

# WingBeats

A publication of Liberty Wildlife



## Change Provides Opportunity

When we come to live as a part of the beautiful web of life and respect the limits inherent in a finite world, we will restore balance.

Story by Gail Cochrane  
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## Meet Maya **a Crested Caracara**

The jaunty black cap, impressive beak with its orange cere, and those long orange legs make this member of the falcon family a real eye stopper.

by Megan Mosby  
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# *from the* **Director's Chair**



**C**ontinuing our efforts to support wildlife and the natural world for forty-one years has afforded us the opportunity to transform our operations in many ways. From the single mission of wildlife rehabilitation for release back into the wild, we have since greatly enhanced that sole program to include a number of equally important initiatives. First came the Education department, then the Research and Conservation program. Just prior to our move to our new facility, we introduced our Liberty Wildlife Non-Eagle Feather Repository (LWNEFR).

Five years ago, with limited space and availability, we fulfilled our dream of moving to our new campus, the Rob and Melani Walton Campus of Liberty Wildlife on the Rio Salado in downtown Phoenix. This monumental change has presented us with the opportunity to grow and change exponentially. Once in, it took a little while for us to settle and realize that this was just the beginning. The opportunity to change has been great, but transformation is what we have done and what we will continue to do.

Our campus programming has grown adding to our mission of educating the public about the beauty and benefits of wildlife and nature. We have added a variety of opportunities including “pop-ups” with handlers and wildlife ambassadors so that an up-close experience can change a life. We have introduced an avian flighted program demonstrating activities that you could see in the wild if you are afforded the time and opportunity. The addition of a Teen Club gives young people a great chance to experience the “wild” world, to learn about nature firsthand, and to share their enthusiasm with the public. Our

newly minted Superhero program works toward giving 5- to 11-year-old nature enthusiasts practice at advocating for nature with their friends and family...a great start! Our membership program rolled out with bonuses like monthly nature/bird walks, store discounts and first opportunities to participate in campus events. We have provided opportunities for beehives to continue the betterment of the pollinator program afforded by our butterfly and pollinator garden.

Our guest experience and safety are top on our list while planning our activities. QR codes have been added to signage allowing guests to read and learn about each creature on display. External fencing has helped make our events run smoothly and our internal fencing around public enclosures ensures that both guests and ambassadors are safe and available. Trees have been added to help with shade as well as shade sails wherever possible. Eventually the trees will provide shelter from the sun...but it takes time, and we want everyone who visits to have the best experience possible.

Adding our condor exhibit has been off the charts exciting. Nowhere else can you see so boldly the charm of California condors who clearly seem to enjoy the experience also. The black-crowned night heron, a showstopper for most guests, has moved into his new “digs” and proudly displays his charm. The aviary for small birds has hosted a number of beautiful to look at and hear songbirds hidden in the shrubbery and vegetation...a fun game of where’s the bunting? Sotdaes, Korean folk art, adorn the wetlands providing perches or nests for passing raptors and solitary beehives for another boost to pollinators.

The collection of educational ambassadors continues to swell. A crested caracara is a new species to our group of non-releasable raptors. Of recent, we are adding mammals to our collection. Groot, the coati-mundi; Poppy, a newly acquired opossum; Bisbee, the ringtail; and this year, Bobbie, the bobcat, who you can read about in this issue; all have come to us injured, orphaned, or intentionally raised for a questionable pet trade. They each have stories to tell and facts to teach and learn about, and learn you will, when you visit our campus. Our next big drive is to provide enclosures for them on the education trail...more to come about this endeavor... stay tuned.

The “Littles” are filling out the Interactive room with small mammals, small raptors, reptiles, insects, and amphibians in all of their splendor. They are out on display during open hours, and you might get lucky to see the Colorado River toad scarf down a roach...eeeew! Learning about the beneficial nature of each one of these often-maligned creatures is a not to be forgotten experience.

Our award-winning Non-Eagle Feather Repository is a favorite stop for everyone on campus. Affording each person the opportunity to see the work that is being done providing recycled feathers to be sent to Native Americans for religious and ceremonial regalia, giving us the opportunity to promote cultural enrichment for Native American communities across the country. The success of the program is highlighted in the article commemorating their 5000th order filled.

**Director's Chair**  
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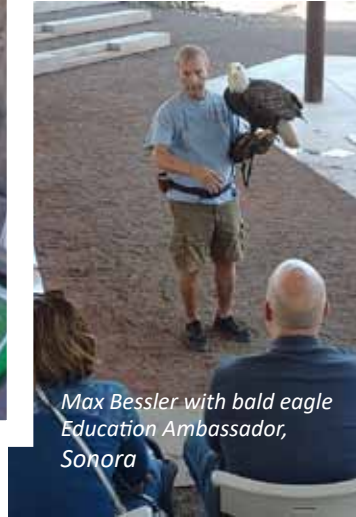




Ben Riddle with a Sonoran Desert toad



Morgen Hackett (teen volunteer) leading an activity



Max Bessler with bald eagle Education Ambassador, Sonora

Experience the rewards of being a Liberty Wildlife volunteer.

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Editorial staff:  
Megan Mosby,  
Carol Suits, Nathan Thrash

Contributing authors:  
Gail Cochrane,  
Donna Excell-Steffel,  
Kristin Atwell Ford,  
Laura Hackett,  
Amanda Harder,  
Robert Mesta,  
Jan Miller, Chris Sar,  
Kathleen Scott,  
Terry Stevens, Alex Stofko

WingBeats design:  
Cindy Gort

Cover Photo:  
Great horned owl release  
by Rodrigo Izquierdo

Back Photo:  
Female Anna's hummingbird  
by Mike Ince

For more information, please contact:  
WingBeats Staff, Liberty Wildlife  
2600 E. Elwood Street  
Phoenix, AZ 85040

Wildlife Hotline (480) 998-5550

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[www.libertywildlife.org](http://www.libertywildlife.org)

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Ferruginous hawk  
Photo by Terry Stevens

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# Documentary News



## The Weight of a Feather: *Connecting People, Nature, and Cultures*

By Kristin Atwell Ford, Filmmaker, Producer

Documentary films can amplify a mission beyond an organization's location and germinate great ideas. The Rob and Melani Walton Foundation wanted to see a documentary film about Liberty Wildlife because they felt we're ready to "go to the next level." As filmmakers, we took that challenge to heart. The Liberty Wildlife story is as intimate as a baby bird that comes through your intake window and as broad as the web of life that makes our environment viable for all living beings. The film "The Weight of a Feather" illustrates how the organization supports animals and people. Weaving intimate stories into large scale cultural and scientific impacts is a network of committed people. Seeing the Liberty Wildlife staff, volunteers, and partnerships like Arizona

Game and Fish Department, SRP, APS, and The Peregrine Fund work hard for wildlife is a moving experience that fills this story with connectedness.

One key goal of the film is to communicate the Liberty Wildlife Non-Eagle Feather Repository (LWNEFR) for all members of registered Native American Tribes in the United States. With the story of ceremonial feathers comes a deeper understanding of how Indigenous cultures were overlooked when the first wildlife laws were written. The LWNEFR addresses the balancing act of protecting bird populations and honoring Native American cultures. The LWNEFR gives individuals a chance to affirm their cultural identity. Liberty Wildlife and its partners also

address complex environmental challenges such as lead in the environment that impact raptor populations, protecting migration corridors by working with major utilities, and educating about imprinting and the illegal pet trade. Liberty Wildlife approaches tough issues with heart and hard work. The organization teaches compassion in all its research, conservation, and natural history education programs. Seeing so many solutions in action is uplifting.

The documentary will be released locally, statewide, and nationally. We will start by celebrating its world premiere at Harkins Cine Capri at Tempe Marketplace on the banks of the Rio Salado, where Liberty Wildlife lives and much of the film was





captured. Starting October 7th and running through Indigenous People's Day weekend, the film will be open to the public to see at that Harkins location. One hundred free tickets will be available to Liberty Wildlife volunteers on a first-come basis (more details to follow). We hope you will bring your family and friends to see the film. This is an auspicious launch right before Liberty Wildlife's annual fundraiser "Wishes for Wildlife." In addition to introducing people to the organization we hope to build and invigorate a larger com-

munity of donors. This is all part of taking Liberty Wildlife to the next level.

The next viewing opportunity will be on television with Arizona PBS. The film will air on Channel 8 and other AZPBS outlets later this fall. We are fortunate to have a local broadcast partner who will usher the film into the Public Broadcasting System in Arizona and nationally. PBS reaches over 80% of all households with televisions in the United States. We are honored to work with PBS. It is a powerful

way to reach Native American communities and new audiences who love wildlife and nature documentaries.

Early next year the film will be available to all PBS member stations across the country. That doesn't guarantee those stations will air the film, but if your friends and family make a request to their local stations to air it or stream it on their website, it's more likely the film will play in different regions.

The film will also be submitted to wildlife film festivals and be available in the nationwide PBS Learning Media with resources for classroom use. Ultimately, we aim for the film to fuel the growth and sustainability of Liberty Wildlife and all of its programs for years to come.

We hope you will be a proud film ambassador. Please know we could not have made this documentary without The Rob and Melani Walton Foundation, The Virginia G. Piper Trust, your staff, volunteers, and board, and every living creature who has been touched by Liberty Wildlife.

#### The Filmmakers

**Kristin Atwell Ford, Bill Davis & the team at Quantum Leap Productions**

“

Change will not come if we wait for some other person or some other time. We are the ones we have been waiting for. We are the change that we seek.”

Barack Obama

## Director's Chair...continued from page 2

This year, due to the incredible number of orphans that we are receiving, we have added an annex for "teenaged" birds before sending them out to the flight cages prior to release. Who knew we would receive so many babies...but we have, and we have adapted to the demand! One more opportunity for us to morph and grow!

