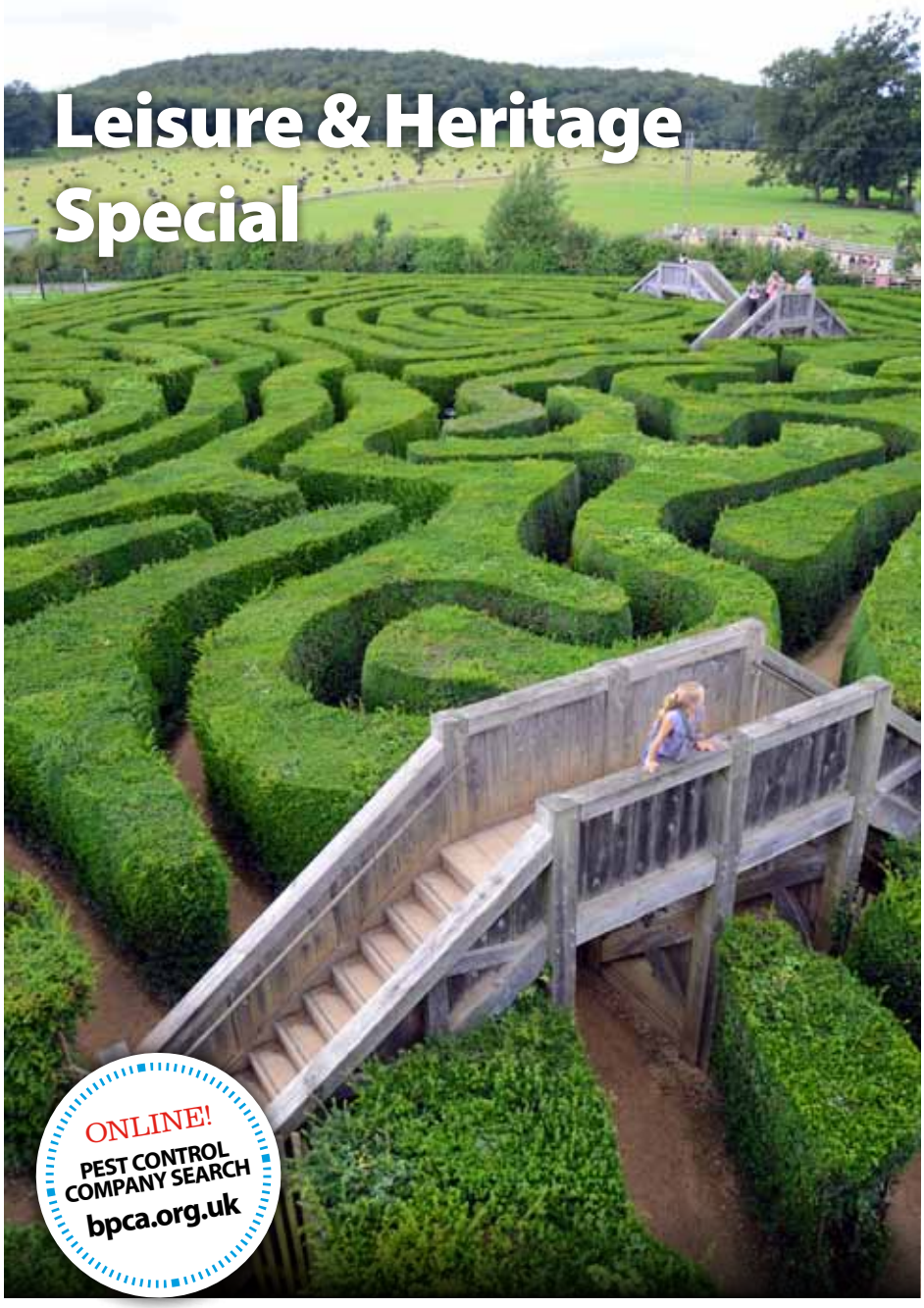
alexo

LEISURE & HERITAGE SPECIAL
ISSUE SIX

Meeting the pest problem head on.

BPCA British Pest Control Association



Leisure & Heritage Special

ONLINE! PEST CONTROL COMPANY SEARCH bpca.org.uk

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.

BPCA British Pest Control Association MEMBER

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.

contents

Pest Management: Prevention and Pitfalls

BPCA Technical Manager Richard Moseley examines the potential pest problems that face our heritage and leisure attractions.

