

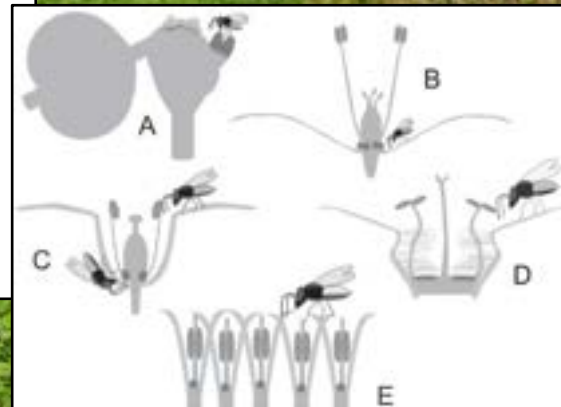
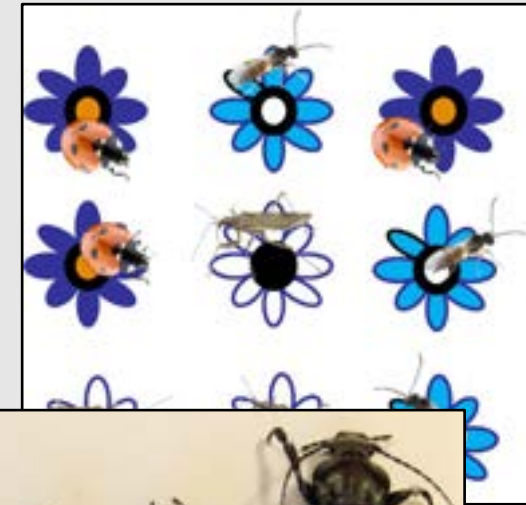
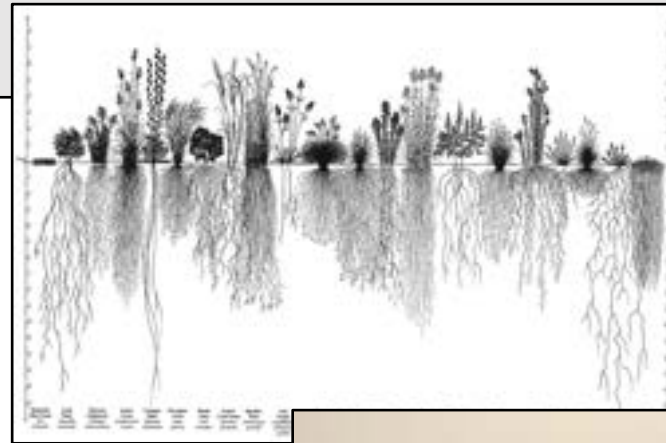
Funktionel biodiversitet i produktionslandskabet

Symposium: HVORDAN ADRESSERER VI
BIODIVERSITETSKRISEN I DANMARK?

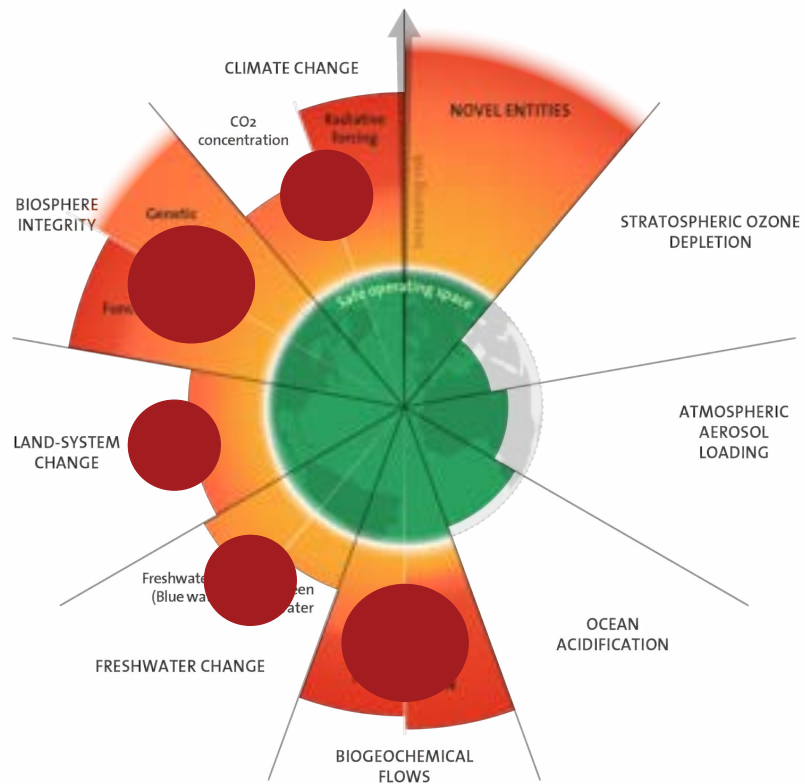
Stine Kramer Jacobsen
Lektor, Institut for Plante- og Miljøvidenskab

