

SWCA

the Wire

News from SWCA Environmental Consultants

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FOCUS: STEADY AND HOPEFUL

By Joseph J. Fluder, III, CEO



This year has been a historic one, to put it mildly. And, we're barely more than halfway through. Amid the many challenges, I find comfort in focusing on what has remained steady and hopeful.

In the midst of constant change, I've realized that some things don't change: [SWCA's core values](#); our ability to be nimble and resilient; our passion for our people, our clients, and our work; our commitments to give back to the communities we live, work, and play in. Over the past few months, SWCA has given thousands of dollars and hundreds of volunteer hours to help both COVID relief and racial justice efforts nationwide. We're also working on some exciting initiatives to create lasting change within our company and the industry, which I'll share more about in future issues.

In this issue of *The Wire*, we're highlighting elements of SWCA that remain steady: our ability to meet clients where they are, even if that's at home (see "Virtual Public Involvement," page 3 and "Streamlining NEPA," page 18); our love for the work that we do (see "Scenes from the Field" photo essay, page 10); and our innovation and expert knowledge (see "An Inside Look at the Offshore Wind Industry," page 6).

For fun, we also put together a series of interactive Backyard Birding Guides (page 4) that you can use and share with family and friends. As many of us have stayed closer to home, we've found these guides entertaining and educational. If you are interested in seeing a guide specific to your region, email backyardbirds@swca.com and we'll send one to you.

In an effort to be more sustainable, this issue of *The Wire* is our first fully electronic and interactive issue. Click around to explore the content, watch the videos, and enjoy a paper-free experience. ■

Joseph

Curve-billed Thrasher eggs among the cacti in Arizona

VIRTUAL PUBLIC INVOLVEMENT: WHEN MEETING IN PERSON IS NOT AN OPTION

By SWCA Staff



theWire

When the COVID-19 pandemic struck, many agencies and companies wondered how they would continue to move projects forward when large public gatherings were prohibited. This was especially a concern for projects that require public engagement or stakeholder meetings.

Yet, we quickly learned that we could rely on technology and meeting strategies that have been in the works for several years. Our experts at SWCA have developed custom public engagement tools and outreach efforts for decades. They realized that the pandemic didn't have to be a barrier to public engagement.

A well-designed public engagement strategy provides a variety of mechanisms for the public to learn more about a project, along with multiple options for providing feedback and comments. This includes one-way communication (to inform and raise awareness) and interactive options (to gain input).

There are secondary advantages to the virtual meeting environment that benefits the public too. For example, people can engage from the comfort of their own homes and provide information and feedback that clients and agencies need. Virtual public meetings also offer accessibility benefits for those who are not able to attend meetings in person. And, security measures guarantee that all virtual meetings and webinars are safe to attend and facilitate.

The overarching goal is to make project information available to as many people as possible and ensure that there are minimal limitations from accessibility issues.

VIRTUAL PUBLIC MEETING AND ENGAGEMENT TOOLS

- Creating a dedicated virtual environment for public engagement
- Providing secure webinar tools for virtual meetings
- Facilitating participant registration
- Allowing the meeting to have multiple hosts in different locations
- Creating Q&A forums
- Producing meeting transcripts for viewing later or for project records
- Hosting presentation video recordings that can be watched at any time
- Centralizing libraries for FAQs, PowerPoints, and PDF posters
- Providing dedicated project phone lines (voicemails emailed as WAV files and with a transcript)
- Ensuring accessibility with features like live closed captioning during virtual meetings



WANT TO LEARN MORE?

Contact [Cara Bellavia \(cbellavia@swca.com\)](mailto:cbellavia@swca.com), [Jennifer Rideout \(Jennifer.Rideout@swca.com\)](mailto:Jennifer.Rideout@swca.com), or your SWCA project manager with any questions or to develop your public involvement strategy. ■

BACKYARD BIRDS

By SWCA Staff

THERE'S NEVER BEEN A BETTER TIME TO GET TO KNOW THE BIRDS THAT VISIT YOUR WINDOW, BACKYARD, AND NEIGHBORHOOD!

