



Echoes From South Dakota

E-NEWSLETTER OF THE SOUTH DAKOTA BAT WORKING GROUP

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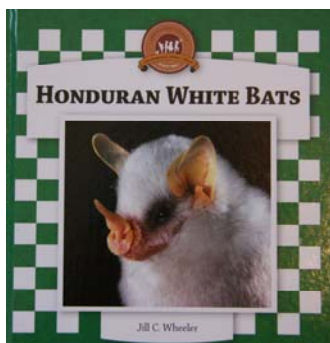


BAT BOOKS FOR SCHOOLS RECEIVES SDGFP GRANT !

The SD Bat Working Group's Bat Books For Schools project has received an award through a competitive grant process of the SD Game, Fish, and Parks Wildlife Diversity Program.

The funding provided by this grant will enable the purchase of 58 sets of bat books for distribution to public elementary school libraries across the state. More than doubling the scope of the program, this grant will bring the total number of schools served to 101!

The Bat Books For Schools project was begun at the end of 2007 providing sets



of books about bats to public elementary school libraries across SD. Each book in the 12-volume set features a different species of bat and has proved to be popular with students and teachers alike.

All of the money from this award, as with all dona-

tions to the project, are spent exclusively on the purchase of the books. An all volunteer program, no other costs are paid from donations (including shipping). Books are often delivered to schools by local volunteers.

A list of schools that have received books can be found on our web site- www.sdbwg.org

We encourage you to check the listing. If your local school is not listed, drop us an email to suggest it as a possible recipient school.

Send any questions or suggestions for recipient schools to: joeltigner@gmail.com



SDGFP's Doug Backlund Retires

Doug Backlund (SDGFP's Pierre office) recently retired after almost 20 years of service to the wildlife and people of SD.

Doug has been (and continues to be) a member of the SD Bat Working Group since it was first organized. He has been a friend to bats and bat research in our state

for many years. His commitment to all wildlife and its habitat is apparent to anyone that has met him.

If you have not done so, for a treat, have a look at his photography at :

wildphotosphotography.com

Thanks, Doug, for all your hard work aimed at protect-

ing that segment of our wildlife all too often neglected or dismissed as insignificant.

We wish you well in your well-earned retirement and look forward to your continuing efforts to bring our attention to all things wild across South Dakota.

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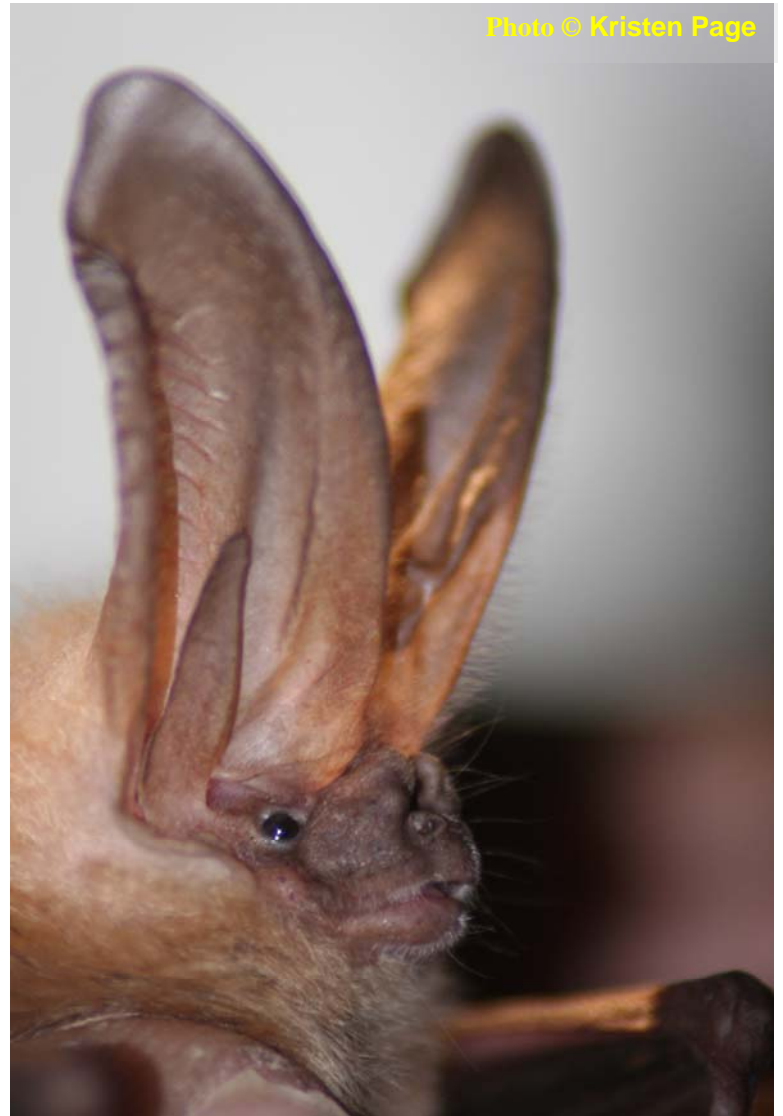
Echoes from South Dakota

