Identifying Gaps in the Current Agri-Environment and Climate Scheme – Policy Brief

Background

It has long been acknowledged that a side-effect of agricultural intensification has been a countrywide loss of biodiversity across multiple habitats. In response to this, payment schemes for environmentally friendly management have been run by governments and their agencies to try and halt or reverse this trend. The agri-environment schemes used in Scotland have developed considerably since the initial Environmentally Sensitive Areas scheme. However, further evolution is possible.

Research undertaken

The information in this briefing was developed in a four stage process:

1. A desk study that compared the current AECS with agri-environment schemes in operation in other countries. All schemes available in English were assessed for the presences of options not currently in use in Scotland. This covered Croatia, England, Finland, Ireland, Lithuania, Northern Ireland, Poland, Romania, Slovenia and Wales.
2. A desk-study that compared the Scottish Biodiversity List with the species identified as benefiting from AECS options.
3. A short workshop with stakeholders as part of the first Ecosystems and Land Use Stakeholder Engagement Group (ELSEG) meeting (14/11/16).[1]
4. A workshop (9/3/17) with key SG, agency and NGO staff that assessed the report from the three previous stages to identify gaps in the current AECS in coverage could be augmented by adoption of options from other agri-environment schemes.[2]

These information sources were summarised to identify potential options that could be adopted quickly and easily to improve the current AECS. In the process of developing this work other types of potential improvements to the scheme were identified, as well as a number of evidence gaps. These are summarised at the end of this brief.

Key findings for policy development

A number of options could be quickly adopted from other country's schemes. These include:

- **Pollinator** specific options designed to provide nectar and pollen through the summer, which may benefit other invertebrates as well.
- More emphasis on **winter stubbles** to shift growers to spring-sown crops to benefit biodiversity and reduce erosion and nutrient loss.
- Payments to manage **coastal systems** through grazing (dunes, grasslands) to combat shrub/tree encroachment and the impacts of pollution.
- Widen the options available to manage **peatlands** based on knowledge gained from SNH's Peatland Action project.
- Adapt options to benefit **invertebrates** through leaving areas of bare ground.
- Adapting arable options, such as field margin management and pollinator options for **fruit growing areas**.

As these are existing options available in other countries they could be quickly adopted in Scotland to broaden the coverage of AECS for biodiversity.

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Comments on the existing scheme captured from the workshops

[1] Available as the report "Identifying Gaps in the Current Agri-Environment and Climate Scheme (2014-2020)"

[2] Available as "Notes from a workshop on "Identifying Gaps in the Current Agri-Environment and Climate Scheme" held at Silvan House on 9/3/17"

Re-evaluation:

- More focus on supporting **ecological networks** at appropriate scales.
- **Upland options** should focus on wide ranging management rather than specific species or habitats because of the mismatch in the scale of intervention with the scale of the target.
- Options for **wading birds** needs to account for both breeding and feeding requirements that cross the enclosure line (often requiring collaborative working) and options need to take into account variations between species and regions.
- Options need to take account of **future climate** and potential **land use changes**.
- A more flexible approach is needed to develop appropriate management for **habitat mosaics**.
- A holistic approach for **wetland management** that integrates ditches, ponds, wader scrapes and other wetland types.
- **Restoring/rehabilitating existing habitats** is more cost-efficient rather than creating new ones.
- Integration of the **white-tailed sea-eagle** and **goose schemes** into the wider AECS would benefit biodiversity and simplify application.

Improved process:

- **Scoring** should focus on the quality of the application rather than its breadth of coverage, which biases funding away from small farms.
- **Local priorities** could be used to develop local ecological networks but also to vary management to cope with local constraints such as weather and the availability of livestock to graze.
- The scheme should include **training for farmers** and other land managers in assessing opportunities for conservation action.
- There should be **long-term commitments** on both sides where natural processes are slow to protect investments. For example, restoring peatland vegetation takes many years and a newly created species rich grassland should be protected from ploughing, fertiliser and pesticides.
- **Scoring** should be more focussed on outcomes rather than on meeting regulations.
- **Redefinition of eligible land** to allow for management of non-agricultural land such as patches of scrub or dune systems.
- Actions under **Pillar 1** should be used to improve basic environmental standards.
- Options should be funded only if they are **joined up**. If a pollinator strip is funded then there must be reduced pesticide use in an adjacent buffer zone.
- **Agriculture and forestry** need funding in the same scheme to enhance integration at the farm level.
- **Forestry options** need to include action for wider woodland biodiversity, e.g. through management for woodland ground flora.
- Access for **monitoring** must be a condition of payment and monitoring could be developed to include that by land managers.
- **Monitoring budgets** should be increased to provide useful data for scheme improvement.
- The scheme ought to be analysed to remove **perverse incentives**.

Research needs identified in the workshops

- Can we redesign intensive farming operations to capture aspects of **High Nature Value** farming? This could be helped by **fine resolution targeting** (field level) for management/restoration and through understanding plant dispersal and animal movements build landscapes to ensure **functional connectivity** not just structural connectivity.

- Monitoring need developing to provide information on **rare species**, on the effectiveness of **individual options** and landscape level impacts of AECS, and ask whether easy to assess groups (e.g. plants, birds, butterflies, bees) are **suitable indicators** to assess wider agricultural biodiversity and whether we are picking up true **population effects** or just changes in distribution.
- Can land be managed to cover all parts of **pollinator lifecycles**, and can approaches in arable systems be developed options for **grassland pollinators** through sward diversification or modifying silage production.
- Can we integrate/improve management of options, for example through integration of **field margin** and **hedgerow management,** development of appropriate targets and management of **habitat mosaics** and the **introduction/management of the ground-flora** in forestry?
- Can we **climate proof** options to take into account changing environment and farming practices?
- Do we know enough about the biodiversity benefits of silvo-arable and silvo-pasture **agro-forestry systems** or how different options might impact on **aquatic ecosystems** or benefit **soil and soil structure**?
- Most research has focussed on common habitats, but is there sufficient knowledge for the appropriate management of **rare habitats?**
- Could the i**ntegration of environmental and agricultural data collection** with national indicators such a **NCAI** and **EHI** be of use for monitoring AECS? Or should monitoring be in the hands of **farmers and contractors** to enable them to be fully engaged in an agro-ecological approach?
- Regular **evidence review** to ensure option design is modified in the light of new knowledge.