

## Scotland & Northern Britain

### Browning of Scots pine

Foliage browning of Scots pine was visible across many parts of Scotland earlier this summer (below). This widespread damage was almost certainly due to winter injury following the record cold weather of 2009/10. Fungal diseases were also damaging some affected trees. These included the needle cast pathogen, *Lophodermium seditiosum*, and *Brunchorstia pinea* which infects young shoots causing them to die back.



### Death of Douglas fir

Mortality of a group of P1930s Douglas fir (below) was reported near Aberfoyle in June. These trees were located on a steep, convex slope with free-draining sandy textured soil. Total rainfall recorded locally from 1st December- 31st May was 378 mm in 09/10, compared with 769 mm in 08/09 and 1077 mm in 07/08. It is thought that drought during the first half of this year may be the main factor responsible for the death of these large trees.



### *Dendroctonus micans* in northern England

The spruce bark beetle, *Dendroctonus micans*, was recorded earlier this year causing damage to several Sitka spruce trees in a stand close to Kielder forest (below). Affected trees typically show symptoms of resin bleeding on the main stem (below right) and top dieback (below left). This beetle is an exotic pest which is now established in western England and Wales. This is the first report of its presence northeast of Cumbria.



## England & Wales

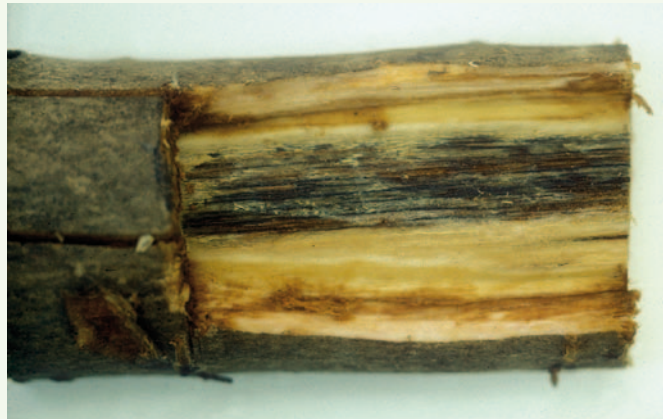
### Phytophthora disease of beech and *Nothofagus*

There have been frequent reports of Phytophthora disease this year. Bleeding cankers on beech and *Nothofagus* have often been found to be caused by *P. pseudosyringae* (below). *N. obliqua* seems especially susceptible, with many killed as a result of multiple stem infections which extend up into the crowns of affected trees. Once girdled, the trees can re-sprout vigorously from the base but the new growth often becomes re-infected.



### Dutch elm disease (DED)

DED is widespread in southern England this year, aided by a warm May/June which encouraged early emergence of the beetles that spread the DED fungus, *Ophiostoma novo-ulmi*. DED has even been reported affecting some elm varieties previously considered as disease resistant. Infected trees have yellow-brown leaves and curled shoot tips. The disease is confirmed when the bark is peeled from affected twigs to reveal dark streaks in the sapwood (below).



### Sudden larch death

*Phytophthora ramorum* infection of Japanese larch continues to be damaging, with affected trees identified throughout the West Country into Wiltshire, and in south Wales. More recently, infected larch have also been found in Northern Ireland and the Republic of Ireland. Affected trees have multiple resin bleeds on branches/trunks leading to dieback, and infected needles are black-grey. Details at: <http://www.forestry.gov.uk/website/forestry.nsf/byunique/wcas-4z5jll>