I'm sure I don't need to remind you just how valuable the articles and artefacts are in museums and heritage sites. Value is not necessarily measured in monetary terms, as items can be rare and unique without costing the earth. Unfortunately, pest species do not see the value, uniqueness or importance of buildings and the collections they hold; pests see opportunities.

Pests seek out food sources, hiding places and breeding opportunities. If your leisure facility or collection meets any of these pest requirements, you may need help and support to avoid damage to sites, loss of collections and costly treatment programmes.

When we think of the risks from pests at heritage sites, we often think only of the damage insects can cause to artefacts. However, we must not forget the damage rodent species can cause, not only to collections, but to the buildings in which they are housed.

The majority of damage caused by rodent species, such as the common (brown) rat, the house mouse and grey squirrel, is due to their need to constantly gnaw on items and objects. Rodents' incisor teeth grow continually throughout their lifespan, so they must be worn down by gnawing. They are incredibly strong, and can gnaw through thick wood and brickwork with ease, so rodents can easily damage buildings and items by simply 'chewing them up' in the process of wearing their teeth back.

A risk often overlooked is the potential damage caused by rodents gnawing through water pipes and electricity cables encouraging flood and fire, which is a reality for countless buildings and their contents every year. This can put your whole business at risk. If you have an uncontrolled rodent infestation on your site, you're often gambling with the future your business and potentially items that simply cannot be replaced, or their loss compensated for by insurance claims (especially if your policy excludes damage by pests, as many do!).

It is also worth remembering that rodents carry diseases, and you have a responsibility to your staff and members of the public to provide a pest free environment where they are not in danger of contracting potentially deadly infections and disease. If you have an eating establishment on your site, you also risk being closed down by Environmental Health officials if activity from disease-carrying pests is not controlled and eradicated.

Insects, of course, continue to be a major concern, and we are not just talking about wasps. Although wasps and other flying insects have the ability to ruin the customer experience, for museum and heritage officials, certain other species are of greater concern. Species such as the clothes moth and carpet beetle will attack any item of animal origin, laying their eggs in and around the food source. Upon hatching into larvae, the insects will devour the artefact whilst the adults fly around the museum, seeking out other sources of food for their larvae. If activity is not identified and rapidly controlled, collections can be damaged

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beyond repair before you even realise there is a problem.

Treating insect infestations is a highly specialised field that can be costly and very time consuming. It's important to get the job right first time and many common treatments may be unsuitable for specific artefacts. If the insecticide is water or oil based, those ingredients may cause more damage to the infested item than the insects. In such situations staff will need to ensure the pest control contractor's survey is comprehensive, and alternative treatment processes, such as heat, carbon dioxide and fumigation, are considered where required.

Heat will kill all insects if the correct temperature is maintained for a period of time, usually a couple of hours, but again, some items may not be suitable for this kind of process. Carbon dioxide will also kill insects without risk of damage to artefacts, but this is a highly skilled process and can take a number of weeks to complete.

PESTS HAVE THE POTENTIAL TO:

1. Contaminate public spaces and workplaces, spreading disease
2. Damage building contents, rendering them worthless
3. Damage property, causing fires and flooding
4. Ruin reputations, leading to loss of business and prosecution

Prevention

As with most situations in life, where there is a risk of damage or injury, prevention is always better than cure. If we can prevent rodent and insects entering a property we remove the likelihood of infestation. This is easier said than done, but there are a number of ways in which locations can be made unattractive to pests, thus limiting their ability to damage our environment.

Firstly, if you have a problem with birds on your site, consult a specialist and get rid of them. Bird species and the debris created around nesting sites act as a reservoir of infestation for pest insects. If you treat the insect at ground floor level without addressing the source of the activity at roof level, you are embarking on a long and fruitless battle that you will ultimately lose. Remove the source and prevent the birds re-entering and you will have a far better chance of protecting your business. Birds carry diseases just as rodents do, so whoever removes any evidence of their presence should be a trained and competent operator who understands the risks and has the correct protective equipment and disinfectants to hand.

Secondly, help ensure a pest free environment by removing attractants. If you have gaps beneath doors, seal them. If you have gaps around pipes, block them. If your waste is building up in the rubbish area because bins are not emptied regularly enough, increase the frequency of your waste collections. If you have foliage and shrubs around the external walls of a building, cut them back to remove coverage that allow rodents freedom of movement and unseen access to your building. Basically, make your building as uninviting to pests as you possibly can by removing what they require – food, water and harbourage.

