Sky Island Tours
Jeff Babson
Jeff@SkyIslandTours.com
www.SkyIslandTours.com
Phone: 520-488-8551

The Sky Island News

Vol. 17 No. 3 **March 2026**

"Nothing in biology makes sense except in the light of evolution."

Theodosius Dobzhansky

It appears as though spring has sprung in southern Arizona. The winter rain and warm temperatures have led to many flowers blooming, butterflies on the wing, moths coming to the lights, and birds singing and even constructing nests. The long cold Arizona winter looks like it is over! If you are reading this where winter is still in charge, hang tight. You, too, will see signs of spring soon when Nature is re-born. It is an amazing time of year. Get out and enjoy it!

I hope you like this month's issue!

March Field Trip

Santa Crux River in Tubac. Wednesday, March 25. 7:00 – 11AM. Cost is $10/person. Email (jeff@skyislandtours.com) to register. LIMIT 15 PARTICIPANTS.

This month we head to the Santa Cruz River in Tubac. We will bird north of the Tubac bridge where we will scan the skies and cottonwoods for our feathered friends. We will meet in the Safeway Shopping Center at I-19 and Continental Road and carpool to the site.

March Classes

Common Gray Fox
Ryan Fitzgerald

Wild Dogs of the World. Friday, March 6. 10AM-12PM. Las Campanas (565 W. Belltower Dr., in Green Valley). To register, call 648-7669 or visit https://www.gvrec.org.

Foxes, wolves, and coyotes are familiar animals in much of the world. This class explores the diversity, natural history, and conservation of the world's canines.

Buteo Basics: Natural History and Identification. March 16, 2-3:30PM. Tubac Community Center (50 Bridge Rd, in Tubac). Part of the Tubac Hawkwatch Festival.

Buteos are familiar birds that, due to variation within species, present some identification challenges. This presentation will help birders sort through the buteos and how to separate them from related hawks.

The World of Bats Friday, March 20. 10AM-12PM. Las Campanas (565 W. Belltower Dr., in Green Valley). To register, call 648-7669 or visit https://www.gvrec.org.

Bats, the only mammals capable of flight, are diverse in species, appearance, and habits. In this class we explore the nocturnal world of these fascinating animals, including debunking myths about them and how to census bats in your neighborhood.

The Evolution of Plants. Friday, March 27 . 10AM-12PM. Virtual Class Via Zoom. Tucson Botanical Gardens. To register, use this link https://tucsonbotanical.org/class-schedule/.

The evolution of plants is one of the most important stories of life on Earth. From single-celled algae in the sea to towering redwoods and the spectacular diversity of flowering plants, they have made all other life possible. This class traces the remarkable story of the evolution of plants.

Pima County Presentations

These online programs are free but you must register in order to receive the Zoom link to the presentation. The programs are recorded and all who have registered will receive the link to the recording. If you have questions or need assistance, contact us at: eeducation@pima.gov.

Visit our Eventbrite page at https://bit.ly/Nature-Online-Tickets to register. Once registered you will receive a link to the Zoom presentation. Note that we have switched ticketing platforms and this is a new link.

Adventures in Birding: Grebes. Tuesday, March 3. 7-8PM. Virtual Presentation via Zoom. Free, but registration is required. To register visit https://bit.ly/Nature-Online-Tickets. Once registered you will receive a link to the Zoom presentation.

Grebes are interesting birds – consummate divers that, at least in some species, have fantastic courtship displays, and are found on many different types of wetlands. In this month's episode of AIB, we look at grebes, both in North America and around the world.

The World of Mammals: Deer Mice. Monday, March 16. 7-8PM. Virtual Presentation via Zoom. Free, but registration is required. To register visit https://bit.ly/ticketsEE. Once

registered you will receive a link to the Zoom presentation.

Looking a lot like mini woodrats, deer mice are an abundant part of the mammalian fauna in many terrestrial habitats. There are several species found in the Sonoran Desert. This month we look at these wonderful rodents.

