# Scottish Wildlife Trust Briefing

Environment, Climate Change and Land Reform Committee Debate: Report on The Draft Climate Change Plan



"Nature is the sleeping giant in solving climate change. [...] Though clean energy technology and policy to regulate emissions are essential, they alone cannot work fast enough. Nature-based solutions are readily available, can be deployed now and could contribute more than a third of the reduction in carbon emissions needed by 2030. These solutions also provide critical value to people and nature beyond carbon mitigation—including more secure drinking water, improved food production, stronger community protection from storms and floods and refuge for some of the world's most endangered species." <sup>1</sup>

Climate change is already affecting Scotland's wildlife: some species are extending their range northwards (e.g. little egret, nuthatch, comma butterfly) whilst others which are already at their southern extent in Scotland - are contracting their range (e.g. dotterel, mountain ringlet butterfly). Because of climate change, species must also adapt to changes in the timing of natural events (phenology) e.g. woodland flowers such as the bluebell have evolved so their growth and flowering occurs before leaf emergence and canopy closure. Climate change is causing leaf emergence to occur earlier. Climate change is also changing species distributions and food webs in the oceans, which is affecting seabirds like the kittiwake. Migration patterns are changing e.g. migrations are shorter, some species are not migrating, others are spending less time in their wintering grounds. Climate change also brings an increased risk from some pests and diseases e.g. because the climate is becoming more suitable for pests (e.g. pine tree lappet moth). Changes to weather patterns change the conditions for plant growth e.g. leading to drought stress, and increase wild fire risk. The keys to helping Scotland's wildlife adapt to climate change are:

- Protecting the jewels in the crown of Scotland's nature by continuing to improve the condition of our
  protected areas e.g. by tackling the main threats currently impacting them, invasive non-native species and
  overgrazing.
- Increasing the areas of wildlife habitat e.g. by requiring all farms to have at least 12% of their land devoted to wildlife as a condition of public support
- Creating large areas of interconnected habitats across Scotland through a National Ecological Network

The Trust believes that actions to tackle climate change and efforts to prevent biodiversity loss are two sides of the same coin. Maintaining and restoring ecosystem health is a prerequisite to mitigating the impacts of, and adapting to, climate change. Ecosystem health can be a triple win - helping climate change adaptation, mitigation and assisting biodiversity conservation.<sup>2</sup>

This briefing focuses on the natural environment and land use. We have been guided by the fifth report published by the UK Climate Change Committee<sup>3</sup> (CCC) which highlights, *inter alia*, "the little progress [that has been made] in reducing emissions from agriculture and land use and the need for stronger polices in RPP3" and the UK CCC report on climate change adaptation<sup>4</sup> which states, *inter alia*, that: "productive soils are being lost" and that "Further action on the ground is needed, including: the wider restoration of peatlands and native woodlands." And the need for "more extensive protection of agricultural soils; and the introduction of further measures to help safeguard forests from pests and pathogens."

### **Forestry**

The Trust welcomes the increased woodland creation targets in RPP3. We call for the following additional measures to be included:

- Align woodland creation targets in RPP3 with those in the Scottish Biodiversity Strategy, so that at least half of new woodland created is native woodland.
- Reinstate the option to support native woodland creation by natural regeneration through forestry grants.
- Reduce browsing and grazing by deer and sheep to encourage regeneration and improve condition of existing woodland. This would also improve timber quality and production. <sup>5</sup>
- Reduce reliance on Sitka spruce for timber production (currently 60% of Scotland's coniferous woodland<sup>6</sup>), by diversifying plantations when restocked.

