

Different* aims of biodiversity research

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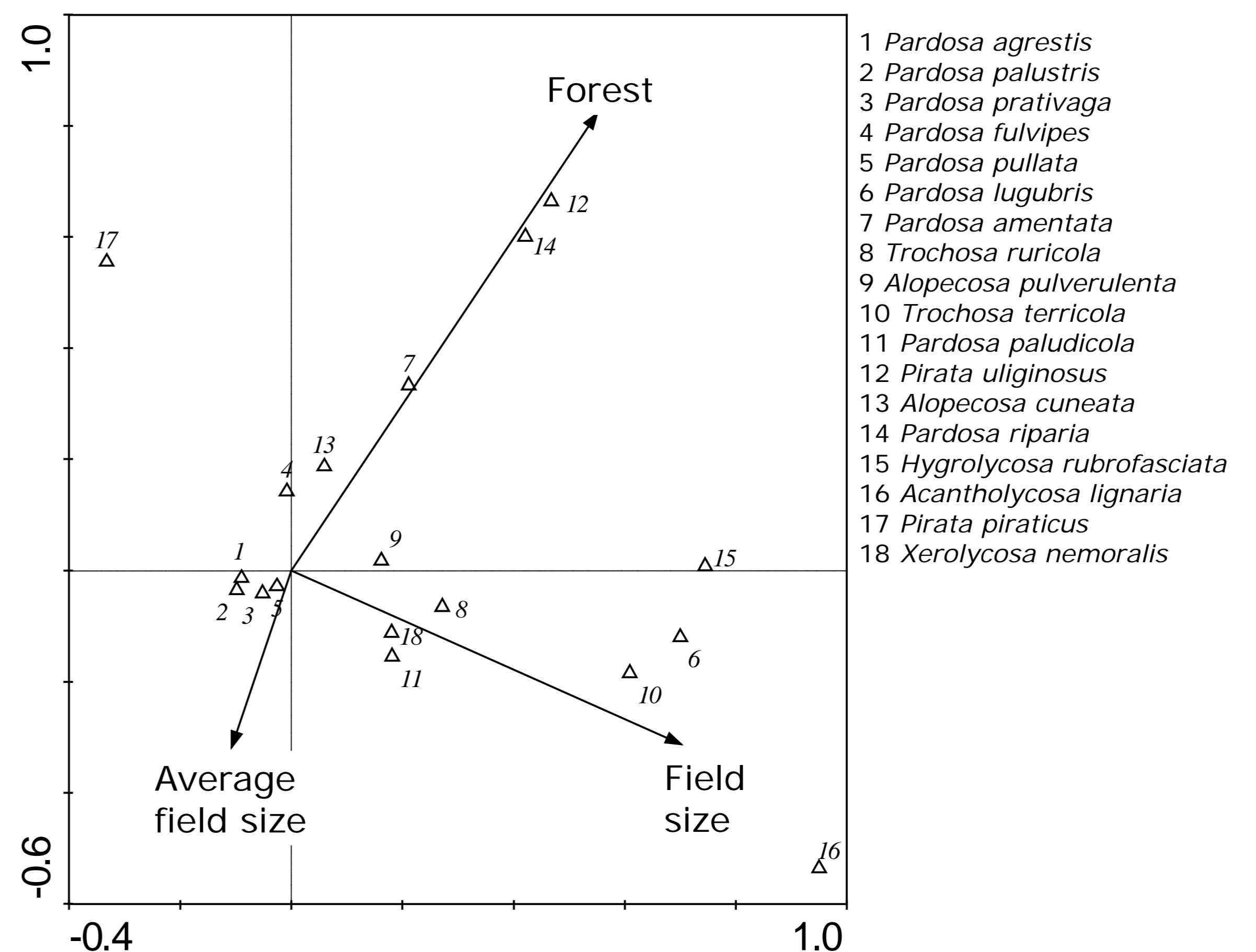
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Biological control – Spiders in the agricultural landscape

Spiders in agroecosystems play a role in pest suppression and contribute substantially to biodiversity. In my thesis I investigated how it might be possible to provide suitable conditions for enhancement of their populations.



A diverse landscape with easy access to perennial habitats will increase both number of species and individuals of spiders.



CCA biplot showing the relationship between significant environment variables and Lycosidae species. The species are numbered in decreasing activity density order.



Conservation - Surveying and monitoring of arthropod species

Butterflies and bumblebees (Norwegian Nature Index project):

The Nature Index will give a holistic measure of biodiversity, designed to reveal trends in ecosystems. We are currently working on development of methodologies for area representative monitoring of chosen groups of arthropods intended to be included in the Nature Index.

