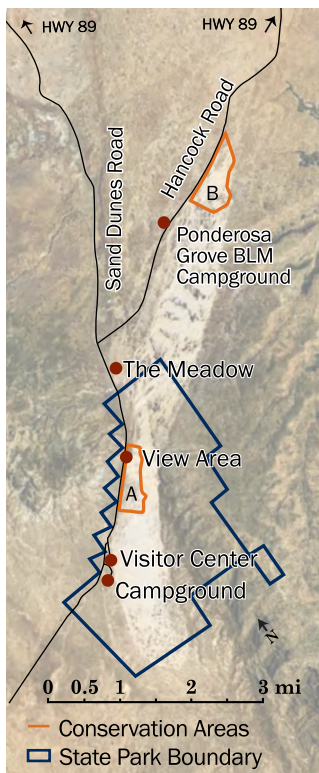


## POPULATION TRENDS AND LIMITING FACTORS

Number of beetles varies greatly from year to year. Adult numbers have ranged from less than 600 to almost 3,000. Studies indicate high death rates during the larval stages. As few as 10 percent of larvae may reach adult stage.

Factors impacting the species likely include drought, which can directly cause larval death as well as restrict the amount of prey. Robber flies, spiders and birds prey on adult tiger beetles, and small parasitic wasps can attack the larvae. Off highway vehicle use on the dunes may also impact the beetle and its habitat, although much of the habitat is protected within Conservation Area A and B.

Please help us protect this species by respecting the conservation areas and refraining from collecting Coral Pink Sand Dunes Tiger Beetles.



This brochure was developed in partnership with the Bureau of Land Management and Dr. C. Barry Knisley of Randolph-Macon College.

The cover photo is courtesy of Bob Wexler.

### Park Operating Hours:

Open daylight hours year-round, no holiday closures.

### Address Inquiries To:

Coral Pink Sand Dunes State Park  
P.O. Box 95  
Kanab, UT 84741-0095  
(435) 648-2800  
or  
Utah State Parks and Recreation  
P.O. Box 146001  
Salt Lake City, UT 84114-6001  
(801) 538-7220, (877) UT-PARKS  
stateparks.utah.gov

### Utah State Parks Mission:

To enhance the quality of life by preserving and providing natural, cultural and recreational resources for the enjoyment, education and inspiration of this and future generations.

### Your park fees provide for the care, protection and enhancement of this park.

Information contained in this brochure was accurate at the time of printing. Policies, facilities, fees, hours and regulations, etc., change as mandated. For updated information please contact the park.

The Utah Department of Natural Resources receives federal aid and prohibits discrimination on the basis of race, color, sex, age, national origin or disability. For information or complaints regarding discrimination, contact Executive Director, Utah Department of Natural Resources, P.O. Box 145610, Salt Lake City, UT 84114-5610 or Equal Employment Opportunity Commission, 1801 L Street, NW, Washington DC 20507-001



Printed on  
recycled paper  
04/11 1.5M



# The Coral Pink Sand Dunes Tiger Beetle



**Coral Pink  
Sand Dunes State Park**

Photo: Chris Wirth

## Meet the Coral Pink Sand Dunes Tiger Beetle



Photo: Chris Wirth

### ABOUT THIS INSECT

The Coral Pink Sand Dunes tiger beetle *Cicindela albissima* is one of the rarest insects in the United States. It became a candidate for listing under the Endangered Species Act on February 28, 1996. Species are named as candidate, threatened or endangered when a decrease in numbers may cause extinction.

This beetle has one of the smallest geographic ranges of any insect. It is only found within a small portion of the seven-mile long Coral Pink Sand Dunes ecosystem. Its nearest relatives are located in southwest Wyoming. It has a striking appearance due to its bright white elytra, or wing cases, on its back.

In order to conserve this species, a conservation agreement has been established between the U.S. Fish and Wildlife Service, Bureau of Land Management, Utah State Parks, and Kane County. Resource specialists from each agency participate in this agreement, which includes managing species habitat and monitoring population trends and threats.

### TIGER BEETLES IN GENERAL

Tiger beetles are a family of insects found worldwide. They are represented by more than 100 species in the United States. These brightly colored, diverse insects are studied and collected nearly as much as butterflies. Because many species are specific to particular habitats, they are often used as indicators of natural, undisturbed habitats such as rainforests and sandy beaches.

### LIFE CYCLE

The tiger beetle life cycle includes 1) egg, 2) three larval stages, 3) pupa and 4) adult.

#### Egg

Mating and egg laying occur from April to June. The female lays individual eggs one to two inches deep in the sand. Generally this occurs in open or sparsely vegetated areas on interdunal swales and low slopes.

#### Larval Stages

One-fourth inch long, first instar larva hatch from the egg. The larva digs small vertical burrows into the sand. After several weeks of feeding, the larva plugs its burrow, sheds its skin and becomes a larger second instar larva.



The second instar stage lasts several months until developing into third instar larva. The third stage can take nine months to over one year depending on conditions.

#### Pupa

When the larva has finished developing, it forms a pupa, a resting or inactive stage that takes about three weeks. During pupation the larva metamorphoses into an adult beetle, much the same as a caterpillar pupates and transforms into a butterfly.

#### Adult

Adults are active on the dune surface during warm, sunny days. They dig burrows for shelter at night or in bad weather.



Photo: Chris Wirth



Photo: Chris Wirth



Photo: Dean Anderson

### WHAT GOOD IS A TIGER BEETLE?

All creatures have a purpose in their ecosystems. Tiger beetles are predators, and like spiders, prey on insects. Adult tiger beetles use their good vision to find small insect prey and their large mandibles to kill and consume them. They also feed on dead insects. Larval beetles are “sit-and-wait” predators. They perch at the top of the burrow and wait until prey wanders close, then strike quickly and drag their prey into their burrows.

### WHEN AND WHERE CAN YOU FIND THEM?

Adult beetles are most common on warm, sunny mornings and late afternoons in early April through mid-June. Small numbers may also be found in September. The highest concentrations of adults can be found on the north end of Conservation Area A, on the low dune slopes and interdunal swales. To see the beetles, look on the ground 15-20 yards ahead. When they detect your presence, they quickly fly up and land a short distance away.

You are unlikely to see any beetles midday when the sand is hot or when the weather is cool or rainy. At this time, beetles are in burrows under the sand, waiting for better conditions.

*Collection of the Coral Pink Sand Dunes Tiger Beetle is prohibited.*



Photo: Chris Wirth