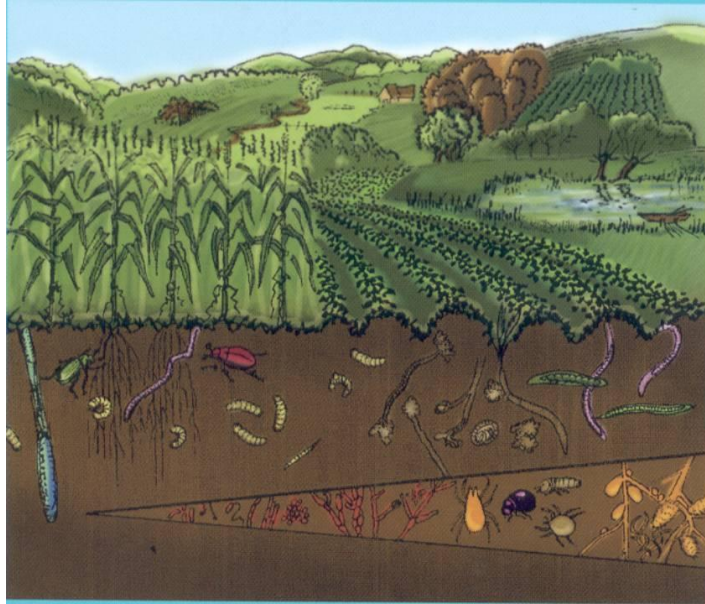


Earthworm diversity and ecosystem services in a landscape context



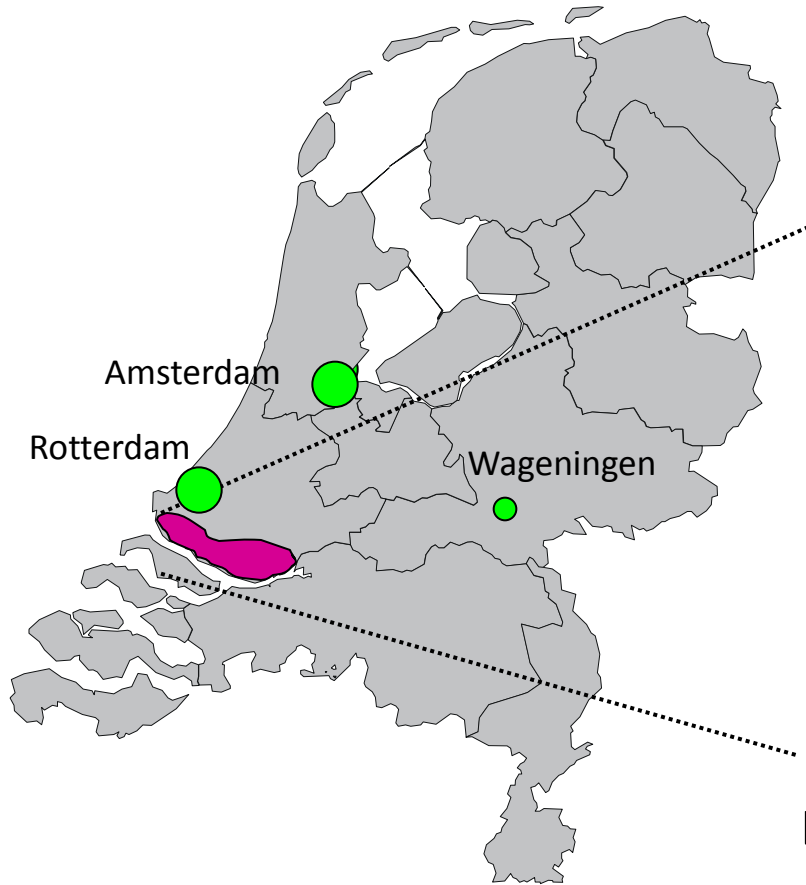
Mirjam Pulleman, Steve Crittenden, Jack Faber, Jeroen Groot, Lijbert Brussaard

Wageningen University and Research Center

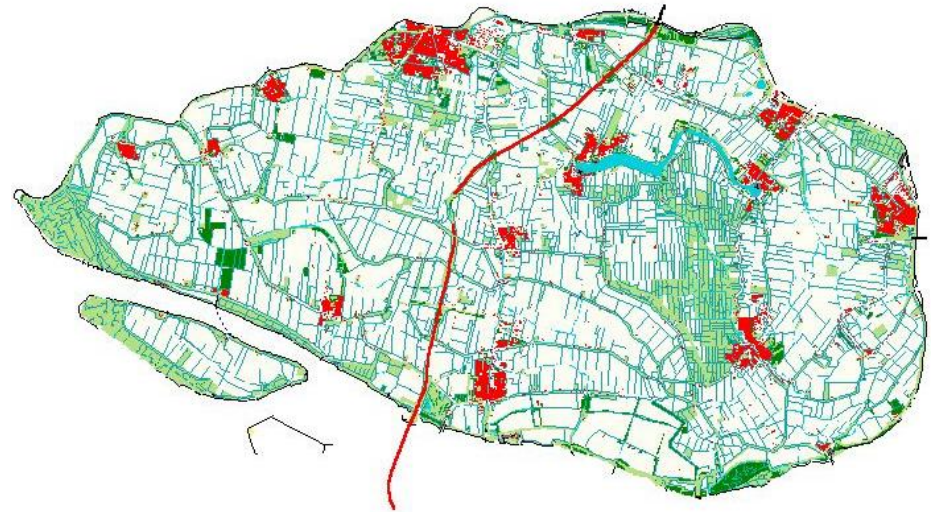
Spatial interactions between arable fields and semi-natural habitats



