



# Winter 2019

Volume 37, Number 1



Cover Photo Courtesy: Bridget Sandoval



# IN OUR LITTLE CORNER OF THE WORLD!

By Sue Cass, BCNA President

**T**hose of us fortunate enough to dwell on the western edge of the high plains, with the snow capped escarpment Major Stephen Harrimon Long christened the “Rocky Mountains” looming over us, know we live in a special place! One of the great gifts this place gives us is the ability to, from time to time, escape our crazed and chaotic affairs of state and focus on the natural world that surrounds us and the amazing creatures that reside therein, be they transient or resident.

To that end, over a decade ago BCNA formed an alliance with Boulder County Parks and Open Space (BCPOS) and our sister conservator, the Boulder County Audubon Society (BCAS), to attempt to stave off county-wide extirpation of an enigmatic and beguiling species, the Burrowing Owl! In 2007, when this open ended partnership began, the situation was dire with no recorded sightings over a period of several years and, then, a few

observations were confirmed. Both BCPOS and the City of Boulder Open Space and Mountain Parks (OSMP) initiated plans to monitor the owls with OSMP electing to do so with staff and, due to their extensive leased agricultural holdings, BCPOS choosing to recruit “citizen scientists” from respected environmental organizations like BCAS and BCNA. The objective was to determine how to best manage “open space” in support of the owls and their symbionts, the often reviled and under-appreciated prairie dog.

It was tough during the early years of the survey when few nesting Burrowing Owls were observed on the thousands of acres that comprised the targeted BCPOS properties and most monitors had little to no chance of actually seeing an owl. We would organize potluck picnics at Barr Lake in mid to late June when young owls could be observed above ground in an area in Adams County north of DIA, just so our monitors could actually experience the

owls in their natural habitat. Natural, that is, only if you consider prevalent oil and gas operations and jet aircraft screaming overhead “natural”! The owls don’t seem to mind at all!

This pattern continued in Boulder County until the 2017 season when you recall we reported a sudden and unanticipated up-tick in the number of nests on Boulder County open space (7 total/3 failed) and young fledged (16) from the previous year! Was this an anomaly or the beginning of a trend? Well, I’m here to report we appear to have established an incline in the population of nesting Burrowing Owls in Boulder County with consecutive seasons notching significant growth over the previous year. The 2018 monitoring period identified nine (9) nests on County open space (both public and leased agricultural) with thirty one (31) young observed and twenty-six (26) fledged. An additional nest was observed on privately owned land on which BCPOS holds a Conservation Easement which successfully fledged four (4) young, bringing the total for the season to ten (10) active nests with thirty (30) young fledged, another seismic boost to the Burrowing Owl population in Boulder County!

As if the new numbers weren’t encouraging enough, we learned from other agencies late in the nesting season that the Burrowing Owl population growth we’re experiencing in Boulder County is being mirrored across the Front Range! Given the tumult our species is dispersing across the region I wonder how that could be? When I find out I’ll let you know and if you would like to join us in 2019 email me at [suecass@comcast.net](mailto:suecass@comcast.net).

Photo Courtesy: Steve Jones







# EDUCATION NEWS

## 2019 Class Schedule Enclosed!

By Mary Stuber, BCNA Education Coordinator

**W**e're excited to preview our new classes for 2019 for you. The first one takes place in February, and the rest will follow all the way through November! You can keep your head in the nature game almost all year long just by joining us. Registrations for the first two will open quickly so, look over the new schedule right away and make your selections now to avoid being "skunked."

We're including a great new feature to help you keep track of when registrations open and what the actual class dates are more easily. Pull out your **Important 2019 BCNA Class Dates** sheet and keep it with your calendar and class brochure for a quick and easy-to-read reference.

Our special thanks to Bridget Sandoval for her beautifully designed class schedule.

## WHAT DO WE HAVE LINED UP FOR YOU?

Once again, we're pleased to introduce several instructors who are new to BCNA.

