

Musth Facts

Musth- a normal periodic condition in bull (male) elephants, characterized by a large rise in reproductive hormones, temporal drainage, and dribbling/trickling of urine.

Musth is not a disease or ailment, and therefore there is no “cure.” If a bull elephant goes into musth, it actually means he is healthy.

Testosterone levels in an elephant in musth can be as much as 6 times greater than normal.

This rise in hormones causes the animal to feel more restless, aggressive, and frequently acts unpredictable.

Bull elephants in musth lose their appetite, and it is not uncommon for a bull to lose up to 1000 pounds by the end of the musth cycle. This is completely normal and quickly returns to his normal weight.

Musth typically lasts between 2-3 months and occurs in three stages – a 3-4 week pre-musth condition, a 4-5 week peak musth, and a 4-5 week post-musth condition.

Elephants in musth discharge a thick tar-like secretion called temporin from the temporal ducts on the sides of the head. Temporin contains proteins and lipids.

The elephant's aggression may be partially caused by a reaction to the temporin, which naturally trickles down into the elephant's mouth. Another contributing factor may be the accompanying swelling of the temporal glands. Elephants sometimes try to counteract this pain by digging their tusks into the ground or pushing on trees.

There is no definitive reason why bulls go into musth, but some theories prevail:

1. Expelling of other bulls from an area in order to maintain territory.
2. Giving a physically weaker bull strength and energy to reproduce/gain dominance.

Here is some information regarding the chart:

The goal is to provide a communication tool to empower management expertise for consistent communication of musth signs. This pictorial scale is for tracking and communicating musth signs. **This scale includes only the visible signs**; it does not include the behavioral signs, which are critical in assessing the onset and intensity of musth. The pictorial definitions can be used by speakers of any language in both western facilities and range countries. The text descriptions are written in simplified English that can be translated to other languages. This scale and the descriptions have been approved by the Elephant Managers Association Board of Directors, a team of veterinarians at Chiang Mai University who work closely with mahouts throughout Thailand, and the Oregon Zoo elephant staff.

The Oregon Zoo and other western facilities use some variation of the scale proposed here. **The biggest difference is that western facilities likely do not include the category 5 (TGS/UD #5) showing staining after draining and dribbling have stopped, which indicates post-musth.** This post-musth sign was requested by the team of Thai vets. In Asian range countries where animals are moved between facilities, one facility or a mahout may receive a post-musth bull and they need to know for safety reasons that the bull has just come out of musth. In addition, any indication of musth is important in Human Elephant Conflict (HEC) situations.