Order Up! Roly Polies. Tuesday, March 24. 7-8PM. Virtual Presentation Via Zoom. Free, but registration required. To register visit https://bit.ly/Nature-Online-Tickets. Once registered you will receive a link to the Zoom presentation.

Known by a variety of names – isopods, woodlice, and pill bugs to name a few, roly polies are often found under logs, rocks, and other objects. This month we look at these unassuming creatures.

Lifestyles of the Smooth and Scaly: Spiny Lizards. Monday, March 30. 7-8PM. Virtual Presentation via Zoom. Free, but registration is required. To register visit https://bit.ly/Nature-Online-Tickets. Once registered you will receive a link to the Zoom presentation.

If you live in southern Arizona, you have likely seen spiny lizards. Named for the keels on their scales that give them a spiny appearance, these reptiles are widespread in the Southwest in many habitats.

Join us in the Beautiful Chiricahua Mountains in May with Arizona-Sonora Desert Museum

The annual ASDM trip to the beautiful and birdy Chiricahua Mountains is May 1 – 3., 2026 We will stay at the Southwestern Research Station and explore the canyons and woodlands of the largest Sky Island Range in Arizona. Birds we hope to see include Montezuma Quail, Coppery-tailed Trogon, Mexican Chickadee, Painted Redstart, and many others. As an added incentive, spring migration will still be going on and we expect to see some migrants on their way north. For more information on both trips and to register, visit https://desertmuseum.doubleknot.com/adult-trips-and-classes/75596.

We hope to have you on the trip!

Sky Island Tours
Jeff Babson
Jeff@SkyIslandTours.com
www.SkyIslandTours.com
Phone: 520-488-8551

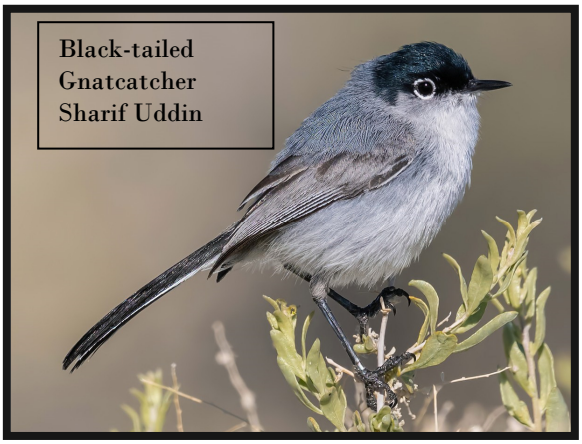
What's in a Name: Gnatcatchers

Gnatcatchers are small, long-tailed, active, insectivorous birds that can be found from southern Canada to southern Brazil and Argentina, reaching their peak of diversity in the tropics. They are placed in the Polioptilidae, along with their longer-billed, shorter-tailed cousins, the gnatwrens. The family includes 3 genera and 22 species, 4 of which live in North America. Their closest relatives are the 'true' wrens in the Troglodytidae.

All 4 North American gnatcatchers are in *Polioptila*, which includes 18 of the family's 22 species. The name derives from Greek words meaning 'gray plumage,' an accurate name as all members of the genus are bluish gray in color with black and white in the tail and black markings on the head. It was coined in 1855 by English zoologist Philip Lutley Sclater, who was a big deal in ornithology at the Natural History Museum in London in the mid-1800s.

The most widespread gnatcatcher in North America is Blue-gray (*P. caerulea*), which was named by Carl Linnaeus in 1766. The species name is Latin for blue. Putting the genus and species names together, one gets a nice description of this bird! Widespread from southern Canada to Honduras, Blue-gray Gnatcatcher is composed of 7 subspecies, 2 of which occur in North America. The nominate is found in eastern North America, from the western edge of the Great Plains to the Atlantic coast. The western subspecies, *obscura*, occupies the West. This subspecies has slightly less blue tones to the plumage, a thicker black forehead mark, and less contrast in the supraloral line than the nominate form. The subspecific epithet is Latin for 'dark, dusky, obscure,' though I cannot say what Robert Ridgway had in mind when he described this form in 1883. Some believe the 2 North American forms are actually separate species. Stay tuned!

