



## Key Deer Diseases

Several diseases and injuries are common in Key deer. Although distressing to observe, many of these diseases are a natural part of Key deer biology. Below is a brief description of diseases seen in Key deer.

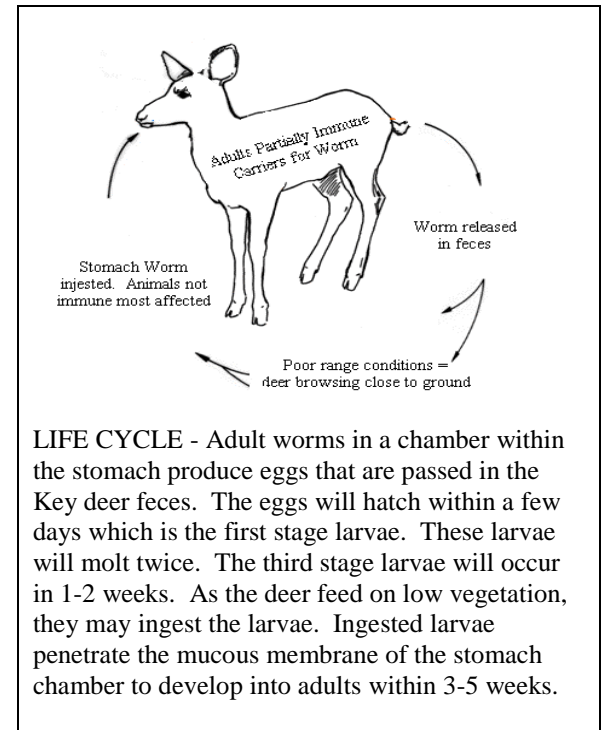
**Large Stomach Worms** (*Haemonchus contortus*) belong to the Phylum Nematoda (=round worms). Stomach worms are a parasite and primarily affect young (< 1 year old) Key deer. Deer infected with worms are underweight, weak, and anemic. Many times their coats are mangy or blotchy. When the presence of stomach worms is high in the herd, the disease may be population limiting (i.e., slowing the rate of population growth). When deer become overpopulated or group in small areas (common feeding areas), the disease can spread, and entire age classes can be effected. Deer that survive develop a partial immunity to the disease and will carry moderate numbers of the large stomach worms to pass along to future generations. Even though Key deer can be treated for stomach worms, such activities do not solve the problem. Worm epidemics are a natural part of the Key deer biology. Feeding is discouraged because of the increased likelihood the disease may spread.

**Brain Abscesses** are a product of bacteria introduced beneath the skin of Key deer males typically > 3 years of age. Females are generally not affected. An abscess is usually pus-filled, causing an inflammation on the surface of the brain. Symptoms of infected deer include circling, dizziness, and loss of body weight. Other symptoms include open sores or lesions in the head and neck region and deformed or broken antlers. The disease is transmitted between males during antler development and sparring or fighting during the breeding season. Although brain abscesses are not likely to kill the deer, the infection can increase their chances of death. For example, brain abscesses can decrease deer coordination increasing the likelihood of roadkill or drowning in canals. Deer infected with the disease cannot be treated and live the remainder of their life in the wild.

**Other Diseases** commonly seen in the Key deer include lumpy jaw and foot injuries. Lumpy jaw is a bacterial infection that forms a golf-ball sized bump in the lower jaw region. Typically, the condition does not bother Key deer and eventually may decrease in swelling. Foot injuries also affect the Key deer due to the rocky soil where they live. This hard surface results in broken or injured hooves causing deer to limp. Key deer also are commonly entangled with foreign objects such a bottle

tops, wire, and netting. Such hazards should be separated from deer to ensure their safety.

For more information about the Key deer and its habitat, feel free to contact the National Key Deer Refuge at 305-872-0774.



**LIFE CYCLE** - Adult worms in a chamber within the stomach produce eggs that are passed in the Key deer feces. The eggs will hatch within a few days which is the first stage larvae. These larvae will molt twice. The third stage larvae will occur in 1-2 weeks. As the deer feed on low vegetation, they may ingest the larvae. Ingested larvae penetrate the mucous membrane of the stomach chamber to develop into adults within 3-5 weeks.