



SRUC Hill & Mountain Research Centre

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Buckingham

Kirkton & Auchtertyre Farms, Crianlarich,
Perthshire

Loch Lomond and The Trossachs National Park Boundary

Legend



National Park boundary



Local Authority boundary

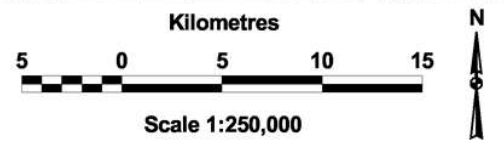
Argyll & Bute

HMRC Kirkton and Auchtertyre

Perth & Kinross

Stirling

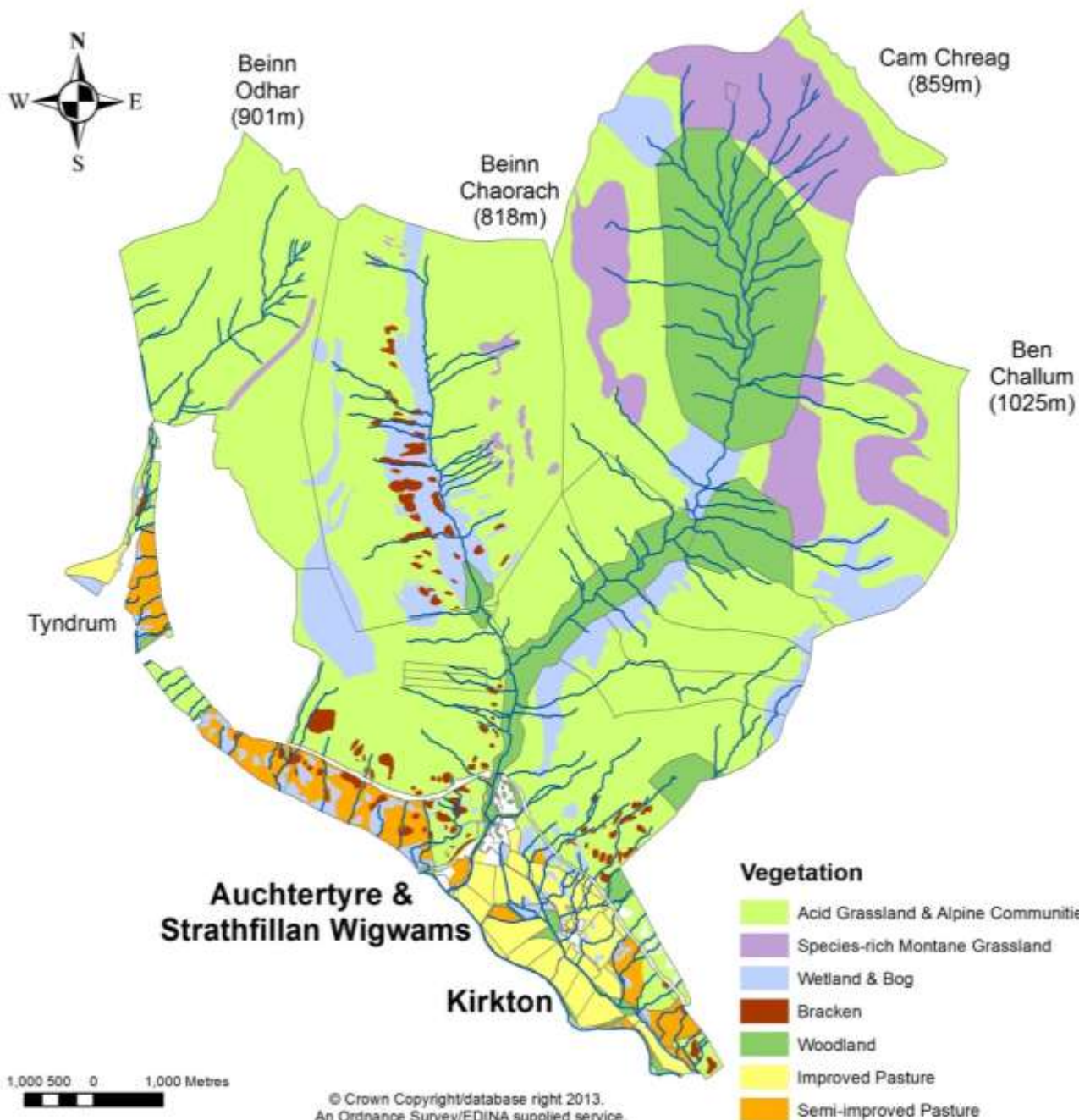
West
Dunbartonshire



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Environment

Area: 2225 ha

Altitude: 180 - 1025 m

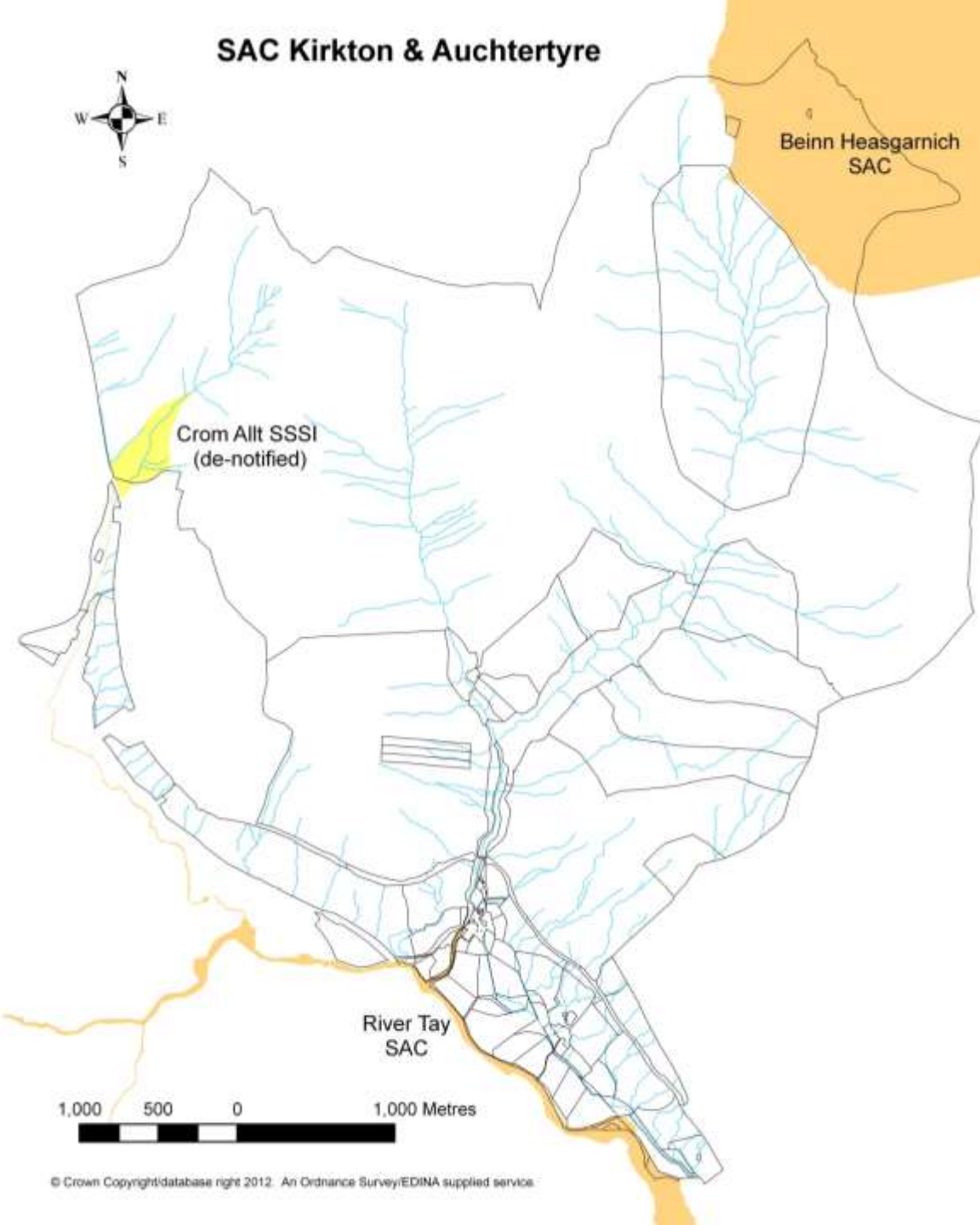
1 Munro (>3000 ft) – Ben Challum (1025 m)