California Gnatcatcher (*P. californica*) is found in coastal chaparral in southern California, extending through most of the Baja peninsula. It was formerly lumped with Black-tailed Gnatcatcher but was split based on vocal and morphological differences. This gnatcatcher was described in 1881 by American ornithologist William Brewster, who named after the state where specimens were collected used in the description. Due to habitat loss and development, California Gnatcatcher is listed as Threatened by the US Fish and Wildlife Service.


Black-tailed Gnatcatcher
Sharif Uddin

The common desert gnatcatcher in southern Arizona is the Black-tailed (*P. melanura*), whose scientific names translates as the common name. Ranging from southeastern California to western and southern Texas, southward to northern Mexico. American businessman and ornithologist George Lawrence described this species in 1856 from specimens collected in the Rio Grande Valley in Texas. The form in Arizona is the subspecies *lucida*, meaning 'clear, bright.' It was described by Adriaan Joseph van Rossem in 1931 from birds that came from Sonora.

The last gnatcatcher on the North American list is also the most range restricted, the Black-capped (*P. nigriceps*). A highly sought-after west Mexican species, this

bird breeds in small numbers in southeastern Arizona. The species name is Latin for 'black head.' While Black-tailed Gnatcatcher can have almost as much black on the head as Black-capped, the names for North American gnatcatchers do a good job of describing their appearance. Black-capped was named in 1864 by Spencer Fullerton Baird from birds collected in Mazatlan, Sinaloa, Mexico. It seems to me that numbers of this bird have dropped in southeastern Arizona in recent years. On the other hand, they may be overlooked.

Identifying gnatcatchers as such is fairly straightforward if one gets a good look (not always easy). But identification to species can be problematic. Focus on the undertail pattern and the extent of black on the head.

Enjoy these restless sprites!

Delightful Deer Mice

Earth is, from a mammalian perspective, the planet of rodents. The order Rodentia includes 2,754 species, found on all continents save Antarctica. There are terrestrial, arboreal, fossorial (burrowing), and semi-aquatic rodents. There are carnivorous, omnivorous, and herbivorous rodents. You get the idea. One widespread group of rodents are the deer mice, also known as white-footed mice, in the genus *Peromyscus*.

There are 85 species in the genus, ranging from northwestern Canada to Central America. Twenty deer mice are recorded from the US and Canada. Many have small ranges, such as El Carrizo Deer Mouse (*P. ochraventer*) which is restricted to a very small area on northeastern Mexico, Tres Marias Deer Mouse (*P. madrensis*) of its namesake islands off the west coast of Mexico, and Dickey's Deer Mouse (*P. dickeyi*) known only from the island of Tortuga in the Sea of Cortez.

Mesquite Mouse
Horatio Barcenas

Deer mice look like small versions of woodrats (packrats). They are small to medium sized rodents with body lengths of 3 – 4 inches with a tail equal to or longer than body length. They weigh about 1 ounce. They have large eyes, large ears, and long whiskers, befitting their nocturnal habits. Back color is brown, gray-brown, or orange-brown. Some species have orange on the sides that contrasts with the white belly.

At least 1 species of *Peromyscus* is found throughout North America, occupying boreal forests, tundra, deserts, mixed forests, swamps, marshes, and grasslands. They are mostly terrestrial but do climb into trees and shrubs. They will also occupy woodrat middens and burrows abandoned by other mammals.

Sky Island Tours
Jeff Babson
Jeff@SkyIslandTours.com
www.SkyIslandTours.com
Phone: 520-488-8551

The deer mouse diet is composed of insects and other invertebrates, seeds, fruits, green vegetation, and fungi. Some, like the Canyon Mouse (*P. crinitus*) of western Arizona, and northwestern Mexico to Oregon, Idaho, and Colorado, does not need to drink water, obtaining all of its water from their food.

