

Hållbar utveckling i odlingslandskapet – Hur gör vi?



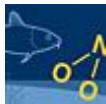
Sönke Eggers
Institutionen för ekologi
Uppsala
SLU

Tio ton vete kombinerat med giftfri miljö, ingen övergödning och biologisk månfald – går det?





Ett rikt odlingslandskap



Ingen övergödning

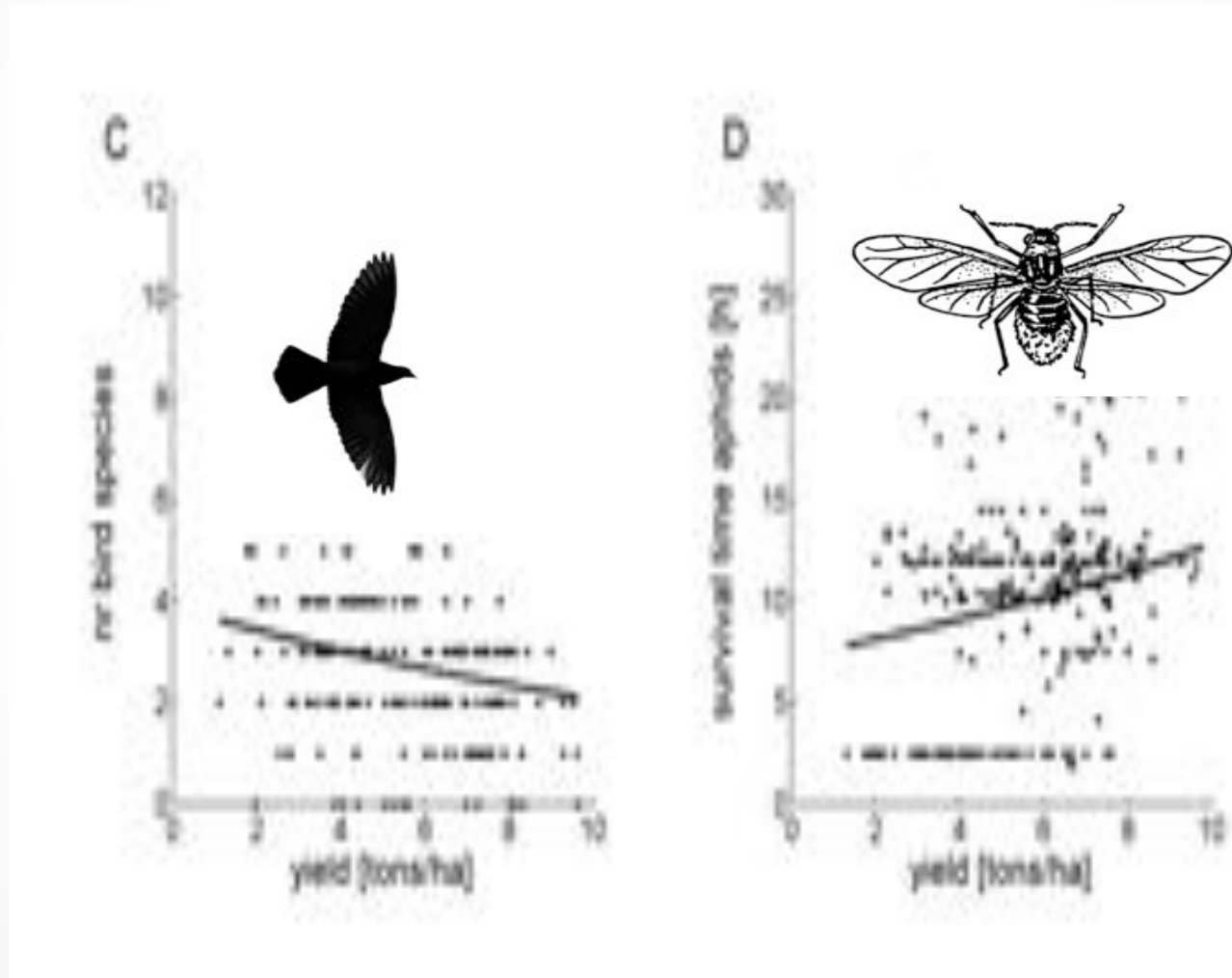


Giftfri miljö



Produktion

Ökad skörd utarmar artrikedom!



Popular Pesticides Linked to Drops in Bird Populations

This is the latest in a string of studies suggesting that some pesticides impact birds as well as pollinators



EU to ban pesticides linked to bee deaths

A vote at the European Commission on Monday means a continent-wide ban on pesticides linked to bee deaths could be in place later this year.



