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Dear Friends of WildCare,

You know the expression “busy as a beaver.” Although we had no beaver patients this year, we can relate! In addition to our Terwilliger Education Programs, and the steady flow of patients through our wildlife hospital, we have been working hard to realize our vision of a new facility where we can multiply our impact.

Progress continues slowly and surely on our new facility. As a result of significant increases in construction costs in the current robust building market, our initial budget of $7 million has grown to $11 million. With over $7 million raised to date, we have decided to phase the construction and build the hospital first. We anticipate that it will be completed by the end of 2017. Education, administrative and other staff will remain at our current location until we reach our fundraising goal to move everyone to our new site. All education and other programs will continue without interruption at Albert Park during the hospital build out. I am especially pleased to share the exciting news that we just received an anonymous $1 million matching grant for the new facility! Many thanks to this wonderful donor and all of you who have supported this project. It is truly transformational.

It is with mixed emotions that I write this – my last newsletter column. After almost 14 years as executive director, I have decided to retire in January. WildCare has grown tremendously over this timeframe in so many ways. Our operating revenue has increased over 300%. There have been important and impactful additions to WildCare’s overall programming, including wildlife advocacy initiatives and WildCare Solutions. New and enhanced education and volunteer programs have involved countless children and adults. The level of care for our wildlife patients continues to advance to make our patients’ stays as comfortable and brief as possible.

But the most significant reason for this unprecedented growth is WildCare’s human family. WildCare’s staff is made up of dedicated and passionate professionals; I am so honored to have led such a wonderful group of people. WildCare’s board has guided this organization to new heights with visionary leadership and commitment to WildCare’s mission. WildCare would not have excelled in the way it has without the skill and tireless efforts of our 400 plus volunteers. Our partnerships have grown and prospered, as have our donors who make all of our work possible. I extend my heartfelt thanks to all of you for helping to make my time leading WildCare one of the most rewarding experiences of my life.

Sincerely,

Karen J. Wilson
Executive Director
Fourteen years ago, WildCare was a small, informal organization. Enter Karen Wilson, an executive with a long track record of success in both for profit and not for profit worlds. Under Karen’s leadership, WildCare has become a much larger and more professional organization. Karen developed a Board with passion for our mission, with the skills to help WildCare in its continuing evolution. She built a wonderful staff, many of whom have been with WildCare for over ten years. Under Karen’s leadership WildCare began its efforts in advocacy – most notably working on the national level to reduce/eliminate the use of rodenticides, and insuring the Tule Elk at Point Reyes National Seashore are provided water in times of need. WildCare Solutions also began during her tenure, providing home-owners and businesses safe, humane and non-toxic solutions to problems with wildlife.

Karen also had a vision; to build a new facility that would allow future generations to learn to love nature and allow WildCare to expand its valuable programs. Over the last four years, she has worked tirelessly to set the stage for that transformation. She found a new property, negotiated the lease, and worked to complete the necessary permits and studies. She spent many hours meeting with potential donors to share her passionate vision, and has led the way to raise over 60% of the money needed to complete construction, which will begin next month.

While Karen had hoped to see the completion of the new facility during her tenure, she realized that it will still take several years to complete the final fundraising and second phase of construction, and believed that this would be the ideal time for a new leader to come on board, to put his or her own stamp on “New WildCare.” To that end, WildCare’s Board is conducting a search to ensure that a new Executive Director is found with just the right skills to lead the organization through a new period of positive and orderly transition.

Susanne Lyons, WildCare’s Board President for the last eight years said, “WildCare has benefited greatly from Karen Wilson’s leadership and vision. We would not be in the position we are today to broaden WildCare’s impact in the community without the work she has done to set the stage for our next big evolution at Silveira Ranch.”

Karen, on behalf of all of us at WildCare, thank you for all your work. We wish you the best!

Karen Wilson – 14 years of dedicated work
It’s dusk. You’re sitting by the fire at your favorite campsite and you watch, fascinated, as a wide-eyed, big-eared rat that looks like a cross between a hamster and a chinchilla scurries into your campsite, inspects the pile of bottle caps at the end of the picnic table, drops an acorn, picks up a bottle cap, and hurries away.

What just happened? What is that rat going to do with a bottle cap? My friends, you have just encountered the Dusky-footed Woodrat, *neotoma fusipes*, Marin County’s only native rat.

Often mistaken for non-native Roof/Black Rats or Norway/Brown Rats, Dusky-footed Woodrats can be easily differentiated by their most prominent field markings: a furred tail and sooty or “dusky” paws. They also have rounder bodies with a white chest, an overabundance of whiskers and large, almost comically round ears. They are, in fact, genetically closer to the Deer Mouse than the invasive European rats mentioned above.

"rat" burglars

But back to your campsite...where is that little burglar taking your bottle cap?

Dusky-footed Woodrats are very curious, and will often stop to watch humans in their vicinity, including keeping an eye out for treasures they can take home with them. Marbles, dimes, bottle caps, paper clips and other shiny or small objects are most often their choices.

Commonly referred to as “pack rats,” Dusky-footed Woodrats are known for their unexplained affinity for foreign objects, though some conclude that it is just a result of their drive to locate and carry nesting materials. Many have been seen carrying one object, like a toyon berry, only to drop it and swap it out for something more enticing, like a pencil eraser! It is the scenario described in the opening paragraph that describes the most frequent encounter between woodrats and humans: curious visitors looking for treasures.