Litter size ranges from 1 – 8 or so, with the typical litter around 4. Litters can be born almost any time of year, depending on species and latitude.

Arizona is home to 10 species of deer mouse. Identifying them by sight or in photographs is a challenge, but location and habitat are good places to start. Some new species have been described in recent years, largely the result of genetic evidence. For example, Lacey's White-ankled Deer Mouse (*P. laceianus*) of Texas, barely extending into southeastern Oklahoma and southeastern New Mexico, was raised to species level in 2015 based on DNA and morphological evidence. It was described in 1906 but was considered to be a subspecies of Southern White-ankled Deer Mouse (*P. pectoralis*) of Mexico until the change in status.

If you are reading this almost anywhere in the US or Canada, you likely have a deer mouse nearby. You may be lucky and actually see one! If you want to try to observe a deer mouse in the wild, head out at night with a flashlight or head lamp. Good luck!

Butterfly Profile: Texan Crescent

2026 has gotten off to a pretty good start for butterflies in southeastern Arizona. The warm winter and winter rains have produced suitable conditions for the emergence and survival of adults of a respectable number of species. One of these is Texan Crescent (*Anthanassa texana*). A recent trip to Patagonia Lake State Park produced dozens of adults nectaring on the yellow flowers of an unidentified shrub.

The upper side of Texan Crescent is black with white spots on the forewing and a white spot band on the hindwing. Reddish orange is found at the base of all 4 wings (southeastern populations have more extensive and brighter orange than those in the west). The forewing below is orange basally with dark brown to the wing margins. The hindwing below is crossed by a white median band. The underside pattern of this butterfly is complex!

The range of Texan Crescent is primarily southern, extending from southeastern California to northern Florida. Occasionally they stray farther north and have reached Utah, Nebraska, and South Carolina during such flights.

Adults readily visit flowers and will sometimes be found at mud. The caterpillars feed on members of the Acanthaceae or acanthus family. Known foodplants in southeastern Arizona include Arizona Foldwing

(*Dicliptera resupinata*), Chuparosa (*Justicia californica*), and Firecracker Bush (*J. spicigera*), which is an ornamental.

Adults are on the wing all year in southern Arizona with multiple broods produced each year. They are most abundant in the warmer months. However, in years with warm winters, like this year, they can be numerous.

Texan Crescent is the most widespread member of its genus in North America. Three other species come north from Mexico to the Lower Rio Grande Valley in Texas. Another species is found in the southern half of the Florida peninsula but its main range is in the Caribbean. A further 2 species have been reported from south Texas but their identities have not been verified. In the past, some lepidopterists have placed these butterflies in *Phyciodes*, but most accept their current placement in a separate genus.

If you have flowers in bloom in your yard or see some on a walk, stop and take a look. There is a chance that Texan Crescents will be present, getting a sip of nectar to fuel their flight.

Moth in the Spotlight

Even though many moths are clad in earth tones they can still be beautiful. Not every creature can be a Faithful Beauty (see last month's newsletter). The somber hues of many moths are the result of millions of years of evolution, allowing them to survive long enough to find a mate and pass their genes on to the next generation without being eaten. To many, these moths are not that impressive. But I would beg to differ. There is much subtle beauty in these creatures if one stops to take a look.

A case in point is a moth that I recently met. It showed up at my lights a couple of weeks ago. Among the Creosote Moths, Oblique Loopers, and Short-crested Tolypes was one that stood out. I didn't recognize it but was struck by its appearance. I grabbed my new western moth field guide (see book review below) and started to look through it. I went to the Noctuidae section, as the moth's shape seemed to be a good fit for that family. Thumbing through the pages, I got to page 528 and found a match - Scribbled Sallow (*Sympistis perscripta*).

