



PEATLANDS
for Prosperity

Metamorphosing Ireland's Peatscape Mosaic through Paludiculture Choices

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Rialtas na hÉireann
Government of Ireland



Arna chomhchistiú ag
an Aontas Eorpach

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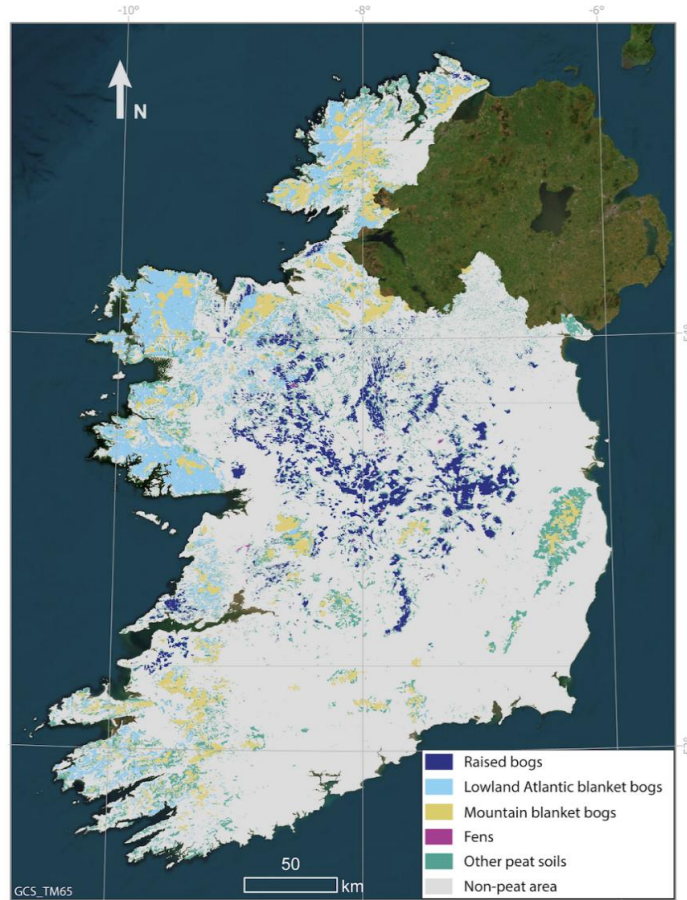
Tionól Réigiúnach an
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Regional Assembly



