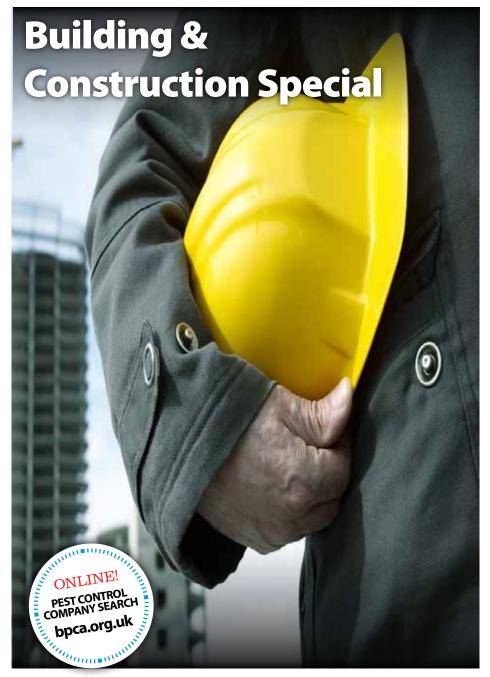


BUILDING & CONSTRUCTION ISSUE TWELVE

Meeting the pest problem head on.





What is alexo?

alexo is BPCA's digital magazine designed to keep your business informed about public health pest control.

alexo is packed with professional advice from leading experts in the pest control industry, and is the only magazine you need to tackle your organisation's pest problems.

Why choose a BPCA member?

By choosing a BPCA member you are ensuring the use of a contractor who can provide a professional and

consistent service.

All BPCA members meet our strict membership

criteria, hold the relevant pest control insurances, and are fully qualified and trained to deal with your pest problems.

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Bridging a gap

Preservation and pest control in buildings from the outset





Role of pest control in construction A look at problems caused by pests in construction



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The deadly killer affecting buil

The deadly killer affecting builders and construction workers



It's not a thought often considered by those working in the architectural and construction professions, but they can play a key role in keeping buildings free from pests, damp, and insect infestations – with measures introduced on the drawing board and out on the building site for maximum effect. Supported by a programme of maintenance after the handover stage, the end result is a comfortable, healthy environment for the long term. In this article, the British Pest Control Association (BPCA) highlight ways to preserve and protect properties in the UK – and help keep out any unwanted guests.

Hidden issues in sustainable construction

Modular, off-site building methods are being warmly welcomed by many in the construction sector, who recognise the sustainability benefits and fast-track nature of the process. However, one area which should be carefully considered by specifers are the pallets and packaging the modular products are transported in, from exporting countries.

Species including the Pine Wood Nematode (a microscopic worm-like pest spread by a wood-boring beetle known as the Sawyer Beetle) and the Asian Longhorn Beetle can be transported into the UK via this route – and ultimately they can impact severely on the UK countryside and urban areas.

Both of these pests can prove detrimental to our forests and urban street trees and, if significant numbers take hold, wooded areas and avenues of trees would need to be felled to control spread.

It is an EU requirement that all wooden packaging and pallets

imported to member states from third countries (or from Portugal, which has an outbreak of Pine Wood Nematode) have been treated by an ISPM 15 approved measure, so that this risk is removed.

According to the BPCA, peace of mind is assured by ensuring wood pallets and packaging are treated and marked to the International Standards For Phytosanitary Measures No 15, (ISPM 15).

David Hammond, managing director of Thermokil Ltd said: "Packaging and pallets can be produced from inferior wood including deadwood, which is more likely to be infested, as it may have been allowed to stand around for a period of time."

Anyone with concerns in this matter should contact the BPCA, or the Forestry Commission, for advice and guidance on the subject.

Tackling the condensation season

As well as the use of greener materials in construction, the quest for a more sustainable building industry – and a long-term reduction in energy bills – means more efficient homes and properties.

However, these 'greener' properties can harbour an emerging problem that construction managers and project managers might in the future need to help address – namely the issue of poor ventilation causing mould, damp and condensation.