SPECIES PROFILE: Townsend's Big-eared Bat (*Corynorhinus townsendii*)

Townsend's Big-eared Bat is perhaps one of our more exotic-looking bat species. It is easily distinguished from all of our other bats by its very large ears and characteristic lumps on the end of the nose. (It used to be referred to as the lump-nosed bat.) A year-round resident of SD, this bat is considered to be a species dependent upon underground roosts. This is true for the active summer season as well as for winter hibernation.

When active, this bat's ears are erect and can be adjusted/directed to better collect sounds. During the winter hibernation season, it typically will fold the ears down where they are hidden beneath the folded wings. (See below)

Note also the band on the bat's right forearm in the photo below. This bat was found during a winter survey of a gated mine near Rochford in the Black Hills. The number on the band enabled the bat's identification. She was banded as an adult during an evening survey at a cave near Deadwood. Based upon physical characteristics at the time of banding, she was at least 4-5 years of age. This made her at least 16 years of age at the time this photograph was taken. (The record age for this species in the wild is 21 years.)



This species is known to be particularly susceptible to disturbance at their roosts. High levels of roost disturbance have resulted in sites being abandoned. This bat roosts on the surface of the rock and is almost never seen backed into crevices.

These bats are very agile fliers, easily avoiding obstacles including mist nets during surveys. They are often seen flying adjacent to mist nets, finding a hole, and diving through with folded wings. With their large ears and keen hearing, they also echolocate very softly and can be missed during acoustic surveys where echolocation calls are recorded. Both characteristics, amazing flight abilities and soft echocations, make this bat difficult to study in the field.

ECHOLOCATON - ACOUSTIC SURVEYS

Acoustic echolocation surveys often enable biologists to identify what species are in an area or using a roost without having to disturb the bats or their routine. Such surveys are not invasive and can provide reliable presence/absence information about bat species. The two strips shown below are cropped screen shots of two species' echolocation calls (made using SONOBAT™ Software for Bat Call Analysis, Arcata, CA; recorded using full-spectrum detectors [Pettersson 240X, Pettersson Elektronik, Sweden]).

In some instances, as displayed by the calls of these two species, bats are easily distinguished on general appearance alone. Frequency of the call, shape of the call, call duration, and other factors are used to identify species whose calls are more similar.

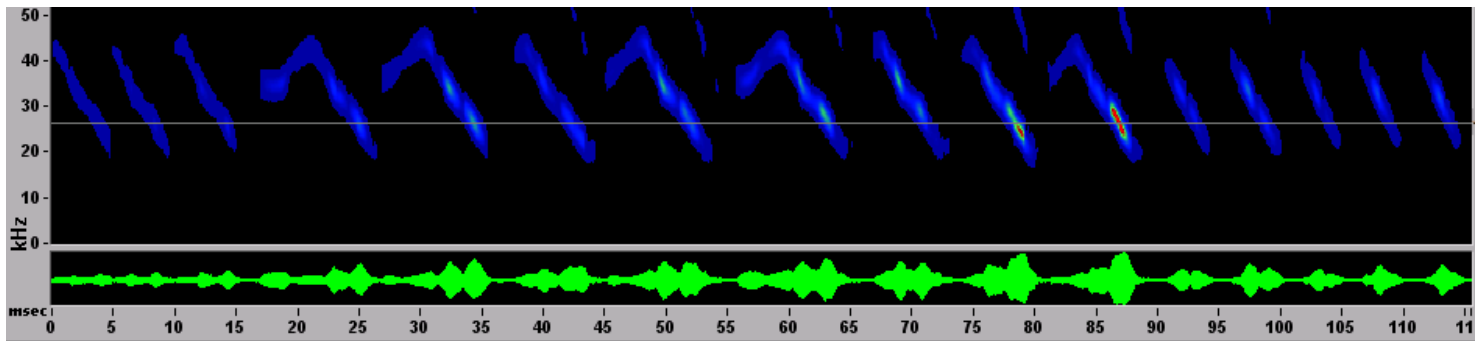
These surveys provide several advantages, including:

Recordings of call surveys provide a record of bat activity at a location that can be used for comparisons to future surveys.

Acoustic surveys of bats in open prairie grassland habitat provide more information than traditional netting surveys where captures are difficult or impossible.

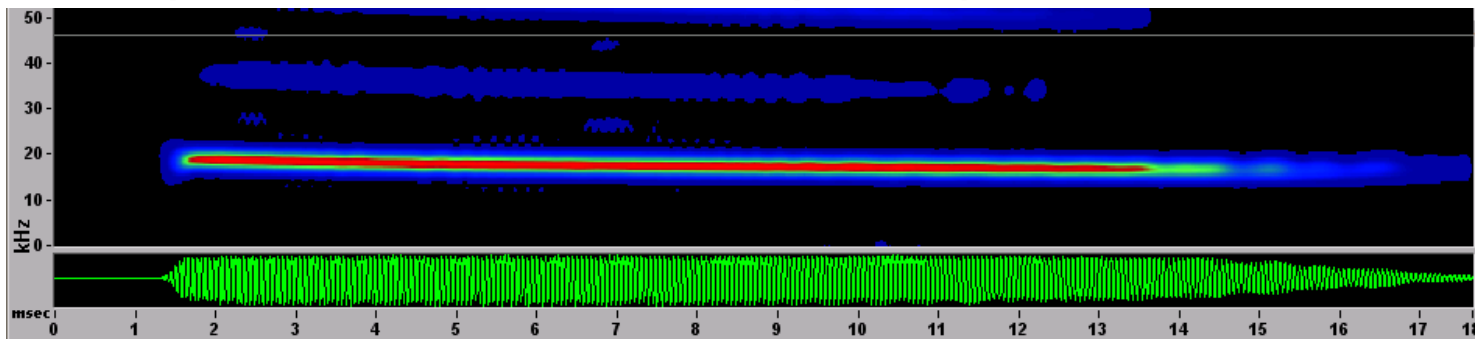
They provide information about pathways of migratory bats through SD.

One example of how these surveys are used is to document the level of activity at a cave or mine that is being evaluated for protection through installation of a protective bat gate. Such sites are surveyed before the gate is installed and after to confirm the site is being used in the same manner by the same species.



Townsend's big-eared bat echolocation call ↑

Hoary bat echolocation call (last issue's profiled species) ↓



JUST FOR KIDS...

Most people think about bats as always roosting underground in caves or abandoned mines.

At least three of our bats here in SD don't typically roost underground. These three are considered tree roosting bats and are the Silver-haired Bat, Eastern Red Bat, and the Hoary Bat.

Even these three species have different places in trees where they prefer to roost. Reds and Hoary Bats often roost out in the branches of trees, while the Silver-hairs often prefer cavities in trees.



It's important to remember that many species of wildlife depend on trees for finding shelter and raising their young. The tree in this picture was used by squirrels, birds, and bats (all at different times) during the same year.

It is important to remember to have different ages of trees in managing our forests so that the wildlife will always have somewhere to go. Large dead trees used by wildlife today will someday rot and fall.

We need to be sure other old trees are there to take their place.

BE SURE AND COME TO THIS YEAR'S BAT FESTIVAL AT CUSTER STATE PARK!

Surprise

VISITORS

A section for photos of wildlife that show up unexpectedly during bat surveys in South Dakota.....