## **Peatlands**

The Trust strongly supports the new annual peatland restoration targets of 20,000 ha through to 2032. We call for the following additional measures to be included:

- A separate budget line for peatland restoration. We estimate that restoring 20,000 hectares per year would require an investment of £16m per year, and should be funded by a dedicated Peatland Restoration Challenge Fund. Long-term certainty over this funding will allow the economic benefits of this work to be fully realised.
- Delivery through the Peatland Action model<sup>7</sup> with regional advisors coordinating and assisting with funding applications.
- Commitment from current and future landowners to protect restored peatland from future damage. We
  agree with the ECCLR Committee that it would be counterproductive for restored carbon sinks to be
  damaged by other causes such as grazing and trampling by deer.
- Private investment in peatland restoration through restoration in accordance with the Peatland Code<sup>8</sup> could
  in part be achieved by providing business incentives for peatland investment e.g. Scottish Government
  encouraging reporting by businesses of carbon emission reductions through investments in peatland
  restoration.
- No new permissions for peat extraction should be granted. We also agree with the ECCLR Committee that
  the Scottish Government should explore how it can use its powers to prevent peat based products being sold
  in Scotland.
- An end to drainage of deep peat soils, and regulation of muirburn to ensure no burning of peatlands.

# Agriculture

The agricultural sector was the third largest source of GHG emissions in Scotland for 2014 (10.7 MtCO₂e) and as a percentage share by sector emitted 22% of Scotland's GHGs.<sup>9</sup> We agree with the ECCLR Committee that targets for agriculture should be ambitious rather than reasonable. The Scottish Wildlife Trust believes that by improving on farm efficiency; restoring agricultural ecosystems; fully embracing agro-ecology and agroforestry; reducing livestock emission intensities (emissions per unit of animal product);<sup>10</sup> returning agriculturally unproductive land to its natural state; and removing perverse incentives it is possible to substantially reduce emissions from many Scottish agricultural units and convert some into net carbon sinks.<sup>11</sup> We call for the following additional measures to be included:

- Making better use of public support for farming to create carbon sequestering landscapes. An example
  would be a greening payment that leads to reduced stocking (in the uplands), but the farm is still viable
  because reduced income from commodity production is compensated by public money for the ecosystem
  services provided by the changed landscape (e.g. carbon storage, flood prevention, biodiversity, increased
  water quality).
- We agree with the ECCLR Committee's recommendation that there should be soil testing on improved land to optimise fertilise use. Measures also need to be taken to conserve soil organic matter.
- The Trust agrees with the Committee on Climate Change's 2016<sup>12</sup> report which states that "If the [Scottish] government continues with voluntary measures it must be clear how they will be judged and if found to not be working consider other options." We agree with ECCLR that the final plan should state clearly how the Government will determine whether voluntary measures have been a success.
- Faster progress in carrying out carbon audits on farms at the rate set out in RPP3 it would take >1,000 years to audit all Scotland's farms..<sup>13</sup> Going forward, the Trust believes that a whole farm review covering both

biodiversity and climate issues should be incorporated into a form of cross compliance for whatever scheme replaces the CAP.

## Blue Carbon

The Trust is disappointed that there has been a complete omission of blue carbon in the draft RPP3. The potential value of blue carbon habitats was highlighted in RPP2, with emphasis on the need to increase the knowledge and scientific understanding and develop policies on blue carbon in RPP3. The lack of continuity between the two plans is surprising, especially as the conservation and carbon sequestration value of blue carbon habitats to mitigate climate change is recognised worldwide. We agree with the ECCLR Committee's call for a section on blue carbon to be included in the final plan, setting out what progress has been made since RPP2, and setting out the steps that need to be taken to allow policies and proposals on blue carbon to be included in RPP in the future.

