Examensarbete
Degree project

Dept of Evolutionary Biology
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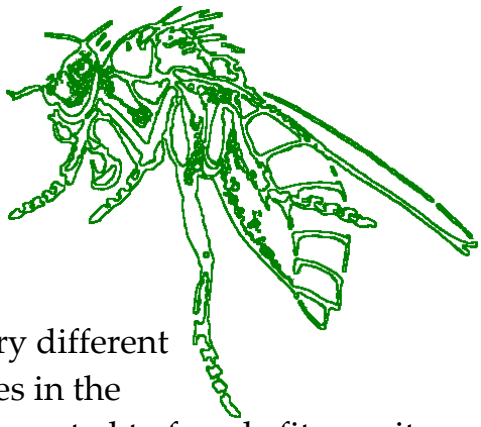
Climate Change and Male and Female Fitness

Increasing global temperatures will change the living conditions for many species. Ectotherms, species that cannot regulate their own body temperature, may be especially sensitive to these changes, as all metabolic reactions are temperature dependent.

The different strategies employed by males and females to maximize their fitness has selected for sex-specific phenotypes. For example, males and females of many species differ both with respect to their morphology and physiology as well as their behaviour. These differences may have resulted in that males and females are sensitive to changes in the environment to different degrees.



The consequences for population fitness may be very different depending on which sex is more sensitive to changes in the environment. While population fitness is closely connected to female fitness, it is not obvious what effects changes in male fitness will have.

The purpose of this project is to measure male and female fitness independently, when environmental variables, such as temperature, are manipulated, to understand their effect on population fitness. Experiments will be conducted with *a Drosophila melanogaster* model system.

If you are interested in doing a project on how a changing environment will affect male, female and population fitness, do not hesitate to contact us!

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