



The Cactus Wren•dition



Volume LXXI No. 2

Summer - 2019



Great Blue Heron
by Tom Cheknis

MAS holds meetings (membership is not required) on the first Tuesday of the month from September through April at Papago Buttes Church of the Brethren, 2450 N. 64th Street, Scottsdale (north of Oak Street on the west side, between Thomas and McDowell roads). If southbound, turn right from 64th Street, 1/2 mile south of Thomas. If northbound, turn left (west) at Oak Street, 1/2 mile north of McDowell, and then right at the Elks Lodge. Continue past the lodge and turn right into the church parking lot. Look for the "Audubon" signs. Pre-meeting dinners (September through April) are held at 6:00 pm at Noodles Ranch Vietnamese Cuisine, 2765 N. Scottsdale Road at the southeast corner of Scottsdale Road and Thomas in the south part of Scottsdale Crossing Plaza. The May meeting is our annual banquet. Please check the Spring *Wren•dition* or our website for details.



House Finches. Photo by Kevin McGraw

September 3, 2019

Kevin McGraw Backyard Bird Feeding

Backyard bird feeding is more than a billion-dollar industry nationwide. With this activity come many benefits, such as drawing attractive small birds to our yards and provisioning them with valued resources. However, dark sides to bird feeding are possible, and these could include the spread of disease at feeders that attract dense populations of avian visitors. Kevin

will discuss the first field experiment of its kind to investigate the extent to which routine bird-feeder cleaning can reduce disease severity and spread in a common feeder-visiting passerine (the House Finch).

Kevin McGraw is Professor and Associate Director for Facilities in the School of Life Sciences at Arizona State University. He joined ASU in 2004 and leads a research team that investigates two main areas – the evolution of exaggerated traits in animals and urban behavioral ecology. His group's primary foci have been on the control and function of ornate colors of birds (especially finches and hummingbirds), and how birds acclimate and adapt to the many ways in which humans modify city environments. Students in his lab have also studied elaborate coloration in animals such as chameleons, butterflies, and jumping spiders.

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The Earth has received the embrace of the sun and we shall see the results of that love.

Sitting Bull

An Investment in the Future

Bequests are an important source of support for the Maricopa Audubon Society. Your chapter has dedicated itself to the protection of the natural world through public education and advocacy for the wiser use and preservation of our land, water, air and other irreplaceable natural resources.

You can invest in the future of our natural world by making a bequest in your will to the Maricopa Audubon Society. Talk to your attorney for more information on how this can be accomplished.

Check out our new website at:
www.maricopaaudubon.org

where you can:

- Become a member of the Friends of MAS or renew your Friends membership
- Donate to MAS conservation projects
- Subscribe to the e-newsletter
- View and download past issues of *The Cactus Wren•dition*
- View the calendar of events (field trips, workshops, programs)
- Email MAS officers and committee chairpersons



On the Cover: Great Blue Heron

Focal length: 400 mm, 1/500 sec, f8, ISO 400, Canon 50D, on the lake shore at Gilbert Riparian Preserve, Oct. 3, 2012, by Tom Cheknis

Tom says: The Great Blue Heron is an expert "spear fisherman." It swallows its prey head first after flipping it into the correct position. The prey descends slowly in the bird's esophagus creating a very visible bulge.

President's Message



Mark W. Larson

Summer, by far our longest season in the Sonoran Desert, is an annual test of will and endurance for those of us who live in the Valley of the Sun the entire year. I am just happy that our geography in Maricopa County affords us the opportunity to escape the oppressive heat by traveling to cooler environments, if only for a few hours. Not that I do that except once in a great while, but just knowing that I could is a balm that helps me cope.

Many of our members, on the other hand, escape the heat of desert summer by spending the warm months in cooler regions of the country, but there is plenty to keep the Maricopa Audubon Society's Board of Directors busy here in the summer, no matter how hot it gets!

We have a new website, thanks to the tireless work of Laurie Nessel (Program Chair), Vicki Hire (Treasurer), and a consultant,

Joey Trankina. Please check it out! And, while you are online, visit our Facebook page, maintained by Vicki Hire.

What adventures do you have planned for this summer? And, how are you going to encourage someone to become more environmentally aware and conscious of their effects, positive and negative, on the natural world? 🐦

Mark W. Larson
President

Letter from the Editor

by Gillian Rice



Gillian Rice

The other day a hawk moth spent the day on my patio. With wings that concealed its body, it was dull, but seemed silky and furry. I was surprised that it chose my cream patio wall, which gave it little camouflage. I determined to sit outside just before sunset to observe the moth when it awoke. To where would it fly? Although the *Datura* had no buds to open, I suspected the several on the Tufted Evening Primrose would attract the moth.

It was challenging to sit and wait, and wait, watching this motionless special visitor. Hummingbirds squabbling over the Chuparosa in the fading light distracted me. I feared the moth would fly off when I glanced away. About ten minutes after sunset I could sit no longer. I stood up and studied the moth with my close-focus binoculars. At last I detected movement. The

moth wiggled its antennae for a few minutes. Was the moth using special sense receptors on its antennae to detect flower scent? The moth extended one wing. I strained to see any color, but the light was too low. The moth stretched its other wing and in an instant was off – straight towards the just-unfurled evening primrose flowers – followed by me. Another moth joined it. These hawk moths whirl their wings like hummingbirds. After foraging on each bloom for a few seconds they disappeared into the darkness.

About three-quarters of all flowering plant species need animal pollinators for reproduction. Pollinators contribute to ecosystem health and a sustainable food supply. Although moths don't pollinate food crops, they pollinate many native plants. June 17-23 is National Pollinator Week. Twelve years ago, the US Senate's unanimous approval and designation of a week in June as "National Pollinator Week" marked a necessary step toward addressing the urgent issue of declining pollinator populations. Pollinator Week has grown into an international celebration of the valuable ecosystem services provided by insects, birds, and bats.

Why not learn more about pollinators and how you can help them in your backyard? One way is to make sure you have plenty of native plants in your landscape (and don't forget some night-blooming plants like *Datura*, evening primrose, or Queen of the Night). Another is to build a bug hotel to attract beneficial insects such as solitary bees, ladybugs, and lacewings to your yard. It's easy to find instructions online.

I hope you enjoy this summer issue of the *Wren•dition*. Science Corner will make you wonder more about a pollinator: the honeybee. We have stories from near (where to see Vermilion Flycatchers in Scottsdale and how to distinguish between cormorants) and far (the Caribbean and India). Learn more about lizards in Green Scene and take pleasure in the beautiful poetry, photography, and art.

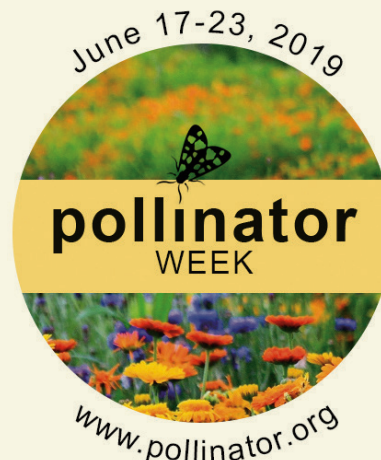
As always, I am grateful to our generous writers and photographers who make *The Cactus Wren•dition* possible 🐦

TABLE OF CONTENTS

Field Trips	4
Conservation Update	5
Tales from the Field	6
Cormorant Population Explosion by Tom Gatz	10
Green Scene: Leaping Lizards	12
The Residents of the Krishnachura Tree by Monica Ray	14
Poetry by David Chorlton	17
Green Scene Extra	18
Green Scene Puzzle Answers	19
Science Corner: Wisdom of the Hive: Reverse Engineering Honeycomb by Clint Penick	20
Nature Through the Artist's Eye: Mary Lavan	22



Great Ash Sphinx. Sphinx chersis – Hodges#7802. One of its larval hosts is ash. My neighbor has an Arizona Ash tree. I wonder if this is why the moth lives around my yard. Thank you to Margarethe Brummermann for identification help. See her website: <http://arizonabeetlesbugsbirdsandmore.blogspot.com>



Maricopa Audubon Society Field Trips & Workshops

field trips

Car Pooling: Please make every effort to organize your own car pool, consolidate vehicles at meeting places and/or contact leaders for car pooling assistance. Be courteous to the trip leaders and help cover their gas costs. We recommend that passengers reimburse drivers 10 cents per mile each.

