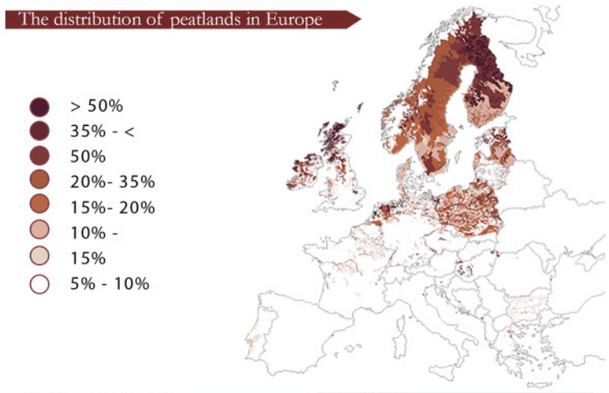
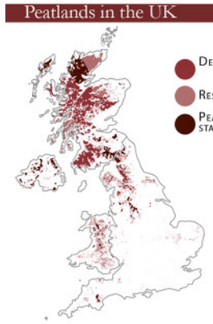
# (RE)PEAT

Peatland restoration through sustainable tourism in the Isle of Skye, Scotland

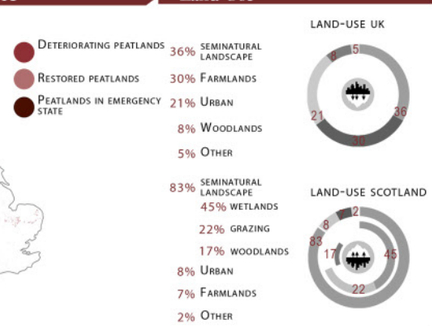
## The distribution of peatlands in Europe