Finally, for now, in an effort to continue our transformation we are presenting a documentary about Liberty Wildlife, our very beneficial partnerships, and all of our efforts to make the world better for

nature and her creatures, all of them, that depend on it. Watch for information about the film's October release. We are excited about the opportunities this affords us and are grateful to the Rob and Melani Walton Foundation for providing the funding to make this possible. See the documentary article in this magazine for more information.

There is no resting on our laurels here. We have never been content or pleased about not improving on our past achievements. It just isn't in the cards for us. We never con-

sider that further effort isn't necessary...it is. We know that to survive and succeed we must change. To make a difference in this world we must give up what we know and are comfortable with for what we need...and maybe the unknown. And, we have.

*Megan Mosby*

**Megan Mosby**  
Executive Director

# Change Provides Opportunity

“Yesterday I was clever, so I wanted to change the world.  
Today I am wise, so I am changing myself.”

Rumi

By Gail Cochrane, Contributing Author

*As we understand that we are part of nature, we remember that as humans and mammals, we are sustained by communities. Just as herds of antelopes, flocks of sparrows and schools of fish find safety in numbers, human communities provide support and nourish growth.*

A classic tale of the natural world concerns Squirrel, diligently caching seeds and nuts for the lean months of winter. Squirrel understands a change is coming. Mammals and birds both prepare for changes in the weather and the resulting food scarcity and work hard to prepare.

A Southwest bird that changed its habits in order to enjoy greater food diversity is the verdin. Tubular flowers such as those on chuparosa, hold sweet nectar at the base of their blooms, too deep for the verdin to probe with its short beak. But the clever bird learned a work-around. All verdins now make slits at the bases of tubular flowers, reach right in and drink the nutritious nectar.

Animal adaptations are changes and solutions. Over the eons Black-tailed Jackrabbit's ears became bigger and bigger. These giant appendages help cool the hare, allowing it to forage later in the morning and to start feeding earlier in the afternoon. An animal that was nocturnal becomes crepuscular and thrives.

Our global world is changing; temperatures rising, extreme drought gripping some areas while intense downpours flood others. These changes are already upon us, and it does not appear we have time to evolve bigger ears or longer legs. However, we can still learn new tricks like Verdin.

A particularly valuable change would be reducing the size of our footprint. Our Earth footprint is the size of the chunk we each remove from Earth's resources every day. Stark images of reservoirs reduced to low water levels and smoke from wildfires spreading across entire states drive home the hard fact that the natural world sustains us as it does all critters. Humanity's unrestrained use of Earth's resources is throwing

everything off kilter. When we come to live as a part of the beautiful web of life and respect the limits inherent in a finite world, we will restore balance. To bring down Earth's fever we have to stop burning fossil fuels, the sooner the better. In the face of change we must adapt as have so many before us.

As we understand that we are part of nature, we remember that as humans and mammals, we are sustained by communities. Just as herds of antelopes, flocks of sparrows and schools of fish find safety in numbers, human communities provide support and nourish growth. Community gardens are amazing gathering places that allow folks to meet and work, laugh and learn together—and they provide food. Local sources of food are valued in any world. The community that is Liberty Wildlife nurtures the nature of Arizona as well as nurturing and inspiring all of the people who work, volunteer, support and visit the facility.

Oftentimes our views of reality make it hard to imagine that things could be different. Then some people have new ideas, and a few people act on them, and some just talk about them with others. When enough people start to engage with those ideas and to act differently as a result, a shift occurs. A new reality takes shape and begins to gain momentum. We have seen this happen at Liberty Wildlife, as a dream transformed into solid reality, and today a vibrant new facility treats thousands of injured wild animals.

The science of social change teaches that change provides opportunity. Many people benefit from change, especially those resilient folks who realize that they can adapt. Imagination, creativity and optimism will carry us many interesting places in the new world to come.

# A New Feline Friend

by Laura Hackett, Biologist,  
Education Coordinator

When you think of Liberty Wildlife, do you picture Sonora the bald eagle? Or Hedwig, the great horned owl? Or maybe even a small songbird you found injured in your yard that you brought into our hospital. That is generally the main vision people get when they hear our name, and we do take in a majority of feathered friends. However, Liberty Wildlife accepts all native wildlife—feathery, scaly, AND furry!

Over the past few years we have introduced you to Groot, the coatimundi. Then Bisbee, the ringtail (and state mammal) who you can visit in our Interactive Room. This year, we have a new four-legged friend that has made Liberty Wildlife his permanent home: Bobbie the bobcat. We realize it's not the most original name, but it is never our intention to keep any of the animals that come to our hospital, so we do not give them names until it is known they cannot be released back to the wild. It is a reminder to all of us that they are wild animals and not pets. When the staff talked to each other about what daily chore they were doing next, we'd simply say, "I'm off to take care of the bobbie"—and it just stuck.

Bobbie came to us as a kitten. He and his sibling were trapped along with the mother at a sub-station south of Phoenix. The trapper safely relocated the mother and sibling, but he noticed that the little male had a severe injury to his eye, so he brought him to our hospital. Even at approximately 3–4 months old, he was already wary of humans, had a fierce growl, hiss, and spit whenever we approached his enclosure. Our volunteer veterinarian Dr. Lamb examined the eye and found that the injury was too severe for it to be saved by simple antibiotics or time. It needed to be removed. The surgery was a success and the wound healed well. There are animals in the wild that have had injuries to their eyes or even lost sight in one completely but were still successful hunters. But, Bobbie had been taken from his mother at a young age and had not received the amount of training from her that we felt he would have needed to be able to survive on his own. We were able to move him to our education permit and officially name him "Bobbie."

**Bobbie**...continued page 34



Photo by Laura Hackett



# Desert

## Amphibians

Colorado River toad  
Photo by Diana Rodriguez

by Gail Cochrane, Contributing Author

**A**mphibians begin their lives in freshwater as eggs and they hatch as larvae, or as we call them, tadpoles. Those little swimmers undergo an incredible transformation to adults, trading their gills for lungs, and crawling onto dry land with brand new limbs and digits. Amphibians such as toads, frogs, spadefoots, and salamanders thrive in the Sonoran Desert, but they face great challenges due to extremes of heat and aridity.

Sonoran Desert toads are well adapted. They limit their above ground activity to May through September hunting mostly at night during the hottest months. With the monsoon rains of summer, the toads breed and lay eggs where rain collects in pools and in permanent ponds. The larvae need 6 to 10 weeks to metamorphose. Adults eat mostly insects but sometimes small invertebrates, even other toads. This toad grows to be as big as your hand, but don't pick him up! The Sonoran Desert toad emits

toxins through glands in its skin, and these chemicals are strong enough to take down a dog if it were so rash as to mouth it. If your dog has been running loose and begins to paw at its mouth or show unusual gait or excessive salivation, hose out its mouth from back to front and call your vet!

Couch's spadefoot is so called for a keratinous sickle shaped "spade" at the base of each hind foot. These appendages are used to dig burrows, some as deep as three feet. Down where it is cool and moist the spadefoot rests. Spadefoots emerge from their burrows when they sense the vibrations of monsoon rain and thunder. They immediately begin calling for mates in a frenzied rush to breed and lay eggs in the rising pools. The females lay 3,000 eggs which must hatch into tadpoles quickly before the water dries up. In warm water, hatching can happen in 15 hours. Tadpoles metamorphose in as little as nine days. Still, given the ephemeral nature of desert water puddles, few of

the eggs become young frogs. Couch's spadefoot also has a secretion that can cause allergic reactions in some humans.

The desert environment calls for clever adaptations. Tiger salamanders and lowland leopard frogs must live near permanent water, ponds, streams, or springs. The Sonoran Desert toad and desert spadefoot spend nine or ten months of the year or longer in their moist underground burrows. When they do emerge to breed and lay eggs, they must gorge on insects brought on by the rains. It may be a year or more before they eat again.

Amphibians were among the first of the vertebrates to emerge from the oceans to forage on land. Their reliance on water for their larval stage and permeable skins make life on land a trial, especially in the desert. Yet amphibians have proven versatile, for they have persisted over the eons and made niches in every habitat.



# Ways You Can **Support Our Mission**

by Chris Sar  
Development Consultant

## Members & Sponsors

With many visitor enhancements added around our campus this past year (and more that are planned for the near future!), it's a great time to bring the family out to experience Liberty Wildlife in person again.

Annual family memberships are just \$95 and include two adults and two kids unlimited admissions throughout the year. Individual annual memberships start at just \$30. In addition to admission, memberships also sustain the vital education, rehabilitation, and conservation work that Liberty Wildlife conducts every day.

Your membership provides support to care for these animals as they receive emergency care, surgeries, and intensive long-term rehabilitation. We have public visitor windows into both our triage and surgery suites—so there's a good chance you might see some of these rescues getting care! But all this work is only possible because of support from our members.

Starting at just \$30 per person, membership has its privileges. Depending on your level of membership, some benefits include:

- *Admission throughout the year, plus extra guest passes at higher levels;*
- *Invitations to special events at Liberty Wildlife;*
- *Invitations to members-only activities and events (like expert-led birding hikes);*
- *Discounts off preview events, new exhibits and special event programs;*
- *Discounts on merchandise in our gift shop;*
- *Invitations to our Speaker Series, Nature Hikes, shadowing Wildlife Trainers; and more...*



And even if you don't plan to visit or attend activities at Liberty Wildlife, we now offer a new way to show your support for our Animal Ambassadors. Sign up as a Sponsor of a particular type of animal. You can sponsor an eagle, owl, raven, hawk, corvid or vulture. Or you can sponsor all the animals taken into our Orphan Care. These

sponsorships also make great gifts for special occasions, or just to remind a loved one how much you appreciate them.

