Introduction

The National Peatlands Strategy is one of a suite of measures designed to assist in managing, conserving and restoring Ireland's peatlands. Action 5 of the strategy calls for a Review of the use of Peat Moss in the Horticultural Industry. A working group was established, comprised of representatives of the Departments of Agriculture, Food and the Marine, Communications, Climate Action and Environment, Culture, Heritage and the Gaeltacht and of the Environmental Protection Agency to prepare an Issues paper for public consultation. The Issues Paper on the Review of the use of Peat Moss in the Horticultural Industry was published on 9 October 2019 with submissions invited by 31 January 2020. 34 submissions were received from a range of individuals, the Environmental Sector, Industry Sector and Advisory Bodies.

A summary of the submission received is contained in Appendix 1. A copy of each submission is available on www.npws.ie and on www.chg.gov.ie.

Both positives and negatives were identified in the submissions received for ending the use of peat moss in the Horticulture Industry as follows:

Positives from ending the use of Peat Moss in the Horticultural Industry.

The preservation of habitat and species, the effect on water quality and in the fight against global warming and climate change are identified as the primary positives from ending the use of peat moss in the Horticultural Industry. The contributors to the paper in favour of ending the use of peat moss for the most part want alternatives used and cite green compost and coir as possibilities. The industry understands the need for change but feel it needs to be measured. It is fearful of using alternatives that are unsustainable, costly and unreliable. Some of the respondents mention Paludiculture and Sphagnum farming as possible answers. These practices are currently being investigated and undergoing testing - this may provide a sustainable way forward when mixed with other alternatives.

Positive examples taken from the submissions include:

- Stopping the use of peat in horticulture would help mitigate climate change by stopping the release of carbon held in the peatlands and reducing our greenhouse gas emissions.
- Regenerating spent bogs would help to restore carbon sinks improving water and air quality.
- Restoration of peatlands would enable the recovery of habitat and species and improve peatland related ecosystem services.
- Restoration of peatlands could provide employment to the former peatland industry workers.
- The restored peatlands could be given back to the communities as areas of amenity and
 used to promote eco-tourism in the areas affected which would also help the local
 economies.
- Preserving what is left of existing healthy peatlands would enable the preservation of what is left of our fragile and unique archaeological record.
- Peatland does not regenerate within a human lifetime. Preservation of what still exists and restoration of what has been degraded will provide benefits now. Action on

- restoration or re-purposing degraded peatlands is urgent as it will take time for these actions to establish reinvigorated, resilient ecosystem functions.
- Jobs in the Peat Industry are not sustainable, they are often seasonal, unskilled and of short duration and this presents a good opportunity to make the change to alternatives.
- New industry in the green economy could emerge as a result of the restoration and preservation, such as a sustainable organic horticultural industry and in areas such as composting and developing peat alternatives for both industry and hobby horticulture.
- Peatland conservation and restoration measures would encourage the community at large to be more environmentally aware and proactive in green practices.

Negatives from ending the use of peat moss in the Horticultural Industry

Negatives from ending the use of peat moss in the Horticultural Industry centred on the loss to the rural economies of the areas affected in terms of jobs and industry revenue. The major issue for the companies involved in the production of peat products is that there is no viable alternative to peat for their products and what products are available are not guaranteed or sustainable and may cost considerably more. In some cases the main component in a company's product is peat and there is no alternative. This type of industry is located where the raw material is readily available so the loss of the raw material negates the need to be located there which in turn impacts the local economy.

Companies involved in the production of food, such as the soft fruits and the mushroom industry, are already substituting a percentage of the peat used with alternatives but the lack of availability and cost are factors which are impacting their ability to further decrease their reliance on peat moss.

Negative examples taken from the submissions include:

- An awareness campaign would need to be launched to educate the public and promote awareness of the products used for horticulture. There is a cost implication for this.
- Job Loss in rural areas which are already at a disadvantage. Large investment would be needed to retrain and re-educate the workers in these areas.
- Some of the workers are at an age where training or re-education would not be an option because by the time any meaningful training or re-education was complete they would be at retirement age.
- Would the value of the alternative jobs match what workers currently earn.
- Length of time required to set up new business models for the change of work type.
- There would be large cost implications in compensating industry for losses incurred.
- Loss of a cultural activity which has been part of Irish rural life for centuries
- Alternatives that are available may not be as reliable and therefore cannot be used to any great extent in commercial horticulture.
- Security of food production is jeopardised when using alternative products that may carry problematic diseases or contaminants.
- There may be biosecurity risks to human health when introducing alternatives, this needs to be continually monitored to assess the potential risk of diseases such as legionella in growing materials over several years.
- Increased in carbon footprint if a company stays in their current location but is now importing peat from abroad resulting in increased costs to the consumer.

- Prohibitive costs in recalibrating existing machinery or purchasing new machinery to cope with alternative materials.
- When making a decision to use an alternative the sector should use a responsible sourcing calculator, this allows for materials to be fully audited and benchmarked against any other material as the calculator assesses all materials against the same set of criteria. Alternatives that are not produced locally will need to be imported and therefore will contribute to carbon emissions and in turn sustainability issues.

Conclusion

As set out in the Issues Paper and in the submissions received there are significant positives and negatives arising from ending the use of peat moss in the Horticultural Industry. All of the issues, both the positive and negative, set out above are important. There are difficult choices to be made - how we garden as individuals to how we grow food crops on an industrial scale would all come under the spotlight when trying to transition to more sustainable models of practice and production. There is a need for an understanding that the speed at which changes can take place needs to be balanced with the economic consequences for the industry, food security at a national and an international level and the economic and cultural impact on the local communities that would be affected.

Further research on and investment in alternatives to peat moss, re-education and retraining programmes would need to be prioritised and there would need to be solid job options available when re-training is complete. Most of those who made submissions favoured the setting up of a working group to consider how best to achieve the reduction or complete cessation of the use of peat moss in the Horticultural Industry.

Recommendation arising from the review of the use of peat moss in the Horticultural Industry

Therefore, it is recommended to establish a working group to include representatives from relevant Government Departments and State Agencies, Environmental Non-Governmental Organisations and industry stakeholders under an independent chairperson to examine:

- Eliminating the use of peat moss in the amateur gardening sector in order to leave what remains in use for the industry sector to buy time to develop alternatives, enabling food security and to provide industry surety.
- Graduating the elimination of the use of peat moss in the Horticultural Industry over an agreed period of years with an agreed end date.
- Finance and support for those workers whose skills cannot be accommodated in proposed alternative industries.
- Investment in further research into the development, education and use of alternatives to peat moss, such as bark, wood fibre, coir, biosolids, bracken and green compost, perlite, vermiculite, rockwool, and horticultural clay and in new methods of farming such as Paludiculture and Sphagnum farming.
- Up-skilling the existing workforce to regenerate the existing bogs for use in Paludiculture, Eco-Tourism, Carbon Farming, and Tree Farming as appropriate to optimise environmental outcomes.
- Quantifying the value of the existing viable peat lands as carbon sinks and then determine a carbon market to incentivise owners and operators of peat lands to preserve, rewet or restore their assets.
- Educating the public to the benefits of what would be proposed to include the climate and environmental benefits, the economic, social, cultural and public health benefits.