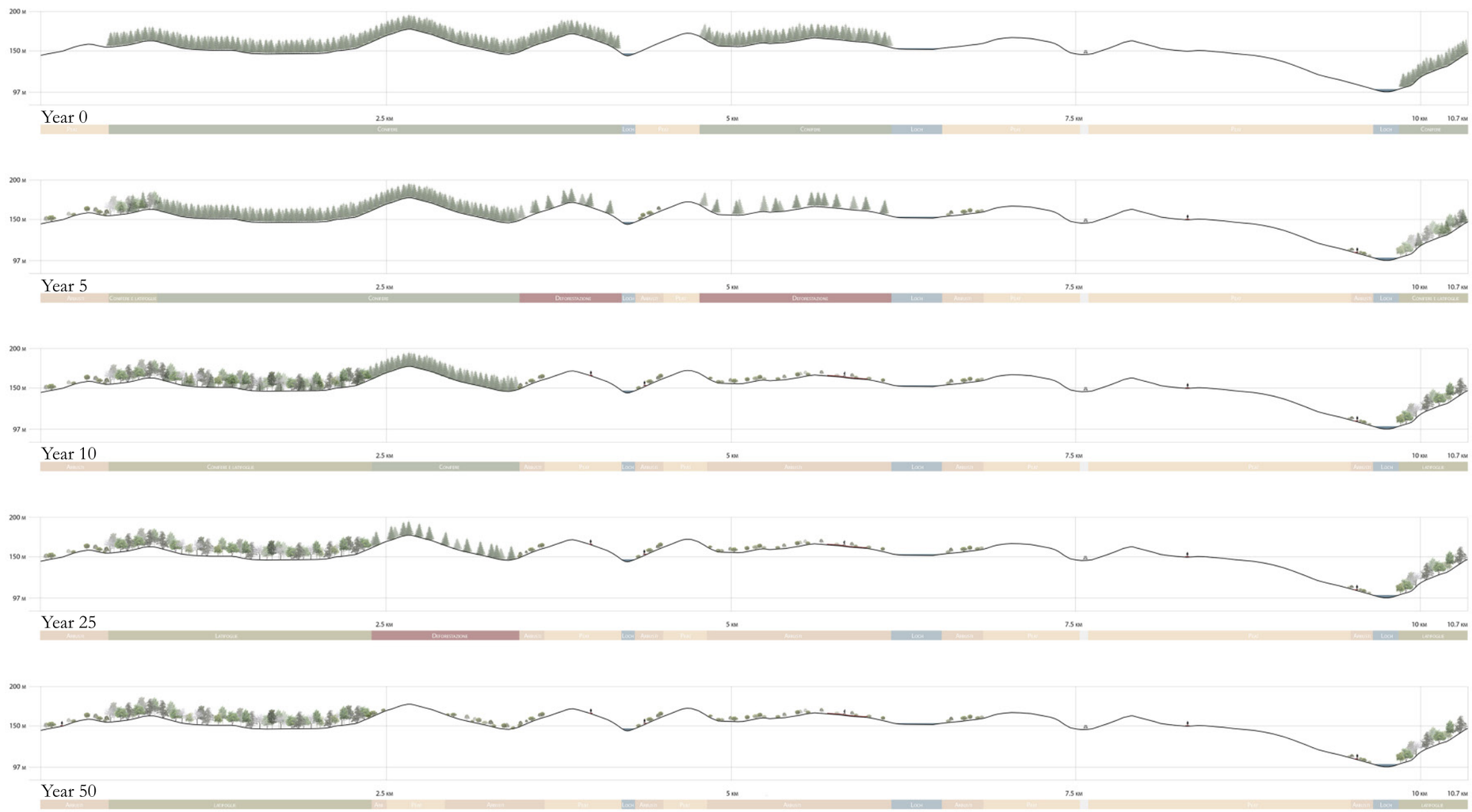

## Peatlands in the UK



## Land-Use




## Landscape evolution through deforestation and peat restoration




| | |
|---|---|
| Country / City | Italy, Ferrara |
| University / School | Università degli Studi di Ferrara |
| Academic year | 2016-2017 |
| Title of the project | (RE)PEAT: Peatland restoration through sustainable tourism in the Isle of Skye, Scotland |
| Authors | Merlante Alice, Valmassoi Carlotta |

# PERFORMATIVE NATURE

**Barcelona International Landscape Architecture Biennial**

September 2018 Barcelona

SCHOOL PRIZE

**X International Landscape Architecture Biennial**

**Máster d'Arquitectura del Paisatge -DUOT - UPC**
ETSAB- Escola Tècnica Superior
d'Arquitectura de Barcelona
Avenida Diagonal, 649 piso 5
08028 Barcelona-Spain

## TECHNICAL DOSSIER

| | |
|---|---|
| Title of the project | (RE)PEAT: Peatland restoration through sustainable tourism in the Isle of Skye, Scotland |
| Authors | Merlante Alice, Valmassoi Carlotta |
| Title of the course | Landscape architecture and infrastructures |
| Academic year | 2016-2017 |
| Teaching Staff | Emanueli Luca, Lobosco Gianni, Porfido Enrico |
| Department/Section/Program of belonging | Architecture department - Sealine research centre |
| University/School | Università degli Studi di Ferrara |

Written statement, short description of the project in English, no more than 250 words

Peatlands are a unique type of wetlands which are among the most valuable ecosystems on Earth: they are critical for preserving biodiversity, provide safe drinking water, minimise flood risk and help address climate change. Since they are the largest natural terrestrial carbon store - more than all other vegetation types in the world combined -, damaged peatlands are a major source of greenhouse gas emissions.
The thesis sets up a restoring plan for an highly damaged Peat area in the isle of Skye, in Scotland, where a radical forestation process for wood harvesting is covering almost the whole territory, threatening to destroy its fragile habitat.
Grounded on economic analysis, the project suggests to gradually shift the region's incomes from wood farming to tourism, making the most out of peatland's biodiversity attractiveness which could easily take advantage of the strong existing touristic fluxes now just focused on the coast.
With these aims, the proposal determines the chronological activation of a visiting network implemented in parallel with the restoring operations of peats, native broadleaf forests, heather and cottongrass meadows. According to a sequence based on the different terrains' recovery potential, a new landscape dynamic is activated, transformed into an attraction for ecotourism development pursued alongside the engagement of existing local voluntary societies.
Crossing an in-change environment, the walkways network - shaped on different type of visitors including kids, elders and wheelchair users - is softly designed to make peatlands approachable from different points of views while still preserving their wild sceneries.