This nocturnal behavior is facilitated by the way they move in the woods. They are quite lithe in their nighttime movements; they prefer a route along tree limbs with cover overhead as they go about their business. If they have to walk on leaf litter, they move very slowly to keep from making noise to avoid alerting their most common predator, the Northern Spotted Owl, to their presence.

The ubiquitous neighbors you may never see, Dusky-footed Woodrats much prefer oak forests and chaparral with dense underbrush to human homes, and have a variety of unique characteristics and behaviors.

They build elaborate stick homes called middens that can be as high as six feet! If you see an intricate pile of sticks in the woods, the chances are that you are looking at a woodrat midden. These social animals live in loosely defined neighborhoods, with many middens in close proximity to each other. Often a single woodrat can have several middens. While most middens are on the ground, males are known to build theirs in trees, and if lacking a better space, females will as well.

Woodrats will share their homes with other species, such as salamanders, lizards and surprisingly, the California Kingsnake! The Parasitic Mouse (formerly known as the California Mouse) is another interesting species that shares woodrats’ middens. Findings are not yet conclusive, but studies show that this mouse’s survival depends on a healthy Woodrat population and suitable nesting sites.

**good middens = good neighbors**
While occasional tiffs may break out between males who are unfamiliar with each other, or when a female faces an unwanted suitor during mating season, Dusky-footed Woodrats are a congenial species, who more commonly interact comfortably with one another, especially among friends of neighboring middens. Generations of woodrats are known to live in the same home, most often passing the midden from mother to daughter, though some will strike out on their own, but often not go far.

**Dusky-footed Woodrat holding his precious leaf**

**home is where...the leaves are?**

Dusky-footed Woodrats line their middens with bay laurel leaves. Scientists have discovered that woodrats have adapted to use the leaves to reduce ectoparasites like fleas, because a toxin in the leaves is deadly to flea larvae. Middens are also known to have many chambers, or “pantries,” where woodrats store their acorns, leaves and other tasty treats for eating later. They have chambers for their treasures and for pupping, and even a latrine room, if they choose. (Some individuals prefer outhouses!) One of their favorite tasty treats is actually poison oak! Their digestive tracts are known to be the home of detoxifying gut microbes that allow them to digest the poison oak safely without ill effects. Other species of woodrats, like the Desert Woodrat, have this same ability. Fascinatingly, they maintain a healthy level of these microbes by engaging in coprophagia, or eating their own feces. Remarkably, when WildCare had a young woodrat patient who was having digestive issues, medical staff introduced the feces of other healthier woodrats into her diet and her illness cleared up!

**the key to a good relationship is communication**

Dusky-footed Woodrats are known to thump their tails to warn each other in the event of a confrontation with a mating aggressor or a predator. When relaxed, a woodrat will often sit up on his or her haunches, hands folded primly against his or her chest. A woodrat with ears held back is angry or annoyed, and a woodrat who is grooming feels secure. Often, baby woodrats in care at WildCare will also groom their faces to indicate that they are done with their formula syringe feeding.

**Dusky-footed Woodrat being syringe fed at WildCare**

**all power to moms**

A matriarchal and matrilineal species, males often cede nests to females, and females choose their mates, often choosing the same mate in subsequent years, though the male has no involvement in rearing young. Typically, there are one to three pups per litter. The babies will cling to mom and travel around with her for the first week or two of life, their eyes opening at two weeks old. Similar to opossums, if you find a dead or sick female adult woodrat, please check her belly for babies! The pups will begin to wean at three weeks old, but will often nurse for up to six weeks, and they will live with mom for at least a year, sometimes longer. Dusky-footed Woodrats can live from six to eight years, much longer than domestic or European rats, who typically only live around two to three years.

**it’s a dangerous world out there**

Aside from their natural predators like the Northern Spotted Owl, the biggest dangers for woodrats are rodenticides. As we know, rat poison does not discriminate, and since the Dusky-footed Woodrat is often mistaken for his invasive cousin, homeowners too often put out bait boxes to get rid of them, without knowing that woodrats usually avoid human dwellings. They much prefer their secretive lives in the trees and brush. In the event a woodrat goes into your home, the animal can be excluded just like skunks and other mammals, and much more easily than Roof or Norway Rats.

If you find a Dusky-footed Woodrat’s midden on your property, consider it a good omen, especially if the midden is near your garden! Not only do they have little interest in living in your home, woodrat feces have been shown to be good fertilizer because of their varied herbivorous diet.

Another thing to keep in mind is the recent classification of the native Northern Spotted Owl as an endangered species. Poisoning Dusky-footed Woodrats creates a direct danger to the Spotted Owl population as well.

**in conclusion**

Nocturnal animals, woodrats are not often seen during the day. Preferring to avoid even moonlight, it is more common to see them moving around furtively at dusk. They are found in both the United States and Mexico, and while the Dusky-footed Woodrat is not endangered, many subspecies of woodrats are threatened, vulnerable and endangered, like certain subspecies found in Santa Cruz, California.

So the next time you go camping, keep your eyes open and your bottle caps handy. Sit quietly and observe – you might have the pleasure of seeing one of these little burglars scampering through your campsite. They are one of many magical creatures in our Marin forests, and we are lucky to have them as part of our local ecosystem.