First is **Betty Naughton**, a familiar face in Boulder's Open Space and Mountain Parks' programs. Betty loves looking for signs of animal activity, especially after a bit of fresh snow, and figuring out the stories they tell. Join her for **The Joy of Tracking** as she shares skills that you can use to sniff out what may have happened before you arrived. Learn just what to look for and how to understand what it silently tells us.

I'm pleased to introduce another new instructor who is well known around Boulder's birding community. **Nathan Pieplow** will school us on a skill we would all like to

have, but often eludes us. In **Bird Sounds: Becoming an Expert Listener** Nathan will break down these sounds into their different parts and qualities, giving us a vocabulary to understand what they have in common and how they differ. Regardless of your experience level, you'll leave with a better understanding of what you are hearing when a bird begins to sing. And then, maybe "ear-birding" can become a reality for you.

Delve into the hidden world of some of Boulder County's most important pollinators with **Dr. Adrian Carper** in his class, **Introduction to Colorado's Wild Bees: Their Taxonomy and Ecology**. Our state has one of the most diverse wild bee faunas in the US and a long history of research on our native bees. Dr. Carper has been studying sites severely impacted by the 2013 flood to identify important nesting areas. Visit restoration areas with him and tour the University of Colorado's Bee Collection. Come hold a bee, yourself, as we capture and release specimens. Really!

Two of our most talented local photographers are teaming up to present a new class called **Nature Photography for the Enthusiastic Amateur: How to Improve**

**Both Taking and Processing Your Photos**. If you have a DSLR camera and are ready to move past its "auto" settings, and if you would like to know how to enhance your photos using computer post-processing, then this class is for you. **Leslie Larson and Vicki Braunagel** will share what each one has learned through her own ten years of trial and error. The course includes a follow-up day of personal attention to review and critique the photos you will take. Learn how others see your photographs. A new set of eyes on your work is often the most valuable thing you can get from a photo class.

We're also excited to have four of our most popular instructors back again this year. Some new class formats will replace our usual way of doing things and may pique your interest.

**Bill Schmoker** helps us go beyond needing to get a good look at a bird in order to know what it is. In **A Holistic Approach to Bird ID**, we will learn how to broaden our observations to include more of the available identification "puzzle pieces" to fill out our own bird ID tool boxes. Like what, you ask? There are so many cues and clues we could be using. Spend a day in the field



absorbing personal instruction from one of the elite birders in Boulder. This kind of training is an opportunity you don't want to miss!

I'm also pleased to welcome **Megan Bowes** back to help us parse out the **Wily Wetlands and Grasslands of South Boulder Creek**. A plant ecologist whose easy command of the green world will amaze you, Megan's special talent is sharing what she knows and loves with others in ways that are easy to understand. Riparian corridors and their floodplains have unique characteristics and their associated plant life has had to adapt to survive. Come explore this grassy, reedy, sedgy world where you can "get your feet wet" examining the whole mesic messiness – or not.

**Steve Jones** introduces us to **Milkweed and Monarch Magic**. The weird relationship between the Monarch butterfly and the milkweed plant is the stuff of magic. From the toxic host plant that protects the caterpillars to the odd flower structure that milkweed has developed to aid in pollination, this is a strange story indeed. The monarch's life cycle, and how it makes migration possible, sounds implausible.

Yet each year we watch hopefully for this beautiful butterfly's return northward, fulfilling the promise of life triumphing over long odds once more.

If you want to learn about dragonflies and damselflies (wait – there's a difference?), there's no one better to help you make sense of it than **Scott Severs** with his **Extraordinary Odonata – Dragonflies!** The order, Odonata, means "toothed ones." While they don't really have teeth, they are aggressive predators and carnivores. They're out for blood - but not yours. What's not to love? Both beautiful and vivid, we'll try to observe and photograph them after talking about their life cycle, behavior, and identification.