1



0



0



1



Email



Spannmål och vallodling



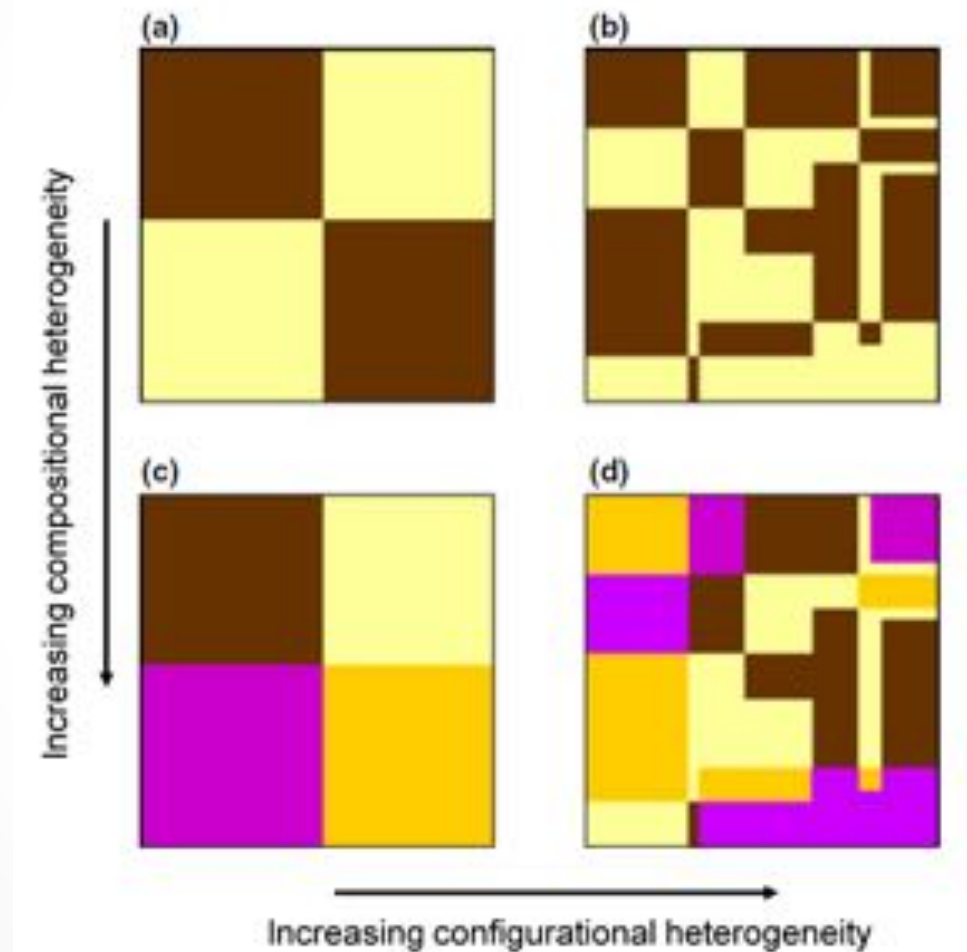
Föda



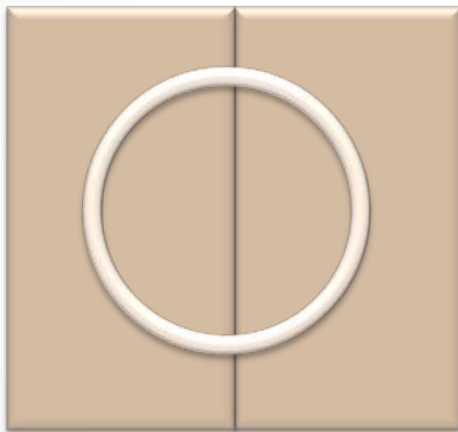
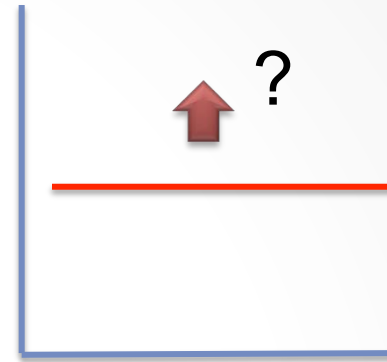
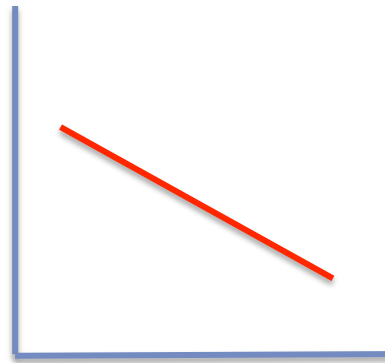
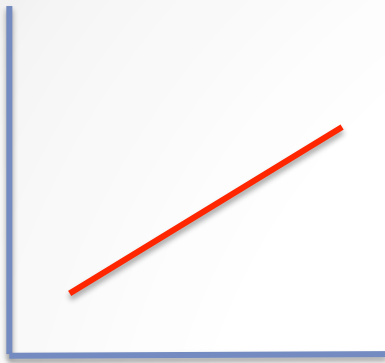


Low et al. 2010

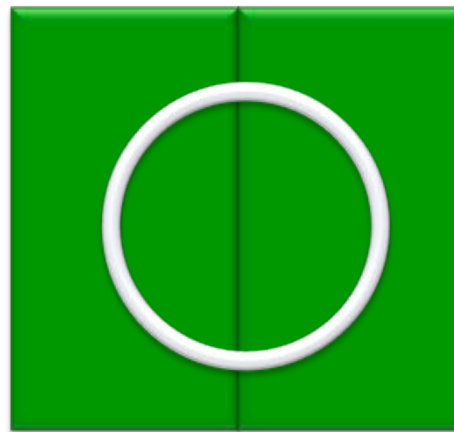
Landskapsheterogenitet



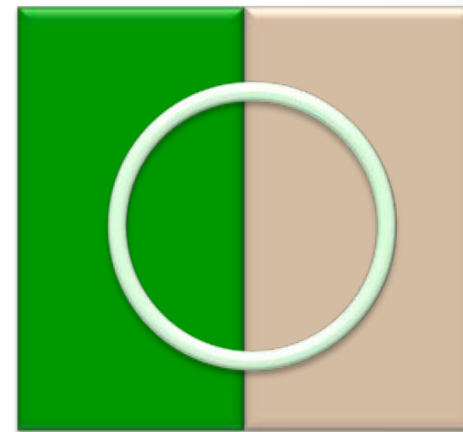
Fahrig et al. 2011



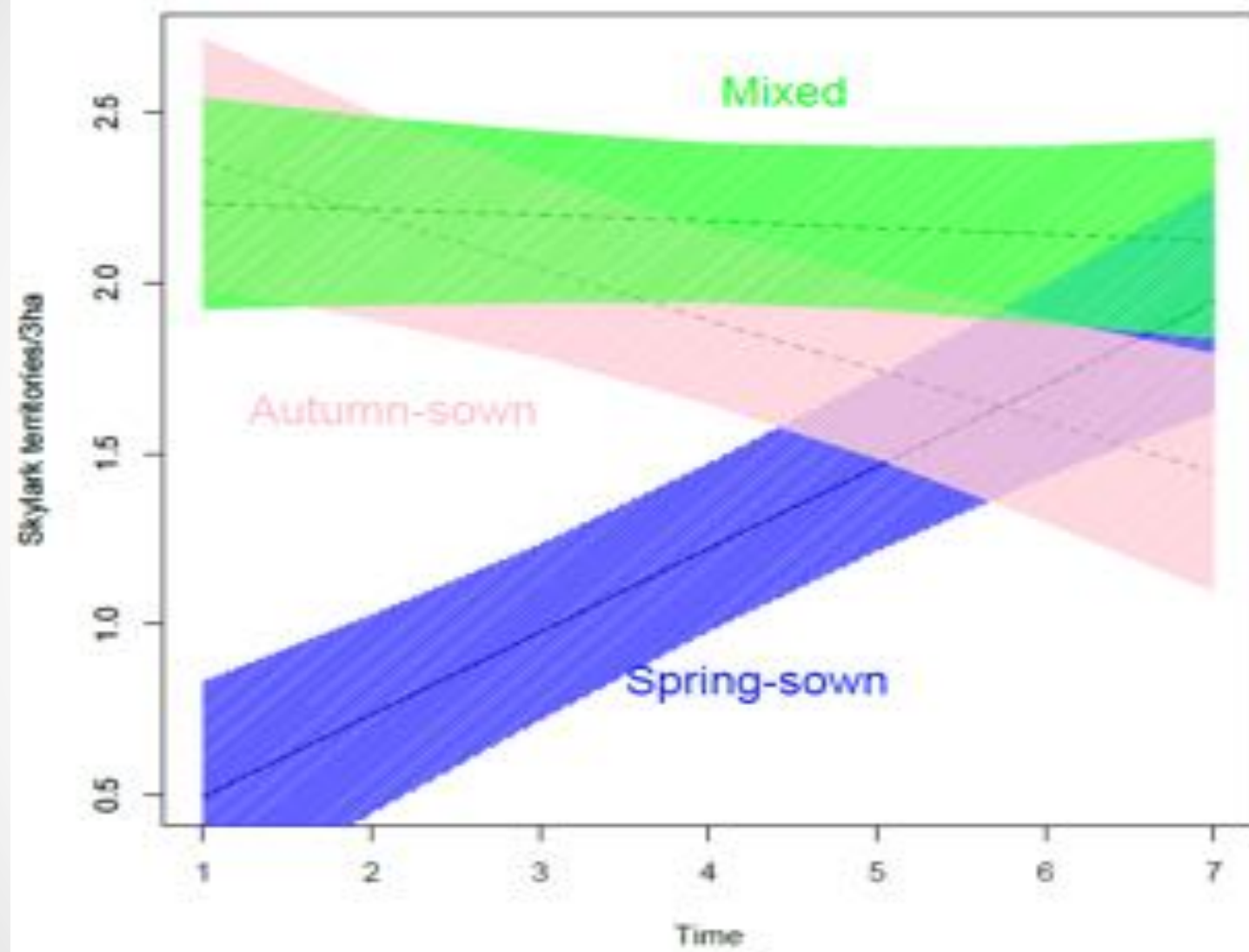
Vårsäd



Höstsäd



Mix







Volunteer & Farmer Alliance (Sweden)