[uh-oh]

YOU CAN'T ALWAYS GET WHAT YOU WANT...

While mist-netting bats during a survey near a stock pond in Harding County (northwest SD), a juvenile saw-whet owl was inadvertently caught in our mist net. Taking it all in stride, after its release, the young owl sat on a nearby tree branch and watched the activity for about 15 minutes before flying away.

Other unintentional captures that have become entangled in mist nets during bat surveys here in SD include nighthawks, whip-poor-wills, assorted other birds, frogs, flying squirrels, cows, biologists, and one really close call with a bison.

Just an example of the fun of working at night...

Artist's depiction of the last thing a moth sees...



Special thank you to a student in Ms. Roller's 1st grade class at Knollwood Elementary in Rapid

MORE ON NEXT PAGE



DID YOU KNOW?

A SILVER-HAIRED BAT, NETTED AND BANDED NEAR WHITEWOOD IN THE BLACK HILLS, WAS RECAPTURED NEAR DENVER.



Sometimes bat biologists use bands to identify a particular bat. The bands can be different colors and sizes. They all have a different number engraved on them. Here in SD, all male bats are banded on the left forearm and females are banded on the right forearm. The picture on page two shows a bat in hibernation with a band. Even without reading the story, you should now be able to tell if it's a male or female. This allows biologists to collect data without disturbing the bat!

Bat bands are very light-weight and don't harm the bat. The band is closed around the forearm enough to keep them from slipping off but still be loose enough to slide around. Notice that all the band's edges are rounded with no sharp points that might injure the bat.