A favorite instructor from last year, **Sue Riffe**, owner of She Flew Birding Tours and board member of Colorado Field Ornithologists, is back this year with two fun classes – and she's put a brand-new twist on each of them. First up is **Birding Walden Ponds Through the Seasons** – a five-part class that invites you to explore an important birding "hotspot" that's right in your backyard during each distinct season of a year-long period. You may join her for just one, or as many of her dates as you like,

beginning with an evening discussion of how migration and bird ranges affect what you will find there and when, followed by five field trips to see what's there in spring, summer, fall, and winter. (Register separately for each date or time you want to attend by choosing from the drop-down menu on the class's Eventbrite page).

Then, in November, Sue will dispense with the usual evening class altogether, opting instead for a special day in the field she calls **Birding Fall Specialties in NE Colorado**. The South Platte River, a dominant feature of the landscape, attracts many species. Local reservoirs and ponds bring in great numbers of waterfowl. We're out to find fall "specialties" – birds you might expect to see in this place at this time. They will include birds we don't usually see here in Boulder. We probably won't find them all, but we'll thoroughly enjoy our treasure hunt for them, nonetheless. See the class brochure for links to eBird bar charts showing average monthly species projections for both classes!

## **What every wise naturalist knows –**

Pull your 2019 Ecology Field Class Schedule out of this newsletter, along with your

**Important 2019 BCNA Class Dates** sheet, and keep them both handy or with your day-planner to remind you of important registration and class dates. They tell you exactly when enrollments open for the classes you want. Jot the dates down in your calendar as you start the new year. We'll send reminders, too, on Nature-Net, our email announcement and discussion group. It's a great way to stay informed about local environmental issues and opportunities. To subscribe, just send a blank message to [nature-net-subscribe@yahoogroups.com](mailto:nature-net-subscribe@yahoogroups.com).

**WE HOPE TO SEE YOU SOON IN  
ONE OF OUR CLASSES!**



# BEAUTY AND THE BEAST

## Is That a Noxious Weed on the Cover of my Newsletter?

By Megan Bowes

**T**he striking image of a common teasel seed head with backlit hoarfrost strikes an elegant winter pose. I witnessed a young couple gather an imaginative bouquet of dead stalks while along Boulder Creek near Walden Ponds many moons ago. Others likewise admire the arty seed heads and spray-paint them a glittery gold or silver for flower arrangements and wreath ornaments. I even sowed the seeds in the backyard of a client in Northern Virginia; he had recently returned from a trip to Colorado and wanted to introduce the plant in his garden (and I was a 19-year-old without much of an understanding of ecology).

Twenty-plus years later, I know the perils of common teasel, designated a “List B” species in the Colorado Noxious Weed Act which legally necessitates the eradication, or in some cases containment or suppres-

sion, depending on state regulations. Native to Europe, where historically it is believed to have been used to card or nap wool, it has infested nearly all the US and at least half of Canada. Teasel is a biennial, growing leafy rosettes the first year and flower stalks the second before dying, with purple or sometimes white flowers and prickly stems and leaves. And it can produce more than 2,000 seeds per plant!

As an ecologist with the City of Boulder, my staff works extensively in the South Boulder Creek riparian corridor and associated floodplain. Much of their work is mechanically mowing, weed whipping, clipping of seed heads and chemically spraying plants in the Open Space and Mountain Parks lands located between the Bobolink Trailhead and the Marshall Road trail access; we also work with our Agricultural managers to implement prescribed grazing. This



area is a Colorado State Natural Area which “features a mosaic of high-quality wetlands, wet meadows and mesic grasslands, including plains riparian forests and tallgrass prairie ecosystems” ([CNAP](#)).

