Grasshoppers

So, you are interested in finding out more about Grasshoppers?

Why not participate in this 'Grasshoppers Survey' to contribute to the overall conservation status of these species in Northern Ireland. There are about 50 grasshopper and cricket species (Orthoptera) that have been recorded in Britain, but only a handful have been recorded living and breeding here. We want to establish what species of grasshopper and cricket live in Northern Ireland, population estimates and their overall conservation status. This year marks the first year of the survey, which will be carried out every year from 2014 to provide data for future trend analysis.

Grasshoppers are a familiar group to many people. Adults are typically between 1.5 and 3cm in length and have enlarged rear legs which they use for jumping. They have relatively short antennae and behind their head a prominent saddle-shaped structure called the pronotum (a plate that covers the top and sides of the thorax). All species 'sing', making a characteristic chirping noise by rubbing their hind legs against their forewings. Female grasshoppers have a small ovipositor, most simply pushing their abdomen into the soil to lay their eggs. Many species vary considerably in colouration which is not a good guide to species identification. Structure and songs can be used more reliably to identify them.

We would ask you to undertake the survey using a net to sweep tall and short grassland vegetation for these species. The following information provides survey specifics to ensure everyone is surveying in the same way to provide comparable results.

For the Field Studies Guide for Grasshoppers and Allied Species, please see the following web address below. The guide costs £3 and will be useful for this survey. CEDaR has a limited number of copies of this guide, so if you are quick to contact us (catherine.finlay@nmni.com), you can pick one up free of charge!

http://www.field-studies-council.org/publications/pubs/british-grasshoppers-and-allied-insects.aspx

Equipment needed

- Net (for sweeping)
- Camera
- Ruler
- Plastic bags (to temporarily hold the insect)
- ID guide

Timing of Survey

Once a month in September - October 2014, during late afternoon (4pm onwards) and preferably when weather conditions are warm, dry and sunny (air temperature <17°).

Where to Survey

Publically accessible site which has long uncut grassland e.g. National Trust sites, Ulster Wildlife sites, local parks, uncut road side verges, graveyards (please seek permission prior to entering these sites).

Survey Effort

To provide systematic and controlled survey results, we ask that you undertake a time-survey. Specifically, we would ask you to visit your grassland site and survey for 15 minutes during each visit (one per month between August and September) which will involve hand searching through the grassland vegetation and sweep netting to catch those insects trying to hop away!

Survey technique: Sweep Netting

Sweeping is a technique used to monitor invertebrates that live on foliage and in low vegetation. Sweeping involves passing a sweep net back and forth through the vegetation to capture invertebrates. Further information on this method can be found in <u>Ausden, M., in Sutherfland, W. J., 1996. Ecological Census Techniques – a handbook, University of East Anglia, Cambridge University Press.</u>

Download the Recording card here for ease of use in the field.

If you need further help with ID, please see the <u>UK Orthoperta Recording Scheme</u> for species information.

Once you have recorded all grasshopper and allied species you've seen, pop your records onto <u>CEDaR Online</u> <u>Recording</u>. Navigate to the Grasshoppers Survey page and input your information and records.









