contain a few of its own eggs, and also several eggs each of Bronzed and Brown-headed Cowbirds—both brood parasites.

There is still much to learn about Arizona’s breeding birds, especially in the face of climate change. Consider ways to support and conserve native habitat, whether in your own backyard, at the ballot box, or as a volunteer with Tucson Bird Alliance and others.

Treasure your time in the field, bring a new person with you, and keep your eyes peeled for new breeding records. Unexpected finds may make your day!



Northern Beardless-Tyrannulet with nest, Seth Ausubel; Bald Eagle pair in Arizona, Rhett Herring; Black-throated Sparrow nest in cholla, Doris Evans; Lucy’s Warbler nesting in old Verdin nest, Scott Olmstead



Troy Corman
An avid birder (and herper) since high school in Pennsylvania, Troy moved to Arizona in 1980. He co-authored the *Arizona Breeding Bird Atlas*, helped found Arizona Field Ornithologists, and after nearly 31 years, retired from the AZ Game and Fish Dept. where he was an avian biologist.



Cathy Wise
As Audubon Southwest’s Senior Manager for Community Building, Cathy oversees bird survey and habitat conservation projects across Arizona and New Mexico. She has studied birds throughout the southwest and co-authored the *Arizona Breeding Bird Atlas*.

NORMAL BIRDS, WACKY NESTS

Birds are industrious and highly adaptable, and many seem perfectly able to construct successful nests in the most surprising of environments. Here are some fine examples.



A storm blew a Great Horned Owl nest out of my pecan tree, so we replaced it with a washtub. The next year, I was thrilled when she took right to her new metal nest and raised two little owlets annually for the next nine years! —Carol DiQuilio



Barn Owls nesting in a pipe under an overpass, Dan Weisz



Lucy's Warbler from this spring nesting in a lamp post, Lisa Mainz



Gambel's Quail nesting in a pot, Dan Weisz



Morning Dove nested just outside my kitchen window last summer. She successfully raised two babies in this ashtray!

—Rene Clark, *Dancing Snake Nature Photography*



Lucy's Warblers nesting in wind chime, Heather Meador



A pair of Rock Wrens nested in one of my gutters and hatched five chicks from behind a substantial wall of rocks!

—Karen Howe



This is the 4th year Mourning Doves have nested in this pot on our patio. —Lynn and Dale Mason



Canyon Towhee nest on the spare tire rack on the back door of my Isuzu Trooper. I did not realize they had built a nest there and I drove the vehicle to Tucson a couple of times. I stopped driving it until nesting was complete! —*John Hoffman*



Broad-billed Hummingbird on a Ben's Bell, Dan Weisz



Cactus Wren nesting in a screech-owl nestbox, Dan Weisz



Hummingbird on a hummingbird in Green Valley, Bill Webb



Hooded Orioles raised young in Barn Swallow nests in 2017 and again in 2018, Arlene Ripley



Great Horned Owl nesting on a pillar in front of the Walmart in Oro Valley, Dan Weisz



Barn Swallows nesting in Hooded Oriole nest, Arlene Ripley.

BEFORE YOU CHOP, STOP!

Follow these steps to safeguard our feathered friends and their nests when performing landscape maintenance.

PREVENT CONFLICTS

The best way to minimize impacts to nesting birds is to avoid work during peak breeding season. In Tucson, that's typically February to September.

PRE-WORK INSPECTION

Visually scan trees and shrubs for evidence of nests (sticks/eggs/chicks/hanging nests). Be sure to peek in cavities!

Be aware of birds carrying sticks or other nesting materials, calling out in harsh, distressed tones, or dive-bombing you.

Look for an accumulation of bird droppings under/on/around trees and shrubs.

ACTIVE NEST?

If an active nest is found, remove the tree/shrub from your current scope of work and add it to a future rotation. Under the Migratory Bird Treaty Agreement, it is illegal to kill native or migratory birds or destroy their nests or eggs in the US.

MISUNDERSTOOD MISTLETOE



Humans seem to have an innate dislike of parasites, so it's not surprising that mistletoe gets a bad rap. Mistletoe actually provides many important benefits to both people and wildlife. Biologists consider mistletoe a keystone species, which creates increased biodiversity and supports a greater variety of bird, mammal, and insect species, as well as increased numbers of individuals of those species.

Our native desert mistletoe is a hemi-parasite—it has its own chlorophyll and can photosynthesize, but requires water and some nutrients from its host tree. It does not usually kill its host (unless the tree is already severely compromised from drought or disease), and many giant, old mesquites live long lives with large clumps of mistletoe.

