



# Winter 2020

## The Naturalist

Click **HERE** for the IN Section website

**A**s we say 'good riddance' to 2020, the leaders of the Interpretive Naturalist Section wish you a healthy and happy 2021. We welcome your content anytime. Send any articles, poems, photos, news to Newsletter Editor, John Miller at [interpretivenaturalist@gmail.com](mailto:interpretivenaturalist@gmail.com).



Credit: Dribbble

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We hope you enjoy this issue and give feedback.

# From the Trail



Mary Loan,  
Director

Winter Greetings  
to our IN Section  
Members!

As I write this, it is snowing lightly outside, but I am warm and toasty inside looking at the snow through the window. I'm not sure that I am quite ready for winter, but I have certainly learned over the years that it will come whether I am ready or not! I am excited for getting out and doing some winter activities such as skiing and snowshoeing and just exploring and enjoying the cool air (properly socially distanced, of course). What do you have planned for winter activities in your area? What are some unique winter programs that you have done in your area?

One of our annual fall activities is the NAI National Workshop, held this year in mid-November. I hope that many of you were able to attend the virtual event—even though we weren't able to join together in St. Augustine this year as had originally been planned, the NAI National Office did a great job of pulling together the virtual workshop, and we had a great turnout. At last count, we had over 1300 people attend the workshop this year. Even though we were all in our own areas, it was great to join together for a week of workshop sessions and keynote speakers and fun. And, for those who were really looking forward to traveling to St. Augustine, don't fret—one of our future Workshops will be hosted in St. Augustine and we will all be able to get together there again.

We had a very successful virtual Section meeting at the National Workshop—we had over 100 members

attend for a lively and engaging discussion about a variety of topics on what our members would like to see from our Section. One of the things we discussed was

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We need your help. Contact John Miller at [interpretivenaturalist@gmail.com](mailto:interpretivenaturalist@gmail.com) if you would like to be a representative for your region!



## From the Trail (continued)

having monthly “get-togethers” for presentations and trivia, and our Deputy Director Monique Thompson hosted a successful first “trivia night” this month. I look forward to all our future get-togethers.

Another thing we discussed was the potential to have a short, virtual IN Section Spring Workshop—we are working on the details for this, but we hope to have at least a short IN Section workshop for our members next Spring. Keep an eye out for more details, and if you would like to help with the planning or presentations, let me know!

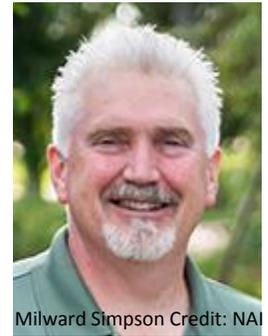
We are also looking at the potential of having a pre-workshop session at next year’s National Workshop which is scheduled to be held in Palm Springs, CA, from November 30-December 4, 2021. I would love to have a pre-workshop birding trip in the area—keep an eye out for more details in the coming months. And if you have some ideas on great birding spots in and around Palm Springs, let me know!

There was great interest from our members in creating a Mentor program within the Section, also. We would like to create a group of volunteers who are willing to share their trip into and through interpretation with new or less-experienced interpreters. Or interpreters that have management experience who can help a younger interpreter looking to move up the ladder. There are a myriad of ways that those of us who have been in the field for a few to many years can help others. If you are interested in either being a mentor or a mentee or if you have questions that you would like to see answered, let me know—I would love to get this program going soon.



Credit: John Miller

Also, at our National Workshop (and our Section meeting) we were introduced to our new NAI Executive Director: Milward Simpson. Milward started with NAI in November and hit the ground running. He was able to attend many sessions at the National Workshop and sat in with our Section meeting to introduce himself and join the conversation. Look for more information from Milward as he settles into the job, especially if you were unable to join us for the Workshop. Welcome Milward!



Milward Simpson Credit: NAI



Margo Carlock Credit: NAI

I’d also like to say a great big “Thank You!!” to our newly retired Executive Director, Margo Carlock. Margo came to NAI 7 years ago at a time when NAI was struggling with some things, and she not only helped NAI become financially solvent but has also done so much to increase our standing as

the professional organization for the field of interpretation. NAI would not be the organization we are today without all of Margo’s hard work and enthusiasm for all of NAI’s members. She will definitely be missed and we wish her good luck and lots of exploring in her retirement (and hope she isn’t a stranger).

As always, let me or any of your IN Section officers know if you have suggestions, needs, ideas or wants from the Section. We are here for you, and we want to help you become better interpreters! Thanks for all that you do, every day—it is appreciated!

## What is it?

Can you guess the identity of the item to the left? This photo is only 1/8<sup>th</sup> of the full photo. Hint: Its cold beautiful name is very descriptive, but not truly accurate. ***The answer and full photo are on page 16.***

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# How YOU Can Be More Involved

## Help Needed!

### Communications Co-Chair

Benefits galore! Build up your resume and learn new skills. Work with an incredible team to promote IN in social media platforms, newsletters, and trivia nights.

**Interested?** Contact Monique Thompson, [raindropranch@gmail.com](mailto:raindropranch@gmail.com)

## Instagram Account: IN of the Week

The Interpretive Naturalist Section would like to highlight your story and your work! Each week, our Instagram account features our IN of the Week. Want to be our IN of the week?

Email 3-4 photos and a brief bio - how you decided to go into the field, your favorite interpretive place or program, hopes/plans for the future, and anything else you'd like to share to **Monique Thompson**, [raindropranch@gmail.com](mailto:raindropranch@gmail.com).

