MSc Project

Closing date: 31 Jan 2024

Contact: david.douglas@rspb.org.uk

Title: Do apex and mesopredator interactions influence wader nest predation rates?

Timescale: Apr-Jul 2024

Location: England/Scotland (various)

Resources available: Access to sites, basic field equipment

Background

Predation of nests by abundant mesopredators including foxes is a major contributor to poor breeding success and population declines of waders and other ground-nesting birds. One potential reason for high mesopredator densities, and their ability to range freely and exert strong predation pressure on waders, is the UK's scarcity of apex predators. Native species such as Eurasian Lynx and Grey Wolf are absent, while the range and abundance of Golden and White-tailed Eagles have been limited by persecution. It is unknown whether the presence of apex predators could alter mesopredator densities or behaviour, the latter through the potential establishment of 'landscapes of fear', and whether this could in turn affect predation rates by mesopredators on wader nests. This project will experimentally test these theories.

Aims

Test the prediction that the presence of an apex predator alters mammalian mesopredators' ranging behaviour and reduces nest predation rates.

Methods

Apex predator presence will be simulated in landscapes representative of wader breeding areas using apex predator scent. Mesopredator activity and daily survival rate of dummy wader nests will be quantified across treatment and control areas.