Light gray in color, the most conspicuous mark on a Scribbled Sallow is the black

antemedial line that crosses the forewing. The postmedian line is thinner and both of these lines are edged with warm brown. The orbicular, reniform, and claviform spots are thinly outlined with black.

According to John Himmelman in his outstanding *Discovering Moths,* the word sallow is derived from *Salix*, the Latin word for willow, which is the caterpillar food plant for some English species. Scribbled Sallow use snapdragons and toadflax, both of which are in the plantain family (Plantaginaceae) as larval food. They may also use native plantains as I do not have either of their documented food plants in my yard (but my neighbors may).

Sallows are noteworthy for taking flight early in the season. The flight period of Scribbled Sallow in Arizona is January to May. The range extends from northern California to southern Texas and along the east coast from the Florida Panhandle to Maine. Scribbled Sallow was described in 1852 by French entomologist and lawyer Achille Guenée.

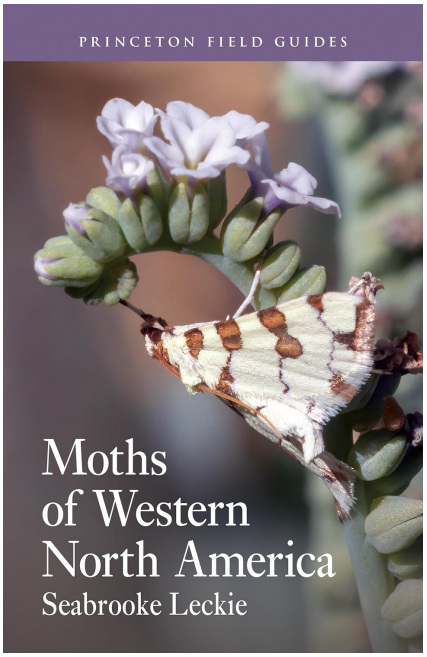
Perhaps you have Scribbled Sallow in your yard, too. Turn those lights on and see!

Book Review **Moths of Western North America. Seabrooke Leckie. 682 pages. Princeton. 2026.**

I was very excited when I first heard about this book last fall and immediately pre-ordered it. Seabrooke Leckie is co-author (with David Beadle) on *Field Guide to Moths of Northeastern North America* (2012) and *Field Guide to Moths of Southeastern North America* (2018) and knows what she is writing about.

The book begins with an Introduction that includes sections on getting into the pastime of mothing, how to identify moths, taxonomy, conservation, and other topics. Included here are photos that show the moth wing topography and the terms that come up throughout the text. Adult flight periods are shown using 4 colored icons that are a nice innovation that is quite handy and easy to understand.

Unlike her previous guides, the new guide is a larger format book offering larger photos, making identification of the tremendous diversity of western moths that much easier. This is a welcome development as many moths are similar in appearance and subtle details are more visible in the larger photos. And there are a lot (over 2,000) photos in this guide!



The book follows the currently accepted taxonomic sequence of moth families, beginning with the Metallic Leaf-miners (Eriocraniidae) and ending with the darts (Noctuidae). Each species account includes common name (many coined by the author), scientific name, abundance (rare, uncommon, common, very common), and the Hodges' and Moth Photographers Group numbers. These are somewhat akin to the banding codes used by birders but are a numeric shorthand instead of using letters.

Following the species' heading, the total length (in millimeters) is given in bold. The moth is then described with key field marks indicated by arrows on the accompanying plate on the opposing page. Many terms,

like antemedian line, postmedian band, reniform and orbicular spots, are mentioned on every page so beginners will frequently consult the topography diagrams when getting started. Caterpillar foods come next (not always plants!). Some species have a Notes section that provides information of diurnal activity, variation within a species, and similar topics.