Reminders:

- Avoid wearing bright colors. Wear neutral-colored clothing and sturdy walking shoes.
- Bring sunscreen, sunglasses, head protection, and water.
- Always bring your binoculars. Bring a scope if recommended.
- Submit trip and leader suggestions to the Field Trip Chair, Larry Langstaff.
- Unless stated otherwise, reservations are required.

Day Passes: Many locations in the National Forests require Day Use Passes. For details, see <http://www.fs.usda.gov/main/tonto/passes-permits>

Monday, May 27

Stewart Mountain Desert Tortoise Quest

Hardy souls willing to trek in the early morning heat of May with a slight chance of finding a desert tortoise can join Laurie Nessel on hillsides searching for tortoises that emerge during the arid fore-summer. Just about all tortoises surface to replenish their water reserves after an iconic monsoon storm. But some tortoises, notably females and juveniles, emerge in late spring, or during winter rain days, to feed, bask, and drink if possible. Learn about the behavior, life cycle, and status of this keystone species. Difficulty: 4 (steep, rocky terrain, and hot weather). Bring snacks, sun protection, hat, sturdy hiking shoes, a high-power flashlight or mirror, and plenty of water. Start near daybreak; return by noon. No limit. Leader: Laurie Nessel, laurienessel@gmail.com, 602 391-4303.

Sunday, June 9

Tonto Natural Bridge State Park

See swifts, swallows, jays, wrens and other residents in this refreshingly cool, riparian habitat northwest of Payson. Adult entry fee is \$7.00. Limit: 8.

Leaders: Roberta Taber and Joy Bell. To reserve, email mindfulbirding@protonmail.com

Saturday, June 15

Pinal County Dragonflies and Damselflies

Pierre Deviche, ASU's School of Life Sciences professor and odonate expert, will be your guide. Eighty-eight odonate species have been recorded in Pinal county. Visit (tentatively) Oak Flat, the Gila River at Kelvin Bridge, Kearny Lake, and/or the Dudleyville fishing

ponds. All locations easily accessible. Wear hat, sunscreen, long sleeves and pants, hiking shoes, bug repellent, and bring food and water for the day. Close-focus binoculars helpful to observe small species. Difficulty: 2. Limit: about 10 to allow for good viewing and photography. Leave Gilbert at 8:30 am and return mid-afternoon.

To reserve, send cell # to Larry Langstaff, larrylangstaff1@gmail.com



Sonoran Desert Tortoise. Photo by Brian K. Sullivan

Sunday-Monday, June 23-24

Pinal Mountain

An intensive two days of birding, including night birding. Leave Tempe 4:30 am to arrive at Claypool about 6:00 am; bird Pioneer Pass until noon. Eat lunch in Globe, check into a motel for an afternoon break. Early dinner in Globe then night birding from about 7:00-10:00 pm. Search for Flammulated and Spotted Owl, Mexican Whip-poor-will and possible Buff-collared Nightjar. The next day bird Pinal Peak from 6:00 am-1:00 pm (picnic lunch) to look for nesting Short-tailed Hawks, warblers, tanagers, nuthatches, woodpeckers and more. Return to Tempe 3:30 pm. Expenses include one motel night, one to two restaurant meals, and gas donation to your driver (\$20.00 suggested). Difficulty: 2, some walking, long days. Limit: 6.

Leaders: Dave Pearson and Kathe Anderson, Register by April 30, kathe.coot@cox.net

July-October, date TBA

Stewart Mountain Desert Tortoise Quest.

Have you ever seen a Sonoran Desert Tortoise in the wild? Increase your chances of stumbling upon one of these iconic desert creatures by searching in their preferred habitat after a summer monsoon. We are not setting an exact date for this trip near Saguaro Lake until the conditions are right. We will contact you one day before or possibly the morning of the walk. It could be a weekend or

weekday. Learn about the behavior, life cycle, and status of this keystone species. Difficulty: 4 (steep, rocky terrain, and hot, humid weather). Bring snacks, sun protection, hat, sturdy hiking shoes, strong flashlight or mirror, and plenty of water. Start near daybreak and return by noon or have options for afternoon start times. Bring flashlight for hiking in the dark! Limit: 10.

Leader: Laurie Nessel, laurienesselatgmail.com or 602 391-4303 to get on the call list. Leave your name, email address, cell number, and preference for morning or afternoon trip. Also leave your cross-streets for car-pooling and whether you can drive or would like a ride.

Wednesday, July 10

Dudleyville/San Pedro River Preserve

Join Dave Pearson to explore this riparian area for Thick-billed Kingbird, Rufous-winged Sparrow, Northern Beardless Tyrannulet, Gray Hawk, Black Hawk, and many desert species. Leave 4:00 am and arrive 5:30 am (sunrise 5:27 am). Return 2:00-3:00 pm. Bring water. Lunch at the famous Maria's Mexican Restaurant in Hayden at the end of birding. Limit: 7 (plus leader) in two vehicles. Birding along flat paths and the road for short distances.

To reserve, send cell # to Larry Langstaff, larrylangstaff1@gmail.com

Friday, July 19

San Tan Mountain Regional Park and Queen Creek Wash

A brief, but warm, foray to a little-birded regional park south of Queen Creek, to help boost eBird summer data. Start about 4:30 am in Scottsdale, arrive at the park about sunrise, spend perhaps an hour, and move to Queen Creek Wash for a short stop. Look for a spot to catch coffee—and perhaps breakfast—on the way home, to arrive by about 9:30 am. Limit: 8. Leader: Kathe Anderson, kathe.coot@cox.net

Thursday-Friday, July 25-26

Overnight to Cottonwood/Oak Creek Canyon

Explore the Cottonwood area, likely Page Springs fish hatchery, Dead Horse Ranch State Park, Sedona's wetlands, and the lower part of Oak Creek Canyon. Leave Phoenix about 5:00 am, stay at a moderately priced hotel in Cottonwood and enjoy dinner out. Expect tanagers, vireos, flycatchers, and some waterfowl at the wetlands. Expenses include a night at a moderate hotel, one to two meals in restaurants, entrance fees, and a gas donation to your driver. Difficulty: 1-2. Limit: 8.

Leader: Kathe Anderson, kathe.coot@cox.net

Wednesday, August 28

Payson and the Rim Lakes

Check out a couple of spots in Payson before heading east on 260 to visit Willow Springs and Woods Canyon Lakes on the Mogollon Rim. A variety of summer birds: Osprey, flycatchers, tanagers, and warblers, as well as resident woodpecker and nuthatch species. Weather permitting, a picnic lunch at one of the lakes. Return to Scottsdale about 3:00 pm. Difficulty: 1-2. Limit: 8.