The many dozens of Animal Ambassadors that you can visit at Liberty Wildlife are representatives of the many more thousands of birds, mammals, reptiles and amphibians that are brought to



Photos courtesy of Terry Stevens

our doors orphaned, sick, or injured. On average, Liberty Wildlife takes in over 35 animals every day of the year. And of course, it's several times higher than that during the busy "orphan care" season, when baby birds are blown out of nests by storms, or when other orphaned baby wildlife are found around people's homes or along various urban hiking trails in the spring and summer months. Our orphan care season seems to be getting longer each year with warmer weather. It's becoming more common to see the earliest arrivals now in February, and last November we were still getting baby owls brought to our intake window for care!

For information on becoming a member or to become a wildlife member or sponsor, contact Liberty Wildlife today, at 480-998-5550 or <http://libertywildlife.org/how-to-help/donate/>.

## Campus Improvements: Gifts made it happen

Throughout 2021 and into 2022, Liberty Wildlife made continuous improvements to our Rob & Melani Walton campus along the Rio Salado, mostly to enhance the visitor experience.

Among the earliest improvements was also one of the most urgently needed—a secure perimeter fence and electronic gate across the front of the campus driveways. This along with some staffing additions helped to ensure that our campus is safer both day and night. A generous donor made it possible, along with some cost savings by getting recycled gates from a neighborhood in Scottsdale. The new fences were then painted with an artificial rusting technique that helps them blend in with other architecture and signage on campus.

**Community Support**...continued on page 28



# Where would we be without our bean trees?

by Donna Excell-Steffel, Contributing Author

The simple answer is that the Sonoran Desert so many of us love would look different and would support far fewer flora and fauna in the absence of bean trees. Three of the most common native trees in the Sonoran Desert are legumes, like peas and peanuts. These trees play a core role in the desert ecosystem: the desert ironwood, the velvet mesquite, and the palo verde (blue and foothills). All three are almost exclusive to the Sonoran Desert and are ecologically vital to it.

These trees provide unique micro-habitats (small areas which differs from the surrounding habitat). They provide shade from intense sun, protection from extreme cold, higher water availability, nutrient-rich soil underneath, and thorny trunks and branches to discourage larger mammals—including humans—from emerging flora.

*Mesquite tree and surrounding habitat  
Photo by Judi Stivers*



The trees are an important sanctuary for both native and migratory birds, which use them for perching, mating, nesting, and prey-seeking. In the Sonoran Desert, they are used by almost 150 bird species, and it is estimated the presence of the trees increases the bird population up to 63 percent—more than creosote, cactus and bursage alone could support. Legume trees also provide sanctuary and food, directly or indirectly, for 62 reptiles and amphibians, and 64 mammals. Small burrowing mammals often prefer to make their homes among the roots of the trees.

Hummingbirds and bees depend on their flower nectars, which also attract insects, which then attract insect-eating critters. Some birds also eat the flower buds, and desert tortoises eat the dropped flowers. Flowers of the velvet mesquite contain more sugar than the

other trees, which attracts 60 species of bees who produce popular mesquite honey. Also, 63 species of butterflies use the velvet mesquite as a larval plant.

Some months after flowering, the beans ripen in their pods and become sugar- and protein-rich food sources for birds and small mammals, as well as humans. Beans from all three trees are edible. The dried pods can be ground for flour and were a dependable staple for early inhabitants. The seed-eating wildlife, as well as pods dropped from branches, generate a rain of seeds and whole fruit, which adds nitrogen to the otherwise nutrient-poor desert soil. This naturally enhanced soil can then support young seedlings. More than 230 plant species have begun their lives within the legume trees’ protective

microclimate—although different trees cater to different seedlings—including the saguaro cactus.

The saguaro cactus, the most distinguishing Sonoran plant, might not exist in this desert at all if it weren’t for these trees. In addition to the Sonoran’s perfect climate for saguaros, all three trees, but especially the palo verde, are nurse plants for the saguaro. It takes a saguaro seedling about 10 years for it to grow one inch, and about 83 years to reach 10 feet. This means the saguaros cannot reach maturity unless their seedlings have uninterrupted protection for years. Sometimes desert observers will see a mature saguaro crowding out one of these trees. That’s because the seedling was nurtured under it, but as the saguaro grew, it robbed the tree of nutrients, which sometimes will result in the tree’s death.



Mesquite seed pods



Foothills palo verde seed pods



Velvet mesquite seed pods

Photo courtesy of Diana Rodriguez

Photos courtesy of Donna Excell-Steffel

**Here is a brief summary of the flowering and legume-producing trees:**

	Desert Ironwood <i>olneya tesota</i>	Velvet Mesquite <i>Prosopis velutina</i>	Palo Verde <i>Parkinsonia florida</i> (blue) and <i>P. microphylla</i> (foothills)
Flowers			
Bloom time	Early to late spring	April – May (sometime again in August)	April – May (most prolific flower producer)
Color	Pink, Purple	Cream to pale yellow	Yellow
Seed Pods			
Develop	Early Summer	June – Sept	June – July
Beans per pod	1 – 4	1 – 8	1 – 8
Tastes like	Peanut butter	Sweet & slightly fruity; a hint of caramel	Sweet & nutty; varies among trees

# Orphan Care

## Bert... Ernie...



...and Our Many Gambel's Quail at Liberty Wildlife

Photos by Kathleen Scott

by Kathleen Scott, Orphan Care Coordinator

Like the Gila monster, greater roadrunner, and collared peccary (javelina), the Gambel's quail is an iconic animal of the Arizona landscape. With its distinctive calls, one may hear a Gambel's quail before seeing it. Visually, it's easy to identify with its "question mark" shaped feather tuft atop its head.

Gambel's quail are found throughout Arizona. Their range stretches across most of western, central, and southern parts of the state, and may also be found as far north as Utah and as south as Sonora in Mexico. When young and during breeding season, Gambel's quail enjoy eating a variety of insects, along with their main diet of vegetation. They live in family units called coveys, and they are one of our many ground nesters in Arizona. The female will make a small scrape or bowl-shaped depression in the ground,

usually hidden under a bush or in with some cacti, where she will lay up to fifteen eggs. The babies are born precocial, meaning they are self-feeding from birth, but this does not mean they do not need their parents. Sometimes, a newly hatched quail will become separated from its family due to any number of reasons. A parent is crucial to their survival, which is where Liberty Wildlife comes in.

During the spring and summer, Liberty Wildlife may receive several newly hatched quail each day that have lost their parents and families. Without a parent, the baby quail simply do not thrive as they should, as they may become hypothermic in cooler temperatures, may not yet understand how and where to look for food, as well as other dangers. They need a parent to look out for them, so a foster parent is

required. Through trial and error, we have found that only a very specific quail will fit the job. Surprisingly, adult Gambel's quail do not seem interested in fostering their own kind. We have discovered that, for us, the very best fosters for our army of little baby Gambel's quail are northern bobwhite quail, more specifically, male northern bobwhites.

For years, Liberty Wildlife had a northern bobwhite named Papa Quail, who was known for being an excellent and protective parent. After his eventual passing, we knew we needed new fosters to take up the charge. In the spring of 2021, Bert and Ernie, two young male northern bobwhites, were purchased from a breeder in Tucson. At first, they weren't sure what to make of their new surroundings and exactly how to be dads. But

Some of the many Gambel's quail babies being fostered by Bert and Ernie are pictured above. The photo includes foster parent Bert, a northern bobwhite.



If you find a newly hatched quail on its own, it is most likely in the animal's best interest that it be brought to Liberty Wildlife (or another wildlife rehabilitator) for care. You can determine if it is a new hatch by seeing that it is one to two inches in height, weighing around 4 grams, with fluff instead of any visible feathers. Is the quail feathered and about four inches in height? It is probably okay where it is!

given a bit of time, both Bert and Ernie have proven themselves to be excellent parents and have carried on the legacy of Papa Quail. In cold mornings or during storms one can see Bert and Ernie fluffed out, each with tiny baby quail packed tightly around and under them for warmth.

They watch over many more young than any quail parent would have to in the wild, and they do an admirable job. We are so grateful to have Bert and Ernie, and we love seeing their young quail grow and thrive under their care.



*Covey of Gambel's quail in the wild.  
Photo by Randy Vuletich*

# Daily Care

By Alex Stofko, Daily Care Coordinator

## What Happens Now? From Rehabilitation to Release

One of the top questions we get asked at the intake window is "What happens now?" It's a valid and important question, one which I will answer now!

When a caring member of the public calls the Liberty Wildlife Hotline (480-998-5550) or brings an animal directly to the facility, the animal is entered into our intake database in order to keep track of where an animal came from and why it needs assistance. Once entered, the new patient goes to triage to be assessed and to determine what treatment plan it may need. Wait times vary as they do at any medical facility, especially during our busy orphan season. The new patient is examined from the top of their head to the bottom of their talons or paws. A treatment plan is put

together and the animal is moved to one of four locations. The intensive care unit (ICU) is for patients needing continued medical treatment, bandage changes and daily medications. Isolation is for those patients with a contagious illness that could be spread to other animals. Orphan Care is for those young and innocent songbirds and doves that need to be raised until they can be on their own. And lastly, raptor babies and juveniles with no illness or injury that just need to be raised get placed outside with foster parents of the same species. We also have a bunny room for, you guessed it, bunnies and other small mammals such as squirrels. So far, the new patient has gone through Intake or Rescue/Transport, Medical Services, Orphan Care,

and Bunny Care...each with their own volunteer crew.