This is likely the most intact plains cottonwood riparian ecosystem that Boulder is incredibly lucky to manage. It provides “essential wildlife habitat and contributes to the biological diversity of floodplains along the Colorado’s western plains” as the riparian, wetland and grassland communities found along South Boulder Creek are considered by the Colorado Natural Areas Program “to be among the best preserved and most ecologically significant in the Boulder Valley”. They provide habitat for four species of concern: Ute ladies tresses orchid (a federally threatened species so named because the spiraled flowers resemble the way Ute women would braid their hair), Preble’s meadow jumping mouse (another federally threatened species), Northern leopard frog (a Colorado species of special concern recently denied federal protections), and bobolink (a locally rare bird on the edge of its range).

All of that said, teasel control (contain-

ment/suppression) is of upmost concern to ecologists with Boulder’s OSMP. In the 1990’s the greatest concern was Canada thistle, while today it is clearly teasel. This species and it’s kissing cousin cutleaf teasel compete for space against our native stalwarts, the species detailed above, as well as numerous other native functioning species and communities. We do our very best to restore riparian, wetland and grassland communities across the Boulder system and control of common teasel is one of the things at the top of the list.

## LEARN MORE ABOUT NOXIOUS WEEDS

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<https://www.colorado.gov/pacific/agconservation/noxious-weed-species>

<http://wssa.net/wp-content/uploads/WSSA-Weed-Science-Definitions.pdf>

<https://bouldercolorado.gov/ipm/noxious-weed-ecology>



# BCNA REQUEST FOR GRANT PROPOSALS

Application Deadline: Monday, February 18, 2019

By Megan Bowes, BCNA Grants Committee Chair

**B**oulder County Nature Association is pleased again this year to offer research funding by giving small grants for projects consistent with our mission. Grants are available in two categories:

The Ken Evenson Memorial Grant, up to \$2000, is available specifically for research on our native cats (mountain lion, lynx, and bobcat). One grant may be awarded annually.

General BCNA grants, up to \$3,000, fund projects that will add to our understanding of the natural history of Boulder County or will augment the existing documentation of the county's ecosystems. Past projects include a survey of butterfly species, a study of bat species and their ecological requirements, pika habitat and climate change, and a comparison of flora

and fauna adjacent to trails that allow dogs and don't allow dogs, among many others. Exceptional proposals may be considered for funding at a slightly higher level. Proposals are judged on their scientific rigor, prudent use of resources, and the potential benefit to natural resource conservation and management along the Front Range.

Applications should be submitted not later than **Monday, February 18, 2019**, to Megan Bowes (bowesm@bouldercolorado.gov) the chair of the Grants Committee. More information about grant applications and requirements at: <http://bcna.org/grantapplications.html>

***If you are interested in helping guide BCNA in deciding what research projects we should fund for 2019, WE NEED YOU!***

The proposal review process will occur between Feb 18 and Mar 1st and will include reviewing proposals, meeting to discuss the proposals and choosing the proposals to recommend to the BCNA Board for funding. Contact Megan Bowes, chair of the 2019 Grants Committee, at [BowesM@bouldercolorado.gov](mailto:BowesM@bouldercolorado.gov), indicating your interest in volunteering.

## CURRENT AND RECENT RESEARCH PROJECTS

SPONSORED BY BCNA

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- *Conserving Northern Leopard Frogs on Colorado's Front Range*
- *Drivers of Spatial Heterogeneity in Nitrogen Processing among Three Alpine Plant Communities in the Rocky Mountains*
- *The Effect of Urban Areas on Avian Species Interactions*
- *Butterflies in Three Boulder County Open Spaces - Effects of the 2013 Flood*
- *The Front Range Pika Project*
- *Determining Lichen Individuality Through Analysis of Ploidy Architecture*
- *Proposal to assess the impact of rock-climbing on local avian cliff communities in Boulder OSMP*



# 2019 ANNUAL ECOSYMPIUM

By Claudia VanWie, Ecosystems Committee Chair

**O**n Saturday, March 16, BCNA will host the annual ecosystem symposium at the University of Colorado SEEC Building, 4001 Discovery Dr, Boulder. The ecosystem symposium will again be at the SEEC Building, 4001 Discovery Dr, Boulder.