Leader: Kathe Anderson, kathe.coot@cox.net

Tuesday, September 3

Glendale Recharge Ponds

Expect to be hot—and hot on the trail of returning shorebirds. Start from Scottsdale 5:00 am to arrive in Glendale before sunrise. Prowl the wetlands for the usual variety of birds—ducks, raptors, and water-loving species like Black Phoebe, egrets and swallows, and hope for an abundance of shorebirds returning from the north. Possible unusual species for the desert, like Dunlin or Whimbrel. We will find a cool indoor spot to go over the list. Return to Scottsdale by 10:00 am. Difficulty: 1-2. Limit: 8. Leader: Kathe Anderson, kathe.coot@cox.net

Monday, September 9

San Carlos Lake (Gila/Pinal Counties)

Explore this San Carlos Apache Reservation reservoir with Dave Pearson. Look for waterfowl, pelicans, and migrating shorebirds. Have a chance to see gulls, terns, and maybe a jaeger! \$10.00 recreation permit for the Reservation required and will be purchased in Globe. Sunrise is 6:08 am, so leave Tempe at 4:30 am, returning about 3:00 pm. Bring water, lunch, and a scope if you have one. Limit 7 (plus leader) in two vehicles. Birding mainly from the road. To reserve, send cell # to Larry Langstaff, larrylangstaff1@gmail.com

conservation update

Conservation Update

by Mark Horlings



Mount Graham Squirrels:

Fewer than 100 Mount Graham Red Squirrels remain in the wild. After lawsuits and negotiations, the US Fish and Wildlife Service (USFWS) designated critical habitat to protect the remaining population. Recently however, after the 2018 fires, the surviving squirrels abandoned the higher elevations of Mount Graham, the area designated as their critical habitat.

MAS and its allies first notified USFWS that conditions on the ground require a new designation of critical habitat. After USFWS dithered, MAS threatened to sue. USFWS recently announced that it will consider adding new areas, presently used for vacation cabins and a bible camp, to the squirrels' critical habitat. A small victory in this continuing saga!

Section 404 Permits:

The Arizona Department of Environmental Quality (ADEQ) plans to assume responsibility for the Section 404 wetlands permitting program. Until now, the US Army Corps of Engineers reviewed dredge and fill permit applications affecting Arizona wetlands.

To facilitate the change, ADEQ organized stakeholder committees to spot problems and recommend procedures to ease transition. Stakeholders represented private businesses, city and county agencies, Arizona tribes, consultants with experience on Clean Water issues, and nonprofits. I joined committees focused on the Endangered Species Act (ESA) and protection of cultural and historical properties.

Most committees have finished their work. A majority of the Cultural and Historical Committee concluded that Arizona statutes are sufficient, with some administrative rule changes, to offer protections comparable to federal protection under the National Historic Preservation Act. Of course, the federal act is widely considered toothless, requiring only consultation when bulldozers threaten historic properties. Arizona's state act is similar, requiring only a pause to consider before projects proceed.

Tribal representatives argued that Arizona must adopt environmental law paralleling all the federal statutes protecting air, water, wildlife and tribal properties for ADEQ to assume this role. Most committee members rejected this approach as politically impractical in Arizona.

The ESA Committee wrestled with other problems. No one considers the ESA ineffective. Once ADEQ assumes the wetlands fill and dredging program, important provisions of the ESA will no longer apply since ADEQ, not a federal agency, will issue permits. The ESA Committee consulted officials in other states, two of which have taken local control of the Clean Water Act wetlands permit program and others which considered and rejected the alternative.

Two of us filed a minority opinion saying ESA problems made ADEQ administration of the program unworkable. A vote of the membership revealed that five members, a majority of those taking a position, felt the threatened loss of ESA protection meant ADEQ should leave the wetlands program in the hands of EPA and Army Corps of Engineers.

Stakeholder committees on fees, jurisdiction, and the permit process have also finished. ADEQ remains committed to taking over this program. Conservation groups seem united in their opinion that the EPA and the Corps of Engineers do a better job than ADEQ will. 🐦

ARE YOU A FRIEND?

Do you enjoy reading *The Cactus Wren•dition*? Are you a "Friend of Maricopa Audubon?" Or have you renewed your membership this year? Please support Maricopa Audubon by becoming a Friend. Please see the back page of *The Cactus Wren•dition* for full details. Your contribution will help fund the publication of the *Wren•dition*. Thank you for your support!

Our Thrilling Encounter

by Mary Martin



Vermilion Flycatcher. Photo by Diana Austin

It was a cold, gray Wednesday morning and no way would I have ventured outside our warm house were it not for the fact that I had made a commitment to meet a few others for a one-hour bird/nature walk. A couple of years ago, I volunteered to lead an hour-long bird/nature walk for patrons of the Via Linda Senior Center on Wednesday mornings. We communicate by email and meet in local spots that I select each week.

This day, the meeting spot was Northsight Park in Scottsdale at 8:00 am, where I can almost guarantee the presence of a male Vermilion Flycatcher. I knew it would be a good day when I spotted the first male Vermilion Flycatcher as I drove the short lane into the park. He was sitting, all puffed up, on top of a sign, just as I entered the park.

As the group members arrived, we were delighted to walk quite close to him and some got out their cameras. He wasn't flustered by us and continued to sit in all his blazing-vermilion glory, much to the delight of every one of us. There wasn't any bug activity at all, and eventually he flew to a new perch up to the top of a huge, old spreading mesquite that has its many elbows resting on the ground in all directions.

While we were all focused on him with our binoculars, he took off and flew up higher and higher and higher, becoming a little speck in the gray morning sky. Then he plummeted earthward, sort of wildly at first, and then like a Peregrine Falcon in a mighty stope. Just above the treetop, he flared out suddenly and made a perfect landing on a topmost branch. He had no need to adjust his landing in any way. And then he sang. We all looked for a female, but never saw one. I have read in *The Sibley Guide to Bird Life and Behavior* that this is a mating display. It is dramatic!

As we finally pulled ourselves away to walk around the park, I related some information about the Vermilion Flycatcher. I always like to mention the genus/species name, as it is so perfect: *Pyrocephalus rubinus*. Yes, he certainly is a "fire head" and he is the only member of this genus.

I have observed them for many years in this park and have watched them raise batches of little ones. Last year, I witnessed three mating pairs, and I believe they were all successful. This

Wednesday morning, we saw three more males in a short walk, but each in its own location, so I am expecting to see at least three mating pairs again this year.

One year we witnessed the first real "lift-off" for one of three nestlings. Our delight was matched by the amazed stares of the two, still nest bound. It flew from one branch to another, staying in the same tree and close to the nest. It returned to the nest limb when the male landed with food, and got its breakfast first.

The female Vermilion Flycatcher is a beauty in her own right, but very different from the male. She has gray-brown to gray-black upperparts and head with a thin dark mask. Her throat is white, while her white breast is streaked with brown lines and she has a colorful peachy, or salmon-colored belly and vent. I have seen two females with a yellow belly and vent and they were in widely separated locations. One was here at Northsight Park, the other in Santa Cruz Flats, and my iBird app includes a photograph of a female with the yellow belly and vent.

One year, the "yellow belly" at Northsight Park made it easy to discern the area that each mating pair claimed, as she and her mate occupied the area between the two other pairs. I could not distinguish between the males. Each pair seemed to have a very specified area and did not have disputes that I could detect.

On this particular cold bird walk we observed several common birds: House Finch, Lesser Goldfinch, Northern Mockingbird, European Starling, Great-tailed Grackle, a large skein of flying Canada Geese, Gila Woodpecker, and Gambel's Quail. We also saw a pair of "mystery" sparrows (my guess was Song Sparrows as a couple of us thought we observed that dark breast patch, but the little rascals were very puffed up to protect against the cold, and remember, I'm no expert.) Half frozen, we headed back toward our cars. I spotted what



Sharp-shinned Hawk. Photo by Diana Austin

I assumed to be a hugely puffed up Mourning Dove, until I trained my binoculars on it and discovered a Sharp-shinned Hawk, sitting down inside a tree devoid of leaves.

I hedged for some time, wavering between Cooper's Hawk and Sharp-shinned Hawk. It was quite dark bluish-gray on the back and had a colorful breast that always makes me think the bird is still lounging about out in his washed-out orange and white tiger-striped jammies. It also had the long banded tail. It continued sitting and seemed not at all perturbed by us. Some of our group had to leave, but one lady wanted to get even closer for a photo and I stayed with her. We moved in so close that my binoculars would no longer focus and that is when I took a measure of the length of the hawk from a very close position. I know that the span between the tip of my thumb and the tip of my pinky finger, stretched as far as possible is eight inches, so I extended my arm and determined that this hawk was just a little over ten inches long. I had never been this close to any wild hawk in my life.

