

Tag der Nationalpark-Forschung

Habitatwahl und Bestandsdichten der Schafstelze im Seewinkel

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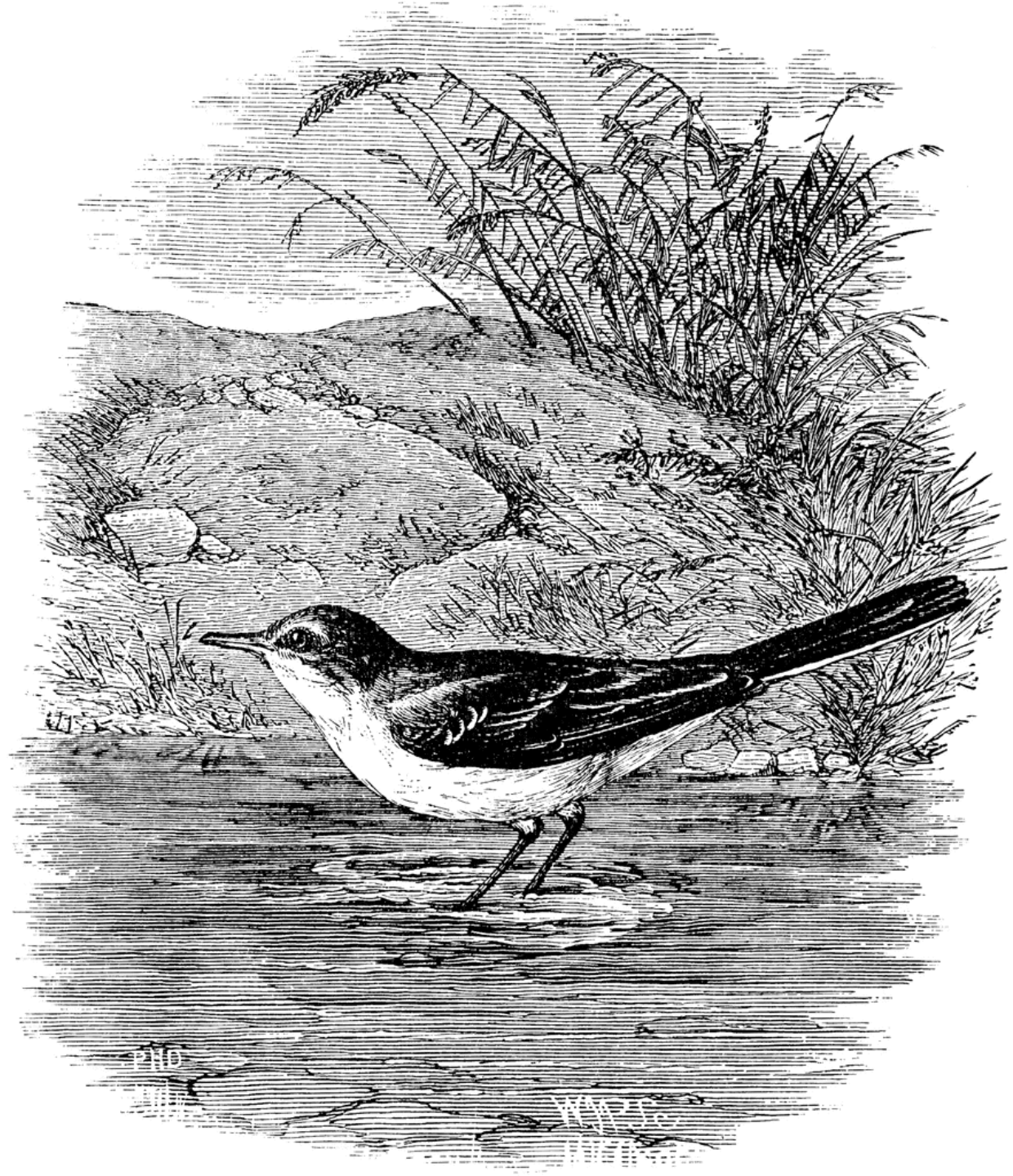
Tropical Ecology and Animal Biodiversity



– NATIONALPARK –
NEUSIEDLER SEE
SEEWINKEL

Introduction

- Typically in wet meadows
- Decline in meadows and pastures
- Stable in arable land
- Possible habitat-switch



Motivation

- **Factors responsible for distribution**
→ **conservation strategies**
- **Interaction arable land and natural sites**
→ **growing closer together**