So what happens now that the animal has been assessed and placed in its temporary home? This is where Daily Care steps in! Daily Care has two shifts, a morning crew that cleans and feeds everyone in the hospital and in outside rehabilitation, the second shift is the Owl Team that comes in to feed and clean all the owls in rehabilitation. The Daily Care crew is the biggest team of volunteers with over 100 members. The teams work 365 days a year—rain, shine, or scorching temperature—to make sure every patient is well taken care of during their stay.

**Daily Care...***continued on page 20*

# Sotdae Sculptures



Photos by Diana Rodriguez

by **Megan Mosby**  
**Executive Director**

As you pass through the lobby of Liberty Wildlife, you see across the wetland, two tall perches and one potential nesting site. These structures, called Sotdaes, are inspired by Korean art forms with roots in the Bronze Age some 5,000 years ago.

A typical sotdae consists of a tall wooden post with one or more abstracted birds on top. The birds vary in form with some of them being carved duck shapes and others simply “V” or “Y” shaped pieces of tree branches.

Animist peoples of northern Asia considered waterfowl to be special as they could walk, fly, and swim. Plus, they were thought to be messengers to the gods as they flew to far-off places in autumn but returned every spring. People erected sotdaes to encourage the return of these emissaries with good tidings. Sotdaes are still erected, mostly in rural areas of Korea, to bring good luck and prosperity and to celebrate special events.

The Liberty Wildlife sculptures have steel bases topped with branches from desert willow trees. There are abstract

birds attached that are also made of desert willow from the Liberty Wildlife grounds and whitewashed with non-toxic milk paint.

Each of these sculptures has wooden inserts in the bottom that are bored with tunnels to encourage solitary native bees to use them as nesting habitats.

The middle sculpture in the group was made as a raptor nesting platform. It is also made of steel and wood.

## Bee Habitat in Sotdaes

Arizona is home to about 1,300 species of bees; it is one of the most bee-diverse places on the planet! Most of our native bees are solitary species, which do not make hives or honey, but they are critically important pollinators of both native plants and food crops.

Most species of native bees nest in “condos” below ground. But, some of them prefer to nest in borer holes in dead trees where a beetle has done all of the work of digging a tunnel. It is these bees that will be attracted to the habitats at Liberty Wildlife which are made by drilling tunnels of various diameters into wood beams.



Tucson artist and landscaper Greg Corman created the sotdaes donated to Liberty Wildlife by Jennifer and Charles Sands

Female bees find the tunnels and use either mud, resin, or leaf parts to make small cells within. Each cell is provisioned with a ball of pollen mixed with nectar, and the bee lays an egg on this ball. When the egg hatches, it eats the food ball and goes through a series of metamorphoses until it is a fully formed adult. The following spring, it will hatch out with its cohort and start the process over again.

These native bees are essentially stingless and are safe to have around people and pets. They aren’t attracted to human food or drink and don’t get aggressive when people are nearby. These habitats cannot attract “killer bees” or honeybees, which need large cavities for their colonies.



# Beehives have Landed at Liberty Wildlife

by Amanda Harder, Guest Author

Alvéole is an urban beekeeping company new to Phoenix that has been operating in cities across Canada, Europe, and the U.S. for the last eight years. As the service in Phoenix is still relatively small, there is only one local beekeeper at this time—that's me, Amanda Harder. Our mission is to reconnect people with nature; we accomplish this by installing beehives directly to the rooftops of large corporate buildings, and by introducing the tenants to their new insect neighbors. We have found that the more gentle nature of Italian honey bees has made them the perfect ambassadors for the pollinator community, and that once people fall in love with their bees, they are compelled to protect them. This leads to increased environmental awareness, and our goal is to encourage more sustainable practices in all the lives that are touched by our sweet bees.

So, what are the bees doing at Liberty Wildlife? Alvéole is optimizing the unused space at Liberty Wildlife to act as our 'bee yard.' This is a space to keep extra hives ready to take to new clients. It provides them with room to grow and plenty of flowers to forage from. Bees operate on a seasonal cycle, and no matter where they are located they will be focused on collecting enough pollen and nectar to support their hive throughout the flower-less times of year. As the beekeeper, it's my job to regularly check up on the hives and to provide them with safe places to do their jobs. Since March of this year, Liberty Wildlife has been gracious enough to help by hosting up to a dozen hives.

The next most popular questions: Do the bees sting? Of course they sting, they are still bees! However, when a bee stings she dies shortly after, so they only sting when they feel extremely threatened. A worker bee has a one-track mind. She only

wants to protect and support the colony—meaning their goal is never to attack, only defend. The Italian honey bees that Alvéole employs are also known for being the most docile of the honey bee species, and therefore they are the easiest to work with. Their more well-known cousins, the Africanized honey bee, are recognized for being more aggressive. This is because the Africanized bees are much more productive in creating honey, and they feel significantly more protective of their resources and home. The Italian bees still produce an abundance of honey and don't mind too much when it comes to sharing with friendly humans!

Speaking of which, what happens with the honey? The excess honey that the bees produce is a gift, and we offer it to our clients as a treat, but it is not the main product. Our main product is the turn-key beekeeping service and educational workshops—because saving the pollinators is about so much more than honey. It does make for a very sweet treat though. So in exchange for hosting our hives, we offer honey jars to Liberty Wildlife as well.

Now when you think of Liberty Wildlife as home to all of the incredible wildlife that seeks refuge behind their doors, you can include honey bees as part of the menagerie! Just as Liberty Wildlife encourages the public to protect and learn about the desert creatures that we share our city with, Alvéole's focus is to educate about and protect all pollinators. We just use the honey bees as ambassadors instead of eagles!



If you want to follow along with the bee's journey at Liberty, you can scan the QR code to see their MyHive—it's a social media page for bees!



*A wild native bee and Alvéole honey bee share a pollen breakfast from a prickly pear blossom at Liberty Wildlife.*



*A frame of bees working on honey storage. The white section is cells that the bees have filled with honey and covered with wax. They will fill up all the cells on both sides of the frame before the beekeeper harvests the honey.*

*Photos courtesy of Amanda Harder*

# Life and Death:

## *The Eternal Trade-Off*

by Terry Stevens, Contributing Author

Unlike the outbound trip, the drive back to Liberty Wildlife was much slower, less frantic and well within the published speed limits. The urgency of the mission had been negated by the demise of my quarry, riding silently next to me on the passenger's seat. I knew when I saw the Cooper's hawk it was dead, confirmed by a cursory exam upon picking it up. Never one to waste a teaching opportunity, I explained to the gentleman who had initiated the call that it was hard to be definitive about the exact cause of death. Most of us are volunteers who have regular jobs and are not biologists or veterinarians. I told him about car collisions, windows, and, since there was some crusty residue around its mouth, possible diseases passed among avian species. I thanked the man, a dentist by profession, for taking the time to make the call, and I began the sad trek back.

I thought about my quiet passenger, judging it to be a female because of its size. She must have been quite young, perhaps a yearling, due to the crisp

freshness of her beautiful plumage and the bright yellow of her eyes, still mostly open. These marvelous organs of vision, deprived of their miraculous acuity within the hour, were so clear and intense that they had yet to become lifeless, and I had the urge to beg some avian deity to bring this gorgeous example of winged fury back from the abyss. I softly touched her head, and I felt a pang of sadness as I wondered just what important lesson had she failed to learn in her short, spectacular life. Perhaps it really had been a car or a window as I told the man. Certainly both of these man-made devices play a role in the education of young Cooper's hawks everywhere. But, nature is a demanding teacher, and often the test precedes the lesson.

The lucky ones learn early on that cars are to be avoided and glass, though apparently traversable, does not yield readily to flesh and feathers. She had no overt signs of damage, and I again took note of the crusty patches around her beak. She was fairly thin through the

keel, and I suspected that, even with all the experience and luck in the world, diseases like canker (trichomoniasis), borne by the wild birds that made up her diet, were not something she would ever have recognized.

The balance of nature is something upon which we, as a species, have yet to get a firm grip. There are two kinds of birds, I tell the kids at our educational shows: hunted birds and birds that do the hunting. As one population rises and falls, the other reacts to keep the proportions roughly stable. When a population of prey gets too dense, predation or disease will bring it back into equilibrium. In this case, however, the equalizing force also took its toll on the predator. But it's not up to us to judge what is fair, only to accept what is a natural occurrence. As this beautiful accipiter died, hundreds, even thousands (if she had lived her normal life span) of sparrows, doves, warblers, and

### **Eternal Trade Off**

*...continued on page 20*





# Liberty Wildlife Non-Eagle Feather Repository

## LWNEFR

## Celebrating a Milestone

by Robert Mesta  
Coordinator, Liberty Wildlife's Non-Eagle Feather Repository

### **The Liberty Wildlife Non-Eagle Feather Repository sends out its 5,000th feather order!**

In July of 2010, Liberty Wildlife entered into a Memorandum of Agreement with the U.S. Fish and Wildlife Service (Service), creating the Liberty Wildlife Non-Eagle Feather Repository (Repository). Under this agreement Liberty Wildlife is permitted to accept, hold, and distribute non-eagle feathers to Native Americans belonging to a Federally recognized tribe for religious and ceremonial purposes.

In October of that same year, we sent out our very first order, red-tail hawk feathers destined to become a ceremonial fan. In the 11 years since that first order, the Repository has worked hard, averaging 455 orders annually, to fill feather orders from Native Americans representing over 200 tribes located throughout the United States (45 of 50 states). This hard work paid off when in February of this year the Repository filled its 5,000th feather order! These 5,000 orders represent millions of feathers in the form of whole carcasses, wings, tails, and individually molted feathers—feathers that are essential to the creation of ceremonial, religious, and dance regalia. Additionally, every year thousands of birds are taken illegally from the wild and sold on the black market. By providing a legal and no-cost source of feathers, we are providing a viable alternative to the purchase of

illegally taken feathers, and thus, helping to conserve our bird populations.