We left the area with the hawk still sitting there. I returned to my car with fingers numb from the cold, but with the joy of having had a wonderful bird experience, shared with others who were just as thrilled as I. I realize that I would have missed this once-in-a-lifetime experience on this particular gray, cold morning if I had not reached out to share birding with others.

So, think about it. You probably know enough birds to get started and you can quickly find others to join you and you will all learn from the adventures you will share! The Senior Center

connection, for me, serves as a safety filter for meeting others with similar interests. The Center asks for their names, email addresses, and phone numbers and then puts them in touch with me.

I'm sure you can find others in your area to join you on a bird walk in a similar way. I can guarantee you that you will really enjoy the experience. There are so many more birds to see OUTSIDE your house. Get out there! 🦅

Mary Martin is a naturalist, by love, and an educator who retired 19 years ago, but never stopped teaching.

Sign up for the e-newsletter!



To receive updates and supplements to *The Cactus Wren•dition*, sign up for the monthly (September to May) e-newsletter. It includes meeting and field trip reminders, special events, and citizen science projects. To subscribe, contact laurienessel@gmail.com

Note: We do not use the email list for anything other than the described purpose.



Bond ... James Bond

by Matt Van Wallene

When a Brown Booby lays two eggs, the second rarely survives. The first chick ejects the second from the nest shortly after it hatches. This is called siblicide. This strong-flying seabird makes its home in tropical areas. In the Caribbean, human development has caused population declines among Brown Boobies. The bird's name "booby" is thought to come from a Spanish colloquial word for stupid: bobo. In the days of sailing ships, the birds, long at sea, would find a ship a convenient resting place. Having no fear of humans, these unfortunate birds became easy meals for the sailors.



The Bananaquit, also known as the sugar bird, is found in the Caribbean, Central America, and South America. Its diet includes small insects and spiders, fruits, and nectar. It sometimes obtains nectar through the side of the flower, and in this case does not pollinate flowers. This behavior is called nectar-robbing. The Bananaquit builds nests with a side entrance. This Bananaquit made its home in an artist's therapy piece. It was a glove hanging from a branch. Wish I was there to see the hatchlings.

Ian Fleming was a birder who lived in Jamaica. He bought the book, *Birds of the West Indies*, by James Bond, the leading ornithologist for the region. Bond worked as an award-winning ornithologist at the Academy of Natural Sciences. Fleming "stole" this author's name because he wanted one that sounded "as ordinary as possible." He got permission and met Bond and his wife. After *Casino Royal*, Fleming wrote *You Only Live Twice* and gave Bond a first edition copy signed, "To the real James Bond, from the thief of his identity." After Bond's death, the book sold for \$87,000. In *Dr. No*, Fleming referenced Bond's work by basing a large ornithological sanctuary on Dr. No's island in the Bahamas.

I send out emails to my crew about my birding experiences. More often than not, my chronicle results in comments that are as entertaining as I try to make my picture stories. The latest series is about our family outings to the Caribbean, which resulted in Ted saying, "don't fret... there will never be a spy hero named Matt Van Wallene... too much complexity in this name ha ha!"



The Hispaniolan Lizard-Cuckoo is confined to the island of Hispaniola (Haiti on the west and Dominican Republic on the east). And yes, it does eat lizards.

Our two trips to the Caribbean were for family visits. The first was accompanying my sister-in-law to visit her husband's family in Dominican Republic. The second was meeting up with my two sons and family in Puerto Rico. Neither one was associated with birding, yet I often tell people that you can bird in a Walmart parking lot. So when you go to a unique environment, walk around, check out your surroundings, and enjoy your feathered friends before the traffic gets heavy and your family is waiting for you. It's a beautiful part of the day and all these friends will perch for you at the top of the trees. An unexplored region like the Caribbean provided adrenaline reminiscent of my early birding days. Every bird is a potential newbie. Trying to peg a bird to what you have experienced is also exciting.

The temperate climate of the Caribbean allows for unique approaches to living. We stayed in a home that had no walls other than for the bedrooms, bathrooms, and kitchen. Our proximity to the beach allowed for exploration and relaxation. Yet it didn't keep me from having my head on a swivel looking for lifers. 🦋



The family went snorkeling and found a sea slug, a sea anemone, and a starfish among other sea creatures. My grandson, Ragnar, enjoyed the sea and its inhabitants.



While in the Dominican Republic, I heard a story of the dictator Rafael Trujillo. He put a bounty on turning in woodpecker bills. I tried getting corroboration of the story, but it seems to be an urban myth. True or false, Rafael is not a loved historical figure. The Hispaniola Woodpecker is a gregarious, noisy woodpecker that people sometimes regard as a pest because of its love of fruit orchards.



Cormorant Population Explosion

by Tom Gatz

Cormorants can fly with wet wings but usually spread their wings after fishing to dry their body plumage. These Double-crested Cormorants were photographed by Melinda Louise.

“What’s a cormorant?” That’s what a fellow Desert Botanical Garden (DBG) volunteer asked me recently after I helped him identify the large, dark birds with long necks he described flying over the Garden in long lines. “They looked sort of like geese, but silent. I’ve never noticed them before,” he said. It’s not surprising that he only noticed them recently. Unless you are an angler who hates cormorants (because they are better at catching fish than are the anglers), or a birder, you may not be familiar with them either. If you’ve heard of them at all, it may have been from footage of these fish-eating birds on nature specials where captive, tethered, cormorants were used by Asian fisherman to catch fish.

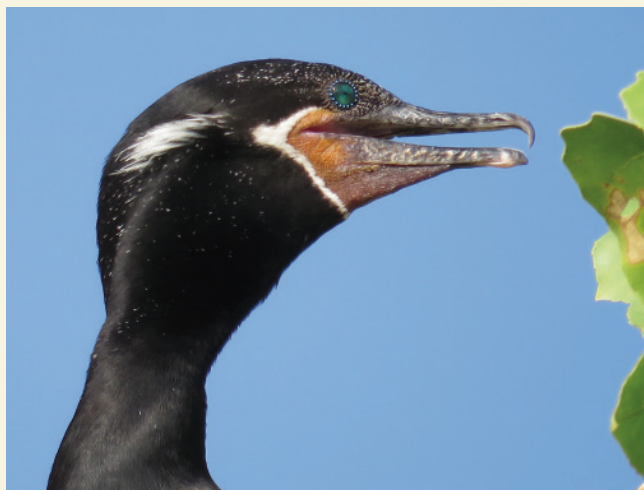
Now, however, Arizona fish hatchery managers and anglers often get frustrated whenever increasing numbers of cormorants devour the fish they are trying to catch. But don’t blame the cormorants. Cormorants are undergoing a population explosion in Arizona and elsewhere in response to

human changes in the environment, specifically the creation of manmade lakes and the introduction of non-native fish. Before Anglo settlement, Arizona had almost no large, natural lakes

(only Stoneman Lake and Mormon Lake, and even they go dry periodically). Now we have created many large, permanent, impounded reservoirs along our rivers and numerous smaller lakes and ponds in our parks, housing developments, and golf courses. All of them are stocked with mostly non-native fish, including several species of tilapia, apparently a cormorant favorite (Rademaker and Corman 2008), providing a veritable “cormorant buffet” throughout the year.

In 1972 there was only one expected species of cormorant in Maricopa County, the Double-Crested Cormorant, and it was considered

uncommon and usually only seen in migration (Demaree et al. 1972). At that time, only one record existed here of a smaller, more tropical species, the Neotropic Cormorant. Fast forward to today. Both species now nest here and are considered common, with the Neotropic Cormorant listed as locally abundant with recent winter counts in the greater Phoenix area exceeding 3500 birds. One nesting colony in Chandler contained over 950 nests, the largest colony known west of



*A Neotropic Cormorant in full breeding plumage is identified by the V-shaped border at the base of the bill.
Photo by Troy Corman*

Texas (Witzeman and Corman 2017), and this species was not even confirmed breeding in Arizona until 2004.

