

# Innovative brash management to enhance water quality following peatland restoration and forestry operations.

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**Brash**



**Aged needles**



**Creating a brash mat**



**Fresh brash mat**

# Brash mat examples



# Brash Management

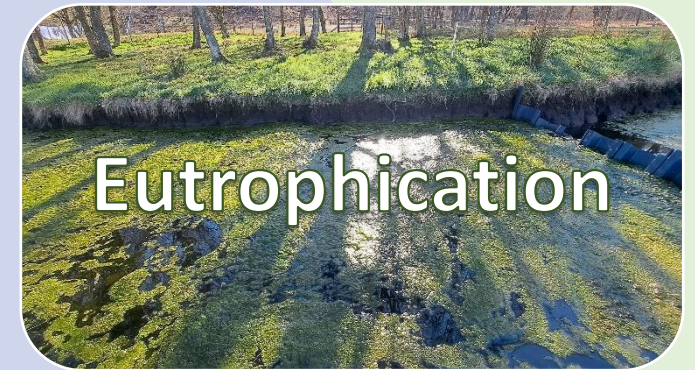
**Brash mats left in situ**



**Brash bale going for biomass**



# Why manage brash?



Negative impacts of decomposing brash

# Project Aims

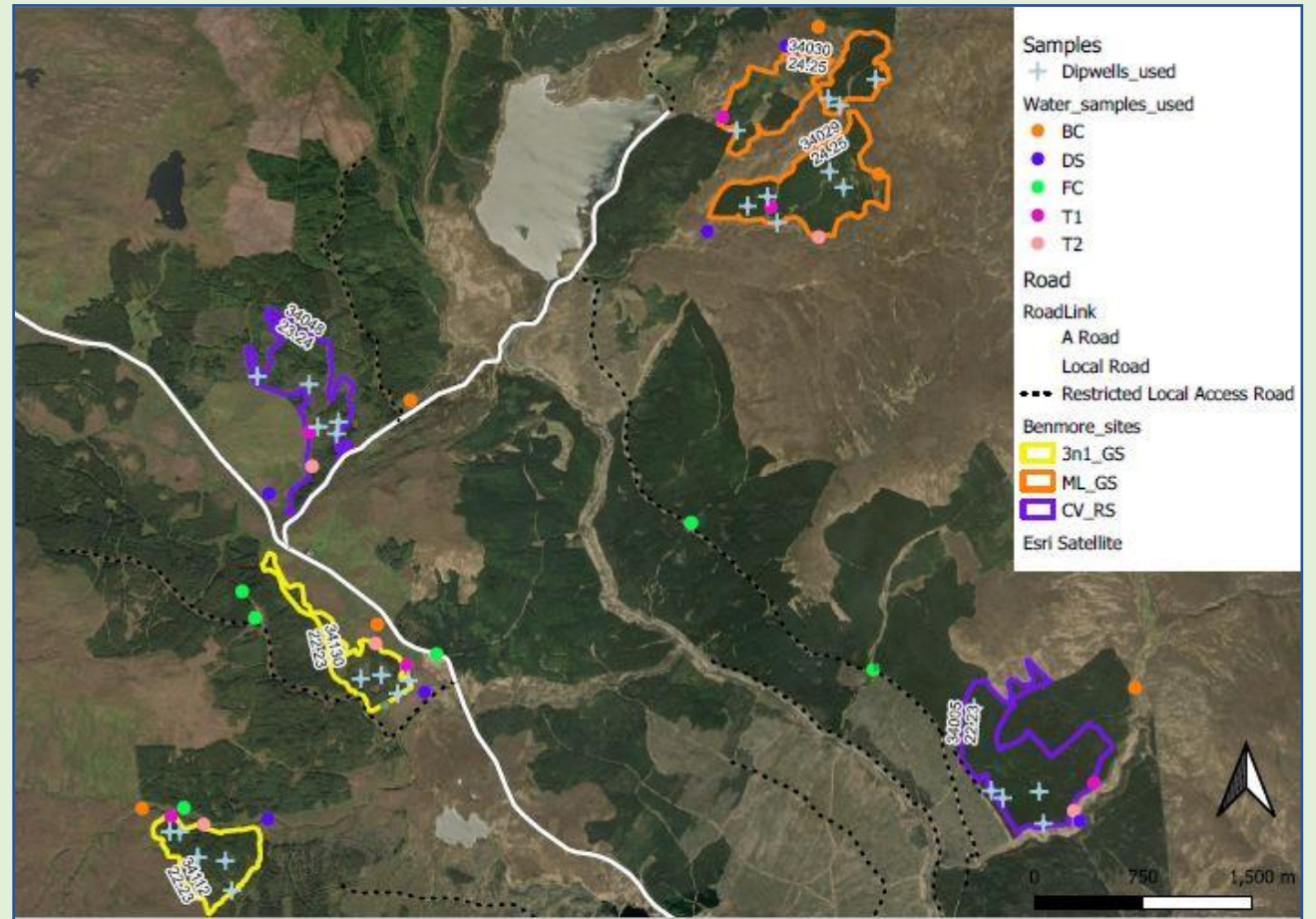


1. How can we best manage brash on forestry and peatland restoration sites?
2. Assess rapidly evolving techniques in felling and peatland restoration.
3. Can we repurpose brash? Creating a brash-based biochar water filter.