**Dusky-footed Woodrat, Patient #1465 at WildCare**
As you cross the bridge over Mahon Creek, you enter the world of WildCare. Your eyes may be drawn to the beautiful raptors to your left, or straight ahead as you get up close and personal with a Brown Pelican. Perhaps Vladimir, the Turkey Vulture, with his wings spread out sunning himself, will catch your eye (he does like to be noticed). These wild animals and many more, live at WildCare because circumstances have left them unable to survive in the wild. They, along with their human care-givers, educate thousands of people every year. Our goal is to instill in everyone a love for the Ambassadors’ wild homes and relatives. As Mrs. T always said, “People take care of what they love.”

Although these animals are fascinating on their own, it is the people you meet and talk to who will bring you back again and again. Trained and dedicated volunteers are always available to educate and provide introductions to WildCare’s Wildlife Ambassadors. They love to hear your stories and to share their love of nature with you.

Every day at 10 am and 4 pm volunteers are out there feeding our pelican, cormorant and gulls. They’re happy to let you see (and smell) the birds’ food. Maybe even touch a mealworm! We can’t let you touch Baja, our Brown Pelican, but we will bring out a taxidermied one for you to experience.

At 11 am and 2 pm every day, more touchable taxidermy and biofacts, along with a few of our Ambassador animals, provide a personal experience for our visitors. Even while they are busily providing daily care to the animals, our Wildlife Ambassador volunteers are always happy to share a moment with you.

Pippin and the Ambassador Volunteers look forward to your visit to WildCare. It is a magical place and we are thrilled to share it with you. In fact, we would like to share it with everyone, so don’t forget to like us on TripAdvisor.

And don’t forget to ask for your Ambassador Collector Card. Visit WildCare twenty times and collect the whole set!

WildCare’s new educational Virginia Opossum, formerly known as patient #1259, arrived at WildCare on July 26, 2016. He was orphaned and suffering starvation and dehydration. He was much too small to be on his own. He was merged with other opossums of a similar size but was always a bit weaker. He showed no signs of fear and actually approached people whenever possible. He exhibited strange head bobbing and excessive sniffing (even for an opossum). After these animals were moved to a large outdoor cage, chew marks were discovered on his foster siblings’ tails. It was confirmed that he was the culprit. He was separated from the rest and evaluated. It was concluded that his unusual behavior was neural and involuntary. Although he was healthy otherwise, his condition meant he was non-releasable.

Right now, we are very excited to have the opportunity to introduce visitors to our newest Wildlife Ambassador.

At our September 17th Gala, the opportunity to name him was won in the silent auction by ______________. WildCare is therefore happy to introduce you to Pippin, the Virginia Opossum.

Pippin, the Virginia Opossum

Can’t make the trip? Visit us at www.wildcarebayarea.org/shop to purchase Ambassador & wildlife patient gear from our online shop to see them whenever your heart desires!
Susy Friedman began volunteering at WildCare in 1997, shortly after she retired from working in the film industry where she worked as an assistant editor. A close friend mentioned to her that there was a desperate need for help in the birdroom with hundreds of babies to be fed, and Susy decided to join the team. “It was before the foster program got completely off the ground and there were literally hundreds of hungry babies there wanting food every 20 minutes.” From hummingbirds to pigeons, WildCare’s birdroom sees a myriad of different songbird species ranging from hatchlings to fledglings, all needing to be fed every 20 to 60 minutes, depending on their age.

Susy enjoyed her initial shift in the birdroom, and recalls getting excellent mentoring from the start. “I found working with the birds challenging and gratifying, and also found lasting friendships with other volunteers.” She also has high praise for the WildCare staff. “I’d like to thank the staff for their leadership, competence, and dedication. They really are terrific and are one of the reasons I’ve stayed on at WildCare all these many years.”

Twenty years later, Susy is now a shift supervisor on her Tuesday morning birdroom shift, mentoring new volunteers to care for baby birds. She supports WildCare’s work helping wounded, sick and orphaned wildlife, and believes it is equally important to help preserve the beleaguered wildlife population.

Space is limited! Join our once-a-year orientation on February 25 or 26, 2017, 12:45pm – 5:00pm.

To sign up and to find out more, visit www.wildcarebayarea.org/volunteer

You may also contact Jessica Grace-Gallagher, Volunteer Services Manager at volunteer@wildcarebayarea.org, or call 415-453-1000 x21 for more information.

*Please note that if you are between 15 and 17 years old you must attend the orientation with a parent or guardian.
Close up on our local wildlife! Our Ninth Annual Living with Wildlife Photography Contest brought us over 250 entries from all over California, offering singular glimpses of the wide diversity of California wildlife and the stunning places they call home.

We extend special thanks to our hard-working judges – Frankie Frost, Kate Van Gytenbeek and Randall Bryett for contributing their time and expertise.

The top five photographs in each category are shown in the gallery at right, and online at wildcardbayarea.org/photos.

**Best in Show: Yellowlegs with Water Droplets Photo by Susie Kelly**

**People’s Choice Award:**
*Green Heron’s Dinner*
*Photo by Brian Valente*
California Wild Animals:
Cross-legged Coyote
Photo by Janet Kessler

Living with Wildlife:
Raccoons in Compost Bin
Photo by Patrick Donohew

General Nature:
Point Bonita Lighthouse
Photo by John Litten

California Wild Birds:
Harrier in Flight
Photo by Timothy Shore
California Wild Animals (Other) in their Natural Settings

California Wild Birds in their Natural Settings

A simple change can make a huge difference!