The ex-wife of my bird-watching nephew once commented that “cormorants are boring.” Somewhat harsh words and perhaps partly why she and my nephew are no longer together. Still, I see her point. Cormorants are almost reptilian in appearance, sitting motionless in the sun for hours on end, with no colorful plumage and are often a challenge to identify to species. The Neotropic is smaller than the Double-crested and it has a shorter bill but a relatively longer tail. However, this is only helpful if they are sitting or flying side by side. To identify single birds in flight or a flock of birds that are all the same size, look at the length of the tail relative to the length of the out-stretched head and neck. The Neotropic’s tail is about as long as its neck and head; the Double-crested’s tail is shorter than its head and neck, giving the Double-crested a more goose-like shape in flight.

I was always told that cormorants had to spread their wings to dry their water-logged feathers due to an absent, underdeveloped, or underutilized preen oil gland. Apparently this is not true. It appears that they have and use a fully functional oil gland. According to several researchers, they need to dry off because the microscopic structure of the feathers has evolved to make their plumage “wettable” to decrease buoyancy to facilitate underwater pursuit of fish (Ehrlich et al. 1988, Rijke and Jesser 2011, Sellers 1995).

The little pond at the DBG is likely too small to attract cormorants. Look for them on bigger bodies of water such as in Papago Park or at Tempe Town Lake. 🐦

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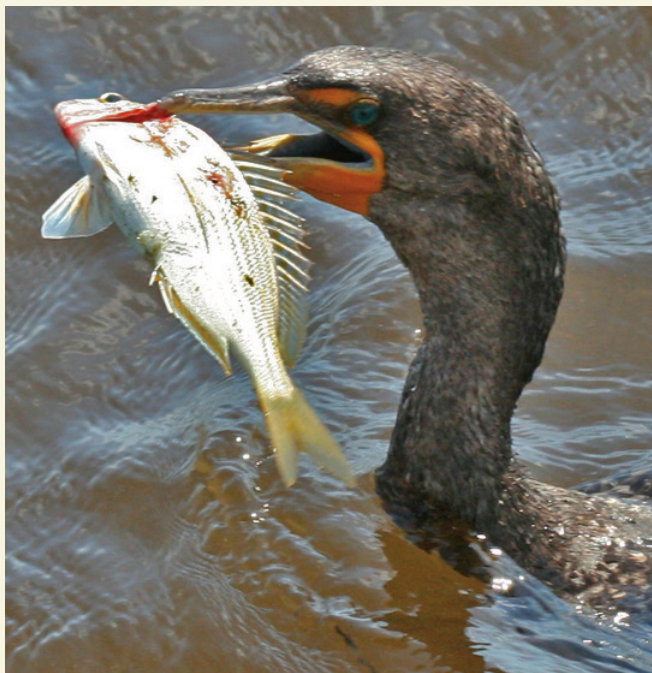
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Thanks to Troy Corman and Melinda Louise for helping me with this article.

Tom Gatz had been a MAS member since 1981.



The Neotropic Cormorant prefers to nest in trees. This is a rookery in Gilbert.



Double-crested Cormorant. Photo by Matt Van Wallene



Neotropic Cormorant with nestlings. Photo by Matt Van Wallene



Connecting with nature makes Arizona a fun and better place to live!

Compiled by Gillian Rice. Photos by Brian K. Sullivan



Tiger Whiptail



Gila Monster



Common Chuckwalla

Leaping Lizards!

Did you know lizards are ectotherms? They use their environments to maintain warm body temperatures so they can perform their daily activities. A lizard basks in the morning sun before searching for food.

Did you know almost all lizards are carnivores (they eat other animals) or omnivores (they eat foods of plant and animal origin)? Lizards, like the Ornate Tree Lizard common in urban areas, eat insects, spiders, and scorpions. They are a valuable natural pest control method in your backyard!

Did you know some lizards find prey by “waiting and pouncing?” Others like the Tiger Whiptail spend most of their time on the move, sticking out their tongues to catch scent particles in the air. The lizard pulls back its tongue and places those particles on the roof of its mouth, where it has special sensory cells. The scent “clues” help the lizard find its often-buried prey in leaf litter and under plants and rocks. Try to spot juvenile whiptail lizards; they usually have bright blue tails.

Did you know some lizards are territorial and defend their females and territories by doing displays like “push-ups,” which exposes bright belly patches to other males and females? Some lizards are oviparous, which means they lay eggs. Others are viviparous and give birth to live young. Most lizards in our region are oviparous.

Did you know to protect themselves from snakes, birds, and mammals, lizards display various behaviors? Some run away quickly. The Zebra-tailed Lizard can run at over 17 mph. It flees from predators with its tail curled over its back. To confuse predators, it wags its tail, showing the “zebra-striped” underside. When the Common Chuckwalla detects a predator, it retreats into a rock crevice, gulps air to inflate its lungs, and becomes wedged and very difficult to remove. Most lizard species (but not Gila Monsters or Common Chuckwallas) have “tail autonomy.” The tail breaks free when grasped by a predator, allowing the lizard to escape and grow a new tail.

Did you know the secretive Gila Monster is the largest native lizard in the US? Primarily active during spring days, it travels long distances in search of bird and mammal nests (quail and rabbits are its primary food), but it becomes nocturnal during the summer to avoid the heat. It can spend considerable time underground in burrows or packrat nests. Four or five very large meals (often half of its body mass in one sitting!) can sustain it through the year since it can store fat in its tail and water in its bladder. The Gila Monster’s color pattern may warn potential predators that it has dangerous venom, but it also allows these lizards to blend in perfectly in the broken shade of a shrub. It can only move slowly, with a top speed of about one mile per hour. It’s illegal to handle, collect, or kill Gila Monsters.

Did you know you can see lizards from spring through fall in Maricopa County? In the extreme heat of summer days lizards seek shelter in the shade. To watch lizards, walk slowly along a trail while scanning the environment. Find them in city parks, our mountain preserves, and even your backyard. Observe lizards to learn about them but do not touch or capture them.



Zebra-tailed lizard

Green Scene True or False?

- T F 1. Most lizards in Arizona are viviparous.
 T F 2. The Zebra-tailed Lizard can run at over 17 mph.
 T F 3. Lizards are ectotherms.
 T F 4. A Gila Monster usually eats one meal per week.



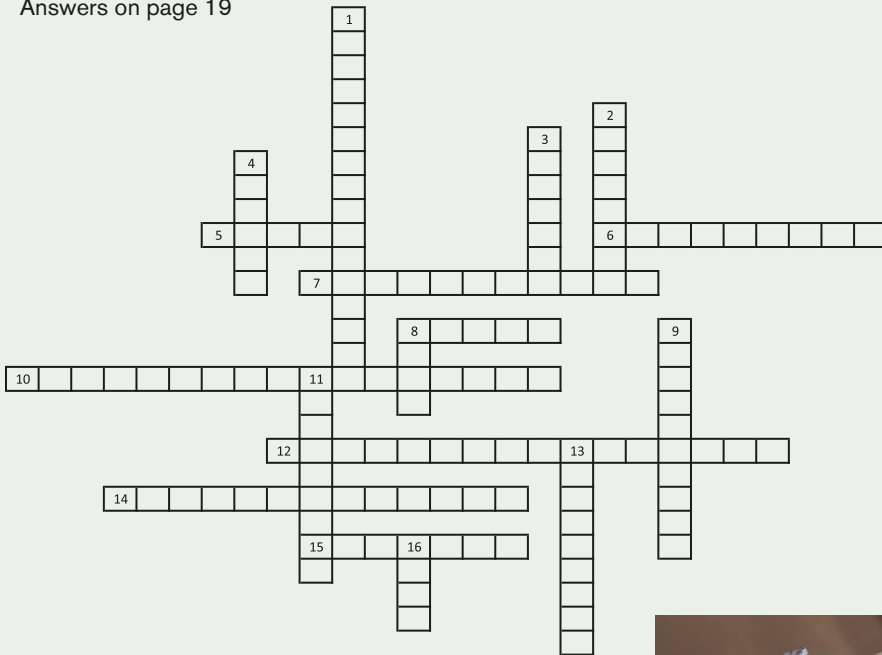
Guess this Lizard!