This is a timely concern – as the beginning of winter usually heralds the start of the 'condensation season.'

Day-to-day activities

Atmospheric moisture is created by occupation including

respiration, industrial activities, washing/bathing/laundry, and cooking.

Steve Hodgson, General Manager of the Property Care Association (PCA) said: "With all these activities representing normal day-to-day activities, the creation of atmospheric water is natural and must be expected.

"When a building leaks air, the damp air within the building can move out and is diluted with air moving into the building from outside to replace it. This dilution of the damp air within a building reduces the relative humidity levels within the occupied space and decreases the likelihood of dampness, condensation and mould growth.

"To meet the needs for more energy efficient homes, when doors and windows and loft hatches are draught-proofed, walls are insulated, floors are covered in laminates and flues sealed, the rate of natural air exchange is dramatically reduced."

Double trouble

Simon Forrester, BPCA Chief Executive, says such conditions are not just ripe for cultivating damp and mould. "From a pest control point of view, an elevated moisture content level within a building, particularly kitchens and bathrooms provides a good climate for pests. This can include psocids and book lice, as well as roaches – especially the German cockroach, which thrives in this type of environment."

"Moisture is absolutely essential to the growth and development of many public health insects. By reducing this through effective ventilation, air management, good design and effective building maintenance, the chance of such pest infestation is considerably reduced. Furthermore, reduced relative humidity also helps reduce the incidence of house mites, which in turn will help asthma sufferers."

Addressing the problem

Steve Hodgson believes that, in the future, there will have to be a balance between the economic reality of powered and passive ventilation, with the need to conserve heat and fuel.

Managing the characteristics of new build and refurbished buildings that are better insulated and increasingly air tight with the expectations of the occupiers will also need to be addressed.

Steve said: "Solutions are available, but one size does not fit all. For construction and project managers the installation of vapour check layers within the fabric of the building is an idea for consideration, but the whole subject needs to be

researched and considered overall."

Onsite action

Construction managers can also, at the earliest stage of a building project, take steps to minimise pest problems for the longer term. While much thought is given to community and environmental aspects on building sites, BPCA urges contractors to think about another perspective – pest infestations.

Simon Forrester said: "One of the biggest issues on a construction site is the opportunities packaging and materials present for harbourage. Rats burrow and make their nests under shelter such as timber stacks, piles of rubbish and untended vegetation, and when the builders move out the rats don't move too – they'll look to the new residents as a continuing source of food.

"We've had reports of rats infesting entire new developments, which does not leave a great impression for the new occupants."

Action at the design stage

Richard Moseley is the Technical Manager at BPCA. He believes that ideally at the design stage, architects, house builders and design & build contractors should consider consulting a BPCA member, as they can give advice on any problems likely to be encountered early on, following a detailed site investigation, and make recommendations on proofing and site maintenance measures.

Richard said: "One of the major areas of our work is to prevent birds entering a building. We can advise on suitable action at the building design stage on works such as the proofing of nesting sites using netting. It's much easier to put these measures in place at the design stage, knowing the scaffolding is in place and the work can be carried out under the control of the main contractor.

"Another area of significance in the design stage is taking action on the spread of mosquitoes. We are seeing mosquitoes laying their

larvae in standing water in the

UK and the ground conditions on a building site can present a great opportunity for this activity.

"The warmer, damper seasons seem to be leading to an increase in the mosquito population.

Traditionally we have approximately three dozen varieties in the UK. It appears however, that varieties such as the Tiger Mosquito are moving into Western Europe. As these mosquitoes are vectors for disease, anything that can be done to control their spread is important."

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According to BPCA, other factors to consider at the design stage include placing a fine mesh over air bricks to prevent pests like rodents entering a building, and addressing the issue of voids where a ducted heating system is specified, for example in a multi-occupancy development, as these areas can provide a route for rats and mice to access the entire structure, making subsequent control very difficult and expensive.

