Of all the animals we treat at AWARE, the coyote unquestionably stirs the most controversy. Historically considered a threat to livestock, the coyote’s dubious reputation persists today, in spite of substantial evidence that coyotes not only pose little threat to humans and their animals, but that they provide immeasurable environmental benefits. In this issue of Tails from the Wild, we hope to shed more light on these animals and to demonstrate why peaceful coexistence with them is essential.

AWARE is especially excited to have the privilege to share the writing of David George Haskell, whose book The Forest Unseen was one of three finalists for the 2013 Pulitzer Prize in General Nonfiction. The book is a celebration of the natural world, sharing the author’s observations within one square meter of old-growth forest near his Tennessee home over the course of one year. The chapter featured in this issue, “Watching,” describes an encounter the author has with coyotes while visiting this patch of forest, which he likens to a mandala, a Buddhist artistic representation of the entire universe. This chapter, like the rest of the book, uncovers fascinating details about the forest’s inhabitants, making insightful observations about our interconnectedness with all of its creatures. With nothing but a notebook, a hand lens, binoculars, and his own senses, Haskell uncovers a secret universe hidden to all but the keenest observers, paying tribute to the complex and beautiful world we live in. In doing so, he also opens up the opportunity for all of us to uncover the wonders in our own backyards, large or small. From slithering snails to chirping chickadees, each chapter “leads the reader into a new genre of nature writing, located between science and poetry...” according to a review by biologist, naturalist, author, and Harvard University Professor Emeritus E. O. Wilson on the book’s website, The Forest Unseen. You can read Dr. Haskell’s latest explorations in his entertaining and informative blog Ramble.

Of course, we haven’t forgotten to include beautiful wildlife photos, and our director Dr. Tarah Hadley offers a thought-provoking column about environmental responsibility. You’ll also find a profile of Georgia’s state bird, baby season tips, and more. We hope you will enjoy this issue and share it with others. Thank you for supporting wildlife!

America vs. the Coyote

Each year, AWARE gets hundreds of calls from people who are concerned about sightings of coyotes in their neighborhoods, and we rescue and rehabilitate dozens of these animals after they are injured or orphaned, often as a result of trapping. What is it about the coyote that makes people so uneasy? How has the dog achieved the status of “Man’s Best Friend,” while its wild cousins, especially the coyote, continue to be feared and misunderstood? With a few precautions they pose little threat to people or their livestock and pets, yet coyotes are persecuted on a national level. In spite of this persecution, the resilient and resourceful coyote has managed to adapt and flourish even in metropolitan cities. In fact, scientists and (continued on page 4)
America vs. the Coyote

(Continued from page 1)

wildlife officials estimate coyote numbers to be at an all-time high, and studies show that efforts to reduce the population usually end up increasing it instead. In short, the coyote is an amazing evolutionary success. Although coyotes are moving into our neighborhoods, with minor adjustments we can learn to appreciate and coexist with these intelligent, adaptable canines.

In order to understand why coyotes are so misunderstood, a few historical facts are worth mentioning. In the early history of wildlife management, Americans generally agreed that predators such as wolves, coyotes, and panthers should be killed indiscriminately. In 1909, under pressure from livestock owners, Congress began funding a large-scale predator control program aimed at large carnivores from eagles to wolves. As a result, both the Red Wolf and the Gray Wolf were completely wiped out in the United States in the ensuing decades and have only recently been reintroduced to the American landscape. Sadly, this predator control program persists even today with the government killing approximately 100,000 carnivores each year -- using methods that include trapping, aerial gunning, poisoning, and killing young in their dens -- and spending an estimated $100 million of our annual federal budget to do it (nrdc.org). This program targets coyotes in particular. Statistics provided by the United States Department of Agriculture for 2009 indicate that 81,684 coyotes were killed in 45 states (usda.gov). Although top predators like coyotes play a vital role in the health of our ecosystems and most livestock losses come from weather, disease, illness, and birthing problems, coyotes continue to be persecuted. As the National Resources Defense Council notes, “driven by narrow agricultural interests, these predator control activities often ignore the greater public need for a healthy environment, fiscal responsibility, and safe public lands, raising some serious questions about how the program is being administered” (nrdc.org). Little suggests these control measures are working; coyotes not only have failed to decline in numbers, but have expanded their range in all directions, flourishing in a wide range of habitats ranging from the Canadian tundra to Metropolitan Atlanta.