This lizard is highly territorial.



Leaping Lizards! Crossword

Answers on page 19



Across

- 5 Lizards seek shelter in _____ when hot
 6 Egg-laying
 7 Largest lizard in the United States
 8 Most lizards can regrow these
 10 This lizard wags its tail
 12 This lizard wedges itself in a rock crevice to escape predators
 14 A lizard always on the move
 15 Example of Gila Monster's food

Down

- 1 A lizard common in urban areas
 2 Eats foods of plant and animal origin
 3 Common food of most lizards
 4 Territorial display by lizards
 8 Where the Gila Monster stores fat
 9 Gives birth to live young
 11 Uses the environment to warm its body
 13 Eats other animals
 16 Juvenile whiptail lizards have bright _____ tails



Ornate Tree Lizard



The Residents of the Krishnachura Tree

by Monica Ray



Mama kite on the nest with two chicks. The veranda railing shows how close the birds nested to the building.

The Black Kite (*Milvus migrans*) is a common sight in most Indian cities, but to peer into its nest and watch it rearing young, is unusual and exciting. I never gave this medium-sized bird of prey much thought. Together with the abundance of crows and pigeons, it is just part of Kolkata's urban scene.

Many years ago, my father-in-law had planted a *Delonix regia* tree, Krishnachura as it is called in Bengali, in what was left of the garden after the ancestral home was torn down and replaced by a five-floor apartment building – a common practice in Indian cities.

The crown of the tree has reached beyond the top floor and provides welcome shade, obscures neighboring buildings, and somewhat diffuses the cacophony from the streets below. Above all, it enables watching a variety of birds from the veranda.

Occupying the top floor of a building has many advantages in a place like Kolkata, and with such a magnificent specimen of a tree close by, nature feels a little closer too, and even more so when I can study the upbringing of a pair of young kites.

The kite is called Chil in the native language, a name possibly derived from its call. I had witnessed an earlier unsuccessful attempt by the Chils to build a nest in the Krishnachura, when they were pestered by crows. What a wonderful surprise when the kites did manage to build their home. One would think, since they are not really small birds of prey, that they could stand their ground, but the birds are often simply outnumbered by the crows. This pair persisted.

The rather sloppy nest of twigs and thin branches, pieces of plastic, strips of cloth, and full of bones, feathers, and other detritus, looked precarious on a fork of branches.



Both parents on the nest



The Krishnachura Tree (Delonix regia) in May displaying flamboyant bright orange-red flowers. It has fern-like leaves and the mature seedpods are long, dark brown, and woody. Photo by Arabinda Ray (1932-2016), proud planter of the tree.

The female stays in the nest most of the time, especially when her chicks are very young. She crouches when I stick my head too far over the veranda railing. The male, if nearby, may swoop down, emitting his shrill, almost musical “chee-ll,” and to warn me to back off (or so I hope!) nicks my head. Quite startling. A little painful too!

Early morning the male brings breakfast, sometimes a pigeon, often caught in mid-air, or a freshly caught fat rat – plenty of those live in this West Bengal metropolis; another reason to live as high up as possible.

Black kites eat “on the wing” explains one of my bird books, but papa kite is a good provider and brings food to his offspring and mate first. The rat, and many more rats thereafter, are plucked and fed in bits and pieces to the chicks. Once devoured, what is left of them becomes part of the nest, a kind of furry lining or carpeting.

The chicks grow fast and if I miss them for a few days, the difference in growth is all the more noticeable. However, in this nest, one of the chicks lagged behind and perished. I wondered what happened to it ... did the crows kill it, knowing that it was weak? Always pestering the poor kites, maybe the crows kept an eye on the sickly little one and when given a chance, caught it for breakfast? Nobody I spoke to witnessed its demise; it was simply gone one day.

Another bird occupying the tree is the Indian cuckoo. The Koel, as it is called colloquially, conceals itself in the emerging foliage and has a loud rising call that becomes increasingly hysterical.

Continued on page 16



Caught in the act. Against the backdrop of the urban jungle, Black Kite with pigeon in its talons. Photo taken while having breakfast. Always good to have a camera at hand.

The Asian Koel (*Eudynamys scolopaceus*) with its striking red eye has a bright red gape, noticeable when the beak opens wider and wider as it calls. I hear it before dawn while the city awakens with sounds of the sacred conch shell (Dakshinavarti Shankh) accompanying Hindu morning prayers, and in years gone by the lovely mellow sound of wooden bells, worn by goats herded through the streets below.

The city scene has drastically changed over the years and many trees have perished, or have been taken down for more and more buildings. Our Krishnachura tree, also known as Flame-of-the-Forest or Gulmahor in Hindi, brings delight in this concrete jungle. And, even with a pair of nesting kites, the numerous crows, and the loud cuckoo, many other birds visit the tree.

I have spotted occasional Black-hooded Oriole (*Oriolus xanthornus*) with its bright yellow plumage and flute like voice, Spotted Dove (*Stigmatopelia chinensis*), Oriental Magpie-robin (*Copsychus saularis*), Red-vented Bulbul (*Pycnonotus cafer bengalensis*), Common Myna (*Acridotheres tristis*), Blue-throated Barbet (*Megalaima asiatica*), Asian Pied Starling (*Gracupica contra*), Rufous Treepie (*Dendrocitta vagabunda*), Purple Sunbird (*Cinnyris asiaticus*), and some others I have not identified yet. All are common widespread residents of northeast India, but often unexpected in an urban setting.

This year when I visited, I noticed that the old nest was gone; monsoon rains must have washed it away. What happened to the rat furs? Perhaps they are lying in the garden beneath or on the street outside the garden wall until they are reduced to nothingness. I didn't check, but know that no one will bother to clean them up. After scouring the tree with my eyes, I saw the kites, perhaps the next generation, built a nest once more, but on the far side of the sprawling crown of the Krishnachura. This time I need a pair of binoculars to see them, which is not so easy, because the tree has started sprouting leaves. Soon it will bloom in all its splendor, giving welcome visual pleasure in the "City of Joy." 🐦

Monica Ray, botanical artist, avid gardener, and enthusiastic birdwatcher, enjoys traveling to far off places and writing about her experiences. She paints on commission and for exhibition, and teaches botanical drawing and painting at East End Arts School in Riverhead, Long Island, NY.



Spotted Dove



Mama kite with chicks. One is growing fast, the other lagging.



Asian Koel. Notice the bright red gape.

From: Speech Scroll

#29, #36, #43

by David Chorlton

Wheeling around the left
arm of the wind, a Red-tailed Hawk
dips a wing in light
shining from between the clouds
until the right arm
takes hold and lifts him
up behind the rain
to where he balances at a rainbow's
highest point. Gravity can't reach him;
he's higher than words
in a raptor's silent world
where a newscast doesn't reach
and days have no numbers.

On gusty ones
like this, the Earth tilts and mountains
slide on their foundations, but
the eye is a searchlight
even in the clearest air.

In clear light
beneath the wind tossed clouds
every bird is brighter
than it was the day before:
the lovebirds greener, and the Gila
Woodpecker precise
with gleaming stripes along its back.
On the pond the Buffleheads
bob a little as they go
from wave to wave and the voices
of coyotes carry on the cold
air sweeping down
the desert slopes that shine
with yellow poppies
while the eye of the hawk
as it slices through a flock
of back yard doves
contains the sky.

