



Ticks



A tick is a blood-sucking parasite that can be found in the montane and sub-alpine lifezones of Rocky Mountain National Park. With the onset of spring-like temperatures, the Rocky Mountain wood tick (*Dermacentor andersoni*) becomes active and remains active into mid-summer. They are external blood-feeding parasites of birds and mammals including humans.

Ticks belong to the Arachnid class which includes spiders and mites. An insect has three pairs of legs and a set of antennae. A tick, however, has four sets of legs and no antennae.

Ecology

Tick habitat includes brush, grassy, and wooded areas. These cold-blooded creatures lie on blades of grass and low brush with their front legs extended ready to grasp any passing warm-blooded animal that they contact, or that they sense with their front legs.

After attaching to the host, ticks use a dart-like anchor just below their mouths

to hang on. This firm grip sometimes makes it difficult to remove a tick without pulling the body away from the head which is still attached to the host.

Ticks pass through three stages of life: larva, nymph, and adult. Since both unfed adults and nymphs hibernate through the winter, their life cycle requires up to two years for development.

Rocky Mountain Tick



The only tick in Rocky Mountain National Park is the Rocky Mountain wood tick. It is active from early spring through mid-summer. It is most common in the park east of the Continental Divide. These ticks are about 1/8 inch (.32 cm) long.

The adult female is a dark reddish brown with a white shield on the back.

The adult male is flat and somewhat oval in shape. His coloring is a mottled reddish brown and gray.

When engorged with blood from a host, the female tick turns gray and becomes greatly distended with blood, often expanding to 1/2 inch (1.27 cm) in size. This condition makes the female almost unrecognizable as a tick.

Avoiding and Managing Tick Encounters

In tick habitat a few simple precautions may be taken.

- Wear trousers, long-sleeved shirts, hat, and boots.
- Wear light-colored clothing.
- Do not sit or lie on the ground especially
- Tuck pant legs into boots, shirts into pants, and keep sleeves buttoned.
- Use insect repellent on shoes, socks, and cuffs.
- Check often for ticks on clothing and skin.
- Change clothes when outing is over, checking for ticks.

Tick-borne Diseases

Only a small percentage of ticks are infected by virus or bacteria that cause diseases. Larval ticks acquire a virus or bacteria from the blood of infected host animals usually rodents. As an adult the tick passes the infection on to larger animals including people. Both male and female adult ticks attach to and feed from mammals.

Colorado Tick Fever is the disease most often acquired in the national park. Rocky Mountain Spotted Fever and Lyme disease are very rare in Colorado. No cases of Lyme disease have ever been reported in the national park or surrounding areas.

Colorado Tick Fever

A virus carried by the Rocky Mountain wood tick is the source of Colorado Tick Fever. Between 100 to 300 cases of the disease are reported in Colorado each year.

Incubation period

3-6 days

Duration

5-10 days up to 20 years of age.
up to 21 days over 20 years of age.

Symptoms

- Head and body aches
- Lethargy
- Nausea and vomiting
- Abdominal pain
- Sensitivity to light

Treatment

- Check with a physician!
- Be sure to inform the physician that you may have been bitten by a tick.

Rocky Mountain Spotted Fever

Spotted Fever is rare in Colorado, but it is a very serious ailment. It is caused by *Rickettsia Rickettsii*, a bacterium carried by the Rocky Mountain wood tick.

- Aches in abdomen and muscles
- Spotted rash beginning on the hands and soles of the feet then spreading over the entire body.

Treatment

- Check with a physician!
- Be sure to inform the physician that you may have been bitten by a tick.

Incubation period

2-4 days

Symptoms

- Fever
- Headache
- Nausea and vomiting

Lyme Disease

Borrelia burgdorferi is the spirochete bacterium that causes Lyme disease. This bacterium is found in blacklegged ticks, *Ixodes* genus, which feeds only on white-tailed deer. Mule deer are the only deer at present found in Rocky Mountain National Park, although white-tailed deer are in areas just to the east of the park. No cases of Lyme disease have been reported in the area.



Tick Country