## Game Night Swag Sponsors

Want to share more about your company or organization and offer prizes to our worthy game night winners? Consider being a Game Night Swag Sponsor.

Contact: **Monique Thompson**, [raindropranch@gmail.com](mailto:raindropranch@gmail.com)

## Representatives for Regions 1 & 2

are needed for newsletter content. Gathering news, articles, and photos is a great way to learn what great things your Region does. **Contact John Miller** [interpretivenaturalist@gmail.com](mailto:interpretivenaturalist@gmail.com)

## Interpretive Naturalist Section Monthly Gatherings

### – Learn more about the IN field and test your Trivia Skills

**T**hanks to the leadership of Deputy Director Monique Thompson, a new service has been created for members of the Interpretive Naturalist Section. Called **Game Night**, these are a mixture of awesome presentations, trivia, and a whole lot of fun. Check out the lineup below.

Special thanks to our December guest presenter, Mark Smith, who shared the first of a three-part series on **Remote Sensing with Drones**. Mark opened his drone toolkit as we explored biological imagery and infrared applications. He shared that, "Interpretation is strategic communications, and imagery is a tool in that strategic communications tool-bag." Join us in the future for Part 2 and 3 of this exciting topic. Also, congratulations to our first trivia night winner, **Katie Raney!**

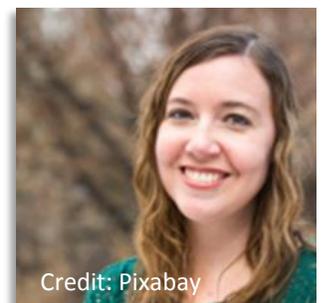


## 2021 Schedule of Monthly Gatherings! All are FREE!

January 7<sup>th</sup> (Thursday) 8:00 pm ET; 7:00 pm CT; 6:00 pm MT; 5:00 pm PT

### Diversity, Equity, Inclusion, and Accessibility in STEM Learning

Claire Ratcliffe Adams is an Education Coordinator II at the Space Science Institute where she curates STEAM resources and professional development opportunities for library staff. She has a B.A. in Environmental Studies from the University of Utah and an M.S. in Natural Science Education from the University of Wyoming. Claire has over ten years' experience working in informal education settings, including teaching science camps across the country, working as a Marine Naturalist in Hawaii, and directing a teen program for the Boys & Girls Club. Claire also spent several years teaching k-8 STEM in a public school. In her spare time, Claire enjoys gardening, reading, YA novels, and hiking.



ZoomLink: <https://us02web.zoom.us/j/81856083575?pwd=bEFkMUNaUmpId0VvcXBuU1FqL3hyd09>

Meeting ID: 818 5608 3575 Passcode: INGAMES

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## Monthly Game Nights (continued)

February 4<sup>th</sup> (Thursday) 8:00 pm ET; 7:00 pm CT; 6:00 pm MT; 5:00 pm PT

### Q & A with Milward Simpson

Milward was named as the new executive director of the National Association for Interpretation (NAI) in November 2020. As E.D. he is responsible for all aspects of NAI's business development and management including strategic planning, fundraising, marketing and public relations, personnel management, data management, external communications, partnership management and management of the organization's finances. Milward has spent a diverse career in nonprofit and state agency management, working in the arts and humanities, parks and recreation, the children-in-nature movement, tourism promotion, and conservation in Colorado, Minnesota, and his home state of Wyoming.



Zoom link: <https://us02web.zoom.us/j/84824890402?pwd=S0h6ZGpkYjhidG4wOUFEbUZTUUVVtdz09>

Meeting ID: 848 2489 0402 Passcode: INGAMES

March 4<sup>th</sup> (Thursday) 8:00 pm ET; 7:00 pm CT; 6:00 pm MT; 5:00 pm PT

### Access to Excellent Tools for Interpreting Climate Change

Dr. Geneviève de Messières is the lead for the Earth to Sky Interagency Partnership [earthtosky.org](http://earthtosky.org). She works for Science Systems and Applications, Inc, and is based at NASA's Goddard Space Flight Center in Greenbelt, MD. Earth to Sky is a partnership that actively fosters climate communication collaboration between scientists, interpreters, communicators, and informal educators from NASA, NPS, and other place-based organizations. We look forward to accessing tools such as [earthobservatory.nasa.gov](http://earthobservatory.nasa.gov).



**Zoom link and Meeting ID will be on the IN Section website and email from NAI.**

## NAI Shining Star Award

Have you witnessed a fellow interpreter going above and beyond the call of duty? We are looking to recognize NAI members with these qualities on a monthly basis. The NAI Shining Star Award will highlight the amazing interpretive work being done by members, like you, all across NAI. This award is meant to highlight winners' efforts to the NAI interpretive community as well as the winners' supervisors and coworkers.



To nominate someone for the NAI Shining Star Award email NAI Member Liaison Heather Manier at [hmanier@interpnet.com](mailto:hmanier@interpnet.com) with the following information:

- Contact information of the nominee (name, title, site, work address, work email, and work phone).
- Example(s) of how the nominee went above and beyond their routine duties.
- Example(s) of how the nominee's action made a positive impact on visitors, resources, or NAI.

These awards are independent of the NAI Professional Awards.