Green Restoration
IRELAND



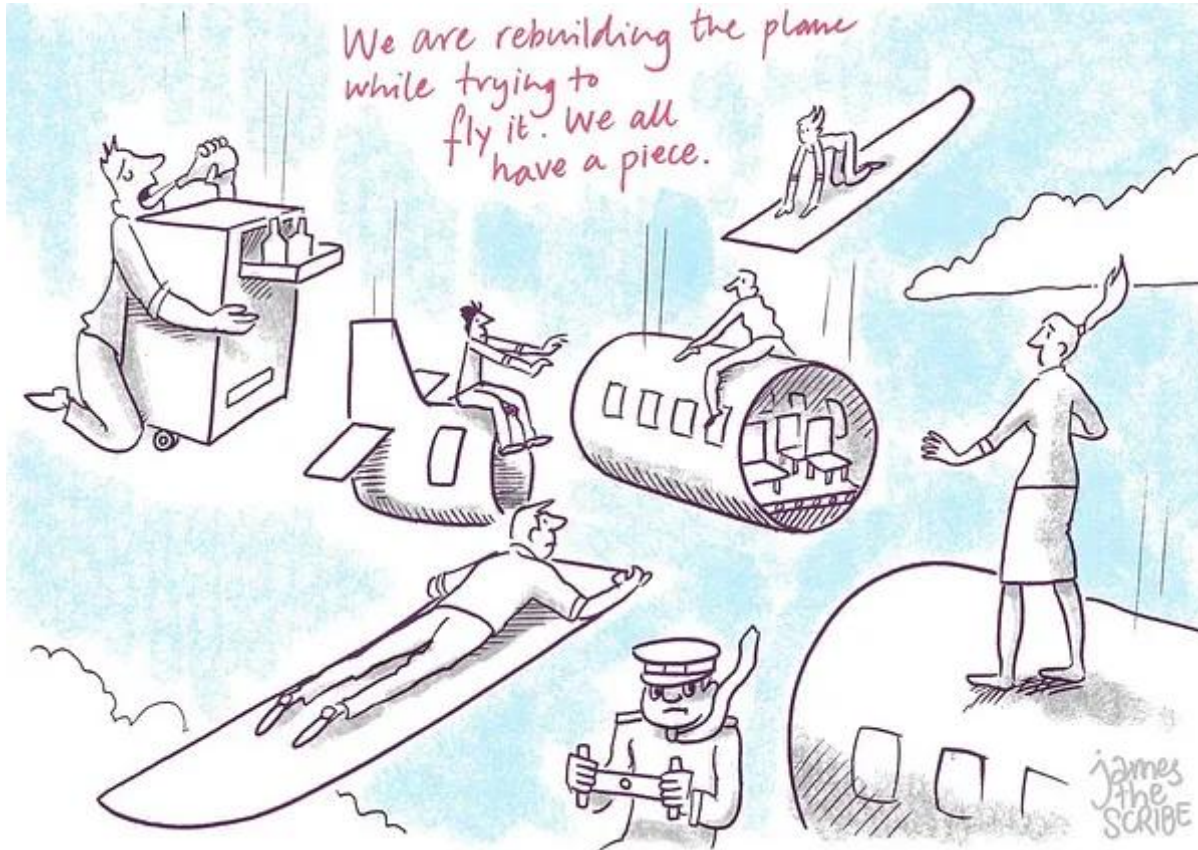
The Challenge



- 1.66 M ha store 2.2 billion tonnes
- **75%** of our soil carbon - **6-7 times** that stored in Irish forests
- 85% damaged / degraded
- Up to 10M t CO₂e emissions
- 300,000 ha afforested
- 10,000 ha arable
- **340,000 ha peat grasslands**
- **610,000 ha cutover**



Mission Impossible?!?





Barriers

Messaging



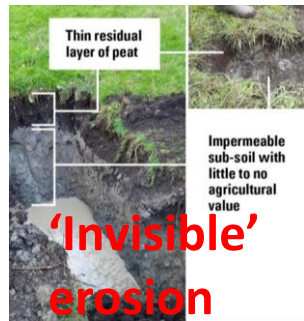
Preferences / funding?



VS

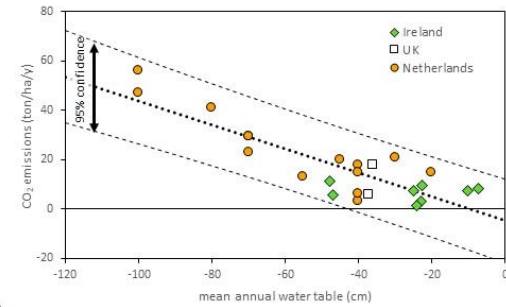
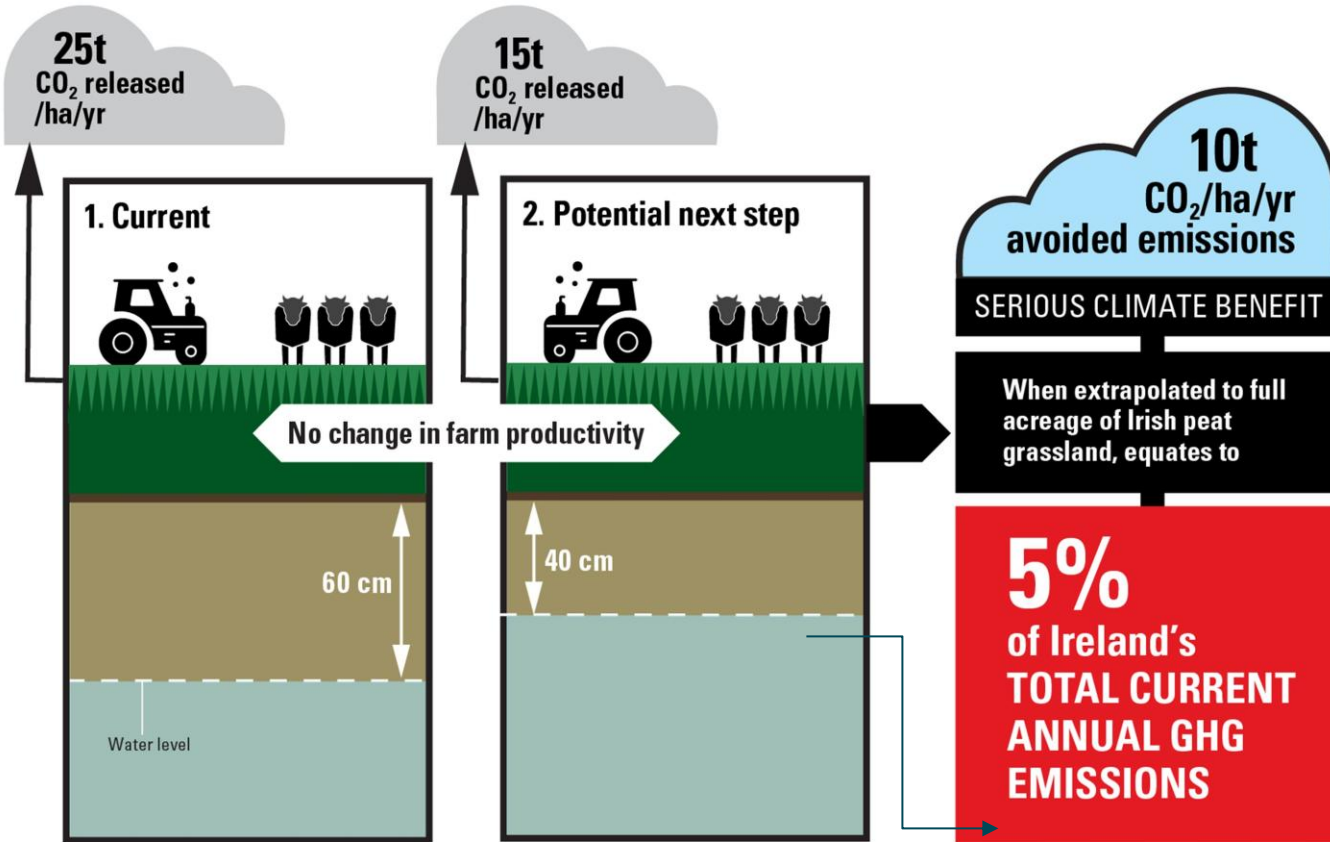