Many factors have contributed to the coyote’s success. Until recent decades, coyotes lived only in western North America, often in harsh, dry climates with scorching days and freezing nights that enabled them to adapt to a wide variety of conditions. The eradication of wolves in the United States boosted coyote populations, both by eliminating their biggest predator and by making more prey available to them. Humans further contributed to the coyote’s expanding range by clearing forests and creating fragmented habitats ideal for small mammals, the coyote’s favorite prey. And, interestingly enough, many wildlife biologists argue that the overkill of the species has served only to transform the coyote into a more adaptable, intelligent, and indestructible animal since the individuals that escape the guns, traps, and poisons are those that possess the keenest survival instincts. Studies also show that efforts to control coyote populations actually cause a population increase within a short time. In a stable family group (usually a breeding pair and one or two offspring, known as a “pack”), only the alpha male and female reproduce, keeping the population in check. When individuals are killed and more resources become available, females tend to have larger litters and the survival rate is higher. If an alpha female is killed, the other females in the area will seize the opportunity to have litters of their own. In any case, the population ultimately increases quickly. The coyote’s generalized diet gives it an additional evolutionary edge. Though excellent hunters, coyotes are also opportunistic, dining on carrion, insects, nuts, fruits, grasses, and other vegetation, in addition to small prey. In spite of our best efforts to defeat it, the coyote has adapted and persevered. Like the well-known Wile E. Coyote of cartoons, the coyote just keeps bouncing back.

Although they are newcomers in the East, coyotes do provide a benefit here as a top predator, and their presence needn’t alarm us. Instinctively fearful of people, these animals go out of their way to avoid humans. When people feed them, intentionally or unintentionally (by leaving pet food or garbage outside overnight, for example), coyotes may begin to become less wary of our presence, which can lead to occasional sightings, but rarely more than that. Most of the time, coyotes go about their coyote business -- living in small, close-knit family groups that hunt and play together, care for each other, and protect their territory from intruding coyotes and other predators. Having a healthy family group in your area is an asset, as coyotes help to control pest populations and maintain the balance of wildlife, including their own species. If you do happen to catch a glimpse of this amazing animal, consider yourself lucky. It is man’s friend, too.

By Melanie Furr
Photos: Janet Kessler
The coyote is a member of the dog family (Canidae), which also includes domestic dogs, wolves, jackals, and foxes. Once confined to the West, coyotes now are found across most of North America, and their numbers are likely at an all-time high.

The coyote figures prominently in Native American folklore as a highly intelligent and clever trickster. Its name comes from the Aztec word coyotl and was changed to coyote by Spanish explorers. Modern coyotes have demonstrated their cleverness by adapting to the changing American landscape.

Standing about 2 feet tall and measuring 4-5 feet in length including the tail, the average coyote weighs 25-40 pounds. Most coyotes have a mottled reddish-brown coat with tan legs and feet and a bushy, black-tipped tail. Melanistic (black) forms of the species do exist and may be more prevalent in the southeast.

Like their cousin the domestic dog, coyotes are exceptionally curious, loyal, and affectionate, and their intelligence exceeds that of most dogs. Coyotes show strong family bonds: they groom and show affection for each other; play, hunt, and go trekking together; and keep in touch over distances with their barks and howls. Coyotes generally mate for life. Males bring food to their mates when they’re confined to the den with pups, and they actively help to care for their young. Like other dog species, coyotes are territorial, leaving their territory only when food runs short or in search of a mate.

Coyote “packs” are actually close-knit family groups that consist of an alpha pair and a few of their offspring. Breeding occurs in January through March, and after two months, females den and give birth to litters ranging from three to twelve pups. Pups stay with their parents through the winter, and some will remain with their parents long-term and help to raise subsequent litters. Others will strike out on their own around one year of age. Solitary transients make up a substantial percentage of coyote populations.