Mistletoe is dioecious, with separate male and female plants, and blooms in the winter. The male flowers are tiny and inconspicuous, but they exude a delightful, citrusy fragrance that permeates the desert, attracting many insects and pollinators at a time when few other plants are blooming. Female plants produce translucent pink berries in spring, which lure many birds in to feast when they are nesting and feeding chicks. Sensitive to frost, winter freezes may reduce or eliminate its fruit crop.



Phainopeplas are almost totally dependent on mistletoe berries, eating up to 1,000 berries in a day. Their lives are so entwined, that a bad year for mistletoe berries means a bad reproductive year for Phainopeplas and that some adults may starve.

Other birds, like Gila Woodpecker, Northern Mockingbird, Ash-throated Flycatcher, Gambel's Quail, and Verdin are not as dependent on mistletoe, but still heavily rely on the fruits and insects that are attracted to the flowers in winter. Mockingbirds, woodpeckers, and other birds can be seen with beaks full of mistletoe berries as they return to their nests to feed their chicks.



Mistletoe also functions as a bed and breakfast for birds. Besides supplying berries, the clumps provide a nesting and roosting refuge, offering shade and concealment from predators. Over 16 species, including Black-tailed Gnatcatcher, Verdin, Pyrrhuloxia, Canyon Towhee, Cactus Wren, Bendire's Thrasher, Rufous-winged Sparrow, Northern Cardinal, Elf Owl, Western Screech-Owl, and the ever-present Phainopepla, take advantage of these mistletoe havens.

Dead clumps of mistletoe also provide shelter and a microclimate for birds. Any gnatcatcher nest you see, even in a dead mistletoe clump, is very likely active. Immediately after most gnatcatcher nests are abandoned, a queue of birds line up to steal the nesting material to use in their own nests. The gnatcatchers also reuse the old material in building new nests, so unused nests disappear quickly.

Mistletoe is an important and nutritious food plant for any number of other animals as well, including white-tailed and mule deer and bighorn sheep. Butterflies, like great blue hairstreaks and duskywing skippers, use mistletoe as a larval food plant for their caterpillars. Bees are attracted to the flowers' sweet nectar, and beetles, weevils, spider mites, moths, and other insects (aka bird food) make use of mistletoe.

Mistletoe is so valuable in the ecosystem that it's important to leave it in your tree to promote healthy habitat and greater wildlife diversity. Mistletoe and your trees can live long and productive lives together!



Pinau Merlin is the author of *A Guide to Southern Arizona Bird Nests and Eggs* and writes frequently about the natural history of the Southwest.

Phainopepla feeding mistletoe berries to nestlings, Doris Evans; Phainopepla perched above mistletoe seed pile, the primary method for new plant recruitment, Ned Harris; Gnatcatcher nest in dead mistletoe, Pinau Merlin

Investment Protection • Life Care • Bountiful Amenities

own it



THIS IS WHERE SENIOR LIVING GETS INTERESTING

Just when you thought you had “these kinds of communities” all figured out, discover how Splendido provides the platform to live confidently. Well-appointed homes and services to suit your style—all in a dynamic Life Plan Community that’s uniquely designed with the future in mind, so you can rock life with confidence.

We’re proud to sponsor the Tucson Bird Alliance!

(520) 762.4084
Oro Valley



Visit SplendidoTucson.com for floor plans, videos, and more.

AN OASIS FOR NESTING BIRDS IN TUCSON

Sweetwater Wetlands is probably best known as a place to find unusual birds in migration and for large flocks of wintering birds, especially waterfowl. But it is also a safe haven for at least 30 species of breeding birds due to the mix of wetland habitat surrounded by dense native vegetation. Even in January, the first signs of breeding behavior are beginning. Perhaps the most conspicuous are the displaying male Anna's Hummingbirds and Vermilion Flycatchers posted up like sentinels around the wetlands. The dense cattails provide cover for a variety of nesting birds, including American Coot, Red-winged Blackbird, Great-tailed Grackle, Common Yellowthroat, Song Sparrow, and excitingly the past two summers: Least Bittern! Most of these nests are so well hidden that the only way to know they are in there is watching for nesting behavior: parents disappearing into the reeds carrying nesting material, or later in summer, bugs to feed their nestlings. Once noisy fledglings begin to appear in summer it becomes much more obvious which species have successfully nested. This year, the noisy chicks of Common Gallinules, Pied-billed Grebes, and Green Herons were some of the most conspicuous and my personal favorites to watch. A couple of very awkward Black-crowned Night Herons were another fun surprise last summer that I had no idea nested given their secretive and nocturnal nature.