Syfte

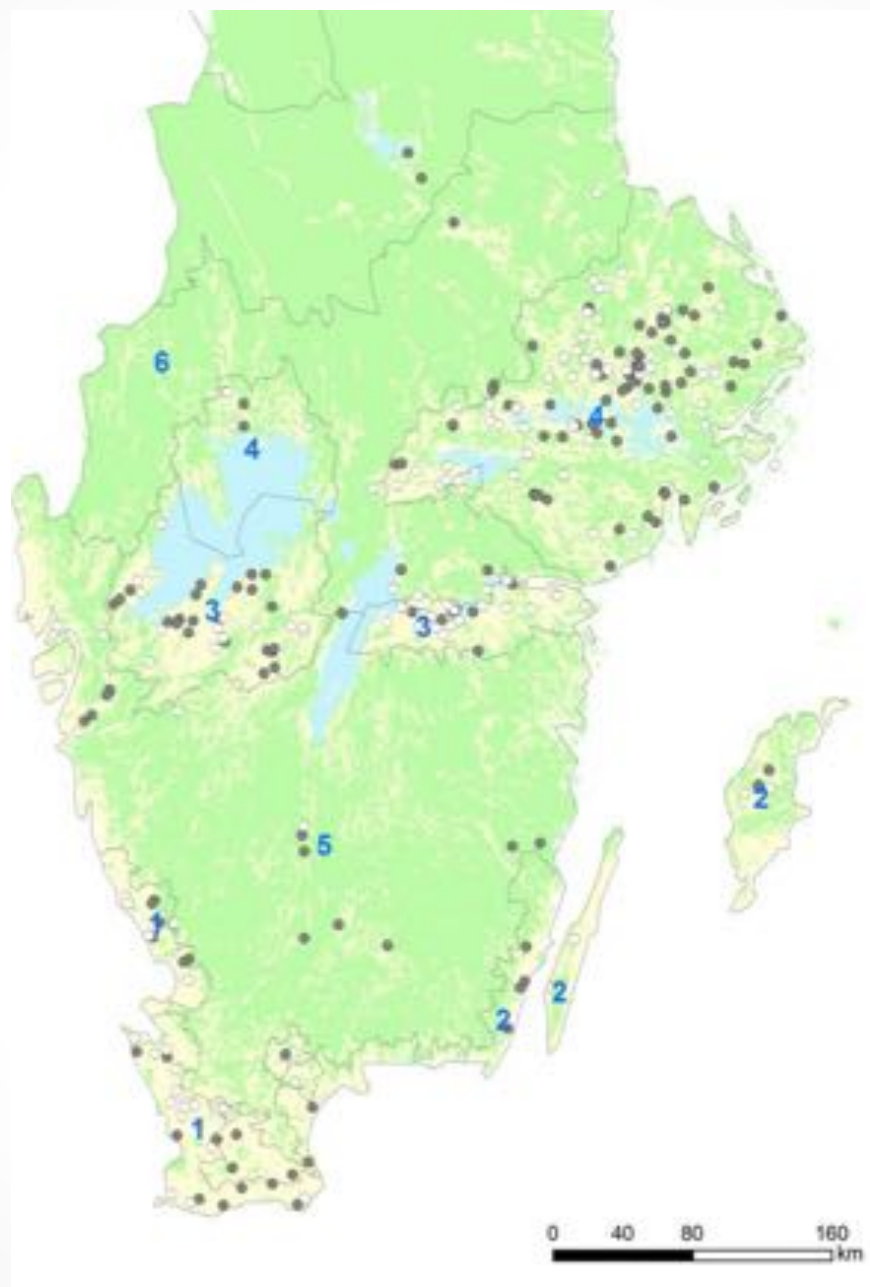
Effektiviserar miljömålsarbetet

Identifiera naturvårdande åtgärder
med hög acceptans hos markägaren

Mål



- (1) Kompetensutveckling
- (2) Miljökommunikation
- (3) Natur- och viltvård

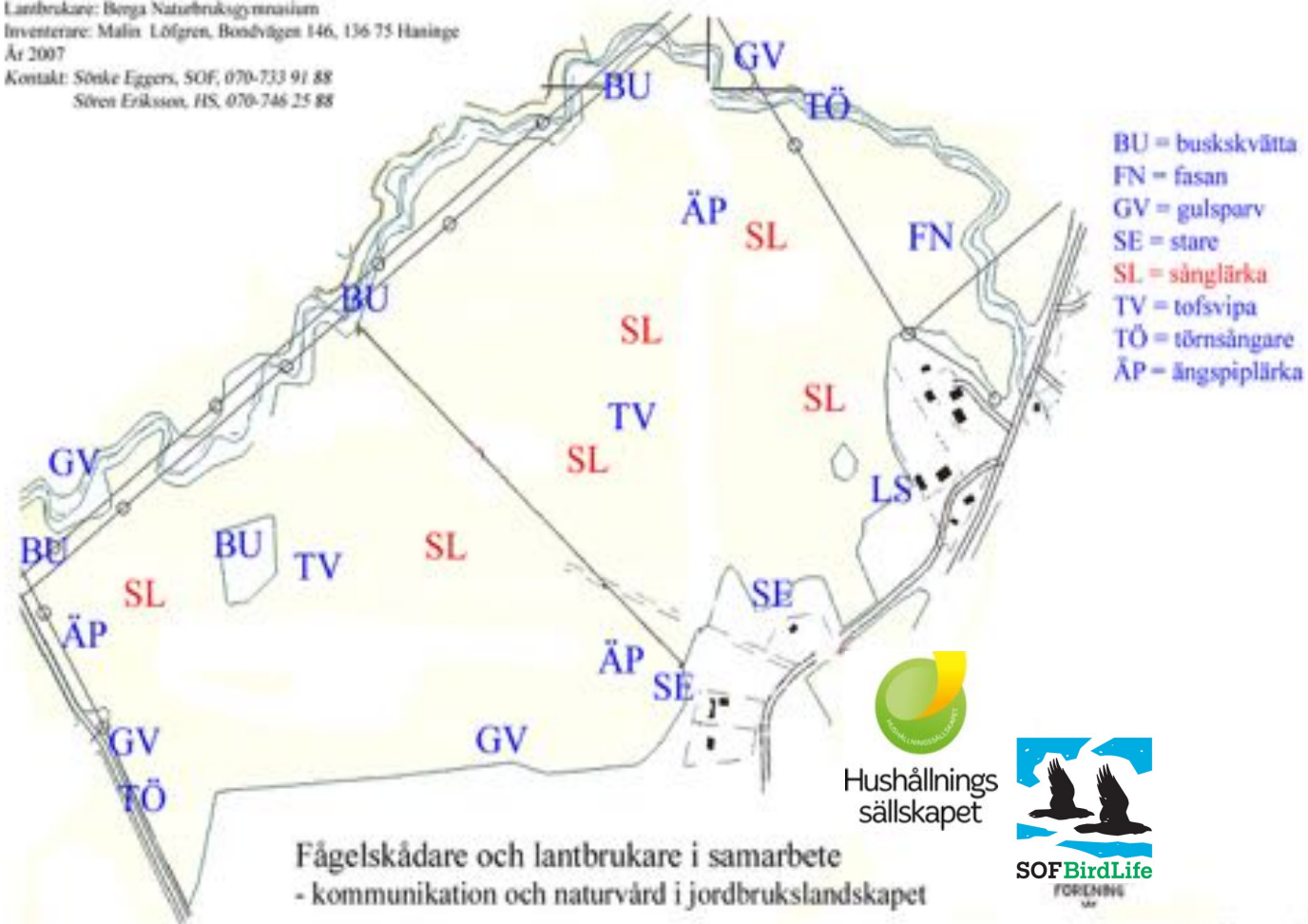


Hushållnings
sällskapet



SOF BirdLife

Lantbrukare: Benga Naturbruksgymnasium
 Inventerare: Malin Löfgren, Bondvägen 146, 136 75 Haninge
 År 2007
 Kontakt: Sönke Eggers, SOF, 070-733 91 88
 Sören Eriksson, HS, 070-746 25 88



