

# Sustainable Sphagnum for Peatland Restoration

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## Sphagnum BeadaHumok®



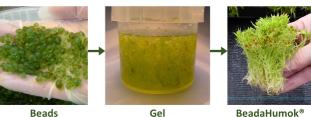
- >11 million produced
- Grown 100% Peat Free
- No donor site damage through wild harvesting
- Multiple Sphagnum species for targeted planting
- Resilient and rapid establishment and growth in situ
- Easy to transport and plant
- Sustainable production methods





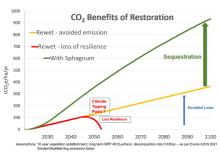
#### Optimising Revegetation of Peatlands

>15 years of development and trials to produce a method which provides optimal survivability, growth, biodiversity, greenhouse gas and ecosystem benefits while factoring in cost



BeadaHumok<sup>®</sup>

### Sphagnum for Climate Resilience

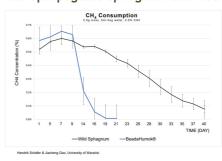


-88-110 tCO2e/ha could be sequestered within years through planting Sphagnum

This provides resilience against the influence of projected climate change

Without revegetating with Sphagnum there is a significant lost opportunity for carbon sequestration

#### Micropropagated Sphagnum and Methane



Micropropagated Sphagnum supports more active methanotrophic bacteria and demonstrates a higher methane consumption rate than wild-harvested material

Provides a natural solution to mitigate the increased methane emissions associated with rewetting peatlands

#### Sphagnum and Biodiversity

Sphagnum functions as an Ecosystem Engineer

Influences conditions - reduces pH, maintains water table, stabilises peat surface

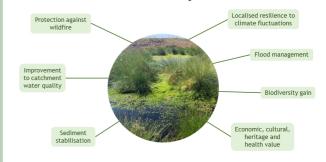
Produces optimal environment for the development of native peatland species

**Boosts biodiversity** 

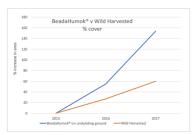




#### Additional Benefits to Ecosystem Services



#### Growth and Establishment



BeadaHumok® demonstrated a much higher rate of growth than wild harvested material on a restoration site (Data from Moors for the Future trials on Kinder Scout)



One year after planting - Grown from 4 to 11 cm diameter

#### Micropropagation **Wild Harvesting** Input Harvesting Impact at Donor site No impact Supply Limited Scalable **Species Limited Control** Controlled CH₄ mitigation Slower Faster Cost Higher Lower





