

Encadrement :

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Titre du stage :

Sex-biased dispersal of animal species – related to scale?

Mots clés :

species conservation, distribution, dispersal

Résumé (150 mots maximum) :

Male-biased dispersal is a common trait in mammals, but its genetic consequences at the population level have been rarely considered for solitary species. Sex-biased dispersal, where individuals of one sex stay or return to their natal site (or group) to breed while individuals of the other sex are prone to disperse, is a wide-spread pattern in vertebrate organisms. In general, mammals exhibit male-biased dispersal whereas birds exhibit female-bias. Dispersal estimates are often difficult to obtain from direct field observations. While the genetic methods to detect sex-biased dispersal are now relatively well developed, their interpretation can prove problematic due to the confounding effects of factors such as the mating system of the species. Moreover, the relative power of these methods is not well known and requires further investigation. The task will be to use an existing database on sex-biased dispersal and analyze the data in regard to scale-related patterns, methodological impact on the found results and discrepancies between different studies concerning the sex, which disperses in a species.

Deux références bibliographiques:

Goudet J, Perrin N, Waser P, M. (2002) Tests of sex-biased dispersal using bi-parentally inherited genetic markers. *Molecular Ecology* 11:1103-1114
Prugnolle F, de Meeus T (2002) Inferring sex-biased dispersal from population genetic tools: a review. *Heredity* 88:161-165

Techniques mises en œuvre:

Statistical analyses, meta-analysis

Compétences particulières exigées:

Knowledge of population genetics and statistics are advantageous