



"No man is an island, entire of itself; every man is a piece of the continent, a part of the main. If a clod be washed away by the sea, Europe is the less, as well as if a promontory were, as well as if a manor of thy friend's or if thine own were: any man's death diminishes me, because I am involved in mankind, and therefore never send to know for whom the bells tolls; it tolls for thee." John Donne

This issue of WingBeats celebrates the power of community and the notion that acting communally on a local level can have a powerful impact in the larger community—i.e. globally. Our actions do not occur in a vacuum.

Liberty Wildlife is a community. There is a membership quality—a feeling of belonging. There is a sense of caring and value—a sense of mattering. The community provides a feeling of reward in participating within the community, and there is a shared emotional connection. This strong community allows us to accomplish big things that can start on a small level but catapult quickly to a much higher, broader pallet. It demonstrates connectivity.

Our new facility provides us with opportunities to "walk our talk" on conservation issues. Our LEED Platinum building exempliies green living by creating, among other things, water harvesting practices, the use of solar power, sequestering of CO2 with our wetlands, utiliza-

tion of recycled materials including our 6.5 acres of land—formerly a reclaimed gravel pit. The building itself allows us to participate in projects and programs that could have a global impact on the conservation of wildlife.

### Scientific Impact

For example, our 180-foot flight cage provides for the conditioning of strong wings or prepares fledglings for release into the wild. It is currently furnished with utility power equipment used by Salt River Project including a prototype power pole. In the flight enclosure, many different species of raptors react to the prototype equipment, and these interactions are videotaped and studied by engineers and biologists. The purpose of their study is to design equipment that is less likely to cause harm to birds that inevitably interact with it. This could potentially lead to equipment used worldwide that would lessen negative impacts with large birds.

### Wind Turbine Impact

Liberty Wildlife participated, this spring, in a study with Purdue University relative to injuries sustained by large birds when they are struck by the blades of wind turbines. The study was designed to test the visual and auditory acuity of eagles. These birds of prey get into trouble as their concentrated search for food leads them, inadvertently, into the path of turbine blades. This otherwise beneficial alternative power source could become less tainted if the blades could be designed to warn the hunting eagle away from them by the addition of visual or audio deterrents. The results of the study are not in yet, but it is hoped that this will address these unintended consequences.

#### **Species Impact**

Our efforts to combat the impact of lead shot in birds of prey continues. We tend

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# Liberty Wildlife's NatureWalk



**Join us** for a tour of the riparian area outside our fence. All aspects of nature and the river will be addressed including the river and water issues, migration and birds, insects and mammals, and seasonal topics. Every walk is different. Every walk is fun and informative. Check our website, www.libertywildlife.org and our Facebook page for dates and times of our next **Nature Walk**.

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WingBeats is an annual publication of Liberty Wildlife, Inc. issued to supporters of the organization.

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Back Photo: Northern Saw-whet owl by Matt VanWallene

Photo (left): Nature Walk on the Peace Trail by Laura Hackett

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Great Horned Owl Education Ambassador, Tucker Photo by Laura Hackett

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to concentrate on what lead does to California condors because the loss of one of the few remaining birds is so impactful. It is important to note, however, that almost every raptor that we tested had some level of lead in its system...ofen not enough to bring them down but there, never-the-less. California condor 455 was, however, brought down by the high levels of lead and is a case in point.

She came to us as a 12-year-old in early 2016...emaciated and burgeoning with lead. She was given a transfusion, a gift from another condor also in our hospital. She was chelated a number of times to remove the lead from her system. It was touch-and-go for almost four months, where she received supportive care. Finally, she was ready for return to the canyon for release. Upon release, she reunited with her mate, and this year, as of this writing, she is believed to have hatched a chick... the beginning of another generation, if we are lucky. Another California condor, 409, has just hatched a chick in Zion National Park. She, too, was treated at Liberty Wildlife. If all things go well, these two additional chicks could lead to a stronger condor population for years to come.

#### **Professional Impact**

The impact of our community continues on a human level. In the 35+ years that we have been working to help wildlife, we have trained numerous volunteers. Their passions have led many of them to pursue advanced training to become Certified Veterinary Technicians. Others

have chosen veterinary medicine as a life career. As you read this magazine, you will see that these dedicated people will impact other veterinarians and ultimately improve the widespread care of wildlife which isn't an area taught in many veterinary schools.

#### **Educational Impact**

Our educational arm is getting stronger and the message is having a greater impact. A recent unfortunate incident with rodenticide has given us the spring board to educate the public about the ugly nature of that method of pest control...it does move up the food chain no matter what you are told. Our presentations are hitting the mark and our ability to spread the word has become more robust. Liberty Wildlife has a public persona that is growing with the seasons. Our publications, our dedicated volunteers, our impressive animal ambassadors are reaching into the hearts and minds of all in our orb, and that has a national reach. As you consume this information, you will see many opportunities for up-close and personal educational experiences. We invite you to come to our campus for an intimate interaction with speakers, wildlife programs, special events, camps, nature walks and of course, our fundraisers.

### **Cultural Impact**

Lastly, our community has encompassed a new program area. We are extolling the values of our southwest heritage—its own sense of place and community. In line with that, our Non-Eagle Feather Repository addresses the need to embrace the value of culture while sustaining species. Providing feathers and bird parts to federally recognized Native Americans allows them a legal means to obtain feathers to use in religious practices, ceremonies, and regalia. This wildly successful program is speading its wings and training new volunteers, and is developing an internship program. Nationally acclaimed, the program has reached over 178 tribes in 48 states making it truly widespread throughout the country. Additionally, the program provides a potential deterent to the black market, which utilizes the illegal take and sale of protected birds and bird

Our community, like those of the ironwood tree, ants, and the prairie dog covered in this issue, provides a place for diversity that benefits hundreds of other species. We are connected—all of us—and what happens for the good or the bad touches the whole. At Liberty Wildlife we choose to work towards a positive impact for all, and like other keystone species, we engender the space for the sense and power of community.

Megan Mosby Executive Director

MegarMosby

You may never know what results come of your action, but if you do nothing there will be no result.

Mahatma Gandhi

# **Events at Liberty Wildlife**

Many of the events we have are seen as either educational, inspirational, or as a source of producing revenue to further our mission.

Before we moved into our new facility we were limited to one big event held off campus at a resort. They were beautiful, but it was difficult to show the depth and focus of our efforts.

At the Rob and Melani Walton Campus for Liberty Wildlife, we have a whole new pallet to draw on. Our annual fundraiser, Wishes for Wildlife, was held on campus for the first time last year, and it was wildly successful. We plan to do that again this year, on October 26,2019, with "Something Wild This Way Comes." Do not miss it. (See Save the Date on page 29)

We have also added a number of events, including our Sippin' the Spirit of the Southwest and our Wine, Whiskey and Wildlife, which highlight local vendors and reflect the flavor of our southwest culture.

Our annual Wild Ones Orphan Baby Shower helps us to "feather our nest" in preparation for the busiest season of the

noto by Terry Stevens



year. A new event that visitors have requested us to repeat is our Arbor Day event, featuring a popular activity from Katherine Applegate's, Wishtree. Kids of all ages are encouraged to hang a wish on one of our trees. On the closest Saturday to Arbor Day we invite the public to a free open house to honor these wishes, releasing them (figuratively) on the wings of rehabilitated doves.

Stay tuned at www.libertywildlife.org.



Clockwise from top left:

Chris Parish, Director of Global Conservation, The Peregrine Fund, speaking at Wishes for Wildlife 2018

A Liberty Wildlife Arbor Day activity based on Katherine Applegate's Wishtree (2 photos)

Sippin' the Spirit of the Southwest event

Dinner at Wishes for Wildlife





photos by Laura Hackett

### **Liberty Wildlife's**

# Partners in Education

For a number of years Liberty Wildlife has partnered regularly with other organizations to bring the message of the importance of nature and our mission to their public from all corners of the globe.