### NAI Important Resources

[Mission, Vision, and Core Values](#)

[Telling Everyone's Story - NAI's Commitment to Diversity](#)

[Diversity, Equity, and Inclusion Resources](#)

[NAI Certification Courses](#)

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# 2020 Thomas Say Awards



We strive to honor naturalists who have demonstrated the highest accomplishments of our profession and have inspired greater understanding, awareness, and stewardship of our natural resources. These awards not only provide much deserved recognition for our fellow section members, but they also bring to the attention of administrators that they have outstanding employees, whose abilities and talents are recognized by other outside professional individuals and organizations.

## Congratulations to the 2020 Thomas Say Awards Winners:

### Outstanding Program "Do You Know the Bow?"

**Sarah M. Smith**, Rogue Naturalist Science Theatre, Calgary, Alberta

This program is an 8-class (K-3) hands-on exploration of St. Patrick's Island, a local city park on the Bow River, and this project was commissioned to facilitate park connections to the natural history of the park. With innovation plays such as "Superbirds Save Spring" (grade 1 play), and "The Rocks Remember" (grade 2 mask and movement piece), this science theatre residence project truly inspired the students and teachers.

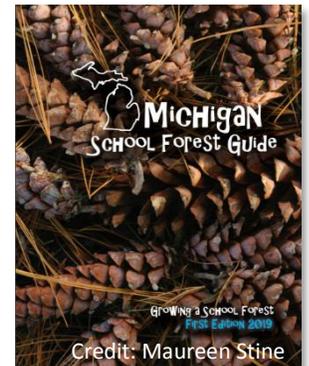


### Outstanding Publication Michigan School Forest Guide

**Maureen Stine**, Natureology, Michigan

Contributors also include Michigan DNR Foresters Ada Takacs & Mike Smalligan as well as AmeriCorps interns Angel Squalls & Rachel Straughen.

*The Michigan School Forest Guide*, First Edition, is an excellent example of POETRY. It was developed for the PURPOSE of interpreting forestry heritage for Michigan students, ORGANIZED into 8 chapters leading the audience through the guide, ENJOYMENT of their hard work and individual stories of success. The guide follows a THEMATIC approach enabling schools to realize the impact of taking any lesson (History, English, Math, Art, and Science) and bringing learning outside. It is RELEVANT for Michigan students because the forests are laboratories just waiting for exploration, given 19.3 million acres of forestland and the jobs created. Finally, this publication is YOU, as the guide empowers all associated with it.



### Outstanding Naturalist

**Fred Wooley**, Indiana State Parks Retiree

Fred, like many who have received this award since it began in 2013, is an excellent example of what our section is all about. He is a founder of NAI, and active in Region 4. He spent 35 years at Pokagon State Park in NE Indiana, and during his retirement, has been devoted to Blue Heron Ministries, a columnist for the Republican Herald and others, and many other accomplishments as a naturalist.

Credit: Fred Wooley

Congratulations to Fred and all our award recipients this year! It's never too early to begin working on nominations for the 2021 Thomas Say Awards. **Details will be featured in the next newsletter, with the usual deadline of August 15.**



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# Forever Protected

*Friends of the Desert Mountains Saves Desert Habitat from Development*

**Article and Photo By Sindy Hernández Orellana Barrows**

Acquisition Coordinator, Friends of the Desert Mountains

[Friends of the Desert Mountains](#) has acquired the 481-acre Rancho Royale within the Coachella Valley, a biodiversity hotspot in the Colorado Desert of Southern California's Riverside County.

Located within the City of Desert Hot Springs, the property will no longer be the future location of a master-planned community of up to 1,998 homes. Considered the desert gateway [Sand to Snow National Monument](#), we are proud that Rancho Royal will forever be protected.



The biological importance of this desert property is one of its most significant features. Rancho Royal hosts three different vegetation types: Sonoran creosote bush scrub, Sonoran mixed woody and succulent scrub, and desert dry wash woodland. These three vegetation types provide vital habitat and resources for a variety of species, some of which are endangered and endemic to the Coachella Valley. Rancho Royal is also an important wildlife corridor, from Big Morongo to Mission Creek and Whitewater Canyon.

The September 2020 acquisition of Rancho Royale is by far one of the most challenging and vital land purchases Friends of the Desert Mountains has completed in recent years. It would not have been possible without a package of state and federal funding assembled by the [Coachella Valley Mountains](#)

[Conservancy](#). Together we helped protect the vital habitat, linkages and fluvial, and aeolian sand transport corridors found within this property. Other acquisition partners were [California Department of Fish & Wildlife](#), [State of California Wildlife Conservation Corp](#), [State of California Parks & Water Bond 2006](#) and the [US Fish & Wildlife Service](#).

Check out this [panorama video](#) and you will agree that the beauty and biodiversity of this desert landscape is imperative to protect.



Friends of the  
Desert Mountains

## About

Friends of the Desert Mountains is dedicated to building a community of support to help preserve the unique wildlife and scenic beauty of the Coachella Valley and surrounding mountains. The nonprofit acquires and preserves wildlands, promotes stewardship of trails, conducts educational programs, and supports ecological research. The organization works with biologists, conservationists, and government agencies to identify key lands for protection. Its leadership team selects land for its scenic, biological, recreational, or cultural significance, and then offers to purchase it at fair market value. Through these key acquisitions, Friends of the Desert Mountains provides permanent protection to the beauty, character, and diversity of the Coachella Valley.

