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14<sup>th</sup> November 2008

Dear Alison,

**Re: Consultation Response: A draft Honey Bee Health Strategy in Scotland**

This response lays out Scottish Environment LINK's views on the draft Honey Bee Health Strategy in Scotland. Scottish Environment LINK is the forum for Scotland's voluntary environment organisations - over 30 member bodies representing a spectrum of environmental and associated cultural heritage interests with the common goal of contributing to a more environmentally sustainable society. LINK provides a forum and network for its members; and assists communication between members, government and civic society.

LINK welcomes this consultation for developing a honey bee health strategy in Scotland and is willing to participate further. We recognise the important contribution that honey bee management makes in terms of local food production and pollination services. We also recognise that there are concerns regarding parasites and disease that affect honey bee hives, and as a consequence, honey production and pollination.

The four proposed outcomes are useful means by which to arrive at a sustainable and healthy honey bee population. However, we believe that the proposed initiatives do not adequately take account of the broader issue of native pollinators, which may have far-reaching consequences for the pollination of Scotland's crops. Notable among a wide diversity of pollinating insect species are the bumblebees (*Bombus* spp.). There are 18 Scottish species of bumblebee, 14 of which have a worker caste (providing the

majority of pollination visits). There are also many species of solitary bee. The current draft strategy considers only the honey bee, and not the full complement of pollination services. Honey bees provide a proportion of pollination services that contribute to the two stated Scottish Government Strategic Objectives, but this proportion has perhaps shrunk considerably as a consequence of honey bee declines. Evidence for declines of native pollinators therefore raises concerns of a potential overall “pollination deficit”.

Our concerns are relevant and evidence-based, and closely aligned with Government roles and responsibilities. They are summarised with regard to:

1. Pollination services
2. Habitat and land management
3. Risks posed by the importation of commercial, non-native bumblebee nests.

### **1. Pollination services.**

Native pollinators already provide vital pollination services for Scotland’s crops and wildflowers. Given documented declines in honey bees, it can be argued that a greater proportion of pollination services is now provided by native pollinators, with bumblebees the single most important group. However, there are concerns that this native pollinator “insurance policy” is under threat. An inclusive, sustainable approach is needed to avoid a “pollination deficit” that would have serious socio-economic consequences.

#### **LINK recommendations:**

- a. LINK recommends that due recognition is required for the role of native pollinators in any discussion of pollination services, food quality and food security, notwithstanding the importance of honey bees and the livelihoods they help support, and their associated legislative requirements.
- b. The “fee-free” contribution of native pollinators (particularly bumblebees) is inextricably linked to the strategy discussion, since the underlying assumption – with little direct evidence – is that native pollinators will take up any ‘slack’, providing insurance against honey bee declines. This contention urgently requires fundamental research, especially as there is strong evidence for widespread bumblebee declines in the UK, including Scotland.
- c. As pollination services represent both a land management issue, and a key economic sustainability issue, LINK recommends the establishment of a stakeholder group to include the appropriate industry, government and environmental interests. This is an opportunity for Scotland to take a lead role in discussions with particular regard to possible EU and national legislation resulting from the International Initiative for the Conservation and Sustainable Use of Pollinators (2002), the European Pollinator Initiative, and the European Union 6th Framework Project, ALARM (due to complete in 2009).

## **2. Habitat and land management**

The current draft strategy includes consideration of adverse effects such as pesticides and habitat loss. There is no consideration of climate change yet at least one new bee species has colonised the UK within the past decade.

### **LINK recommendations:**

- a. LINK recommends that issues regarding habitat loss, pesticides and climate change are addressed through wider consideration of a sustainable suite of pollination services, not restricted to honey bees. It is appreciated that the Scottish Government has obligations towards honey bees under national and EU legislative requirements. Habitat requirements need to be met for a representative guild of pollinating species, which in Scotland are almost exclusively insects. As a consequence, the requirements of honey bees will be satisfied.
- b. LINK recommends an assessment of existing habitat suitability with regard to sustainable pollinator populations, including honey bees. In addition, there should be a review of current delivery mechanisms for habitat management, such as the capacity of agri-environment measures to deliver for pollinators, and appropriate risk assessment of the impacts of pesticides and climate change.
- c. LINK recommends research into native and colonising bee species, parasites and pathogens as a result of climate change-influenced range expansion, together with appropriate contingency assessment. This will likely be influenced by reporting from the ALARM project.

## **3. Risks posed by the importation of commercial, non-native bumblebee nests.**

In excess of 60,000 commercial, non-native bumblebee nests are imported annually into the UK. The subspecies involved is *Bombus terrestris dalmaninus* which is morphologically distinct from the endemic UK buff-tailed bumblebee *B. t. audax*. These are used particularly for pollination of covered and open field crops such as soft fruits. These crops contribute a substantial proportion of the estimated £48.1million output from Scotland's fruit growers (2007 provisional estimate, *Economic Report on Scottish Agriculture 2008 Edition*). There is recent evidence for viral disease transmission between honey bees and bumblebees, and imported stocks are not screened for viruses. Current assurances that consignments are free of the small hive beetle are valuable, but far from adequate in the light of this new evidence, and we believe that commercial bumblebees do not represent a 'minimal risk' to honey bees.

The catastrophic consequences for native bees that can result from accidental introduction of non-native pathogens are well illustrated by the situation in North America, where the accidental introduction of the pathogen *Nosema bombi* with commercial bumblebee nests is almost certainly the cause of the rapid decline (and in one case extinction) of seven native bumblebee species. North America has now banned the importation of bumblebee colonies.

### **LINK recommendations**

- a. References to 'other bees' should be retained within the strategy, as this represents an inherent recognition of their value as native pollinators and the potential for integration with delivery actions for honey bees.
- b. Further research is required to assess the risks associated with importation of non-native bumblebees, with regard to 'honey bees and other bees' as stated in the strategy. Appropriate regulations and sanctions to be explored.
- c. That the health strategy includes a separate item under Part 2. Outcome 4 that lays out SGRD responsibilities regarding the risks that commercial bumblebees represent (i.e. intentional importations), with associated contingency planning under the current Annex B.
- d. If non-native commercial bumblebees must be imported, the central aim to minimising risk has to be hygienic rearing enforced by screening of imported bees to make sure that they are disease free. Current suppliers to the UK maintain that their factories are disease free, but the diseases they test for are not ascertained. There appears to be no screening for viruses, which in light of recent findings of transmission between honey bees and bumblebees is very worrying.
- e. Improved guidance to growers may be required. Options for minimising egress of commercial bees can be considered. For example in Japan there is a legal requirement that all greenhouse vents be netted to prevent bumblebee escape. A Defra study will evaluate the cost implications of such options.

Yours sincerely

Bob Dawson

BBCT Representative for LINK Agriculture and Biodiversity Task Forces.

The following LINK member organisations support this statement:

Buglife  
Bumblebee Conservation Trust  
Butterfly Conservation Scotland  
John Muir Trust  
RSPB Scotland  
Scottish Allotments and Gardens Society  
Scottish Wildlife Trust  
Woodland Trust Scotland

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