Despite the ideal wetland habitat, not many ducks breed at the wetlands, being mostly Mallards, Mexican Ducks, and sometimes hybrid pairings of the two. The dense mesquite and saltbush thickets surrounding the wetlands provide nesting habitat for many terrestrial species too, such as Abert's Towhee, Verdin, and delightfully, Gambel's Quail with their lines of tiny precocial chicks running after them. Tucson Bird Alliance has put up nest boxes at Sweetwater primarily for Lucy's Warblers and cavity nesting flycatchers like Ash-throated and Brown-crested, but these species may favor the abundance of natural cavities at the wetlands given all of the dead trees full of holes made by our Gila and Ladder-backed Woodpeckers.

Raptors also nest here with Cooper's Hawks often building nests right over trails, Great-horned Owls hiding among the large eucalyptus trees lining the road, and a Red-tailed Hawk pair seemingly always returning to the same power tower along the Santa Cruz River to construct their massive platform nest! An adult and juvenile Gray Hawk visiting last summer suggests they nested nearby along the Santa Cruz River.

One of our least abundant breeders that birders seek out here is Tropical Kingbird—one of the species' most northerly nesting locations. With such a variety of well-sheltered habitat, who knows what other species may try to nest here. Personally, I would love to have Indigo Bunting or Yellow-billed Cuckoo attempt to. I hope to see you out at Sweetwater viewing bird families this nesting season!

FALL MIGRATION HIGHLIGHTS

Sweetwater Wetlands had yet another fantastic fall migration this year! The invasion of high mountain species, including jays and woodpeckers, continued with several Woodhouse's Scrub-Jays and a Steller's Jay. A female Williamson's Sapsucker first seen at Agua Nueva also visited Sweetwater, marking a first-ever record for the hotspot. I thought a Broad-winged Hawk would be the raptor highlight of the year, but two new hawk species for Sweetwater were found by yours truly in October: an American Goshawk and a Ferruginous Hawk. October 24 proved to be a big day with a flyover Lewis's Woodpecker, only the second Townsend's Solitaire ever for Sweetwater, and the first American Bittern sighting at the wetlands in three and a half years!



Alex Patia
Sweetwater Wetlands Coordinator
apatia@tucsonbirds.org

Breeding Common Gallinules; Breeding Pied-billed Grebes; Fledgling Least Bittern; Gambel's Quail; Williamson's Sapsucker. Photos by Alex Patia



A NEW AND IMPROVED PATON CENTER IN 2026



Tom Brown
Site Manager
Paton Center for Hummingbirds
tbrown@tucsonbirds.org

As I write this, we are in the final stages of 2025. It has been an amazing year at the Paton Center for Hummingbirds. One year ago, I was applying for final permits, looking at budgets, and scheduling contractors for three huge projects. The first to break ground, and quite frankly the one that was the highest priority for many, was the new ADA-compliant public restroom facility. Many county, city, and federal permits were worked through, and all the infrastructure was put in place in 2024 to allow us to complete the restrooms in 2025. They are now open for use!

With the growing number of guests at the Paton Center, the next highest priority item was a new parking lot. Again, having a design that brought together many different people and government agency requirements had its challenges, but we successfully opened the new parking lot in mid-December.

Last, but certainly not least of the three big projects for 2025, was the completion of an on-site gift shop. It is located at the front corner of the original building, in what was a small enclosed patio, or "Arizona Room." We hope to have it open for business soon!

While these additions make the facility much more user-friendly, I feel they were all completed in a manner that was minimally invasive to the historic Paton Center. The serenity and tranquility that you feel when visiting is still very much in place. We look forward to your next visit, and I hope that you are as pleased with the improvements as I am.



Tucson Bird Alliance
**Paton Center
for Hummingbirds**



CLOCKWISE FROM TOP LEFT: ADA Public Restrooms; Parking lot; Gift Shop interior; Gift Shop exterior

ABOVE: Bird of the Year: "In April, the Paton Center had a V.I.O. (Very Important Owl) visit. I have had the chance to hear Flammulated Owls many times, but never actually got to see one, let alone get a pretty good photo!" —Tom Brown

SHORT ON SPACE? TRY A CONTAINER HABITAT!

Like about half of all Tucsonans, I am a renter. This means that despite my love of native plants and sustainable landscaping, I have very little say over what goes on in my tiny yard. Of course, I have a random assortment of non-native potted succulents, pothos, and spider plants like any self-respecting millennial, but lately I've been thinking, "What's stopping me from putting native plants into pots?"

Luckily, our awesome Paton Center for Hummingbirds volunteer Judi White was on the same wavelength. She reached out to our Habitat at Home team about her fully hardscaped back patio. Since a traditional garden was impossible, Judi asked us to install our first ever container habitat!

First, I came up with a plant list. When picking plants, I was most concerned with keeping them to a max size of 3'x3'. While some larger non-native plants can do well in pots, most of our large natives form extensive root systems that will start to girdle the plant if confined to a pot. Judi was also looking to attract hummingbirds and butterflies, so I focused on pollinator favorites like autumn sage (*Salvia greggii*), blackfoot daisy (*Melampodium leucanthum*), and Gregg's mistflower (*Conoclinium greggii*). I also included some side oats grama grass (*Bouteloua curtipendula*) and snapdragon vine (*Maurandella antirrhiniflora*) for visual interest.