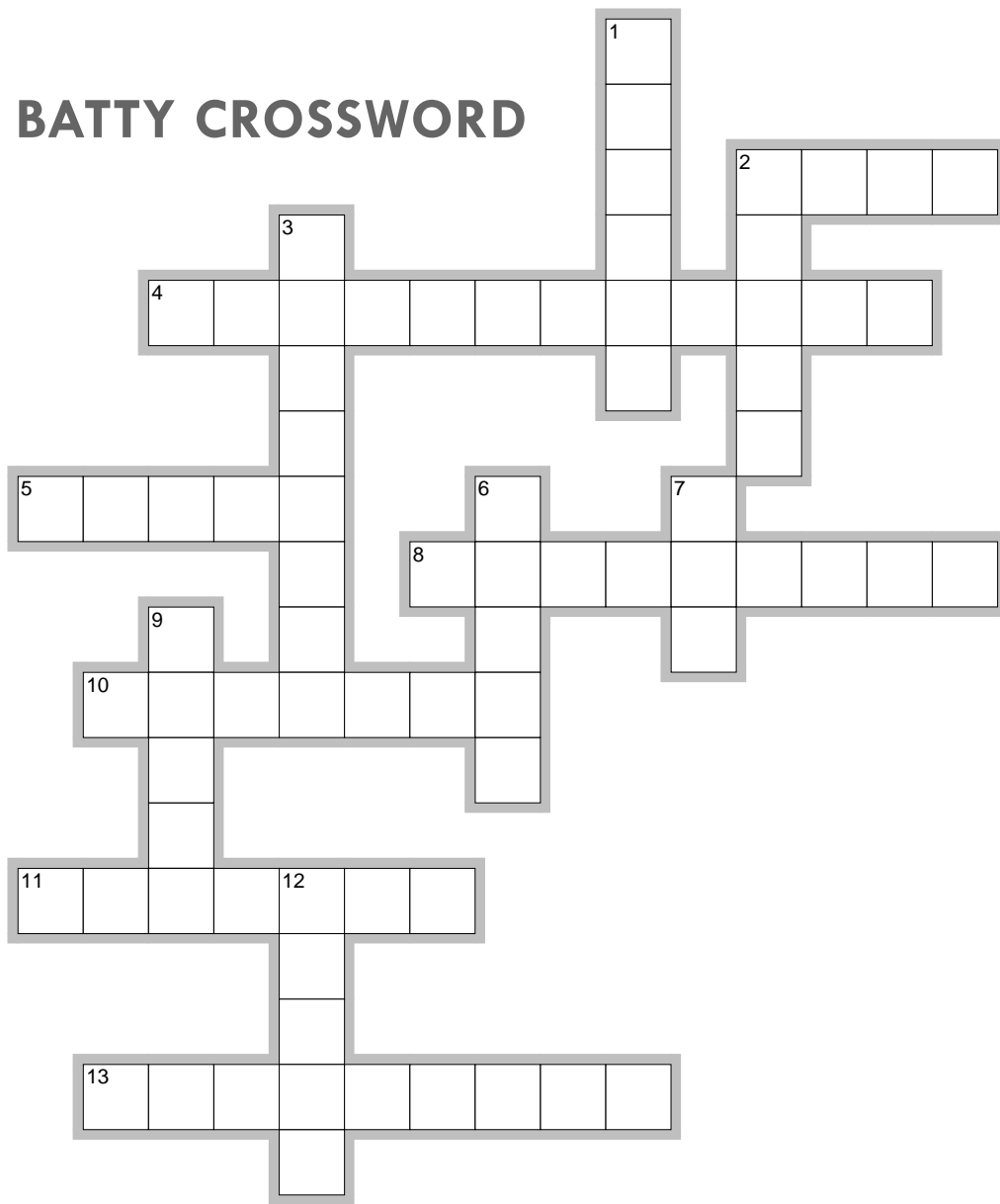


ABANDONED MINES



PLEASE REMEMBER: STAY OUT & STAY ALIVE

BATTY CROSSWORD



WORD LIST

HIBERNATE

BLIND

MINES

BATS

MAMMAL

CAVES

BRIDGES

NOCTURNAL

ECHOLOCATION

INSECTS

PUP

THOUSAND

TREES

ROOST

EclipseCrossword.com

Across

2. _____ are very important to a healthy ecosystem.
4. The sonar system bats use to find their way around in total darkness is called _____.
5. Although some are used by bats, abandoned _____ are very dangerous places. Stay Out and Stay Alive.
8. Animals that are active at night are said to be _____.
10. Often built over water, _____ are often used as roosts by bats during the summer months.
11. All of SDs bats eat nothing except _____.
13. Bats that do not migrate must _____ to get through the winter in SD.

Down

1. Bats are the only _____ that can fly.
2. Bats are NOT _____. They all have eyes and can see well in low light levels.
3. There are over one _____ species of bats worldwide.
6. Any place where bats live is called a _____.
7. A baby bat is called a _____.
9. These large living plants, called _____, provide homes for many types of wildlife, including bats.
12. The Black Hills have many natural underground rooms called _____.

BAT MANAGEMENT TIP

One of the problems many people have when sealing holes in buildings as part of doing a proper bat exclusion, is how to neatly seal smaller cracks and crevices. Caulk will work but it can be messy and difficult to match the surrounding colors of differing building materials. You can end up with obvious and unsightly patches. One product that works very well is Lexel® clear sealant. It is the cat's pajamas of sealants. Once applied, it simply disappears...it's *that* clear. Other companies make "clear" caulks but many cloud or turn a milky color with time or when applied thickly.



Lexel® stays clear, period. It is easy to apply, sticks to just about anything, stays put when applied, can be painted, and it even sticks to wet surfaces. Easier to work with than silicone and according to the manufacturer, is 19 times clearer than silicone. (Not sure how that last bit was arrived at.) It is sold at most home improvement/hardware stores and is easy to find as it comes in a clear plastic tube (squeeze tubes and caulk-gun cartridges).

Disclaimer -

Note: This product does not double as a dessert topping and we are not the North American distributor for the stuff.

Be sure to follow the proper procedures when doing a bat exclusion! Visit our web site for more information: www.sdbwg.org

PLEASE BE CAREFUL USING LADDERS!

Remember - Bats typically drop to gain air speed before flying away. If you startle a snoozing bat by coming up a ladder underneath it...try to remember, sideways isn't an option...



ASK A BAT...

QUESTIONS SUBMITTED BY READERS ON BAT RELATED TOPICS

(Okay, we actually did not receive any questions from readers this time so here's one asked after a public presentation at last year's Bat Festival.)

WHERE CAN I BUY A BAT DETECTOR AND HOW MUCH DO THEY COST?

