



Butterflies in Östergötland - how important is the landscape?

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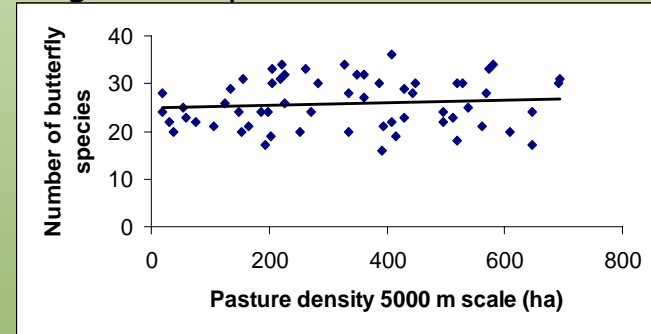
More information?

Contact: Lena Ask, lenas470@student.liu.se
https://cms.ifm.liu.se/biology/master_projects/2005/lenas470

Applied Biology, International Master Program, Linköpings universitet

Butterflies are dependent on unfertilised, low-nutrient, semi-natural pastures and many butterfly species are now declining all over Europe. One major cause is that their habitats have decreased with 82% in Sweden since 1880, mostly due to intensification of agriculture and change in land use. Therefore the butterfly diversity was expected to be lower in pastures with small amount of semi-natural pastures in the surrounding landscape.

In this study the butterfly composition at 60 semi-natural pastures was investigated in Östergötland, Sweden. They were mainly selected from a matrix of coniferous forest and with a gradient from small amount to large amount of pastures in the surrounding landscape.



The results in this study showed that the butterfly diversity did not automatically increase with increased amount of semi-natural pastures in the landscape. Although significant, the effect at 5000m scale was rather small, in contrast to what was expected.

The field work consisted of butterfly recordings, examination of several habitat factors and calculation of the amount of semi-natural pastures in the surrounding landscape within three different buffer zones (500, 2000, 5000m) from each butterfly site.

In conclusion, there was no clear relationship between the amount of semi-natural pastures and butterfly diversity in a coniferous dominated landscape. Still the landscape may be of importance in conservation planning for long term persistence of a rich butterfly fauna.