Monthly giving is one of the easiest and most effective ways to support WildCare’s mission. This year we are asking supporters to make a change and share it forward.

- Skip a latte once a week. $20/month
- Carpool with colleagues. > $65/month
- Switch brands, price compare or clip coupons. > $40/month
- What will you change to help wildlife?

www.wildcarebayarea.org/monthly
General Nature

Elizabeth Alm

Carmen Vargas-Echeverry

Michael Irwin

Kramer

Living with Wildlife

Byron Chin

Carlos Porrata

Rita Skevos
On Giving Tuesday, November 29th, WildCare had the honor to be featured on SF Gate's website and received a two page spread in the San Francisco Chronicle. The article titled, “10 Wondrous and Wild Babies Rescued by WildCare” highlights our Wildlife Hospital’s work with orphaned and injured wild baby animals.

During Baby Season, WildCare’s wildlife hospital fills to the brim with wild baby patients. In fact, the center cares for over 800 baby songbirds in a year alone, with each one requiring a feeding 15 times a day. Thanks to the dedicated staff, volunteers, and donations, WildCare successfully cares for over 4,000 animals a year. Below are five of the stories presented by SF Gate.

#1 Great Horned Owlets
Whooo, Whooo! Three Great Horned Owlets landed at WildCare in the span of only two weeks, all three falling from their lofty nests in Marin County Parks and Open Space preserves. Because Great Horned Owls don’t build their own nests — they reuse the nests of other birds and even squirrels — it’s not uncommon for owlets to be found on the ground, particularly after high winds. As part of the maturation process, fledglings or “branchers,” also commonly wander the ground to search for food. But if an owlet is covered in white fluff, then he’s in need of assistance.

While all three fluffy kiddos’ health checked out— two of them were siblings! — they desperately needed help returning to their nests, especially since the pair had fallen onto a busy hiking trail.

Thankfully, WildCare, Hungry Owl Project, and Park Rangers came to the rescue. Their team of volunteers and staff researched where the babies had fallen, finding signs like a half-eaten rat that showed the parents had been caring for them, and gathered materials like old laundry baskets. In a complicated collaboration, volunteers scaled the trees with baskets and babies in tow to place them near their families while also coyly avoiding suspicion and stress for the parents.

In a beautiful ending, all three owlets happily reunited with their parents and siblings (as verified by WildCare volunteers)!

#2 Tiny Skunks
At 5 or 6 weeks old, baby skunks nest in their dens and wait for mama while she goes hunting. But when mama doesn’t return, the babies eventually reach a point of hunger and desperation that drives them out of their nest and away from safety.

When an Oakland homeowner found frightened baby skunks wandering around his property, he first called a trapper. (Many people panic when they see skunks since even the young ones can spray.) Thankfully, a neighbor saw the scene and dialed WildCare for help in rescuing the remaining two babies.

Once at WildCare, the orphaned skunks suckled on formula from a nipple for a few days before graduating to custard, and then exploring small pieces of solid food like chopped fish, egg and other protein sources. The brother-sister duo also moved from a safe, warm indoor enclosure that mimicked their den to an outdoor pen to build their strength and foraging skills before release. At 10 weeks, they went back into the wild of the Bay Area to claim their own territories!

If skunks wander into your yard, keep in mind they make excellent neighbors. They grub on slugs, snails, insects and other critters that plague gardens. Acting as the “beneficial predators” that they are, they also devour rats, mice and other small rodents. Skunks even chomp on Black Widow Spiders and scorpions. So if they’re wandering your yard, either enjoy their neighborly company, give them some space (alert skunks with noise before you let your dog out, giving them time to hide and not spray) and call WildCare if you have any questions!

#3 Ducklings
When California Highway Patrol Officer, Kenji Burrage, found himself responsible for a stranded duckling just off San Francisco’s Golden Gate Bridge,
gently tucked the duckling into the pouch of the saddlebag on his CHP motorcycle, and headed across the bridge to admit the baby into WildCare’s Wildlife Hospital. Officer Burrage joked the baby must be the smallest “juvenile delinquent” he had ever had in custody!

The duckling went into an incubator with seven other similarly-aged Mallard ducklings — WildCare can have over 100 Mallard ducklings at a time in care. This baby and his new siblings spent the next months gorging themselves on Romaine lettuce and specially-formulated duckling mash, and after nearly two months in care, this duckling and his fellows were old enough to be released back into the wild.

On their release day, CHP Officer Andrew Barclay arrived to help release the officers’ rescued duckling, and with his help, all the ducklings waddled into a duckweed-laden pond. Thanks again to WildCare, the ducklings turned into ducks and went on to their new lives in the wild.

**#4 Baby Blond Raccoons**

When someone left three brother raccoons in a box on the doorstep of the Napa Wildlife Center, WildCare’s Raccoon Team came to the rescue. The orphans — it’s suspected their mother had been trapped and killed and the den site was unknown — had very unusual coloring. Two of them were blond. Despite their light coloring, the raccoons weren’t albino, but carried an unusual color morph that maintained all the markings of regular Northern Raccoons, but in a lighter hue.

