SUMMER RECREATION TAKES CENTER STAGE

BACKPACKING LEADING YOU INTO THE WILD.

> DISCOVERING WHAT’S UNDER SOUTH DAKOTA WATERS
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DENNIS DAUGAARD
Governor of South Dakota

GAME, FISH AND PARKS

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Amphibians and reptiles are an important component of native ecosystems and are often times poorly understood and under-appreciated. Recent declines in amphibians and reptiles across the globe due to habitat loss, introduced species, diseases, and environmental pollutants, have highlighted the need to monitor and document species across the state.

South Dakota is home to 45 species of reptiles and amphibians, some of which range across the entire state like the Northern Leopard Frog and Plains Gartersnake, while others...
occur in small unique areas like the Ornate Box Turtle and Prairie Lizard in the Sandhills region of southern South Dakota.

Although South Dakota has a diverse group of amphibians and reptiles, information on the distribution of these species is limited, especially compared to other groups such as fishes, birds, and mammals. There are just over 12,000 records for amphibians and reptiles from the state, and biologists use these records to map where species are found, and how their distributions in the state may be expanding, shrinking, or shifting. When biologists map the distribution of species, they are concerned with two important aspects: 1) where species occur and 2) how this changes over time.

Understanding where species occur across the environment is important (e.g., what counties or river drainages a species occurs in), but equally important is understanding if species are persisting in known habitats year-after-year. Records from South Dakota represent specimens collected as early as 1855 all the way through 2018. Unfortunately, 70 percent of these records are more than 20 years old, which limits our understanding of current distributions of amphibians and reptiles. By understanding current distributions of species, we can make more informed management decisions about where to build roads or what pieces of land should be protected in order to conserve threatened and endangered species.
With the help of citizen scientists and the South Dakota Game, Fish and Parks (GFP), updated distribution maps of these species are being developed.

While biologists continue to collect data on the distribution of species in the state, there are increasing opportunities for South Dakotans to become involved and participate in these efforts through citizen science.

Citizen science has become popular, as it helps to gather important information on species in a region while simultaneously engaging community members in the natural world around them.

Resources and time are limited for biologists, and attempting large, statewide surveys for species is challenging. By encouraging citizen science reporting of species, individuals gain increased appreciation for amphibians and reptiles, and citizen science can help generate valuable observations of species for biologists to better understand their distributions.

To learn and share more information about amphibians and reptiles of South Dakota, sdherps.org was launched to provide information on species and allow for the submission of user photos. In 2017, over 900 specimen records were added to the website to better map species distribution. Citizen scientist submitted records have helped update the distribution of species and have included many of the first observations of species within a particular county.

These records include both widespread species, but also rare species such as the state-threatened False Map Turtle and Eastern Hog-nosed Snake. Observations of False Map Turtles from along the Missouri River have helped with recent survey efforts for this species. In addition, an observation of an Eastern Hog-nosed snake from Todd County was the first recorded observation of this species from west of the Missouri River in South Dakota.

South Dakotans were eager and willing to participate in these efforts last year and I challenge readers to contribute their own observations to the website and become citizen scientists.

With warmer weather, amphibians and reptiles will begin emerging from overwintering sites, and people will begin to see them while spending times in the outdoors. As these opportunities to discover amphibians and reptiles in the wild present themselves, so do opportunities to actively participate in citizen science efforts to better understand the distribution of amphibians and reptiles in the state. Visit sdherps.org to learn more on the amphibians and reptiles in South Dakota and to report your own observations.

Resource Goal - Objective B :: Manage wildlife within biological, social and fiscal constraints. 
Objective E :: Manage habitat on GFP lands for sustainability of natural resources.