For further information
**Máster d'Arquitectura del Paisatge -DUOT - UPC**

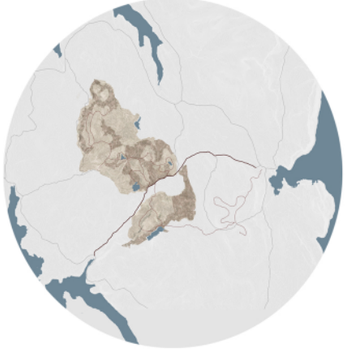
T: + 34 93 401 64 11 / +34 93 552 0842
Contact via email at: biennal.paisatge@upc.edu
Consult the web page http://landscape.coac.net/

Peat areas
Peat with shrubs
Native woodland
Productive coniferous forest
Grazing area
SS B885
Walking paths

Road stop areas
View points
Walking paths starting points
Cycle lane
Portree Town

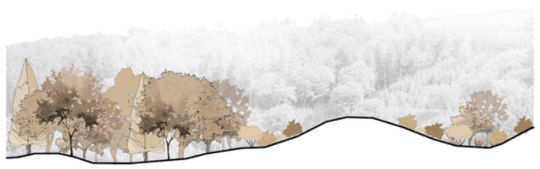
B885

Ⓐ Example profile: Peat areas

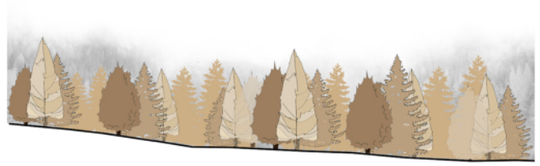


Ⓑ Example profile: Peat with shrubs

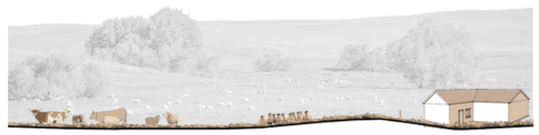
Ⓒ Example profile: Native woodland

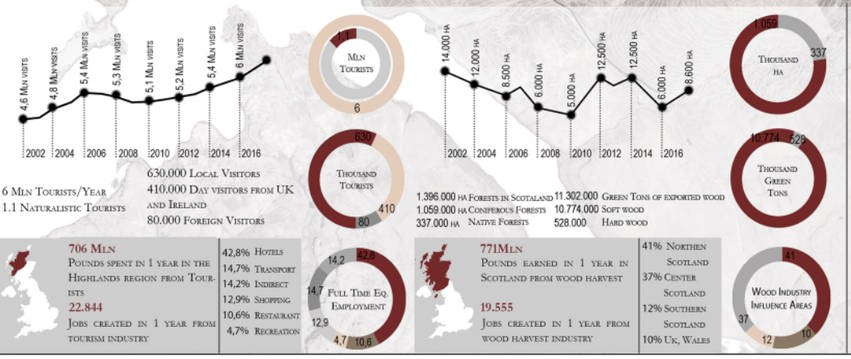


Ⓓ Example profile: Productive coniferous forest



Ⓔ Example profile: Grazing area






6 Mln Tourists/Year
1.1 Naturalistic Tourists

630.000 Local Visitors
410.000 Day visitors from UK and Ireland
80.000 Foreign Visitors










706 Mln
Pounds spent in 1 year in the Highlands region from Tourists
22.844
Jobs created in 1 year from tourism industry

42,8% Hotels
14,7% Transport
14,2% Indirect
12,9% Shopping
10,6% Restaurant
4,7% Recreation




1.396.000 ha Forests in Scotaland
1.059.000 ha Coniferous Forests
337.000 ha Native Forests