28.01.2025

KØBENHAVNS UNIVERSITET



Betydning af praksis, struktur, og landskab for **biodiversiteten** i landbrugslandet



Landbruget bidrager betydeligt til overskridelse af flere planetære grænser, inklusiv **biodiversitet**

RESEARCH

FARMING PRACTICES

Joint environmental and social benefits from diversified agriculture

Laura Vang Rasmussen^{1,2}, Ingo Grass^{2,3}, Zia Mehrabi^{4,5,6}, Olivia M. Smith^{7,8}, Rachel Bezner-Kerr⁹, Jennifer Blesh¹⁰, Lucas Alejandro Garibaldi^{11,12}, Marney E. Isaac¹³, Christina M. Kennedy¹⁴, Hannah Wittman^{15,16}, Peter Balle¹⁷, Dorothea Bockelmann¹⁸, Barbara Göttsche¹⁹, Lutz Claas²⁰, David W. Crowder²¹, David Gonthier²⁴, Aidan Leslie²⁵, Lesli Hoey²¹, Dana J. Jacobson²⁶, Yodit Kebede²⁵, Carmelita R. Llanque⁴⁰, Chrysoula M. Roseberry Nunes Maranhão⁴¹, Elissa M. Olimpi⁴⁶, Jean-Christophe Scherber⁴⁹, Ingolf Steffan-Dewenter^{56,57}, C. David Tilman⁵⁸, and Verena Weis⁵⁹

PNAS RESEARCH ARTICLE | AGRICULTURAL SCIENCES

Complex agricultural landscapes host more biodiversity than simple ones: A global meta-analysis

Natalia Estrada-Carrion¹, Andrea C. Sánchez², Roseline Remans³, and Sarah K. Jones⁴

Edited by Arun Agrawal, University of Michigan-Ann Arbor, Ann Arbor, MI; received February 24, 2022; accepted July 5, 2022

Managing agricultural landscapes to support biodiversity conservation requires profound structural changes worldwide. Often, discussions are centered on management at

Global Change Biology | WILEY

PRIMARY RESEARCH ARTICLE

Positive but variable effects of crop diversification on biodiversity and ecosystem services

Damien Beillouin^{1,2} | Tamara Ben-Ari^{3,4} | Eric Malézieux^{1,2} | Verena Seufert⁵ | David Makowski⁶

Abstract
Ecological theory suggests that biodiversity has a positive and stabilizing effect on the delivery of ecosystem services. Yet, the impacts of increasing the diversity of culti-

Significance

tural land, the world's human-managed term, forms the matrix that its remnant and fragmented s of natural vegetation nondomesticated iversity struggles to survive. ing the resources that this can offer to biodiversity is to halting biodiversity loss. mprehensive meta-analysis trates the positive and ant effect on biodiversity of ing landscape complexity in rural lands. We found more iversity in complex

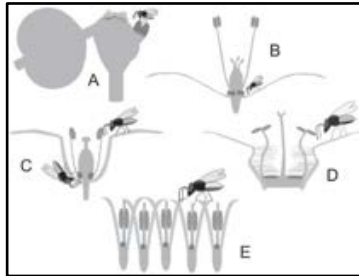
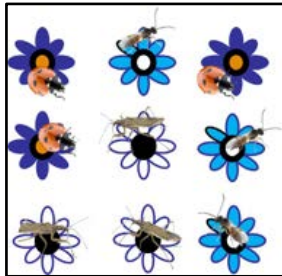
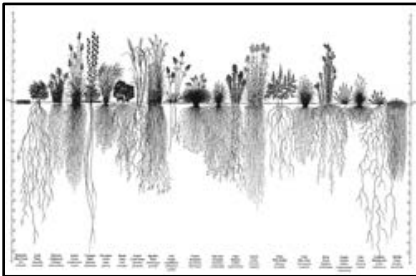
Kilder: Stockholm Resilience Center, University of Stockholm; Campbell et al. 2017, Ecology and Society 22(4): 8; Rockström et al. 2009

Funktionel biodiversitet

“Værdien, bredden, udbredelsen og den relative forekomst af de funktionelle egenskaber af organismer i et økosystem” (Oversat fra Pla et al. 2012)