We would like to honor some of our Partners in Education:



• **Verde Canyon Railroad** features a train ride with Sonora, a bald eagle and Liberty Wildlife Education Ambassador, the second Saturday of the month. Sonora rides the rails with her handlers and wows the guests with an up-close and personal look at eagles that can be seen living in the canyon. Once a month we have an educational booth at the railroad with raptors, reptiles, and a representative from our Non-Eagle Feather Repository. Christmas at the Rails is a special treat and Sonora is part of the scene.

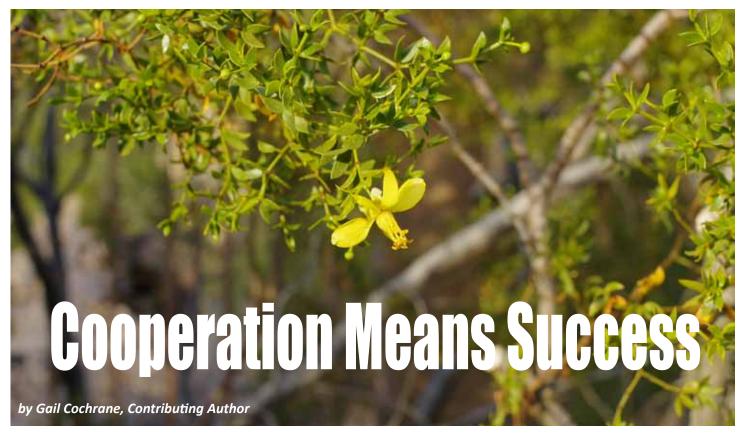


# Hyatt RegencyScottsdale Resort &Spa at Gainey Ranch

features a variety of raptors in a flighted program every Friday afternoon, October to May, at 4:00pm. It is free to the public and is sure to please.

• **Desert Botanical Garden** in Phoenix has a splendid Las Noches de Las Luminarias starting after Thanksgiving through the holiday season and Liberty Wildlife participates with a booth full of nighttime critters. It is a big hit to be able to stroll through the garden taking in the beauty and surprisingly run into the Liberty Wildlife display.

### "The wildlife and its habitat cannot speak, so we must and we will."



eystone species of the Sonoran Desert are creators of life, nurturing rich and diverse ecosystems in an unforgiving land. The ironwood tree is the most important nurse tree of the Lower Colorado River Valley. This legume spends its lifetime generating a diverse and riotous garden around itself. Remarkably, the tree orchestrates soil, moisture and temperature conditions to ensure that a host of interdependent plants, microbes, insects, and animals grow and thrive.

Up to 165 plant species are documented to grow under the nurturing of iron-wood trees. These allies further attract pollinators, pathogens, herbivores and mutualists. In a sum greater than the parts, diverse ecosystems form, strongly resistant to insect infestations, disease and changing environmental conditions.

So, how do they do it? The work begins underground. When an ironwood seedling probes its first roots into the thin desert soil, it emits chemical compounds. Rhizobium bacteria respond and begin to form nodules on the roots. This makes nitrogen available to the growing tree.

As it begins photosynthesizing, the plant releases further compounds that enable

the development of fungi. A mycelial network spreads under the surface of the soil. This mat intertwines and taps into the root system, feeding on sugars secreted by the ironwood. In turn, the fungi provide the tree with nutrients and protection from disease. Other microorganisms are attracted by the bacteria and fungi and come to feed, colonize and further enrich the soil.

Tap roots probe deep into the soil. Perhaps as far as 100 feet down, the roots seek subterranean water sources. In a mighty act of respiration, the ironwood pulls deep water up to the surface, and exhales moisture through stomata on the undersides of the leaves.

Other small plants begin to sprout under the ironwood canopy, protected from exposure and cooled by transpired moisture, watered by hydraulic lift. Deep soil minerals drawn to the surface with the water provide nutrients. Thirty-one of the species nurtured here grow only under the conditions created by ironwood trees. The plant community connects through the mycelial network and their plant chemistries flow back and forth. Communication is furthered by the constant release of volatile aromatics, compounds that fall in a mist over

neighboring plants and the soil, and pull in pollinators.

Over time, leaves, bark, and limbs fall and form a layer of decaying matter, a mounding island of nutrient rich soil caught and held at the base of the tree. Insects, birds and animals attracted to the area pollinate, spread seeds, build nests and dig burrows. Botanists estimate ironwood trees live to be 300 years or more. This represents many seasons of increased abundance and species richness.

Creosote bush is another integral desert plant that controls conditions to create a community of its choosing. The creosote is one of the most drought resistant plants on the face of the earth, and it secretes growth inhibiting allelochemicals that selectively screen out other plants. Even other creosote shrubs are only allowed within a certain distance based on the amount of rainfall for the area and the conditions of the soil.

Yet this is also an important nurse plant that shelters annual flowering species as well as cacti such as hedgehog, night blooming cereus and mammillaria. More than 60 species of insects are

Cooperation continued on page 8

### **Cooperation** continued from page 7



Ironwood flower

associated with creosote, including 22 species of bees that feed only on its flowers.

Numerous rodents dig burrows under creosotes finding easier purchase where the plant's roots have already plunged. Reptiles and invertebrates also move into these burrows, and the various species benefit from each other, sharing and providing food and shelter.

The powerful compounds secreted by this plant make it the single most widely used medicinal herb in the Sonoran Desert for indigenous peoples. These aromatics are why creosote is the smell of rain in the desert. O'odham tradition maintains creosote was the first plant created.

Plant communities such as these are found in all land ecosystems, from prairies to forests to mountains. Communities always create the richest, most abundant and resilient ecosystems.



# NEFR

## Non-Eagle Feather Repository

...helping to preserve Native American traditions

#### by Rachel Day, Contributing Author

n a table of a non-profit wildlife rehabilitation center, Liberty Wildlife, rests a red-tailed hawk. The mature female bird sports a display of rich brown and white plumage. If you saw her circling the sky, you might mistake her for an eagle. Red-tailed hawks' white underbellies gleam in the sun and end in ombre striped brown feathers with darkened tips. Their tail feathers show as a dusty pink from beneath, and a copper shade of red on the top. Thousands of feathers cover the birds, each equipping them for a life of soaring. Red-tailed hawks can live to be up to 25 years old in the wild. But not this red-tailed hawk. This red-tailed hawk has died.

Before her euthanization, as a result of declining health from West Nile Virus, the bird was taken to the Wisconsin Humane Society Rehabilitation Center. Crystal Sharlow-Schaefer, WHS Wildlife Supervisor, spoke with the tribal member from the Oneida Nation who brought it in.

"They said, of course, do what you can to rehabilitate the bird, but they wanted to know if she didn't make it if they could get the carcass for feathers," Sharlow-Schaefer said.

Her wings will never soar again. Her feathers will never take flight. So, now, the hawk will be sent back to Wisconsin and be used for a different purpose. Preserving Native American traditions.

When Sharlow-Schaefer first looked into giving the bird directly to the tribal member, she was told she had to go through Liberty Wildlife's process. Liberty Wildlife is permitted by the

federal government to accept, hold, and distribute feathers to Native Americans for religious and ceremonial purposes.

Over the past 3 years combined, Liberty Wildlife has filled requests for roughly 1,285 applications. Mare Van Dyke makes sure Liberty Wildlife keeps up with demand, handling many of the day to day operations when it comes to helping applicants complete their request form and filling the orders that come in as quickly as possible. She says a major problem is lack of awareness and knowledge about how the program works, partially due to the remoteness of many places that request feathers.