Low / no Awareness





Near BAU, slower burn 'Win-Win'



BUT

Issues <40 cm

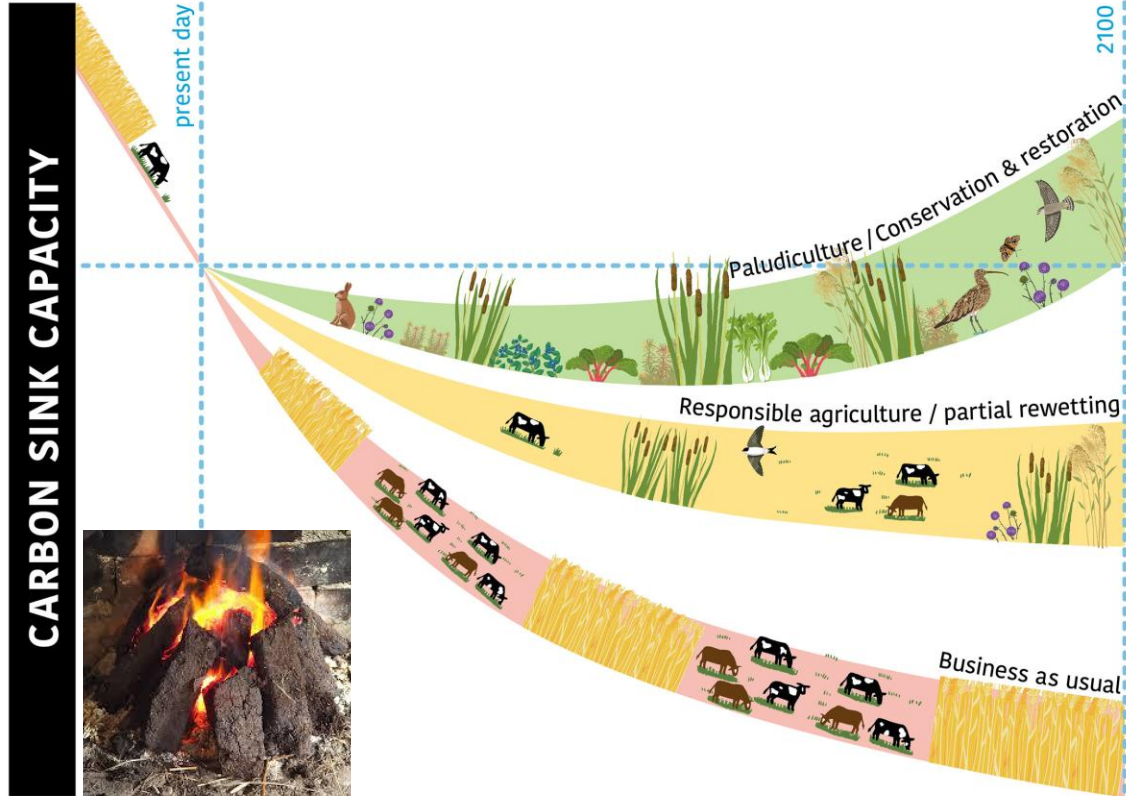
and

'Adjacency' barrier

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Peat Grassland Options for Water Level Increase?