There are several different types of bat detectors currently on the market. The most common type of detector that enables bats to be heard and the least expensive is a heterodyne detector. These detectors, used by laypeople and bat biologists alike, electronically lower the echolocation call signal down into the range of human hearing.

The detector we recommend is manufactured in the UK and can be seen online at www.batbox.com. They offer several different models. (If you have attended the Bat Festival, the detector we use is their BATBOX IIID. It provides high quality sound with low background noise. When used with earphones, the volume can be adjusted down to where you hear only bats, with no background noise or static. The price at this writing, based upon the current exchange rate is just under \$200.00 (does not include shipping).

A new model they offer is the Batbox Baton which sells for just over \$91.00, again at the current exchange rate.

Detailed descriptions of both models are available on their website. The detector can be purchased online and more information can be obtained by sending them an email.

Want more information? Have another question? Sorry, you'll have to email your question to ASK A BAT - and send it to joeltigner@gmail.com and it will get relayed to someone that can provide you an answer.

Echoes from South Dakota



Support South Dakota's wildlife by joining the Team

Much of the bat survey and conservation work sponsored by the South Dakota Department of Game, Fish and Parks uses a federal funding source called State Wildlife Grants. This is an annual appropriation to each state wildlife agency for work on rare species and native habitats, particularly resources that do not have other funding sources. While this funding has been important for wildlife management work throughout the nation, a more stable and longer-term funding source is sorely needed.

Teaming with Wildlife is a legislative initiative to encourage the U.S. Congress to find a mechanism to fund the needs of all fish and wildlife species. Teaming with Wildlife was created a decade ago as a grass-roots movement to demonstrate the widespread support for wildlife. Game species and sport fish have a permanent funding source. Nongame and endangered species do not. The national Teaming coalition is made of individual state coalitions. The coalitions have been very successful at making their voices heard, but in these challenging economic times, it's important that coalitions continue to grow and diversify.

South Dakota's coalition numbers more than 200 member groups, making it the 10th largest in the nation. But we're always hoping to find more organizations, businesses, and government bodies to add to the list. Joining the coalition is free and requires only that a representative of a business or organization sign a commitment to Teaming's mission.

If your group or business would like to show your commitment to the future of South Dakota's wildlife, please visit this website to join the South Dakota Teaming with Wildlife coalition:

www.sdgifp.info/Wildlife/Diversity/teaming.htm

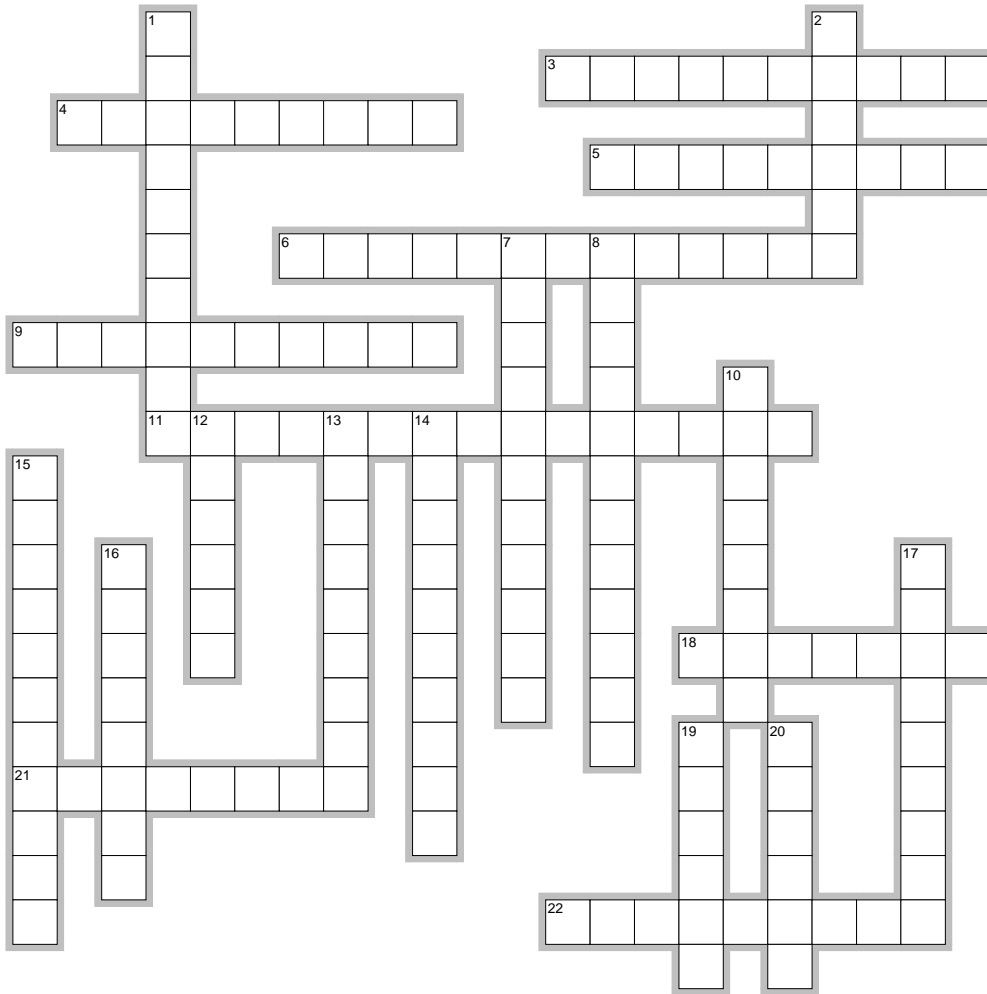
Submitted by — Eileen Dowd Stukel, SDGFP