3 Corbetts (>2500 ft) – Ben Odhar (901 m); Cam Chreag (884 m); Ben Chaorach (818 m)

3 river catchments

SRUC's Kirkton & Auchtertyre upland research farms

SAC Kirkton & Auchtertyre



Biodiversity

2 Special Areas of Conservation

1 former geological Site of Special Scientific Interest (de-notified in 2011)

1 Propose Geological Conservation Review Site

320 vascular plant species (3 red data book & 15 nationally scarce species)

107 bird species recorded

3 amphibians, 1 reptile and 18 mammals



Land-use

Total Area = 2225 ha

1 ha forage crop (rape & turnips)

8 ha reseeded perennial ryegrass/clover (2012 & 2013)

65 ha improved pasture

153 ha semi-improved pasture

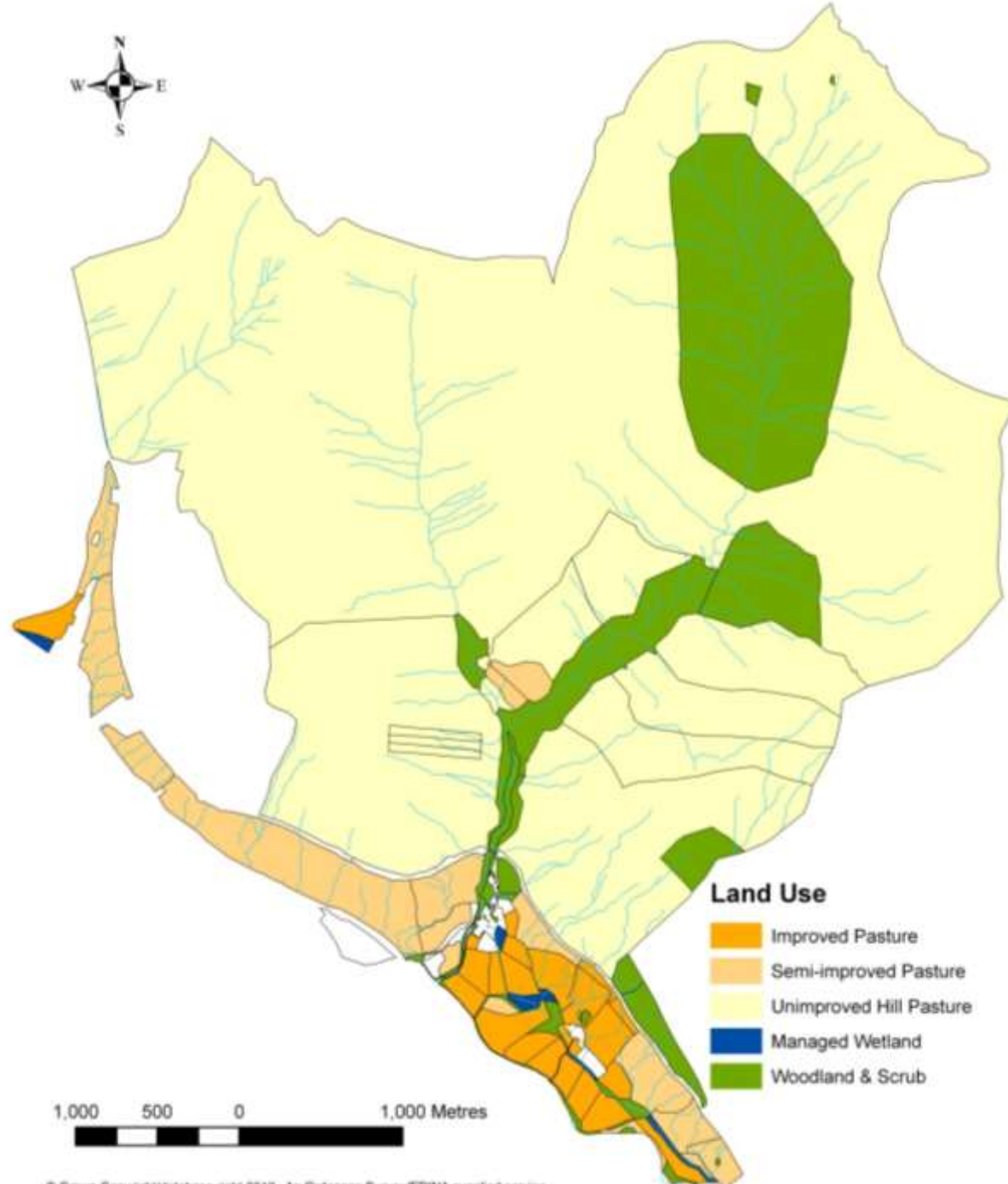
1677 ha unimproved hill pasture (predominantly grassland)

