Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Department of Wildlife, Fish
and Environmental Studies

Moose rutting period – do female and male movement change in relation to sex ratio?

In deer, the rut (i.e., the mating season) is in fall. In moose, it peaks in September and mid of October, depending on latitude. During the rutting period, female deer are in estrus and male deer modify their behavior in order to maximize their chances for mating. Previous moose research suggest that male moose intensify their movement possibly searching areas more effectively to find suitable mating partners, while female moose engage more in foraging behavior. Are these behaviors valid in any population, regardless of the sex ratio in area? Are male moose always search for female moose, or can be the other way around in areas with few male moose?

To improve our knowledge about the movement of female and male moose during the rutting period, we are looking for a student who is interested in analyzing moose movement activity and space use, overlap of spatial distribution between genders during fall in relation to the sex ratio. The student will use the existing dataset on moose GPS-positions and will link them to digital maps about landscape features, as well as to data on moose sex ratio as given by the moose observation data in the area.

Requirements: A motivated student that has good knowledge in GIS, R and statistics. The project will be a desk-based study. The project is expected to generate a peer viewed publication in an international journal.

Extent: 60 or 30 credits

Supervisor: Wiebke Neumann, Fredrik Widemo/Jonas Malmsten

To apply: please send a letter of interest to Wiebke Neumann (Wiebke.Neumann@slu.se) explaining your suitability for the project.