11.302.000 Green Tons of exported wood
10.774.000 Soft wood
528.000 Hard wood

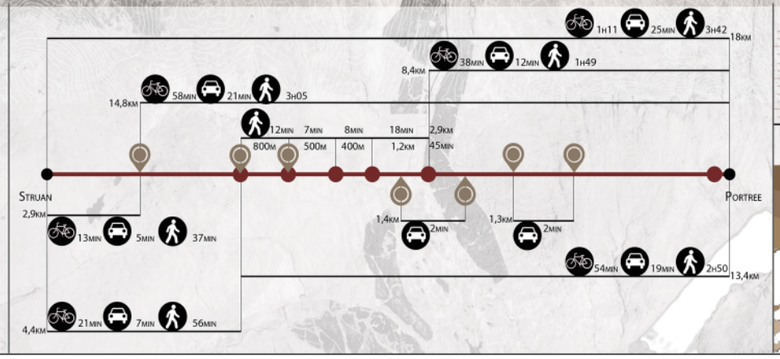


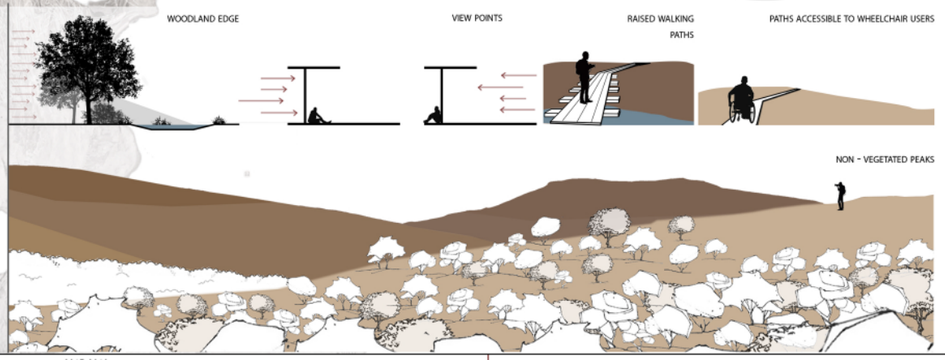




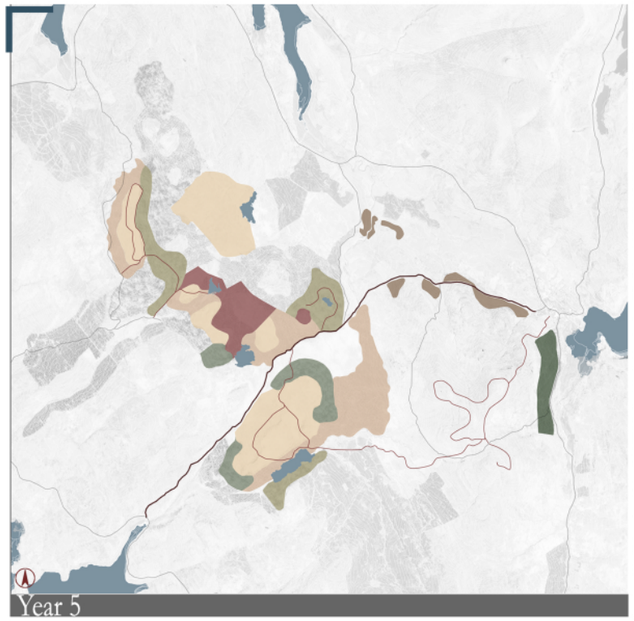
771Mln
Pounds earned in 1 year in Scotland from wood harvest
19.555
Jobs created in 1 year from wood harvest industry

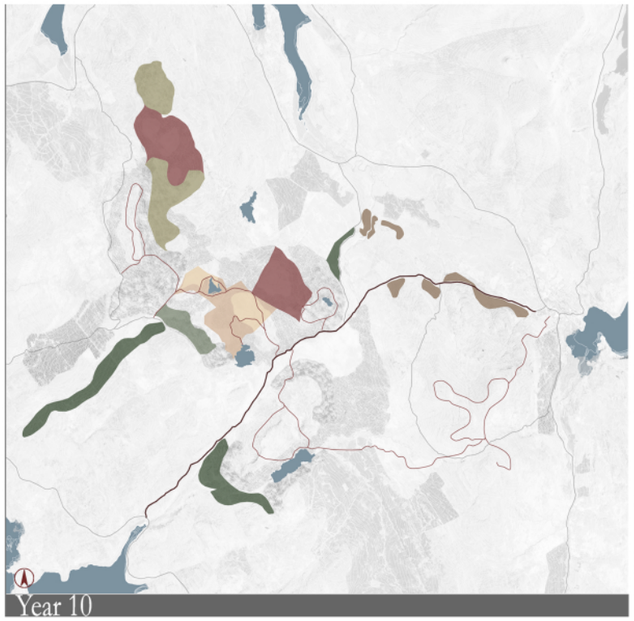
41% Northen Scotland
37% Center Scotland
12% Southern Scotland
10% Uk, Wales

