Parasites on the move: the large scale circulation of seabirds, ticks, and their associated infectious agents

Karen Mccoy^{*1} and Jennifer Provencher²

¹UMR 5290 IRD-CNRS Maladies Infectieuses et Vecteurs Écologie, Génétique, Évolution et Contrôle (MIVEGEC) – CNRS : UMR5290, IRD : UR224 – Centre IRD, 911 Ave Agropolis, BP 64501 34394 Montpellier, France ²Acadia University – Canada

Abstract

The capacity of birds to disperse infectious agents at large spatial scales is now widely recognised. Among birds, colonial seabirds include the most wide-ranging species and are characterised by a suite of life history traits that renders them ideal hosts for parasites and pathogens. Surprisingly, however, little is known about their role in parasite and pathogen circulation at different spatial scales. Using a series of examples from the different areas of the globe, we highlight the different factors that affect seabird movement and dispersal, outline how different types of seabird movements can alter patterns of dissemination of their associated parasites, and discuss potential feedback loops that can affect seabird population dynamics and favour pathogen emergence.

^{*}Speaker