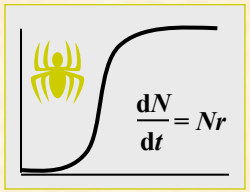


Population Ecology of Animals

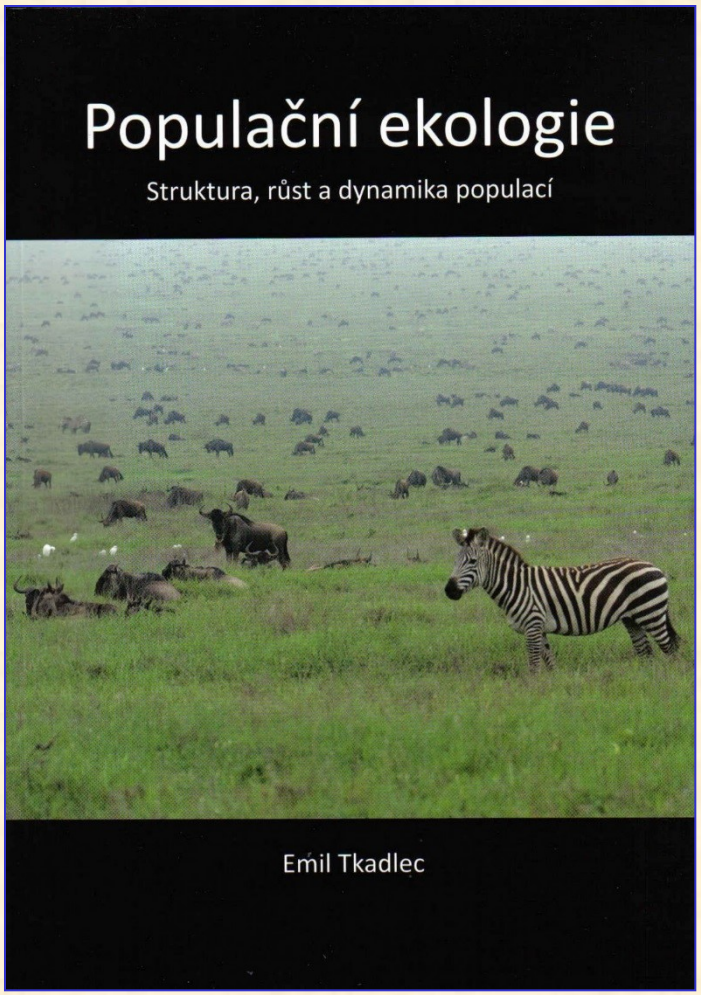
"Populační ekologie živočichů"

Stano Pekár

Content

- Population ecology (Resources, Conditions, Models)
- Population growth (Population censuses)
- Population structure (Stage/Age life-tables, k-factor analysis)
- Temperature models (Degree-days)
- Intraspecific competition (Harvesting, Allee effect)
- Spatial ecology (Distribution, Dispersal, Metapopulations)
- Interspecific competition (Mutualism)
- Predation (Functional and numerical responses)
- Predation models (Host-pathogen/parasite, Prey-predator, Host-parasitoid, Plant-herbivore)

Literature



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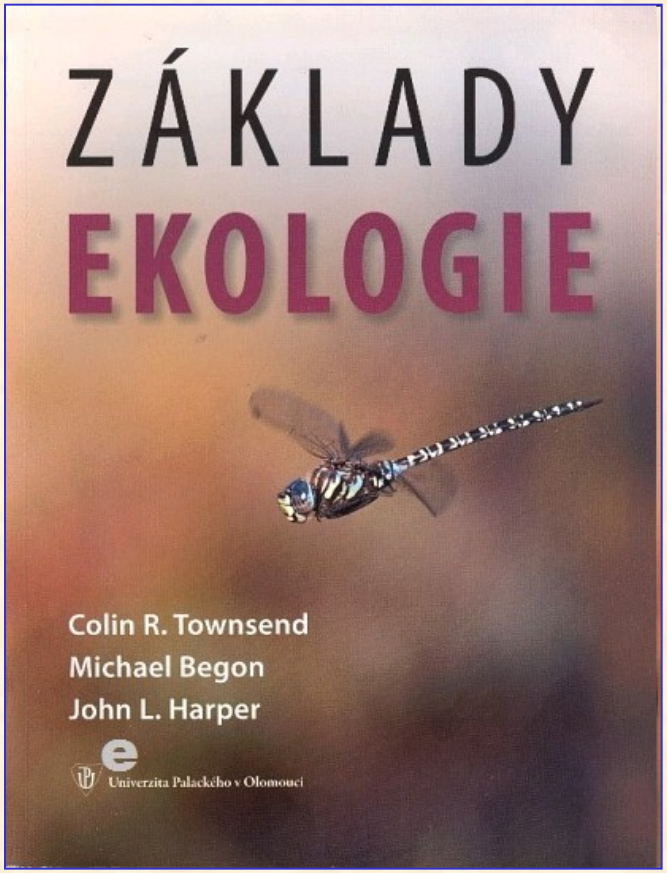
Literature