"They are basically living off the technology grid," VanDyke said. "I shipped last week to a house number one off milepost 281 off the dirt road 264 with a yellow truck in the driveway."

Sometimes when VanDyke hears someone is having trouble complet-

ing an application, she'll mail one to them with a red feather stamp to know where they came from. She gets calls from members sitting in libraries, with the Liberty Wildlife website pulled up, and walks them through the process. Though the structure of applying could seem complicated, VanDyke is always ready to help.

A man requested a magnificent frigate bird, a large seabird found on the coasts that rarely lands and spends most of its life soaring over the seas.

"Oh, we're never gonna see that out here," VanDyke said. So instead, she gave him the names of rehabilitation centers in Florida. When the man called one in the Florida Keys, the center just happened to have a magnificent frigate bird that had died, waiting on ice in the freezer. And, they were willing to ship to Liberty Wildlife.

**NEFR** continued page 18



Robert Mesta, NEFR Coordinator, fulfilling feather requests



One of the great benefits of having this beautiful facility is sharing it with others...our guests or the guests of people who are looking for a memorable venue in which to hold their event. We have rented our conference room, classroom, library, amphitheater and accompanying event space, the wetland and mesquite bosque to corporations, agencies, and club meetings, birthday parties, baby showers, weddings, celebration of life, and assorted other "happenings." These photos show a few event potentials.



Dinner is served in the mesquite bosque



Wedding celebration at Liberty Wildlife

### Contact Alexa Gibson at alexagibson@libertywildlife.org for facility rental details

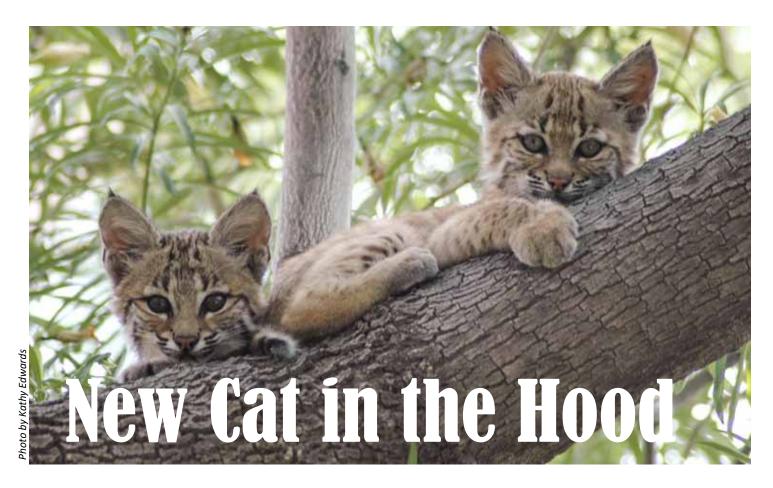


Arizona Forward celebrated their 50th Anniversary at Liberty Wildlife



The DJ lights up the festivities at the wedding of Chris Bauer and Wendy Ingram.

Wedding photos by Ben and Kelly Photography



### by Claudia Kirscher, Contributing Author

here are four species of wild cats in Arizona: the bobcat (Lynx Rufus) is the most common. They outnumber mountain lions (common), ocelots (rare) and jaguars (rare). Also thought to inhabit our state is the jaguarundi, though there have been no confirmed sightings. Both the bobcat and mountain lion range over the entire state, while ocelots and jaguars are found in south and southeast Arizona. The bobcat is highly adaptable and successful in a variety of habitats including the Sonoran Desert, mountain forests, riparian canyons, and even in populated urban areas. They are not considered endangered; however, their numbers are rapidly dwindling, and their existence is being threatened by loss of habitat, hunting and trapping. Predators of the bobcat include mountain lions, coyotes, foxes, owls, wolves, and humans.

An adult female bobcat weighs 18 to 19 pounds, with an adult male weighing 20 to 22 pounds, and are an average of 2 to 2.5 feet in length. They vary from orange to grey with black spots and bars,

pointed tufted ears, and a short 2-8 inch tail ending in black with a white tip..... hence "bobcat." Their lifespan is 13-15 years. They are strong hunters. Adult males have been known to bring down deer. Reaching speeds up to 30 mph they can pounce as far as 10 feet. Interestingly, they carefully place their back feet where their front feet left off in order to lessen noise that might alert their prey.

They tend to be nocturnal, most active from sunset to sunrise when hunting. During daylight hours, bobcats sleep under thick bushes, rocky ledges, caves, and even near backyard pools and landscape. The female bobcat raises a litter of 1-4 bobkittens alone. She has several dens and will move between them. Occasionally, the female finds what seems to be a safe and welcoming backyard, roof of a house or even an attic!

As our urban communities expand into wildlife habitats, bobcats have become frequent visitors to neighborhood yards. These residential havens have plenty of rabbits, mice, birds, shelter and water—a perfect survival combination. They also

eat lizards, snakes and carrion. Bobcats may attack unwatched house pets and other backyard animals. Be a wise and cautious pet owner. Bobcats rarely attack people as they are easily spooked, but if one attacks, it may have rabies.

We encourage you to safely enjoy the beauty of these new urban neighbors from a distance. Help them to continue to thrive in Arizona by working to protect their wild habitats.

Resources: Arizona-leisure.com; desertmuseum.org; sciencing.com; arizonahighways.com; nationalgeographic.com



An infant bobkitten cared for at Liberty Wildlife



### by Holly Hicks and Claudia Kirscher Contributing Authors

rairie dogs are small rabbit-sized burrowing rodents found in the grasslands of North America. There are five types of prairie dogs of which the two native to Arizona are Gunnison's and black-tailed prairie dogs. They are considered a "keystone" species because of their integral role in promoting animal and plant diversity in our grasslands, benefiting approximately 150 other species.

Prairie dogs are very social and live in close family groups called coteries. They reproduce once per year and once the young emerge from the underground burrows, they are nursed communally by other group members. Group living helps protect them from predators by use of a repetitive series of warning barks, varying in frequency and pitch. They have a different alarm call for each type of predator and barks indicate the location of the danger. The early settlers traveling across the plains thought

these warning calls sounded similar to dogs barking, and therefore called them prairie dogs. Once the predator or threat is gone, black-tailed prairie dogs are unique with their jump-yip display where they throw their arms up in the air and let out a "wee-ooo." (Photo below)



They eat a variety of vegetation such as grasses, flowering plants, roots, seeds, and occasionally insects. They are able

to hydrate themselves with water from their food. They keep the vegetation around their colonies short. Their digging action churns up soil like a plow that aerates and reverses soil compaction from cattle grazing. Water will also penetrate deeper, channeling rainwater into the water table. All of this combines to encourage a greater diversity of plants with higher nutritional value that in turn draws other wildlife like pronghorns to the area to graze.

Prairie dog colonies are further beneficial because their burrows provide suitable habitat for animals such as burrowing owls, pocket gophers, black-footed ferrets, rabbits, ornate box turtles, snakes, and tiger salamanders. Endangered mountain plovers prefer the areas of clipped grass surrounding the colony for nesting.

The prairie dog is a prime example of the interconnectivity and balance of

nature and its ecosystems. If the prairie dog disappears so do the burrows and the species that call them home. Without a stable food source, predators must work harder to find prey and feed their offspring. If they are removed from the grasslands, the landscape changes in its absence. While considered a pest by many, conservationists recognize them as an integral part of nature. Because of their burrowing and intensive landscaping behavior, they are often considered pests. During the 20th century, about 98% of all prairie dogs were exterminated. Their range has shrunk to perhaps 5% of its historic spread in North America's prairies and open grasslands. Arizona was the only state successful in eliminating their

black-tailed prairie dog populations during the extermination event. Development and agriculture have also greatly diminished their habitat.

