

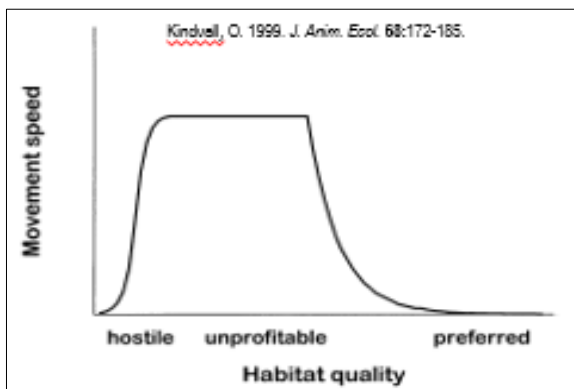
Coming Spring 2016

ENT 812: Introduction to Metapopulation Biology

Spring 2016, 1 credit (1-hr lecture per week)

Tuesday, 3:00 – 3:50 pm, Room 244B Natural Science Building
Recommended prerequisite: Ecology

What do dispersal of bush crickets, tuberculosis in possums, biological control of weeds, urban habitat fragmentation, fitness in bacteria, dung beetles, and elephant megaparks have in common? What's the role of emigration, immigration, dispersal, and extinction in population dynamics? All represent aspects of metapopulations. In this course we will discuss the origins and changes in metapopulation theory and practice. Concepts of matrix theory in fragmented landscapes; spatial and temporal heterogeneity; connectivity; source-sink dynamics; core and satellite species; natural host-pathogen, host-herbivore and host-parasitoid relationships; and other aspects of metapopulations will be examined. The course will be highly interactive. There is no text, but a significant amount of reading, interpreting and presenting historical and current literature will be required.



Instructor:

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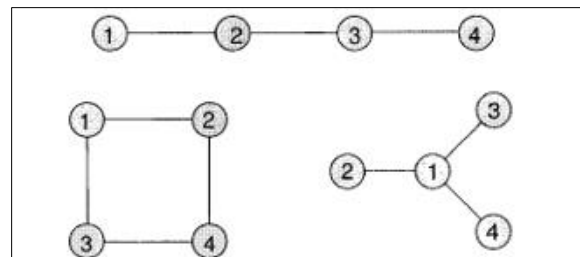


FIG. 2. The spatial configurations of the three generic metapopulation structures with four patches: the chain, loop, and spider.

Fulford, G.R. & M.G. Roberts. 2002. *Theoret. Pop. Biol.* 61:15-29.