Scottish Wildlife Trust
Policy

Lowland Peat and Horticulture

Policy headlines

- The Scottish Wildlife Trust believes that peat should not be extracted for horticultural purposes
- The Scottish Wildlife Trust does not and will not use any peat products at any of its reserves visitor centres or offices
- Public sector procurement should eliminate peat use by 2012
- The use of peat in soil improvers should be stopped immediately
- There should be a target of zero peat in growing media for amateur use by 2016; if this target is not met, the use of peat for amateur horticulture should be banned
- There should be a target of zero peat in growing media for commercial use by 2020; if this target is not met, the use of peat for commercial horticulture should be banned
- Retailers and consumers should be helped to switch to peat-free media by the use of clear labelling and the provision of advice and encouragement
- There should be no new peat extraction sites, and existing sites should be restored to as near favourable condition as possible
- Small scale domestic peat cutting is whilst locally damaging to the hydrology of raised bogs is currently not at a level in Scotland to cause concern, but we will keep our policy on domestic cutting under review
- Current licences should be reviewed and, if necessary, their conditions enforced

Background

1. The Scottish Wildlife Trust has a long history of campaigning on peat and peatlands, including advocating the phasing out of peat in horticulture and running a five-year project in the 1990s on the conservation of lowland raised bogs.

2. Peatland habitat in Scotland covers around 2 million ha of which over 60% may be adversely affected by land use activities including drainage, forestry, burning, grazing and peat extraction. Scotland's deepest peats (>1 m) store around 6500 Mt CO_2e: ten times as much carbon stored in the whole of the UK's forest biomass.

3. Peatlands provide valuable services of importance to human well-being, including biodiversity conservation and climate change mitigation. They have additional value in providing a range of water management and quality functions and as preserves of archaeological and other historic remains. With much of our peatland resource in unfavourable condition, we are losing valuable services and incurring costs as a result of the continuing degradation of peatland ecosystems.

4. Climate change poses a direct threat to peatlands, with the biggest impacts likely to be on damaged areas. Increased summer temperatures with increased fire risks can damage the habitat, and high rainfall events further erode bare peat surfaces. An effective way of addressing the impacts of climate change on peatlands is to restore damaged habitat and hydrological function to help make the system more resilient and continue providing valuable services. Restoration on both upland blanket bogs and lowland raised bogs can be achieved through a combination of ditch blocking, reducing grazing pressure, avoiding burning on deep peats and vegetation management such as scrub control.

Importance of lowland raised bogs

5. Lowland raised bogs are amongst the rarest and most threatened habitats in Scotland, and indeed the whole of Europe. They are naturally relatively species-poor, but are still considered very important for biodiversity as they contain unique assemblages of species, several of which are rare and / or threatened. A small selection of the important species associated with lowland raised bogs in Scotland includes:

    - Bog rosemary *Andromeda polifolia* (a raised bog specialist)
    - Cranberry *Vaccinium oxycoccos* (a raised bog specialist)
    - Several species of *Sphagnum* many of which are confined to raised bogs
    - Cotton grasses *Eriophorum* spp.
    - Great sundew *Drosera anglica*
    - Large heath butterfly *Coenonympha tullia*
    - Six spotted pot beetle *Cryptocephalus sexpuntatus*
    - Snipe *Gallinago gallinago*
    - Curlew *Numenius arquata*
    - Golden plover *Pluvialis apricaria*
    - a lichen *Absconditella sphagnorum*
    - a beetle *Cyphon kongsbergensis*

6. This policy relates to lowland raised bog, a habitat under threat from mechanised peat extraction. Upland peat habitats, for example blanket bog, are addressed by the Scottish Wildlife Trust's Upland Vision.

7. Lowland raised bogs are also an important carbon sink. Globally, all types of peatland contain one third of the world's soil carbon. This carbon pool exceeds that of the world's forests and equals that of the atmosphere. The stripping of peat for horticultural purposes from lowland raised bogs not only leads to the release of this carbon but also removes the carbon sink, exacerbating global warming and climate change.

8. Important geochemical and palaeological archives are contained within lowland bogs, offering unique historical insights into past climate and other environmental events.

Threats to lowland raised bogs

9. The area of lowland raised bog in the UK has decreased by around 94% over the last two centuries from c 95,000 ha to c 6,000 ha at the present day (England 37,500 ha reduced to 500 ha, Scotland 28,000 ha to 2,500 ha, Wales 4,000 ha to 800 ha, Northern Ireland 25,000 ha to 2,000 ha).[i] The main factors which have led to this decline are agriculture, afforestation and peat extraction. The Scottish Wildlife Trust believes that it is imperative that Scotland's raised bog habitats to not suffer the same level of decline as those in England.

10. Peat extraction for horticultural uses still occurs in Scotland. In 2009 there were 390 operational peat extraction sites in Scotland for horticulture and 21 for other uses accounting for 412,000 m^3 of peat extracted[ii].