# Benmore Forest

## Forestry and Land Scotland



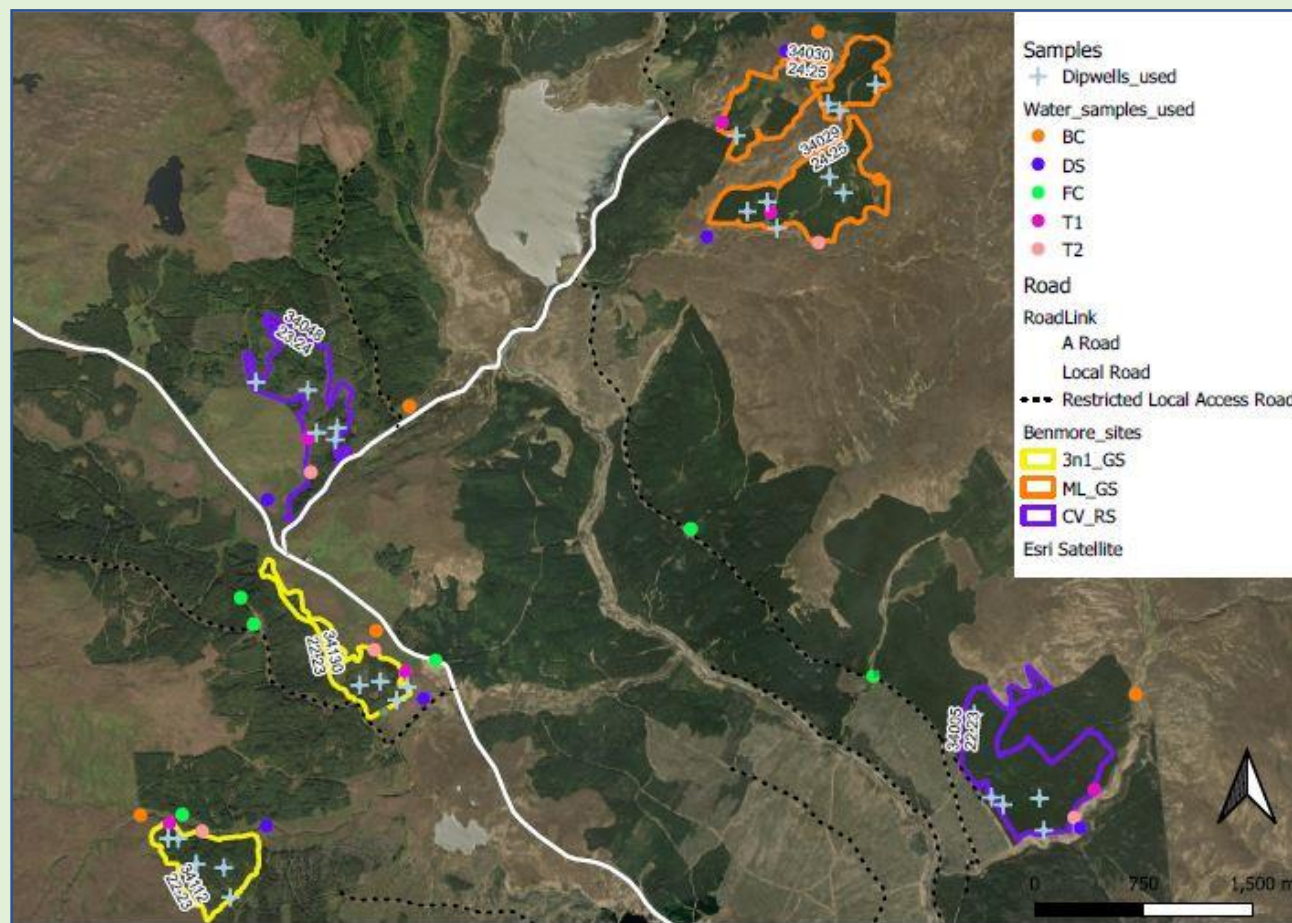
# Benmore Forest

## Forestry and Land Scotland

**3 paired sites.