Coyotes possess keen vision and a strong sense of smell in addition to their cunning, making them formidable hunters. They can run up to 40 miles per hour and leap up to 12 feet. They are also excellent swimmers and adept at climbing trees. Smaller than wolves, but larger than foxes, coyotes combine advantageous adaptations of both species—the fox’s cat-like talent of ambushing small prey, but also the wolf’s ability to bring down larger animals if necessity and opportunity arise.

As omnivores, coyotes eat a wide variety of foods. Besides hunting small mammals, birds, reptiles, and amphibians, coyotes eat insects and other invertebrates, fruits and vegetables, roots, grasses, and other vegetation, as well as carrion. They occasionally kill deer, but usually only weakened individuals or the young. Deer carcasses are an important winter food source for coyotes in some areas.

Coyotes provide numerous environmental benefits. By keeping rodent populations in check, they reduce crop loss and the spread of disease. They also help to sanitize the environment by eating carrion. As a top predator, they help to maintain the balance of wildlife in our ecosystems, as well as regulating their own numbers.

Most encounters with coyotes are sightings. Coyotes have an instinctive fear of people and typically steer clear of us. Coyotes rarely harm pets, especially when pet owners take a few simple precautions. Although they get a bad reputation for occasionally killing free-roaming cats, urban coyote studies estimate that domestic cats account for as little as one percent of their diets.

Trapping and population control measures are inhumane and do not work to reduce coyote populations; in fact, they often have the opposite result. Learning to live peacefully with them is the best solution. A wealth of coyote information and photographs, as well as recommendations for coexistence can be found at coyotecoexistence.com.

Photos courtesy of Janet Kessler

DID YOU KNOW...?
In Georgia and many other states, coyotes receive very few protections. They may be hunted or trapped at any time of year and their pelts commercially sold. By law, coyotes trapped as “nuisances” may not be relocated. Trapped animals are either euthanized or sold to licensed hunting facilities where they are put in penned enclosures and hunted with dogs for sport.
The weak sun of late afternoon shines on the westward facing slope of the other side of the valley. The red-tinged light reflects from the bark of massed trees, giving the forest a purple-gray glow. As the sun falls, a line of shadow swings up the slope, extinguishing the warm reflection, turning the forest to dusky brown. As the sun drops lower, its rays angle into the sky, over the mountain. Crimson shades into haze on the horizon, and the sky’s blue fades, first to watery mauve, then to gray.

Ten days ago, on the day of the winter solstice, I watched this same swing of sunlight. The rising border between dark and light on the opposite forest slope drew all my attention, its climb up the mountain building to the moment when the shadow would crest and the bright sunlight would blink out. At the very instant that the line of shadow hit the horizon, coyotes hidden on the forest slope just to my east broke into howls. They yipped and wailed for half a minute, then fell silent. The timing of their chorus seemed too precise to be a coincidence, coming as it did at the moment that the sun slipped off the slope. We may both, coyote and human, have watched the bright spectacle on the mountainside and been stirred by the sight of the sun’s disappearance. Coyotes’ howling behavior is known to be sensitive to both daylight and to the moon’s phase, so it is not unreasonable to suppose that these animals might sometimes wail to the setting sun.

This evening, the coyotes are either hushed or absent, and I watch the changing light without their accompaniment. The forest is not silent, however. Birds are particularly vocal, perhaps enlivened by the day’s temperature, which climbed well above freezing. Now the wrens and woodpeckers chatter as they go to roost, chipping and scolding as darkness thickens. When the sun has fallen well below the horizon and the fussing birds have quieted, a barred owl yelps from high in a tree just down the slope. The owl repeats its strangled barks a dozen or more times, perhaps calling to a mate in this winter season of owl courtship.

After the owl falls silent, the forest enters a deeper quiet than I remember experiencing here. No birds or insects call. The wind is still. The sounds of human activity, distant aircraft or roads, fall away. The very soft murmur of a stream to the east is the only detectable sound. Ten minutes pass in this peculiar calm. Then the wind quickens, drawing a hiss from the treetops. A high airplane rumbles, and muffled hammering echoes up the valley from a distant farm. Each sound is made vivid by the surrounding silence.