As Simon Forrester maintains: "the design stage is the most crucial in long-term pest prevention, but the facility manager's ability to control infestation is hampered without information on what's behind the wallpaper, or under the floor. Building Information Modelling (BIM) needs to encompass pest management if we are to address the issue of public health pest control..

Finally drains and sewers should be specifed with hinged plates, not only to help address any potential flooding issues, but to stop rats entering properties via this route. Rats can even enter a property through a toilet if not properly maintained.

Rochard Moseley added: "Public health issues are not generally considered by constructors and designers as being within their remit, but there is such a lot they can do to control and manage pest problems. It adds such a lot to a property when they do, and also prevents potential sale problems later on."

Maintenance matters

After the design and construction phase, both trade bodies see building maintenance as a critical factor in halting problems, not only in residential environments but commercial, retail and industrial areas too.

The PCA appealed to property owners to call in experts after unearthing evidence that badly installed cavity wall insulation can have a damaging effect on buildings. The move came after the PCA saw a rise in calls from the public, who have found that dampness and decay has created the potential for structural damage to their properties.

Steve Hodgson said: "We have had an increasing number of complaints about timber decay and dampness in homes following the installation of cavity wall insulation.

"We compiled a checklist of faults for the public and property managers to look out for as part of their maintenance programme, and we urge people to be vigilant as ultimately the issue can cause the corrosion of wall ties."

BPCA has also reported a significant increase in a perennial problem – wasps. This year was a bumper year for the stinging pests after a poor 2012.

Again, maintenance can help address the issue, with particular attention paid to sealing gaps between soffits and walls, offering an effective method of preventing wasps nests being built in roof spaces, a major source of habitat for the pests this summer.

Flash points

Both trade bodies report flash point areas, where property problems and pests can thrive if maintenance actions are not taken. This includes drains, which should remain clear of leaves and other debris to enable water to escape from a building quickly, particularly during heavy downpours. Such activity will help prevent water taking an alternative route, potentially into the internal area of a property, which can eventually lead to damp problems.

From a pest control point of view, as described above, hinged plates on drains and high risers can also help stop rats and mice entering a building. Roofs should also have their lead-work and roof tiling checked, as any loose or worn areas can soon become exposed, allowing water to find its way in, as well as wasps and masonry bees and even squirrels.

Finally, gutters should be free from moss, leaves and other debris – and all properly connected up – to give water a fast exit from the building and prevent the entry of pests.

Take the right advice

As a long-established UK trade body in pest control, the BPCA has built up a wealth of experience in their relevant sectors. With regular training programmes, technical experts and carefully selected members, BPCA can offer property professionals peace of mind in the service they will receive. More about the BPCA and its pest control expertise can be found at www.bpca.org.uk or by calling 01332 294 288.



Rats and mice have caused serious fires by gnawing the insulation off electrical cables, floods by puncturing pipes, and have been known to chew holes in gas pipes. Pigeons and Starlings incur substantial cleaning costs to remove their nests and droppings, which are also reservoirs of insect infestation, can block guttering and damage stonework. In all aspects of pest control, prevention is better than cure and measures should be taken to proof buildings against bird and rodent damage.

Birds

Birds such as Pigeons and Starlings roosting on buildings can cause problems by defecating on the outside of buildings or within roof spaces. Not only is this unsightly, but may also be destructive as the acidic droppings can erode the surface of stonework. Gulls nesting on roofs can also cause damage to the fabric of a building by pecking and nest debris and droppings can sometimes block drains and gutters.

Prevention is better than cure, especially in the case of birds. Culling of colonies will create a void that will rapidly be filled and unless a case can be made that public health is under threat, it is highly unlikely that this will be allowed. There are various types of bird proofing methods available. If birds are entering premises, look for gaps at the eaves of the roof, broken windows and broken or missing roof tiles. Gaps under eaves should be sealed with material that cannot be pecked out, for example fine cement.

Where birds are roosting on the building, a variety of antiperching devises are available. Most suitable for properties where any system will need to be as unobtrusive as possible, is bird netting. It can be used to cover small areas or features or the entire elevation of a building. Different net sizes are required for different birds so it is important to employ a professional pest control company not only to correctly install the netting but also to correctly identify the birds that are causing the problem. Otherwise a net designed to obstruct pigeons could still allow access to starlings and problems will continue.