When stay-at-home orders were enacted last spring, our natural resource experts began thinking of ways we could stay engaged with the natural world from home. They worked to develop this Backyard Birding guide for clients, employees, and their families to enjoy. The guide includes various species from the common to the not-so-common. Want to play along? Grab your camera or binoculars and see how many species you can check off the list (additional birds on back cover). To receive a copy of a birding booklet for your U.S. region, email: backyardbirds@swca.com.



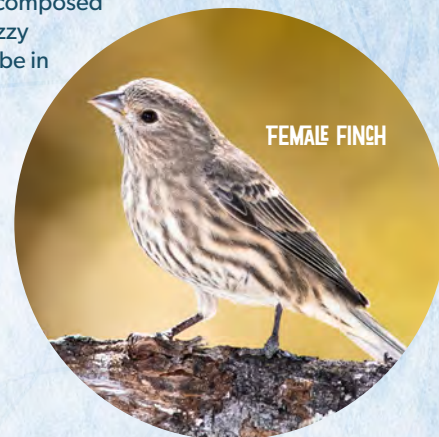
CHECK IF SPOTTED!



MALE FINCH

HOUSE FINCH

Originally a native of the western U.S., this bird was introduced to New York, where it then spread across the eastern states. Often occurring together or in small groups, the male House Finch is brownish above, with a face, breast, and rump that are usually red, but sometimes orange, and a pale belly streaked with brown. The female is brownish and streaked, with a plain face. You may find them perched on a telephone wire, roof top, or top of a tree, where the male sings a warbling song composed of short phrases and some buzzy notes. When feeding, they may be in bushes or on the ground.



FEMALE FINCH



AMERICAN ROBIN

At home in a tree or on a lawn, the American Robin is known for its rusty orange breast and pleasant clear, whistling song that sounds like "cheery, cheer-up, cheer-io." They also make a chicken-like "tut, tut, tut" call. They eat worms, bugs, and fruit and so do not usually visit feeders, but will happily build a nest in a sheltered place on a house, like under an eave.

COMMON SPECIES THROUGHOUT THE UNITED STATES



TURKEY VULTURE

Turkey Vultures are named for the bald red head of adult birds that resemble the heads of turkeys. A large blackish/brown bird usually seen flying overhead, but can also be seen perched or standing on the ground. In flight, note the long, two-toned wings. Turkey Vultures will soar without beating their wings for long periods of time, often while rocking a bit side to side.



MOURNING DOVE

The Mourning dove is a light grey and brown bird with black spots on the wings; males and females look similar. They make a "coo-oo, coo-oo" call and can often be seen in large flocks during the winter. During the breeding period they mate and can have up to six broods per year! They are seed eaters and can easily be seen at feeding stations on the ground.



EUROPEAN STARLING

Almost always found near people, European Starlings can be seen hunting on lawns or perched on a telephone wire or on a bare branch. They are stocky and short-tailed, with black plumage that has an oily purple-green sheen and is speckled white for part of the year. Their bill is spiky and yellow during the nesting season, but dark during the winter. They nest in cavities, whether in a tree, streetlight, or birdhouse.



GREAT-TAILED GRACKLE

The bane of many an outdoor diner, the Great-tailed Grackle is larger than most other urban and suburban birds and likes to throw its weight around. Bold birds, they will take food on a patio from an unguarded plate and even follow a person pushing a lawnmower in hopes of being able to snatch a flushed bug. The male is glossy black with a long, creased tail and a yellow eye. The female is slightly smaller and brownish, but with the same long tail. May be alone or in small groups by day, but will gather together at night to roost in large flocks, sometimes numbering in the thousands. These birds are loud and make a variety of screeches, chatters, and whistles, including a call that sounds like ripping paper.



NORTHERN MOCKINGBIRD

The Northern Mockingbird occurs in a variety of habitats (neighborhoods, brushy fields) except heavy forest. A robin-sized gray bird with patches of white in the wings and tail, the Northern Mockingbird sings a loud song consisting of varying phrases, often including the calls and songs of other birds. Not afraid to divebomb a cat when defending a nest!