We focus on butterflies and bumblebees as they have important ecosystem functions and are alarmingly decreasing. Also, they are publically popular, so it might be possible to find enough volunteers for future nation wide inventories.

By collecting data evenly throughout areas we receive both information on differences in species composition and population sizes of common species over time and space.

Threatened species (ARKO project):

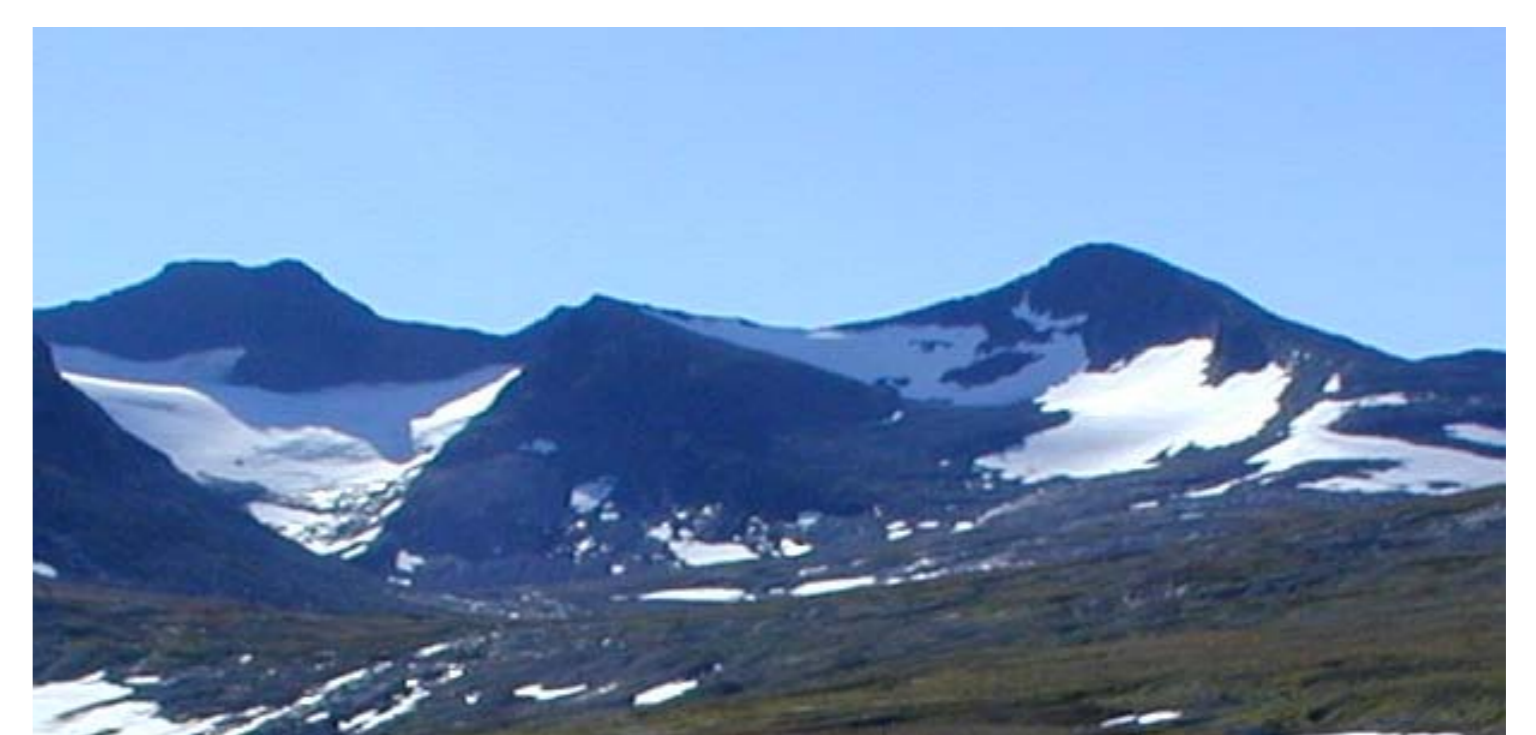
By surveying and monitoring red-listed species in hotspot habitats we learn more about the viability of their populations and the influence of human disturbances.

With my participation spiders are now included in the project. So far, six red-listed species and one new species for Norway have been found in only a few samples.

Impact assessment - Effects of climate change on arthropod biodiversity

An expected climate change might alter biodiversity severely. Alpine tundra ecosystems have been proposed to be a good indicator system for environmental change.

In my coming research, I would like to study biodiversity of pollinators and predators at different altitudes, longitudes (oceanic-continental gradient), and latitudes. This will make it feasible to make predictions on future possible changes, hopefully ending up with recommendations for adaptive management.



* or similar?