## "Cactus Bucks"





## What are characteristics of "cactus bucks"

Cactus bucks are male deer with antlers with abnormal growth patterns that retain the velvet due to alterations in testosterone level usually as a result of testicular trauma, undescended testicles or from the effects of disease affecting the blood supply to the testicles. These animals often have multiple short misshapen points and excess "globs" of velvet hanging from their antlers giving rise to the name "cactus buck". These animals also have small or unapparent testicles.

# Why has there been an increase in sightings/ or hunted deer with this condition in Oregon and where are the majority of these animals being found?

There have been increased reports throughout central and eastern Oregon in addition to eastern Washington in the last few years (2013-2016). The primary reason for this condition is thought to be a response to previous infections with hemorrhagic disease such as epizootic hemorrhagic disease (EHD) or bluetongue (BT) viruses. ODFW has documented both viruses in mule deer and white-tailed deer populations during 2014-15 in several locations in Oregon.

## What causes abnormal antler growth in Cactus Bucks

A number of "cactus bucks" were evaluated in Colorado. Necropsies and virus evaluation indicated an association with EHD or BT viral exposure and development of abnormal antlers. Mule deer are more resistant to infection and mortality caused by the viruses but also suffer long-term impacts of inflamed blood vessels of the testicles which can result in chronic inflammation and a regression of testicular tissue. Antler abnormalities usually result in the next season of antler growth which is why we likely see a delay in animals with this condition a year or two after a hemorrhagic disease outbreak.

## What are some other causes of abnormal antler growth?

#### i. Decreased testosterone:

Testosterone plays a significant role in antler growth and shedding of velvet. Animals with direct injury to the testicles may also show similar signs. Some deer may also have testicular developmental abnormalities such as cryptorchidism (where one or both testicles don't descend).

## ii. Trauma to the pedicle:

Occasionally one antler has less branching or points in an odd direction because the base of the antler (pedicle) has been damaged by trauma.

# iii. Damage to an antler in velvet:

Trauma to the antler at this growing stage can alter the growth and symmetry of antler.

## iv. Injury to an extremity:

Often an antlered animal can have stunted or abnormal antler growth on the opposite side of a front or hind leg injury due to an incompletely known mechanism but may be related to nervous and vascular regeneration being focused on different tissue.

## How is this condition spread?

Both EHD and BTV are spread to deer through the biting midges or no-see-ems. These viruses are not directly passed between deer.

## What species of deer has this been occurring in?

Most of the reports observed have been in mule deer but white-tailed deer have also been reported. Mule deer are observed more often with Cactus Buck antlers because white-tailed deer generally have a higher mortality rate when they are initially infected with BT or EHD viruses.

## Is my deer still healthy to eat?

Yes. The viral infection causing the antler abnormality is from a previous infection occurring in 2014-15. Deer seen now are completely recovered and in good body condition. Handle and cook your meat properly as always.

## Should I report these?

Report observations of Cactus Bucks to your local ODFW biologist so the Department can map their distribution and identify the extent of the condition.

### What if I have additional questions?

Contact our Wildlife Health team via e-mail at wildlife.health@state.or.us or you can call our wildlife health toll free number (1-866-968-2600).