No burn

Slower burn

Slow burn
and ...





Paludiculture addresses False Dichotomy

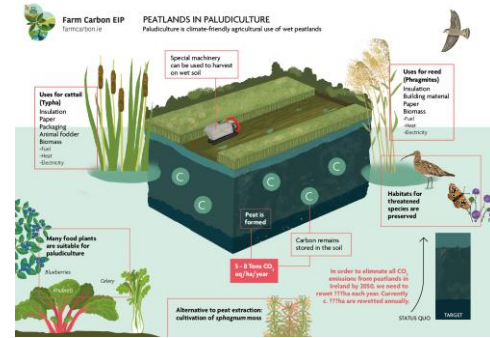


VS





Paludiculture = Silver Bullet



Biodiversity



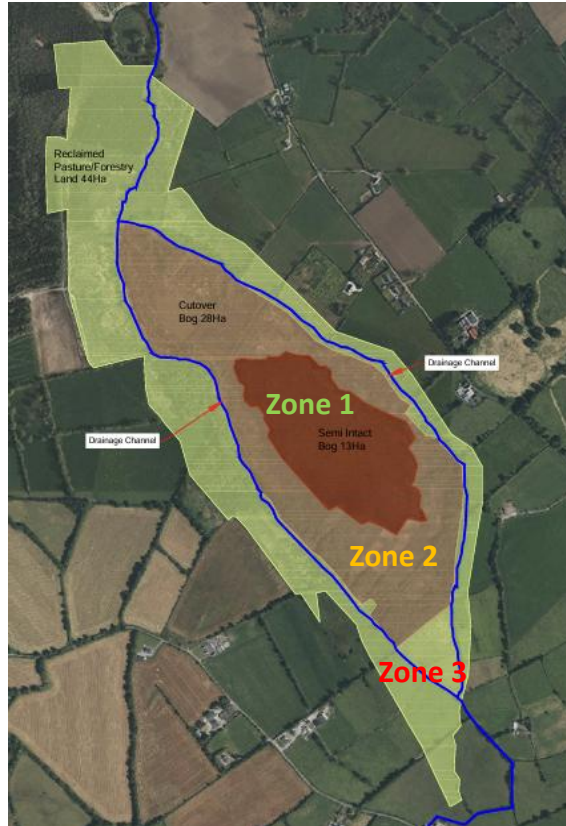


Gortavally Case in Point





3-Zone Solution: Landscape-Level Mosaic



- Irish (raised bog) peatlands typically in 3 concentric zones:
 - **Zone 1:** *Semi-intact core* (50,000 ha);
 - **Zone 2:** *Cutover middle ring* (120,000 ha) - Post-extraction abandoned areas/forestry;
 - **Zone 3:** *Agricultural outer ring* (80,000 ha) - Converted to grassland/forestry - Gradual transition potential with partial water level increase in pastures
- Restore Zone 2 '**wastelands**' with ***tailored, habitat-appropriate*** paludiculture solutions simultaneously restores productivity AND hydrological conditions needed to protect Zone 1
- *Restore & protect nature by producing (through paludiculture)* – creates hotspots of wetland biodiversity
- De-risked, 'stacked income' opportunities



Cutover – Fen or Bog Peat?



