UPPSALA UNIVERSITET

Master thesis project available:

SVERIGES LANTBRUKSUNIVERSITET SLU

Does antiparasitic treatment change the reindeer gut microbiome?

Info: Reindeer are semi-domesticated cervid ruminants which roam and forage freely in Sweden. The calves are given Ivermectin (antiparasitic drug) to reduce reindeer bot fly infections. It is still unknown how this treatment affect their intestinal microbiota (the symbiotic bacteria).

In this collaboration between UU and SLU, we have collected fecal samples from reindeer calves *before treatment* and two times points *after treatment.* We have evaluated changes in parasite load and now we want to investigate any effect ivermectin might have on the gut microbiota.

Tasks include: Analyze microbiome DNA sequence data in R, interpret results, reading scientific papers, and write a thesis about the findings. The findings will be published in a scientific journal. There's also an opportunity for a short field trip sometime during the winter 2026/2027.

Requirements: An interest in learning about wildlife microbiomes, parasites, and coding in R.

Duration: ~20 weeks (30 hp). Start: Nov 2026 or later.

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