Western North America is a large area with diverse topography and a lot of moths. Leckie's guide includes an impressive 1,900 of 'the most common species.' Even with such extensive coverage, many species are not included. A more comprehensive guide to the area would be a huge book (or books) that would be prohibitively expensive and would require a Sherpa and a wagon to use in the field. But, as indicated above, the guide includes many species that are likely to be seen at your patio lights at night or at flowers or mud during the day. I selected several species off the top of my head to see if they were included and they all are here.

Going through this volume reveals how diverse moths are in terms of size, shape, color, and pattern. Some are strikingly beautiful. Others are remarkably camouflaged, clad in earth tones that would be very difficult to pick out among the leaf litter, lichens, and tree branches. Some rest in strange positions.

If you are interested in moths then you need to pick up a copy of this book. If you live or travel in western North America, you will consult this book a lot. It is a landmark achievement and a welcome addition to any moth-ers library.

New Species Report

This month's column is a bit different from the usual. Instead of highlighting a newly discovered species, I present a summary of a fascinating new article that offers the potential to fill this space for decades to come. This article, *"Cryptic species are widespread across Vertebrates"*, by Yinpeng Zhang and John Wiens (both from the University of Arizona), was published in *Proceedings of the Royal Society B*.

Before diving into the article I would like to define what is meant by the term 'cryptic species.' This refers to species that are identical in morphology but differ in nuclear and/or mitochondrial DNA. Without genetic analyses, one could look at a cryptic species and have no idea that it was distinct from other, look-alike, species. Such species can have important implications for ecology, evolution, and conservation.

The authors looked at 373 studies across the vertebrate spectrum that treated species limits. Thus, they included studies of cartilaginous fishes, ray-finned fishes, amphibians, reptiles, birds, and mammals. What they discovered was astounding. They found that each morphology-based species contained 2 cryptic species on average. This was constant across dramatic differences in ecology and physiology (fishes and birds, for example). Simply put, there could be double the number of vertebrate species than are currently recognized. That is bananas!

Taking mammals as an example, the studies found that each morphology-based species contained 0.7 cryptic species. Currently, there are 6,871 mammal species recognized (according to the Mammal Diversity Database, which is maintained and regularly updated by the American Society of Mammalogists). Note that the number of cryptic mammal species is slightly below that of vertebrates as a whole. Doing some

quick math, this means that there are 4,809 cryptic mammal species out there, raising the total number of mammal species to 11,680!

If the predictions based on this study hold true, the number of bird species would increase to 22,334, the number of non-avian reptiles would be slightly higher (22,678), amphibians would increase to around 18,000, and the number of fish species would explode to approximately 72,000!

The dramatic increase in the number of vertebrate species recognized has important implications for conservation. For example, the Chinese Giant Salamander (*Andrias davidianus*) is currently thought to be 1 wide-ranging species that is listed as Critically Endangered by the International Union for the Conservation of Nature (IUCN). Recent analysis suggests that this 1 species may actually be 7 to 9 species, each of which should be classified as Critically Endangered.

If this study holds true to it's predictions, there is a lot of work that needs to be done!

Did you know?

... that recent fossil discoveries on the Arctic Island of Spitsbergen show that life made a stunningly fast comeback after the world's most significant mass extinction event? The end-Permian extinction 252 million years ago, often called the Great Dying, eliminated more than 90% of marine species. This is not the extinction that wiped out the dinosaurs, which happened 186 million years later, at the end of the Cretaceous. Paleontologists uncovered more than 30,000 fossilized teeth, bones, and other remains on Spitsbergen that revealed a diverse ecosystem of marine reptiles, amphibians, bony fishes, sharks, and invertebrates, signaling complex food chains, a mere 3 million years after the extinction event. These findings lend support to the hypothesis of evolution known as 'punctuated equilibrium,' which proposes that species experience long periods of stability with little change, and then undergo rapid evolution and speciation.

Scientists link the end-Permian catastrophe to intense greenhouse conditions, oxygen loss in the oceans, widespread acidification, and massive volcanic eruptions tied to the breakup of the ancient Pangaean supercontinent.

Yet another example of Nature's resilience.