11. The number of planning consents issued for peat extraction is not known, but a previously unpublished assessment of 28 out of 32 local authorities undertaken by Scottish Natural Heritage found that, at that time, there were 72 peat extraction consent sites recorded in Scotland (20 active, 16 expired, three pending, the remaining 33 awaiting confirmation)[iii].

12. The UK Department for Environment, Food and Rural Affairs (DEFRA) estimates that the UK now uses just under 3 million m^3 of peat for horticulture every year. Most (69%) is bought by amateur gardeners from retail outlets as "multi-purpose compost" and specialist composts for plants and containers, "grow-bags" for growing tomatoes and other vegetables and, to a much lesser extent, soil improvers to improve plant health and growth. The professional horticulture sector, and in particular growers of food and ornamental plants, are also significant peat users (30%), with Local Authorities and landscapers using the remaining 1%.[iv]

Peat use for horticulture

13. Peat became the dominant material for horticulture and gardening in the 1970s as a replacement for loam-based growing media[v]. A market for the horticultural use of peat and an extraction industry to supply that market grew at a time when the importance of peat habitats for biodiversity, climate change adaptation and the provision of other ecosystem services were not fully appreciated.

14. Peat-free growing media and soil improvers derived from, *inter alia*, bark, wood fibre, wood chips, green compost and coir fibre dust (a by-product of coconut-fibre rope and matting production) make up 30% of the market and have increased in use significantly since 2007. There has not, however, been a corresponding fall in the volume of peat extracted as the growth in the market for growing media has offset the positive switch to peat-free alternatives. DEFRA estimates that if current trends continue, the growing media market for amateur gardeners will not be peat free until 2082.

15. The UK currently imports around half the peat it uses. Peat for the UK market is sourced from the UK including Scotland, Ireland (which supplies 60% of the UK's horticultural peat products) and the Baltic States (8%)[vi]. The Scottish Wildlife Trust believes that peat habitats are of global importance (aside from the global implications of their importance as carbon stores and sinks) and that exporting peatland damage to supply the domestic market for soil improvers and growing media is unethical and cannot be supported.

16. The Scottish Wildlife Trust has seen no evidence that garden biodiversity benefits from the use of peat as a soil improver or growing medium. The Scottish Wildlife Trust does not believe that biodiversity losses, including losses to Annex 1 or UK BAP Priority Species, associated with peat extraction could be offset by any gains in garden biodiversity.

International policy context

17. The importance of peatlands has been emphasised in international discussions at the 10th meeting of the Conference to the Parties of the Convention on Biological Diversity in Nagoya. Peatlands are also recognised under the Ramsar Convention on Wetlands of International Importance which provides the framework for national action and international cooperation on wetlands and their resources.

18. Raised bogs, mires and fens are recognised by the EU Habitats Directive, and many vulnerable and valuable sites therefore receive strict protection under this Directive as Special Areas of Conservation (SACs). Similarly, sites with significant numbers of notable bird species can be classified as Special Protection Areas (SPAs) under the EU Birds Directive and, together with SACs, form a network of important European sites known as Natura 2000. In Scotland most of these sites are also Sites of Special Scientific Interest (SSSIs).

19. Annex 1 of the EU Habitats Directive includes two lowland raised bog habitats: active raised bog and degraded raised bog. This unprecedented inclusion of degraded habitats within Annex 1 underlines the rarity and importance of recoverable lowland raised bog.

20. The EU Landfill Directive (1999) sets demanding targets to reduce the amount of biodegradable municipal landfill by all Member States. Stimulation of the market for peat-free growing media would divert a number of significant waste streams from landfill.

Policy statement

21. The Scottish Wildlife Trust believes that protecting and restoring peatland habitats is in the public interest. The ecosystem services provided by raised bogs which are not currently captured in economic metrics, outweigh any perceived benefit to horticulture which has developed over the last forty years.

22. The Scottish Wildlife Trust believes that peat should not be extracted for horticultural purposes.

23. The Scottish Wildlife Trust does not and will not use any peat products at any of its reserves, visitor centres or offices.

Soil improvers

24. There is no justification for the use of peat in soil improvers and we believe that this practice should be stopped immediately. At a very minimum there should be a complete ban, based on legislation if necessary, on the sale of peat in proprietary soil improvers or for use as a soil improver by 2012.

Growing media for amateur use

25. The Scottish Wildlife Trust recognises that consumption habits and patterns of behaviour take time to change and are best achieved by information and incentive rather than penalty. We therefore believe that the use of peat for amateur horticultural growing media (where adequate alternatives are readily available) should be phased out completely by 2016.

26. A levy on products containing peat is a possible mechanism to help the market support the development of peat-free alternatives by removing any price advantage enjoyed by peat products. Any peat levy, however, should be set at a level best calculated to encourage a rapid consumption switch away from peat-based products at a rate sufficient to meet the 2016 target.

