# Rocky Mountain

# **National Park** Colorado



### **Ticks**

A tick is a blood-sucking parasite that can be found in the montane and subalpine lifezones of Rocky Mountain National Park. With the onset of springlike 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. This picture is blown up to about 15 times the normal size of a Rocky Mountain wood tick.



#### **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 heat sensors in their front legs.

After attaching to the host, ticks use a dart-like anchor just below their mouth 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 Wood Tick**

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



shield on the back.

Rocky Mountain wood tick, actual size.

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

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

# Avoiding & Managing In tick habitat, a few simple **Tick Encounters**

precautions can be taken.

The adult female is a dark reddish brown with a white

Wear trousers, long-sleeved shirts, hat and boots. Wear light colored clothing. **D**o not sit or lay on the ground, especially where wildlife gathers.

Tuck pants 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 Spoted 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:

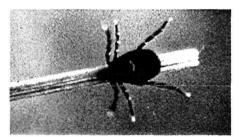
5 - 10 days up to 20 years of age; over 20 years of age, up to 21 days.

#### Symptoms:

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

#### Treatment:

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



Rocky Mountain Wood Tick

## **Rocky Mountain Spotted** Fever

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

Incubation Period: 2 to 4 days.

Symptoms:

**F**ever **H**eadache Nausea & vomiting Aches in abdomen and muscles

Spotted rash beginning at wrists, ankles and/or waist and spreading over entire body

#### Treatment:

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

#### Lyme Disease

Borrelia burgdorferi is the spirochete bacterium that causes Lyme disease. This bacterium is found in deer ticks, Ixodes genus, which feed 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**