#### WHAT YOU CAN DO TO HELP:

The AZ Game & Fish Department began reestablishing black-tailed prairie dogs to southeastern Arizona in 2008. There are three colonies within the Las Cienegas National Conservation Area, which is open to the public. If you would like to be involved with the project, contact Holly Hicks at hhicks@azgfd.gov. Volunteers are always needed to help with monitoring and trapping events. You can contact government officials at the local, state, and federal levels advocating further protection for prairie dogs. You

can also donate to charities trying to save the prairie dogs and their habitat.

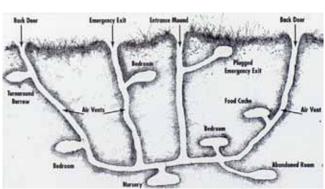
### MAKE IT PERSONAL AND BE PART OF THE SOLUTION!

References and further reading: defenders.org, animalfactguide.com, animals. nationalgeographic.com, https://azgfd-portal.az.gov/Wildlife/speciesofgreatestconcervneed/blacktailedprairiedog, http://www.prairiewildlife.org/index. html, http://www.humanesociety.org/about/departments/prairie\_dog\_coalition

Photos by Holly Hicks and Claudia Kirscher



Prairie dog closeup



Sketch of a burrow



Prairie dogs on watch

## **Natural Restorations** cleanup of the Rio Salado outside of Liberty Wildlife was a huge success! 163 volunteers, including 62 youth volunteers, helped us remove 3,199 pounds of trash and 11 tires!

























# **Ever on the March**

by Greg Martin, Contributing Author

illions of them live worldwide. They construct vast cities, their urban sprawls stretching for miles on end. They master the natural world: agriculture, livestock, timber, and other resources fall to their command. They cultivate advanced societies where division of labor is key: from engineering, to local security, to nursing care for the young, they split tasks between specialists in order to ensure the maximum gain for the maximum good. They forever colonize new lands, whether wanted or not, a breed of Manifest Destiny always their mantra. They protect their own with surprising tenderness ... yet they wage war on one another with incredible violence, annihilating their rivals in conflicts that often see millions dead with all the totality of World War II.

They are masters of their environs. They are beautiful, powerful, essential, invasive, caring, and remorseless, all at once.

They are ants, and they march confidently, inexorably on.

Countless billions of ants go about their work worldwide, far more than we realize. Living underground as they do, their intricately beautiful mazes of tunnels and chambers can reach a scale that borders on incomprehensible: there is, for instance, a "supercolony" of Argentine ants stretching nearly 600 miles along the coast of California. Not 0.6. Not 6. And not 60. 600. Imagine how many ants you've seen in a cubic foot of soil, then magnify it accordingly. 600 miles is an absurdly large amount of territory for a single colony to possess, until you factor in the nearly 4,000 mile Argentine ant colony "along the Mediterranean coast." The residents of these subterranean civilizations actually recognize members of their respective supercolonies by chemical scent; they will

ANT VS. ANT

Argentine ant

Carpenter ant

Argentine ant Linepithema humile

Native of Argentina, now found on every continent except Antarctica, is a threat to native California ants, citrus groves and homeowners' peace of mind. Source: Bayer Environmental Science

Camponotus vicinus

One of the California natives threatened by
the invaders. Scientists are studying the
ways native species are fighting back.

BAY AREA NEWS GROUP

never harm one another, even if they hail from opposite ends of the colony. Outsider ants, by contrast, know there's only one penalty for encroachment: to be surrounded by foes and ripped limb from limb, as if bound up on some nightmarish medieval torture rack.

Argentine ants are considered an invasive species in regions beyond their namesake origin, and an extremely dangerous one at that: like tiny Borg, they relentlessly press forward, assimilating entire ecosystems, and resistance truly does appear futile. They lack the venomous stings of the more infamous (and also invasive) fire ant, instead securing dominance through overwhelming numerical superiority. They easily hop continents in even small amounts of soil, and once established, well....

There are over 10,000 species of ants in the world, and each is utterly indispensable to the health of the planet. When aggressive groups spread across the globe as tiny hitchhikers in human cargo, they displace the complacent local colonies upon which ecosystems completely depend. Ants are instrumental in caring for the soil, planting seeds, and otherwise aerating the ground through their ceaseless tunneling. They aid in decomposition, act as a food

source, and serve myriad other functions for their surroundings at large. It's impossible to overstate how critical ants are, nor how devastating the results can be when usurpers take their place.

Supercolonizing ants resemble their cousins in terms of behavior, while exponentially magnifying the impact through the sheer heft of their population. Ants of all stripes engage in "ranching:" the raising of aphids, tiny green bugs that feed on plant life. Colonies maintain vast herds of them, allowing them to graze, then "milking" them for a nutritious secretion that forms a mainstay of ant diets. This usually goes on without notice. Supercolonies, however, are so hyper-industrious in their animal husbandry that they've joined the ageless dispute between agriculturalists and pastoralists. Fights over grazing rights commonly erupt between human farmers concerned for their crops, and millions of tiny shepherds angrily protecting their flocks.

Many ants benignly live off the fruits of the soil, tending enormous underground fungus farms. Others scavenge the wider world. Yet no matter their predilection, most inevitably reach a crisis point with their neighbors. While all animals compete over resources,

their hive-mind nature turns struggle into outright conflict. Small colonies might limit themselves to occasional bullying, but the largest, with populations in the many thousands or millions, practice total war at its most extreme. With everything subjugated to the collective good, they will relentlessly slaughter one another in the push for supremacy. Some are so utterly intractable that scientists, far from being able to remove them, can only marvel as invasive supercolonies send millions to their deaths in miniature World Wars against one another. As a redeeming quality, many ants actually rescue their wounded from the battlefield.

They are builders, caretakers, ranchers, and farmers. They colonize, conquer, and keep this world going, even as they sometimes imperil it. They kill their rivals, but love their kin.

They are wonders. They are paradoxes.

They are ants.



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#### **NEFR** continued from page 9

The cost of shipping is one of the biggest issues that NEFR deals with in order to continue to serve Native communities. The federal government will pay the postage for eagles to be shipped, but non-eagles don't get the same deal. Rehabilitation centers budget carefully to stretch non-profit funds. For a large facility, this comes out to between \$2000 to \$2500 a year. A hefty price tag for just postage.

Joe Early is the U.S. Fish and Wildlife Service (USFWS) Southwest Region Native American Liaison. As a member of the Pueblo of Laguna tribe, he recognized the need for feathers from relatives and other southwest tribes, and asked around about trying to get access. When Robert Mesta called one day to ask about sending Liberty Wildlife feathers to tribal members that came in and asked for them, Early worked with a team to get a permit. Now, Early has seen first-hand the ecological difference that non-eagle respositories make.

"This has put a dent in the illegal acquisition," Early said, "It should deter tribes and folks from going out and shooting birds or buying them when now there's a legal way to do it."

In total, Liberty Wildlife has shipped carcasses and feathers to approximately 4,000 Native Americans in 47 states. That's almost 4000 birds that weren't killed or bought illegally. That number could easily increase as the program grows.

Permit Branch Chief Eldon Brown of the USFWS Migratory Bird Permit team notes future success in all in building awareness.

"The bigger challenge is educating the greater public," Brown said. Wildlife centers don't always know about the option of sending expired birds to a NEFR like Liberty Wildlife. Instead, carcasses are thrown out or cremated. Many Native Americans don't know a legal option exists at all.

"The NEFR pilot program wasn't sure how this would and could be shaped," Brown said. Almost a decade later, and kinks worked out, the Liberty Wildlife NEFR program continues to impact every person involved, from donor to recipient.

"We've stepped outside the box and proven that this can be done," Early said.

