



MANAGING DIRECTOR'S REPORT

Even in these times it is surprising how annoyed people can be when we have to explain to them that in most cases permission will be needed from the Local Authority before any work on the trees (even constructively) can be undertaken. The regulation controlling the treatment of trees, like many others have become more detailed and the penalties for infringement much heavier as the pressure on amenity trees (especially by property development) have increased over recent years.

Although the annoyance of the tree owner is understandable, working in the emotive environment of arboriculture soon reveals that, without regulations to control the treatment or removal of trees, a large number would be gone very quickly. The opening comment of an aggrieved owner usually begins with 'nobody loves trees more than I do but....' and this is a very big 'but'. Trying to explain the need for legal control and protection of trees is a very delicate business, usually beginning with an explanation that the Local Tree Officer is not usually there to frustrate their wishes but to do their best to resolve problems with the minimum of upset all round.

As with many other things, the anger and resentment that people feel, especially when the trees concerned are on their own property, do not help the Tree Officer with the awkward business of explaining why controls are needed.

William E. Matthews

Electronic Tree Tips!

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You'll find this seven-digit number in a yellow box on the outer envelope (like the sample above). Give us your e-mail address and you'll be finding *Tree Tips* in your inbox instead of your postbox! If you prefer the printed copy, you can always return to mail service. We thank you for your patronage and look forward to continuing to care for the trees and shrubs on your property.

GUESS WHO'S COMING TO DINNER

With the Horticultural Development Council reporting severe outbreaks of caterpillar damage on fruit and vegetables as early as January, 2008 has proved to be a "record" year for caterpillar damage to fruit trees, oak, hornbeam, horse chestnut and birch.

Caterpillars are voracious feeders causing complete defoliation of trees in a matter of days or weeks depending on the density of the caterpillar population. They then disperse to find a new food source. Damage caused to trees is highly visual and although a new flush of leaves may occur in July or August, however, defoliated trees over several years may die.



Caterpillar damage to leaves

Natural Solutions

Dimlin Flo: An insect growth regulator that inhibits production of chitin, which is a key component of the insect exoskeleton. Treated caterpillars do not reform an exoskeleton after moulting. Dimilin Flo is most effective on young caterpillars. Importantly Dimlin Flo only affects caterpillars and moths. It has very little effects on any other insects such as lady birds, or beetles.

Biological control:

Dipel is comprised of live bacteria (*Bacillus thuringiensis* - a widely used biological control agent) that produce a toxin that controls caterpillars when ingested by the insect. Results with Dipel can be quite variable depending on weather conditions at the time of treatment.

Chemical

Bandu: A synthetic form of pyrethrum that is a botanical insecticide derived from chrysanthemum flowers. Bandu combines rapid control with long residual activity on the foliage of treated plants. Bandu controls caterpillars on contact and when the insect feeds on the treated foliage. Bandu can be combined with horticultural oil to provide better coverage of plant surfaces.



Caterpillar damage to orchard row

Caterpillar damage is normally associated with the appearance of small white silk tents or webbing usually found on an exposed branch of the food plant.

Organic Solutions

Physical: Remove caterpillars and tents by hand.

Horticultural Oil: Suppress caterpillar eggs by suffocation with horticultural oil applied in late winter prior to hatch.

Soap: A naturally derived product with low toxicity to "hard bodied" insects such as lady birds and beetles. Soap controls all soft bodied insects (aphids, leaf hopper, leaf mite, caterpillars) on contact and when larvae feed on treated foliage with no residual effectiveness.



Damage to individual tree

Contact your nearest Bartlett office for free advice and consultation. ■

PEST ALERT

LEOPARD MOTH



Over the past few months an alarming number of trees have been reported displaying symptoms of decline associated with attack by the leopard moth. This is a stem-boring pest that attacks both deciduous trees and shrubs. Fruit trees (especially apple and pear) and rowan are especially prone to attack although damage has been recorded on birch, amelanchier, lilac, cotoneaster and oak. Symptoms include branches and/or the trunks of young trees breaking suddenly to reveal a tunnel through the centre or under the bark. Damage is increased in windy weather.