27. Producers of horticultural media should label products containing peat clearly. Retailers should provide help, advice and encouragement to consumers to promote the use of peat-free growing media and soil improver. Where this is not done voluntarily we believe that government should take action to enforce a ban.

Public sector leadership

28. The public sector should take a lead. The Scottish Wildlife Trust believes that all public bodies in Scotland should, through their procurement policies, end the use of peat for horticultural purposes by 2012. Failure to do this would be inconsistent with the statutory duty on all public bodies in Scotland under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity[vii] and the duty on public bodies under the Climate Change (Scotland) Act 2009 to act in the way best calculated to contribute to delivery of the Act's emissions reduction targets; in the way best calculated to deliver any statutory adaptation programme; and in a way that it considers most sustainable.[viii]

29. Government should work to promote knowledge of non-peat based growing media to encourage a change in consumer behaviour and stimulate the market for non-peat alternatives. Should the complete voluntary phase-out of peat-based growing media not be achieved by 2016 the Scottish Wildlife Trust believes that the use of peat in growing media for amateur purposes should be prohibited.

Professional horticulture

30. The professional horticulture sector may have more difficulty in moving away from the use of peat as quickly as the general amateur gardener. The Scottish Wildlife Trust recognises that there can be circumstances when the use of peat in growing media *may* be justified for properly controlled conservation or scientific purposes, for example the cultivation of specialist ericaceous plants by research bodies. In these circumstances we believe that the small volumes of peat involved (the Royal Botanic Gardens Edinburgh currently uses less than 0.2 m^3 of virgin peat per year) do not constitute a threat to biodiversity, climate change mitigation or ecosystem services.

31. The Scottish Wildlife Trust acknowledges that some specialist commercial growers rely on the use of peat for the propagation of ericaceous plants. The Scottish Wildlife Trust believes that research into alternatives should be encouraged with a view to the complete replacement of peat as a growing medium; in the meantime we believe that in the limited circumstances described in this and the preceding paragraph, the use of peat as a specialist growing medium may be acceptable.

32. The commercial professional horticulture sector should become peat free. It currently accounts for around a third of peat use. We understand that the challenges for commercial growers are more complex than for amateur gardeners. We also recognise that large numbers of jobs are dependent on commercial horticulture. The whole of the economy has a part to play in conserving biodiversity, adapting to climate change and protecting ecosystem services. There is also commercial advantage for a land-based industry in acting sustainably. The Scottish Wildlife Trust believes that the commercial horticulture sector should become completely peat free by 2020 at the latest and that if this cannot be achieved voluntarily that government should act to prohibit the use of peat as a growing medium in all circumstances except scientific research and conservation.

Peat extraction

33. The Scottish Wildlife Trust believes that no new peat extraction sites should be permitted in Scotland and that any licensing authority allowing new peat extraction would breach its statutory biodiversity and climate change duties. Current licence conditions should be reviewed and, if necessary, enforced.

34. Peat extraction sites should be restored to as close to favourable condition as possible and this could be partly funded by a levy on peat consumption.

35. Domestic peat cutting still continues on some sites in central Scotland. Anecdotal evidence suggests this is currently at a scale which does not present a significant risk to biodiversity. However, there is clearly both loss of carbon and potential disruption to hydrological regimes where domestic cutting takes place on a larger scale. With rising fuel costs there is a danger that domestic cutting for burning might increase in the future. We will therefore keep our policy position on domestic cutting under regular review.

How the Scottish Wildlife Trust will use this policy

36. SWT will continue to advocate the principles outlined in this policy statement to Government, the business sector, the wider public and other key stakeholders to promote less ecologically damaging and more sustainable choices.

Cross reference to other related Scottish Wildlife Trust policies:

- Upland Vision (2009)
- Economics of Ecosystem Goods and Services (2010)
- Policy Futures 3: Climate Connections; towards low carbon high biodiversity economies (2011)

[i] UK Biodiversity Action Programme www.ukbap.org.uk/UKPlans.aspx?ID=20

[ii] **http://www.communities.gov.uk/planningandbuilding/planningbuilding/planningresearch/researchreports/mineralswasteresearch/annualmineralsraised/**

[iii] Scottish Parliament 2009 Answer to Question S3W-24842

[iv] http://www.defra.gov.uk/corporate/consult/peat/101217-peat-condoc.pdf

[v] Alexander, P.D., Bragg, N.C., Meade, R, Padelopoulos, G. and Watts O. 2008. Peat in horticulture and conservation: the UK response to a changing world. *Mires and Peat* Vol 3 http://www.mires-and-peat.net/map03/map_03_08.pdf

[vi] http://www.defra.gov.uk/corporate/consult/peat/101217-peat-condoc.pdf

[vii] Nature Conservation (Scotland) Act 2004 s1(1)

[viii] Climate Change (Scotland) Act 2009 s44