**

**Management techniques:**

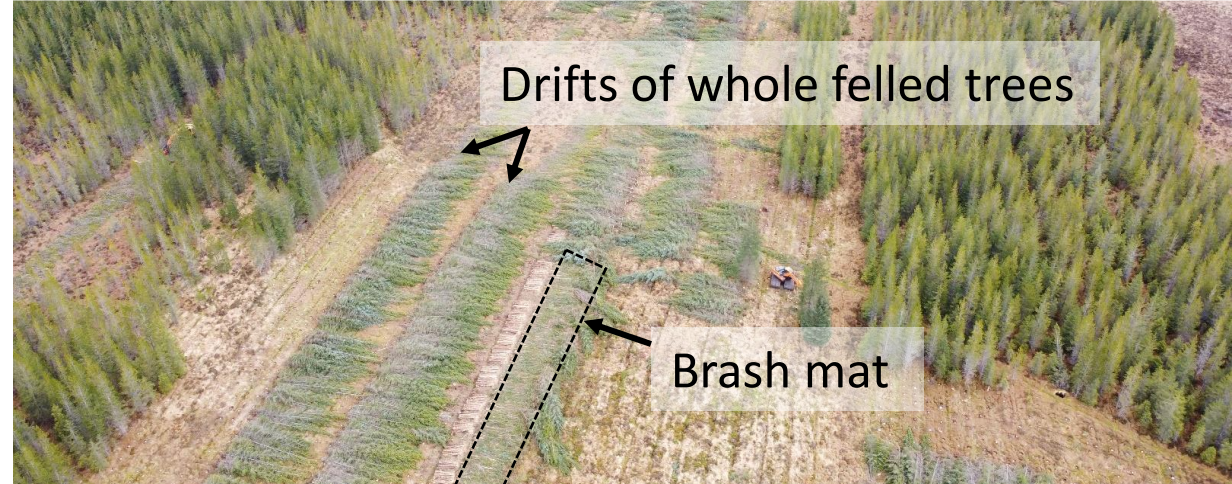
1. Mulching & ground smoothing.
2. Multiple drifts felled into one & ground smoothing.
3. Conventional harvesting.