Damage is caused by the leopard moth caterpillars tunneling in branches and trunks making them prone to breaking. Further “tell tale” signs of leopard moth attack include excrement pellets of compacted sawdust around or underneath the entry hole. The adult moth lays eggs singly on small shoots in midsummer. The young caterpillars cause little noticeable damage but in their second year will bore into larger branches and trunks. The caterpillar is creamy



Leopard moth caterpillar

white masked by many large hairs, black spots with a brown head and can be up to 50mm long when fully grown.

Chemical control is difficult as the larvae are located within the twig and branch tissue. Spraying with the insecticide growth regulator Dimlin Flo is recommended although complete control cannot be guaranteed. Small numbers of larvae can be killed by pushing a sharp wire into the caterpillar tunnels while small infested branches can be pruned out and burnt. Improve tree vitality by appropriate fertilisation, irrigation and mulching is also recommended. ■

WHAT'S EATING YOUR HEDGE?

Due to their rapid growth rates leyland and lawson cypress are now commonly planted to make quick-growing hedges. Over the past few years, however, there has been a marked increase in the number of these hedges that have started to turn brown and die. In some cases browning can be in patches while in others one part of the hedge may die or in a worst case scenario the whole hedge dies. This begs the question as to why has hedge browning increased so dramatically over the past few years?

Recently two insect pests have been associated with browning of conifer hedges:

1 Conifer shoot miners are small moths whose prevalence has increased due to the increase in garden juniper (*Juniperus*) and cypress (*chamaecyparis*) plantings. Shoot moths can cause severe and highly visible damage (shoot tip dieback and foliar scorch) to infested hedges. Moth larvae hollow out the entire shoot tip so infested trees appear scorched with the dead hollowed out twigs easily broken off.



Dying yew hedge

2 Conifer aphid are small sap sucking insects. Initially foliage becomes severely yellowed and browned and affected needles fall in large numbers. Eventually hedge crowns become thin consisting of a few bare needles. Secondary effects result from fouling of the leaves and stems with honeydew that encourages the growth of a fungus known as sooty mould. Control of aphids is a relatively simple process.



Browning conifer hedge



Browning conifer hedge

Can Brown Hedges Recover?

The answer is yes! Even badly browned hedges can recover and “green up”, however, recovery is a very slow process that can take up to 3 to 7 years to complete. The following tips are suggested.

- Inspect the hedge regularly for insect and diseases. Seek professional help if required. Treatment at an early stage is far more effective than treatment once the insect pest is established. Insect control is a vital measure to aid in the recovery of browned hedges.
- Spray with an appropriate insecticide. Soap and spray oil offer organic control options. Shoot miner, however, is located within the leaf, making it is very difficult to control as the insecticides used for aphid control do not come into contact with the leaf miner. Professional help may be required.
- Avoid overzealous pruning. Light and frequent pruning is preferable to heavy and infrequent pruning.
- Keep your hedge well watered during periods of drought and mulch with wood or bark chips applied to a depth of 5-10 cm. Fertilise in spring and autumn.
- Tie in nearby green shoots to cover exposed brown patches.
- Replace individual dead plants with live green ones if possible.

For further advice or a free inspection of your hedge please contact your nearest Bartlett Arborist.

The Secret Lore of Trees

Although many “tree lore facts” cannot be scientifically proved, their origin usually has a basis in fact even if the source is somewhat obscure. Hundreds of years ago people without access to modern medicines and healthcare had to determine what materials would soothe ailments and affect cures. The observation of the attributes of native trees by trial and error led to the selection of trees for different purposes and their place in folklore. Other tree myths and fairy tales, however, were shared as an evening’s entertainment by the fire and passed down through the ages by good storytellers.

APPLE (*Temptation*) Genesis relates that Eve tempted Adam with an apple resulting in mankind’s banishment from Eden.

If you can see the sun shining through the branches of an apple tree on December 25, Christmas Day, then the owner of the tree will have a healthy crop of fruit.

If a crabapple tree grows near a well and flowers out of season, there would be more births and marriages than deaths in a community.

ASH (*Grandeur*) Strips of ash were split to make splints for baskets and hoops. It was also used in weaver’s beams to weave cloth. The seeds of the ash are said to divine love. If seeds are not produced on a tree the owner is unlucky in love, or it may be that a future venture will not be successful. If you find an ash leaf, success will be certain if the ash leaf is kept or worn.