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**BOOK  
REVIEW**

# ***The Feather Thief***

by Kirk Wallace Johnson  
ISBN-13 : 978-1101981634

*Reviewed by Julie Gee, Ohio State Parks*

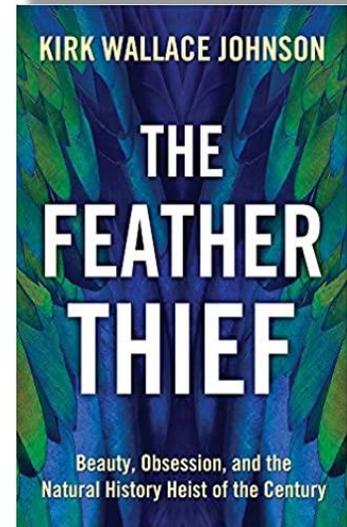
If you have an interest in birds, fly fishing or natural history, you must read *The Feather Thief*.

This unlikely true crime drama grabs the reader and holds you until the end. The author spent six years researching and following leads relating to the theft of hundreds of rare bird skins from the British Museum of Natural History. The known thief then sold the individual feathers to an underground network of fly tiers. The rare feathers, bought and sold illegally with no regard to conscience, were coveted for tying Victorian-era salmon flies. Who knew fly fishing had a dark underside?

*The Feather Thief* weaves together the legacies of Alfred Russel Wallace and Charles Darwin, the

Convention on International Trade in Endangered Species (CITES), the art of fly tying and the story of a young man obsessed with acquiring rare bird feathers at any cost. The book

reads as a suspenseful mystery as the author tries to answer the questions “What happened to the bird skins?”, “Where are all the feathers?”, “Was anyone held accountable?” *The Feather Thief* is an eye-opening tale that shouldn’t be missed!



Credit: Amazon

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## **Update from South Texas**

By Kim Ogden

**G**ood job everyone on the National Virtual Conference. Yay! There were so many amazing offerings and it was wonderful to fellowship with this network.

The Coastal Bend Bays & Estuaries – Nueces Delta Preserve continues to serve educators through virtual content facilitating experiences for students in their nearby nature and trainings for the teachers themselves. Lari Jo fosters a love for nature journaling in the community which gives participants opportunities to document their experiences during this most unusual year. Matt keeps upping his photography & videography game documenting phenology during the passing pandemic seasons. The recovery of nature at our preserve is being recorded and presented in our virtual and social media content. Kim persists in offering socially distanced outreach at

the Preserve in-person and virtually, as well as, keeping in communication with volunteers.



Photo credit: Matt Hendrix



Photo credit: Matt Hendrix

As the Pandemic continues to limit in-person programs, the Preserve restores & refreshes itself, and we are afforded the opportunity to reacquaint ourselves with our site through each seasonal iteration. As we document these recharges of our estuary, coastal prairie, and thorn scrub habitats, we then share these natural occurrences with the community.

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# Hollow Bones and Air Pressure

By Ranger Steve (Mueller)

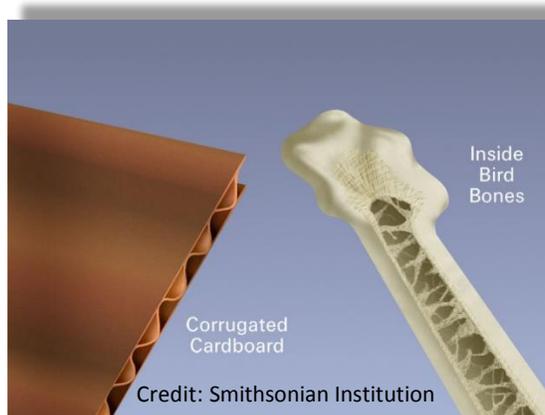
Many people have heard birds sense weather change before clouds, wind, or other obvious indicators. Some have heard birds perceive air pressure drop causing altered behavior.

One indication reported is that bird feeders empty more rapidly before a storm. A park, family or school program activity might document this by observing the length of time required between feeder filling when weather is stable or pressure is lowering. Experiment to determine if it is different when air pressure shifts. I described a personal experience a decade ago. Many did not read my original account because it was not in the Naturalist Newsletter. Weather forecasters reported a new United States record low air pressure on Thursday 28 October 2010 and it impacted me physically. In retrospect I hypothesized what happened and now I empathize better with avian neighbors in my yard.

The day before, I moved lightweight lawn chairs to the shed because hurricane force wind gusts were on the way due to rapid air pressure lowering. We were advised loose items could become projectiles. It only required lightweight lifting and it seemed within my capabilities. I had seven fractured vertebrae that occurred spontaneously from the multiple myeloma cancer. I needed to be careful and cautious because of my porous deteriorating bones.

Thursday morning I was experiencing severe low back pain in my sacrum. I wondered if I had fractured another bone moving chairs. Family members thought I should see the doctor because pain was obvious from my stooped posture and frequent face grimaces.

The winds howled for two days and by Friday night I was feeling fine. I think high air pressure in my abnormally porous bones was forcing its way out to equalize air pressure associated with the big drop in air pressure outside my bones. The force exerted great pressure outward in the bone causing pain.



Perhaps the pressure could even crack fragile bones. Pay attention to your bones during big air pressure changes.

Birds have hollow air-filled lightweight bones that permit easier lift for flight. The hard-outer layer of bones, called the periosteum, does not easily permit quick air movement. I

suspect when air pressure changes slightly or greatly, bird bones are more sensitive than mammal bones because of greater air space in bird bones. Air pressure equalizes and will be most noticeable when pressure is high inside bones and low outside.

