

Ascension Invertebrate Endemics Update 2022

The Ascension Island project has gone from strength to strength since starting in 2021 this is a partnership project with the Ascension Island Government, Species Recovery Trust and UKCEH. The recruitment by Dr Adam Sharp, the Project Officer to the Ascension Island Government was the first step of this, including his training before starting, which Species Recovery Trust facilitated. Since being on island Adam has collated a total of around 460 species (depending on acceptance of spurious historical records and possible synonymy) from 180 families have previously been recorded on Ascension. The earliest records date back to 1752. Species Recovery Trust helped with the initial collation of records.

He has also been undertaking a comprehensive survey of the island. The island has been divided into 100 1 km² grid squares that were used in a past vegetation survey of Ascension (DPLUS038). This ensures that the survey effort is comprehensive and includes all major habitat types. Within these squares sampling locations are being randomly selected. Multiple methods have been used at each sampling site to target different types of invertebrates and collect a representative sample of what is present. These methods include: ground pitfalls (cave version pictured), hanging pitfalls, malaise traps, tullgren funnels, moth traps and hand searching. In addition to the sample collection, the following environmental variables are recorded at each site: broad habitat category (barren, grassland, shrub, forest, cave etc), local geology (e.g. mafic flows, mafic ash, superficial deposits, cones), elevation, presence/absence of major invasive plant species, and presence/absence of seabird colonies and guano. Species Recovery Trust helped to source some unique pipe traps previously used on Ascension to sample subterranean habitats and these have been shipped out to Ascension.



Invertebrate samples have been sorted and identified to at least family level by Dr Sharp. All samples are being stored in ethanol and the first batch have been sent to the UK for species level identification. Contacts at the Natural History Museum, FERA Science, Derby University, the Museum for Natural Sciences and Prehistory in Dessau have been established to carry out the identification work. Species Recovery Trust have been helping to make connections with invertebrate specialists. Dr Sharp has also taken the first photo of one of the endemic scaly crickets *Discophallus sp.*, pictured.



Species Recovery Trust has also been red listing endemic species on Boatswain Island, an inaccessible islet, that has a number of previously recorded endemics, including two scaly crickets and one pseudoscorpion.