Second, I sourced containers. It is very important that any containers you choose have drainage holes, as desert plants are prone to root rot. Keep in mind that clay pots tend to dry out quickly and require more frequent

waterings. Plastic ones retain water longer but can break down in the sun over time. Metal is a good option for very large containers but gets very hot in direct sunlight and is better suited for shadier areas.

Third, we planted! We used regular potting soil, but if you choose plants that prefer more drainage like fishhook cactus (*Mammillaria grahamii*) or desert marigold (*Baileya multiradiata*), I'd recommend a cactus and succulent mix. We installed dripline irrigation to automatically water Judi's plants, but handwatering is a great budget-friendly option. The water needs of your container garden will ebb and flow with the seasons. I have had the most success giving my container plants infrequent but deep drinks, letting the soil dry out between waterings. Each plant is different, however, and I encourage you to monitor your plants and adjust as needed.

I have had so much fun working on my personal container habitat and I'd like to give a huge shout out to Judi for letting me experiment in her garden as well. I have found that container gardening is a low-cost, low-commitment way to start growing native plants. I call on all my fellow renters, apartment dwellers, and hardscape-havers to give it a try and feel free to share photos of your container habitats with us. Happy planting!

Megan Ewbank
Community Habitats Program Manager
mewbank@tucsonbirds.org



Judi White's patio container garden, Ivy Ilkay

GETTING STARTED ON YOUR HABITAT STEWARDSHIP JOURNEY



Throughout the past year, Tucson Bird Alliance shared stories of people who are stewarding habitat in their communities. Through providing tours of their residential habitat, installing habitat in community spaces, or filling a need of local conservation organizations, these individuals have made a notable impact for people and birds. We hope you've been able to take away some practical tips and we'd like to share additional advice for getting started on your own journey.

It starts with paying attention to plants around you, whether while out hiking, exploring Tohono Chul, or visiting native plant nurseries. Identify plants you find using apps such as Arizona Wildflowers or iNaturalist, and then use websites like SEINet or Ladybird Johnson Wildflowers to learn where the plants grow naturally so you can create a space that mimics these conditions. In addition to native plants, it's important to be able to identify invasive species in the region, understand the habitat needs of wildlife, and manage these landscapes in a way that supports ecological processes.

The best place to start your habitat journey is in your own yard or patio. Assess your site conditions to know what native plants you're able to support. Visit our Habitat at Home webpage (TUCSONBIRDS.ORG/HABITAT) for resources and plant lists or visit a local native plant nursery to see what's in stock. Habitat at Home offers fee-based services, such as consults, designs, and installation. Once you've managed to create a welcoming space for wildlife in your own yard, it's time to look for opportunities within your community. Volunteer with a local non-profit to help maintain their habitat gardens, join your HOA's landscaping committee to transform common areas, or work with schools, churches, or other community groups to create and manage habitat.

Material and financial resources are available to support residential and community habitat projects. One of the best ways to start a habitat project is by planting trees. Trees provide valuable nesting sites, reduce your energy consumption by shading your home, and create microclimates that support other native plant diversity. The Grow Tucson project is a US

Forest Service-funded grant, managed by the City of Tucson, which aims to increase urban tree canopy in heat vulnerable neighborhoods. If you live within one of the nine project neighborhoods, you can receive up to three native trees. The Grow Tucson Green Workforce will help you choose the right trees for your yard, provide mulch and treecare advice, and plant the trees for you. See TUCSONBIRDS.ORG/GROWTUCSON for more info and scan the QR code below to request trees.

Tucson Water customers offer a number of rebates including a rainwater harvesting rebate of up to \$2,000. In a region facing long-term drought and rising temperatures, rainwater offers a sustainable solution to rewilding our urban landscapes. For larger, curbside projects that collect street run-off to support native vegetation, a green stormwater infrastructure mini-grant program provides up to \$50,000 a year per ward. A commercial turf removal rebate, perfect for HOA common areas, provides up to \$100,000 for turf removal, \$100 per tree, and up to \$5,000 for rainwater harvesting features. See TUCSONBIRDS.ORG/WATERREBATES for more info.

This journey should be rewarding and fun. Mistakes will be made, and it will be an endless opportunity for learning. Share your journey and encourage others to join the movement! We can all play a part in helping to restore habitat for our feathered friends.



