



# Burnet moths: what do they want?

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## Background

Burnet moths (Zygaenidae) are declining in Europe.

Main reason: loss of appropriate habitat types, e.g. semi-natural grassland.

Effective conservation plans require knowledge of a species' habitat preferences; **for several life stages** and at **different spatial scales**.

### Aim

Find the habitat requirements of *Zygaena filipendulae*, *Zygaena lonicerae* and *Zygaena viciae*

- during different life stages and...
- at two spatial scales



## Implications for conservation

- Preserve sites with a high cover of host plants and nectar sources.
- Manage areas to keep them open and sunny, and to prevent grass domination.
- Execute management with care (or late in the season) to not harm *Z. filipendulae* pupae or reduce substrates suitable for pupation.
- Preserve and restore semi-natural grasslands to promote burnet presence on a larger scale.

## Methods

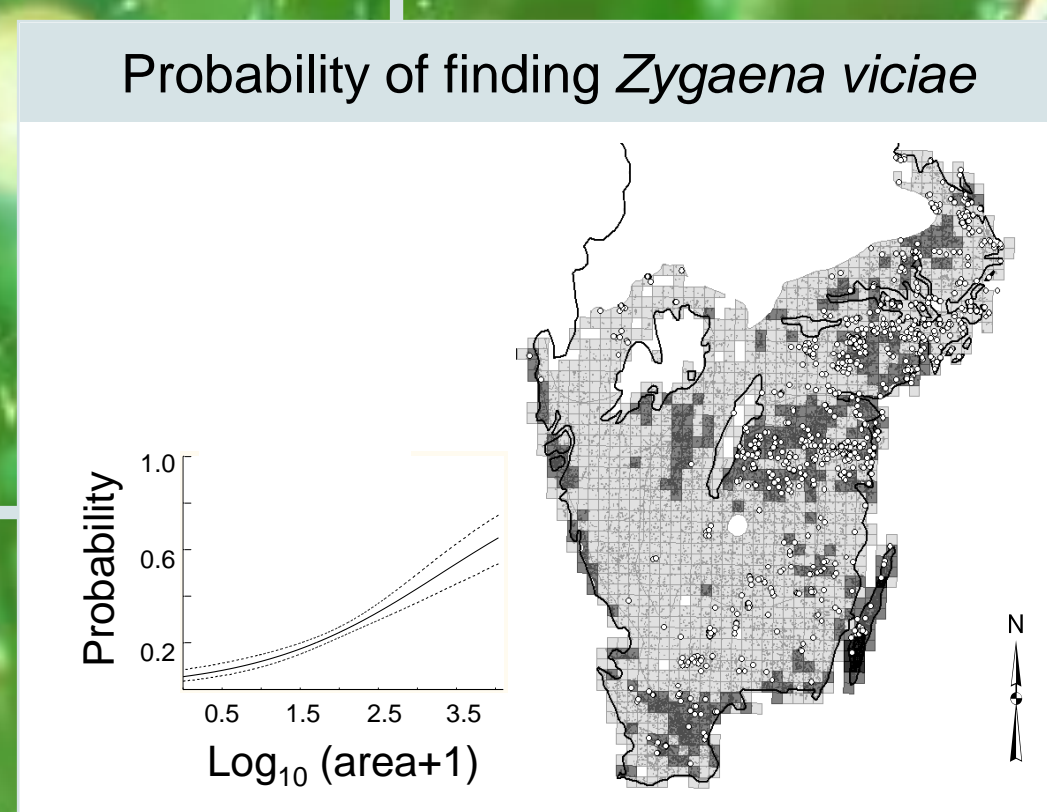
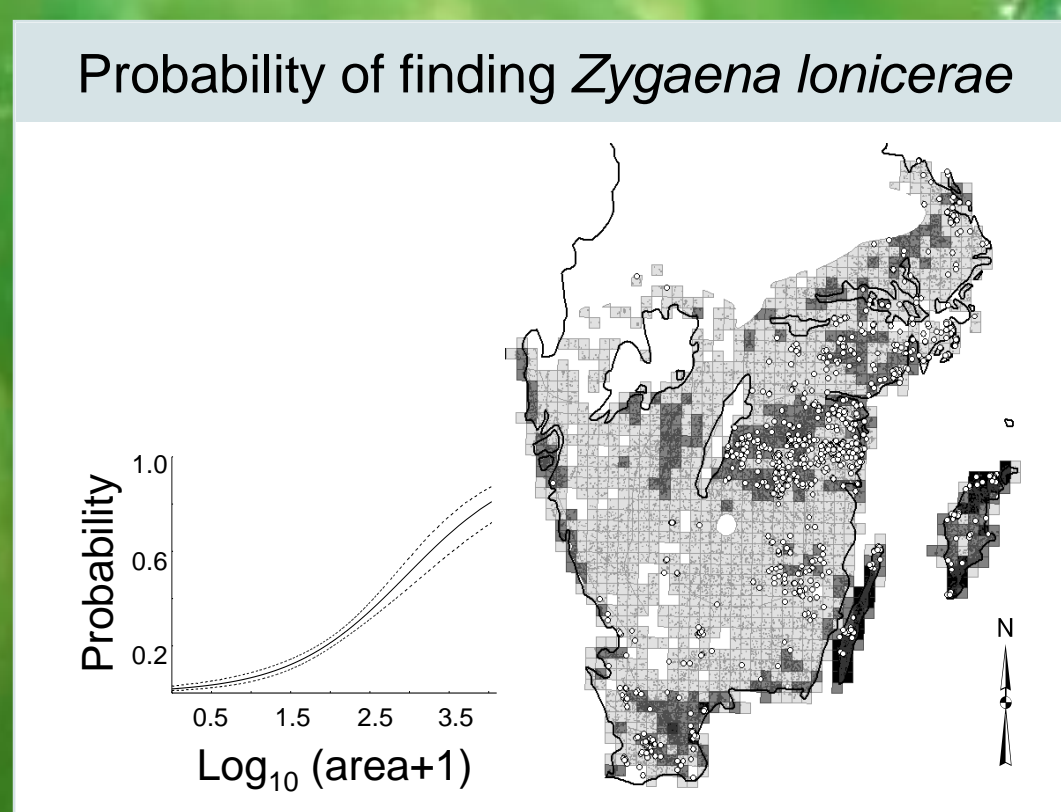
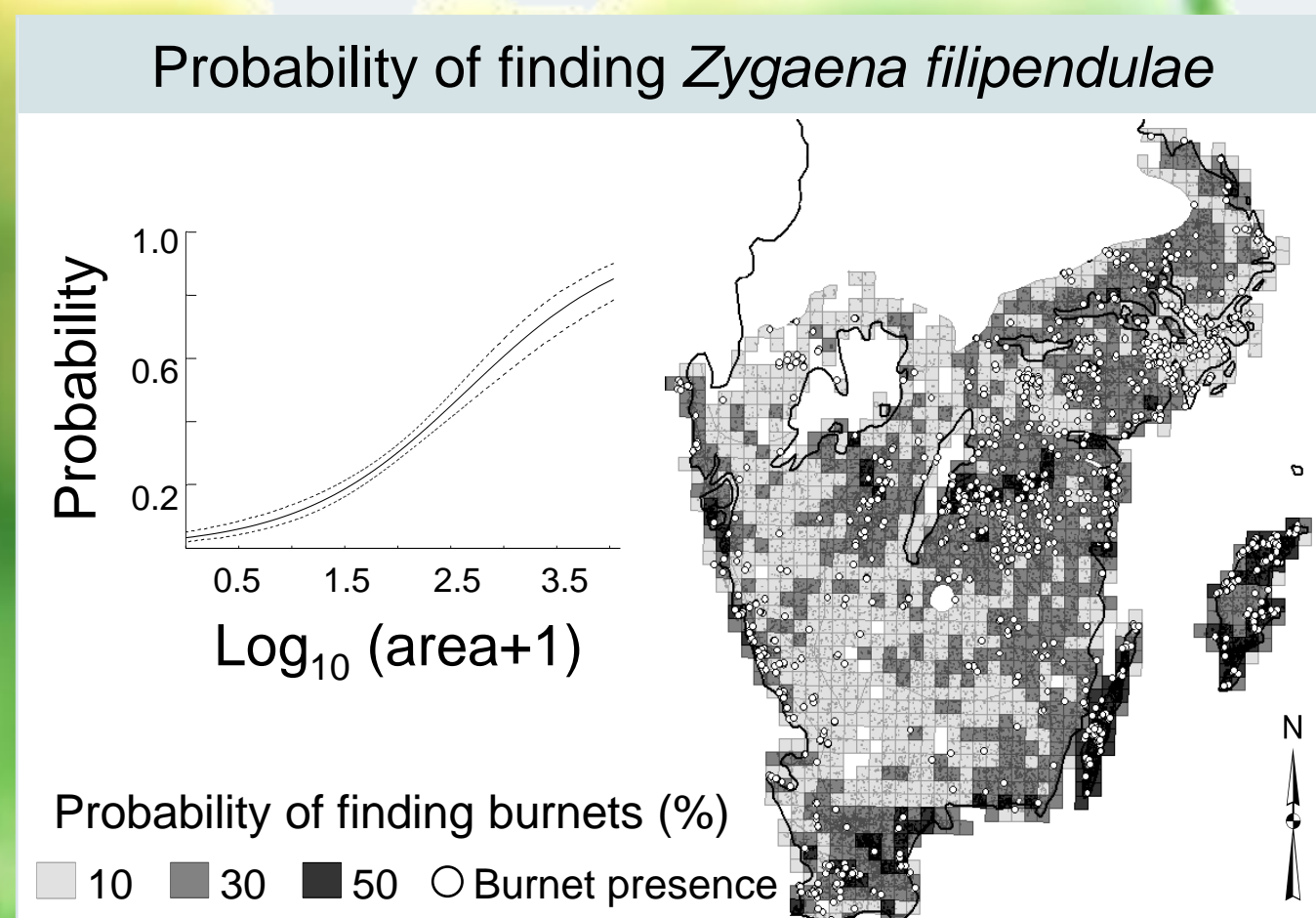
### Small scale