Hummingbirds insist
on postponing darkness.
Here's Costa's, white ear stripe
and a purple
gorget shining through
the dusk. And Anna's,
capped and whiskered
with the red of a gown
picked out for a dinner
for which invitations
have not been issued.

The universe is perpetual
motion. They are its ambassadors.

They hover
at the mountain's crest
to drink the final sweetness
of the day from
the overripe sun.

Green Scene Extra: Regal Horned Lizard

by Vicki Hire



Regal Horned Lizard. Note the cryptic color of the lizard, which makes it very well-camouflaged and, unless it moves, difficult to spot against rocky ground. Photo by Vicki Hire.

The Regal Horned Lizard is very hard to find when it stays still because its coloring makes it so well camouflaged. It's often found next to harvester ant colonies and this might be a good place to locate and observe these lizards. Harvester ants are the Regal Horned Lizard's favorite food.

In summer, the female Regal Horned Lizard lays up to 33 eggs at the end of a tunnel. These lizards are found primarily in the Sonoran Desert in rocky bajadas (slopes at the base of a mountain) and valleys.

I was lucky to find and photograph this lizard. Last July, it wandered on to my patio near the San Tan Mountains. I was so excited; it looked just like a Triceratops dinosaur. I observed and photographed my visitor for more than an hour. It eventually moved from my patio to the desert in front of my house and disappeared as the sun set on a hot summer's day.

To escape from a Coachwhip snake, which can move extremely quickly, a Regal Horned Lizard will remain still and show the largest part of its body to persuade the snake it's too large to swallow. The Regal Horned Lizard will run away from a rattlesnake, however. Maybe it knows it can exceed the speed of a rattlesnake, but not that of a Coachwhip!

To defend itself from canid species like coyotes or dogs, this lizard can squirt blood from the corners of its eyes. The squirted blood irritates the eyes and mucous membranes of the canid. A coyote or dog will leave the lizard alone, back away, and wipe its eyes and mouth. Look at the photo carefully and notice that the area around and behind the eyes suggest that this Regal Horned Lizard has squirted blood recently. 🐉

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Thank you to Brian K. Sullivan for help.



Green Scene Puzzle Answers

Answer to Guess this Lizard

Desert Spiny Lizard. This lizard is active from March to October. You can easily see this species at the Desert Botanical Garden basking on rocks. It is often seen in male-female pairs. It's a "wait and pounce" predator. It waits on a rock or at the edge of a bush, watching for moving prey like insects or spiders. Then, when one comes within reach, it pounces to capture it, and returns to the same waiting position. [I saw one of these lizards eating a scorpion at the Desert Botanical Garden! – Ed.]

Answer to True or False?

1. FALSE Most lizards in Arizona are oviparous.
2. TRUE Zebra-tailed Lizards can run at over 17 mph.
3. TRUE Lizards are ectotherms.
4. FALSE Four or five very large meals in one year are enough for a Gila Monster.

Answer to Leaping Lizards! Crossword Puzzle

Across

- 5 shade
- 6 oviparous
- 7 Gila Monster
- 8 tails
- 10 Zebra-tailed Lizard
- 12 Common Chuckwalla
- 14 Tiger Whiptail
- 15 rabbits

Down

- 1 Ornate Tree Lizard
- 2 omnivore
- 3 insects
- 4 pushup
- 8 tail
- 9 viviparous
- 11 ectotherm
- 13 carnivore
- 16 blue

Help MAS with an Employer Matching Gift

Many Maricopa Audubon members aren't aware that their employers may include a matching gift program in their benefits package. Programs vary from business to business, but they generally offer a dollar-for-dollar match when an employee makes a personal gift to a nonprofit organization like Maricopa Audubon Society.

Please visit your human resources department or charitable giving department to see if this opportunity is available to you. You usually have to fill out and submit a form, which is sometimes done online. If you have already made a donation to MAS in the past year, you may be able to get a matching gift after the fact from your employer for up to 12 months later. 🦎

Grocery shopping?

Support Maricopa Audubon when you shop at Fry's Food Stores.

MAS is part of Fry's Community Rewards Program. Register your Fry's VIP card and select Maricopa Audubon #89166 as your non-profit organization at no cost to you. Go to <https://www.frysfood.com/topic/new-community-rewards-program>



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Wisdom of the Hive: Reverse Engineering Honeycomb

by Clint Penick

The office of my collaborator, Dhruv Bhate, is littered with fragments of 3D-printed honeycomb. Each piece represents the outcome of a past test of honeycomb strength properties. For the last six months, Dhruv and I have been working together to study how honeycomb made by bees could be used to inspire new, lightweight materials for 3D-printing design.

Honeycomb has long fascinated scientists, both for its beauty and its strength. In 36 BC, the Roman scholar Marcus Terentius Varro first proposed what became known as the "Honeycomb Conjecture." Varro speculated that bees build comb using the hexagon because it's the most efficient shape to divide space into equal parts using the least amount of material (in their case, wax). Nearly 2000 years later, Varro's conjecture was finally proven by the mathematician Thomas Hales at the University of Michigan, who found that the hexagon was superior to all other shapes for dividing space.

As an engineer, Dhruv already knew about the strength properties of hexagons, but he wondered if there might still be more to learn from bee comb. Dhruv is an Associate Professor in Arizona State University's Polytechnic School where he specializes in the design of 3D-printed materials. Hexagons are commonly used in 3D-printing to fill space and add strength to parts without adding excess material. Nearly all airplane panels, for example, are lined with honeycomb sandwiches. If there was a way to improve the design of 3D-printed honeycomb, it could have a huge impact on aerospace design as well as other areas where hexagons are used.

In contrast, I'm a biologist in ASU's Biomimicry Center where my research focuses on the evolution and ecology of social insects, which includes bees. When Dhruv first told me he was

interested in studying honeycomb, I was skeptical that there would be much left to learn. For starters, honeycomb isn't that complicated—it's just one shape, the hexagon, repeated over and over again. In addition, people have been studying bee comb for thousands of years. What else could there be for us to discover?

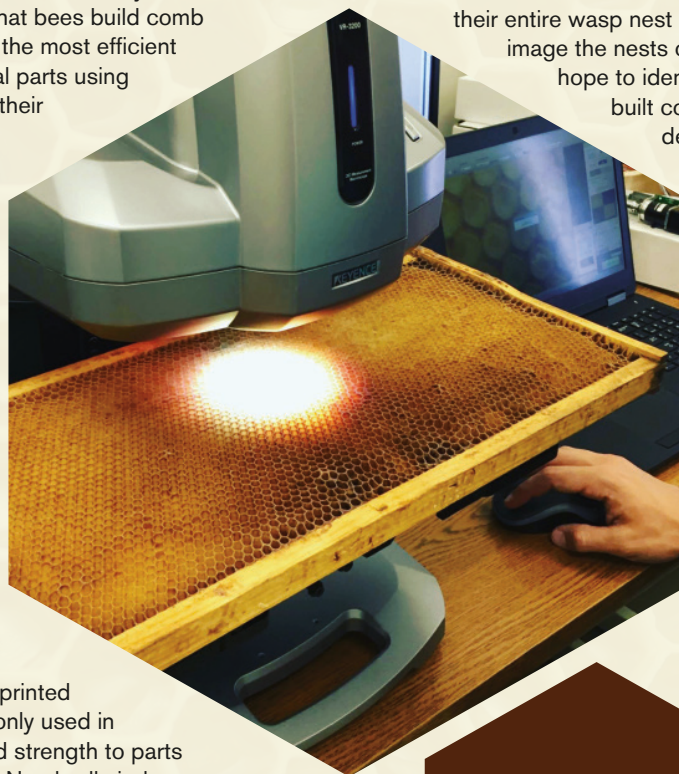
As it turned out, quite a lot.

Unlike honeycomb produced for most engineering applications, bees don't build hexagons with perfect, sharp corners. Instead, bees build hexagons with rounded corners. We wondered if this might be important for the overall strength of their comb.