Compare this with pressure in your ears when going up or down mountain elevations. A pressure problem is not noticed when walking up or down 3000 feet because pressure equalizes slowly. Driving is different. We experience ear pain with rapid elevation and air pressure changes. It is worse when sinuses are congested and makes pressure equalization more difficult.

Birds probably do not normally feel bone pain with small weather changes. When there is a rapid air pressure drop, it may likely be perceived with moderate ache sensation. I wonder if birds learn to associate bone ache with the coming of a storm and deliberately begin feeding or storing food more heavily. I will present another article about American Robins and Black-headed Grosbeaks having a rain song minutes before a strong weather front even though we perceive no apparent pressure difference.

I am currently reading about bird brains and associated learned behaviors. No mention is made about air pressure changes in bones or how it might impact bird nature niche behavior. Normally air pressure changes gradually and should not create discomfort. I hypothesize it might bring about subtle anatomical sensations that might alter bird behavior consciously or subconsciously.

Watermark credit:  
Ontrack-media.net

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# Salmon Die to Renew

*Many species depend on salmon to survive and thrive*

By Jason Fareira

Surviving often requires reaching deep to find strength just to make it through to the next day. In this year of Covid-19, like many of you, I find strength, peace, solace, and spiritual renewal in wild places.

Nature has its own way of renewing itself and the fall return of Chinook salmon is a major part of this renewal. Historically, millions of Chinook salmon return to the rivers of their birth to complete their life cycles. Today, however, only a fraction return, still those that do return continue the salmon's life cycle.

Also known as King, Chinook salmon spend four years swimming along the Pacific Coast. In spring they begin migrating from Baja, Mexico northward to their natal rivers and streams along the coasts of Northern California, Oregon, Washington, British Columbia and Alaska. Therefore, the return of salmon is a marker of time for more than 125

species that depend on salmon to survive and thrive.



Credit: Aleta Walther

While at sea, Chinook ingest marine nutrients that eventually fertilize rivers and also vegetation along the banks of their natal waterways. The vegetation seemingly knows that the returning salmon bring the building blocks for next year's growth. The salmon also

attract birds, including eagles, seagulls, blue herons, kingfishers, puffins and murre. The salmon also lure a multitude of mammals to the river system, including bears, wolves, minks, martens, weasels, and foxes. Marine mammals, like whales, orcas, sea lions and harbor seals, traverse salmon migration routes seeking a feast. Anticipating fruitful salmon runs, anglers pull out their newest gear.



Chinook Salmon - Photo by Gene Franklin

When salmon reach home, the waterways come to life. The water boils with the female salmon hard at work digging their redds (nests) and male salmon fighting to be the lucky ones to fertilize the eggs of the next generation. Shore birds wade deep into the water ready to eat eggs that float out of the nest. Migrating birds navigate

the Pacific Flyway south and stop along the way to snack on salmon that died after spawning. Insects like caddis flies and stoneflies feast on decaying salmon which in turn provide migrating songbirds with the food and energy they need to continue their journey southward.

Just as quickly as it began, the salmon spawning season ends. Migrating birds continue their journeys south, creatures that live along the river are a bit fatter and some, like bears, are ready for a winter's nap. The rivers themselves settle back into their calm, timeless flows from mountain to sea. Lastly, Mother Nature rests knowing her rivers are nurturing the next generations of salmon.



Blue Herron Eating a Fish Gill - Photo by Gene Franklin

Those of us who witness this annual renewal are all the better for it. Our hearts are a bit fuller as our own migration through life continues. If we just stop for a moment to watch and listen to nature, it will feed our spirit and renew our lives.

**Jason Fareira is the Deputy Director, Sierra Pacific Region**  
Scientific Aide/Interpreter  
California Department of Fish and Wildlife  
Nimbus Fish Hatchery, Gold River, California

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# I Spy With My Little Eye

*Inspiration can come from anywhere*

By Sandy Tolzda



Credit: Know Your Phrase

Where do ideas for interpretive programs come from? They come from inspiration. According to Oxford dictionary *inspiration* is “The process of being mentally stimulated to do or feel something, especially something creative”. How can we as outdoor educators and interpreters set ourselves up to be inspired? My suggestion, be open to ideas as they may come at any time, think, lightbulb moments.



Sandy Tolzda

For example: I was sitting in my living room a few months ago when my 6-year-old granddaughter Layla said delightfully, “I spy with my little eye”. My grandson and I listened as she described something in the room, giving us clues,

including its color, shape, and size. During the game, the idea came to me to create an [I Spy video](#) using videos and photos I recently shot at San Diego’s South Carlsbad State Beach Campground.

As an Interpreter for California State Parks, I create entertaining and educational videos for social media and for delivery through California State Parks’ Online Resource for Teachers and Students (PORTS). PORTS is a free distance-learning program staffed by a team of coordinators and presenters who create virtual programs for other educators, community groups and the public.

**But back to my inspiration for my I Spy video.** Once you have an idea, it seems to me anyway, things seem to fall into place. For example: During a recent Covid-19 closure at South Carlsbad State Beach, I had a chance to observe more wildlife than usual and took a

video and photos of what I saw. During my granddaughter’s “I Spy” game, the idea came to make a video using the video and photos I shot at the campground. I was further inspired to create my video after watching a YouTube video by Humboldt Redwoods State Park Naturalist John “Griff” Griffith where he talks about the “green blur”. The definition of green blur is exploring nature, but only seeing the big picture, not necessarily the diminutive details that Mother Nature offers.

I added the green blur concept to make my video informative and fun by highlighting some of the less noticeable wildlife within the campgrounds. Additionally, I added an *I Spy* guessing game to the video to encourage engagement while also adding another element of fun.