The Hoeksche Waard – A real life experiment



Landscape features: Polders, dikes, creeks and ditches

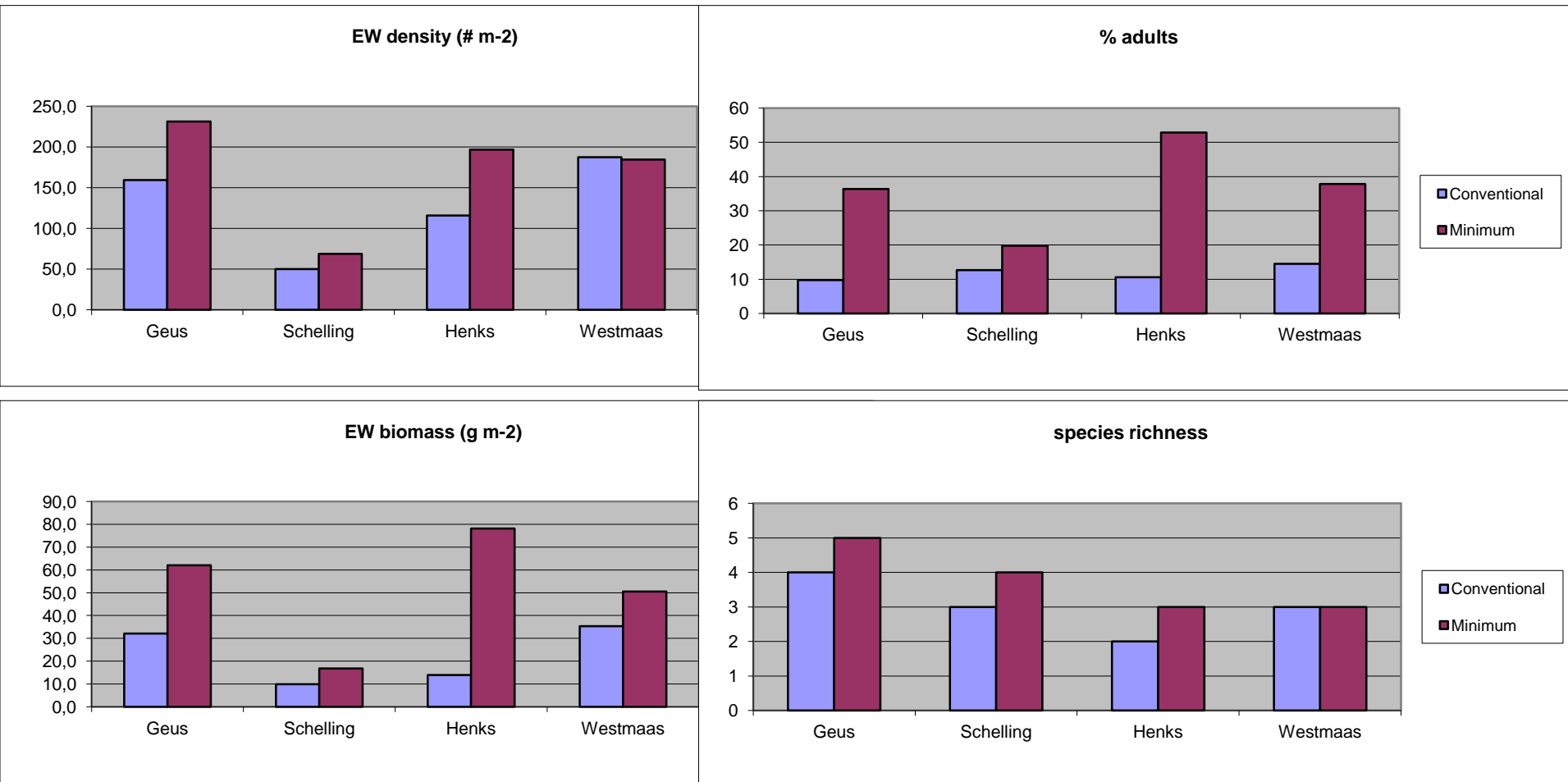


Landscape functions: agriculture, recreation

Sampling in field margins and arable fields (2009-2012)