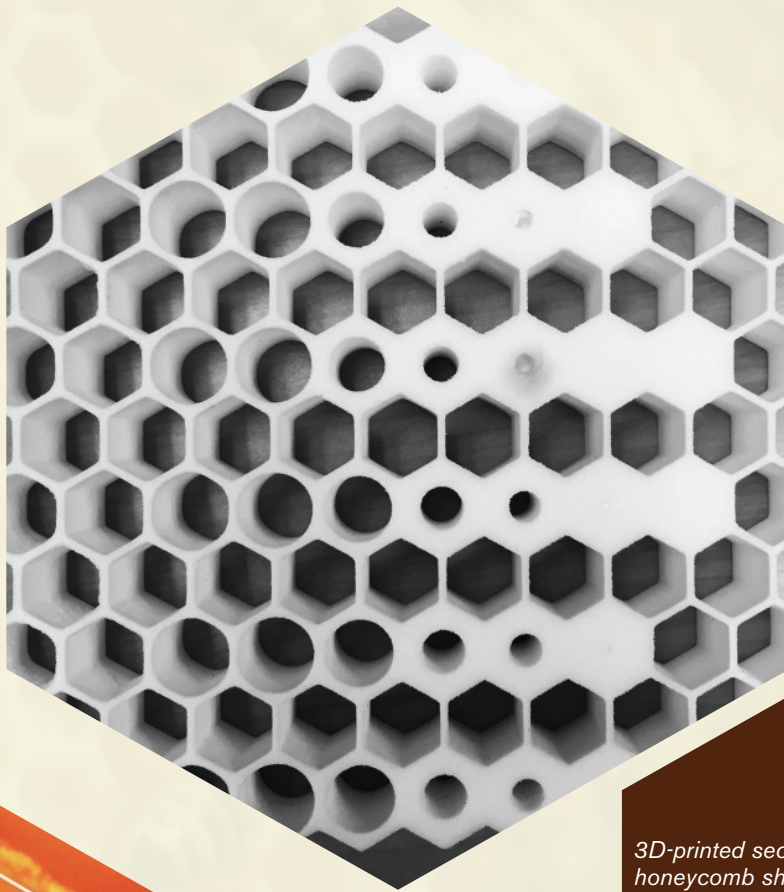
To test this, Dhruv and his students printed a series of plastic honeycomb panels that varied by the amount of rounding added to each corner. Each panel was then placed on a hydraulic press and crushed to measure how they each failed. It turned out that adding a small amount of material to the corners of the hexagons greatly increased the stiffness of the panels without adding much material or additional weight.

Building on this discovery, Dhruv and I are now studying how honeycomb patterns vary across the nests of bees and wasps. With funding from NASA, we recently travelled to the American Museum of Natural History in New York to image their entire wasp nest collection. We were able to image the nests of over 70 species, and we now hope to identify other properties of insect-built comb that could inspire improved designs for 3D-printing. Who knew the hexagon could be so fascinating? 🐝

Clint Penick is an Assistant Research Professor in the Biomimicry Center at Arizona State University where he studies the evolution and ecology of social insects.



Scanning a frame of bee comb for later measurement. Photo by Dhruv Bhate



3D-printed section of honeycomb showing variation in corner rounding (photo: Dhruv Bhate)



Close up view of honeycomb showing measurements of corner rounding. Photo by Clint Penick



A Polistes paper wasp nest in the foreground and bee comb in the background.

Nature through the Artist's Eye: Mary Lavan



Mary Lavan is a studio potter now living and creating in the shadow of Pikes Peak in Southern Colorado. Her functional stoneware pottery is rooted in nature with a modern flair.

A self-taught ceramic artist, Mary began nurturing her artist's soul in Pine, AZ after leaving her high-tech corporate career in 2006. With an eye towards nature and the environment, Mary often incorporates natural elements in her hand-thrown pots. Integrating computer-altered images in her signature work she bridges her high-tech background with her art.

Her stoneware pottery is mostly hand thrown and trimmed on a potter's wheel. After drying thoroughly, it undergoes a first firing in an electric kiln. Then the pots are waxed and glazed (painted) and go back into the kiln and fired to about 2200 F. Much of her work is finished by applying graphic images with an iron oxide transfer process and firing them for a third time. Some of her best sellers feature altered photographs of birds taken by her friend, avid birder, and frequent *Wren•dition* contributor Matt Van Wallene.

Mary is an Audubon Rockies Wildscape Ambassador and board member of the Pueblo West Xeriscape Demonstration Garden at Cattail Crossing. She is excited to spread the word about the need to restore natural habitats for birds, bees, butterflies, and other pollinators by incorporating water-wise native plants into our landscapes. 🐦

Mary's Etsy Shop: <https://www.JustMare.etsy.com>
Contact: Mare@JustMare.com



Rufous Hummingbird Bowl.

Inspired by Matt Van Wallene's vibrant hummingbird photographs, I received his permission to start using them on my pottery in 2009.



Anna's Hummingbird Mug.

I was happy that the kiln worked its magic to capture the ruby coloring of this Anna's Hummingbird on this hand thrown mug (from another of Matt's photographs).



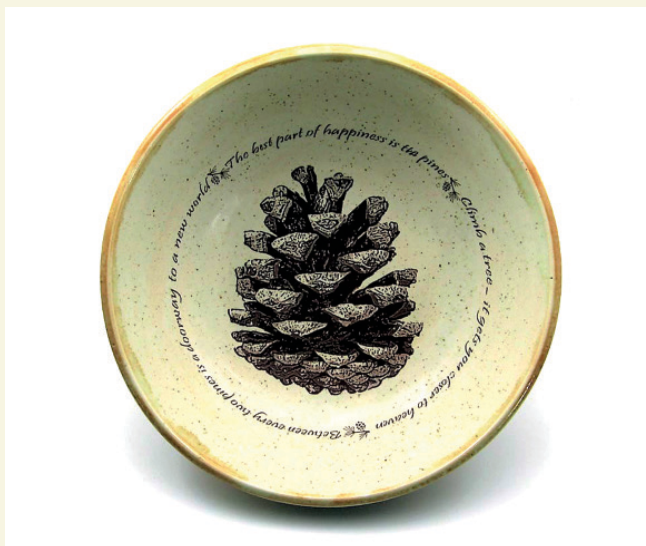
Gila Woodpecker Family – Nesting Bowls.

A set of two shallow nesting bowls featuring altered graphics from Matt's original photographs of a Gila Woodpecker couple and their baby nesting in a Saguaro cactus. His photo featured on the cover of the Fall 2011 *Wren•dition*.



Treetop Hawk Stoneware Bowl.

For my Treetop Hawks series, I took artistic license and transformed Matt's photograph of juvenile Cooper's Hawks into a silhouette.



Life in the Pines Bowl.

Incorporating inspirational quotes along with a Ponderosa pinecone graphic, this bowl captures the spirit of the time I spent in Pine, AZ where I honed my pottery skills.



Monarch on Maximillian Sunflower Bowl

This is the first use of one of my own photographs on my pottery. I had to chase this elusive Monarch Butterfly around the demonstration garden in order to snap its photo.



Sunflower Platter

Inspired by the abundance of native sunflowers growing along Colorado's front range I carved this sunflower platter after throwing it.

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To become a member of the NAS please go to:
www.audubon.org/audubon-near-you

We send *The Cactus Wren*•dition to all current members of NAS if you are assigned to or choose MAS as your local chapter. NAS provides MAS \$3.00 per year for each member assigned to us.

To become a Friend of MAS, please pick up a form at the book sales table at our monthly meeting or visit our website, <http://maricopaaudubon.org>

For specific questions please contact our Membership Chair.

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Copy for *The Cactus Wren*•dition must be received by the editor by e-mail, by January 15, April 1, July 1, and October 1. Articles not received by the deadlines may not appear in the upcoming issue. Email to: *The Cactus Wren*•dition Editor, Gillian Rice: editor.wrendition@yahoo.com

Opinions

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