

Echoes From South Dakota

E-NEWSLETTER OF THE SOUTH DAKOTA BAT WORKING GROUP

Volume 2, Issue 2

5th ANNUAL BAT FESTIVAL!

WHERE? - CUSTER STATE PARK WHEN? - AUGUST 14th, 5pm - until ??

The SD Bat Working Group's 5th Annual Bat Festival will again be held at the TATANKA THEATRE, next to the GAME LODGE CAMPGROUND (entry through the campground) at Custer State Park in the southern Black Hills.

Offering something for everyone, the Festival has been well received by local residents and visitors to South Dakota alike. There is no charge for the Bat Festival activities but there is an admission charge to the Park.

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!

If you're planning to stay to see the bats, you will likely need to stay late. Sunset will occur at 8 PM and we typically don't see any bat captures until after 9 PM. However, there will be bats flying before this time, and you'll be able to hear them on echolocation call detectors. Be sure to plan for cool temperatures and wet grass. Although there is some exterior lighting, we recommend you also bring along a flashlight for safety.

NEW THIS YEAR...FESTIVAL T-SHIRTS !

We're celebrating our 5th year with a t-shirt that will be available at the Festival. Price will be \$10 a shirt and all money raised (after we pay for the shirts) will be put into the Bat Books For SD Schools fund (see the web site for more info on the book fund).

Shirts are limited in number, so get there early! If you can't attend the Bat Festival, any remaining shirts will be made available by mail order. Orders for any shirts remaining after the Festival will be filled on a first-come, firstserve basis. Postage will be added to the cost of the shirt. To check on availability and to get ordering information, after the Festival, send an email to:

joeltigner@gmail.com

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SD's NEWEST PROTECTED BAT ROOST

Another abandoned mine in the Black Hills has been protected to provide bats with a safe and secure location for roosting. The mine is on privately-owned property located near Rochford, SD. The owners of the mine, David and Karen Papcke of Hot Springs, SD, worked with SD Department of Game, Fish, and Parks program of identifying and protecting sites that meet the needs of SD's bats. Although not a large mine, the Papcke's mine serves as a year-round roost for at least two species of bats, Western small-footed myotis (*Myotis ciliolabrum*) and Townsend's big-eared bat (Corynorhinus townsendii).

In addition to evaluation of bat usage, abandoned mines are assessed of risks to the public associated with abandoned mines, and stability of the mine for its long-term prognosis of providing habitat. With the exception of the rock nearest the portal (entry point), the Papcke mine is located in stable material. A heavy gauge steel culvert (48" diameter) was inserted into the mine and a bat gate attached to the outer end. The culvert serves to stabilize the entryway and extends beyond the point where any future collapse of surface rock might obstruct the portal.

Over 50 sites have been protected in this manner throughout the Black Hills of SD and WY.

Thanks to the David and Karen Papcke for their help in protecting bat habitat here in the Black Hills!



The Papcke's mine after the installation of the culvert and bat gate....

MORE MINE PHOTOS...



ALL IN A DAY'S WORK...



With help from the intrepid members of the Flandreau Fire Dept., a microphone for a bat detector was mounted to one of the city's water towers.

The microphone is attached by cable to the bat detector, eliminating the need for scaling the tower to collect the recorded data.

The detector is part of a larger monitoring project to determine seasonal variations in bat activity as part of a survey associated with development of a proposed wind turbine site near Flandreau, Moody County, SD.







2010 - A BAD YEAR FOR BATS IN SD?



2010 will likely go down as a bad year for bats in South Dakota.



Our bats are dependent upon a number of variables all coming together at the right time for a good year - and we are speaking here of a good year in respect to reproductive success. To better understand why this is going to go down as a rotten year, here's a brief recap of some basic bat biology.

First, our bats only give birth once a year. And for most species, they only give birth to a single pup. They don't have large litters or multiple litters as is common with many other similarly-sized mammals. (This goes hand-in-hand with their increased longevity...if you only give birth once a year, to a single offspring, you need to live longer for your species to be successful. (The U.S. record for a bat in the wild is 34+ years of age; 45 years in Europe.)

Second, bats can control their length of gestation based upon environmental conditions. If spring is late, they can rely on a slowing of their metabolism called

torpor (similar to hibernation) that slows or even stops gestational growth. This increases the likelihood that birth will occur when the weather has finally warmed up and their food supply is abundant.

Now, if you think back to March, April, and May of this year here in SD, you might well ask, "What spring?"

The result has been young of the year across the state being born late this year.

Maternity/nursery roosts from across the state (Black Hills, Pierre, Chamberlain, and Sioux Falls) have seen young of the year less than a week of age during the second week of July. If cold weather arrives as early as last year and winter is as cold, there is virtually no chance that many of the bats born this year will make it through their first winter's hibernation or migration. This results from there simply not being enough time to put on the necessary weight before the cold weather knocks out their food supply (i.e., flying insects).

And to make matters worse, it also means the adult females are nursing later into the year and not able to put on the weight they need to make it through the winter. Such conditions can result in significant losses that can take populations years to overcome.

Keep your fingers crossed for a late, mild winter and an early spring in 2011.



ABANDONED MINES



REMEMBER: STAY OUT & STAY ALIVE

Visit us on the web! www.sdbwg.org



SDBWG

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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.

WE LOOK FORWARD TO SEEING YOU AT THE

5th Annual South Dakota Bat Festival

AT CUSTER STATE PARK ON AUGUST 14th, 2010, 5pm-??