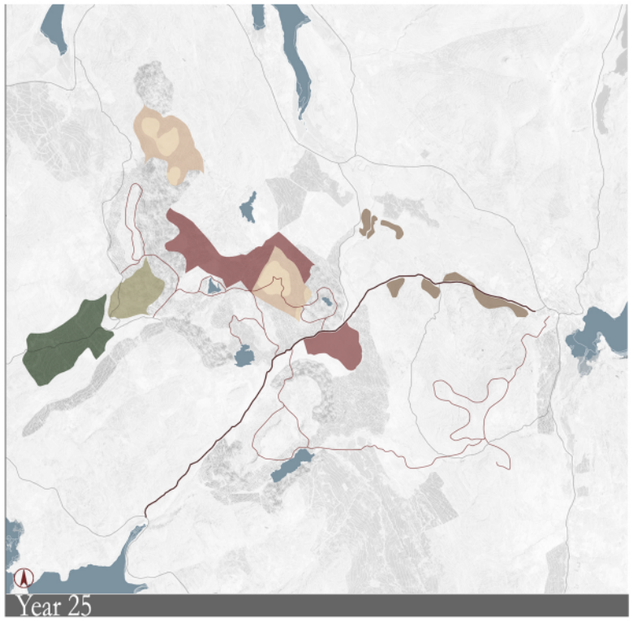


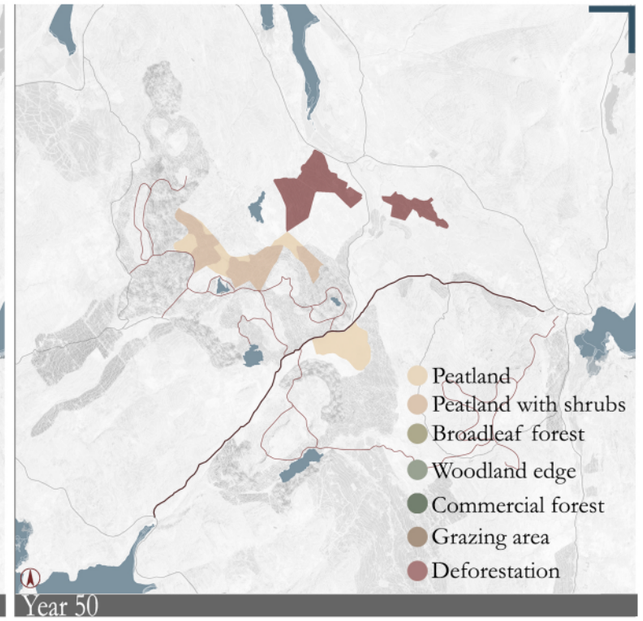




Tourism Strategy



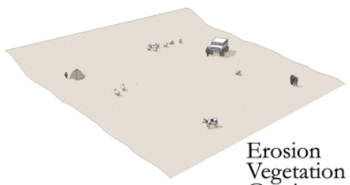



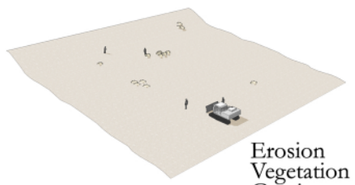




# Intervention steps

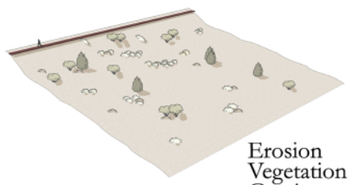
## Priority area 1



Erosion
Vegetation
Grazing
Landscape value

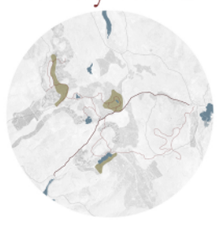


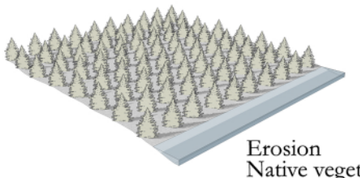
Erosion
Vegetation
Grazing
Landscape value



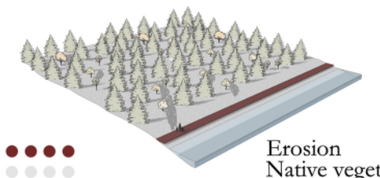
Erosion
Vegetation
Grazing
Landscape value

## Priority area 2

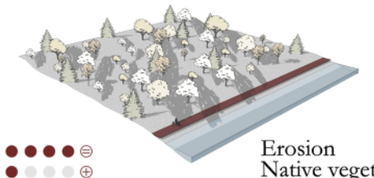




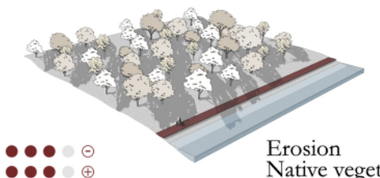
Erosion
Native vegetation
Commercial vegetation
Landscape value