Legend

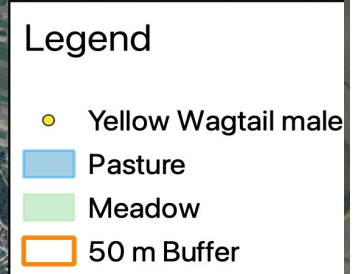
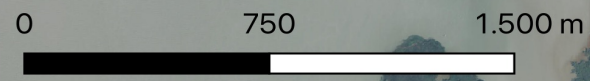
- Pasture
- Potato Fields
- Meadow
- 50 m Buffer

0 2.5 5 km

Focus

- **Meadow management and population density**
- **Habitat preference**

Population Density



The role of arable landscapes as breeding sites for Yellow Wagtails

Hypothesis

- **Source-Sink relationship**
 - Meadows = source
 - Potato fields = sink
- **Wagtails occupy meadows first**
- **Later non-optimal potato fields**

Methods

- **1st May - 17th June**

(1) singing males

(2) displaying males

(3) territorial conflicts

(4) carrying nest material

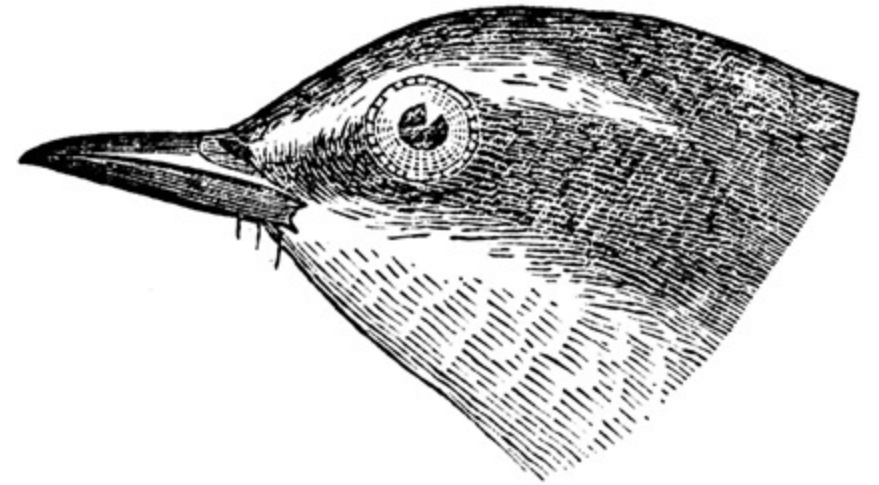
(5) alarming

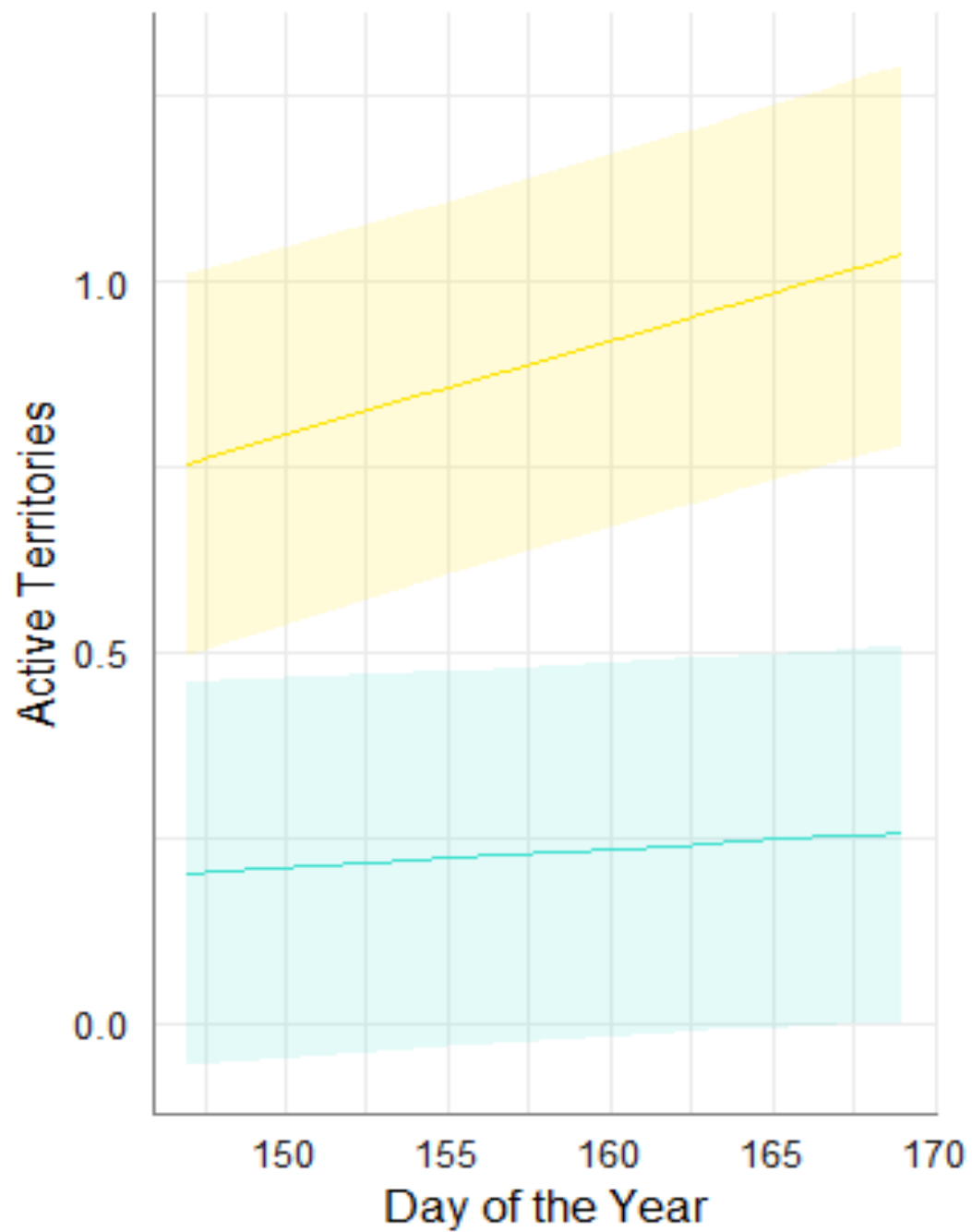
(6) carrying food

After BIBBY ET AL. 2001

Assumptions

- 1. Wagtails never occupy a poorer site when a better one is still available**
- 2. A poor-quality breeding site is better than none at all**