307 ha woodland & scrub

1300 ewes (Scottish Black-face and Lleyn)

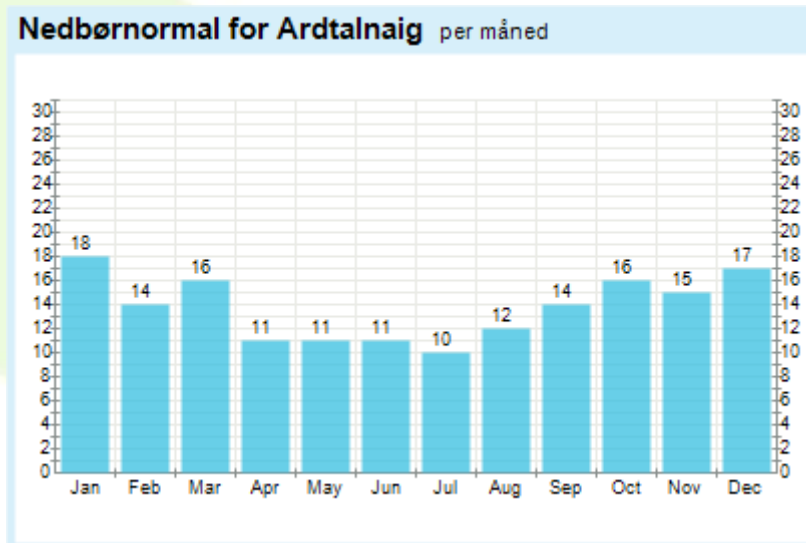
21 Aberdeen Angus cross cattle

Former agri-environment scheme - water margin, wetland, scrub, grassland management, footpath management



