SUBMISSION FROM BUMBLEBEE CONSERVATION TRUST

Statement in favour of Landfill Communities Fund

Case Study: Caithness Bumblebee Champions

Location: Caithness lowland farms

LCF amount awarded: £10,000

LCF Distributor: Highland Council

Recipient: Caithness Biodiversity Group, in partnership with the Bumblebee Conservation Trust

Project details

Farmers and volunteers in Caithness have teamed up with the Bumblebee Conservation Trust to help one of the UK’s rarest bumblebees - now a Scottish speciality - the Great Yellow Bumblebee *Bombus distinguendus*. This strikingly patterned bumblebee is a Species Action Framework priority, and Regional Priority in Highland, Argyll, the Outer Hebrides and the Northern Isles. On the UK mainland it maintains a precarious foothold only in the far north - since 1999 there were only 15 sightings in Caithness spread over ten years. It was previously widespread in the UK but has now disappeared from most areas, a consequence of agricultural intensification and reflecting the loss of 98% of flower-rich grasslands that are so vital.

The Landfill Communities Fund supported funding for an innovative three year project in Caithness. The project builds on substantial research to provide a spring sown mix of pollen and nectar-bearing flowers (mainly comprising agricultural legumes) and combines the skills and enthusiasm of farmers and volunteers. This mix was sown in 2010 at eleven participating farms and results have already exceeded expectations. The plots also supported a wide range of arable wildflowers, including vivid yellow splashes of Corn Marigold.

The participating farms are spread broadly between Thurso and Wick. This is an area about three times the size of Edinburgh, and these rare bees are not easy to find (though can be found feeding at their favourite wildflowers). Spreading out the plots supports as many bumblebee nests as possible, so that foraging bees can reap the rewards of protein-rich pollen - essential to grow new bees - and nectar - the high octane fuel that bees run on. Healthy nests in summer are needed to rear daughter queens, which will start new nests after they emerge from hibernation the following year. Crucially, these small plots help extend the period over which new queens are reared, vital for this rare bee where a nest rears only a handful of new queens.

A team of volunteers from the Caithness Biodiversity Group carried out regular counts of the plots in 2010, continuing in 2011. To our delight, Great Yellow Bumblebees have
so far been recorded on all but one farm, including areas where there were no modern records. On some farms, double figure counts of Great Yellow Bumblebees gave exceptional cause for encouragement, and the rare Moss Carder Bumblebee Bombus muscorum was also noted.

The project also supports events, including an Open Day delivered by the Scottish Agricultural College and Bumblebee Conservation Trust to introduce local farmers to the bumblebee project, and examine the benefits and practicalities of a successful SRDP Rural Priorities application at one of the participating farms. At the end of each year, the project also supports an end of season, 'thank you' event, allowing farmers and volunteers involved in the project to meet up and share their experiences.

The project provides compelling evidence of how small, flower-rich, areas can benefit rare species and provide a range of environmental benefits. This approach is also suitable in other areas to support essential pollination services for crops and wildflowers. Providing these short term boosts for bee numbers is very valuable, but especially where this complements management promoting long-term benefits of wildflower communities, such as through SRDP and ‘high nature value farming’.

The importance of the Landfill Communities Fund in ensuring this project's success cannot be understated, and there is considerable interest among both the farming and volunteer communities regarding current and future participation. This is a valuable source of funding for environmental projects. We ask that it does not disappear as a consequence of new, devolved responsibilities that have so much potential for good in Scotland.

Bob Dawson, Conservation Officer (Scotland), Bumblebee Conservation Trust
David King, Chair, Caithness Biodiversity Group
24 August 2011