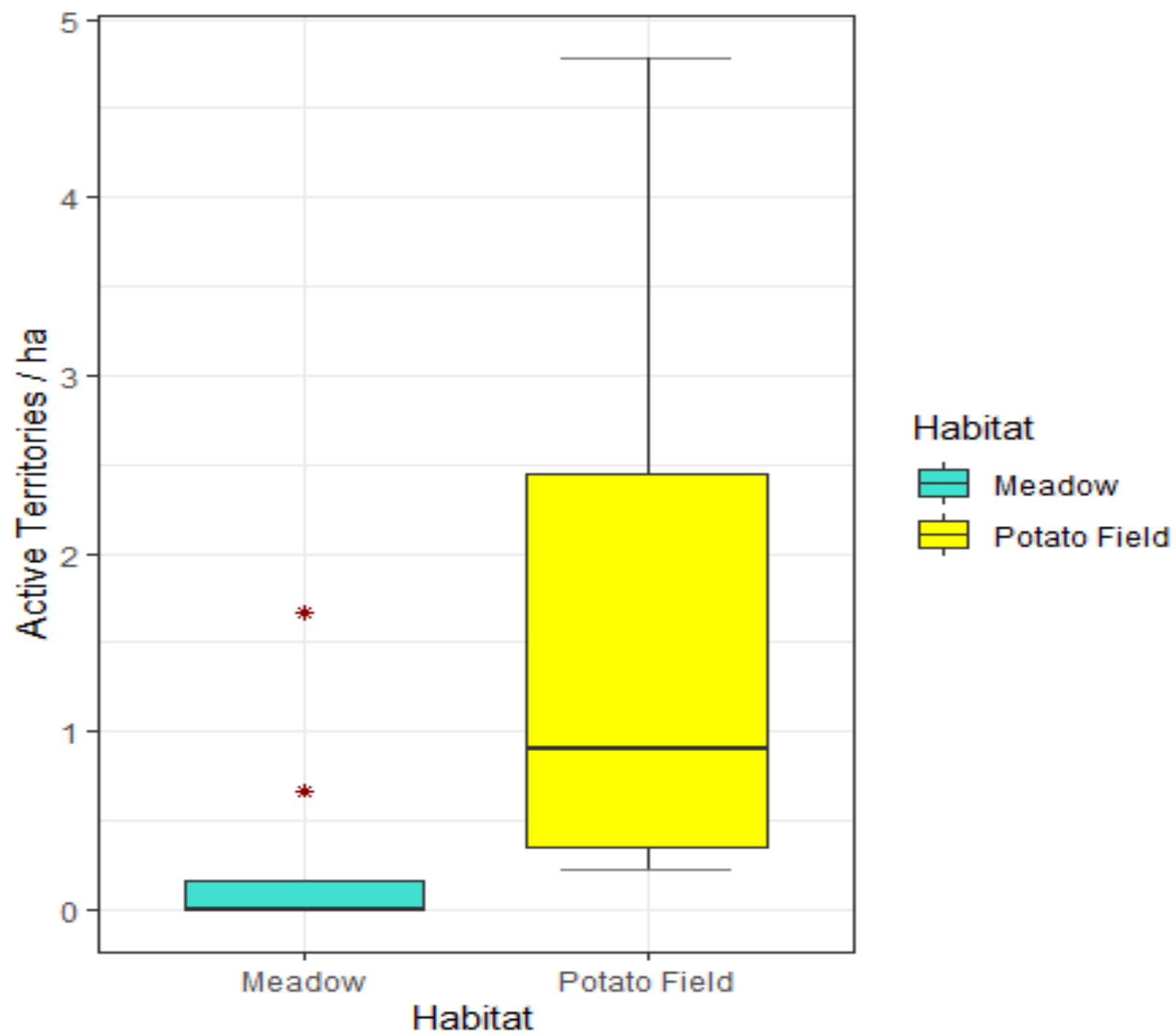


Habitat

- Meadow
- Potato Field

$p = 0.00471$

$p = 3.22e-07$

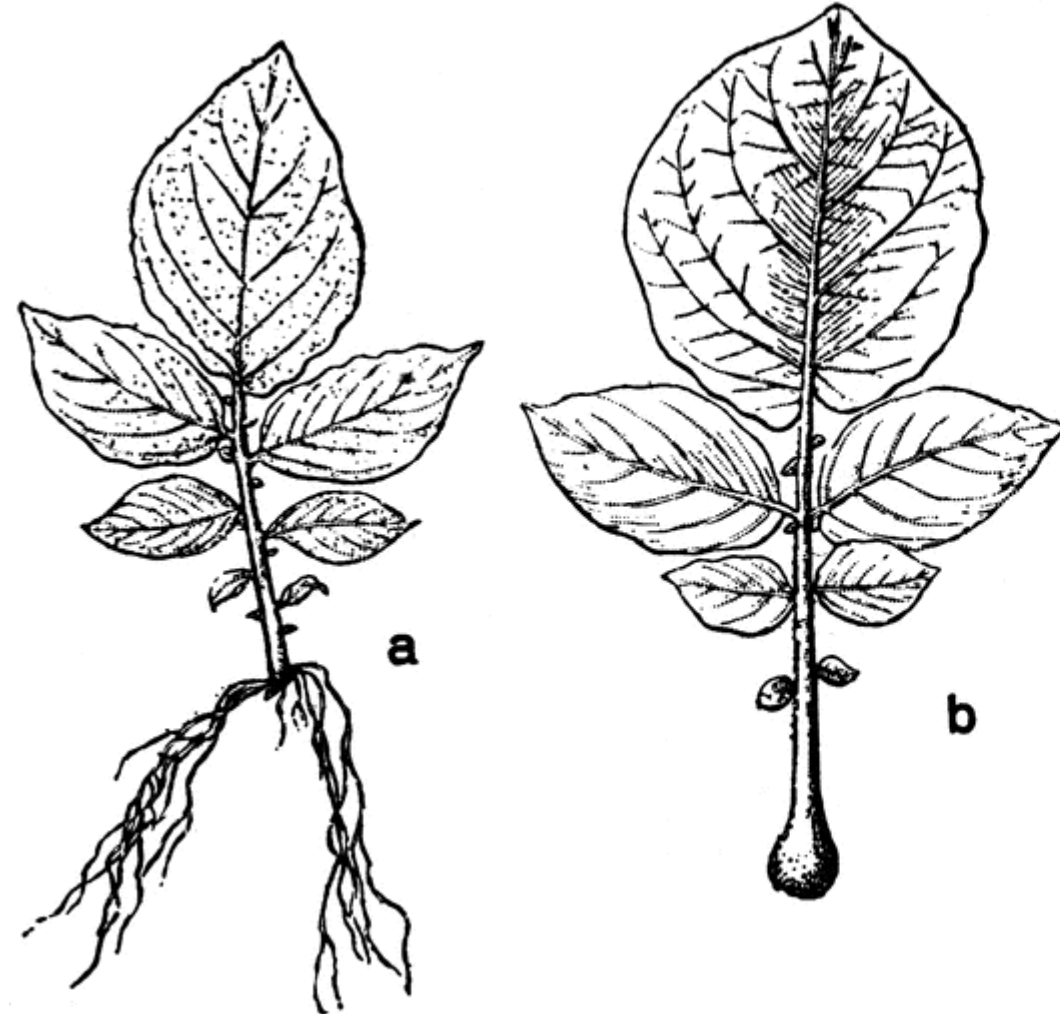


Implications

- **No source-sink dynamic**
- **Colonialization = simultaneous**
- **No preference for meadows**
- **Life history change?**