# Process of felling multiple drifts into one



**1. Access route cut conventionally**



**2. Excavator cuts whole trees with shears**



**3. Results in...**

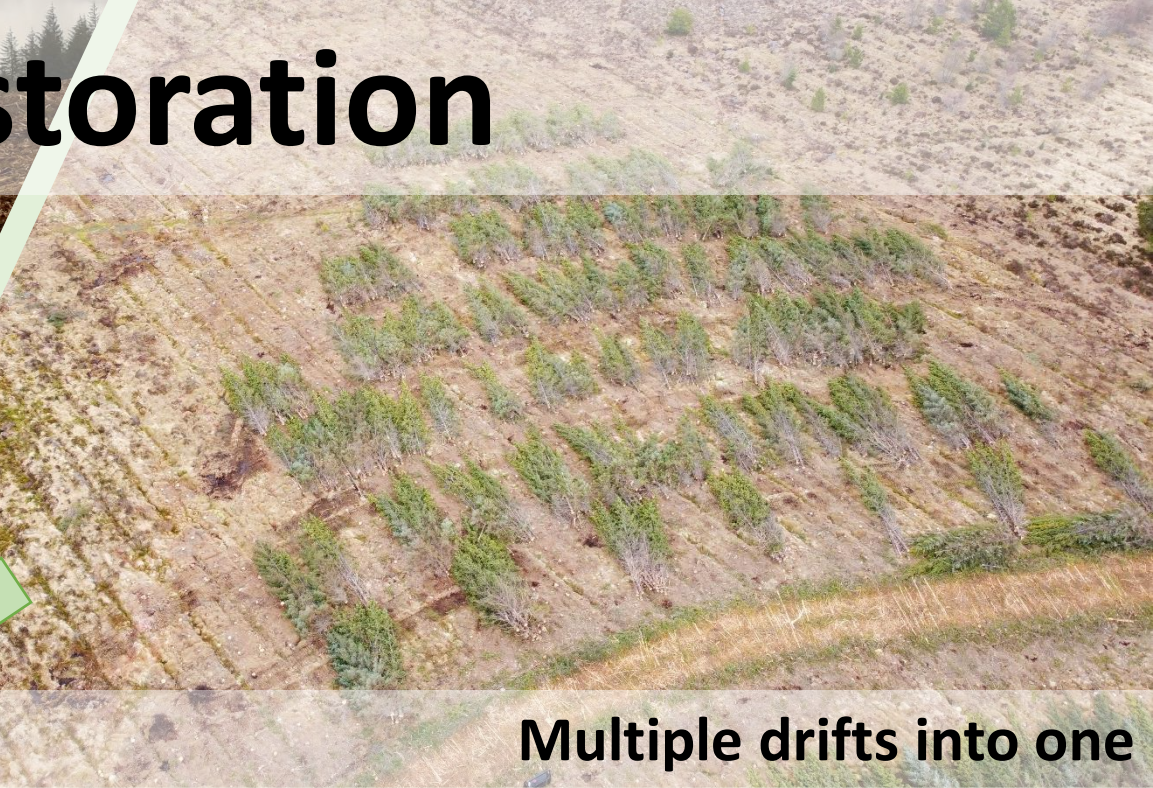


**Low stumps, no visible damage, increased brash removal, widely spaced brash mats & ground