After the red-tailed hawk was shipped back to Wisconsin, the tribal recipient thanked Sharlwo-Schaefer with an invitation to the bird's final moments.

"They invited me for the feather removal, and I had never seen that before," Sharlow-Schaefer said. "That was so meaningful to see that specimen full circle and see how important it was culturally."

## In Flight...

Ferruginous Hawk



The ferruginous hawk is the largest member of the genus of buteo in North American, with a Wing span of 53"-56"

Harris's Hawk

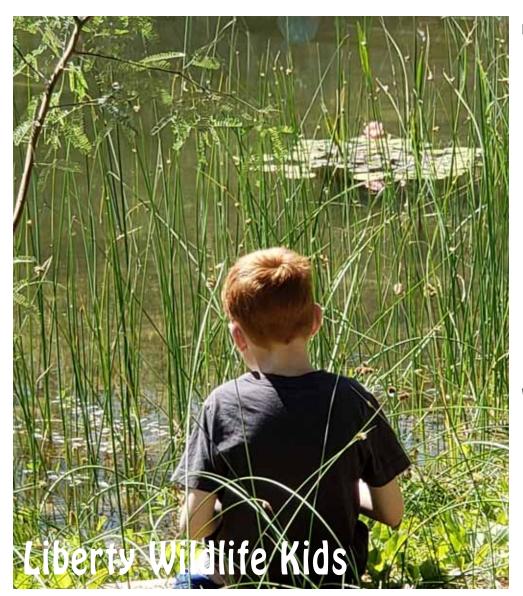


The Harris's hawk, with a wing span of 41"- 47" is considered to be a model for the Thunderbird or Sacred bird of several Native American societies

Red-tailed Hawk



The red-tailed hawk is one of the most common members within the genus of buteo, with a wing span of 43"-56"



# Tune into Nature...

# Find your Sit Spot!

### by Carol Suits Volunteer Coordinator

There's a trick to tuning into nature. It's not hard to do, but we hardly ever practice this trick so we usually don't realize that nature has a lot to say. Each of us has all the tools we need to practice this trick.

Start with finding a place outside that will be a spot just for you to enjoy by yourself.

Look at your surroundings. Why do you like that spot? Is it shady or sunny? Grassy or sandy? Have trees or bushes? Whatever made you choose that spot, it is now your spot where you can tune into nature. It's called your **Sit Spot**. Grab something to sit on, something to write on and something with which to write or draw.

So how do we tune into nature?

The tools we use to tune in are found by asking ourselves some questions. Ready?

- What do I hear? Some sounds are easy to identify. Some are sounds people make, some are sounds animals make and the very softest sounds could be the sound of a breeze moving through the trees.
- What do I see? You can look up, look down, look left and right, and don't forget to look behind you.

You can write or draw what you see and hear or what you think about while on your Sit Spot.

You have learned the trick to tuning into nature! Each time you go to your Sit Spot and practice tuning into nature you may find nature has something new to show you. Everyone in your family can learn this trick. Be sure to share it with them.





Photo above:
Education Ambassadors, Cheese and Quackers, greet the public

Photo on left: Children finding their "Sit Spot" at Camp Liberty Wildlife

### **Monarch Butterfly Craft Project**

This fun project for kids was done at one of Liberty Wildlife's Story Hours and was found at:

https://www.cbc.ca/parents/play/view/coffee-filter-monarch-butterflies

#### What you'll need:

- white coffee filters
- acrylic craft paint (orange, black and white) (we used water colors which took a little longer to dry)
- paint brushes
- clothespins
- 1. Look online and find out what the wings of a monarch look like (obviously, artistic license is allowed if you want to add in other colors).
- 2. Paint the coffee filters orange.
- 3. With a finer paintbrush, add in the monarch's black and white markings.
- While the coffee filter dries, paint the clothespins with black acrylic paint (again artistic license if you want to have your own species of butterfly).
- 5. Pinch the coffee filter in the middle and clip the clothespin to that section.
- 6. Place your monarch outside and see if anyone can spot it!







## Volunteers + Public = Special Delivery by Carol Suits, Volunteer Coordinator

Congratulations! This number belongs to everyone who set in motion the necessary work needed to attempt to save wildlife because this is how many animals were admitted to Liberty Wildlife in 2018. This number represents thousands of phone calls to our Hotline volunteers and hundreds of rescues by our Rescue and Transport team.

Here's what it takes to get wildlife in the door at Liberty Wildlife:

There are three possible paths to Liberty Wildlife and depending on the situation; one, two or all three must be utilized. Each option requires the training and dedication of Liberty Wildlife Hotline or Rescue volunteers to ensure the orphaned, injured or ill wild animal has a chance to survive.

The first and most often used path is a call to the volunteers who monitor the animal emergency hotline. Hotline volunteers equip themselves with formal training, a software program that maps the location of the animal emergency, and resource information to answer questions posed by callers. This group is the gatekeeper for Liberty Wildlife providing prompt and accurate problem solving,

- Is the animal in need of help?
- Can the caller take a picture to help determine the next steps?
- Should the caller bring the animal directly to Liberty Wildlife? (This is path two.)
- Should the Hotline volunteer dispatch a Rescue & Transport volunteer? (This is path three.)

The back and forth discussions result in the best course of action on behalf of the animal in question.

If the Hotline determines a rescue is needed, the software program finds rescue volunteers designated available and willing to travel. Sometimes the destination is across the state but most times, it's within the valley.

Rescue and Transport volunteers equip themselves with formal training, a suitable container complete with air holes and handles, gloves designed to protect them from sharp talons, eye ware designed to protect from sharp bills, a flashlight for night time searching and a net. It might be important to add that rescue people also equip themselves with stamina, persistence and the degree of stubbornness sometimes necessary to find the elusive wild animal, capture and transport it while staying safe!

Together the Liberty Wildlife Hotline and Rescue volunteers and YOU work to save wildlife every day. Thank you!



Carol Suits, Volunteer Coordinator, monitoring hotline calls

## Interns

We count ourselves lucky to have so many talented interns working with us each semester. Their passion is evident by their willingness to go above and beyond their school requirements to ensure a successful project outcome. What they have in common is a love of the environment, nature's creatures and a determination to make a difference. How they differ are their unique talents and perspectives formed in part by their chosen field of studies.

### Prolific in number and scope, the projects completed this past year by Liberty Wildlife interns include:

- Trail blazing on the Rio Salado
- The launch of "Sky Stories" podcasts (photo to right)
- Video documentation of Liberty Wildlife Ambassadors
- Curriculum development for

Camp Liberty Wildlife and Liberty Wildlife Intersession

- Informational brochures on pollination and the Pollinator Garden
- Event planning and support



# Education

by Laura Hackett, Education Facilitator

# The photos on these pages tell the story

**From our earliest days of creating booths** for community events and traveling to classroom settings, we have expanded our programming to provide unique experiences for all our visitors. On any given day, you may find a school field trip in session or a private tour. You will see guests exploring the Interpretive Trail or the Interactive Room or gathering in the amphitheater for fun and engaging activities. With the increase in guest participation, our public open hours will expand by adding Fridays in September, and in October we will change from our summer hours of 9:00am – 11:00am, to our fall hours of 10:00am – 1:00pm.

Popular programs returning to the schedule include Camp Liberty Wildlife, the Speaker Series and our monthly nature walks. New this year, is our "Coffee with the Ranger." The duck walk and experience with Education Ambassadors, Cheese and Quackers, will continue to thrill and entertain audiences, as will the chance to watch an eagle feeding session. But, get ready for other engaging programs that will be announced on our website, www.libertywildlife. org and Facebook page. Nowhere else can a guest get such an up-close and personal experience with these stunning creatures!