FOR A COPY OF A BIRDING BOOKLET IN YOUR AREA:

email backyardbirds@swca.com



AN INSIDE LOOK AT THE OFFSHORE WIND INDUSTRY

By Alexis Croisdale and Whitney Fiore

If you've taken a road trip across America, chances are you've stumbled upon a wind farm. Turbines twirl across miles of wide-open spaces where winds are high, creating needed energy in an efficient manner. For many years, the idea of implementing such wind farms was widely criticized and construction was slow, yet the industry remained and has proved to be a valuable source of renewable energy. To date, SWCA has worked on over 950 onshore wind projects and counting.

With the wind industry booming, new technologies have arisen to address the challenges of building wind farms. One challenge is the amount of space needed – and that is where offshore wind farms come in. Offshore is exactly as it sounds: locating wind turbines in the ocean, rather than on land, to harvest wind energy and create electricity. Offshore wind is widely popular in Europe and is making headway along the Eastern Seaboard of the United States. But just like its onshore counterpart in its infancy, there are many factors still unknown.

Whitney Fiore, a Senior NEPA Consultant at SWCA, has worked on many of SWCA's offshore wind projects. She has more than 20 years of experience in natural resources and is highly skilled in marine and coastal projects, water rights, the National Environmental Policy Act (NEPA), biology, wetland ecology, and regulatory compliance. We asked Whitney about all things offshore wind and where she thinks the industry is heading.

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“ *The industry indicates that by 2030 there will be over 20 gigawatts of offshore wind facilities on the Atlantic Outer Continental Shelf (OCS) alone.* ”

Wire: What are the main differences between onshore and offshore wind?

Fiore: One difference between onshore and offshore wind is **how the energy gets from the generation site to the grid.** They essentially function the same way mechanically and are interconnected by distribution lines within a wind farm, which must be connected to the grid in order to provide renewable energy where it is needed. However, onshore wind may require the construction of long transmission lines to supply power where energy is needed. Offshore wind is typically located 15 to 35+ miles seaward where no other necessary infrastructure exists. This means that all aspects of getting energy from the wind farm to the onshore grid needs to be constructed in the marine environment.

This leads to the difference between how wind farms are constructed and operated. Because offshore wind is built in a marine environment, in water depths from 90 to 250 feet in the ocean, much of the required work is conducted with marine vessels, including geologic and biologic surveys, construction, and maintenance. There must be a nearby port for a landside facility to construct the wind turbines, with navigable depths to handle the vessels bringing fabricated pieces of the wind turbine to the wind farm site for installation. Imagine everything you know about terrestrial construction on any type of infrastructure and move that miles offshore, in a marine environment, with ocean swells and wave action challenges.

Wire: Do the environmental impacts of onshore and offshore wind also differ?

Fiore: Yes. With onshore wind operation, the biggest environmental concern relates to impacting species, namely birds and bats. Because of the distance from land with offshore wind, birds and bats are less frequent visitors. Most, but not all, birds tend to stay closer to the shore even when migrating, and there are no flying insects for bats. However, with offshore wind in America, there are marine mammals and sea turtles, which are both protected and require a great deal of regulatory agency coordination and approvals. Onshore wind can coexist with agricultural activities in many locations. Lastly, permitting the onshore cable landfall can be challenging and requires local government approvals and community support. Offshore wind's biggest challenges are perceived visual impacts and how the commercial fishing industry sees development of offshore wind as potentially removing fishing grounds and a threat to their livelihood.

Wire: What are the benefits of locating wind turbines offshore?

Fiore: Some of the largest population centers in the U.S. are located on the Eastern Seaboard, where there are consistent winds with mean wind speeds of 18-22 mph, which is well suited for wind generation. These reliable wind conditions coupled with the fact that many of the existing coal-fired power plants on the East Coast are being retired means development of a reliable power source is imperative. Although the construction of an offshore wind farm itself is challenging, there are fewer siting challenges - such as existing infrastructure, topography, urban and suburban neighborhoods and the like - that often create obstacles to onshore development.