Erosion
Native vegetation
Commercial vegetation
Landscape value

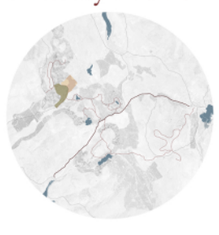


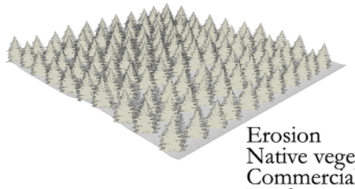
Erosion
Native vegetation
Commercial vegetation
Landscape value



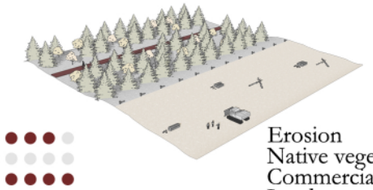
Erosion
Native vegetation
Commercial vegetation
Landscape value

## Priority area 3

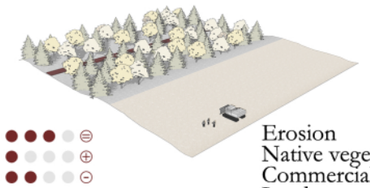




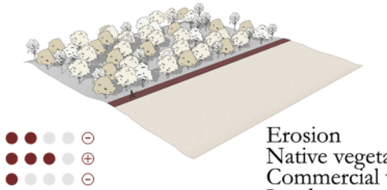
Erosion
Native vegetation
Commercial vegetation
Landscape value



Erosion
Native vegetation
Commercial vegetation
Landscape value

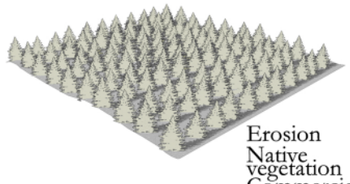


Erosion
Native vegetation
Commercial vegetation
Landscape value

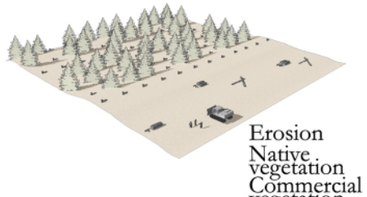


Erosion
Native vegetation
Commercial vegetation
Landscape value

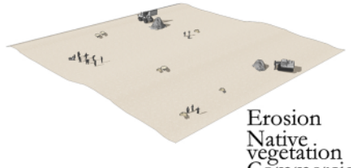
## Priority area 4



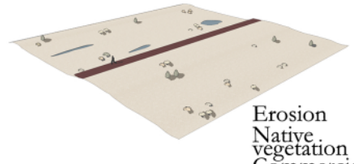
Erosion
Native vegetation
Commercial vegetation
Landscape value