smoothing**

# Peatland Restoration



**Mulching**



**Multiple drifts into one**



**Ground smoothing**

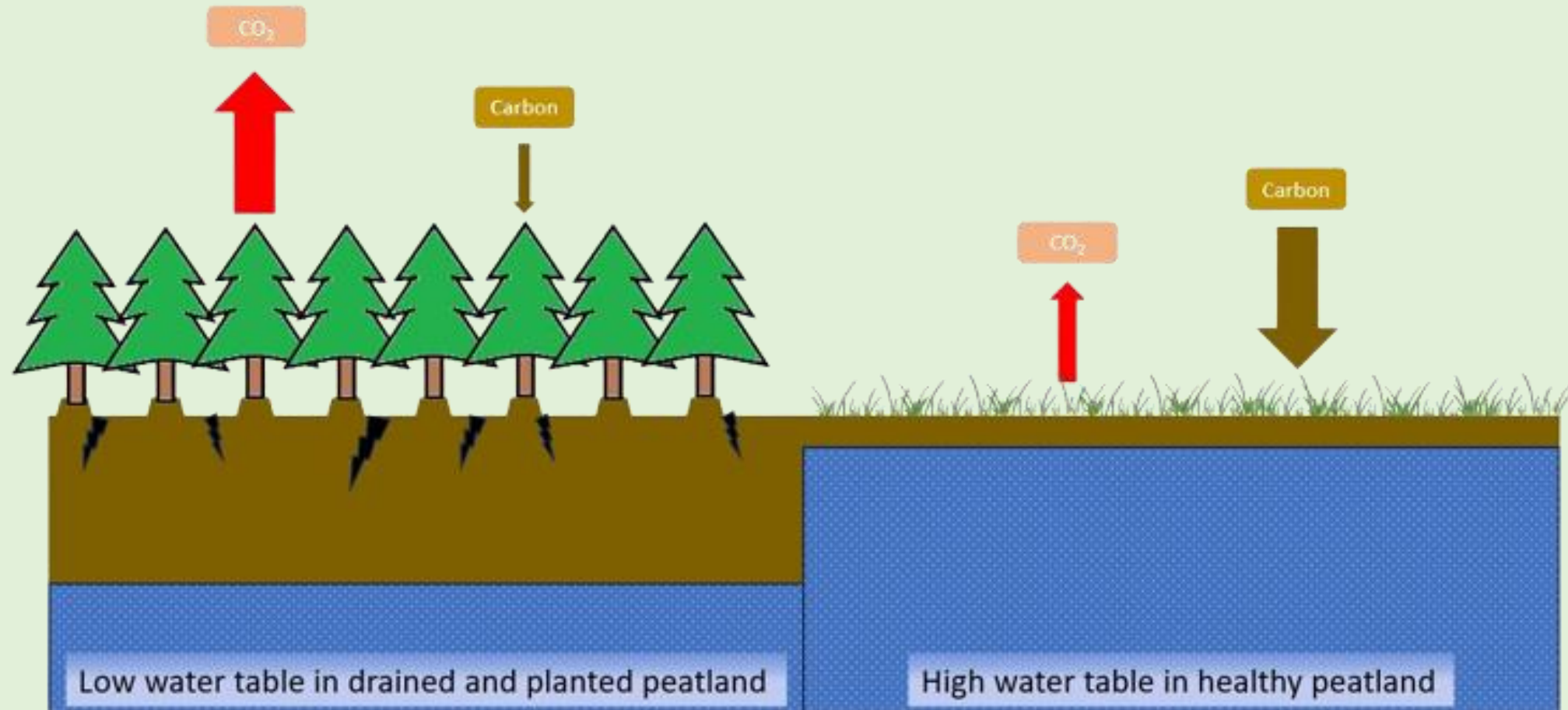


**4 years post ground smoothing**

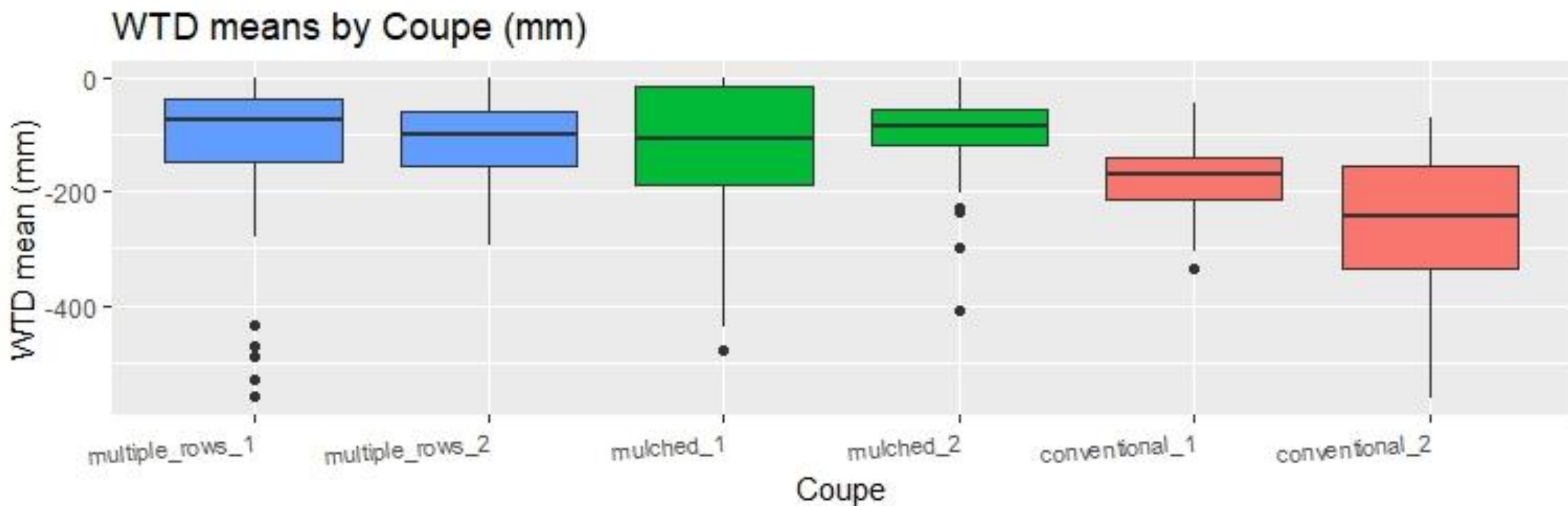
# Initial Results from field study

~ Water table depths ~