ASPEN (*Lamentation*) Aspen is believed to have curative powers and relieve fevers. The leaves of the aspen tree quake or tremble.

BEECH (*Prosperity*) Beech tablets were used as writing surfaces. Beech and book share the same word origins. Beech is associated with ancient knowledge as in old objects, places and writings.

According to Greek myth, the God and Goddess Apollo and Athena transformed into vultures and sat in a beech tree to observe the war between the Trojans and the Greeks. (I wonder what kind of wood the Trojan horse was made of.)

CEDAR (*Strength*) This tree has been used by Native American Plains Indians for spiritual purification (as has sage). The Pawnee burned twigs of the cedar tree for relief from nightmares and nervous conditions. In the ancient world, incense made from the cedar tree was highly valued. The best incense comes from the Cedar of Lebanon. Cedar is still used in closets today for its properties as an insect deterrent.

FIR (*Will, Desire*) Fir trees have strong connections to the owner of the land on which it stands. It is said that if a fir tree is struck by lightning or if it withers, the owner will die.

When Atys metamorphosed into a fir tree, Cybele sat mourning under the tree until Zeus promised the fir tree would remain evergreen. Fir cones respond to rain by closing and the sun by opening.

HAWTHORN (*Caution*) The hawthorn tree is said to bring bad luck to its owner. Bringing any part of the tree into a house especially the flowers will result in someone in the house passing away. Cutting down a hawthorn tree predicts the same dire result. However, another belief is that a hawthorn branch placed above the door will warn negative forces not to enter. Some believe that the hawthorn is a holy plant, and that negative energies will be repelled by it. It is very unlucky to cut down a hawthorn tree, as these are the trees that fairies live in.

A flowering hawthorn tree is a sure sign that winter is over and spring is coming. Hawthorn wood provides the hottest fires known. Its leaves and blossoms are used to make a tea to aid with anxiety, appetite loss and poor circulation.

HAZEL (*Mysticism*) In Europe hazel is commonly used for water divining, the art of finding water with a forked stick. Hazel wood is used to gain knowledge, wisdom and poetic inspiration. Hazel nuts were also believed to possess mystical powers.

MAPLE (*Abundance, Success*) Sugar maple has the highest sugar content in its sap but all maple species can be tapped for syrup and sugar. It was a vital resource to early North American settlers.

Putting a maple branch in a house is also said to ensure that bats will not enter. The maple encourages good health and a long life for a child passed through its branches

PINE (*Courage, Daring*) The evergreen pine tree is called the sweetest of woods. The nymph Pitys, loved by Pan was turned into a pine. The pine was also sacred to the sea-god Neptune (Poseidon) and to Bacchus (Dionysus). Its needles are a valuable source of vitamin C.

ROWAN The rowan or mountain ash has always been considered a lucky tree. It was said that planting a rowan near your house will keep away witches and if planted on a grave will stop the dead from rising.

WALNUT (*Intellect, Strategy*) Walnut is regarded as a sinister tree. It kills any vegetation near it. Walnut trees seem to especially dislike oaks. A heavy crop of walnuts indicates a harsh winter. To dream of walnuts implies unfaithfulness in relationships. Carrying a spider in a walnut shell is supposed to prevent fevers. The nutshells of the walnut can be used to make a dye.

WILLOW (*Enchantment*) There are at least 500 willow species. In western tradition it is a symbol of mourning and being unlucky in love. Willow indicates cycles and rhythms. The willow is associated with the elements of water, the moon, and the gods Artemis, Ceres, Hecate, Persephone, Hera, Mercury, Belili, Circe, and Belenos. It is associated with death, femininity, love, and healing. It is used to make friendship pacts and alliances. It is combined with sandalwood to invoke spirits. Placed in homes, it protects against evil and sorcery. Carried, the wood will help one overcome the fear of death. If one needs to get something off their chest or to share a secret, confess to a willow and your secret will be safe. Willow wood is used to make harps.