Etc



OR





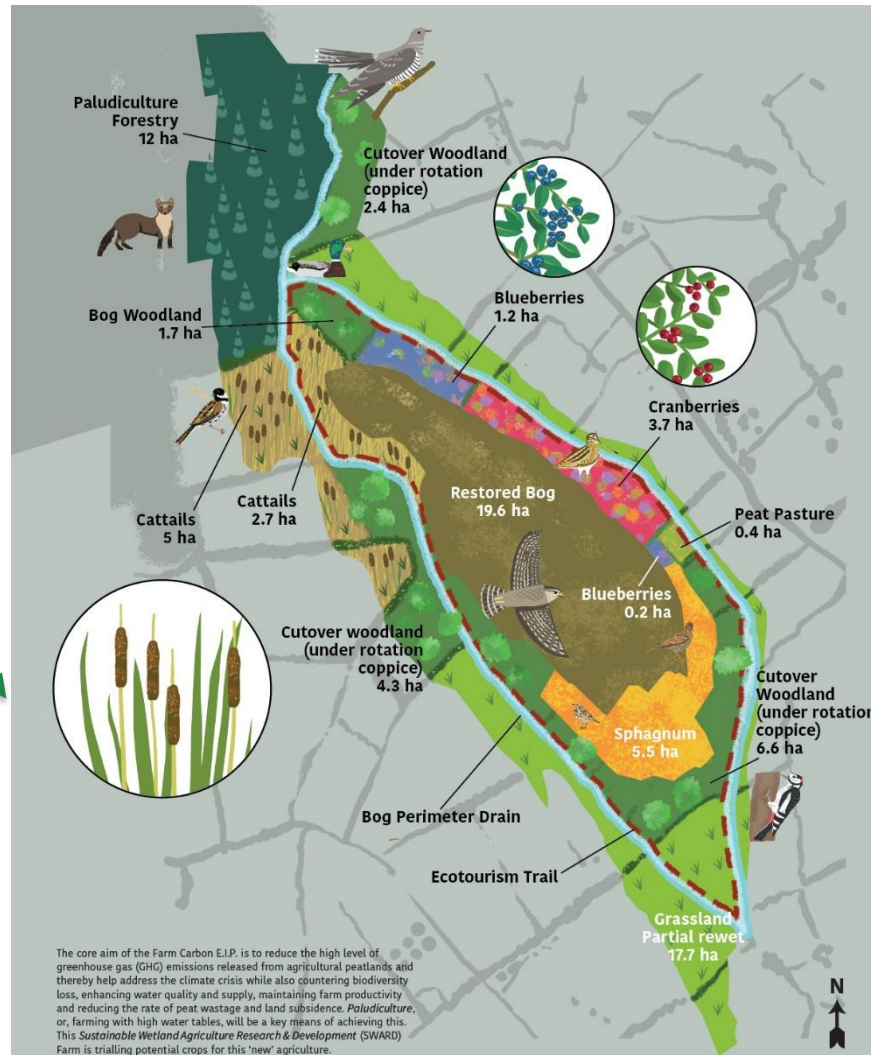
Cultural Alignment in No-risk Cutover



- Need sustainable solutions for all habitats
- No-risk use of 'Stranded Assets'
- More land, more income, production, more nature
- Need restoration & active management