The three-week old babies needed bottle feeding every four hours, 24 hours a day, but eventually went from crying, eyes-closed babies to toddling bundles of curiosity, getting into anything and everything. When their rambunctious behavior became too much for the nursery, the three went to an outdoor cage and yard, which they found fascinating.

Raccoons, incredibly intelligent and curious animals, must be introduced to the challenges they will face in the wild during rehabilitation. From climbing trees to tackling crustaceans, the more experiences baby raccoons have, the better prepared they'll be for their futures as wild animals.

During their 99 days at WildCare, the rambunctious raccoons ate a varied diet of the wide range of foods they’d find in the wild. As they grew up and gained weight on fruit, fish and other items, they grew appropriately wild and snarly toward their human caretakers. They were ready for the next phase of their lives! After scouting good release sites in Napa, WildCare volunteers opened the carrier and let them go into an area with a creek and oak trees. Thanks to WildCare, a threesome of beautiful and unusual animals returned to the wild.

**#5 Baby Squirrels**

WildCare sees more than 150 baby squirrels a year, including these tiny pink tots whose home fell from its tree in heavy winds! These babies were so young they lacked fur, and therefore had no ability to maintain their body temperature, so rapid response saved their lives. Fortunately, a rescuer saw the youngsters as soon as their nest hit the ground, and sent them to WildCare in good time.

Staff immediately warmed the tiny squirrels by heating dry hand towels in the microwave and wrapping them around the furless babies. Applied carefully, the soothing, dry heat raises the little ones’ body temperature and makes them comfortable quickly. Once warm, they were given subcutaneous fluids and an oral electrolyte solution to keep them hydrated, and despite being healthy, they stayed with WildCare nearly three months since volunteers couldn’t find their mother.

Shortly after arriving at the wildlife hospital, they started drinking a special squirrel formula before graduating to nuts, seeds, fruit, and other foods that make up an adult squirrel’s diet. The siblings were also cradled in heating pads, Snuggle Safes, and Kritter Keepers to keep them warm and safe until they grew into larger wire cages and a protected outdoor space where they were able to learn and explore before returning to the wild as adolescents.

To view the full article visit: blog.sfgate.com/storystudio/2016/11/10/wondrous-and-wild-babies-rescued-by-wildcare/
When we hear the word hibernation many of us only know the image of a big old bear sleeping away the cold months of winter in a cave. Ironically, bears aren’t true hibernators; they actually go into what is called torpor, a light hibernation. So what exactly IS hibernation?

Hibernation is a form of dormancy, which is a general term used to describe a period in the life cycle of an animal when its metabolic activity slows down to help conserve energy. While hibernation is the one we are most familiar with, there are many types of dormancy.

**Hibernation**

True hibernation is when an animal goes into a deep sleep in order to conserve energy and to survive the cold season when there is a lack of food. During hibernation, an animal’s metabolism slows down significantly, and its body temperature lowers. Some hibernating animals do move around as often as once a week, but others sleep throughout the season, which could mean months. Examples of animals that hibernate include: ground squirrels, bats, snakes, frogs and marmots. In colder areas of California, ground squirrels hibernate for several months. They dig elaborate underground tunnels with different rooms for food storage, sleep and going to the bathroom (yes, they have bathrooms). California Ground Squirrels do store some food so they can wake up and eat during hibernation.

**Estivation**

Estivation (or aestivation, from Latin aestas, “summer”) is a type of hibernation that occurs during the summer when it may be too dry or hot for some animals to find food and water. Species like the California Red-legged Frog estivate to conserve energy during this period of deprivation. In areas where the summers are hot some Ground Squirrels may also estivate for a few days.

**Brumation**

Brumation is a hibernation-like state that cold-blooded (ectothermic) animals undergo during very cold weather. Animals seek refuge or hibernacula (from the Latin, “tent for winter”) to survive the cold of winter. The Western Pond Turtle is our native turtle found in sloughs, rivers, streams, lakes and ponds. It may dig into soft stream-bottom mud for the winter. However, it has been known to pop out to find the December sun. Western Fence Lizards are also known to find shelter in rock crevices or under bark, as does their natural predator, the Alameda Whip Snake.

**Torpor**

Torpor is hibernation “lite”! It occurs when an animal reduces its body temperature to that of its environment, especially in times when it is not active. Animals that go through torpor include small birds such as our year-round resident, the Anna’s Hummingbird, that goes torpid on cold nights to conserve energy.

California Desert Tortoises spend winter in a torpid state in their underground burrows. Some small mammals, like skunks, get comfy with family members in their dens in torpor. During their brief torpor, skunks occasionally wake up and come out to scrounge something to eat. Other mammals that may go into torpor are badgers, raccoons and chipmunks.

These different aspects of dormancy are serious business if you are an animal trying to survive extreme temperatures or lack of food. What is amazing is how these animals rely on internal chemistry or environmental clues to trigger them into the necessary state of dormancy.

A recent study has found a connection between hibernation and a new treatment for Alzheimer’s. Researchers from Leicester University in Great Britain, have isolated a cold-activated protein named RBM3, which is responsible for restoring brain activity in animals coming out of a hibernating state. This protein also exists in humans but is found to be missing in patients with Alzheimer’s. Researchers now believe that a drug that mimics the effect of this protein may have potential to restore lost brain function among individuals suffering from neuro-degenerative disorders.