Storm Desmond

- 48 Hour rainfall Total, 9am, 4th December 2015
– 140mm



Flooding at Kirkton December 2015



Infrastructure damage on farm

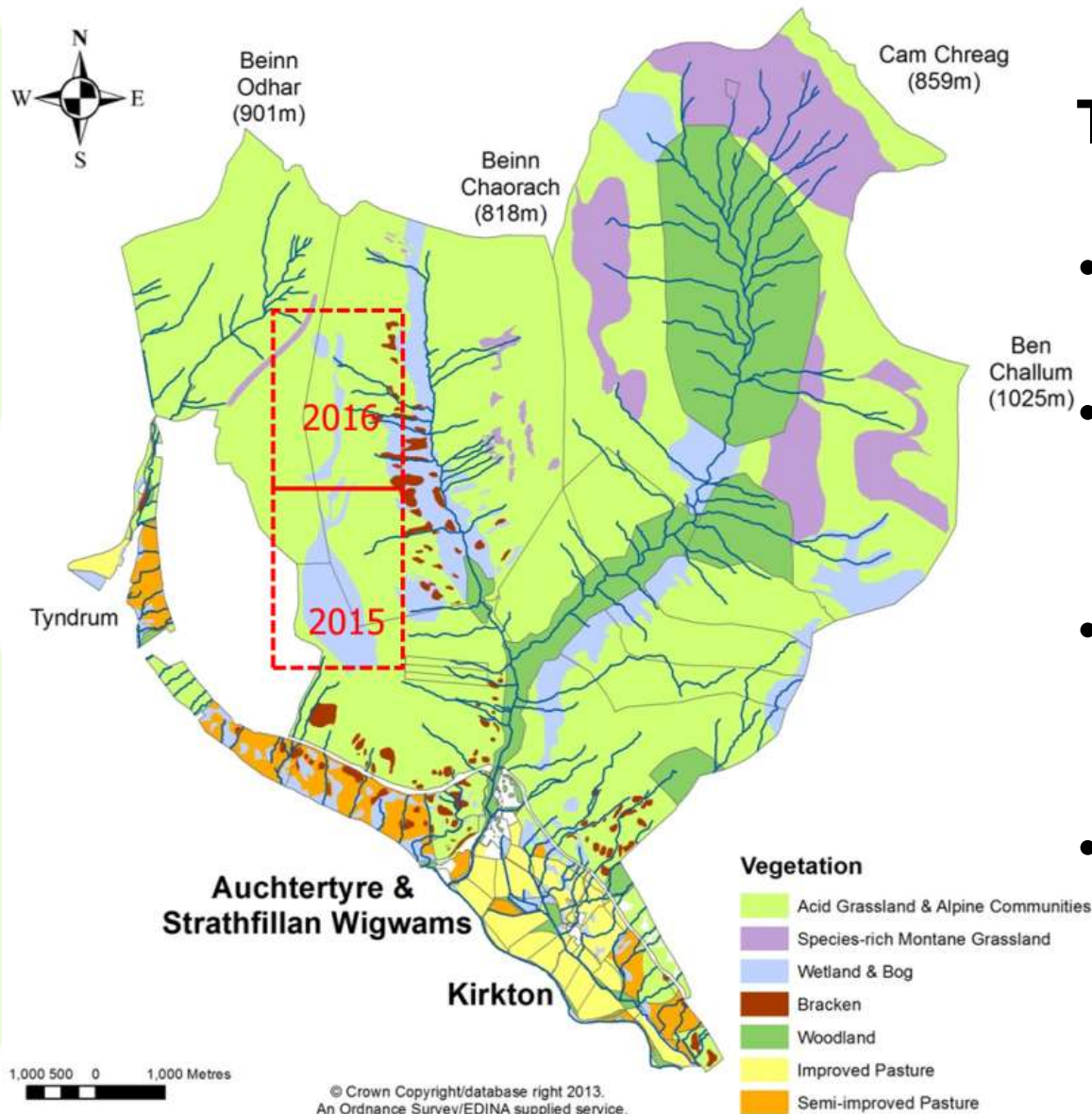


Tyndrum and Crianlarich Flood Risk



- Potentially vulnerable area (08/09) 166 km²
- 20 residential properties and 10 non-residential at risk
- £160,000 annual average damages largely from river flooding
- No NFM plans within the current flood management plan for this area but definitely potential.

High altitude peatland restoration



Total 2015 and 2016:

- c. 104 ha restored
- Over 15 km peat hag re-profiled
- Construction over 80 dams to rewet peat
- Revegetation of two large peat pans

Re-wetting



Peat Bank Amendment



Current research



- MSc student – DOC and Carbon Emissions
- PhD proposal written
- Further Information and Collaboration
 - Davy McCracken (davy.mccracken@sruc.ac.uk)
 - Jennifer Carfrae (jennifer.carfrae@sruc.ac.uk)
 - John Holland (john.holland@sruc.ac.uk)
 - Sarah Buckingham (sarah.buckingham@sruc.ac.uk)

Questions?

A large landscape photograph of a mountain valley serves as the background for the lower half of the slide. The foreground is a dark, grassy slope. In the middle ground, there are dense evergreen forests. The background shows a range of mountains, with the highest peaks covered in snow and partially obscured by a layer of grey clouds. The sky is filled with soft, diffused light from the clouds.

Many Thanks, Any Questions?



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