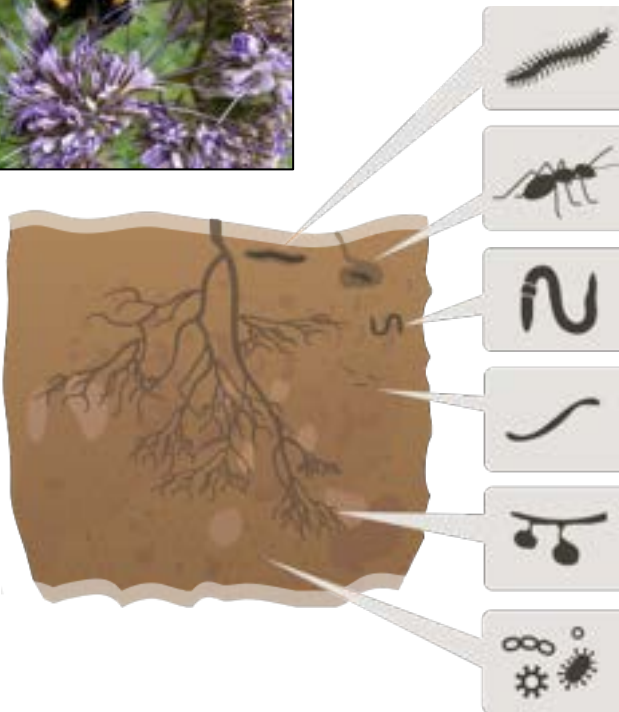
Funktionel biodiversitet sammenfatter forskellige aspekter af den biologiske sammensætning - **arternes rolle** i økosystemet

Egenskaber:
Morfologisk,
fysiologisk,
strukturelt,
fænologisk,
adfærd, etc.



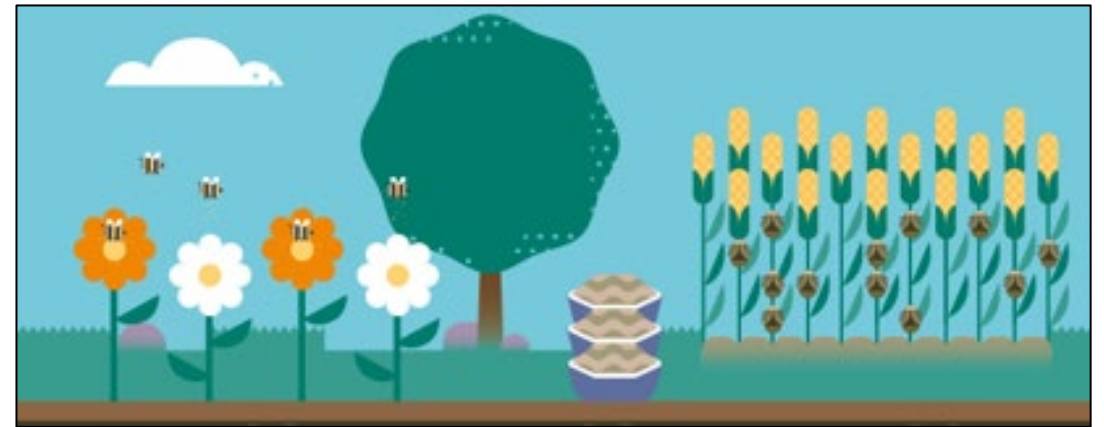
Functional Redundance hypothesis: Stabilitet opnås ved tilstedeværelse af flere arter med samme funktion

Funktionelle grupper



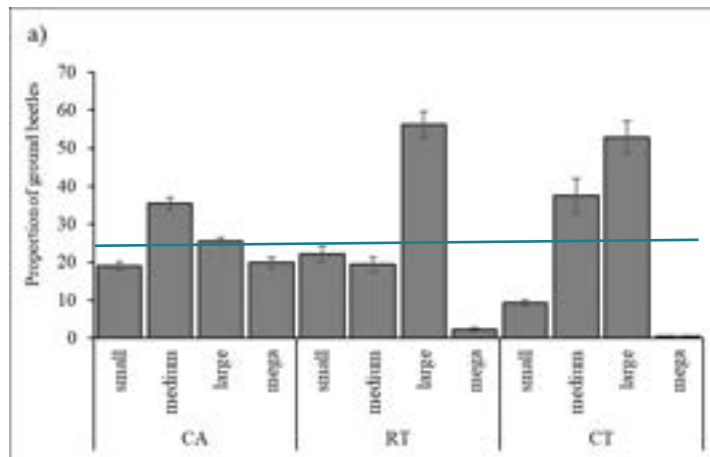
Økosystemtjenester

- Bestøvning,
- Skadedyrsbekæmpelse,
- Jordens fertilitet
- ...



Tiltag der fremmer funktionel biodiversitet

- Arts- og genetisk diversitet af afgrøder
- Plantediverse biotoper,
 - Strukturel diversitet
 - Sammenhænge
- Færre forstyrrelser på og omkring dyrkningsfladen
 - Reduceret pløjning, færre input



Vurdering og implementering

- Betydning af landskab, praksis, m.fl.
- Vurdering af tiltag
- Værktøjer til implementering



TAK for opmærksomheden



Projekter fremvist har fået tilskud fra Grønt tilskuds- og demonstrationsprogram (GUDP) under Ministeriet for Fødevarer, Landbrug og Fiskeri, samt som del af Organic RDD6 programmet koordineret af ICROFS, SusCrop ERA-Net FACCEJPI, og 15. Juni Fonden.