Liberty Wildlife's educational programs are growing and changing by the minute.







# **Medical Services**

### **Volunteers that became Veterinarians** by Jan Miller, Medical Services Coordinator



Volunteer opportunities at Liberty Wildlife are many and varied—offering training that can lead to a future career for some. Medical Services, available to seasoned volunteers, provides an eight-week training course that teaches the basics in triaging incoming patients. They learn assessment, fluid therapy, and medication dosages to treat any issue, as well as stabilizing wraps for fractures, and wound management. Once stabilized, one of our volunteer veterinarians further evaluates the animal and continues treatment.

One of the things about the medical services program that is so successful in addition to the immediate care the animal receives is the interest it peaks in individuals that are thinking of having a future in veterinary medicine. Some volunteers

have joined and become a part of the program because it is a volunteer opportunity like no other. They can gain experience in wildlife medicine, and a bonus is that it looks good to have on an application to veterinary school!

Liberty Wildlife has been fortunate to have helped several volunteers gain the experience and knowledge necessary to help them get into veterinary school. Liberty Wildlife has seen nine of its volunteers go on to become veterinarians. They have gone to multiple schools such as UC Davis, Washington State, Colorado State, Kansas State and even to school in the Caribbean. One of our volunteers was in the initial graduating class of Arizona's first veterinary school, Midwestern University. She has moved on to become one of the teaching veterinarians at Tuft's University, one of the best veterinary schools for wildlife.

We are very proud of those nine volunteers. We currently have three volunteers that are in veterinary school at Midwestern University and very proud to say that three more volunteers have just been accepted into next year's class.

Admittedly, the excitement of this accomplishment for Liberty Wildlife is being a part of changing the individual's path, encouraging them to follow a dream. Becoming a veterinarian with some wildlife background will result in more practitioners having an interest in helping wildlife when it is needed.

It is satisfying to know that as we continue to support and train future veterinarians, wildlife has a better chance to survive.



Dr. Lamb examines a patient for the television audience



Medical treatment is observed by guests during Open Hours

# **Veterinary Standouts**

Liberty Wildlife has been very fortunate to attract the best in volunteer veterinary care starting with Dr. Kathy Orr, the founder of Liberty Wildlife. Drs. Tanya Wyman, Stephanie Lamb, and Mike Sorum have held down the fort for many years sharing their vast knowledge and experience. Recently, three new veterinarians have joined them.

#### Dr. Felicitas Tantiyatyanon, (Dr. Tan)



Dr. Felicitas Tantiyatyanon (Dr. Tan) is originally from Bangkok, Thailand. She has lived in Arizona for over 10 years, and received her Bachelor of Science in Zoology from Northern Arizona University. She continued her studies in California where she received her Doctor of Veterinary Medicine degree from

Western University of Health Sciences in 2009. Since graduation, she completed an internship in small animal emergency, surgery and internal medicine while providing quality veterinary care as a general practitioner in the Phoenix area. Dr. Tan has a strong interest in exotic/wildlife medicine and holistic veterinary medicine. She emphasizes the integration of traditional Chinese veterinary medicine with modern western medicine and has completed her certification in small animal, exotic and equine acupuncture through the Chi Institute in Florida. Dr. Tan is volunteering at Liberty Wildlife to provide acupuncture, cold laser treatments and western veterinary care to injured and orphaned wildlife. She strongly believes that every animal can benefit from integrative medicine and is hopeful that these modalities can help in the healing process and comfort of injured wildlife.

#### **Dr. Danielle Semick** (photo top right)

Dr. Semick grew up in Long Island, New York and graduated from the University of Vermont with a bachelor's degree in biology and biochemistry. She earned her Doctor of Veterinary Medicine degree from Midwestern University in Glendale, Arizona and is currently practicing small animal medicine. Her professional interests include: internal medicine, dentistry and geriatric care along with alternative therapies.



On her days off, she enjoys running outdoors with her two dogs, competing in charitable runs and baking for friends and family.



### Dr. Klay Lapa

Dr. Klay Lapa performed his undergraduate studies at Arizona State University before getting his Doctor of Veterinary Medicine degree at The University of Missouri in 2014. After graduation, he returned to the valley and has been practicing Emergency and Critical Care. His favorite pastimes include attending the local theater, hiking, and kayaking with his wife. Together they have six dogs, 4 cats, and typically a foster dog, as well.

Dr. Lapa has always had a passion for wildlife management and conservation, working with the Student Conservation Association as part of both their high school summer conservation crew and their desert restoration corp. Dr. Lapa started volunteering with Liberty Wildlife in May, seeking to use his medical expertise to help injured wildlife return to the wild.

# **Daily Care**

by Alex Stofko, Daily Care Coordinator

# Gone but not forgotten...

### a story of foster parents

The rehab side of Liberty Wildlife relies heavily on foster parents each year during orphan season. This allows the new arrivals to be raised and mentored by an adult of their species, reducing the chance of imprinting.

If you have volunteered at Liberty Wildlife in the past 30 years you know Igor and Hogan. I knew them both as amazing foster parents to hundreds of great horned owl orphans, but before that they graced many Liberty Wildlife educational programs.

Hogan was brought to Liberty Wildlife in 1986. She had previously been a falconer's bird and sustained an injury to her wing. The wing had to be pinioned, and the wing tip was removed. Due to this, the falconer relinquished her to Liberty Wildlife where she received a new life.

Igor and his brother were brought to Liberty Wildlife in 1987. They had been raised by humans and fed hamburger meat which lacks the calcium a young owl needs for growing strong bones. Malnutrition caused folding fractures or 'bendy bone' in both of Igor's wings preventing him from ever flying. His brother suffered a worse fate with folding fractures to both his legs preventing him from standing comfortably. He was humanely euthanized.

Igor and Hogan quickly took to their new job as educational ambassadors. They traveled to countless programs all over Arizona teaching the public about the importance of conservation and wildlife. After many years of being teachers, both decided separately to take on a new role as a foster parent. This is where I show up.

I walked into Liberty Wildlife in January of 2010 for new volunteer orientation. It never crossed my mind that I had found my home and that two owls would change my life forever.

Hogan was the best foster mom I ever knew. If one word could describe her it was fierce. My first day in my new volunteer Owl Team position I was told to catch Hogan and move her so we could access her enclosure. I was young and eager, and I underestimated her completely. I held my gloved hands out and waited for her to launch. When she did, to my surprise, she landed directly on my knees with 4 talons in each. Day one: I'm bleeding. After that I realized what I was up against; the toughest foster mama that ever lived.

Igor was a different story. He was kind and reserved, but he would still launch off his perch if you messed with any of his foster kids. He hooted a greeting at everyone who passed his enclosure. He was definitely a favorite amongst the volunteers. I remember in the slow season, aka not baby season, I was kneeling by his enclosure's door. He waddled over with a mouse in his mouth and handed it to me, repeatedly, until I pretended to eat it. He was satisfied knowing I appreciated his gift, and he went back to his perch.

Hundreds of volunteers have Igor and Hogan stories, as these two owls touched each of our lives differently. This article cannot even begin to describe the impact these two had on the Liberty Wildlife volunteer community. Hogan passed away in 2012 and Igor passed in 2018. To this day they are known as some of the best foster parents to ever

live at Liberty Wildlife. They raised over 500 orphaned great horned owls. So when you see your neighborhood great horned owl, it might just be one of Hogan or Igor's kids.

Here's to you Hogan (top photo) and Igor (bottom photo) and all the lives you touched. I miss you.





# **Orphan Care**

by Alexa Gibson, Orphan Care Coordinator

# learning on the fly

Baby season is in full swing in the Orphan Care Department. In the month of June, we averaged about 64 new animals daily at our intake window. For the entire month, we assisted 1,920 animals! To say that we are busy is an understatement.