Kari Hackney
Director of Habitat Stewardship
khackney@tucsonbirds.org



Luna y Sol install at a United Way Days of Caring event; Volunteers planting trees at the El Pueblo Park, Vianey Avila; Patches of habitat in Carol and Randy Smith's yard, Kim Matsushino



Find details and registration for events/workshops at TUCSONBIRDS.ORG/EVENTS and for field trips at TUCSONBIRDS.ORG/FIELDTRIPS.

WORKSHOPS

BRAND NEW TO BIRDING at Sweetwater Wetlands with Alex Patia

Saturdays, January 17, February 7, & March 7

\$35/member; \$50/non-member

This field workshop is meant for those of you just getting into birding. We'll cover topics like how to use binoculars, finding birds, identifying birds by sight and sound, bird behavior, birding apps, and using field guides. The entire workshop will be conducted outside on a short walk around the wetlands. Binoculars and field guides are available if needed—bring a journal and pencil for some field sketching! Limited to 12 participants.

ADVANCED BIRDING SERIES: FIRST SIGNS OF SPRING with Alex Patia

Sunday, January 18

\$35/member, \$50/non-member

January may still feel like winter, but if you know what to look for, the first signs of spring are starting to appear. Displaying male Anna's Hummingbirds and Vermilion Flycatchers are the most conspicuous and some birds like Great Horned Owls may already be on nests with eggs! This workshop is a great opportunity to learn about phenology and appreciate the changing seasons. Limited to 12 participants.

IT'S ALL IN THE FAMILY: SPARROW ID WORKSHOP

with Homer Hansen

February 5 & 7

Registration fee: \$125/member, \$175/non-member

Join local bird expert Homer Hanson for this 2-part ID workshop focusing on sparrows (participants are expected to attend both portions for a holistic experience). Often skulky and elusive, these "little brown jobs" are often overlooked in the field. As part of this workshop, you will learn how to find and observe sparrows. Useful foraging behaviors, vocalizations, and flight characteristics will be reviewed. This workshop covers 34 species of sparrows, towhees, and longspurs that may be found in the Southwest.

IT'S ALL IN THE FAMILY: RAPTOR ID WORKSHOP

with Homer Hansen

February 26 & 28

Registration fee: \$125/member, \$175/non-member

Join local bird expert Homer Hanson for this 2-part ID workshop focusing on raptors (participants are expected to attend both portions for a holistic experience). Homer will introduce you to the orders and families comprising our western diurnal raptors and present family and generic structure, plumage characteristics, sexual dimorphism, and hunting behaviors useful for identification.

VIRTUAL EVENTS

VIRTUAL HAPPY HOUR—SHOW US YOUR BIRD with Luke Safford

Mondays, January 12 & March 23

Enjoy your favorite drink from home and virtually connect with your Tucson Bird Alliance friends. This will be an interactive virtual event that depends on YOU sharing your bird pictures with us! Send Luke your recent, or favorite, bird picture and we'll take the opportunity to hear your bird story, talk through its identification, and discuss the hotspot where you found it. Feel free to register and join, even if you don't have a picture to share!

WHERE TO GO BIRDING with Luke Safford

Thursday, February 5

Trying to figure out the next birding hotspot to check out? After diving deep into a couple locations, we'll also have time for questions about other locations and/or specific birds you are hoping to see and where to go for them.

IN-PERSON EVENTS

BIRDS 'N' BINGO at Bawker Bawker Cider House

Sunday, February 1

Put your bird ID knowledge to the test, compete to win sweet birdy prizes, and sip some of the best cider in town with your friends from Tucson Bird Alliance!

TUCSON MEET YOUR BIRDS at Sweetwater Wetlands

Saturday, February 21

Join us for a free, family-friendly celebration of Tucson's recent designation as part of the Urban Bird Treaty Program! Join guided bird walks and kids activities, explore interactive booths, and have up-close experiences with Tucson's feathered friends. Whether you're a lifelong birder or just curious about the colorful wildlife in your own backyard, this event is a wonderful way to celebrate Tucson's vibrant bird community and our city's dedication to making it a safer, healthier place for birds and people alike.

TUBAC HAWK WATCH 2026

March 13–17

Watch hawks in migration, go on a bird walk, try out new optics, explore the vendor area, and mingle with other bird watchers. In collaboration with Tubac Nature Center, at Ron Morriss Park in Tubac. Details at TUCSONBIRDS.ORG/HAWKWATCH.

FIELD TRIPS

LOOKING FOR THRASHERS AND WINTER SPARROWS ALONG NIGHT SKY ROAD with Tim Helentjaris

Tuesday, February 10

Registration fee: \$35/member, \$50/non-member

BUENOS AIRES NWR AND AGUIRRE LAKE with Luke Safford

Friday, February 13

\$50/member, \$100/non-member

PATAGONIA-SONOITA CREEK PRESERVE with Donito Burgess

February 22 & March 22

\$35/Members, \$50/Nonmembers, Trail fee: \$8.00

HARSHAW CREEK AND PATON CENTER with Luke Safford

Friday, March 6

\$50/member, \$100/non-member

Tucson Bird Alliance Birdathon 2026



APRIL 1–30

Go birding and raise critical funds for Tucson Bird Alliance in the month of April!