Mammals

Grey Squirrels can enter the roof spaces of houses by climbing walls or jumping from nearby trees. Once inside they can chew woodwork, strip the insulation from electrical wiring, tear up

insulation and sometimes drown in cold-water tanks. The amount of damage caused can be significant and again proofing against a problem occurring at all is the best course of action. Proofing should be done by a professional company; grey squirrels are ingenious creatures with very sharp teeth and a professional pest controller can advise on the best material to use.

Rodents

The health hazards presented by an infestation of rats or mice are well known. However both species can also inflict a great amount of structural damage. Rats in particular can undermine and destroy the fabric of buildings and can damage drains and sewers by burrowing between joints in the surrounding earth and behind brick sewers. The growth of the incisor teeth of a rodent is kept under control by constant gnawing. Lead pipes are sometimes gnawed causing flooding, and gnawing of electrical wiring can be a fire hazard.

To keep rodents from entering a building, fix and replace cracked or broken doors and windows and keep drains and drain covers in a good state of repair. Mice can squeeze through a gap of just 10mm so it is imperative that in the construction of buildings all gaps are sealed, drains have U-bends, and any other gaps (such as grilles and the space under doors) are proofed.

Why choose a BPCA member?

The British Pest Control Association is the trade association for the UK pest control industry. By choosing a BPCA member you are ensuring the contractor is able to provide a thoroughly professional and consistent service. All BPCA members have to meet the certian criteria, such as holding the relevant pest control qualifications, insurances, and pass our assessment process to join. so you can be assured you're hiring a professional.

Further information

Should you require further information on contractors who meet BPCA specifications and are members of our Association, or on any specialist treatment advice, please contact BPCA on 01332 294288 or visit our website at www.bpca.org.uk

Top marks or room for improvement?

Chartered Marketer Dee Blick examines pest controllers' reports and how to gauge their quality.



Your pest control technician has just completed his inspection of your premises and signed off the report that shows you what he's accomplished. Depending on the sophistication or otherwise of the system being used, you either get a paper copy of the report or, if it's in 'The Cloud', available to you at any time, any place.

What do you do with the report? Give it a cursory glance or study it in some depth? Because if you're doing the former you are in danger of missing out on some valuable advice and there may even be a need for you to take corrective action.

Ralph Izod, Managing Director of Dyno-Pest elaborates: "A proper technician's report will always detail recommendations for the client to implement, with a remit to either eliminate or reduce the need for remedial treatment. Let's say a technician finds food debris in a hotel kitchen, tucked away under the units, and notes this in his report, together with recommendations for the housekeeping team. If his advice is overlooked or ignored, it's usually only a matter of time before there's an infestation of flies and fruit

flies – pests that are probably not included in the original contract. By ignoring this advice, the client is incurring extra work and costs to treat this infestation."

In it together

A pro-active and pro-client technician will always be identifying ways in which you can work together as partners against pests. "It's important that you understand everything in the report, that whenever possible you discuss the content with the technician before they leave, and above all that you challenge a conspicuous lack of recommendations and lack of content in general," continues Ralph. "Your technician's reports are part of an ongoing audit trail that enables you to identify any recurring trends and to measure the impact of the pest prevention strategies that you have implemented in the light of the recommendations they contain. Pay attention to those recommendations, act on each one and you'll benefit with a pest-free building."

Content is king

The quality and depth of the advice yielded in the technician's report is undeniably important, as is the need to provide a detailed explanation of the inspection undertaken. If your technician's report is no more than a line or two of hard-to-read scribble you should demand more!



Please clean under coffee machine.



There is a build up of wet food debris under the coffee machine in the first floor tea point that requires urgent cleaning as it will provide an ideal breeding ground for fruit fly to re-infest this area.



Hole in loading bay needs blocking.



