

Sex-structured population models

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SAMS Subject Classification: PDE's and Dynamical Systems.

Populations are often sexually dimorphic. An extreme example of sexual dimorphism is found in the genus *Osedax* of polychaete worms, which lives on whale falls. The females feed on the bones of the dead whale; the males live inside the females and do not develop past their larval stage, except to produce large amounts of sperm. In the majority of scale insects, females are highly modified (eyeless and wingless, with non-functional appendages and reduced segmentation), attached permanently to their host plants, while males are rather ordinary though delicate insects, smaller and winged. In this talk we highlight some major differences. We discuss two-sex models that assume no added structure and thereafter turn to age-structured two-sex models.