

Taking place at the <u>James Hutton Institute</u>, the EVOLTREE Scientific Seminar associated with the 2019 EVOLTREE Annual Meeting and the 2019 <u>EFI Annual Conference</u> will explore the ways in which **forest tree genetics** can be applied to increase local adaptation and resilience in future forests.

New genetic and genomics approaches, including new-generation breeding strategies, have great potential to harness natural genetic variation to promote forest health and productivity, in particular in the face of global disturbances, such as climate change, land fragmentation and emerging pests and diseases.

# AGENDA

# 09:00 – 10:30 SESSION 1 Invited speakers

**Delphine Grivet** (INIA, Spain) – "Using genomics to characterise evolutionary potential for conservation"

**Christophe Orazio** (EFI, France) – "REINFFORCE: First results of plasticity assessment of 35 forest tree species in common gardens along the Atlantic Coast, from Portugal to Scotland"

**Duncan Ray** (Forest Research, England) – "Using climate projection uncertainty to select FRM for future forest sites"

**Santiago C. González-Martínez** (INRA, France) – "Gene networks and polygenic adaptation in two conifers with contrasted demography, maritime pine and English yew"

## 10:30 Refreshment break

# 10:50 – 12:00 SESSION 2 Voluntary contributions

**Sue Jones** (The James Hutton Institute, Scotland) - "Could viruses pose a threat to native tree species?"

**Markus Müller** (University of Göttingen, Germany)- "Investigation of adaptive genetic variation in European beech by means of candidate gene and transcriptome analyses"

Emma Bush (CEH, Scotland) - "Tropical tree phenology in a time of change"

**Lindsay Banin** (CEH, Scotland) - "Intra- and interspecific leaf trait variation, decomposition processes and the 'home-field advantage' in European woodlands"

## 12:00 Lunch

Expenses covered by EVOLTREE

# 14:00 on FIELDTRIP

The Caledonian pinewoods are a distinctive group of remnant forests in the north of Scotland, dominated by Scots pine and adapted to unique northern, oceanic climate. Although they have been influenced by human activity, these sites have been recognised, from historical records and ecological characteristics, as having been continuously forested since the original establishment of

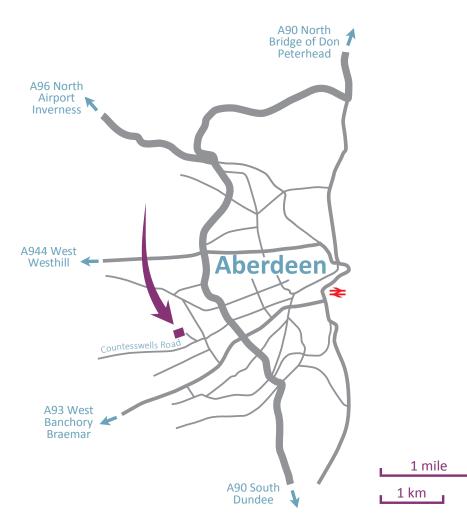


tree cover following the last glaciation. As such they contain much higher levels of biodiversity than the surrounding landscape, including a number of endemic species or distinctive races, and play a vital role in maintaining local diversity. Work by EVOLTREE members has established that the Scots pines that characterise these forests, as well as being distinctive in a rangewide context, show patterns of local adaptation across the highly variable environments of the Scottish Highlands. The field trip will loop through the eastern Scottish Highlands, to visit the Glen Tanar native pinewood, one of the most easterly Caledonian pinewoods, which has formed part of a study group of populations to evaluate genetic

variation in Scots pine, and to the Glensaugh experimental site where provenance-progeny tests of *Pinus sylvestris* are being conducted, including progeny from trees at Glen Tanar.

# **Directions to the Aberdeen site**

The **Aberdeen site** of the James Hutton Institute is situated at Craigiebuckler to the west of the city centre.



#### WebEx:

While we welcome visitors to our site, we have invested in <u>professional-standard</u>. <u>videoconferencing facilities</u> to enable high quality face-to-face meetings while avoiding the financial and environmental costs of travel.

#### Train or Coach:

There are regular trains to Aberdeen from Dundee (1h15min), Inverness (2h15min), Edinburgh (2h30min), Glasgow Queen Street (2h45min), London Kings Cross (7h15min), London Euston (overnight) and other UK cities. See <u>National Rail</u> <u>Enquiries</u>. Coach journeys tend to be cheaper, but slower. See <u>National Express</u> or <u>Megabus</u>.

The Aberdeen train/coach station is an hours' walk, 20min cycle, 35min bus and 15min taxi journey from the Institute. <u>Bike&Go</u> is available at the station.

#### Local Bus:

The Aberdeen site is served by the number 15 (Airyhall) bus route, stopping at Seafield Shops, a 10min walk to the Institute following Countesswells Rd and Macaulay Dr. The number 19 bus route (Culter) stops at Mannofield Church, a 16min walk following Countesswells Rd and Macaulay Dr. <u>First Group Bus Aberdeen</u>.

#### By Foot:

If arriving on foot, please enter via our Arboretum. As you approach on Macaulay Drive from the South, walk past the main driveway (cars only) and follow the sign 50m further for a safer and more pleasant entry into our beautiful grounds. The reception is round the building, to your left.

# The James Hutton Institute

#### Cycling:

The standard cycling route to the Institute from the town centre is: Union Street - A9013 - Union Grove - Cromwell Rd - Seafield Rd - Countesswells Rd - Macaulay Dr. This takes about 20mins. The route is on-road, shared with other traffic. To find our cycle shelters, cycle past the main entrance (cars only), past the pedestrian entrance and turn left into the back entrance. From the cycle shelters, walk around the building, keeping it on your right, to reach the reception.

#### Taxi:

We use Rainbow Taxis, who can be reached on 01224 878787.

#### Car:

The Institute has <u>two fast charge points</u> for electric vehicles. These are on the ChargeYourCar/ ChargePlaceScotland network. To find them, drive along Macaulay Drive, past the main entrance on your left and take the first right. Continue past the entrance into the Nursery and the charge points should be on your right.

#### Accommodation:

The Institute has a few self-catering rooms available for visitors at reasonable rates. Contact <u>hostel@hutton.ac.uk</u> to book these.

#### Air Travel:

For international travellers, <u>Aberdeen Airport</u> is served from many destinations. We encourage you to consider only taking one flight and then taking the bus or train within the UK.

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