Gotta love Mother Nature!!
There is a wonderful variety of winter holiday traditions around the world, but there's a local one of which you may be unaware: the Winter Bird Count. This long-time tradition turned from a havoc-wreaking hunting game into a life-saving conservation activity. Before the turn of the twentieth century people took part in what was known as the Christmas “Side Hunt,” in which teams would go out with guns to shoot as many animals as they could find. Whichever team could produce the most fur and feathers was declared the winner, and praised in sportsmen’s journals. Wildlife was the loser!

As we reached the end of the twentieth century, the idea of conservation had begun to evolve; many observers and scientists were concerned about the decline of bird populations. On Christmas Day 1900, ornithologist Frank M. Chapman, an officer of the then-emerging Audubon Society, proposed a new tradition during the winter holiday: the “Christmas Bird Census,” in which people would count birds during the holidays rather than hunt them. On that day, twenty-five bird counts were held, with Chapman and 27 birders from Toronto to California tallying around 90 species of birds.

In that tradition, for the past five years, Richardson Bay Audubon Center and Sanctuary and WildCare’s Family Adventures have partnered to host the Family and Youth Winter Bird Count at the Albert J. Boro Community Center in Pickleweed Park. In this kinder and gentler scenario, the “teams” are comprised of youth and families, amateur birders, naturalists, and veteran and junior ornithologists from all around the Bay Area. The groups are given tally sheets, binoculars, birding books and spotting scopes, and proceed to meander along San Rafael Bay for a great day of birding. Bilingual naturalists assist in bird spotting, and birding books in both Spanish and English are available for use.

In past years, Burrowing Owls, Ospreys, Great Blue Herons, Grebes, Black-necked Stilts, Great and Snowy Egrets, Anna’s Hummingbirds, and many more species, have been spotted.

Don’t miss this fun opportunity for you and your family!

As winter approaches, check our website for the next Winter Bird Count at www.wildcarebayarea.org/programs/wildcare-family-adventures, or contact Marco Berger, Education Program Manager and Bilingual Naturalist by email at marco@wildcarebayarea.org or by phone at 415-453-1000 x 17.
WildCare advises against using garden netting but if necessary, please visit our website for ways to ensure the safety of other wild animals.

**Gold Crown Sparrow #4659** was found on October 6th in San Rafael, hopping and unable to fly. His rescuer quickly scooped him up and drove him to WildCare where medical staff discovered that the Golden Crown Sparrow had remnants of garden netting tangled around his head and shoulders, rendering him unable to fly. Someone had only cut him partially out of the net and let him go with the netting still attached. This would have resulted a slow death for the bird had the San Rafael resident not discovered him. Luckily, once the remaining netting was removed no further injuries were discovered. The bird flew strongly so was sent back for immediate release!

**Bobcat #1722** was found late at night on a road in San Geronimo. This young, seven pound kit had clearly been hit by a car and was unconscious and very cold. The finder wrapped the kit in a shirt and placed him on his car’s heated passenger seat while he waited for the Marin Humane Society to arrive. MHS Officer Nausin knew that the situation was critical and the kit would not survive the night without immediate medical care so she called our Director of Animal Care at home and they met at WildCare. The bobcat was suffering from severe shock, hypothermia and blood loss as well as head and eye trauma. Once warm and more stable radiographs were taken which further revealed fractured toes in the rear foot and a few broken ribs. After a night of fluids, pain medications and further supportive care he had improved enough to be found sitting up the next morning. It was two days before he was able to feed himself but by the end of the following week he was strong enough to require sedation for his follow up veterinary exam. He was transferred to Sonoma County Wildlife where he is slowly recuperating in a large outdoor enclosure before being released back to his home territory to reunite with his mother.

The squirrel was scared, wet and exhausted from her struggles but still put up quite a fight. Medical staff had to sedate her and use bolt cutters and pliers in order to be able to extricate her from the metal feeder! She was treated for slight hypothermia and dehydration. The squirrel was back to her rambunctious self within two days and moved to an outdoor cage where she was monitored for signs of pressure necrosis (sores that might develop in the areas her body was so tightly pinned between the bars). No such wounds appeared and she was released back in the finder’s yard the following week. If you ever find a wild animal with a body part stuck in a contraption such as this or snap trap, **always** bring the animal to WildCare as pressure necrosis wounds do not typically appear for a few days or even up to a week, and require treatment for survival. In addition, do not attempt to dislodge the animal yourself as this may lead to further injuries and suffering for the trapped animal.
I found an injured bird. I know it’s just a pigeon but...” is often what we hear from callers. To which we reply: “Yes please, bring him/her in.” WildCare is the only center in the bay area that will accept all wild animals including non native species. Keep in mind that non native and invasive are two different things. Both have been introduced to our environment by humans or their activities, either intentionally or accidentally. However, when introduced to our ecosystems, invasive species develop abundant, widespread populations that negatively impact the environment including native wildlife. Non native species on the other hand, do not cause harm to the native ecosystem. Because pigeons are so closely tied to human activity, they have not had a major ecosystem impact and they have not displaced any native species. So even though there are lost of pigeons in cities, their overall environmental impact is slight, making them non native but not invasive. Here are the stories of a few very dedicated finders who again and again go above and beyond to be the voice, and the ambulance service to these local pigeons.