For further information please contact:

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https://global.nature.org/content/environment2017?src=social.nature.twitter.globsol.sca.feature.feb.envir&utm\_content=1486565729&utm\_medium=social&utm\_source=twitter&utm\_campaign=social.nature

http://scottishwildlifetrust.org.uk/docs/027 104 publications Climate Connections final low res 1306398243.pdf

#### **Further more detailed information**

Scottish Wildlife Trust (2017) Written Evidence to ECCLR on Scotland's Draft Climate Change Plan: <a href="https://scottishwildlifetrust.org.uk/wp-content/uploads/2016/09/SWT">https://scottishwildlifetrust.org.uk/wp-content/uploads/2016/09/SWT</a> -ECCLR-Feb-2017-CCP-.pdf

Scottish Wildlife Trust (2017) Draft Land Stewardship Policy: <a href="https://scottishwildlifetrust.org.uk/news/32140/">https://scottishwildlifetrust.org.uk/news/32140/</a> [Note: views are invited until the 27 March and a final version of the policy will be published in April 2017]

<sup>&</sup>lt;sup>1</sup> The Nature Conservancy: The Biggest Environmental Challenges of 2017:

<sup>&</sup>lt;sup>2</sup> See Scottish Wildlife Trust's Climate Connections Policy Futures 3

<sup>3</sup> See: https://www.theccc.org.uk/wp-content/uploads/2016/09/Reducing-emissions-in-Scotland-2016-Progress-Report-Committee-on-Climate-Change.pdf

<sup>&</sup>lt;sup>4</sup> See: <a href="https://www.theccc.org.uk/publication/scottish-climate-change-adaptation-programme-an-independent-assessment-for-the-scottish-parliament/">https://www.theccc.org.uk/publication/scottish-climate-change-adaptation-programme-an-independent-assessment-for-the-scottish-parliament/</a>

<sup>&</sup>lt;sup>5</sup> in 2015 Forest Enterprise Scotland recorded nearly 20% of the leading shoots of one year old restocked trees had been eaten by deer, and more than 60% of restocked plantations had more than 10% of trees browsed by deer. See SNH Review of Deer Management, Chapter 5: <a href="http://www.snh.org.uk/pdfs/publications/corporate/DeerManReview2016.pdf">http://www.snh.org.uk/pdfs/publications/corporate/DeerManReview2016.pdf</a>

<sup>6</sup> http://www.forestry.gov.uk/pdf/Ch1 Woodland FS2016.pdf/\$FILE/Ch1 Woodland FS2016.pdf

<sup>&</sup>lt;sup>7</sup> See <a href="http://www.snh.gov.uk/climate-change/taking-action/carbon-management/peatland-action/information-for-applicants/">http://www.snh.gov.uk/climate-change/taking-action/carbon-management/peatland-action/information-for-applicants/</a>

<sup>&</sup>lt;sup>8</sup> See: <a href="http://www.iucn-uk-peatlandprogramme.org/peatland-code">http://www.iucn-uk-peatlandprogramme.org/peatland-code</a>

<sup>&</sup>lt;sup>9</sup> See http://www.gov.scot/Resource/0050/00503570.pdf

<sup>&</sup>lt;sup>10</sup> Gerber P J et al 2013. Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities. Food and Agriculture Organization of the United Nations (FAO), Rome <a href="http://www.fao.org/docrep/018/i3437e.jdf">http://www.fao.org/docrep/018/i3437e.jdf</a>

<sup>&</sup>lt;sup>11</sup> See: http://www.nature.com/nclimate/journal/v6/n5/full/nclimate2910.html

<sup>&</sup>lt;sup>12</sup> See: https://www.theccc.org.uk/wp-content/uploads/2016/09/Reducing-emissions-in-Scotland-2016-Progress-Report-Committee-on-Climate-Change.pdf

<sup>&</sup>lt;sup>13</sup> Policy outcome 1 states that 200 farms will have free carbon audits by 2021, around 50 per year. According to Scottish Government figures there are 52,303 farm holdings in Scotland: <a href="http://www.nature.com/nclimate/journal/v6/n5/full/nclimate2910.html">http://www.nature.com/nclimate/journal/v6/n5/full/nclimate2910.html</a>

<sup>&</sup>lt;sup>14</sup> IUCN Report – Coastal blue carbon ecosystems in NDCs 2016