WHO? You! Anybody can participate in this tradition begun in 1987. You can form, join, or donate to a team.

WHAT? Birdathon is like a walk-a-thon, but instead of counting miles or steps, you count bird species!

WHERE? Bird anywhere in the world, from your backyard to Borneo!

WHEN? April 1–30. You make the call: Go birding for 24 hours, half a day, a week, or the whole month! Team registration will open in March.

WHY? Have fun birding with friends and family while simultaneously supporting Tucson Bird Alliance. Participants also can win prizes in our competition categories, including Big Day, Grand Champions, High Flyers, and more!

Never done a Birdathon or want new ideas to make your Birdathon the best yet? Watch the “How to Sign Up” video. Learn more at: tucsonbirds.org/birdathon

BIRDATHON WRAP UP PARTY

Date TBD, at Three Canyon Beer and Wine Garden
Celebrate another successful Birdathon!

TUCSONBIRDS.ORG/BIRDATHON

HAWK WATCH 2026

In collaboration with Tubac Nature Center
Ron Morriss Park, Tubac
March 13–17

Optics and vendors, bird walks, Family Birding Day

TUCSONBIRDS.ORG/HAWKWATCH



Common Black Hawk, Ned Harris

Tucson Bird Alliance Southeast Arizona Birding Festival

AUGUST 12–16, 2026

Registration opens April 28
Tucson, Arizona
232 bird species seen in 2025!
TUCSONBIRDS.ORG/FESTIVAL

PRESENTED BY



Painted Redstart, Richard Hickson

India

Ganges River Cruise & Himalayas, from Sundarbans to Darjeeling, aboard the *Ganges Voyager*
December 4-20, 2026

From sophisticated and bustling Kolkata, the cultural heart of India, to the mangrove forests of Sundarbans and on to Darjeeling, the cosmopolitan capital of Assam, our seven-night voyage on the spacious and luxurious *Ganges Voyager* is highlighted by:

- Birds and other wildlife in centuries-old gardens, vast wetlands, mangrove forests, and the rhododendron groves of the Himalaya foothills
- The oak and rhododendron forests of Singalila National Park, echoing with the songs of rare mountain birds
- Cultural and historical sightseeing with visits to elaborate temples, colonial palaces, and venerable monasteries
- A ride on the Himalayan Railway to a monastery library preserving manuscripts central to the liturgy and theology of Tibetan Buddhism
- Insights into the lives of the millions of people who rely on the waters of the Ganges every day
- Superb photographic opportunities

For the birder, India at this season is a dream of paradise. Asian migrants from the north seek out these warmer climes for the winter, where they join a host of resident specialties, ranging from splendidly colored bee-eaters, rollers, and kingfishers to some of the most imposing raptors in the world.

India: Ganges River Cruise and Himalayas
Aboard the *Ganges Voyager*

December 4-20, 2026 / Limit: 35
Cabins begin at \$17,995 per person in double occupancy from Kolkata
Leaders: Barry Lyon, Brian Gibbons, Max Breckenridge, Scott Baker & Raj Singh

India: Tadoba-Andhari Tiger Reserve Pre-trip

November 29-December 6, 2026
\$3,895 from Delhi / Limit: 12
Leaders: Brian Gibbons & local leader

India: Kaziranga National Park Extension

December 18-24, 2026 / Limit: 12
\$3,995 from Bagdogra (ends in Kolkata)
Leaders: Scott Baker & local leader



Yellow-billed Blue Magpie © Andrew Whitaker



CST2014998-50



WELCOME GRACE DONAHUE!



Grace Donahue has joined Tucson Bird Alliance as the new Volunteer & Retail Coordinator. She hails from the Midwest (Indiana, to be specific) and moved to Tucson in September. Grace is an amateur birder and looking forward to learning from her new community's expertise. She is a graduated student of the arts and humanities, a capable fisherman, and a huge water lover. Most of her free time has been spent exploring Southern Arizona with her partner and dog. She's all ears for hiking and camping recommendations!






Grace is very excited to join the team at Tucson Bird Alliance and to work with a crew so invested in conservation, education, and the restoration of our environment. "I can't wait to meet you all!"

Tucson Meet Your Birds!

Saturday, February 21 7:30-11:30am
At Sweetwater Wetlands

Join Us!



-  Interactive kids activities
-  Bird & habitat resources
-  Guided bird walks
-  Coffee truck
-  Giveaways & more!