Fågelskådare och lantbrukare i samarbete
 - kommunikation och naturvård i jordbrukslandskapet



Karta 1(3)



Rådgivning



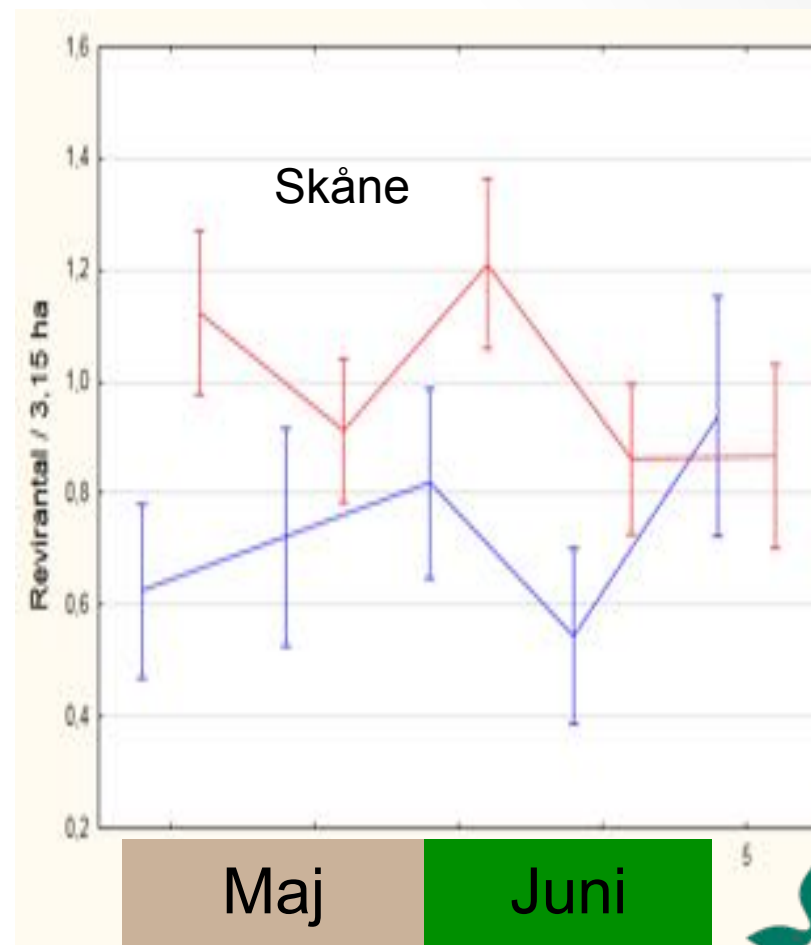
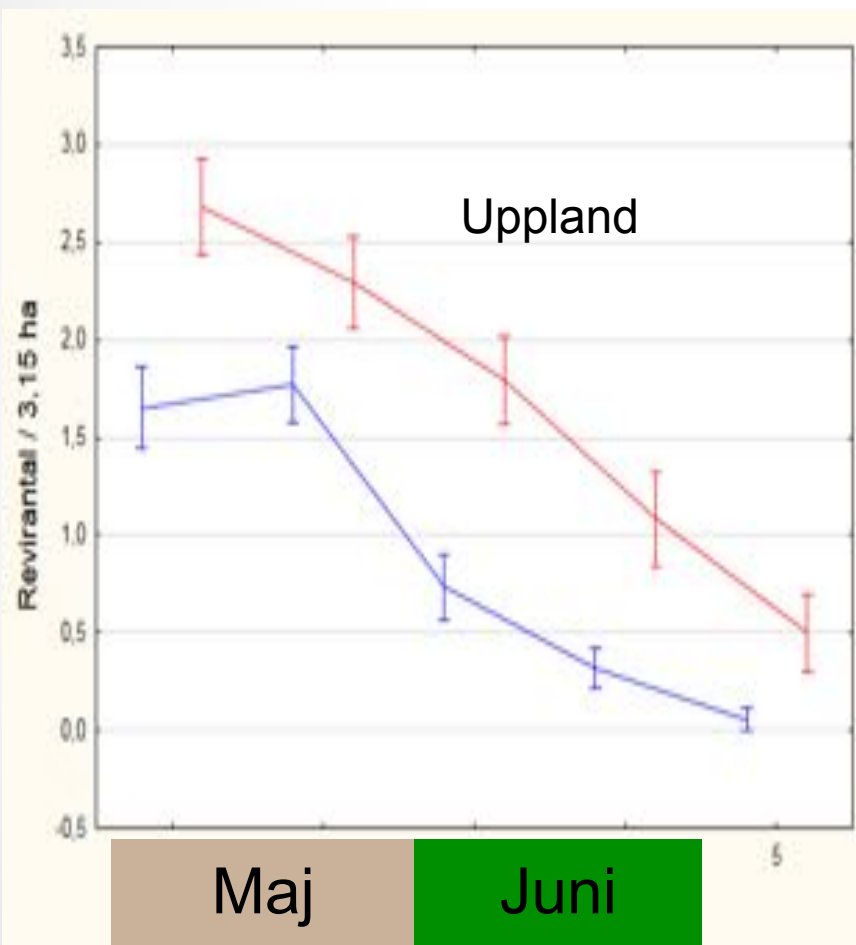
Rädda sånglärkan



Gör lärkrutor någon nytta?



Gör lärkrutor någon nytta?