Feeding each bird a specific diet, depending on species and age of the bird, takes time to learn. Luckily, we have some very dedicated and amazing people who volunteer their time to ensure these little ones will grow up to be released back into the wild. We have the usual babies that come in each year needing some time to grow up like white-winged doves, great-tailed grackles, Gila woodpeckers, Gamble's quail, etc. But, every so often we get in some little guys that need extra TLC to be readied to be reintroduced to the wild.

I have a colony of cliff swallows near my house that I have been watching since the beginning of spring. Cliff swallows are small birds with broad wings and a squared tail. They build their nests in colonies under bridges, cliffs, overpasses, or on the sides of barns. They are wondrous little birds who zoom around in the air catching their food on the wing. Both parents help to build the nest, which they make out of mud and attach to a vertical surface with apt cover. It was such a cool experience to watch these small birds make intricate mud houses in which to raise their families. Throughout this season, we have had over a dozen orphaned cliff swallow chicks brought in. Learning from the swallows in the wild, I took into account what amount and how often the babies were being fed and ultimately mimicked those behaviors to ensure these special little guys would get to soar around with other cliff swallows in the future. Apparently, it worked as all of the swallows we have had in our care have since been released back to the areas where they came from. Watching them fly out of

the transport box and up into the blue sky was truly amazing to see—zooming around as if nothing ever happened. This is just a small example of the care orphans get who end up at Liberty Wildlife. We want to make sure each and every baby that comes through these doors is taken care of in the best possible way to ensure a successful reintroduction to the wild.

Volunteering in Orphan Care can seem like an endless rollercoaster ride, but we are happy to ride! Nothing short of hard work and determination is what it takes to see all of our babies grow up with the best possible chance of survival.









Photos by Terry Stevens

Top left: baby finch durng the intake process

Bottom left: orphan curve-billed thrashers

being fed

Top right: baby hummingbirds

Bottom right: orphan cottontail (with a green color coding mark for

identification)

## We thrive on our

# Community Support

has been

nuturing the

nature of

Arizona and

the Southwest

since 1981.

by Chris Sar, Development Consultant

Birders know Liberty Wildlife. Rehabbers know Liberty Wildlife. **But each day's operation relies** on the continual support of dedicated friends in the community who make contributions that heln feed the animals in our care.

They help maintain the enclosures. They help make sure educational supplies are ready for each and every school child and summer camper that comes to learn more about nature and living in harmony with wildlife. These donations help "keep the lights on" so to speak.

This spring when we began to explore expanding those offerings to include public hour access to our nationallyacclaimed Non-Eagle Feather Repository, we turned again to our community of supporters. And you stepped up, yet again. In just a few weeks, our friends donated \$25, \$50 and more to qualify Liberty Wildlife for a matching grant.

The USA Today Network with Gannett Foundation saw that tremendous support from our community and awarded Liberty Wildlife a grant from their "A Community Thrives" program. Together with ongoing support from the Rob & Melani Walton Foundation we can now expand our program offerings.

The Non-Eagle Feather Respository is now open to the public. We are also working to bring in a college intern. And, we have more resources to supply feathers and bird parts to registered members of Native American tribes across the United States, a growing part of our efforts to preserve our native wildlife and our community's cultural heritage.

### Fly with the Wings of An Eagle

Liberty Wildlife has been nurturing the nature of Arizona and the Southwest since 1981. But our future depends upon continued support. Many Liberty Wildlife supporters make a commitment toward that future for Liberty Wildlife by specifying a gift in their will. These are commitments that will help ensure wildlife is protected for years to come. It is one way that their legacy will continue to soar, like the wings of an eagle.

You can make a commitment like that.

too. And, it's easy to do. Any gift through your will or estate plan qualifies you as a Wings of an Eagle Legacy member. Joining the Wings of an Eagle fund is an easy way to support native wildlife, while costing you nothing today!

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.

Donors who add Liberty Wildlife to their "life list" are recognized as Wings of an Eagle members in our donor honor roll, in annual publications and on our donor board. They receive special invitations to events at Liberty Wildlife, an invitation to an annual reception at the Rob & Melani Walton Campus of Liberty Wildlife, and get the good feeling of knowing they've done all they can for the wildlife of Arizona and the Southwest.

### Become a Member of **Liberty Wildlife**

Annual membership at Liberty Wildlife not only gains you admission throughout the year, it also sustains the vital rehabilitation and conservation work that Liberty Wildlife conducts every day.

The dozens of animal "ambassadors" that you are able to visit at Liberty Wildlife are representatives of the great care provided to the thousands of birds, mammals, reptiles and amphibians that are brought to our doors sick or injured. On average, year-round, Liberty Widlife

takes in over 21 animals each day. And during the Liberty Wildlife busy spring and summer months it is often triple that number!

> term rehabilitation care. your support.

> Your support cares for these animals as they receive emergency care, surgeries, and intensive long-This is only possible with

An easy way to show that support is through your annual membership. Starting at just \$25 per person, membership has its privileges:

- Invitations to special events at Liberty Wildlife
- Previews of new exhibits and programs
- Invitations to our Speaker Series, and more...

A new way to show your support for our wildlife Ambassadors is to sign up as a Sponsor of a particular type of animal. You can sponsor an Eagle, Owl, Raven, Hawk, Corvid or Vulture. These sponsorships also make great gifts for loved ones.





#### Saturday, October 26th - 5pm

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		1	2	3	4	5
6	7	8	9	10	11	12
				17		
20	21	22	23	24	25	26

For more information, call 480.998.5284 or visit: LibertyWildlife.com/events



Save the date for an inspiring and wickedly fun evening under the stars to make a lasting difference with Arizona's native wildlife. Join us at Liberty Wildlife where your SPOOKY night will include:

- Sunset cocktails and hors d'oeuvres
- Costume contest and awards
- Silent auction with unique gifts & services
- Exquisite 3-course dinner
- Dramatic flight of a bird of prey, and more

Invitation to follow

For information on becoming a member, contact Liberty Wildlife today, at 480-998-5247 or http://libertywildlife.org/how-to-help/donate/.

### Help Liberty Wildlife Stretch Our Wings

Since moving into our new Rob & Melani Walton campus for Liberty Wildlife in late 2016, we've been constantly growing into the space. Every day we leverage a vast team of dedicated volunteers to share this important message with our community. Even now, in this state-of-the-art facility we are still adding new enclosures, adding signage, and expanding programs in the space.

This growth requires the talents of many volunteers and the expertise of staff. It also requires cash investments – for program and facility supplies, for staff and for the care of the animals we treat and rehabilitate.

Contact Liberty Wildlife if you would like more information on how you can help expand our campus and our educational offerings.

### Something WILD This Way Comes Wishes for Wildlife 2019

(See Save the Date above)

In 2019 we celebrate our annual signature event with a bit of Halloween flair. Join us on October 26th for "Wishes for Wildlife" beneath the darkening sky at the Rob & Melani Walton campus of Liberty Wildlife.

Come early at 5pm to enjoy a sunset cocktail around our stunning wetlands. Costumes and masks are optional as we stroll the education trails and savor the culinary delights of M Catering under the stars.

Tickets start at just \$350. And, we'll enjoy silent and live auctions, a libation pull, and a special program. At the

event, this year's Legacy Award will be presented to Arizona State University's Rob & Melani Walton School of Sustainable Solutions. The School has partnered with Liberty Wildlife to assist us with the sustainable solutions for our new building. Their assistance was critical to our attainment of a LEED Platinum designation. Over the years they have educated many undergraduate and graduate students in problem solving for sustainability in real life situations. They have also partnered with Liberty Wildlife in sustainability events, helping to spread the word through education and demonstration on how to make the world a better place to live in for all of us.

