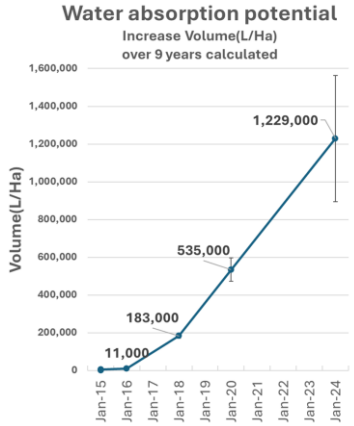
Flood, Fire & Sphagnum

Water Retention Capacity of Micropropagated Sphagnum Moss

Natural Flood Management

- The ability of sphagnum to retain 20x its weight in water slows the flow through peatland catchments
- Reduces the frequency and severity of flooding as well as improving water quality
- Conducting catchment-scale trial with Moors for the Future from 2025-2030: planting Sphagnum plugs at 4 and 8/m2 over 4 1ha catchments
- Aims to substantiate evidence from trials on Kinder Scout at scale



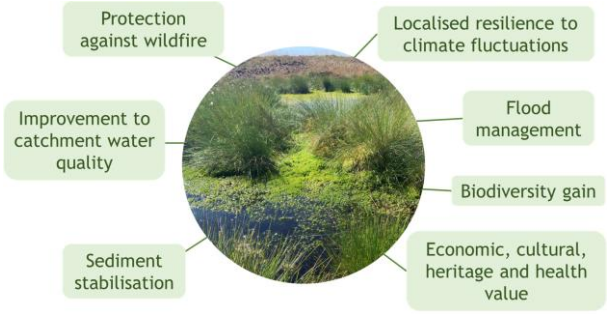
Moors for the Future Kinder Scout high density planting trial - 9yr dataset 2015-2024

Sphagnum BeadaHumok®

BeadaHumok® are sustainably produced multi species Sphagnum moss plugs developed for optimal establishment and growth

Micropropagation process eliminates the need for damaging wild-harvesting practices





>18 million produced
Grown 100% Peat Free
Multiple Sphagnum species for targeted restoration
Resilient and rapid establishment and growth
Easy to transport and plant
Free of pests and disease
Sustainable production methods

Sphagnum vs infrastructure improvement

Dense sphagnum planting presents an alternative solution to costly flood infrastructure developments with considerably cheaper initial capital expenditure.

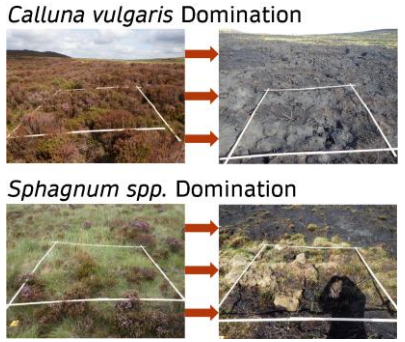
Sphagnum revegetation also provides a permanent natural flood management effect which increases in efficiency over time and provides resilience against climate change - concrete is temporary

Wildfire Risk Reduction and Resilience

- Post-wildfire monitoring suggests significantly higher chances of survival and recovery in densely Sphagnum dominated areas
- Provides protection for other flora and fauna on sites to prevent total loss of seedstock = faster recovery & improved biodiversity
- Maintenance of water table in unburnt Sphagnum dominated areas = faster recovery and reduced fire severity.



Images provided by the Moors for the Future Partnership



Wildfire on The Roaches—August 2018