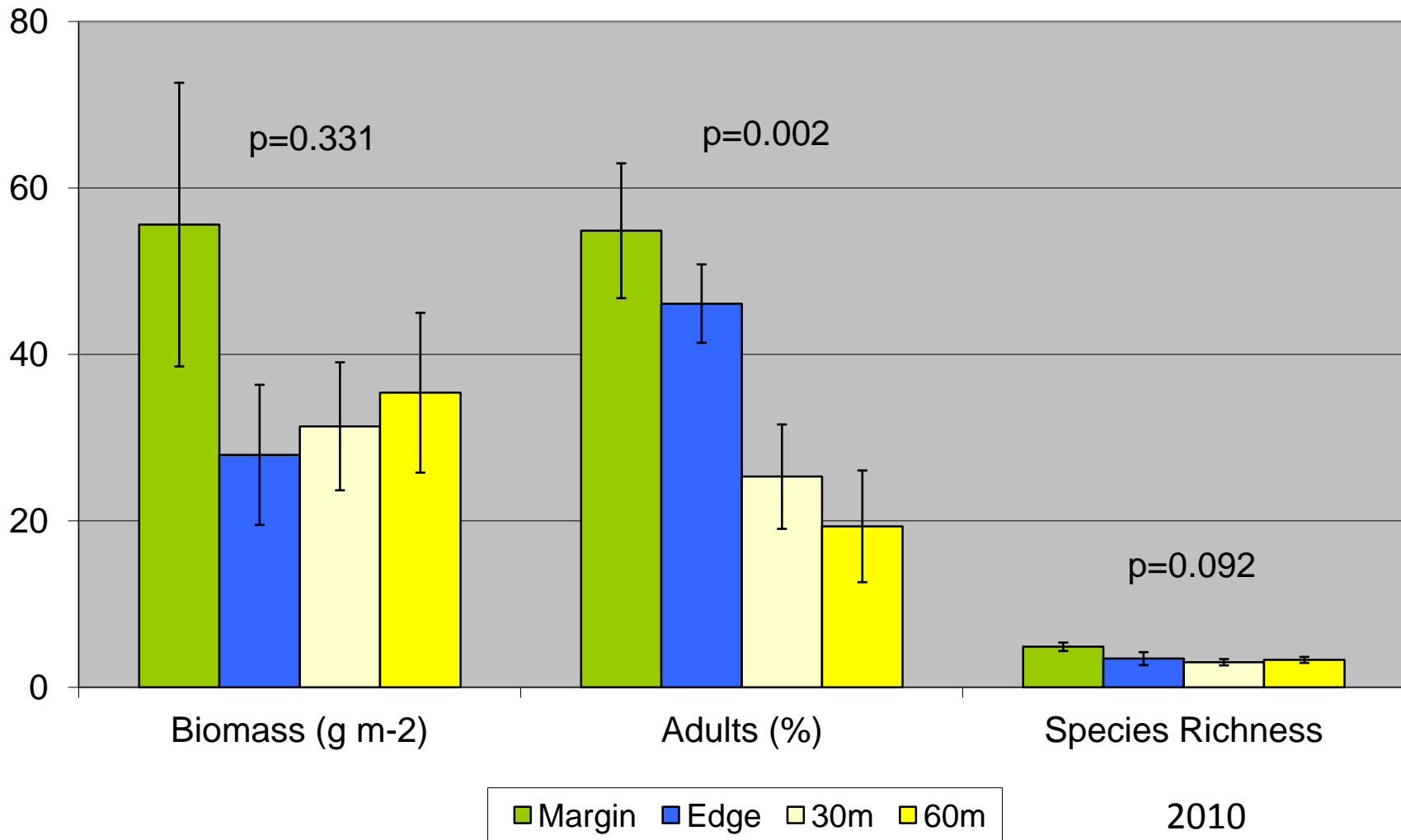


Preliminary results (2009-2010)



Hoeksche Waard

Average across 8 farm fields in the Hoeksche Waard



Future work (new projects)

- ecoFINDERS (EUFP7 2011-2015)
 - ⇒ Linking earthworm diversity and ecosystem services, focus on ecological traits
 - ⇒ Molecular techniques
 - ⇒ Economic valuation

Future work (new projects)

- Dutch NSF (NWO) project – PhD (2012-2016)
 - ⇒ Effects of land use and management of semi-natural habitat and agricultural fields on earthworm diversity in Hoeksche Waard (response traits)
 - ⇒ Links between earthworm diversity and ecosystem functions/services (effect traits)
 - ⇒ Earthworm dispersal in complex landscapes (field experimentation, earthworm tagging, molecular techniques)
 - ⇒ Spatial explicit modeling as a decision support tool accounting for trade-offs between multiple ES