The SD Bat Working Group is proud to be a member of the Team

ARE YOU A LATIN LOVER?

Bats of South Dakota - Fill in the species names



ACROSS

- 3. with something like a fringe
- 4. spotted
- 5. somewhat yellow
- 6. hairy and nocturnal
- 9. around/near mouse-eared
- 11. northern, of the north
- 18. good skin
- 21. of the north
- 22. light-fleeing

DOWN

- 1. belonging to the night
- 2. flying
- 7. night-wandering
- 8. club-nosed
- 10. ash-colored
- 12. good ear
- 13. flying
- 14. after the name "Townsend"
- 15. hairy lips
- 16. hairy tail
- 17. pertaining to the humerus
- 19. mouse-eared
- 20. brown

EclipseCrossword.com

ANSWERS CAN BE FOUND: <http://sdbwg.org/taxa/whatsinaname.pdf>

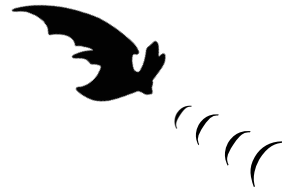
Print this page, fill in the correct answers, mail it back, & receive a free "bats need friends" button!
(Answers can also be sent via email...be sure to include a mailing address for your button.)



REMEMBER TO MARK YOUR CALENDARS!

5th ANNUAL SOUTH DAKOTA BAT FESTIVAL
at
Custer State Park — Saturday, August 14th

Visit us on the web!
www.sdbwg.org



SDBWG

E-NEWSLETTER OF THE SOUTH DAKOTA BAT WORKING GROUP

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The purpose of the SD Bat Working Group is to work to protect bats and bat habitat through action, education, and cooperation with Federal, State, Tribal, and private landowners.

Our objectives are two-fold: to raise awareness about the role bats play in maintaining healthy ecosystems; and to work with public land managers and private landowners and provide alternatives that will reduce possible adverse affects to bats or bat habitat.

Everyone is welcome to become a member of the SD Bat Working Group!

The only requirement is an interest in bats and their conservation.

There are no membership dues, so it's priced right for everyone!

Get Involved....because bats need friends.

The SD Bat Working Group, in partnership with Custer State Park, is sponsoring our **5th Annual South Dakota Bat Festival** on **8/14/10**.

Join biologists and other bat enthusiasts for an afternoon/evening of exhibits, talks, crafts, and an opportunity (weather permitting) to see and hear live bats. There will be something for all ages so bring the entire family.

There is no charge for any of the bat activities, although there is an admission charge to the Park. The Festival site is immediately adjacent to the Game Lodge Campground - - in and around the Tatanka Theatre.

More information will be forthcoming—watch the web site!

PLEASE NOTE: *You will likely need to stay late to see any of the netted bats (2100-2330), so plan accordingly.*