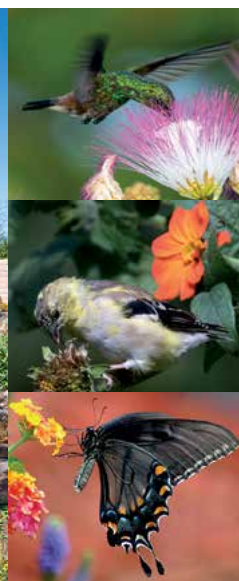
Register here!



tucsonbirds.org/events



Beautiful Landscapes
 in Harmony with Nature



Designing Habitat at Home
 Landscapes Since 2016

Serving Green Valley, Sahuarita, and Tubac. Contact me for a consultation.

Charlene Westgate
charlene@westgategardendesign.com
(520) 829-0399

GIFTS IN HONOR OR MEMORY OF

In memory of Alexandra Labenz from Aggie & Bart Turecki,
and Dale Levinsky

In memory of Brandon Siebinaular from Terry Friesland

In honor of Brooks & Easton Burgess from Bobbie & Don Burgess

In memory of Caroline Bates from Kenneth Voak

In memory of Elly Halprin from Jeffrey Halprin

In memory of Geri Hamersley from Scott Knight

In memory of Joan Goldberg from Joanne & Michael Goldberg

In honor of Joanne Amoroso from John, Amy, & Marco Amoroso

In honor of Jody & Tom Flynn from Roberta & Bill Witchger

In memory of John Murphy from Sheila Klink

To Judy Miller & Frank Tamsen from Connie Frank

In honor of Julee Dawson from Catherine Nichols

In honor of Julie Gordon from Gale Harris

In memory of Karen Davies from Lesley Davies

In honor of Lori Malloy from Max Malloy

In memory of Marilyn Tully Smith from Patti Forkan

In memory of Mary Anderson from Peter Anderson

In memory of Mary Hay from Patrick Shandonay

In memory of Nigel Willis from Carol & Robert Bauer

In memory of Ruth & Walt Hileman from Karen & Gilbert Matsushino

In memory of Ruth Wilson from Gwendolyn Wilson

In honor of Sandra Leigh Damon from Phil Damon

In memory of Sanna Luhtala from Natalie Luhtala

In honor of Sarah T. Dubb from Donna Koch and Hilary Van Alsborg

In memory of Susan Merrill from Brenda Sabin and Jan Gaffney



Barn Swallows, Matthew Studebaker

MAKING A MEANINGFUL IMPACT

In conservation, real success takes time, experimentation, and resources. Resources include your contributions to Tucson Bird Alliance, whether that's time, talent, or treasure. Your contributions are essential because they allow us to test new ideas, collect valuable data, and invest in long-term solutions to protect vulnerable species.

Karen Howe, Tucson Bird Alliance Board President, shares a great example of how her support has been instrumental in our nestbox research and also a source of joy for her:

Often, while volunteering at the Habitat at Home table, I hear, "I hung a Lucy's Warbler nestbox in my yard a few years ago, but it hasn't been used yet." "I've had the same experience," I respond. "Installing a nestbox is good, but the habitat also needs to be suitable."

In 2022, I hung a Lucy's Warbler nestbox in the largest native mesquite on my property. That March, the warblers announced their return by singing from that tree every day. I checked the nestbox often, hoping to find nest materials, but to this day there is no evidence that they ever checked it out.

I also installed two nestboxes in the mesquite bosque along Sabino Creek. Although the warblers have plenty of cracks and crevices for nests there, I've been surprised to find that one or both boxes are used each spring.

Additionally, I volunteered my property to be used as a nestbox testing site for Desert Purple Martins since I had a colony nearby. This subspecies nests in large, columnar cacti such as saguaro, and has never been known to use artificial nests. Two years ago, Tucson Bird Alliance sponsored a Desert Purple Martin nestbox contest, challenging participants to create a nestbox that martins may actually use in hopes of alleviating some of the burden to find suitable nesting cavities in the declining saguaro populations.

When a crew arrived with a truckload of wood to build the 16-foot support for three test boxes, my neighbors were curious about the new "cell tower" being installed on our property and its stability!

The boxes are still standing, and Olya Weekley, Applied Conservation Program Manager, continues to monitor them during the summer breeding season. The first summer, a pair of Brown-Crested Flycatchers fledged four young, but no martins used a box. The second summer, Olya added a decoy martin to the top of the boxes to attract the birds, and a speaker playing their calls. She also added a wildlife camera for remote monitoring. Brown-Crested Flycatchers returned and raised another brood, but again, no martins.

I tell myself, "This is a scientific project, so whatever data we collect is good." Plus, I love Brown-crested Flycatchers. I have to admit, though, that my heart will beat faster if I see a Desert Purple Martin peeking out of a nestbox next summer!