YEW (*Vision*) All parts of the yew are poisonous except for the fleshy covering of the berry. Its medicinal uses include a recently discovered treatment for cancer. Long associated with magic, death, rebirth and the runes. Ancient yews can be found in churchyards all over Britain, where they often pre-date even the oldest churches. Yew wood was used for making bows. ■



HAWTHORN FLOWER



HAZEL



APPLE



CEDAR



ROWAN



ASK DR. GLYNN

Question: The leaves on my magnolia are starting to go yellow yet the surrounding trees look fine. What could cause this?

L.Dulce, Barnsley, South Yorkshire

Answer: One of two possibilities exists. First, magnolia are extremely sensitive to iron and manganese deficiencies in the soil. A soil analysis will confirm if the soil is deficient and the rate and concentration of iron/manganese fertiliser to apply can be calculated. This in turn will alleviate your problem. Second, magnolia trees prefer to grow on acid soils with a low pH. If the pH of your soil has increased then this will also result in the yellowing symptoms you have described. As before, a soil analysis will confirm if this is the problem and remedial measures can be applied.

Question: Are hawthorn berries poisonous?

N.Schutt, Lodway, Bristol

Answer: We know certain tree berries such as yew and laburnum are poisonous to humans, however, little is known about how poisonous hawthorn and other tree berries such as rowan and crab apples are. Given the fact that you can buy rowanberry jam and make wine from hawthorn berries and crab apples it is highly unlikely that they are very poisonous. In support of this there has never been as far as I know any reported case of hawthorn berry poisoning in humans that has resulted in death. Consequently, eating a small amount of these berries would probably have no long lasting effects on human health. Consumption of higher amounts of hawthorn berries may, however, result in a severe stomach upset.

Question: I planted six young trees in early March. Despite watering them regularly they have all started to wilt and the leaves are starting to turn yellow.

A.Crawford, Caversham, Berks

Answer: The symptoms you have described sound like *Phytophthora* root rot attack. Symptoms of which include sudden wilting, smaller yellow foliage that eventually turns brown, dead bark and plant death. Control of this disease relies heavily on either improving the vigour of the tree by the use of mycorrhiza, irrigation, mulching and fertilising or removing the dying tree or shrub and planting with a more root rot resistant species. Consult your local Bartlett arborist for further advice.

Summertime, and the living is easy...

So the song goes, but that's not necessarily true for our trees, and things are likely to get tougher as the years go on. Winters are getting warmer and summers becoming hotter and generally dryer with bursts of extremes thrown in for good measure. Our stand at the Chelsea flower show attracted the largest number of requests for advice about pests, unusual diseases, species for warmer climates, and tree safety in bad weather, than our team can remember.

Change is certainly on our clients' minds, as it is on almost all the major tree organisations. At Bartlett, our research laboratories continue to look at and devise ways to care for our clients' trees in a changing world.

Should we be worried? No, not as long as we are prepared to adapt, which if you think about it is what plants and trees have been doing ever since the beginning of time. A huge percentage of trees we happily accept as native have been introduced over millenia, and almost all the most decorative trees come from other parts of the world. Indeed, plant collectors went to the four corners of the world in search of new specimens.

We think this wealth of species, gained experience and ongoing research will enable us and our trees to adapt and even benefit from change. The Bartlett Consulting team is already active in this process. At our tree care offices and research laboratories, we already provide advice and solutions to tree and shrub pest and disease problems and are confident and prepared for new challenges.

With an unrivalled range of diagnostic tools, we can and do deal with unusual and emerging problems effectively.

Our consultants have over the last few years built a database of often overlooked species better suited to the future. With this, we regularly devise imaginative planting schemes for clients large or small, not only suited to warmer weather, but more drought tolerant, and specific to soil type as well. The species choice is not static but developing all the time. The schemes and associated management programmes can be stand-alone or as part of a building development proposal, properly presented, they can greatly assist in the approval process. Our work with landowners wishing to re-stock or newly plant land also benefits from our concern for the future, our forestry and woodland specialists being able to assist with grant aid applications better in line with a funding body's future aims.

For existing trees, our consultants are able to devise management programmes that will help trees survive in a changing environment, we now have the technology to accurately predict a trees chances of survival by analysing how hard the green chlorophyll in leaves is working. This is even possible for saplings prior to purchase so that our clients can be sure that the trees they buy are fit for the future. So if you are concerned for the future of your trees, young, old or just planned, for please call, we will be happy to help. ■



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