Multifunktionella Skyddszoner



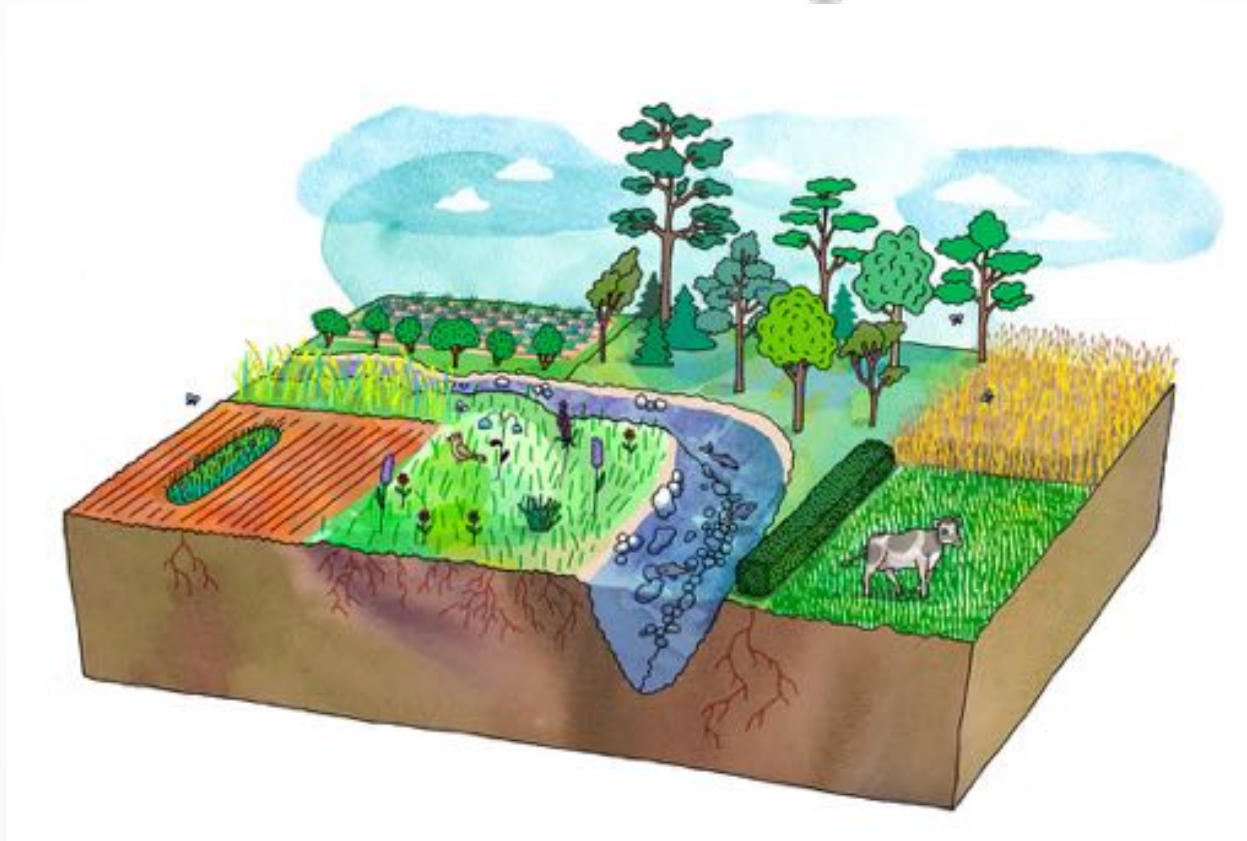
Areal: 6000 – 9000 ha

Potential: 100 000 ha (Jo 10.013)

Ersättning: 3000 kronor per hektar



Systematiskt kartläggning av kunskap



SYSTEMATIC REVIEW PROTOCOL

Open Access



The multifunctional roles of vegetated strips around and within agricultural fields. A systematic map protocol

Neal Robert Haddaway^{1*}, Colin Brown², Sönke Eggers³, Jonas Josefsson³, Brian Kronvang⁴, Nicola Randolf⁵ and Jaana Uusi-Kamppa⁶

Abstract

Background: Agriculture and agricultural intensification can have significant negative impacts on the environment, including nutrient and pesticide leaching, spreading of pathogens, soil erosion and reduction of ecosystem services provided by terrestrial and aquatic biodiversity. The establishment and management of vegetated strips adjacent to farmed fields (including various field margins, buffer strips and hedgerows) are key mitigation measures for these negative environmental impacts and environmental managers and other stakeholders must often make decisions about how best to design and implement vegetated strips for a variety of different outcomes. However, it may be difficult to obtain relevant, accurate and summarised information on the effects of implementation and management of vegetated strips, even though a vast body of evidence exists on multipurpose vegetated strip interventions within and around fields. To improve the situation, we describe a method for assembling a database of relevant research relating to vegetated strips undertaken in boreo-temperate farming systems (arable, pasture, horticulture, orchards and viticulture), according to the primary question: What evidence exists regarding the effects of field margins on nutrients, pollutants, socioeconomic, biodiversity, and soil retention?

Methods: We will search 13 bibliographic databases, one search engine and 37 websites for stakeholder organisations using a predefined and tested search string that focuses on a comprehensive list of vegetated strip synonyms. Non-English language searches in Danish, Finnish, German, Spanish, and Swedish will also be undertaken using a web-based search engine. We will screen search results at title, abstract and full text levels, recording the number of studies deemed non-relevant (with reasons at full text). A systematic map database that displays the meta-data (i.e. descriptive summary information about settings and methods) of relevant studies will be produced following full text assessment. The systematic map database will be displayed as a web-based geographical information system (GIS). The nature and extent of the evidence base will be discussed.

Keywords: Vegetative strip, Buffer strip, Filter strip, Buffer, Agri-environment, Agricultural policy, Mitigation, Agricultural pollution, Agricultural management

