



## **Master Thesis project**

### **Wildlife habitat use as a potential for interaction with domestic animals**

#### *What will you do?*

You will examine habitat selection of GPS-collared fallow deer and roe deer across three study areas in Sweden (Västergötland, Västmanland and Uppland) in a resource selection function (RSF) framework and try to determine their preferred habitats. Data are based on a continuous collection since 2006, (>100.000 radio/GPS-locations) from more than 150 individually GPS-marked roe deer and fallow deer. Particular emphasizes on the use of certain agricultural land (pastures and grasslands) under different weather scenarios, with and without livestock.

#### *Objectives of the thesis work*

- To what extent do roe deer and fallow deer use the same grazing land as sheep?
- Effects of age, gender and population density on habitat choice in roe and fallow deer in relation to sheep farm locations.
- Effects of season and weather on habitat choice in roe and fallow deer
- Does farmer behavior increase the risk of parasite transmission between wildlife and sheep?

#### *Why is this important?*

Studies on habitat selection of wild ruminants in relation to presence or absence of domestic livestock are scarce. Still, studies have shown that particularly fallow deer utilize pastures and meadows for grazing. It is clear that farmers grassland use, change with different weather conditions. For instance, instead of use of using highly productive land for pastures, it is most likely that the farmer will use low productive shrub-land particularly during a dry summer. It is unknown to what extent interactions occur between deer and sheep, consequently, how important the potential risk of parasite transmission is between the two. The parasite communities in such shrub habitats are largely unknown but a negative effect on livestock performance through an increasing parasite load is not impossible because of increasing range overlap with wild herbivores.

#### *Location*

Most of the work can be done at SLU in Uppsala, but a minimum of 1 month stay at Grimsö Wildlife Research Station is required to complete the GPS data work but could be longer upon request. Housing is available for a fair cost. We can offer limited deer hands-on field work during radio collaring in January - March.

#### *Contact information*

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