# The importance of water table depth

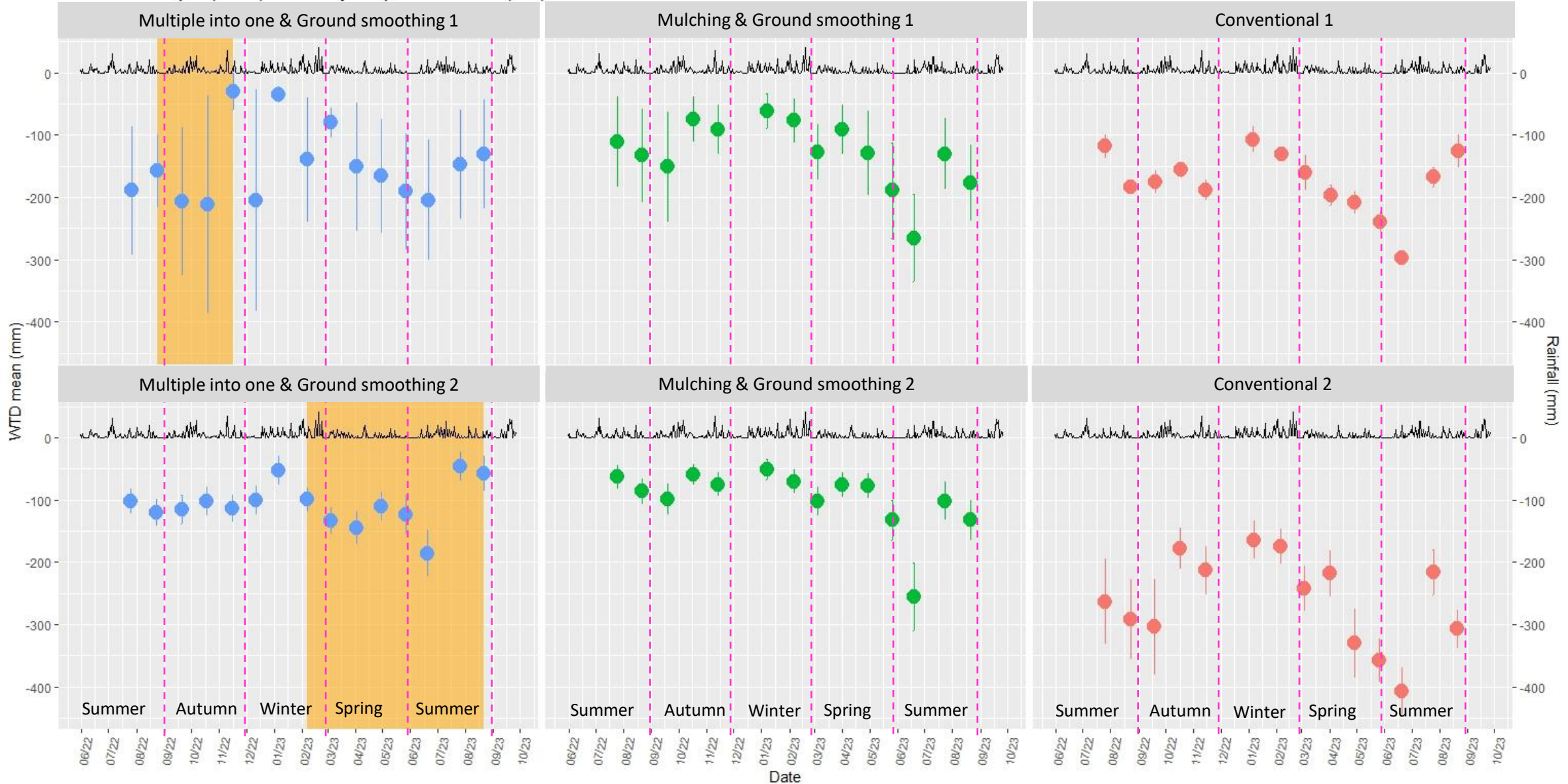


# Water table depth results so far...



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Water table depth (WTD) means by coupe and rainfall (mm)



Site active:  
felling &  
ground  
smoothing

Thank you.  
Any Questions?