Feathers are present in the celebration of birth, the passage to man and womanhood, the healing of the sick, and the recognition of death. The cycle of life. Feathers are both sacred and revered. The feather is the most iconic symbol in Native American culture.

### **Arizona Forward Environmental Excellence Awards**

For nearly 20 years, Arizona's most prominent environmental awards program has recognized exemplary sustainability projects throughout the state. Initiated in 1980, the awards program is a benchmark for economic and environmental accomplishment.

### **The Liberty Wildlife Non-Eagle Feather Repository (LWNEFR) received Arizona Forward's 2022 – Healthy Community Category Award.**

This award is given to projects, programs, policies or plans that promote the health and wellness of Arizona communities in rural or urban areas. The LWNEFR was recognized for its contribution to the health of the Native American communities of Arizona. Award winning programs are considered to be among the most distinguished achievements in Arizona.



Photo courtesy of Quantum Leap Productions





# The Wonder of **WILDLIFE**

natural habitat photography

This page (clockwise from top):

Mule deer – photo by Randy Vuletich

Red-tailed hawk – photo by Mike Ince

Acorn woodpecker – photo by Christie Van Cleve

Cactus wren – photo by Christie Van Cleve

Opposite page (clockwise from top left):

Woodpecker – photo by Mike Ince

Great-horned owl – photo by Randy Vuletich

Elegant trogon – photo by Mike Ince

Leucistic red-tailed hawk – photo by Randy Vuletich









## Daily Care...continued from page 13

The second to last step in rehabilitating is moving the raptors into flight enclosures and moving the small songbirds and doves into an outside aviary for them to stretch their wings and work on their flight skills.

So what's the last step you ask? Release of course! Our main mission is to rehabilitate and release the wildlife that has ended up in our care. Liberty Wildlife's 400+ volunteer crew is offered the chance to release many of our patients as a reward for all the hard work and dedication they put in each and every week. Releasing a rehabilitated animal is a great privilege and a life-changing moment for many.



Two orphaned barn owls are moved outside with foster parents by Liberty Wildlife volunteer Anna A.

Photo by Nathan Thrash

**“Through intimate association with the living things around us, we reach out beyond the narrow human sphere into the larger natural world.”**

Alexander Frank Skutch,  
20th Century, American naturalist

A green heron visiting the Liberty Wildlife wetland  
photo by Rodrigo Izquierdo

## Eternal Trade Off

...continued from page 16

finches were given a reprieve from their fate. For every day that this wonderful bird lived, another wonderful bird would have died in its grasp. That's just the way it works, and that's the way it should always work. So, although I felt bad about not arriving in time to save the Cooper's hawk, I realized that my sadness was probably misplaced. Human emotions are not really applicable to the natural world, at least as long as we don't truly understand or appreci-

ate the intricate workings of nature. If I grieve for the hawk, then I also have to rejoice for the hawk's prey that have now escaped death, at least from the grip of this killer. But die they must, both the hunter and the hunted, for that's how the natural world is designed to work. And, as it works, both populations are made stronger through the process.

Arriving at the Liberty Wildlife facility, I deposited her remains in the Liberty

Wildlife Non-Eagle Feather Repository (LWNEFR) storage cooler for possible distribution by staff. As I wrapped her for storage, I thought rest easy now, little hawk. Fear, hunger and pain have no further hold on you. May all the sparrows be fat and slow. What a contribution to the gene pool you would have made, but what a wonderful contribution your beautiful feathers will make to an appreciative Native American!



# Volunteering

at Liberty Wildlife can be a dirty job but always rewarding. Depending on the department, you might get bitten, scratched, or pooped on. Some volunteers brave the searing summertime heat to care for the animals. Some volunteers deal with members of the public who are quite upset and trying to navigate a wildlife emergency.

I often ask myself, why do volunteers do what they do? Why donate so much of their time helping with our mission? So, I asked our volunteers to submit their reasons for volunteering. Reading the brief stories below, you'll see that despite the blood, (mostly) sweat, and tears, volunteering is quite the rewarding experience.

"Since my childhood I have been interested in wild birds. I helped my dad fill bird feeders during Chicago winters and identified species with our book of Midwest birds. I saw a Liberty Wildlife presentation at the Desert Botanical Garden, and knew I wanted to help. As a Hotline volunteer, I am contributing to the survival of wild birds when I advise the caller on the best course of action or coordinate a rescue with the Rescue & Transport Team. I recently rescued my first bird, a great blue heron and will never forget the joy. Liberty Wildlife is an organization made of people who want to help wildlife in an area experiencing fast growth and loss of habitat. I am proud to be a Liberty Wildlife volunteer and will continue to work to save wildlife and educate others on responsible behavior."

C.A., Hotline & Rescue

"I am extremely concerned about losing our biodiversity—across the globe and locally. Liberty Wildlife has given me the opportunity to help in some way, while being up close to the birds (and other native animals), nurturing and caring, which reinforces this idea that I'm making a difference. Even if it is a partial drop in a thunderstorm, I get some sense of contributing to conservation, and I highly value that."

J.B., Intake & Orphan Care

"One reason I moved to Arizona was the beauty of this state's land and wildlife. What better way to show my appreciation then by volunteering to help preserve it?"

J.V.C., Bunny Care & Rescue

"I volunteer to contribute as a member of my community and help the native wildlife. When I moved to Phoenix last year from a small midwestern town, I experienced culture shock with the busy city vibes, dry climate, and desert landscape. It took me a while to find my sense of place in Phoenix, and volunteering at Liberty Wildlife played a vital part in that. Being a volunteer at Liberty Wildlife has helped me become familiar with the Sonoran Desert avian species that I am now able to identify on hikes around the city. Seeing rehabbed raptors, owls, corvids, and songbirds being released from Liberty Wildlife around this booming city also deepens my appreciation of the native Sonoran Desert wildlife who first called this place home. I will never be a true Arizona native, but volunteering overall increases my sense of belonging in this beautiful state."

C.L., Owl Team & Rescue

"I have volunteered with Liberty Wildlife since Jan 2017 on the hotline shift in the evenings. What motivates me is the gratification in helping someone who has found an injured or abandoned animal and can't think of what to do and who to call. Callers have gotten attached to the animal from the time they found it, and they are in this uncomfortable uncharted space of what to do next. Callers are for the most part relieved and grateful that there is hope in most cases, and we will "take it from there." You get to talk to interesting people in and around Phoenix. It's never dull. My favorite call was a woman who found a young coyote and called me while driving it to Liberty Wildlife. I asked her where the coyote was at the moment and she said, "in my back seat," and she was baby talking to it. While that might not have been the recommended or safest choice of transport, I did say things were never dull right? Liberty Wildlife is a well-run and operated volunteer organization that keeps current with technology and has formed a group of dedicated and passionate volunteers. I am proud to log in after work every Thursday and do my part. "

D.M., Hotline & Rescue

If you're interested in becoming a volunteer, please fill out an application on our website: [www.libertywildlife.org](http://www.libertywildlife.org)

**Nathan Thrash**  
Public Outreach Coordinator

## There are many ways to get involved with Liberty Wildlife

The most common way would be to complete the onboarding process and join one of our volunteer departments. Depending on your skills and interests, you can feed & clean up after animals, guide guests around our facility, take in animals the public brings us, or help with wildlife emergencies. No experience necessary! The only requirements are to complete the onboarding process and to commit to volunteering with us for one shift a week for a minimum of 6 months.

To get started with the onboarding process, please fill out an application on our website, [www.libertywildlife.org](http://www.libertywildlife.org)

## Group Volunteering

If you can't commit to volunteering once a week for 6 months, there are other ways to get involved! Another common way the public helps us fulfill our mission is with group volunteering. Businesses, clubs, and/or like-minded individuals all come together and help us with one of our facility or grounds maintenance projects. Group volunteers cannot work with animals, but the work they do is beneficial to both the animals on campus and wildlife.

Are you interested in group volunteering? Email us at [info@libertywildlife.org](mailto:info@libertywildlife.org) to get more information or to schedule a group volunteer project!

# Get Involved at Liberty Wildlife

# The Power of Water

by Gail Cochrane  
Contributing Author

Photo courtesy of Gail Cochrane

“  
Nature  
knows how  
to produce  
the greatest  
efforts with  
the most  
limited means.”

**Heinrich Heine**  
19th Century,  
German poet

There exists on earth a power as profound as the sun. Here in the desert, its ways are written in deeply carved canyons that flow through the landscape. It snakes across the desert floor in arroyos crowded with green. It secrets itself underground in vast lakes, where it is often harnessed to sustain heavy populations of humans. This power is water, and here in the Sonoran Desert, it means life.

During the magical season called the monsoon, water first appears as masses of white clouds boiling upward from the horizon, rising on thermals generated on the superheated desert floor. Water sometimes dances in the sky in beautiful and ephemeral veils called virgas, precipitation held by air with never a chance to reach the land.

Moisture descends to the desert floor in the form of humidity and awakens plants, insects, amphibians, and mammals from their heat induced stupor. The biotic community responds to the monsoon with a flush of plant growth and a flurry of mating and dispersal for the animals. Keystone species such as palo verde, ironwood, and mesquite trees are galvanized to generate new growth. Cacti call on all of their ingenious adaptations to gather and sequester precious moisture to last them through months of drought.

Annual plants such as summer poppies, devil's claw and morning glories may be insignificant in size but are substantial in number. With in-

creased moisture in the air, they sprout abruptly, flowering and producing seeds that litter the desert floor, providing sustenance for birds and mammals. Desert perennials such as busera, desert lavender and brittle bush have dropped all of their leaves to survive June's heat, but spring back to life as humidity inspires new shoots and leaves.

