What are the benefits of peatlands and their role in future farming systems?

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As a result of climate change we can expect to see future changes in our climate far greater than anything we have seen in the past: Hotter, drier summers, and milder, wetter autumns and winters. The experience of recent years has already shown us how climate change and extreme weather events, such as flooding, will impact society. So what can healthy peatlands offer?

1. **Livestock grazing** – healthy peatlands can improve grazing extent and quality as well as improved access.

2. **Sporting management** – they sustain much of our deer stalking, grouse shooting and fishing enterprises.

3. **A natural defence against wild fire**, which are more likely to occur.

4. **Water supply** – much of our drinking water comes from peatland areas and many of our important salmon rivers depend on peaty catchments. Healthy peatlands make for cleaner water and lower costs to society.

5. **Flood Management** – intact peat bogs store and slow water that helps maintain steady flow rates, thereby reducing downstream flood risks.

6. **Whisky industry** - some brands are uniquely dependent on peat for malting barley.

7. **A place for recreation** – hillwalking, bird watching and a part of Scotland’s iconic landscapes.

8. **A place for education** – peatlands are used widely for learning as outdoor classrooms.

9. **Nature** - Uniquely adapted birds, plants, fungi, invertebrates and micro-organisms make peatlands important for biodiversity.

10. **Combating climate change** – peat accumulates over thousands of years and is, by far, the largest store of carbon in Scotland. Degraded peatlands emit carbon hence the drive for restoration.

11. **Culturally significant landscapes** and valuable archives of our past.

As our climate changes, it will create new conditions that may allow existing pests and disease to spread and new threats to become established in Scotland. The incidence of liver fluke is one example showing a shift in distribution to the East of Scotland, thought to be due to milder, wetter autumns. As peatlands become wetter there has been concern that the host snail species will follow, however recent research suggests this is unlikely due to the acidic nature of peatlands. Another is the apparent increase in occurrence of bog asphodel after peatland rewetting that has been linked with the photosensitisation disease, known as ‘yellowwes’ or ‘plochteach’; however, it is still unknown whether it is the plant or something in association with it, such as a bacterium, that causes the disease.

**Crofters.** Hazel & Kenneth MacKenzie from Shetland, have exclusive-use common grazing on the island which overtime had become degraded.

“Through Peatland ACTION we have been helping use our peat hill in a different way over the last few months. With environmental policies moving towards climate change benefits as well as environmental gain we have been doing our bit to help.”

**Chairman** of Scottish Land & Estates and owner of Annandale Estates, David Johnstone said:

“Peatland ACTION has helped a number of landowners across Scotland to restore peatlands and we encourage others to follow suit. The public’s expectations of what land produces is changing and we recognise that as well as food and timber, carbon storage, water management and biodiversity are also important.”