Wire: Are there government agencies and regulations that need to be accounted for?

Fiore: Yes. The U.S. territorial sea extends 200 miles offshore (state waters typically extend 3 miles offshore), and the federal agency that has jurisdiction over activities such as minerals, sand, oil and gas, mining, as well as renewable energy siting, is called the Bureau of Ocean Energy Management (BOEM). BOEM has specific regulations for offshore wind. There are other federal agencies, such as the National Marine Fisheries Service, U.S. Army Corps of Engineers, U.S. Coast Guard, Department of Defense, and the U.S. Environmental Protection Agency, that also have jurisdiction over the marine area, species in the area and/or activities that occur there. Each state also has agencies that must be dealt with, along with many Tribes that also have a seat at the table due to the presence of pre-contact cultural resources in the shallow waters of the Atlantic Outer Continental Shelf (OCS).

Wire: What's in store for the future of offshore wind?

Fiore: The industry indicates that by 2030 there will be over 20 gigawatts of offshore wind facilities on the Atlantic Outer Continental Shelf (OCS) alone. Currently, there are only 30 megawatts generating offshore, so a lot should happen between now and then. There are also offshore wind opportunities off the coast of California, Oregon, and Hawaii in the Pacific Ocean. The challenges there are different and include water depths often over 1000 feet and fluctuations in wind direction. Floating technologies are currently being developed to work in these types of conditions. Floating technology will not require the same intensity of construction since there are no foundations, thus no need for pile driving 250 feet or more into the seabed. Floating technology is the future of offshore wind - at least for now.

Wire: What makes SWCA uniquely qualified to work on offshore wind projects?

Fiore: SWCA has a long history of working on NEPA projects, including onshore renewable energy projects with the Department of the Interior, the BOEM's Cabinet-level overseeing agency. In addition, SWCA is expanding on the East Coast, putting strategic staff in the places where offshore wind is being developed so we can be responsive and provide local staff.

Wire: Any parting words?

Fiore: If you think back 10 to 15 years ago, onshore wind faced many challenges and construction was very slow. That changed very quickly as technologies advanced and power costs came down. I believe we are on a similar trajectory in offshore wind and the dam will soon break, and projects will be approved and constructed very fast.

For more information on SWCA's offshore wind services, contact **Whitney Fiore** directly at wfiore@swca.com. ■



SCENES FROM THE FIELD: A PHOTO ESSAY

By Steven Maichak

At SWCA, our purpose is simple: to preserve natural and cultural resources for tomorrow while enabling projects that benefit people today.

As the boots on the ground, field technicians survey deep within hidden gullies, high up on wind-blasted ridgelines, over and around mountains, across vast deserts, and through mucky wetlands. Not readily seen, sensitive flora and fauna lurk in hidden haunts throughout the country's diverse landscape.

So, what does a day in the field look like? Follow along as we uncover more than just rare plants and animals in the intermountain west during the 2019 field season.

📍 June 5 | Utah County, UT

The start of our field season had us hiking into the steep terrain of Utah's Wasatch Front in search of Deseret milkvetch (*Astragalus desereticus*), a rare species of milkvetch that is federally listed as a threatened species. Deep within the Spencer Fork Wildlife Management Area, we found a bull elk's crown resting gently on his throne. Scarred with signs of rodent chewing and black ash from the previous year's wildfire, the burr around the base indicates it was shed naturally and the bull was likely still alive.

📍 June 25 | Utah County, UT

High up in the foothills of Spanish Fork Canyon surveying for clay phacelia (*Phacelia argillacea*), one of Utah's many endemic plant species, we happened upon this abandoned picnic table. We found it to be a peaceful retreat from the hordes of hikers on nearby public land. The pristine landscape and relaxing skies encouraged us to take an early lunch. Of course, it was all for science – we had to make sure the picnic table still worked as intended.