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Presentations

No.	Topics	Date
1.	Adaptation, fitness and phenotypic plasticity	23.9.
2.	Abundance and cycles	23.9.
3.	Evolution of sex, sex determination	30.9.
4.	Sex ratio	30.9.
5.	r- and K- selection	14.10.
6.	Geographic variability (temperature, physiological time)	14.10.
7.	Intraspecific competition	21.10.
8.	Management of endangered species, Regulation of pests	21.10.
9.	Sustainable harvesting	4.11.
10.	Cooperation, Allee effect	4.11.
11.	Dispersal and movement	11.11.
12.	Dormancy, navigation, and migration	11.11.
13.	Interspecific competition, competitive exclusion principle, apparent competition	25.11.
14.	Niche and coexistence (storage effect, heteromyopy, resource partitioning)	25.11.
15.	Amensalism, comensalism, mutualism	2.12
16.	Defence against predators (crypsis, mimicry)	2.12.
17.	True predators, parasitoids	9.12.
18.	Parasites, herbivores	9.12.

Projects

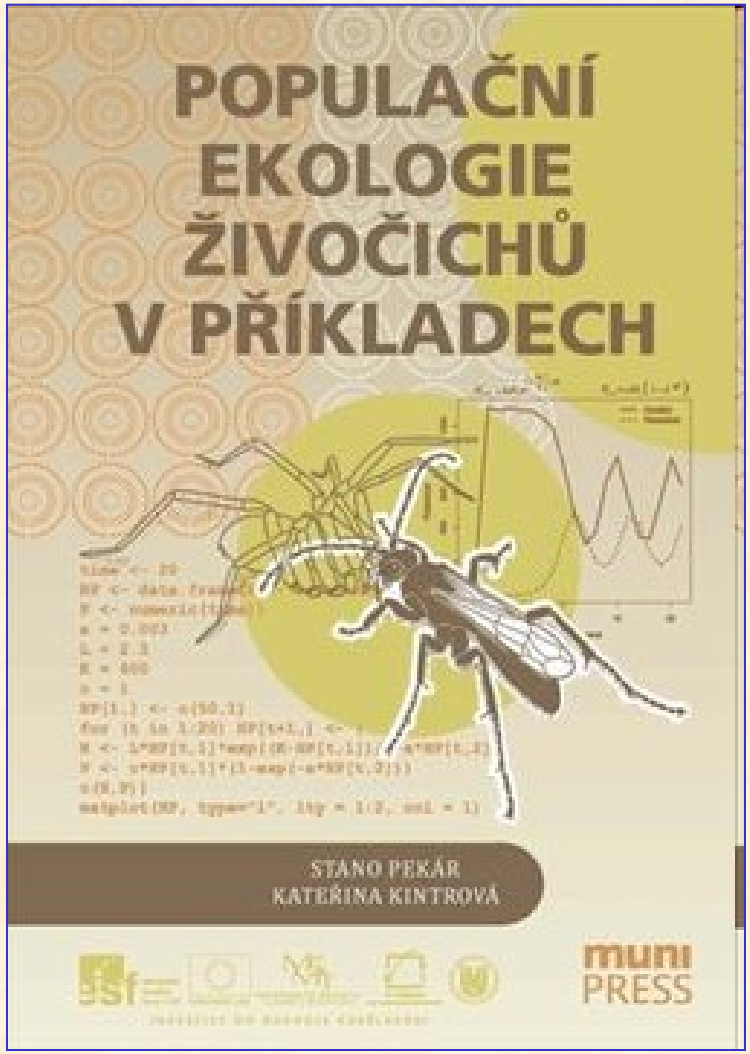
1. Spatial distribution – Coccinellidae, field sampling

2. Trophic niche – spiders, laboratory experiment

3. Demography – beetles, laboratory experiment

Homework

Study chapters 1 & 2 and the description of a selected project



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