



We have been busy in the recent storms clearing fallen trees and pruning damaged ones. We have noticed how evergreens such as Leyland cypress (*x Cupressocyparis leylandii*), Montrey pine (*Pinus radiata*), Lawson cypress (*chamaecyparis lawsoniana*) and Monterey cypress (*cupressus macrocarpa*) have suffered badly from both windthrow and branch breakage. This is presumably due to the combination of the weight of retained foliage and cones these species have during the winter when compared with deciduous species, and very wet ground conditions making root anchorage less effective. On the coast and surprisingly far inland, salt winds have caused damage to evergreen foliage, scorching it brown.



Invasive Plant species:

The gaps in tree cover in gardens and woodland may become sites where **invasive plant species** can become established. Invasive species can take advantage of bare earth by setting seed or propagating vegetatively by suckering where large plants have been uprooted. Species such as laurel (*Prunus laurocerasus*), *Buddleia*, Evergreen Oak (*Quercus ilex*) and *Rhododendron ponticum* all take advantage of bare earth and soon colonise it. Invasive plant species take use natural control mechanisms such as allelopathy where chemicals are released into the soil by the plant to prevent seeds of other plants growing, they also may lack predators to eat them such as insects and mammals.



Clearing Holm Oak from the Undercliff.

Control of invasive plant species often involves cutting and treatment with herbicide to prevent re-growth or complete removal including stump and roots. This is expensive and is one reason why invasive species are often left in woodland and gardens which then become overwhelmed by them, reducing the gardens wildlife and amenity value. Invasive plants will out-grow the native species, shade them out and compete for

light, water and nutrients causing the slower growing natives to decline and be suppressed. If invasive species are not removed at an early stage they often become too large or numerous to control. An article in The Guardian quotes a figure of £1.5bn a year is spent clearing Japanese Knotweed, 11m to remove Rhododendron from a national park in Wales and that Grey Squirrels cause 10m worth of damage to trees.



Rhododendron ponticum in woodland and Japanese Knotweed.

Invasive species should not be confused with **pioneer plant species** which can also populate bare earth at a fast rate making use of strategies such as mass seed production and fast rates of growth and are superseded by other species in a natural progression until the ultimate tree cover is attained, this is called the climax species - the plant species that will remain unchanged in terms of species composition as long as the site remains undisturbed. Birch (*Betula pendula*) is a pioneer species, allowing light onto the ground enabling other species to develop. Beech (*Fagus sylvatica*) is a climax species which casts dense shade and inhibits the development of other trees. The first part of succession may be seen when an area of land is unused for a while. Birch will

often appear even though there is no Birch nearby this is due to the large amount of seed produced by one tree and the ability of it to travel large distances in the wind.

Time is spent by the RSPB on Woodbury Common clearing Birch trees with volunteer groups to ensure the Pebble Bed Heaths are conserved as a heathland habitat. It has recently been fenced to allow cattle to roam and graze the heather and Birch seedlings.



The Wildlife and countryside act (1981) states that it is an offence to allow a plant (or animal) listed in schedule 9 of the act to be released or allowed to escape into the wild, with a maximum fine of £5000. There are 36 plants in schedule 9 some are listed below:

Rhododendron ponticum

**Monbretia (*Crococsmia x crocosmiiflora*),
Japanese Knotweed (*Fallopian japonica*),
Giant Hogweed (*Heracleum
mantegazzianum*)**

Other invasive woody plants:

Buddleia Spp

Evergreen Oak (*Quercus ilex*), fast growing shading out plants beneath

Laurel (*Prunus laurocerasus*),

False acacia (*Robinia psuedoacacia*), Invasive suckering tree creating dense thorny thickets

Tree of Heaven (*Ailanthus altissima*), Releases toxic compounds into the soil to prevent other plants developing, also spreads seeds.

Turkey oak (*Quercus cerris*) a fast growing non native tree with low wildlife value, invades into grassland at a fast rate.

Transporting invasive plant species such as Japanese Knotweed in soil or as trimming and garden waste can spread the species to new areas. Burning cuttings on site, deep burial or composting at high temperatures is the safest way to destroy green invasive plant waste, Crocosmia and Japanese Knotweed are propagated by root cuttings and so soil with roots in must stay on site, repeated chemical application with a systemic herbicide being the most effective way of preventing re-growth.

The most effective way to prevent invasive species in a garden or woodland is to identify the plant and control it while it is small and easy to tackle and prevent it spreading.

If a species is already large and beginning to spread felling and stump treatment with herbicide or stump grinding to prevent further growth may be most effective.

Japanese Knotweed Link:

http://www.devon.gov.uk/index/environmentplanning/natural_environment/biodiversity/japanese_knotweed.htm

Grey Squirrels(*Sciurus carolinensis*).

Although they appear “cute” and are fluffy and friendly Grey squirrels cause a significant amount of damage to trees, their typical bark stripping behaviour causes damage that can result in hazardous branches and a large reduction in tree value for forestry and amenity trees. Bark stripping can have a dramatic impact with brown wilted leaves remaining hanging on branches. Bark stripping can occur at any time between April and July and is triggered by aggressive interactions between adults when population numbers are high and breeding has been successful which may be related to the previous autumn tree seed production. They seem to be partial to *Acer Spp*, *Quercus Spp*, *Fagus Spp* and like younger trees up to 15m tall as older trees have thicker bark and are harder work to chew through. Grey squirrels can be a pest in roof spaces and may damage electrical wiring, insulation and other materials. Incidentally, do not consider Grey squirrels as planters of seed, they generally gnaw through the hypocotyl of the seed before burying, preventing germination. Control is usually by spring traps that kill the animal humanely, releasing squirrels is illegal under the 1981 Wildlife Act.

The rodenticide formulation approved for use against Grey squirrels can only be used by local Authority or a professional operator.

Asian Hornet— Yellow legged Hornet not currently in GB but recently introduced to France and rapidly extending its range. Dark brown or black velvety body with a characteristic dark abdomen and yellow tipped legs and smaller than the native Hornet. High possibility of introduction via imported plants and untreated timber or possibly flying across the channel. It is a highly aggressive predator of native insects and poses a threat to Honey bees. www.nonnativespecies.org

Next Issue:

Body language of trees.