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June 27 | Utah County, UT

Just days after our relaxing picnic lunch, we found ourselves in a much different situation. Still in pursuit of clay phacelia, we were hiking through the southwestern reach of the Uinta National Forest when, on the steep slopes of Green River shale, we saw a Great Basin rattlesnake (*Crotalus oreganus lutosus*) tucked up under a rock. He was one of three rattlesnakes we encountered that day. The encounter served as a gentle reminder to watch our foot and hand placement as we traversed the dicey hillsides.

July 27 | Moffat County, CO

A month later, we were completing flora and fauna suitable habitat surveys for future geotechnical applications in Colorado. Perhaps late July's intense summer heat was creating mirages that played tricks on this wild mare, who trotted in from well over a mile away to get a closer look at us. Once she was confident we didn't pose a threat, she slowly trotted back to her herd on the other side of the basin.



August 13 | Utah County, UT

In mid-August, we started surveys for the threatened Ute-ladies'-tresses orchid (*Spiranthes diluvialis*). Also known as ULT, the specimen pictured here was found in Diamond Fork Canyon, Utah, along a cold mountain stream. It was part of a reference population we used to train our eye to identify ULT before we set out surveying at new sites within the project area. If not for the unique arrangement of white florets, this flower would blend in with the sea of lush, green grasses.



August 15 | Utah County, UT

After our visit to the ULT reference population, we put our new knowledge to the test with a survey near Birdseye, Utah. What we found was unexpected: a decimated riparian area that had recently experienced a severe mud and debris slide. The previous year's wildfire had burned away all the vegetation that stabilized the soil, so the summer rains were able to break loose the topsoil that ultimately led to this surreal landscape.



August 19 | Uinta County, UT

Out of the lush mountainsides of Spanish Fork Canyon and into the barren deserts of Utah's Uinta Basin, we were still in search of Ute-ladies'-tresses orchid (ULT). More specifically, we were trudging through the narrow riparian band that parallels the White River. The intense summer heat was taking a toll on us, but we found a burst of energy when we came across a rare set of black bear prints in the sandy flood plain.

August 31 | Carbon County, WY

The final day of August found us completing a combination of ULT and general suitable habitat surveys in south-central Wyoming. We were wandering through a sagebrush-dominated landscape when we stumbled upon a bobcat skull. It had already been picked clean and bleached by scavengers, insects, and the blazing sun, and we couldn't find any other remnant of the specimen nearby. The unexpected find left us smiling – it's not often you come across an apex predator skull in such great condition!

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📍 October 1 | Uinta County, UT

We started October in search of the Uinta Basin hookless cactus (*Sclerocactus wetlandicus*). Seen near the center of this photo, this cactus individual, like the ULT, was part of a reference population we used to train our eyes before surveying for new populations. As you can see, it can be difficult to locate these small cacti in the vast, brown landscape.

📍 December 11 | Uinta County, UT

We ended our 2019 field season with bald eagle (*Haliaeetus leucocephalus*) roost surveys in the Uinta Basin. These surveys were a fun, relaxing reward for our hard work throughout the summer. Rather than hiking endless miles in intense heat, these surveys required us to sit in one spot and use spotting scopes to identify roosting locations the eagles like to use during the winter months. Watching this large mass of fog creep down the Green River valley in the morning sun's rays was nothing short of impressive.



Across the country, SWCA's scientists are currently in the field. To learn more about our services and how we can help on your next project, visit www.swca.com. ■

STREAMLINING NEPA: STAYING AT THE FOREFRONT OF CHANGES TO KEEP YOUR PROJECTS ON TRACK

By SWCA Staff

When it comes to environmental policy, the landscape is always changing.

Enacted in early 1970, the National Environmental Policy Act (NEPA) requires federal agencies to inform the public about impacts a potential project could have on the human environment. The NEPA process is intended to provide appropriate disclosure to the public regarding potential project impacts, resulting in better agency decisions.

