# **Rocky Mountain**

National Park Colorado

National Park Service
U.S. Department of the Interior

## **Ticks**



With the onset of warmer spring temperatures, tick season begins in the Rockies.

Ticks are taken in stride by the well-prepared hiker or backpacker. Being informed of this tiny arachnid's life cycle and habits can help prevent encounters that might lead to infectious bites.

### **ECOLOGY**

Tick habitat includes brush and grassy or woody areas. These cold-blooded creatures lie on grass or low brush with front legs extended. A warm-blooded animal passing by is detected with the tick's heat sensors, and the tick grabs on quickly with its forelegs.

Ticks are external blood-feeding parasites of birds and mammals, including humans.

After attaching to their host, ticks use a dart-like anchor just below their mouth to hang on. This firm grip sometimes makes it difficult to remove an embedded tick without pulling the head from its body!

Ticks pass through 3 stages of life: larva, nymph, and adult. Their life cycle requires up to 2 years, since both unfed adults and nymphs hibernate through the winter.

## ROCKY MOUNTAIN WOOD TICK

This common Colorado wood tick, *Dermacentor andersoni*, may be encountered from March through July. It is most abundant from April through June, especially on south facing slopes east of the Continental Divide. These ticks are 1/8 inch (.32 cm) long and the females are dark reddish brown with a white shield on their top side.

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

When engorged, the female tick turns gray and becomes greatly distended with blood often to 1/2 inch (1.27 cm) in size.

In this state, the female is so different from the male that it is difficult to recognize her as a tick.

## BITE PREVENTION

The following suggestions could save you worry when traveling in tick country:

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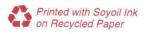
☐ Inspect your clothes, scalp, and skin often while hiking and bathe after outings.

☐ Tuck loose clothing into socks or pants.

☐ Use a tick repellent on shoes, socks, cuffs, and pant legs.

☐ Wear light colored clothing to more easily spot ticks.

☐ Inspect your skin well and bathe after outings.



#### REMOVAL

If you do find an embedded tick, don't panic! Once attached, ticks can be safely and easily removed using these suggested methods:

☐ First, apply oil or ointment on the tick to cut off the air supply.

☐ REMOVE ALL HEAD AND NECK PARTS to prevent infection.

□ Notify a physician if the tick's head breaks off in the skin; if the tick is deeply embedded; if a rash or other symptoms appear after being in tick country.

☐ Do not crush the tick while it is still embedded.

☐ Use tweezers as close to the ski as possible and gently pull the tick straight out.

### **TICK-BORNE DISEASES**

Only a small percentage of ticks are infected by the virus or bacteria that cause disease. The larval ticks first acquire the germs from drinking the blood of infected host animals. The infection is passed on to the next animal the tick bites, including people!

#### Colorado Tick Fever

Tick fever is a serious disease caused by a virus carried in the Rocky Mountain wood tick.
Between 100 to 300 cases are reported in Colorado each year.

Larval ticks become carriers when they bite infected rodents. In the adult stage, ticks pass the disease on to larger animals. Once infected, animals are usually resistant to reinfection. Infection can result soon after the tick attaches to the host. Both sexes feed on humans, but only in the adult stage.

## **INCUBATION PERIOD**

\*3 to 6 days

#### SYMPTOMS

- \*Head and body aches
- \*Lethargy
- \*Nausea and vomiting
- \*Abdominal pain
- \*Sensitivity to light
- \*Skin rash (rare)

#### **DURATION OF ILLNESS**

\*5-10 days (less if under age 20, up to 3 weeks if over age 30)

#### **TREATMENT**

- \*No vaccine yet
- \*20% may require hospitalization

SEEK MEDICAL ATTENTION IF ANY OF THE ABOVE SYMPTOMS

TELL A PHYSICIAN YOU MAY HAVE BEEN BITTEN BY A TICK.

## **Rocky Mountain Spotted Fever**

Spotted fever is rare in Colorado, but is a very serious ailment caused by *Rickettsia ricketsii*, a bacterium carried in the Rocky Mountain wood tick. A tick needs to feed for 6 to 10 hours before bacteria are released into the host.

#### INCUBATION PERIOD

\*2 to 4 days

#### SYMPTOMS

- \*Fever
- \*Spotted rash beginning at wrists, ankles, or waist and spreading over entire body
- \*Headache
- \*Nausea, vomiting
- \*Aches in abdomen and muscles
- \*More severe problems may develop, including death in 20% of untreated cases.

#### TREATMENT

\*Doses of antibiotics

## Lyme Disease

Borrelia burgdorferi is the spirochete bacterium that causes Lyme disease. This bacterium is found in deer tick (Ixodes genus), which feed only on white-tailed deer. The disease is very rare in Colorado, and no cases have ever been reported in Estes Park or Larimer County. The majority of cases occur in northeastern states.