As your ideas come to you, and your *I Spy* video takes shape, don’t be surprised if your theme changes. Refocusing your idea or theme is a natural outcome of interpretive program development. You can also bounce ideas off other interpreters and even park volunteers. Their feedback may provide more inspiration and lead to even greater creativity.

Random ideas that come to you at any time may not be useful at the time, but you may be able to use them in the future. So log ideas in a journal or use reminders on your phone to be sure there is a way to refer back to those ideas when the need for inspiration strikes again.



Sandy Tolzda is the Interpretive Park Ranger 1  
California State Parks, North San Diego District

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## BOOK REVIEW

# Girls Who Looked Under Rocks

*Girls Who Looked Under Rocks, The Lives of Six Pioneering Naturalists*, by Jeannine Atkins and

Illustrated by Paula Conner

ISBN-13 : 978-1584690115

Reviewed by Kathy G. Magruder Miller, CIG

This is a great baby shower idea! Instead of a card, we were asked to bring a book and write our sentiments. We joyously went straight to Acorn Naturalist. Not many BABY books, but that is OK. This is my review of the book we gave to our sweet great niece baby Scarlett, now nearly 3 months old.

This might be called a teen book, easy to read brief biographies clarifying the huge and unique part each woman played in nature is studies. Many nature opportunities today are because of these women!

**Maria Sibylla Merian** began painting in the mid 1600's, studied the tiny details of insects and plants, thus learning what plants insects needed to eat, and what insects plants needed for pollination, which helped open a new era of science. Scientists were amazed at the detail of her paintings, which did sell, despite her gender. Read her bio and book for more details.

**Anna Botsford Comstock**, taught in her youth, graduated from Cornell, married her Entomology Professor, and assisted in him. She was hired as a Professor in 1895, only for it to be taken away the next year due to her gender. It was returned years later as her own book The Handbook of Nature Study, (a must read) became a huge seller and brought nature study into schools worldwide.

**Francis Hammerstrom**, grew through a childhood secret in nature. Later she married a dance partner who became her 59-year nature study partner of game birds. She became known for her conservation of Prairie Chickens, as one of the first female wildlife biologists.

Cornell University Bird Migration BirdCast  
Click [HERE](#) for Bird migration forecasts in real-time  
When, where, and how far will birds migrate? Our migration forecasts will answer these questions for the first time.

### Rachel Carson

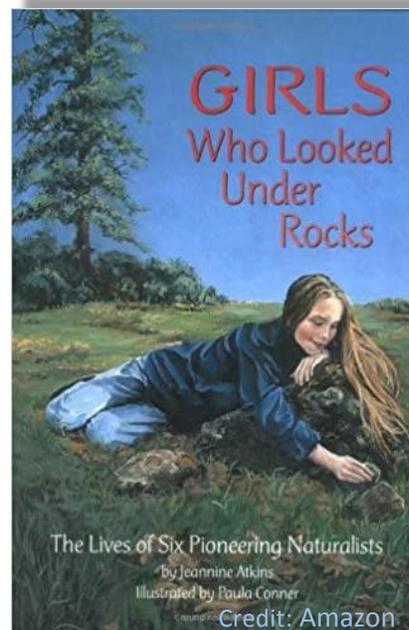
many of us know for her book Silent Spring (another must read). But did you know that she was the first woman (other than secretaries) to

be hired at a government Wildlife Agency. She wrote a second book The Sea Around Us (another good read!). In response to a friend's robins dying in mass, she learned of the problems with chemicals, thus her famous book and her public speaking which led to pesticide banning and environmental laws.

**Miriam Rothschild** had an unusual childhood with zoo animals on the surrounding grounds. She was the first person to record the extraordinary leaps of fleas. Read her book Fleas, Flukes, and Cuckoos. During WWII she shared her childhood mansion and grounds with refugees. Despite finding her mansion in ruins years later, she turned it into a natural habitat of 120 species of wildflowers. She gathered and sold the seeds, she helped others to do the same. She also wrote about political and social issues and helped make laws for the mentally ill, lesbians, and gay men.

