



SRUC Hill & Mountain Research Centre

Dr Jennifer Carfrae, Professor Davy
McCracken, Dr John Holland, Dr Sarah
Buckingham

Kirkton & Auchtertyre Farms, Crianlarich,
Perthshire

Loch Lomond and The Trossachs National Park Boundary

Legend

-  National Park boundary
-  Local Authority boundary

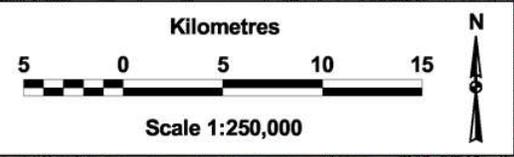
Argyll & Bute

HMRC Kirkton and Auchtertyre

Perth & Kinross

Stirling

**West
Dunbartonshire**



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Environment

Area: 2225 ha

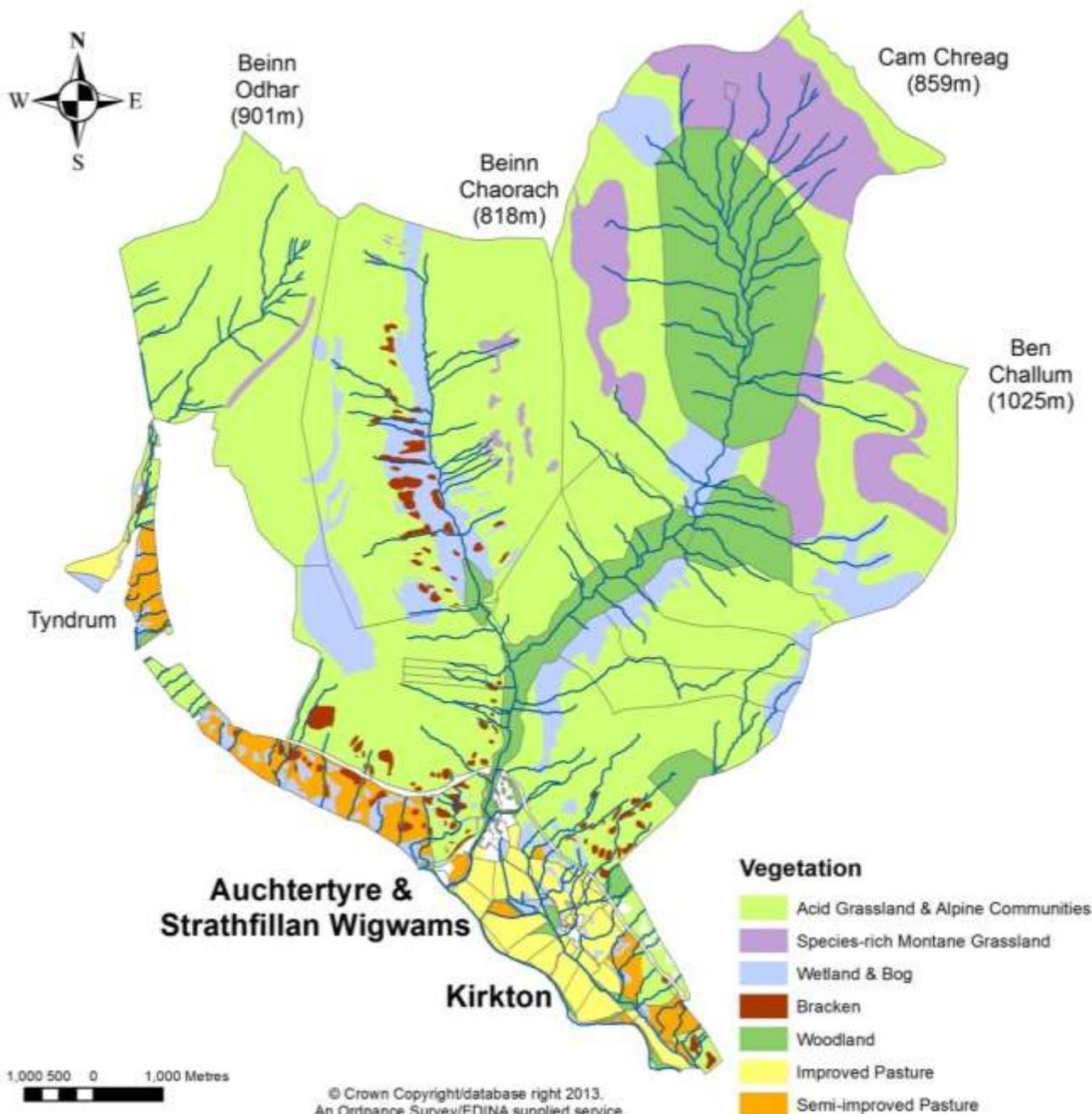
Altitude: 180 - 1025 m

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

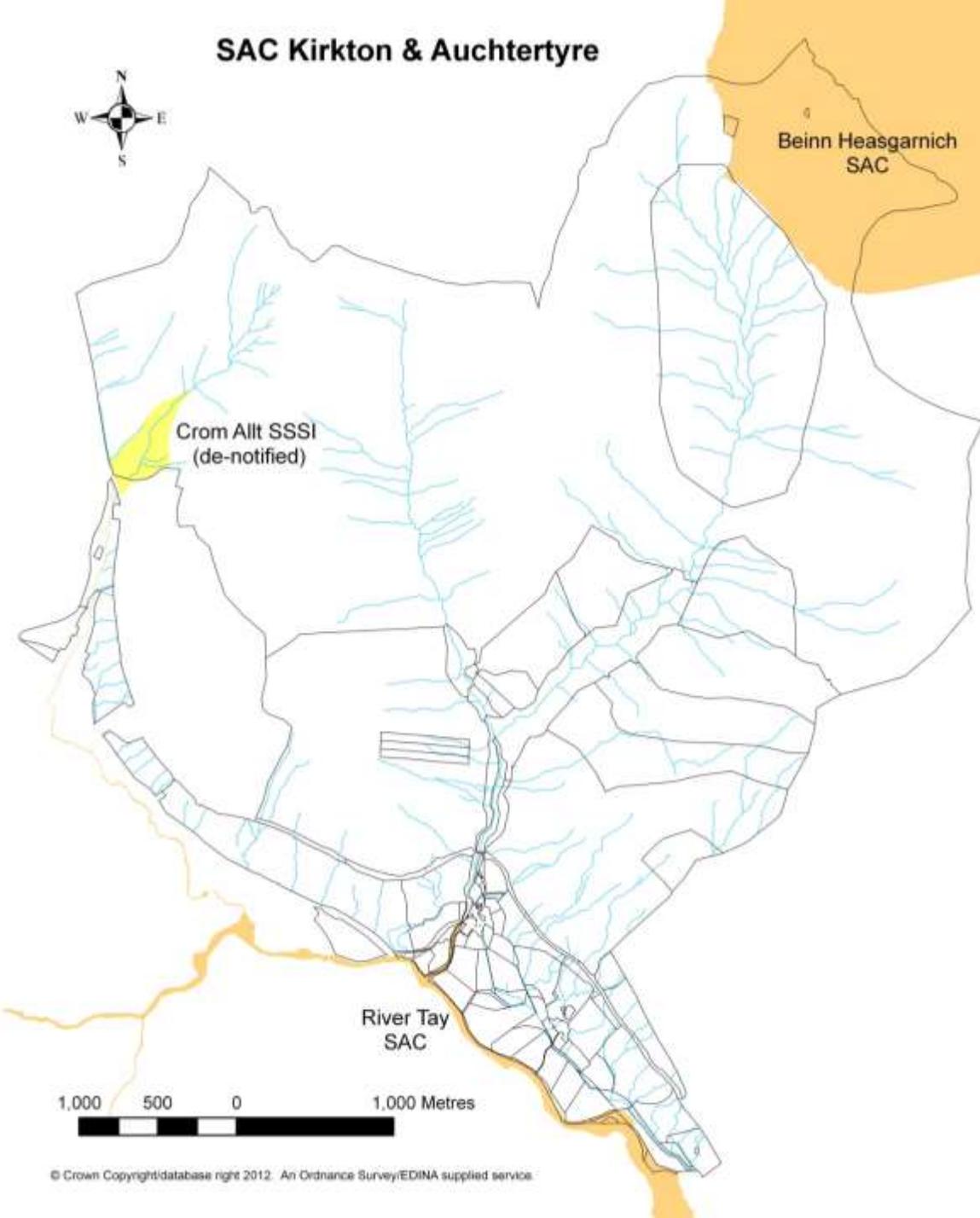
3 Corbetts (>2500 ft) – Ben Odhar (901 m); Cam Chreag (884 m); Ben Chaorach (818 m)

