

Date: Tuesday 31 October, 2017
Time: 17:10 – 19:00
Room: Seminar Room

Interspecific transfer of parasites following range-shifts in *Ficedula* Flycatchers

Presenting author: **William Jones**

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Climate change is causing rapid range expansions and contractions of many species as weather patterns and habitats shift. This has wide-ranging and varied effects on organisms, including forcing previously allopatric species into sympatry and secondary contact. This can have a knock-on result in increased opportunities for parasites to encounter novel hosts. Haemosporidians, the parasites responsible for avian malaria, are a widespread and diverse group of parasites that have been found in the majority of screened bird species with over 2800 lineages described from almost 1500 host species to date. The effects of these parasites on their hosts can vary widely both inter- and intraspecifically. I have investigated parasite prevalence and diversity in the closely related collared and pied flycatchers (*Ficedula albicollis* & *F. hypoleuca*). These species have a large historic contact zone in Central Europe and a newer contact zone on islands in the Baltic Sea. For this study, I have screened over 1500 individuals from 9 locations across Europe, representing allopatric and sympatric populations of both species, as well as using data from the MalAvi database. Pied flycatcher populations vary greatly in both the diversity and prevalence of haemosporidians. Collared flycatchers, meanwhile have lower prevalence, but higher parasite diversity. Additionally, I have identified several malaria lineages that appear to have been able to cross the host-species barrier. I conclude by discussing the role on host-switching and the effect of parasites on interspecific interactions and the role it plays on the speciation process and hybrid-zone dynamics.