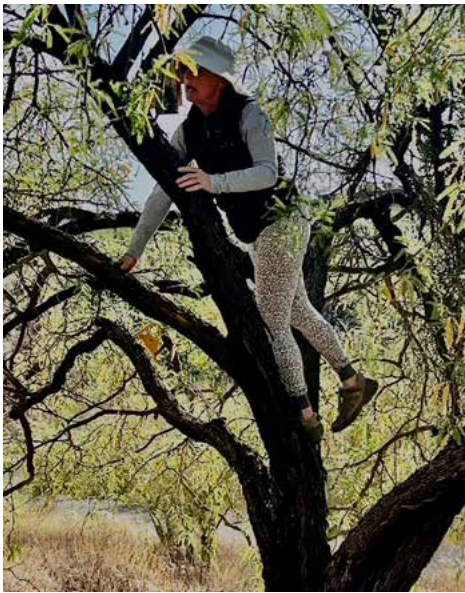
—Karen Howe

When you donate, you become part of the process that turns trial and error into meaningful progress, ultimately helping ensure a future where our native birds thrive. I hope you also find some personal joy along the way.

[TUCSONBIRDS.ORG/DONATE](https://tucsonbirds.org/donate)

Karen Howe checking a Lucy's Warbler nestbox on her property; Brown-crested Flycatcher using a Purple Martin nestbox; The crew installing the Purple Martin nestboxes at Karen's property

Erica Freese
Director of Development
& Communications
efreese@tucsonbirds.org





300 E University Blvd. #120, Tucson, AZ 85705

NON-PROFIT ORG
US POSTAGE PAID
TUCSON, AZ
PERMIT #1345

VERMILION FLYCATCHER

Winter 2026 | Vol 71 No 1

© 2026 Tucson Bird Alliance

Vermilion Flycatcher is the quarterly news publication of Tucson Bird Alliance. National Audubon Society members and members of other chapters may receive the *Flycatcher* by becoming a member of Tucson Bird Alliance. For more information visit: TUCSONBIRDS.ORG.



TUCSON BIRD ALLIANCE NATURE SHOP

NATURE SHOP

300 E University Blvd #120, Tucson 85705 (corner of University & 5th Ave) · 520-629-0510

Wednesday–Friday: 10 am–4 pm; Saturday: 10 am–2 pm

Visit us in-store or online at: TUCSONBIRDS.ORG/SHOP

MEMBERS RECEIVE 10% OFF, INCLUDING BINOCULARS!

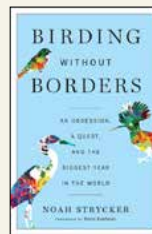
There's never any sales tax since we're a non-profit. All purchases support our mission to protect birds and their habitat.



Susan E. Libby Tote Bags

\$22.00

Carry your essentials in style with this locally crafted tote bag (15"x17"). Made from durable, woven fabric right here in Tucson, each bag showcases vibrant artwork—think whimsical hummingbirds, majestic roadrunners, or a charming Tucson map.



Birding without Borders by Noah Strycker

\$15.99

If you're a fan of Noah Strycker's *Birding Without Borders*, the Nature Shop now has a few limited edition, signed copies! Ask us and we'll point you to the right copy. Follow Noah's fascinating birding adventure through forty-one countries!



Assorted Tiles by Wil Taylor and Carly Quinn

\$38.00

If you've been to the Nature Shop recently, you may have noticed Wil Taylor's iconic series of birds in our lobby. Now you can purchase his bold, colorful nature designs on Carly Quinn Studios tiles! Made right here in Tucson, these tiles are a beautiful addition to any home.



Field Guide of All the Birds We Found in One Year in the United States by Quentin Reiser

\$24.99

Quentin and Owen Reiser set out on an ambitious, road-trip birding adventure: traveling across the US in a used minivan with the goal of spotting as many bird species as possible in one year. What results is part travel diary, part field guide—the book documents the birds they found, featuring adorable illustrations and hilarious observations.



Swarovski NL Pure 8x32

\$2732.22 / Member price: \$2,459.00

The Nature Shop is fully stocked up on optics once again! Members get 10% off our regularly priced binoculars, and thanks to our non-profit status, they're tax free! These Swarovski NL Pure 8x32s are an awesome, professional piece of equipment, featuring signature "Swarovision" lens coatings that will have you spotting color patterns you've never seen before.



"Life Birds at Paton's" Shirt

\$26.00

You asked and we listened—our classic "Life Birds" shirt is back! Featuring the Paton Center's most famous visitor, the Violet-crowned Hummingbird, this shirt is a cool, comfy way to support the birds you love! Printed locally at the Gloop Factory on organic cotton.