Insect life cycles play out in the monsoon season in the air and on the ground. Wings sprout on harvester ants so they may fly to find mates, and Apache cicada adults emerge from their brittle exoskeletons to the same purpose. Gaudy dragonflies hover near tender green growth. Monarch, queen and fritillary butterflies emerge. Myriads of insects flourish just beyond our ken. Gnats swarm at sundown, noted only by swooping bats. Insects and spiders creep and fly through the landscape, forming the primary protein source for growing families of fledgling birds, lizards, snakes, and small mammals. They in turn become food for hawks, owls and coyotes.

In good years, rain comes. Water unleashes its power, cascading across the landscape, coursing towards low ground. Accompanied by booming thunder and livid spears of lightning, rain pounds the earth with its drumbeat of life-giving force.



# Medical Services

## Tracking the Journey: *Telemetry Explained*

by Jan Miller, Animal Care Coordinator

What is telemetry? Telemetry is a way of tracking an animal's movement. On birds, it is a small unit that weighs mere grams and is placed on the animal with a harness like a backpack. The birds are given time to adjust to it, and they can preen their feathers perfectly fine while it is in place. These backpacks are meant to break away after a certain amount of time so that the bird is not carrying it for years. They work with a solar GPS system that sends data to a database where biologists can then retrieve and use it to learn about movements and patterns of particular species. Raptor biologist, Tuk Jacobson of the Arizona Game and Fish Department states, "GPS tracking provides movement data for a variety of wildlife conservation purposes. The eagle movement and perch data is used to identify habitats where eagles utilize utility poles for perch sites. Those areas can then be evaluated for electrocution risks and prioritized utility retro-fit operations. For other raptors (such as Swainson's hawks), the movements within and through Arizona help to document high use habitats and

migration corridors to inform placement of renewable energy developments."

Liberty Wildlife works closely with the Arizona Game and Fish Department and the United States Fish and Wildlife Service (USFWS) on certain species of interest for research purposes and collecting valuable data on the history of some birds. We have had several transmitters placed on bald and golden eagles and Swainson's hawks that have been through rehabilitation the last couple of years. It is really interesting to see the patterns and flight paths of these species that are now on the move. (See maps below and on page 34.)

This past year we had one particular Swainson's hawk that arrived at Liberty Wildlife in April of 2021. This bird had unfortunately been shot and suffered from a fractured wing. She was previously banded and had a USFWS band on her leg which allowed us to obtain the information about where and when she was banded. She had been banded as a 2nd year bird at the Utah International Airport in 2014. Once the

bird recovered, she was fitted for a backpack telemetry to monitor her movements. Swainson's hawks have one of the longest migrations of the raptor species, and they typically go down to Argentina during our winter months where they live on crickets and other prey. The Swainson's hawk did what she was expected to do once out in the wild. She hung out in the Santa Cruz Flats, where she was released, for about a month before setting off on her migratory journey. She left on October 19th and arrived in Argentina on December 5th. You can view her route on the maps below.



*Telemetry backpack/transmitter placed on Swainson's hawk.*

**Tracking...***continued on page 34*



Swainson's hawk tracking January – March 2022



Swainson's hawk update June 14

*Maps courtesy of Arizona Game & Fish Department*

# Education



Ward Traditional Academy 1st and 2nd grade field trip to Liberty Wildlife

Photos by Laura Hackett

## A Welcome Return to Liberty Wildlife's In-Person Programming

There isn't a "normal" day at Liberty Wildlife. While the past two years have certainly created many new stresses and strains, our team has been able to adapt well to everything the world has thrown our way. The lockdown in 2020 and discontinuing our on-site and in-person programming was worrisome at first. How could we share our mission to nurture the nature of Arizona with the general public? How would we be able to get them to care about the native wildlife around us?

Thankfully, the world turned to Zoom, Teams, and other applications created in order to keep us connected. We've happily been able to baby-step our way back to live programming, and everyone is energetic about it; the adult visitors, the students, the volunteers, and even the animals, it would seem.

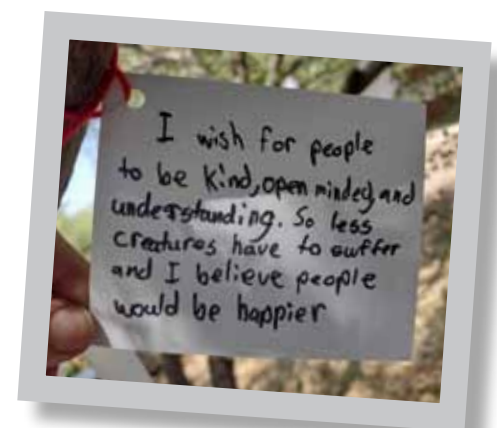
Our education season began slowly with only a few homeschools able to make the trips to Liberty Wildlife and only a few schools giving us permission to enter their buildings—with strong stipulations about spacing and masking. As the world got more of a handle on things, we started receiving more requests and more visitors. By the end of our spring season we were booked every week with at least two to three field trips a week, multiple programs off-site each weekend, privately booked group tours, and busy public open hours. Any fears that our team had about reconvening dissipated when they presented our animals to thrilled guests, young and old.

By the end of April COVID numbers had decreased significantly enough that we were able to host our annual Earth Day celebration, which is a great finale to our in-season visiting hours before the shift to the summer heat and schedule. We had over 130 people attend and offer donations of their choosing and ability in place of our admission cost to join in the

celebration. The scheduled bald eagle feeding and flight show filled the seats in our amphitheater. The volunteers beamed as they brought out a wide variety of education ambassador animals. Our teen group led hands-on activities for kids (and adults) to participate in. We had representatives from Litter Critters AZ, SRP and Alvéole Beekeeping with booths set up to teach us all how we can actively be a part of protecting our earth.



Education volunteer Laura C. at off-site event Phoenix Fun Fest.



My favorite part of this event is always the Wish Tree. Everyone was invited to put their wish on the branches of our tree. These wishes ranged from someone wanting a pet lizard to someone wishing luck to the animals in our care, to peace in Ukraine, and everything in between.

**Education...continued on page 33**





# Research and Conservation

*I am "The Bird Lady"*

by Laura Hackett, Biologist,  
Research and Conservation Coordinator

**"The Bird Lady."** That is my title most of the time when I first meet a new crew out in the field. I'm not "Laura Hackett, the wildlife biologist from Liberty Wildlife" or "someone who can help us save these protected species in our work space." No, I am the lady who gets called in when work is halted because of some disturbance created by a bird (and yes, it's usually a dove!).

Liberty Wildlife is known for its hospital and the mission to return wildlife back to nature once it is healed, but not many people know about our Research and Conservation department (R&C). This small team of biologists are trained to handle situations out in the field where our protected bird species are in the path of construction, infrastructure, and just general day-to-day work of our expanding economy.

Almost every species of bird you see around you is protected by the Migratory Bird Treaty Act (MBTA). This federal act states that once the bird from the long list of migratory species has built a nest and put eggs in it, the nest and all of its contents are protected. The MBTA has been successful in maintaining populations of raptors and songbirds since 1918, but it can cause an issue when a raven builds a nest on a power line. Or, when a great horned owl drops her eggs in the windowsill of an unfinished house.



And it even can affect your cable—which has led to a new partnership with Cox Communications over the last two years. Our team has worked closely with the crew at Cox Communications to safely remove many dove nests from their equipment. Most of the time, these nests have settled perfectly on the cable box and some of the wiring has been displaced from the equipment and layered in the nest. And, as we all know, birds aren't shy about where they "go," so this equipment is also laden with droppings.



Our team has met team members from Cox Communications in various locations around the city. Upon arrival, the workers usually seem a little unsure of why they are meeting "the bird lady." Aren't doves just everywhere? Do we really need to arrange this whole meet-up for just a dove?

Luckily, Raul, Gabriel and the other crew members have all been friendly and willing to load up in the bucket with my bird box in hand and instructions of how to handle the eggs, babies, and the nest. Even though I am standing on the ground looking up, I can see their faces when they finally get a look in the nest.

**Bird Lady**...continued on page 29



# Creature Feature

*Maya, Crested Caracara*



Photo by Nathan Thrash



# Meet Maya

by Megan Mosby, Executive Director

The crested caracara appears to be a bird with an identity problem. It is often referred to as the national bird of Mexico...but so is the golden eagle. On closer scrutiny, the crested caracara looks more like a hawk than an eagle in size and overall appearance. If you choose an identity based on behavior, this handsome bird acts a lot like a vulture. But, wait a minute, scratch the surface and at the scientific level the caracara reveals itself to actually be a member of the falcon family. Poor guy needs a good public relations firm to solidify its brand and image.

Despite it all, we enthusiastically welcome Maya (*photo on left*), our new crested caracara educational ambassador. In the wild, the species is found in South America, Central America and the southern states of the U.S., Florida, Texas and Arizona. They can be spotted in open areas like deserts and grasslands cruising around from sea level to as high as 10,000 feet in elevation...a testament to their versatility. Open land facilitates their ability to take off for the skies, by running on long orangish legs and flapping their four foot long wings ...strut, strut, strut...up, up and away!

Their vulturine comparison likely comes from their proclivity to hang out by dumps and slaughter houses looking for an easy meal. Terrorizing the convenient hen house is no stranger to them. Opportunistic tendencies propel them to eat what they can find whether or not it requires trudging around in shallow waters or digging in the ground for the hapless worm or ant. The tendency to run down their prey if it is alive is preferred as they shun the pounce approach to hunting.

They can be seen nesting in the tallest tree or cactus, but dense foliage is preferred when available. Their bulky nest can house one to three babies that begin life downy and helpless. They leave the nest in approximately three months... depending all of that time on the parents for bringing food to the nest.