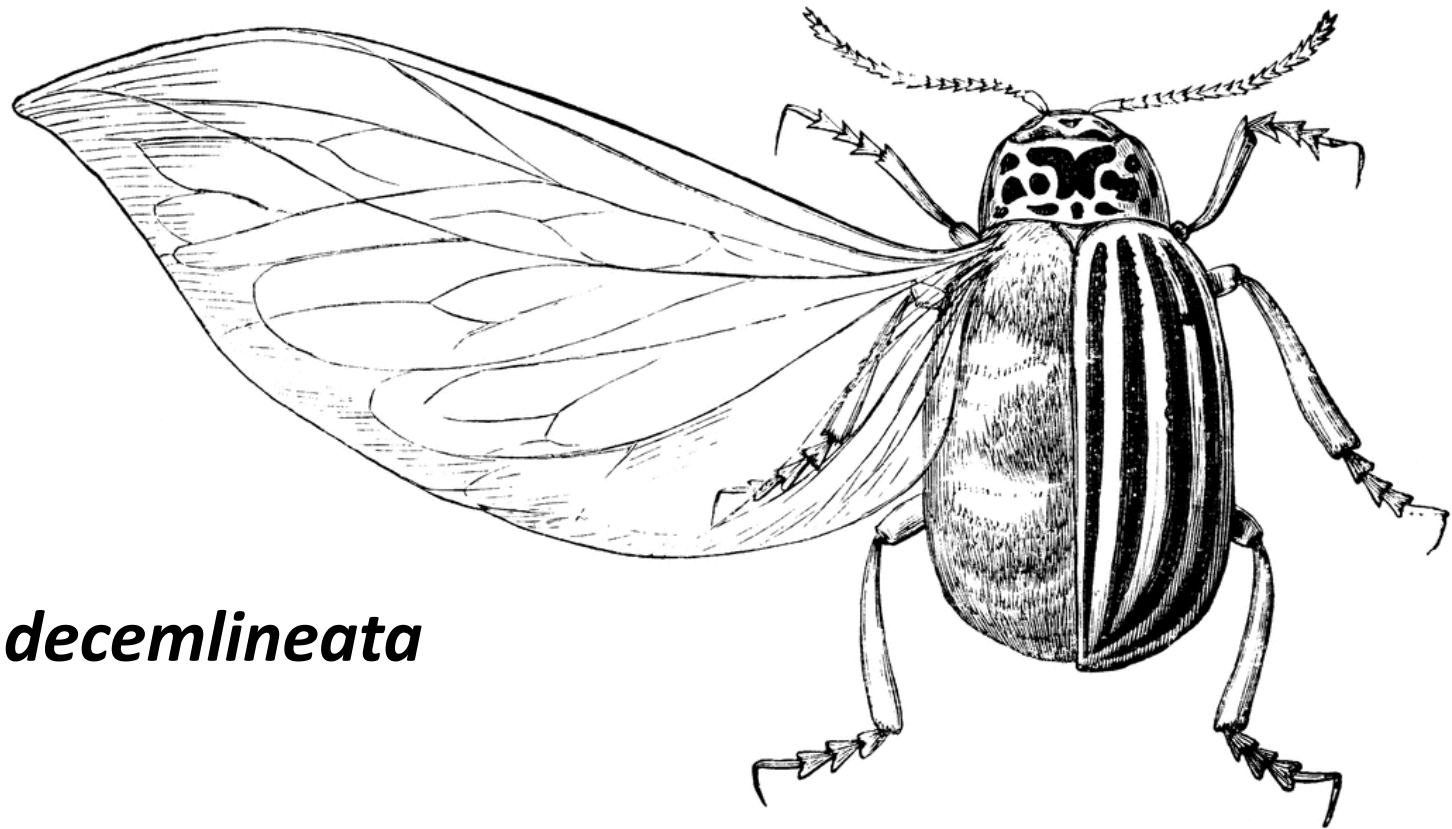
Similarities arable land & meadows

- **Vegetation height = 20 – 40 cm**
- **Ground coverage = min. 60 %**
- **Low perturbation**
- **Water**



Food Sources

- **Molinia meadows = chironomids & coleopterans**



- **Potato fields = *Leptinotarsa decemlineata***

Conclusion

- **Buffer zones particularly important**
→ breeding structures
- **Potato fields = increasingly used**
→ stability of the demographic system
- **Similarities arable land & meadows**