31,341 search results



Removal of duplicates

19,457 records



Title screening

8,094 relevant titles



Abstract screening

3,031 relevant abstracts



Full text retrieval

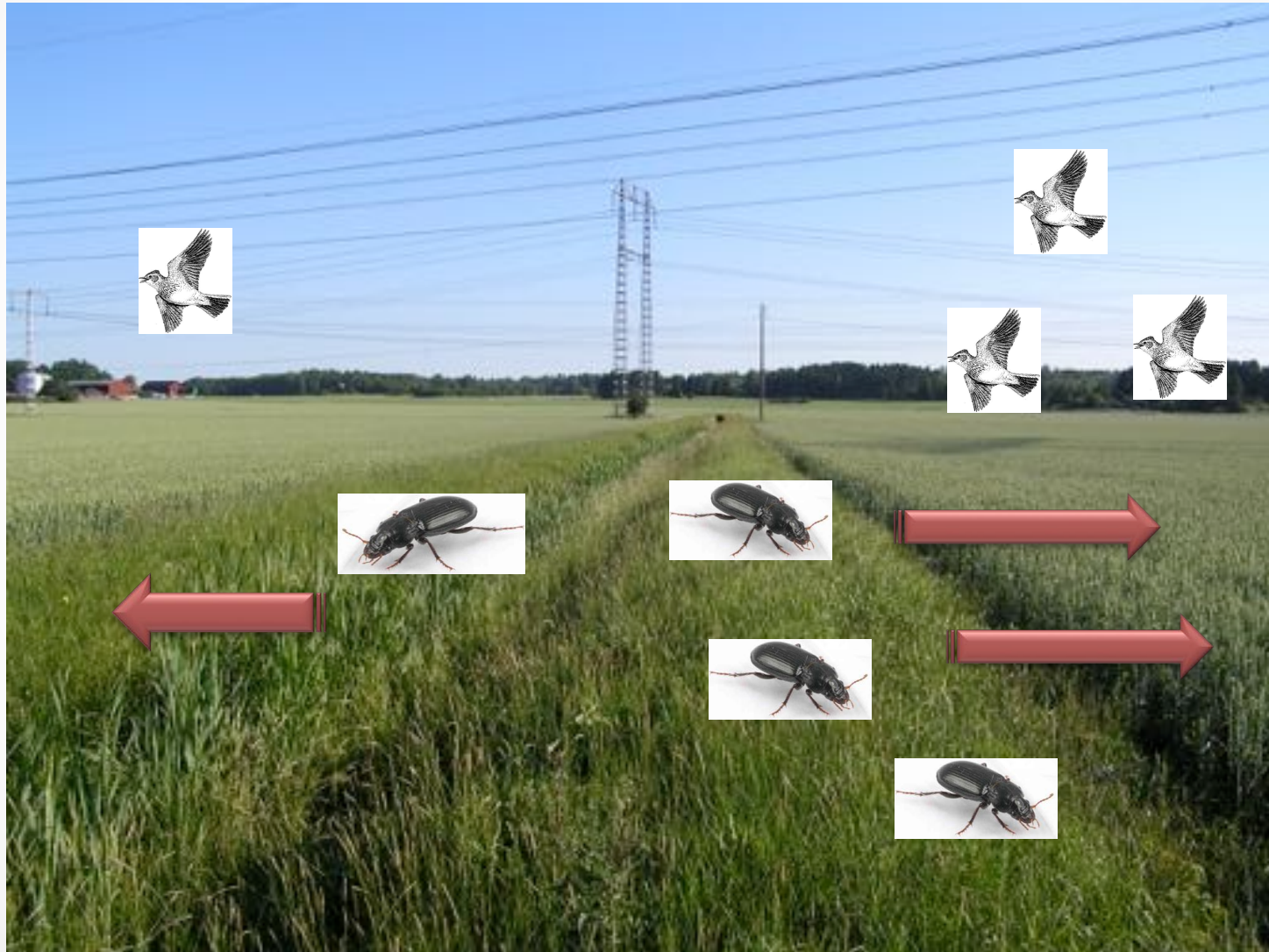
1,911 retrievable full texts

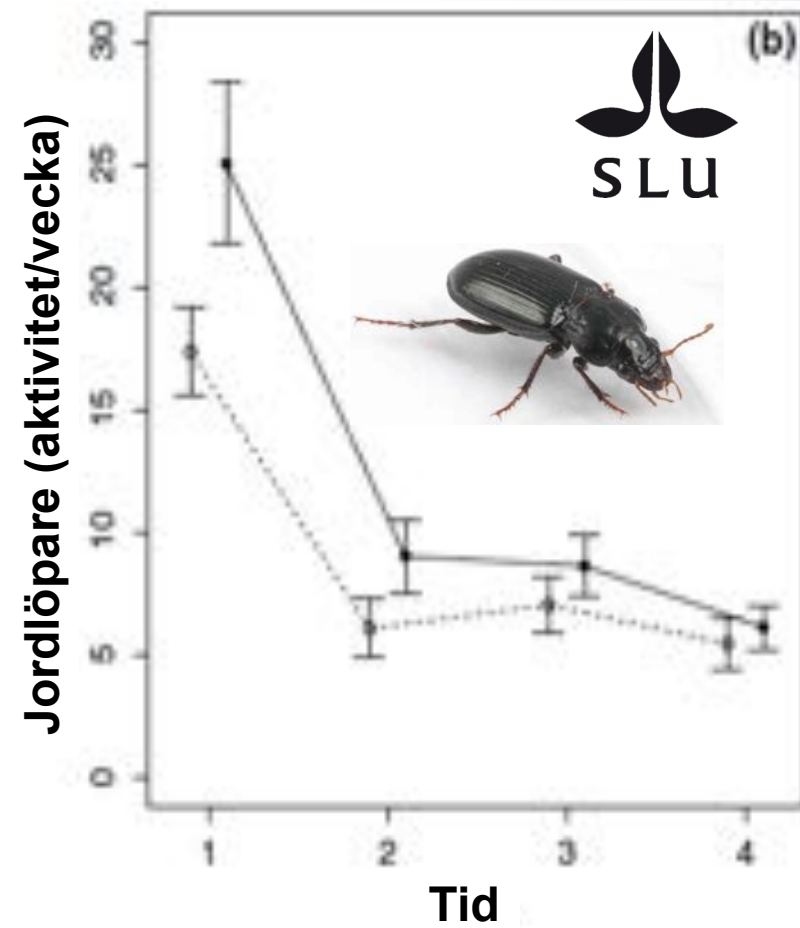
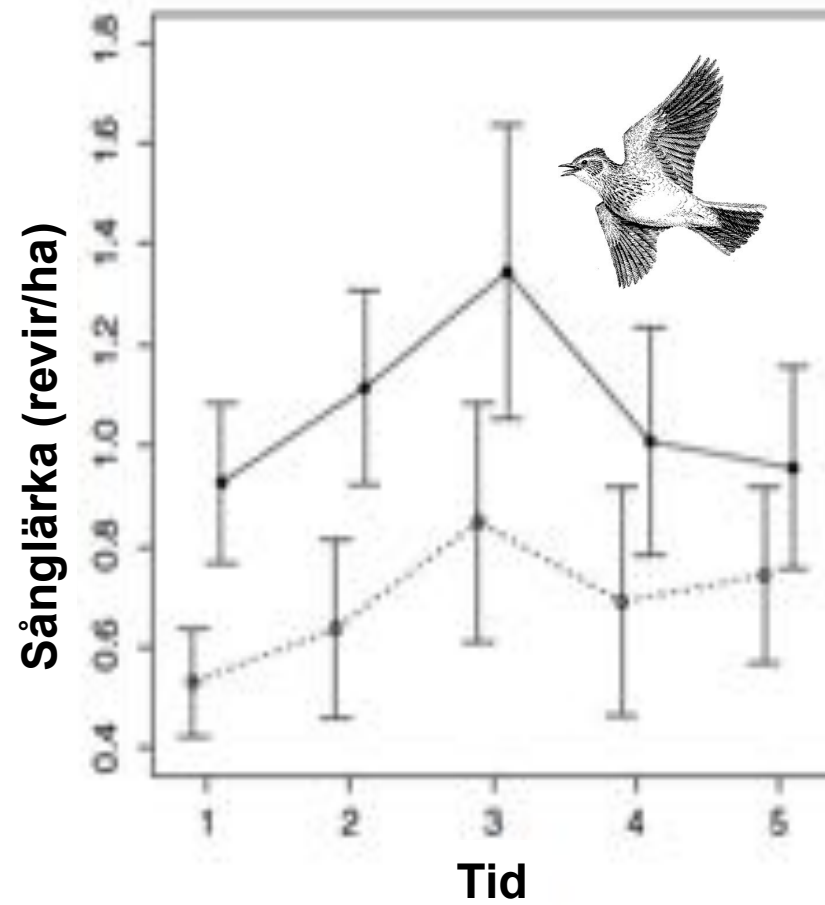