**Rick & Blanca Shaeffer**

Rick and Blanca have been rescuing pigeons for quite some time. So far, they have brought 23 pigeons to WildCare and returned almost all of them to the wild. When asked how their love for pigeons began, Rick replies: “We work in San Francisco on Fisherman’s Wharf. Blanca likes to feed the pigeons that make their homes there.” According to Rick, Blanca has gained the trust of these birds and when they see her coming they know it either means food or a free ride to the hospital. Patient #3257 was the first bird admitted to WildCare by this caring duo for having xxxx. Eight weeks later, he was flying free back to his original home. Too many to help? Rick and Blanca don’t think so. Just like any other wild animals, pigeons have learned to survive in our urban environment because of the constant food source available to them. It’s important to understand the symbiotic relationships between all life forms in a given environment, and our role in this cycle. For those who question the reason to save pigeons they say “We’ve heard people use the term “Sky Rats,” but they are defenseless animals for which, we feel, humans have the responsibility to care for. They are sweet birds. To us, they are one of the most compatible with humans.”

**Daniel Aguayo**

Daniel discovered WildCare three years ago after being turned down at another center where he had brought a pigeon that was unable to fly. To this day, Daniel has rescued over X pigeons, from orphaned babies, to broken wing fledglings, to adults with a myriad of other injuries. When asked about his favorite success story, Daniel replies: “Two very small pigeons, babies. They had no feathers and were stuck between walls in a construction zone. A friend and I rescued them and brought them to WildCare for help.” Those two orphaned babies, patient #xxxx and #xxxx were in care at WildCare for X months and were released back to the wild on X xxx.

“Perhaps I cannot help all of the animals in the world, but it is very satisfying to be able to give one animal another opportunity to live”, says Daniel. At the end of our interview, we asked Daniel what he would like to say to people who don’t think pigeons are worth saving. “Every living being can suffer from hunger or cold - the thing is animals cannot let us know - open your eyes and your heart!”

*Found an ill, injured or orphaned wild animal? Please call our 24-hour Hotline at 415.456-SAVE (7283) for support. Keep the animal safely contained and do not offer any food or water until you speak with a wildlife expert.*

**Did you know?**

1) Pigeons can read...sort of. In a new study, pigeons were trained to distinguish real words from gibberish.

2) Pigeons mate for life, given the chance.

3) Pigeons spend two months with their parents which gives them a better chance at survival than other birds who leave the nest much sooner.

4) Pigeon parents feed specially developed and regurgitated crop milk to their babies for the first few days of life.

5) Pigeons can recognize their own reflection in a mirror...or in water.
Julianna Joe (JJ) first came to WildCare as an intern in 2010 and proceeded to join the medical staff team the following year as a Wildlife Assistant, making her way to Wildlife Technician and becoming head of WildCare’s Rodent foster care team. Outside of WildCare, Julianna works at a local veterinary hospital, sharpening her skills. A compassionate, dedicated member of WildCare’s medical staff, it is with proud but very sad heart that we say goodbye to our beloved JJ. Julianna, we wish you all the best in your future endeavors, wherever they lead you. Any animal hospital would be lucky to have you on their team!

We bid a fond farewell to Jan Armstrong. Over the course of her 14 years with WildCare, Jan has worn many hats. Initially hired as a Grant Writer, Jan quickly became the Development Manager and Communications Manager. Over the years, Jan has built countless relationships with donors. Her calm, friendly and unfailingly courteous approach made her the favorite contact for so many WildCare supporters and visitors. Jan also served as staff liaison to WildCare’s board, assistant to the executive director, event coordinator, and writer and editor extraordinaire. Most recently Jan worked as Stewardship Manager and was in charge of WildCare’s Tomorrow Fund and our WildCare Heroes program. She has put a smile on the face of many of WildCare’s visitors over the years, from toddlers to seniors, always ready with information to make visits more meaningful. WildCare will miss Jan, her skill with language and especially her kindness and generosity. We wish her all the best!
Thank you to our generous sponsors and everyone who attended the 2016 WildCare Gala on Saturday, September 17, 2016!

The evening could not have been more beautiful. Wine country in autumn is a truly magical place, and our Gala was held outdoors under a heritage oak tree with views of shaded hillsides covered in vineyards. The wine, provided by the Benziger Family Winery, was excellent, and dinner, catered by Park Avenue Catering of Sonoma, was delicious. Truly, the Benziger Family Winery was the perfect setting for this glamorous event!

Guests mingled with each other and, as only happens at a WildCare Gala, with Sequoia, the Northern Spotted Owl, Mohave the Desert Tortoise and several other Wildlife Ambassadors. Our wonderful Wildlife Ambassador staff and volunteers shared the mission of WildCare with many guests new to the organization, who were thrilled to learn about our work through face-to-face encounters with our live animals.

Our newest ambassador (photo left), a very young Virginia Opossum, was a real hit, and the opportunity to give him a name was one of the items sold at the event's glittering Silent Auction. He has been named Pippin, and you can meet him in our Courtyard! The Gala Silent Auction was made possible through generous donations from community businesses and organizations, and we were grateful for their support!