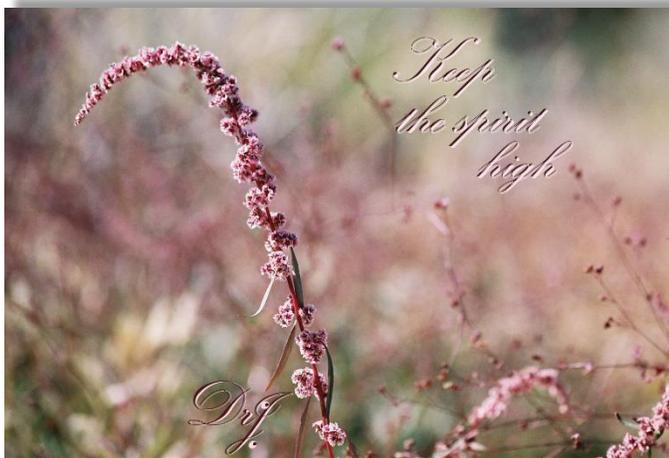
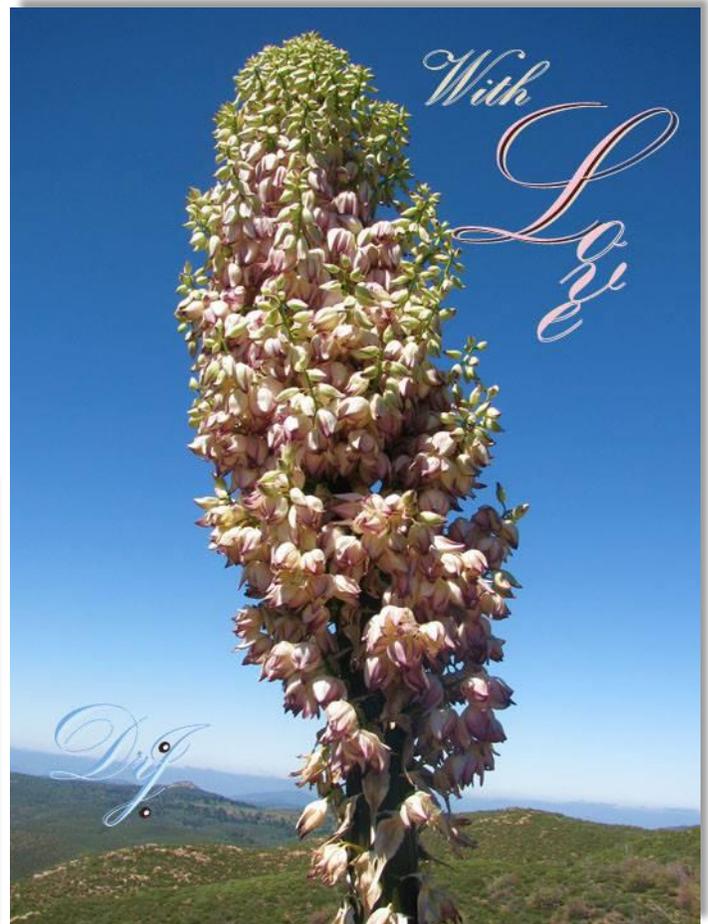
**Jane Goodall** was the first to prove that humans were not the only animals to use tools. Her patient observation allowed her chimpanzees to develop trust. She has done much more work for animals.

Consider this book Girls Who Looked Under Rocks to be a beginner inspiration and be prepared to follow it with much more reading and nature exploration.



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# Photos and Memes by Joseph Gerens



## Tell Your Story

Interpreters come from all walks of life, and we take all sorts of unique paths to this *career*. Our **“Faces of NAI”** video series will highlight the diversity of backgrounds, career paths, and interests represented in the field of interpretation. To see yourself featured in this series, which will be shared on social media and the NAI website, please send your video according to the following parameters to [pcaputo@interpnet.com](mailto:pcaputo@interpnet.com).

**Duration:** 2 minutes

**Format:** Digital video file such as .WMV, .MOV, and .MP4 (Phone cameras work well, but please shoot horizontally, not vertically—and be wary of the effects of wind on audio!)



### Please include the following:

Your name, title, and place of work  
How you got into interpretation  
What the field has meant to you  
Anything else that makes your story unique!

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# Murderous Frogs and Dead Wrens - A Victorian Christmas Card Story

By John Miller

**N**othing says Christmas Greetings more than the murder of a frog or a dead wren. *Huh?* If you lived in Victorian England, you would have paid top pound to create and send these motifs as Christmas Cards to your family and friends. *Seriously?*

Like 2020, Victorian times were grim with suffering, posthumous portraits, mourning rituals, and the daily occurrence of death. Unlike today, however, the average life span was 45 and many children never survived to see 5 years old. To take your mind off of your 19<sup>th</sup> century troubles and show others that things could be worse, you turned to some morbid cards that held symbolism of faith, culture, or fantasy.

In Victorian times science and faith were intertwined as seen in the frog card below. It was believed that frogs had to die in the winter so that it could be 'resurrected' in the spring. The running frog would have been viewed as carrying out this act by murdering the other frog. Note the faith symbols of the cross and the murderer carrying coins (in the 2000 bag) as payment for the deed.



Caption: "A Merry Christmas To You"  
Credit: Vaultofthoughts.com



Caption: "A Loving Christmas Greeting"  
Credit: Hyperallergic.com

The dead wren motif was to depict the moral of sleeping children in the forest. John Grossman, author of *Christmas Curiosities*, believes that the cards were "bound to elicit Victorian sympathy and may reference common stories of poor children freezing to death at Christmas." Additionally, killing of a wren was celebrated as an Irish ritual of good luck for St. Stephen's Day on December 26<sup>th</sup>. This day was also known as "Wren Day". So, getting a card with a dead wren on its back was meant as simply wishing a year of good cheer.

So next time you think that that life in our COVID pandemic could not get any worse, maybe you can cheer up your friends and family with holiday cards of dead birds and murderous frogs. *Maybe not!*

To see more strange Victorian cards and learn about their meanings visit these websites:

**Odd Victorian Christmas Cards**  
**Why Dead Birds on Victorian Christmas Cards?**  
**Strange Unsettling Christmas Cards**

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# The Gift of a Century with Bert Szabo

By Ray Novotny

Unfortunately, the stork didn't deliver Bert Szabo in time to bird with the good doctor Dr. Jared Kirtland (of Kirtland Warbler fame), but he arrived on Earth on December 4, 1920, about a week before the founders of the Cleveland Museum of Natural History met to sign the articles of incorporation.

