

Aviva Scholar: Indicator species modelling



Team members



Dr Ellie Scopes



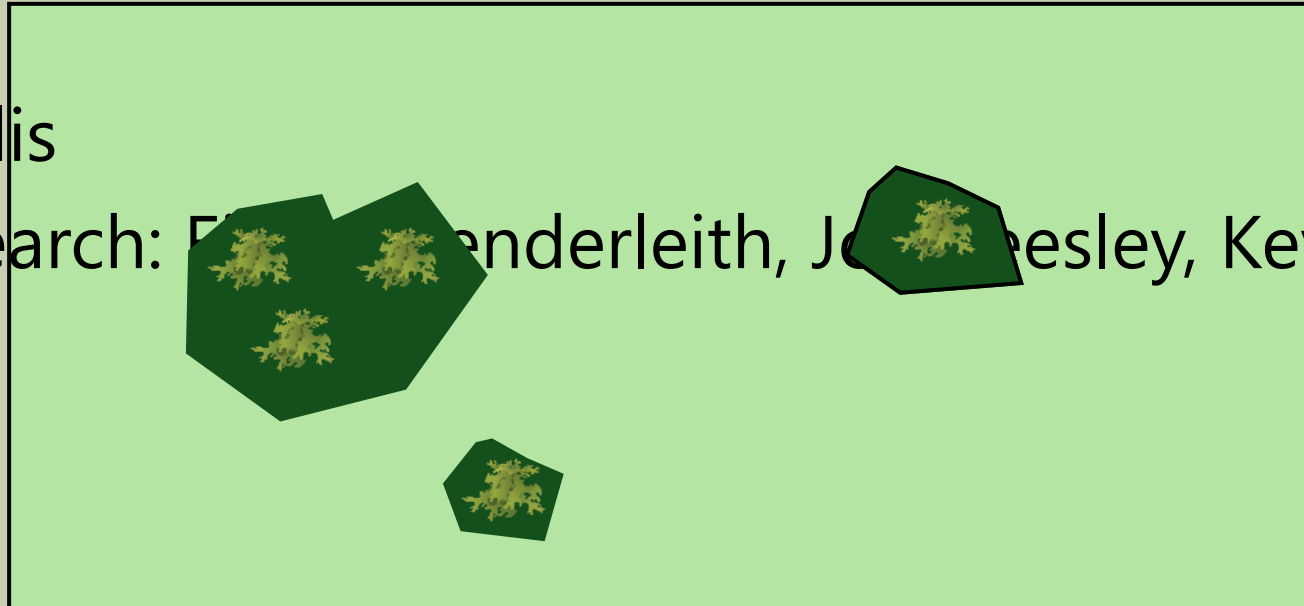
Professor Kevin Watts

Project aims

1. Create models of indicator lichen species
 2. Explore lichen dispersal from existing rainforest sites to newly created woodland
 - Case study Aviva sites
- Knowledge gap: critical factors determining success
 - How quickly do indicator species colonise new areas?
 - What is the existing connectivity?
 - How can we maximise connectivity of newly planted woodlands?
 - Importance: key restoration indicator, likely poor dispersal

Methods

- Individual-based model: RangeShifter
 - Parameters: experts, literature
 - Tracks individuals through movement and survival
 - Real landscapes which change over time
- Dr Chris Ellis
- Forest research: Peter Burslem, Jennifer Leith, Joe Burslem, Kevin Watts



Outputs

- Robust models of lichen species
- Case studies of Aviva sites: when and how they may be colonised by lichens
- Website/magazine article for the Wildlife Trusts
- Interactive web tool (ShinyApp) to allow intuitive exploration of results
- Journal publication