Your attendance and support of this event funds much of our operation throughout the year.

For more information or to purchase tickets, please visit http://libertywildlife.org/W4W/home/ or call 480-998-5284.

### **Wish List**:

- Additional shade sails for the Interpretive Trail
- Laptop computers
- Microscopes for the Children's Interactive Room
- Telemetry system for flighted educational birds
- Hardware cloth
- Lumber/enclosure building materials

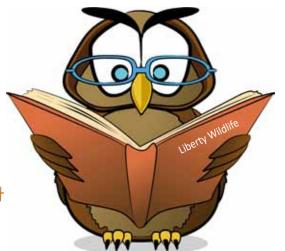
- Small freezer
- Indoor/outdoor swamp coolers
- Storage units
- Sound system for the Interactive Room
- Recording system for the Interactive Room
- Cushions/Chairs for the amphitheater
- Shade sails for the amphitheater



Photo by Terry Steve

# Reader's Corner for all ages

Whether you prefer a book, tablet or laptop, you won't want to miss these suggested stories!



#### **Wolf in the Snow**

by Mathew Cordell/ 5 – 7 yrs. Winner of the 2018 Caldecott Medal

A girl is lost in a snowstorm. A wolf cub is lost, too. How will they find their way home?

#### Wishtree

by Katherine Applegate/8 – 12 yrs. NY Times Best Seller

 Trees can't tell jokes but they certainly can tell stories! Red is the neighborhood "wishtree"—people write their wishes on pieces of cloth and tie them to Red's branches.

#### The Wild Robot

by Peter Brown/ 8 – 12 yrs. School Library Journal Best of the Year Pick

Can a robot survive in the wilderness?

#### Pax

by Sara Pennypacker/ 8 – 12 yrs. NY Times Best Seller

 A compelling novel about the powerful relationship between a boy and his fox.

### The Guardians of Ga'Hoole

by Kathryn Lasky/8 – 12 yrs.

 Featuring Soren, a barn owl, this series is filled with adventure, suspense and heart.

#### The Boy Who Harnessed the Wind

by William Kamkawanba/ All ages

 This is about the heroic young inventor who brought electricity to his Malawian village.

### **The Overstory**

by Richard Powers/ Adult Winner of the 2019 Pulitzer Prize in Fiction

The heroes of this story are centuries old and 300 feet tall!

### Where the Crawdad Sings

by Delia Owens/ Adult NY Times Best Seller

 This novel has a mystery at its core but conveys much more! There is great nature writing, the coming of age and wonderful literature.

### Vaquita: Science, Politics, and Crime in the Sea of Cortez

by Brooke Bessesen/ Adult

This is an intrepid conservation detective story

## **Story Hour**

Volunteer Teresa Landers created Liberty Wildlife's monthly **Story Hour** program that was aimed mostly at toddlers, but many of their older brothers and sisters, as well as their parents enjoyed listening to her read a variety of nature themed stories. A few fun songs and games were included in Story Hour, along with working together on a craft to take home.

Keep an eye on our calendar for when these programs will start up again.



# Whatever it is that makes you want to collect things

wildlife is instituting a Liberty Wildlife Card Collection. You can collect the entire series starting with our Free Flight animals, Garfunkel, Azul, Jax, and Cheese and Quackers. We have a Hall of Fame collection for those famous ambassadors of yore. Then there will be an eagle series, a hawk series, an owl series, and a series for falcons. The vultures will be represented as well as the corvids. If your tendency is toward reptilian species...you are in luck. Even our interesting insects are represented.

I will admit that the only thing I collected as a young person was insects...totally into bugs, and I would have loved to have cards to display instead of the real thing stuck with a pin in cigar box display...eeeewe.

There are many ways to earn a card. Some of them include playing the duck game, participating in camps or a field trip, doing a volunteer project for Liberty Wildlife, attending Arbor Day and making a wish, drawing a picture of your favorite animal at Liberty Wildlife, spending time with our trainers, posting about your visit to Liberty Wildlife on social media using the hash tag #Liberty Wildlife, and many more.

You can even purchase a collector book at our store so that you can proudly display your collection. Trade with your friends to get cards that you want that they have and vice versa. See some of the options here and start your collection now. You will treasure it, and it will satisfy your need to support Liberty Wildlife and to satisfy the thrill of the hunt!



Garfunkel (Funky) - Rookie Liberty Free Flight Program



Born: May 15, 2019

Named for: The singer Art Garfunkel

Weight
At 3 weeks - more than
an adult male hawk

Garfunkel is a Eurasian Eagle Owl, one of the largest owl species in the world. When he grows into his feet he will be 3 ft. tall & have 6 ft. wings.

Like the native Great Horned Owl, Garfunkel will fly silently. His huge eyes are perfect for night vision and his head will be able to turn 3/4 of the way around in either direction!

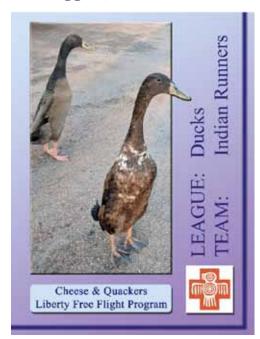
He will be full grown at 15 weeks of age. Soon he will be demonstrating his silent flight over audiences at Liberty Wildlife.

#FunkyTheOwl

# Wildlife Card Collecting

by Megan Mosby

Are you a collector of things? Do you collect things for the knowledge and learning aspect of it? Or, is it for the personal pleasure or the love of a thing? Does part of your collector's mind thrill with the hunt? Or, is it just the prestige of having the biggest, best, collection?



### Cheese & Quackers Liberty Free Flight Program



Born in: 2017

Named for: You gotta admit it's cute!

Weight As much as a toaster

Cheese and Quackers were 'rescued' through a call to the Liberty hotline. The caller was concerned because they could not fly. (Indian Runners can't fly as their wings are too small).

This species is used in indonesia to clear fields of pests - an organic pesticide - without putting harmful chemicals into the environment.

Cheese and Quackers are trained to run to the Liberty Amphithester and play the "Meal Worm Eating Contest" against human children!

#CheeseAndQuackersDucks





Printed on recycled paper



Delivering water and power™

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



### Join or renew!

It is with your help that Liberty Wildlife has furthered wildlife conservation through quality rehabilitation, education, and consultation services. Because of your support and your interest in aiding wildlife, we hope that we can count on you to help us continue these programs.

Maybe it's a good time to add a gift membership for a friend – or maybe raise your own membership level.

All members will receive the *Wing-Beats* newsletter electronically.

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

### **Annual Support Levels**

- \$25 Fledgling Supports the Orphan Care program
- \$50 Explorer
  Provides funding for a youth in a school education program
- \$100 Guardian
  Provides funding to support
  conservation programs
- \$250 Naturalist
  Provides funding for medical
  supplies for wildlife in our care
- \$500 Conservationist
  Provides funding for major
  equipment, such as brooders
- \$1,000 Steward
  Provides funding for
  technology to aid Medical
  Services and Education
  programming

My membership \_\_\_\_\_\_

Gift membership \_\_\_\_\_

Total enclosed \_\_\_\_\_

### My Membership

Name \_\_\_\_\_\_\_
Company \_\_\_\_\_\_
Address \_\_\_\_\_\_
City \_\_\_\_\_ State \_\_ ZIP \_\_\_\_\_
Phone \_\_\_\_\_\_
Email \_\_\_\_\_\_
Contact me about volunteering

### Gift Membership

Name \_\_\_\_\_\_
Company \_\_\_\_\_
Address \_\_\_\_\_
City \_\_\_\_\_ State \_\_\_ ZIP \_\_\_\_
Phone \_\_\_\_\_