No matter their identity confusion, the three-and-a-half- pound bird is a striking, adaptive predator. The jaunty black cap, impressive beak with its orange cere, and those long orange legs make this member of the falcon family a real eye stopper. Shamefully, humans are their only predator.

Maya came to us from the Arizona Game and Fish Department as a youngster with a broken and permanently damaged wing. She showed, from the get-go, a willingness to tolerate people and handlers and easily made her way into our education cadre. Look for her when you attend a Liberty Wildlife event, open hours, or an educational program. She has definitely overcome her identity crisis to become a superstar for her species.

*"A taste for the beautiful is most cultivated out of doors"*

Henry David Thoreau,  
19th Century American essayist,  
naturalist, and philosopher



*A crested caracara family in the wild  
Photo by Randy Vuletich*

## Community Support...continued from page 9



The impact of each and every volunteer may never be fully known or realized. Some will inspire others with a story about the history of a particular animal. Others may make an introduction to a family member, friend, or neighbor who then takes action in the community to advocate for and care for wildlife. And still others support Liberty Wildlife's various programs and events, like our annual Wishes for Wildlife.

Several donors to our capital improvements and additions have been recognized with new signage and plaques on enclosures and other signage on the campus. There are still many opportunities, and over a million dollars is needed for potential projects as we build out different aspects of Liberty Wildlife. Details of these opportunities are subject to change, with the latest information available through the development office:

[development@libertywildlife.org](mailto:development@libertywildlife.org)

Individuals have always been the biggest single source of support for the services provided at Liberty Wildlife. And that's the case again this past year. The Cole Family in particular merits mention for their contributions. Peggy has been a long-time volunteer. Like most who volunteer, she may not have realized just how far the impact of her efforts would go. The smallest actions eventually spiral out like ripples on a pond, and sometimes grow stronger over time.

Over the years Peggy worked her way through various education team roles and into Daily Care, too. Gradually she took on new challenges, volunteering to help plan the auction for the annual Wishes for Wildlife event planning committee (the Guardians). Peggy joined the Liberty Wildlife Board, where she has served as secretary for many years, all while continuing her regular weekly volunteer shifts feeding and handling the education eagles, among many other projects.

Along the way, Peggy's husband George supported and shared her passion for wildlife and nature. When he passed away this last year, Peggy and the family decided to recognize his love of nature by funding a new serenity garden space beside our wetlands, complete with bench seating and a waterfall fountain (*photo above*). The family also contributed to the new safety fences around the education trail enclosures. All of these features helped to enhance the experience of visitors as they walk our trails during open hours, or enjoy tours with their school groups.

Another individual we acknowledge this year is Max Bessler. Max is one of the quiet human faces, calmly handling the eagles in our education programs. A long-time volunteer and supporter of Liberty Wildlife's programs, Max has given his blood, sweat, and tears to this work. And this year, the ripples of his work also reached a new audience, the Rawley Family Foundation.

Through Max's introduction, the foundation's board visited the campus and became fascinated with our mission and the care they observed. They too then stepped up to provide a grant of support to fund the many campus improvements that make our educational programs so special for so many members and visitors.

### Wishes for Wildlife A Virtual-Hybrid Affair



In 2021 our annual signature fundraiser was a hybrid event, both with some supporters hosting small parties in their homes and backyards (*photo above*), while we continued with a virtual auction and recorded online program. One special feature of that online program was a sneak peek preview of the documentary being filmed about Liberty Wildlife's work.

We were thrilled that the event once again raised nearly one-fifth of our annual budget! The net proceeds were nearly \$175,000 from this new format of Wishes for Wildlife! And we'll be reprising the format again on October 22, 2022. Make sure to sign up and bid on your favorite items.

For more information, please visit:

<https://aesaz.co/ELP/WISHES22/>

Liberty Wildlife is important to you. But have you made formal plans for how you will support charitable organizations like



Liberty Wildlife over time? Your gifts may be cash contributions, shares of appreciated stock, beneficial interests in retirement plans, life insurance, or inclusion generally in a will or trust.

**When you include Liberty Wildlife in your plans, you automatically become a member of our *Wings of an Eagle Legacy Society*.** Many others have made gifts both large and small to help Liberty Wildlife far into the future. And commitments to our endowment now are in the millions of dollars. These gifts ensure a future for wildlife for another generation. Liberty Wildlife is

happy to recognize you for such a commitment when you make plans. And we can show our appreciation to you now, even though your actual gifts may be deferred far into the future. We can also give you guidance on how best to ensure those gifts are there when Liberty Wildlife needs them later. We have been nurturing the nature of Arizona and the Southwest since 1981. And we hope to continue doing so far into the future.

**Any gift through your will or estate plan qualifies you as a *Wings of an Eagle Legacy Society* member.** Joining is easy—simply add Liberty Wildlife (Tax ID 94-2738161) as a beneficiary (either a dollar amount or a percentage amount) in your will, trust, insurance plan, retirement account or other account. In many cases this can be done in an online form, or with a single sentence added to your will or account.

## Wings of an Eagle Legacy Society

*Anonymous donors (3)*

*Marion Erickson \**

*Nancy Kohl \**

*Pat Russell \**

*Ken & Patti Vegors*

*Oren Walkington \**

*\*deceased*



Visitors meet with Education Ambassador Henry, a barn owl, at Liberty Wildlife's Condors & Cocktails event

## Bird Lady...continued from page 25

There's a little glimmer if they see eggs but a jolly smile when they find hatched babies in there. The change in their attitude is obvious by the time they have lowered themselves to the ground and shown me what they have retrieved from up high.

Often times I will offer to take a picture so that they can take it home and show the family their amazing animal rescue that day. These men have literally had a hand in saving an animal in a precarious situation and given it a new chance at life.

Part of the mission of Liberty Wildlife is to educate people about wildlife, and we do so through school programming, community events and inviting visitors to our facility. By being a resource for various utilities and other companies, our R&C team not only helps implement the regulations of the MBTA, but we reach an entirely different audience and invite them to become a part of our mission. It actually makes the moniker "The Bird Lady" sound much more important after that!



Photos by Laura Hackett



Photos by Mike Ince

# Welcome Marble and Millie

**By Jan Miller, Animal Care Coordinator  
and Alex Stofko, Daily Care Coordinator**

California condors were reintroduced to the southwest in the mid 1990's after a long battle that almost ended in extinction. Since then the condor population has been closely monitored by biologists. When a condor is in need of medical treatment that is beyond the biologist's expertise, the condors are sent to Liberty Wildlife. Dr. Orr began this relationship when she was the Phoenix Zoo's veterinarian and it has continued here at Liberty Wildlife for over 20 years. We work closely with the Peregrine Fund's Condor Recovery Program and the condor biologists at the Grand Canyon. During 'condor season,' any time after hunting season, about November and into the spring, we will receive any number of condors to rehabilitate.

This year we have the privilege of announcing the addition of not one but two California condors to our Educational Ambassador Team. Marble, named after Marble Canyon, is a female condor captive reared in 2005 at the Peregrine Fund's Bird of Prey Center. She came to us in 2017 with a fracture to her left humerus. The damage to the proximal humerus, near the shoulder, was extensive enough to limit her range of motion and declare her non-releasable.

Millie, named after the Vermillion Cliffs, is a female first generation wild hatch, born in 2020 in Arizona. She came to us in late fall of 2020 with an elbow dislocation. We suspect she made an attempt at fledging too early and hit her elbow. The elbow was unable to be secured back in place, thus making her non-releasable.

There are many benefits to having these majestic creatures on-site, including the ability to provide lifesaving blood transfusions to sick condors rehabilitating at the facility. Any feathers dropped by our resident animal ambassadors go to the Liberty Wildlife Non-Eagle Feather Repository to acquire a second life. As an added bonus, the public is able to get an up-close look at an animal which they do not normally see around the Valley.

Come see Marble, a mature California condor (*in photos on the left above*), and Millie, a juvenile California condor (*in photos on the right above*), up close at Liberty Wildlife during open hours, and we know you will fall in love with them, just like we have!





# Rescue & Transport

## *You Can't Spell Heron Without* **HERO**

by Nathan Thrash, Public Outreach Coordinator

Imagine, for a moment, that you are a baby heron. You've got life made. A cozy nest with a nice lake-front view. As much fresh sushi (well really just raw fish) as you can eat. Plenty of siblings and neighbors to squawk at. Then you hear it..... a slow but steady buzz. And all of a sudden, you're on the ground. Where'd your parents go? Where's the nest? You try to conceal yourself in the foliage of the tree. You wait. You see some of your siblings next to you. After a time, you hear strange garbling noises. The branch above you is lifted. A tall, pale monster reaches in, grabs you, and puts you in a dark box.

Where are you now? Your box is moved. You start to hear a low steady rumble. You feel momentum shift you forward, then left, then right, then forward again. The rumble stops. Your box is moved yet again. Then the monsters reach in, and start stretching your legs and wings out. They make garbling noises to each other. They open your mouth and look inside. They stick you with a needle. What could these monsters possibly want? Why are they doing this?

Their probing stops. You are moved to a larger area. You recognize some of your siblings and the other neighbors. There used to be many more of you. The monsters give you fish every day. You do your best to make yourself large and intimidate them.

Days turn into weeks. You're an adult now. You've got full heron plumage and are ready to be out on your own. The monsters come back. They put you in a box again. You hear a low rumble. Momentum carries you once more, forward, backward, left, right. Then, daylight! You see water as far as the eye can see. Anxious to escape the monsters, you fly up, out and away across the water.