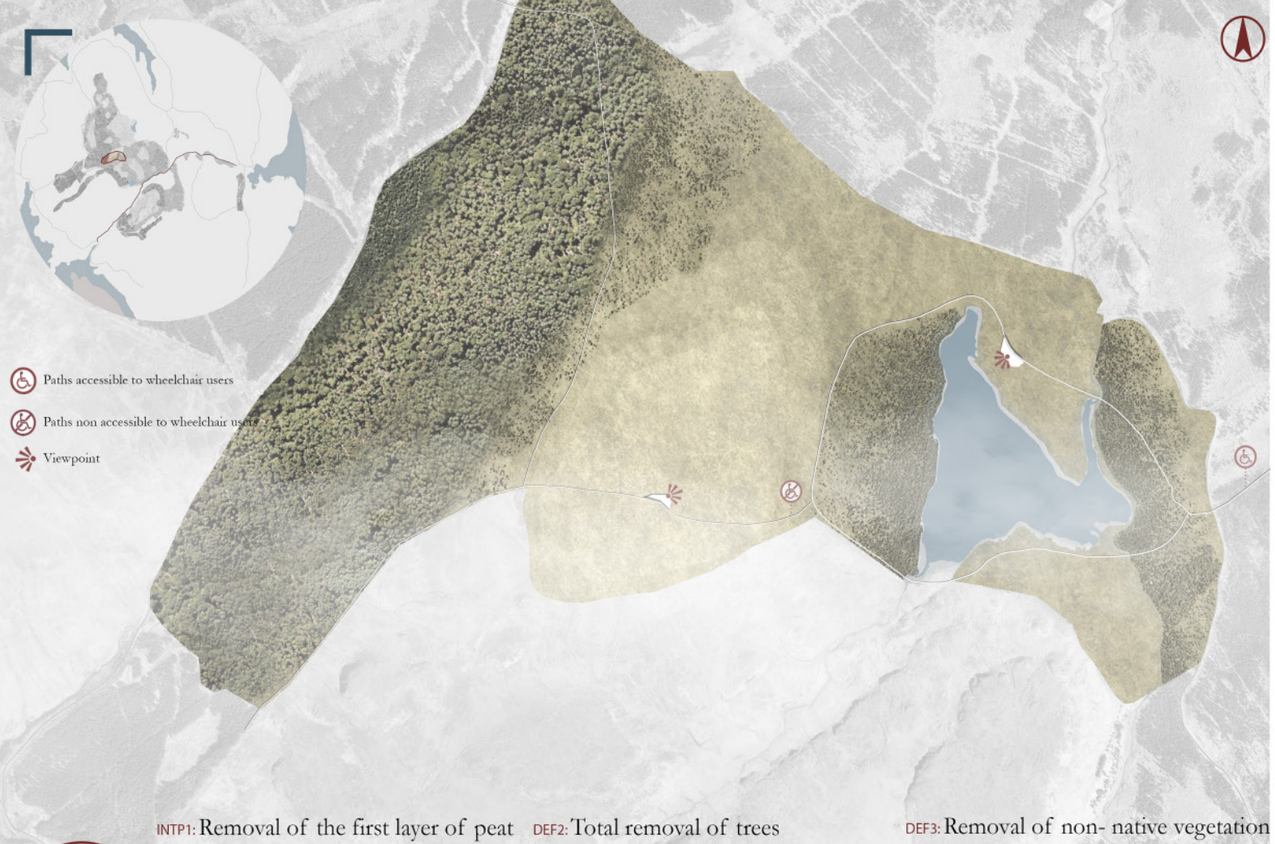
Erosion
Native vegetation
Commercial vegetation
Landscape value



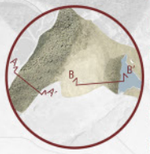
Erosion
Native vegetation
Commercial vegetation
Landscape value



Erosion
Native vegetation
Commercial vegetation
Landscape value



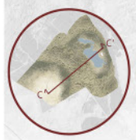




INTP1: Removal of the first layer of peat
INTP2: Filling of cracked peat
DEF1: Deforestation
RIVF1: Rivegetation with broadleaf trees
RIVF2: Woodland edge creation
P2: Paths non accessible for wheelchairs

DEF2: Total removal of trees
INTP1: Removal of the first layer of peat
INTP2: Filling of cracked peat
GEO: Use of Geonet in juta
P2: Paths non accessible for wheelchairs
RIVP1: Sphagnum insertions

DEF3: Removal of non- native vegetation
GRIP: Grip blocking
P1: Paths accessible for wheelchairs
RIVP2: Rivegetation with heather
RIVP3: Rivegetation with cottongrass



INTP1: Removal of the first layer of peat
INTP2: Filling of cracked peat
DEF1: Deforestation
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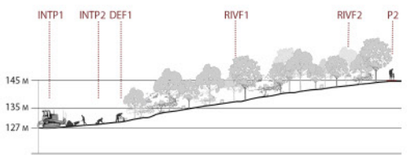
DEF3: Removal of non- native vegetation
GEO: Use of Geonet in juta

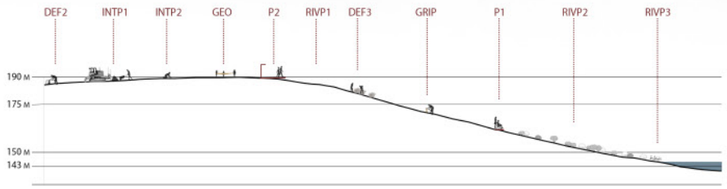
RIVF1: Rivegetation with broadleaf trees
RIVF2: Woodland edge creation
RIVP1: Sphagnum insertions
RIVP2: Rivegetation with heather
RIVP3: Rivegetation with cottongrass
GRIP: Grip blocking

P1: Paths accessible for wheelchairs
P2: Paths non accessible for wheelchairs

Sezione A-A'




Sezione B-B'




Sezione C-C'