I met Bert during autumn 1981 and became better acquainted beginning about two decades later. As he has attained the century milestone, it's my honor to share him with you. Here are a few things he shared in a recent interview:

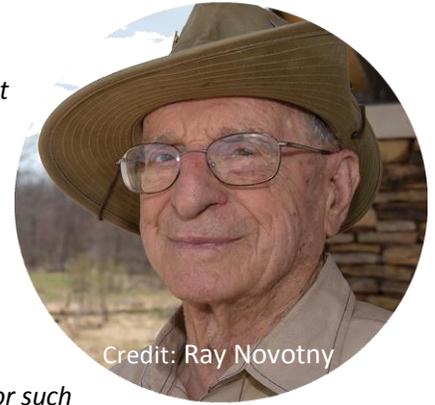
His biggest accomplishment was becoming the Kirtland Bird Club President and opening the membership to anyone. His birding legacy includes his son Mark who retired from a naturalist career at Huron-Clinton Metroparks in Greater Detroit. Grandson Howard Aprill is a naturalist with Milwaukee County Parks. Bert feels that birders can make the biggest world impact is by supporting conservation organizations. His best bird sighting took place in Africa and Central America, but his favorite places to bird are the Summit Metropark's Firestone and Crane Creek State Park.

Bert's son, Mark Szabo recalls that, "Dad's strong point (and biggest birding accomplishment) has always been his ability to turn people onto birding in a way that is gentle, helpful and unintimidating. He has mentioned how impressed he is when his dad meets a child who is already a competent, knowledgeable birder. That gives him hope for the future. I have observed many instances when people on the boardwalk at Crane Creek made statements akin to: 'Hi Bert. You wouldn't remember me, but you got me interested in birding in the early 1970s.' What a truly heartwarming situations to observe."

2021 marks 30 years since Bert retired. In his final article "Natural History of a Naturalist" he closed with: *"The pollution of our planet, the loss of forests, plants and animals must be our major concern. They are biological time clocks ticking off the time when man may no longer persevere. We cannot separate natural history from human history – each is dependent upon the other. Protecting our environment is essential for the health and welfare of*

*future generations. It is my hope that I have contributed somewhat to this endeavor."*

I'm sure you will all agree with son Mark's assessment, *"This was quite a humble statement for such a lustrous career."*



Credit: Ray Novotny

## Editor's Special Note:

### Bert's Lifetime of Well-deserved Honors include:

- Akron Metropolitan Park District hired Bert in 1957, naming him Naturalist in 1963.
  - Bert joined the Association of Interpretive Naturalists in 1958, served as President 1969-1971, and was honored as a Fellow in 1971.
  - Bert served on the Ohio DNR's Natural Areas & Preserves Council (Governor-appointed position) 1970-1983 and 1987-1994 and on the Old Woman Creek National Estuarine Sanctuary Council 1981-2004.
  - ODNR honored Bert with its Conservation Achievement Award, National Audubon Society with its Great Egret Award, and Ohio Biological Survey with its 2002 Naturalist Award.
  - Bert was an NAI Founder in 1987 and became a Life Member in 2007; and
  - Bert retired from Summit Metroparks with 34 years of service in 1991 and has since contributed over 7,000 hours as a volunteer.
- Bert was a generous contributor to the NAI Legacy Trust Fund, Pioneer Exhibit, and regional and national auctions; and to recognize Bert's generosity, Great Lakes Region 4 co-named its student scholarship after him.
- NAI honored Bert as Senior/Retired Interpreter, (National in 2002; Great Lakes Region 4 in 2006), and Outstanding Interpretive Volunteer (both Great Lakes Region 4 and National in 2012), and with its President's Award (2018) and the Special Recognition Award (2020).
  - Bert was inducted into four Halls of Fame: Summit Metroparks (2002), Ohio Department of Natural Resources (2007), Ohio Senior Citizens (2018), and Ohio Veterans (2019); and the City of Munroe Falls designated November 10, 2019, as Bert Szabo Day, and Summit Metroparks established December 4th as Bert Szabo Day in 2019, a practice that will continue annually.



L to R: Howard Aprill, Bert Szabo, Mark Szabo. Credit: Ray Novotny

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# What Is It? ANSWER

By John Miller

## Frost Flower

**D**espite its name, this is neither made of frost nor is it a flower. It is actually ice crystals shaped by the wind into petal-like folds. Midwest and Eastern US plants such as *Verbesina virginica* (white crownbeard), *Verbesina alternifolia* (yellow ironweed), *Cunila origanoides* (American dittany), and *Helianthemum canadense* (longbranch frostweed) are able to store substantial amounts of water in their roots. When the plant goes dormant, this water begins to 'wick' out overnight as unseen water vapor. When temperatures dip below freezing, the water vapor freezes as ice and is bent by the breeze. This creates these amazing frost flowers. Look for these plants in the summer and revisit them next winter for frost flowers. Don't delay, because the water stored in the root system may be depleted by late December.



Photo by John Miller

## Things to Look Forward to in 2021

*Click on Headings*



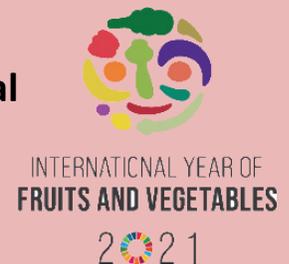
**Chinese New Year  
– Year of the Ox**

**International  
Year of Caves  
and Karst**



**2021 Meteor  
Shower Calendar**

**UN International  
Year of Fruits &  
Vegetables**



Credit: Ten at the Top

**Fun and Weird Holidays**

Examples:

Festivus = December 23

Ask a Stupid Question Day = September 28

Best Friends Day = June 8

Common Courtesy Day = March 21

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