The horizon bleeds away its color and luminosity, falling into deep blue. The fat-bellied moon, three-quarters full, shines low in the sky. My eyes lose their power as the forest turns to shadow.

The stars slowly kindle from the sky’s darkness. The day’s energy ebbs, leaving me at ease. Suddenly—stab!—a blade pierces me. Fear. The coyotes rip open the calm. They are close, much closer than ever before. Their crazed howling comes from just a few meters away. The sound crescendos in squeals and whistles, overlain on deep-throated barking. My mind transforms immediately. The blade focuses all thought: wild dogs will tear you apart. Hell, they are loud.

All this in just a few seconds. Then my conscious mind reasserts itself, and before the chorus is over I have dislodged the blade. There is no chance that these coyotes will bother me. Rather, I am lucky that they did not pick up my scent, or they would not have come so near. My fear passes quickly. But, for a moment, my body remembered ancient lessons. The focused memory of hundreds of millions of years of hunted life exploded in my head with utter clarity.

The coyotes’ chorus carries for miles down the valley, setting off farm dogs in distant barns and fields. Dog minds have also been shaped by years of selection, encouraged by our agrarian ancestors to bark incessantly after hearing the sounds of wild relatives. No coyote or wolf would dare penetrate a cacophony of farm dogs, and this fear gives vulnerable livestock an acoustic shield. Humans, wild canids, and domestic dogs therefore live in an evolutionary tangle of sound. Outside the forest, this intertwining is manifest in the sirens of emergency vehicles that call attention to themselves by wailing like über-wolves, tapping humanity’s deep-rooted fears. Our domestic dogs hear the ancient echo also, howling at passing ambulances. The forest therefore follows us into civilization, buried in our psyche.

The howling stops as abruptly as it started. I am blind in the dark, and the coyotes’ footfalls are silent, so I have no way of knowing whether or how the animals leave. Most likely they will slink away to their night’s work, hunting small animals, guided by their own well-founded fears to circle widely around the human.

Silence returns to the mandala. I sink into the moment, feeling a familiar sense of arrival. The practice of return-
ing to the mandala and sitting in silence for hundreds of hours has peeled back some of the barriers between forest and my senses, intellect, and emotions. I can be present in a way that I had not known existed.

Despite this feeling of belonging, my relationship to this place is not straightforward. I simultaneously feel profound closeness and unutterable distance. As I have come to know the mandala, I have more clearly seen my ecological and evolutionary kinship with the forest. This knowledge feels woven into my body, remaking me or, more precisely, waking in me the ability to see how I was made all along.

At the same time, an equally powerful sense of otherness has grown. As I have watched, a realization of the enormity of my ignorance has pressed on me. Even simple enumeration and naming of the mandala’s inhabitants lie far beyond my reach. An understanding of their lives and relationships in anything but a fragmentary way is quite impossible. The longer I watch, the more alienated I become from any hope of comprehending the mandala, of grasping its most basic nature.

Yet the separation that I feel is more than a heightened awareness of my ignorance. I have understood in some deep place that I am unnecessary here, as is all humanity. There is loneliness in this realization, poignancy in my irrelevance.

But I also feel an ineffable but strong sense of joy in the independence of the mandala’s life. This was brought home to me several weeks ago as I walked into the forest. A hairy woodpecker lighted on a tree trunk and lobbed out its call. I was struck hard by the otherness of this bird. Here was a creature whose kind had chattered woodpecker calls for millions of years before humans came to be. Its daily existence was filled with bark flakes, hidden beetles, and the sounds of its woodpecker neighbors: another world, running parallel to my own. Millions of such parallel worlds exist in one mandala.

Somehow the shock of separateness flooded me with relief. The world does not center on me or on my species. The causal center of the natural world is a place that humans had no part in making. Life transcends us. It directs our gaze outward. I felt both humbled and uplifted by the woodpecker’s flight.

So, I continue my watch, both stranger and kin at this mandala. The bright moon lifts the forest in a lambent, silver light. As my eyes adjust to the night, I see my shadow in the moonlight, resting across the circle of leaves.