For several years, the federal government has focused on streamlining NEPA to make the process more efficient while still staying credible and defensible. Recently, this has resulted in changes that have shortened schedules and mandated page limits.

With consistent updates to the regulations expected in the future, navigating the NEPA process can be complex. We, along with our clients, have found that it's important to be in front of these changes instead of reactive. Our NEPA team has managed to stay at the forefront by developing effective methods for completing the process within established timeframes.

"New presidents and administrations will have ways they want to conduct NEPA and new methods for streamlining the process," says Matt Petersen, Senior Project Manager and NEPA Specialist in our Salt Lake City office. "Outside of that, you have changes to both the physical and regulatory environment. The judicial branch will look at NEPA documents and say, 'does this do a good job at addressing changes in the natural environment? Does it show project consistency with regulatory environments? Is this still doing a good job of informing the public?' If the answer is no, we need to be doing something different."

SWCA uses this knowledge in managing NEPA processes with federal agencies and we disseminate it through our Bureau of Land Management NEPA Streamlined Training Program and our open enrollment NEPA workshops. Petersen says this is why our real-world based NEPA courses remain in high demand by federal agency staff and industry professionals.

Petersen is the instructor for SWCA's Streamlined NEPA Process and Analysis Workshop and says that continued training is a great way for professionals to keep abreast of changes and how to incorporate those changes into NEPA documents.

"We need a refresher on the intent and processes of NEPA," says Petersen. "Training allows you to stay up to speed, to make sure you are always defensible, continue to evolve, and collaborate with other NEPA professionals."

James Gregory, a Senior NEPA Project Manager in SWCA's Portland, Oregon office, says efficient NEPA streamlining also results from a good project management team. "You need a team of good communicators that work in an interdisciplinary fashion and focus on the significant issues," says Gregory. "Being flexible is also very important. Things change quickly in project development and you need to be able to flex with those changes."

Brittany Sahatjian, a NEPA Specialist also in our Portland office, says getting a head start can go a long way with new streamlining requirements. "The Environmental Impact Statement process officially begins with a notice of intent, but there are a lot of things you can do before that. With streamlining, doing as much as possible early on can allow you to hit the ground running when the clock starts on the established time limit," says Sahatjian.

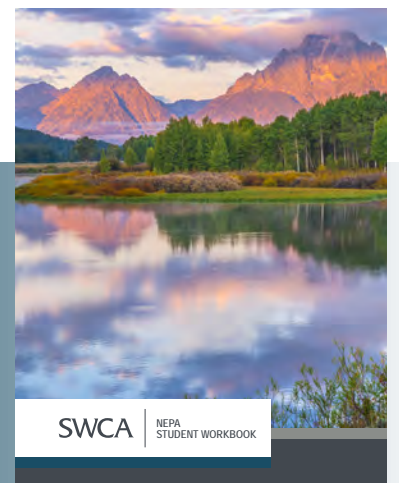
"We need a refresher on the intent and processes of NEPA. Training allows you to stay up to speed, to make sure you are always defensible, continue to evolve, and collaborate with other NEPA professionals."



Involving specialists from outside your organization will also allow you an impartial third-party view that can help avoid bias in the analysis. It also allows professionals who are specifically trained in other environmental specialties such as the Endangered Species Act to weigh in with their expertise.

For more information on how we can help with your NEPA needs, please visit:
www.swca.com/services/natural-resources/national-environmental-policy-act

SWCA will be offering a virtual Streamlined NEPA Process and Analysis Workshop that provides both new and experienced NEPA practitioners the tools needed to effectively manage the NEPA process and develop analysis in documents that are clear, concise, and defensible, and facilitate the NEPA process in less time. Attendees will be provided an overview of the NEPA process, a review of legal requirements and pitfalls, and an opportunity to work on real-world projects following the NEPA process in a virtual instructional and interactive workshop atmosphere.