Future Vision: *Paludiculture- Restoration Peatscape 'Mosaic'*

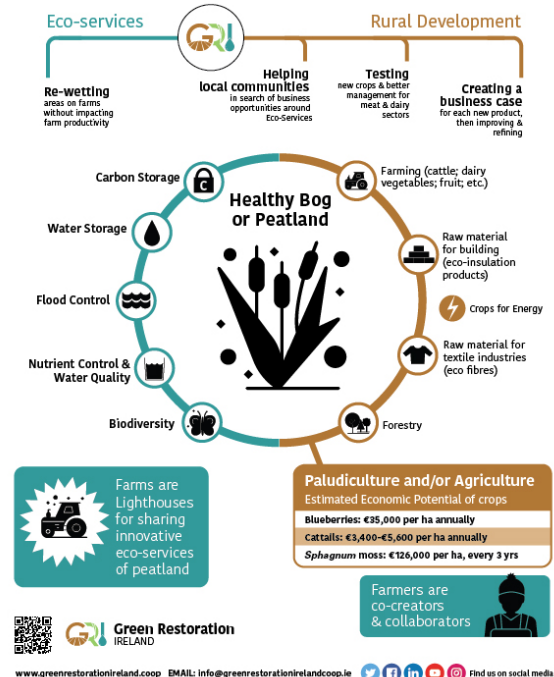




Income for Scaling

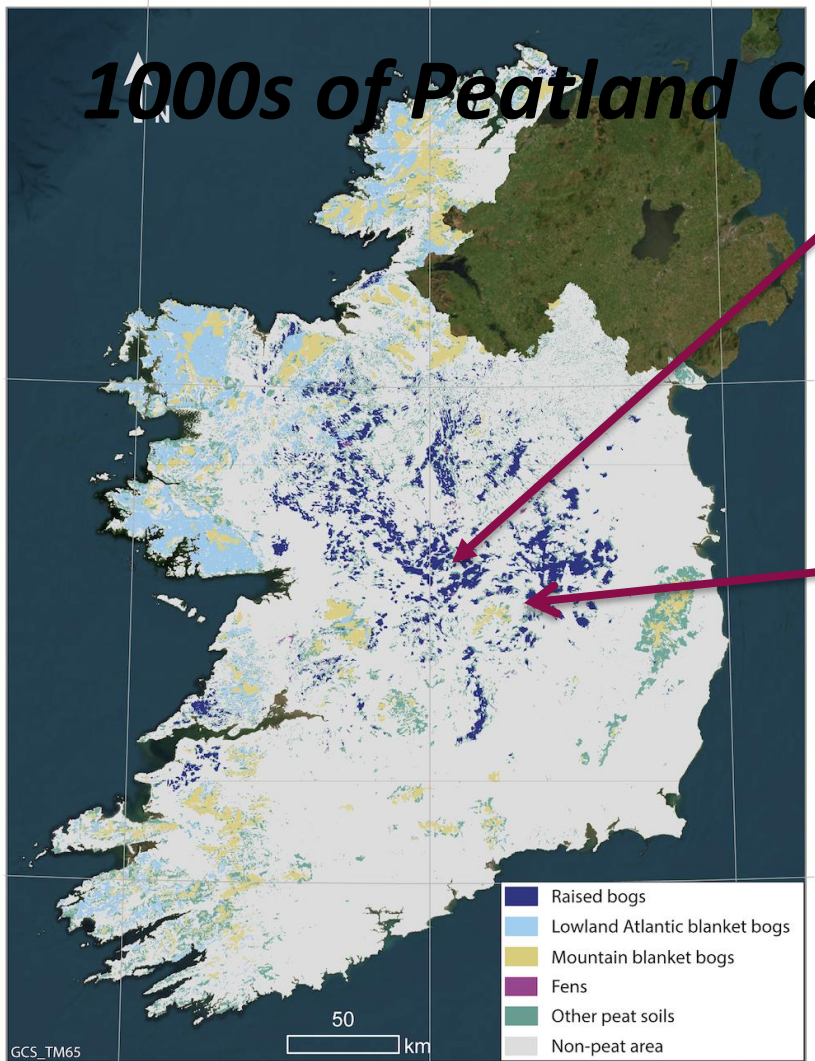


- Make ecosystem service provision economically attractive
- **'Stacked' Revenue streams include:**
 - **Carbon credits:** €30-100/tCO₂ potential under emerging markets (new Peatland Standard for Ireland)
 - **High-value paludiculture crops:** Typically exceeding conventional agriculture returns
 - **Ecosystem service payments:** Water quality, biodiversity, flood management
 - **Premium product markets:** "Carbon-negative" food and bioeconomy materials
- **International experience** to date shows paludiculture requires carbon/PES pricing for full economic viability
- Recreational opportunities e.g. ecotourism
- Ireland's advantage lies in large supply of carbon / PES credit supply from large areas of cutover (620,000 ha) & **70-90% emission reductions**





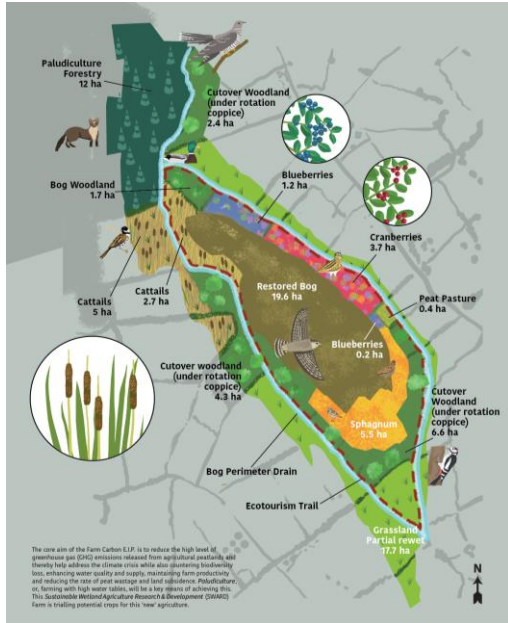
1000s of Peatland Communities



- Each peatland has its own history, unique community & mix of:
 - 1. farmers, turbary rights owners etc,
 - 2. agricultural practices and
 - 3. habitats



Future Peatscape of Paludiculture- Restoration Mosaics x 1000s



X



Each peatland community
needs its own unique
solution!!



Thank You For Joining Us



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Let's Stay Connected