Measurements of habitat variables:

- Larval host plants
- Nectar sources
- Vegetation height
- Cover of bare ground & dry grass
- Sun exposure

### Large scale

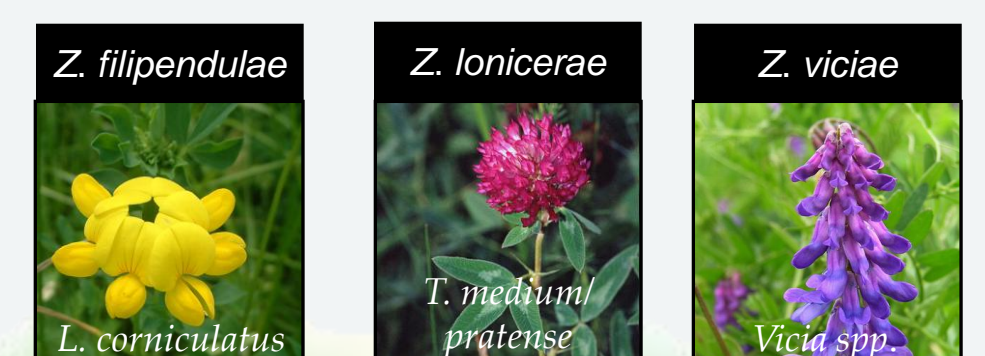
GIS analyses: area of meadows and pastures in southern Sweden vs. burnet presence/absence.



## Results

### Small scale

Larval host plants.



**Larvae:** surrounded by a higher density of larval host plants than average, and than pupae or adults.

**Pupae:** found in higher vegetation than larvae or adults.

**Adults:** found in more sun than average, mainly on red and violet composite flowers such as *Cirsium* and *Centaurea*.

Nectar plants.



### Large scale

Positive relationship between burnet moths and the area of meadows and pastures in southern Sweden.