Full text screening

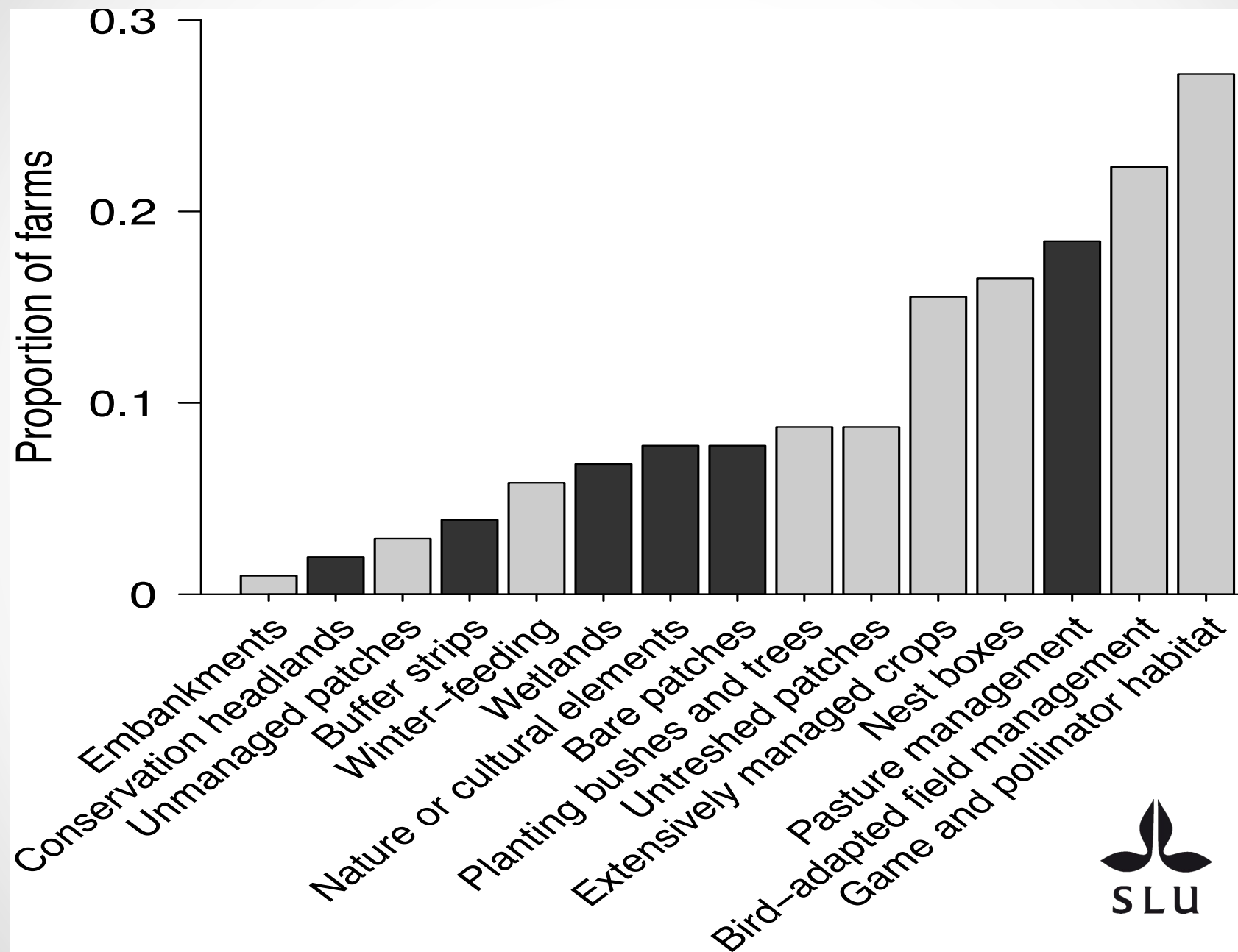
890-1,060 articles in the map

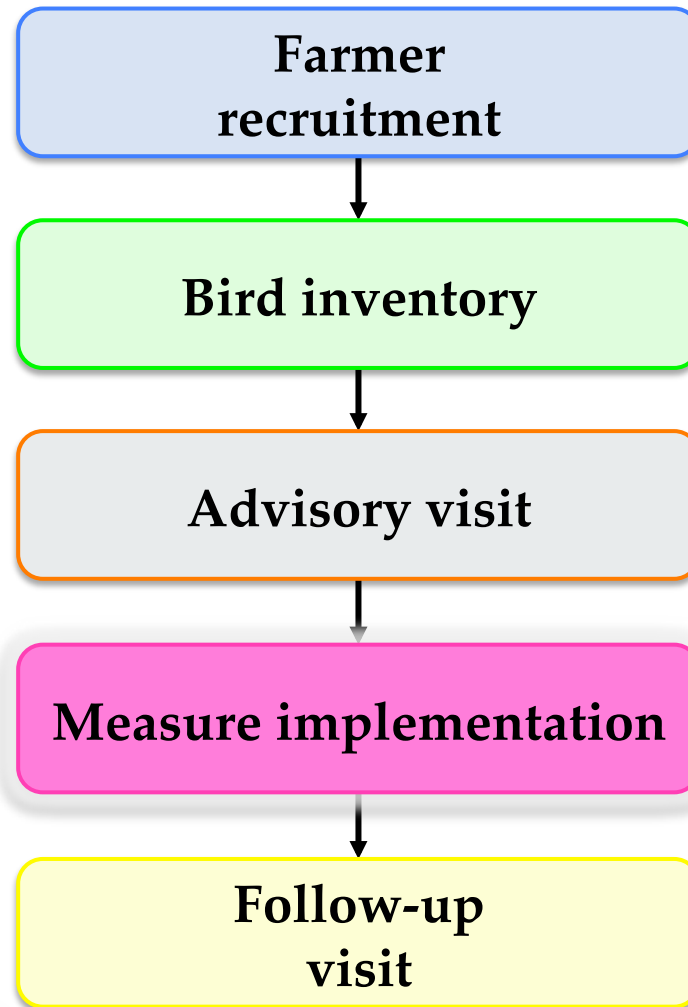
More of the same?