The story above describes, from the heron's point of view, a rescue that occurred in May of 2022. A U.S. Fish and Wildlife Service (USFWS) investigation is ongoing for the incident, so we don't yet have all of the details. The story goes something like this: A tree trim-

ming company came out and cut down a tree with a black-crowned night heron rookery. Black-crowned night herons are community nesters, giving them greater safety from predators. But this communal nesting also gives them greater vulnerability if something were to happen to the tree. The tree fell, killing between 5–10 herons in the process. Liberty Wildlife, USFWS, and Arizona Game and Fish Department (AZGFD) all responded to the scene after getting a call from a concerned citizen. Working together, we ended up saving 27 herons from the ground. Twenty-seven! Let that number sink in for a moment. To my knowledge, this is the greatest number of animals we have rescued from one single area in Liberty Wildlife history.

The worst thing about it is, this didn't have to happen. They easily could've waited a few months for the herons to leave the nest before cutting down the tree. Regardless, it happened and Liberty Wildlife was there to care for the orphans. Caring for that many orphans is difficult. It requires quite a bit of time and money. Consider how many fish 27 baby herons eat. It's a lot!

Now typically, I try not to anthropomorphize animals by giving them human characteristics. In all reality, we will never know what a wild animal is experiencing when they come into contact with humans. What we do know, is that it is a very stressful experience. So much so, that some birds can die from the stress of being handled. Therefore, when we do assessments or otherwise have to handle animals at Liberty Wildlife, we keep it as brief as possible. It's also why the animal you bring in sometimes must wait before it can receive care, so it has time to de-stress.

Thank you to the USFWS and AZGFD officers and Liberty Wildlife volunteers who responded to the scene to help with the rescue. Thank you to all of our volunteers who helped rescue, assess, and raise these herons. Together, we have given them a second chance at life.



Photos by Nathan Thrash

# Liberty Wildlife's Superhero Kids

by Carol Suits, Volunteer Contributor

Did you ever think you were too young or too little to do anything big like help nature? It's easy to feel that way! Yet there are lots of kids helping every day and are making a difference in their world. The secret is to find ways to help nature's living things in your world and share it with friends and family. Sharing your activities and ideas will give them ideas, too.



Your help + their help =  
Big ideas to help living  
things.

**How?**

Check this out!

**You can help too!**

How about getting trashy! Yes, it's all about picking up trash wherever you go! Do you know how to separate trash from things that can be recycled or reused?

Check out these videos at:

<https://tinyurl.com/y4hevjzc>

These are  
Liberty  
Wildlife's  
Superhero  
Kids.



They have been working  
to help nature by learning  
how to reduce, reuse and  
recycle.



photos by Ethan Dunsford





Helping Liberty Wildlife Superheroes in our recent clean-up effort was “Litter Critters,” a non-profit organization of Arizona families on a mission to keep our forests and rivers healthy through organized cleanups and educational programs. They have been focused on cleaning up the Salt River weekly while also building friendships, learning about our local habitat and spreading awareness of litter issues in our wild spaces. With children ranging in ages from babies to teens, the group aims to raise a generation of thoughtful, committed individuals who will continue to protect our environment and encourage others to recreate responsibly.

If you’re interested in joining a cleanup, email Jenn at [littercrittersaz@gmail.com](mailto:littercrittersaz@gmail.com).

Superheroes have nature journals to show how they help nature. You, too, can write or draw about your superhero adventures and what you did. Other times you may use your journal to show what you see when you are outside in nature. These videos show different ways to make a nature journal. If you have a better idea, great!

<https://tinyurl.com/wf6bvsxv>

<https://tinyurl.com/2p9dakbf>



If you would like to learn more about being a superhero for nature, email me at [carols@libertywildlife.org](mailto:carols@libertywildlife.org).

*“If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in.”*

Rachel Carson

## Education

*...continued from page 24*

At the end of the morning, we had a free raffle for everyone on-site to win the chance to release some birds that were rehabilitated at Liberty Wildlife. The release boxes were opened and those free birds took flight with the spirit of all those wishes to scatter throughout our world. The “Oohs” and “Ahhs” from the audience are always so heart-felt and filled with hope.

2020 taught us how to expand our reach through technology. We continue to use this style of educating for those who are too far away or cannot physically travel to our campus. But bringing people and animals back together face-to-face (or face-to-beak as some say) is truly the best way to ensure that our supporters feel the power of these animals and leave with a stronger passion to nurture the nature of Arizona.

**Laura Hackett**  
Education Coordinator



Photo by Laura Hackett

Field trip participants exploring at Liberty Wildlife.

# Bobbie

...continued from page 7

We have a small team of volunteers that care for our education mammals, and every one of them enjoys watching Bobbie play with the enrichment we give him, or listen to the various sounds he makes (ranging from cute begging noises to ferocious annoyed growls when something is a little unnerving for him). We are completely hands-off with him and have him shift between enclosures, but we always enjoy the way he uses his daily behavioral enrichment. Whether it's a soccer ball that we later remove and see all the claw marks on or

if we sneakily hide food wrapped up in newspapers and placed in a paper bag, Bobbie always lives up to the fact that he is part of the cat family.

While you cannot visit him at the time of this printing, we are embarking on a plan to create some new enclosures on our education side for Bobbie, Groot and any other mammals that may end up needing to find a second life at Liberty Wildlife. So, stay tuned!



An adult bobcat in the wild  
Photo by Matt VanWallene

# Tracking

...continued from page 23

The same year, two golden eagles, a male and a female, were banded and had transmitters placed as part of a research study for the USFWS. The female adult golden eagle arrived at our facility with balance issues and a depressed attitude. It was discovered that this bird had a large renal cyst that was pushing on her sciatic nerve. The cyst was ultimately removed, and she was monitored for regrowth of the cyst. The second eagle was a sub-adult male that had arrived at our facility with a wing injury. Once these birds were ready to be released, they were returned to the area where they were found. As you can see from the maps, they made extensive movements.

The key benefit Liberty Wildlife gets from all this information is knowing and having proof that rehabilitation works. We invest time, energy, and lots of care for these wonderful animals that arrive at our facility, and we see firsthand all the injuries and issues that they display. Being able to give these animals the best second chance at survival in the wild where they belong provides validation that the hard work is paying off.



Left: Movement track of Liberty Wildlife rehabilitated female golden eagle 141728 through May 2022 noon, based on hourly GPS locations.



Below left: Movement track of Liberty Wildlife rehabilitated male golden eagle 121742 through May 1, 2022 evening, based on hourly GPS locations.

Yellow bars = 10 miles

Below inset:  
May 1 late afternoon/evening near prairie dog colony.

Maps courtesy of Arizona Game & Fish Department.



# Liberty Wildlife Wish List

- Shade and sails for Intake Window entrance
- New laptop computers
- Microscopes for Children's Interactive Room
- Telemetry system for flighted birds
- Hardware cloth
- Lumber/enclosure building materials
- Indoor/outdoor swamp coolers
- Cushions for Amphitheater
- Forklift
- Bobcat tractor
- Pea gravel
- Decomposed granite
- Surgery lights
- Stainless steel mammal cages
- Fencing for outdoor mammal runs
- Barn fans
- Digital camera
- Brooders
- Stools without wheels
- Mammal control pole

## General Office Supplies:

- Paper towels (Kirkland) or any other brand
- Hand soap
- Kid's scissors
- Postage stamps
- Staples, Fry's, PetSmart gift cards
- Manila folders (letter size)
- Heating pads
- Surgical gloves
- Planter saucers (all sizes)
- New AAA, D, and 9-volt batteries
- Printer paper

## Medical Equipment:

- 60 & 30 cc syringes
- 18, 21, 22, 23, 25 gauge needles  
( $\frac{3}{4}$ " – 1" in length)
- 2" x 2" non-sterile gauze pads
- Chlorhexedine solution
- Tongue depressors
- Cover slips and slides
- Fecalizers
- Biopsy jars
- 3" x 5" fluorescent green note cards
- Portable anesthesia machine
- Blood machine for in-house blood work



Roseate spoonbill  
Photo by Mike Ince



Liberty Wildlife, Inc.  
2600 E. Elwood Street  
Phoenix, AZ 85040  
Wildlife Hotline (480) 998-5550  
Visit us online at [www.libertywildlife.org](http://www.libertywildlife.org)



Printed on recycled paper



As part of our ongoing commitment to the community, SRP is proud to provide the printing for Liberty Wildlife's WingBeats magazine.



## Become a Member!

Membership at Liberty Wildlife gains you admission for a year and other exclusive benefits depending on your membership level. It also sustains the vital education, rehabilitation, and conservation work that Liberty Wildlife does every day.

Choose the membership level that is right for you and join today!

Mail the completed form and your donation to:  
Liberty Wildlife, Inc.  
2600 E. Elwood Street  
Phoenix, AZ 85040

You can also join or renew online at [www.libertywildlife.org](http://www.libertywildlife.org)

## Annual Support Levels

### ☐ Songbird (\$30)

Free admission for one, stickers, store discounts

### ☐ Flock (\$95)

Free admission for two adults and two kids, stickers, one guest pass, member-only nature hikes

### ☐ Kestrel (\$50)

Free admission for one, stickers, store discounts, one guest pass, member-only nature hikes

### ☐ Hawk (\$100)

Free admission for one, stickers, store discounts, two guest passes, member-only nature hikes, spend an hour with a trainer

### ☐ Owl (\$250)

Free admission for two, stickers, store discounts, five guest passes, member-only nature hikes, spend an hour with a trainer, early entrance to events

### ☐ Eagle (\$500)

Free admission for two, stickers, store discounts, 10 guest passes, member-only nature hikes, spend an hour with a trainer, early entrance to events, behind the scenes hospital tour

## My Membership

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

☐ Contact me about volunteering

## Gift Membership

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_