

The habitat preference of the threatened Marsh fritillary butterfly (*Euphydryas aurinia*) on a Baltic island

Demieka Seabrook Säwenfalk Supervisor: Karl-Olof Bergman



For **efficient conservation**, it is crucial to have an understanding for a species' habitat preferences and requirements. This study **aimed** to: (1) assess the **habitat preferences** of a **threatened grassland butterfly**, the Marsh fritillary, in its **different life stages**; (2) assess how female habitat choice affect **larval survival**.

Environmental variables of importance for the Marsh fritillary (in descending level of importance)

- + represents a preference for a higher amount of a given variable
- represents a preference for a lower amount of a given variable

RESULTS

Egg-laying females

- Grass cover
- + Longest leaf length
- + No. of host plants
- + Large tussocks
- Tree crown cover S
- + Bush cover N

Larvae

- + Tussock occurrence
- + Longest leaf length
- + No. of host plants
- Vegetation cover
- + Open land cover
- Presence of mammalian feces

Adults

- Grazing
- + Bush height
- Forest cover
- + Ground moisture

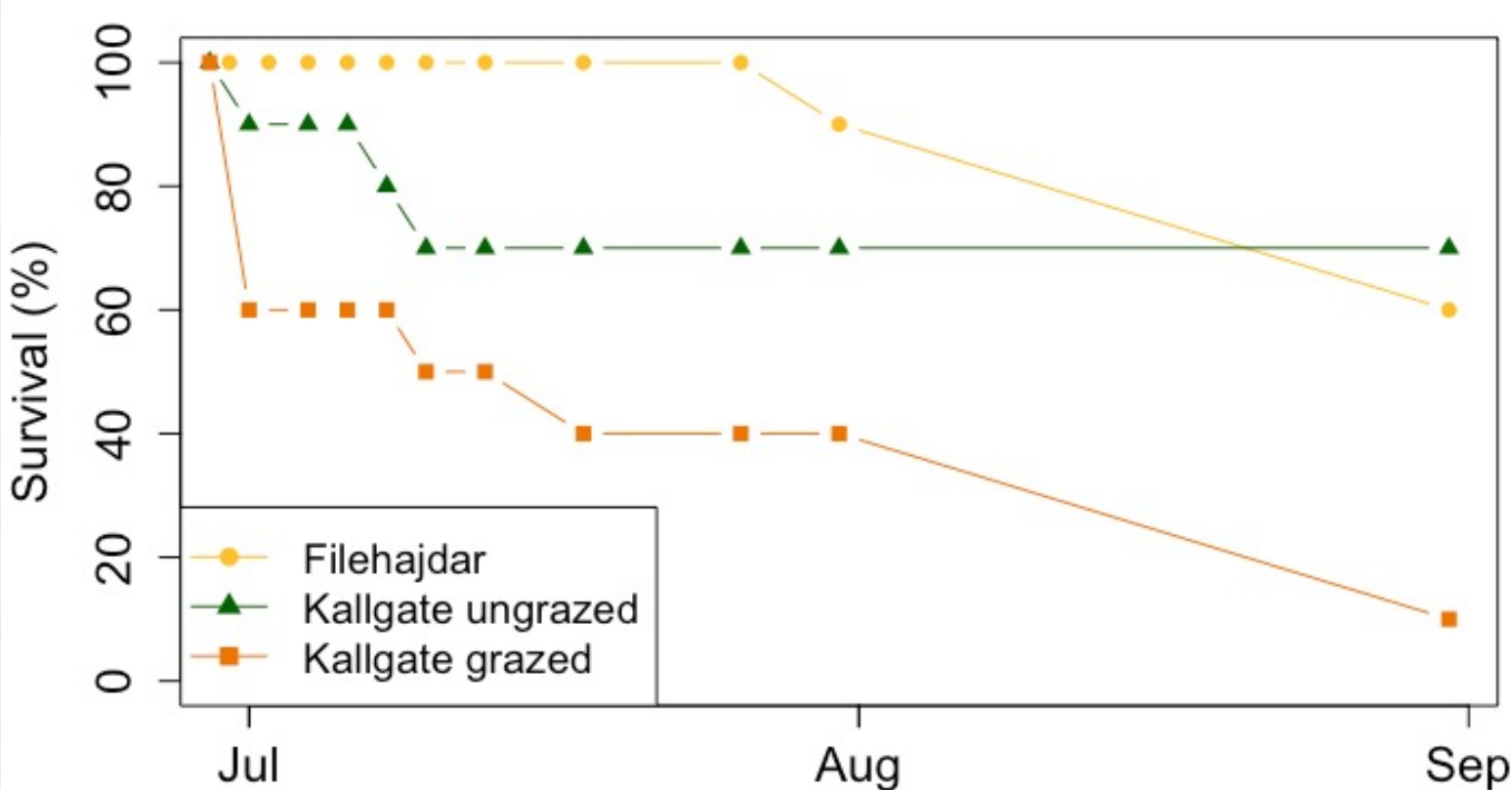


Figure 1. Larval survival on the three different locations: Filehajdar, Kallgate ungrazed and Kallgate grazed, of which Filehajdar and Kallgate ungrazed are areas not currently grazed by livestock. Each point (circle, triangle or square) represents a visit.

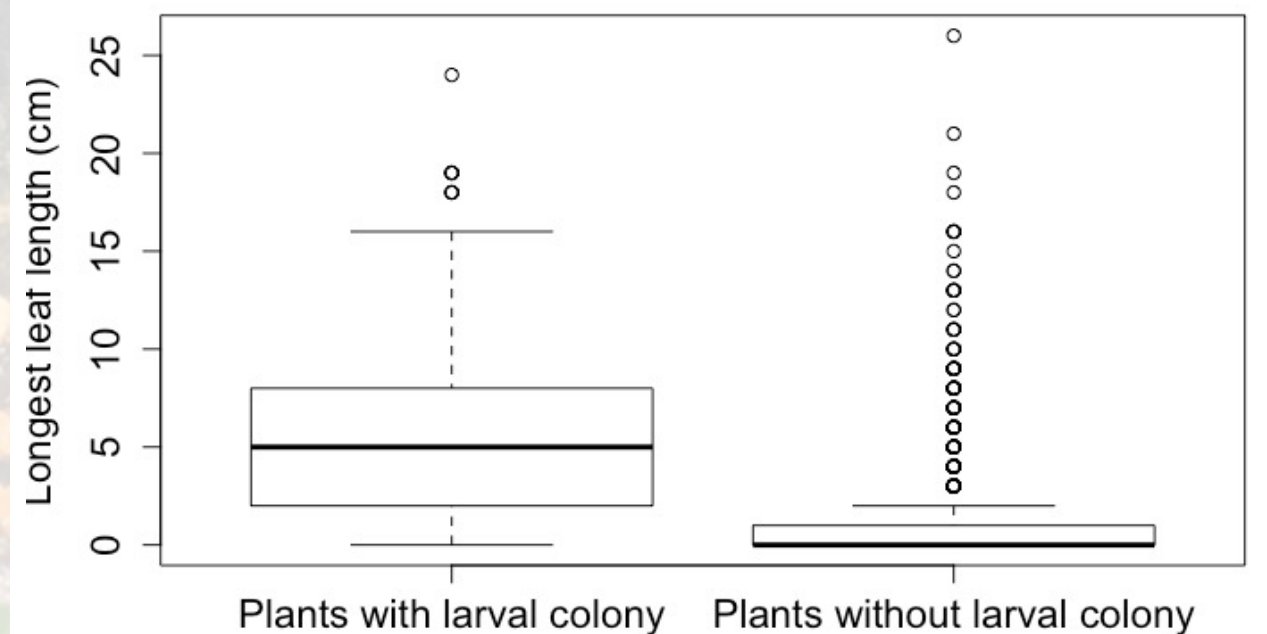


Figure 2. Maximum, minimum, median and interquartile range for the mean number of host plant stalks within \varnothing 80 cm circle where larval colonies were present or absent. Open dots represent outliers.

CONCLUSION

In this study, certain **characteristics of the host plant**, **presence of tussocks** and **openness** were important environmental features for the threatened marsh fritillary, while **grazing negatively impacted** the species. Moreover, the results indicated that the **grazing pressure** as of today was too high and **detrimental** to the population.



Contact
demieka@gmail.com