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

Land Use

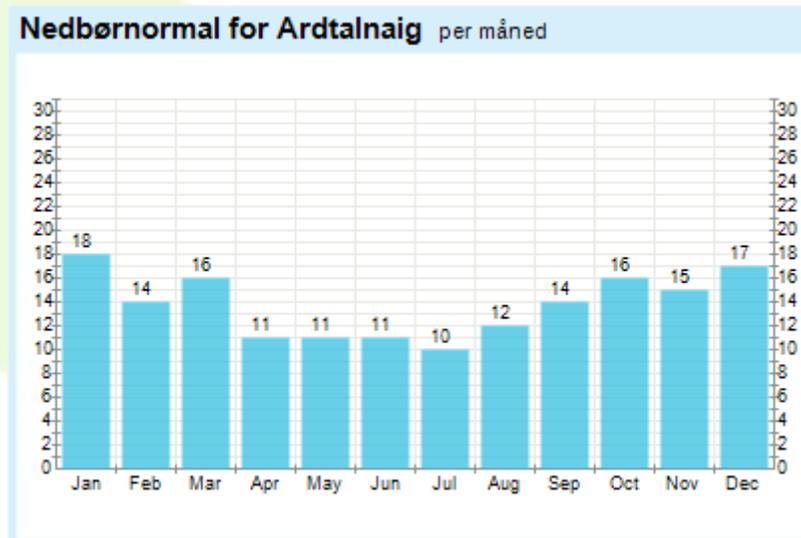


1,000 500 0 1,000 Metres

Storm Desmond



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



Flooding at Kirkton December 2015



Infrastructure damage on farm

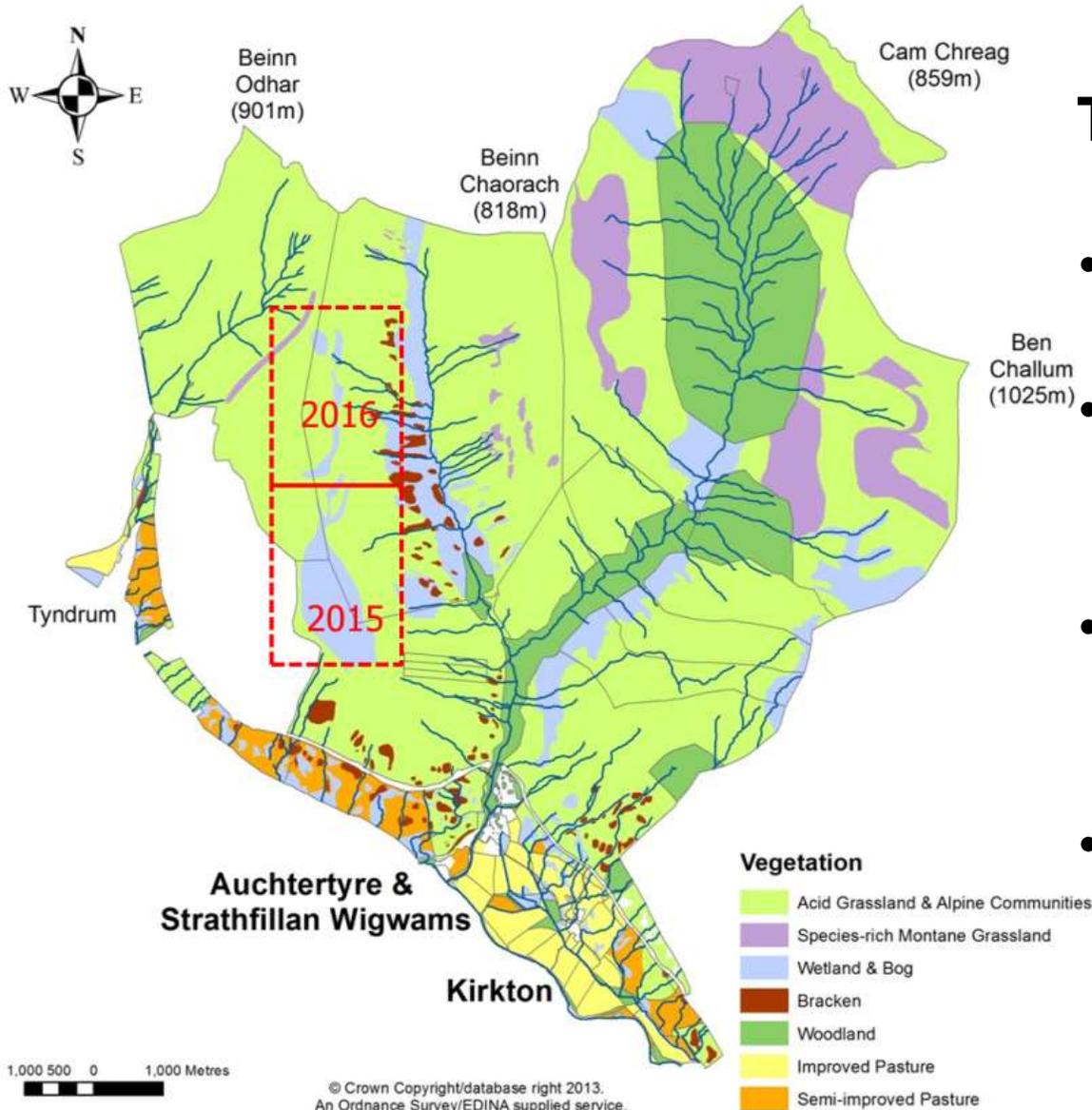


Tyndrum and Crianlarich Flood Risk



- 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 wide-angle landscape photograph of a mountain range. The foreground is a dark, dense forest of evergreen trees. The middle ground shows rolling hills and valleys covered in green vegetation. In the background, several mountain peaks are visible, some with patches of snow or light-colored rock, under a sky filled with soft, grey clouds.

Many Thanks, Any Questions?



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