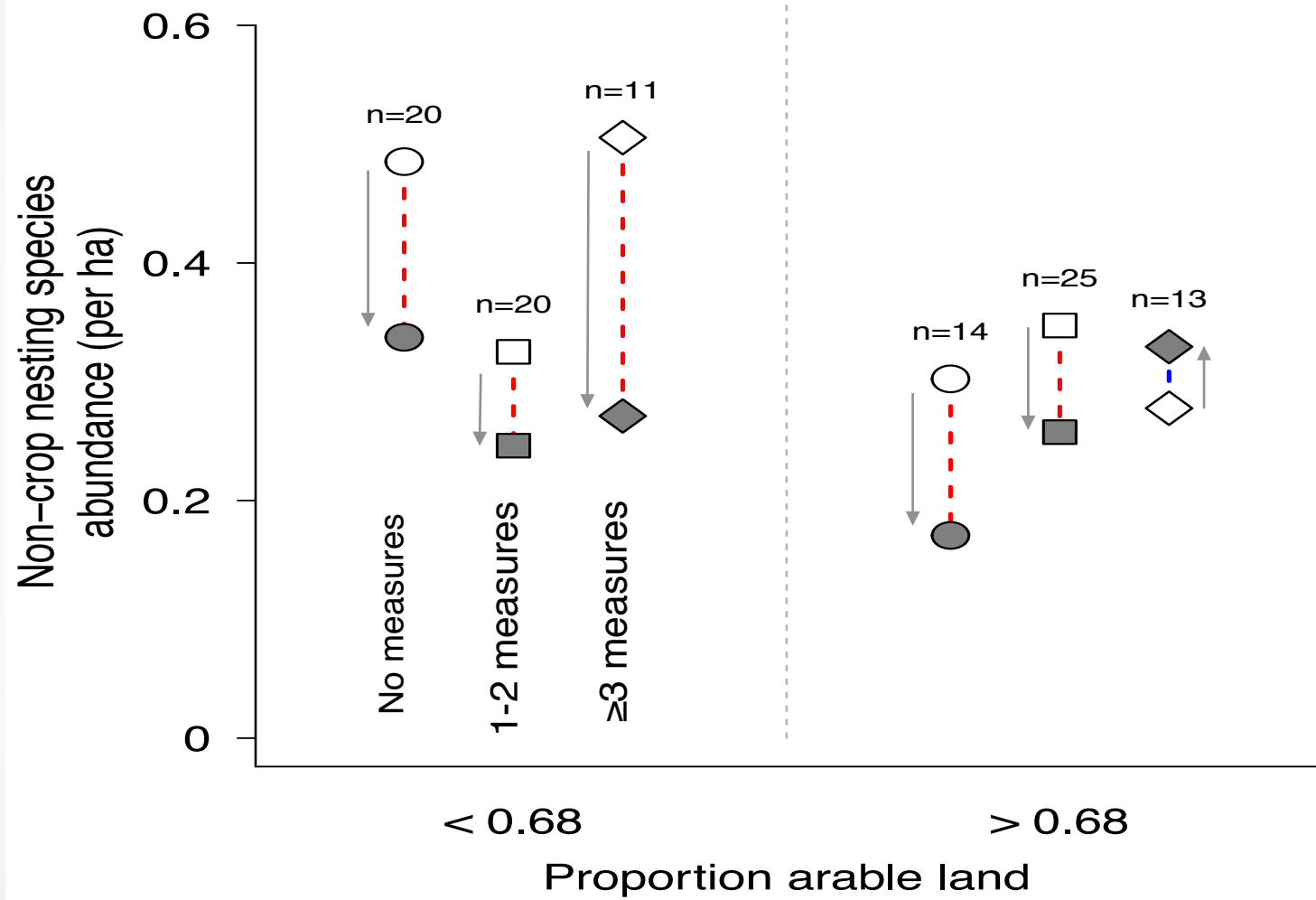




Josefsson m. fl. 2014







Greening & grödmångfald

Antal grödor



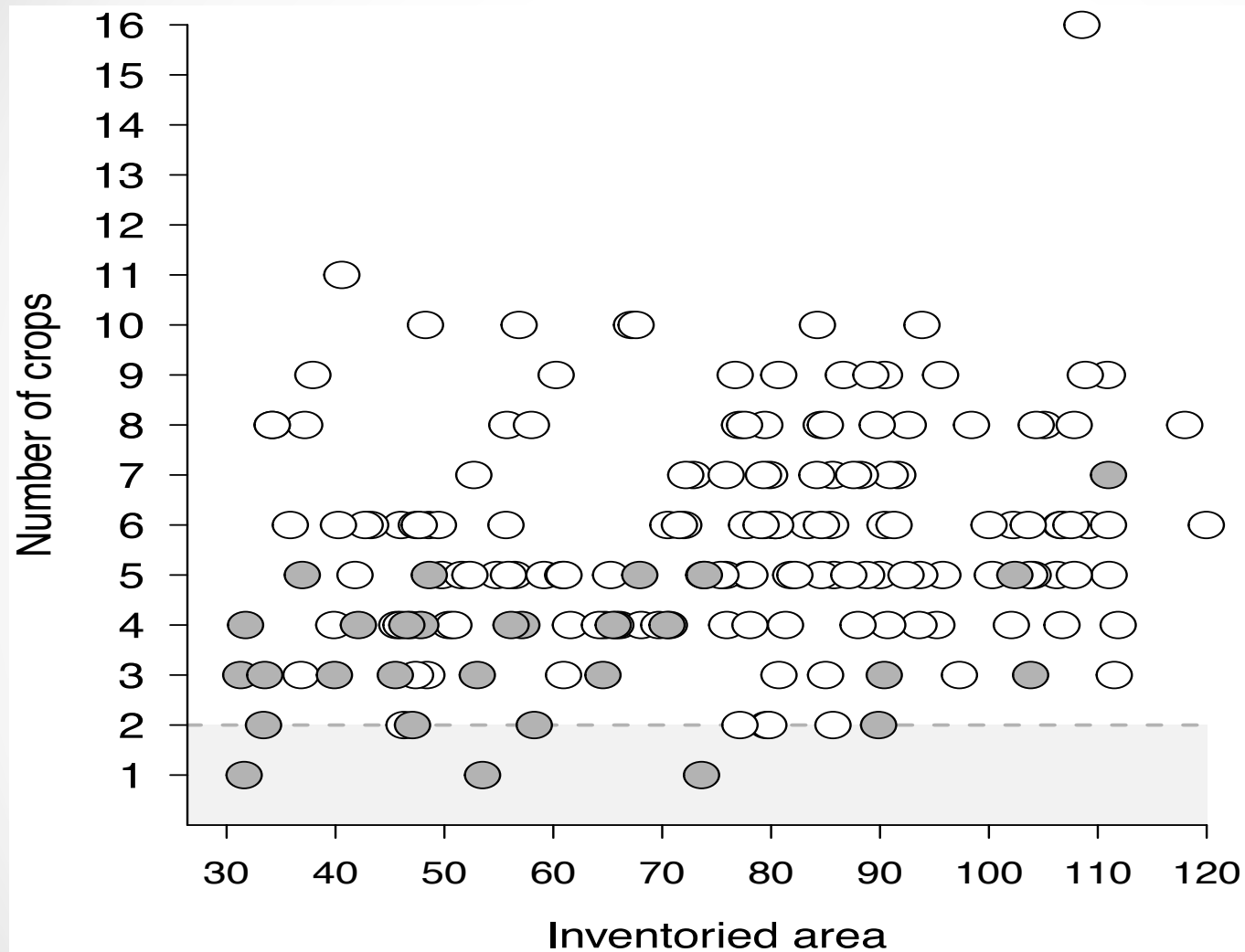
Crop diversitet
= 10

Strukturella klasser

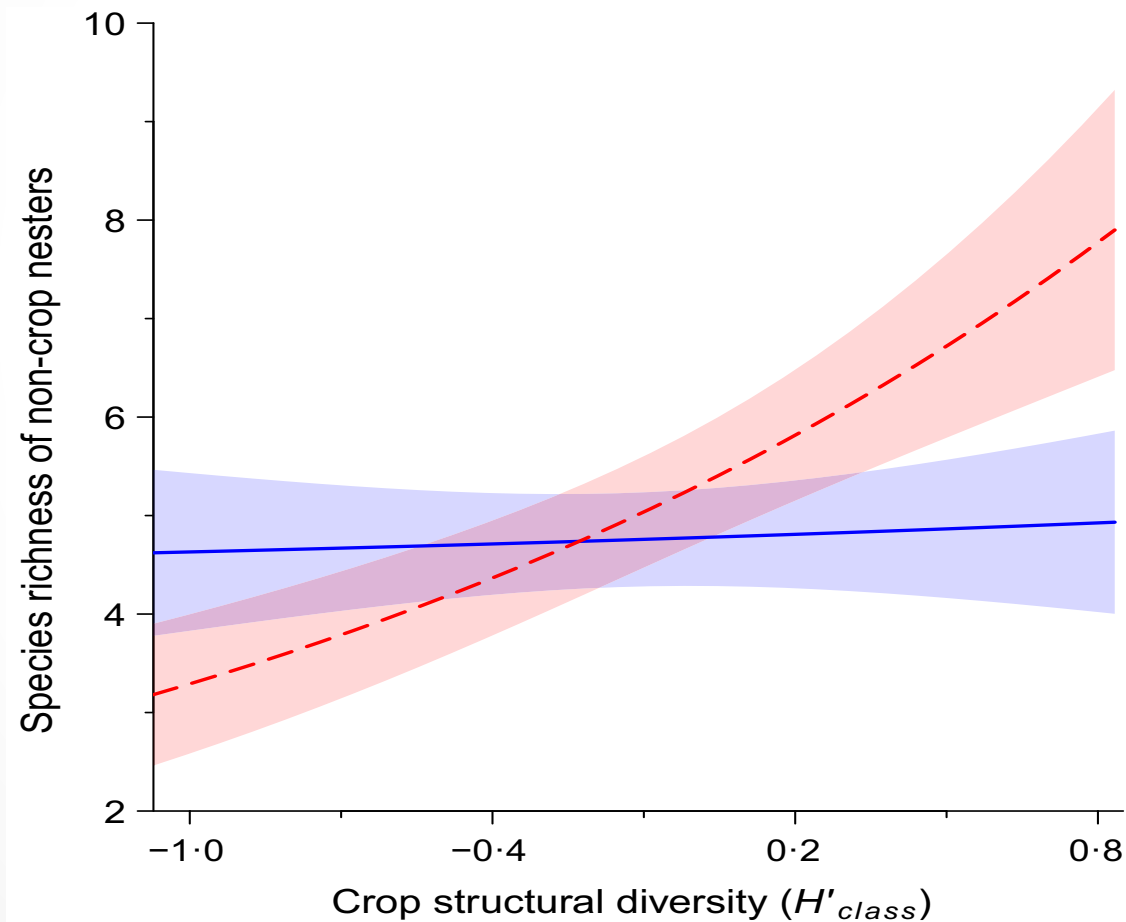


Crop diversitet
= 3

Grödmångfald på våra projektgårdar



Effekten av strukturell gröddiversitet beror på landskap



Hur går vi vidare?

Storskaliga mänskliga samarbetssystem

- bygger ytterst på vår förmåga att tro på saker som existera enbart i vår fantasi.



Hur går vi vidare?

- En gemensam vision om ett hållbart jordbruk
- Nätverk av regionala mångfaldsgårdar skapas (lantbrukare samarbetar regionalt, åtgärder samordnas regionalt)
- Mångfaldsgårdar rekryteras bland markägare med dokumenterat intresse för naturvårdsarbete