NEWS BRIEFS

AWARDS & RANKINGS

SWCA WINS EBJ BUSINESS ACHIEVEMENT AWARD



SWCA was awarded a 2019 Environmental Business Journal (EBJ) Business Achievement Award. SWCA earned a Gold Award for opening offices on both the east and west coasts, contributing to continued growth in company size, and our revenue growth.

2019 STEVEN W. CAROTHERS SCIENTIFIC MERIT AWARD

Mandy Bengtson, PhD, Senior Scientist and Soil Ecologist in SWCA's Reno office, was awarded the 2019 Steven W. Carothers Scientific Merit Award. This award honors a scientist following in the footsteps of SWCA's founder by using excellent scientific skills to solve client problems and grow our business. Dr. Bengtson's skills as a soil scientist have filled a unique niche in the company, where she has designed and managed soil mapping efforts, contamination studies, geochemistry analysis, and soil resource interpretation for a variety of clients.



NEW OFFICE OPENINGS

SWCA now has 36 offices nationwide, adding Charlotte, North Carolina for engineering services; Fort Lauderdale, Florida for energy, transmission, and land development projects; Pensacola, Florida for oil and gas, renewable energy, and land development and ecological restoration services; Portland, Maine for additional support to our northeastern clients; and San Diego, California and Sacramento, California for expanding our presence and providing support for transportation, land development, infrastructure, electric and natural gas utility, and renewable energy projects.



2019 SWCA GIVES BACK HAVE A HEART AWARD WINNER

Our **Phoenix** office went above and beyond in their commitment to the Gives Back program in 2019. They had the highest number of office-wide events and volunteered the most hours per employee. Their Gives Back Local Office Champions **Sondra Johnson** and **Candace Roberts** went to great lengths to increase staff engagement. Their volunteer and donation efforts benefited organizations such as the American Cancer Society, St. Mary's Food Bank, Ronald McDonald House, Marine League Charities, UMOM New Day Centers, and Natural Restorations.

PROMOTIONS AND NEW HIRES



PAT AHERN



ANDI ZOLKIEWSKI



SARAH ZINK



ANTONINO RICCOBONO



CARLOS ESCALANTE



TOM HALE



HENRIK CHRISTENSEN

PAT AHERN

Vice President of Talent Acquisition and Development

Pat Ahern joined SWCA to help bring our talent strategy to life, from recruiting to onboarding and development. Pat has worked in Human Resources, specializing in Talent Acquisition and Development for more than fifteen years, after launching his career in Operations Management. Pat has devoted his career to the study and practice of organizational design and effectiveness, change management, talent acquisition, learning and development, leadership coaching, and process improvement.

ANDI ZOLKIEWSKI

Director of Total Rewards and Wellness

Andi Zolkiewski is SWCA's Director of Total Rewards and Wellness. This is a new position to functionally support our strategic people initiatives. Andi's over 20 years of Human Resources experience will enable us to continue to define and refine our employer value proposition and ensure we are competitively attracting and retaining diverse talent at SWCA. She will be leading our compensation, benefits, recognition, retirement, and wellness programs.

SARAH ZINK

Chicago Office Director

SWCA welcomes Sarah Zink, Director of the Chicago office. Sarah brings 14 years of experience in ecological restoration, team building, and organizational leadership. Her technical specialties include aquatics/aquatic plants, invasive species control, and wetlands. Her professional certifications include Six Sigma Green Belt, Executive Management, and Project Management – Lean Process from the Management and Strategy Institute.

ANTONINO RICCOBONO

Director of Energy Export Development Projects

Antonino Riccobono joined SWCA as Director of Energy Export Development Projects, and will be based in Fort Lauderdale, Florida. Antonino has more than 34 years of experience in planning and implementing major environmental programs worldwide for on- and offshore oil and gas facilities, offshore wind energy

facilities, power generating facilities, industrial plants, waste management facilities, superfund sites, and other civil works projects involving mines, dams, and bridges. He helps guide developers around the world looking to license LNG and crude oil export development facilities in the United States.