The year's symposium will focus on ecological change in the Front Range and the implications for resilience and management.

Change is a constant in ecological systems, but in the Anthropocene age, human impacts are dramatically influencing the nature and pace of ecological change—literally and metaphorically changing the landscape around us. This symposium will explore what we know from recent research and monitoring studies about change to plant, animal

and microbial communities in the Front Range from the alpine to urban forests. We will consider the implications for managing these communities for resilience and restoring them not to some idealized and static past, but to a dynamic future.

Keynote speakers will describe research observations of change in local Front Range ecosystems from the alpine to the urban forest. Short talks will highlight local observations and raise questions for nature observers to notice. We will close by considering what it might mean to “restore forward” in Boulder County.



# BECOME A BCNA MEMBER

By Terry Escamilla, BCNA Membership Committee Chair

**D**ecember is a great time to become a BCNA member. Our memberships run from January through December, and 2019 is just around the corner. The best way to join is online at [www.bcna.org/member](http://www.bcna.org/member) where you can find information about the different membership levels.

Here are just some of the reasons why we love BCNA and value your participation:

- Influential input on environmental issues in Boulder County
- Important Citizen projects on wintering raptors, pika, burrowing owls, and more
- For 30 years our members have studied the plants, wildlife, and natural landscape of our region and used our acquired knowledge to conserve native ecosystems
- Classes led by experts in many fields on birds, bats, butterflies, wildflowers, geology, ethnobotany and more
- Activities, and programs each quarter offered at no charge to all members
- Ecosystem Symposium - a full day of information and education about important environmental issues
- Interesting and informative website
- Regular BCNA Buzz emails to alert you to current topics of interest
- Quarterly newsletter and off-month email publication BCNA BUZZ to keep you in touch with the latest BCNA activities

If you prefer to apply by mail, please return the form on the back of this newsletter.



# BCNA BOARD OF DIRECTORS

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### **State and Regional Wildlife Issues**

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**BCNA RESEARCH PROJECTS**

**Allegra Collister Bird Banding Project**

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**Burrowing Owls Survey**

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**Butterfly Surveys**

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**Ecosystem Stewardship Project**

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**Indian Peaks Bird Count**

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Bill Kaempfer, Coordinator  
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**Wintering Raptor Survey**

Sue Cass, Coordinator

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**Webmaster**

BCNA: Claudia VanWie  
Butterflies of Colorado: Cathy Cook

**Our Mission:**

*To educate, inform, and inspire  
for the purpose of conserving  
and promoting resilient natural  
ecosystems in our region.*

# Support the Boulder County Nature Association

*The easiest and best way to join is to go to <http://bcna.org> and click on "JOIN" at the top of the page. Then just follow the directions. You can pay using your PayPal account or another credit card. Thanks!*

Name \_\_\_\_\_

Address \_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_

## Type of Membership:

\_\_\_\_\_ Student/Senior (65+) **\$15**

\_\_\_\_\_ Founder **\$100**

\_\_\_\_\_ General Member **\$20**

\_\_\_\_\_ Life Member **\$300**

\_\_\_\_\_ Family or Household **\$30**

\_\_\_\_\_ Corporate **\$500**

\_\_\_\_\_ Supporter **\$40**

## Make a Donation!

\_\_\_\_\_ Allegra Collister Fund

\_\_\_\_\_ Research Support Fund

\_\_\_\_\_ Jim McKee Memorial Fund

\_\_\_\_\_ Unrestricted Donation

\_\_\_\_\_ Native Cat Fund

The membership year is January 1 to December 31. Those who join after October 1 are considered members in good standing through the following year. All members receive this quarterly newsletter. Supporter -level members and higher also receive a complimentary copy of each BCNA publication.

Please make checks payable to "Boulder County Nature Association" or "BCNA" and mail to:

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