The evening, of course, was a fundraiser for WildCare, and we are very pleased that our Gala raised over $240,000 for our programs. These funds will help us care for many injured and orphaned wild animals in the year to come, and will also help us continue to advocate for wildlife and introduce thousands of Bay Area children and adults to a love and appreciation of nature. We are grateful for the support of WildCare’s Board Members for all they did to make the event a success.

Visit the Gala page on our website at wildcarebayarea.org/gala to see additional photos from the event. The page also showcases the event sponsors and silent auction donors that helped make the evening so successful.
wildcare heroes!

Here we celebrate budding young philanthropists who support WildCare in their own creative ways. These young people inspire us with their compassion for wildlife and their desire to make a difference! Here are some of our latest heroes:

**Leah Gotlieb – Good habits pay off**

Leah Gotlieb did something for the last year that we would encourage all donors to do – she put aside a little money from each allowance, saved it all, collected it and brought it to WildCare, the charity of her choice -- $40 in all. She is what we would call a thoughtful and generous donor. And she is seven years old.

**Krystof Bruel – When life crumbles your cake, make lemonade**

Krystof Bruel, age 6 and 3/4 yrs (his words) had originally planned to bake a cake to sell to his neighbors to raise money for the injured animals at WildCare. Unfortunately the cake disintegrated before Krystof was able to get it outside to his stand. So mom and Krystof quickly made popcorn, cut up some watermelon and sold lemonade instead.

They advertised the fundraiser on NextDoor.com, which brought in the whole neighborhood. He raised $61.45, and hand-delivered it to WildCare in an empty pickle jar.

**Siena and Dash Rennie – it’s a family thing**

Philanthropy often runs in families; usually from one generation to the next. In the case of the Rennie family, siblings Siena and Dash have celebrated recent birthdays with requests for gifts to WildCare; Siena in 2013 for $156, in 2015 for $65, and in 2016 for $70. In 2016, Dash, in his first year of giving his birthday donations to WildCare, brought in $180. Siena is now eight years old, and Dash is five years old, both seasoned philanthropists.

**ERRATUM:** We apologize for misspelling the name of this young WildCare Hero featured in the last issue of this magazine. To the left is the picture of Alexandrea Coe, who donated her birthday money to WildCare. Please forgive our mistake!

Tomorrow can be your gift to the wild today.

Please include WildCare’s Tomorrow Fund in your estate plan.
Does your inquisitive child love animals? Wildlife Camp is a fun way to stimulate learning about wild animals and instill a life-long respect for nature. Weekly camp programs are designed to captivate, engage and challenge young people, and to build environmental knowledge and values.

Watch a pelican training session, experience animal visits from our live non-releasable animal ambassadors, prepare a meal for our Desert Tortoise, search for wild animal tracks out on the trail, play wildlife-themed games, and create nature crafts – it’s a camp experience that is sure to leave a lasting impression.

Here are some of our favorite comments from Summer Camp 2016:

“It was FANTASTIC! Best camp we have ever done. The staff was great, the curriculum was engaging and my son is still talking about it and was so sad after it was over! Thank you! Couldn’t be happier!”

“My son was jumping out of his skin every day after camp and couldn’t wait to get there the next day. His knowledge of wildlife and his surroundings has increased dramatically and his love of nature has become even more pronounced.”

“Your camp exceeded my expectations. There were so many additional learning and fun activities to keep the kids engaged and occupied all day, while keeping them physically active.”

Check our website for pricing. WildCare members receive a $20 discount.

Scholarships are available! Applications are accepted after registration opens. (See below)
LIFE'S A Hoot!

Take turns rolling dice and moving your game piece around the board. First player to make it to the end wins!

START HERE!
Happy hatch-day!
You have hatched from your egg with your nest-mates. Get ready to take flight!

Screech Owls make soft trilling sounds. Move forward 1 space while you practice your trill.

Owls like you can turn their heads upside down and backwards!

You caught your dinner with your sharp talons. Move ahead to your NESTING TREE while you eat.

The wingspan of a Screech Owl is about 2 feet long. Spread your wings to measure your own!

Screech Owls live in forests, deserts and even cities. Move back 1 space while you check out your habitat.

NESTING TREE
Screech Owls nest in tree cavities and you found the perfect tree to call home!
You aren’t the smallest owl in the world! Roll again if you can name a species smaller than a Screech Owl.

You have great camouflage! Move back 1 space as you search for your owl friends in the trees.

Your silent flight helped you sneak up on your food. Flap your wings and move ahead 1 space.

Uh-oh, you hurt your wing! Move back 1 space while you get better at WildCare.

Thank you to Ziana Salonen, age 9, who created a fun screech owl game which inspired this game board. Well-done Ziana! We thought your game was a hoot!

You aren’t the smallest owl in the world! Roll again if you can name a species smaller than a Screech Owl.

Sunrise is coming. Move back to your nesting tree to rest.

Move forward 2 spaces if you have ever seen a Screech Owl before.

Yum, you have a belly full of rodents, insects, and crayfish!

Your big eyes helped you spot danger before it got too close. Move ahead 2 spaces.

Oh no! Someone cut down your favorite branch. Move ahead 2 spaces.

Photo Credit: Christopher Whittier (coyote), Greg Wilson (squirrel)
Help WildCare reach its new home! Watch for our new text-to-give posters on Golden Gate transit.