CARLOS ESCALANTE

Pittsburgh Office Director

Carlos Escalante has been named Director of the Pittsburgh Office. Carlos has nearly 30 years of consulting experience spanning Pennsylvania, West Virginia, Ohio, and the surrounding region. His background is primarily in wetland work, 401/404/105 permitting, midstream/FERC permitting, and NEPA. He has a long history of supporting both the oil and gas and transportation industries.

TOM HALE

Raleigh-Sanford Office Director

Tom Hale has been named Office Director for SWCA's new Raleigh-Sanford office in North Carolina. Tom will be responsible for leading growth across North Carolina and into the Southeast, and providing staff mentorship and development. Tom joined SWCA in 2014 as a senior project manager in our Salt Lake City office. He recently relocated to the Raleigh area to help support the burgeoning office. Tom has nearly 30 years of experience in project management, environmental compliance, and environmental planning.

HENRIK CHRISTENSEN

Las Vegas/Reno Office Director

Henrik Christensen has been promoted to Director of our two Nevada offices, Las Vegas and Reno. For the past 4 years, Henrik has been the SWCA Las Vegas office Natural Resource Team Lead. He has more than 30 years of experience in the consulting industry with over 20 of those years doing environmental permitting projects for the renewable energy and the power industries. He also has been involved in several electric generating siting studies and the preparation of several NEPA documents for power, airport, and mining projects.



INDIGO BUNTING

One of the few all blue birds a homeowner can encounter in their yard. The breeding male is a beautiful bright blue with darker areas around the face, wings and tail. Interestingly enough, the Indigo bunting has no blue pigment and they are actually black. The diffraction of light through their feathers gives them the blue coloration. Indigo Buntings also migrate at night using the movement of stars for guidance.



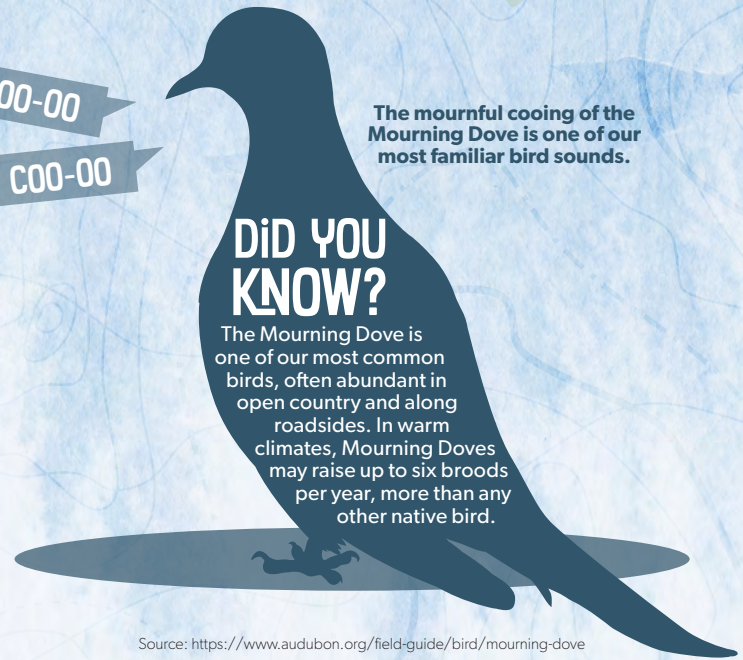
COO-OO

COO-OO

The mournful cooing of the Mourning Dove is one of our most familiar bird sounds.

DID YOU KNOW?

The Mourning Dove is one of our most common birds, often abundant in open country and along roadsides. In warm climates, Mourning Doves may raise up to six broods per year, more than any other native bird.



Source: <https://www.audubon.org/field-guide/bird/mourning-dove>

Backyard birds photo credits: American Robin, Mourning Dove, Northern Mockingbird, Turkey Vulture on post - © Scott Sumner; Female House Finch - 2019 Richard Keller, withmephography.com; Turkey Vulture in flight - Brad Sutton, NPS; Downy Woodpecker - C. Watts; Indigo Bunting - Neal Lewis, NPS

SWCA

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