There is a gap around the AC pipes in the loading bay behind the cage that I would like to seal to prevent mice access into the building. This will require the moving of your secure cage in this area so I can gain access. Please contact me when you are able to do this so I can arrange this work.

WEIL'S DISEASE:

construction's silent killer

Weil's Disease, or Leptospirosis, is regarded by many in Britain as a 'rare' illness. Whilst this is broadly true, this complacency creates a larger problem. Those within the construction industry are at a higher risk of contracting this infection and consequently are being misdiagnosed.

Leptospirosis is an infection caused by bacteria, which are transmitted through water that has been contaminated by animal (especially rodent or cow) urine. For the construction industry work involving sewers and waterways is regarded as a high risk, though any site with standing water and rodent activity may be a cause for concern. For example, cases have occurred in workers re-developing city docks for housing or shopping. Everything from a puddle in a cow shed to derelict brownfield sites could be harbouring the disease.

The bacteria (leptospires) pass into the human system primarily through cuts, broken skin or through the eyes or nose. Hence, prevention tactics are centred on creating physical barriers between operatives and contaminated water or soil. At its most basic, this barrier may be good waterproof clothing or suits, and a waterproof plaster to protect cuts.

Further to this, all care should be taken to prevent and discourage rats from entering any area of the site or buildings. Professional pest control methods may be necessary for some projects, but by far the most important action is hygiene and good housekeeping. Workers should not eat outside of designated canteens as scraps, litter and the smell of food can all attract rats from where there were none. Even if there is no evidence of rats, simple hand washing is key. Site welfare facilities must, of course be adequate. Employers may not be able to fully eliminate the risks of contracting the infection. Employees must therefore be aware of symptoms in themselves and their workmates.

BPCA Chief Executive Simon Forrester said "Leptospirosis is as rare as it is unpleasant for the sufferer. Like pest controllers, construction operatives are often working in sites where rats are present in numbers, and many workers fail to take proper hygiene precautions. It can be as simple as rubbing an eye or smoking a cigarette after touching scaffolding on which a rat has been active the night before. The problem is down to awareness, and we recommend a toolbox talk is given on Weil's Disease as part of the induction on any sites where rat activity has been detected. Your local pest controller will be able to assist."

In the case of a site where the disease is detected, it is suggested that any activity near water sources is ceased until a proper investigation has been carried out. Also, all staff are



immediately given a talk and their PPE is checked for suitability. Any site where Leptospirosis is present you must inform the HSE under RIDDOR.

In summary...

It is clear a healthy respect for the harm this disease can cause will help keep you and your colleagues safe when working in areas of possible contamination. We suggest you build this into risk assessments when working on farms, near open water sources or on/near sewer systems. Workers and their friends and family must understand the symptoms, and employers have a duty of care to ensure their staff communicate the message effectively, including to their medical professionals.

www.hse.gov.uk/pubns/indg84.pdf www.nhs.uk/conditions/Leptospirosis www.bpca.org.uk

Five ways to stay safe

- 1 Always use protective clothing including waterproof gloves and boots when working in contaminated areas.
- 2 Ensure all scratches, cuts and abrasions are disinfected and covered with waterproof dressings before starting work.
- 3 Wash hands and arms thoroughly before eating, drinking or smoking, and after finishing work.
- 4 If you work in 'danger zones', see your doctor if you develop flu like symptoms such as headache, fever or chill.
- 5 For those working in 'danger zones', give regular awareness talks and information - a local BPCA member will be happy to provide toolbox talks for your staff on Weils Disease Prevention.



Visit **www.bpca.org.uk** or call 01332 294 288 Searching for a professional pest controller?
Our database of hundreds of UK pest control companies with thousands of branches across the UK allows you to search by:

- Domestic or commercial contract
- Pest type bed bugs, wasps, rats, mice, birds, mammals, and many more
- Distance from your premises
- Area covered



Worried about what you've read in this issue of **alexo**?



Have you bought pest control solely on price? What criteria did you use to select your servicing company? Are you convinced it will protect your business?

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