Thirdly, make sure you have a regular programme of pest control visits from a competent pest controller to identify early signs of pest activity and ensure you are getting the best possible pest prevention advice. Don't leave things to chance and be sure that you put the safety of your building, collections, staff and the public in the hands of a professional pest controller, such as a member of the British Pest Control Association (BPCA). The BPCA is the leading trade body for the pest control industry in the United Kingdom. By using a BPCA member, you can be assured that your pest control contractor is satisfactorily insured, has a minimum 12 months trading history and employs operatives who are formally qualified and enrolled on Continuing Professional Development schemes to make sure they are keeping their knowledge and skills up-to-date. BPCA members are also audited by our field based team before they join and at regular intervals thereafter, and must adhere to our codes of practice and conduct.

Further information

You can find your local BPCA member either on the website at bpca.org.uk or by calling on tel: 01332 294288

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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**

YOU'VE GOT TO PICK A PEST OR TWO...

...WHATEVER THE VENUE

The perceived wisdom about leisure facilities is that they not only attract pests, but actively encourage infestation. Oliver Madge of www.pe.st, a specialist consultant and BPCA member providing staff development, site and specification auditing investigates the what, where and why of pests in the leisure industry.

Leisure and sporting venues across the UK can be potential havens for a range of pests, attracted by the opportunities these venues create. An influx of visitors generates the ideal breeding ground for pests providing a food source, harbourage and warmth. Sites are usually busy then quiet in a regular pattern with large periods of low disturbance. Even the weather or time of year has a part to play.

When looking to control pests on your site, remember one rule will neither fit nor fix all. It is the skill, knowledge, experience and thus competence of the individual pest control expert on site that makes the difference between success and failure in prevention or eradication. For example, controlling rats is not the same all over the country – issues such as species, behavioural characteristics, resistance and even the location in which they are active, may mean that not all the same control options are applicable.

Treating pests in a modern sports stadium will usually mean that treatments are carried out back of house in the loading bays or storage facilities, due to the 'sterile' nature of the stands and communal areas, thereby creating little risk to members of the public, as their access is limited. However a community setting such as a park introduces many different external factors that must be considered and incorporated within a specialist control programme. Members of the public will have access to most if not all areas, and non-target species such as pets and wildlife will also be active. Attention will also need to be paid towards who has access to pesticides after a treatment, as was found recently when a hive of farmed honey bees was inadvertently killed because they had access to insecticide-contaminated wild honey.

Simply putting in a bait station to 'protect' rodenticide baits from inquisitive visitors will not necessarily satisfy. In our no-win, no-fee compensation culture, every aspect of a treatment must be considered and either eliminated or implemented, in order to deliver due diligence and to prevent third parties gaining access to a pesticide. Risk mitigation is at the heart of pesticide legislation.

So, will simply employing a general pest contractor absolve the site or the owners/managers of their responsibility to manage pest infestations? Unlikely. Due diligence under legislation would not excuse the business owner in the event of an Environmental Health investigation following discovery of cockroach or mouse activity. So what should be done, and whose responsibility is it? Let's start with the particulars.

Buy cheap, buy twice!

Often the intention from the (unprofessional) contractor is to gain the contract at the lowest price, with the view that additional job work onsite (to rectify the problems) will provide the necessary operating profits. A professional contractor such as a BPCA member will provide you with a realistic contract covering and considering all the potential problems you may face, so there are no hidden costs. Which would you prefer? Your initial gain from coming in under budget may in the long run cost you more.

A site could in theory take the approach of 'lowest tender wins' and then it's the pest company's responsibility, but that's a dangerous game in both financial and public health terms. Predominately, pests don't conform to the lowest common dominator, in fact the very opposite is usually true.

Rats are not the most successful mammals for nothing. The common (brown) rat has conquered more continents than any other mammal. It is reported that more people have died from rodent borne diseases than directly in wars; according to the NHS website, 'globally, it is estimated that 7-10 million people get leptospirosis (bacteria carried in the urine of infected rats) every year.'

The leisure industry has particular challenges to face with sudden high-use areas becoming vacant for long periods of time. By allowing infestations to become established any savings are eliminated, so regular visits (and audits) plus joint working between client and pest controller are essential.

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Hide in plain sight

Pest control in public places requires careful consideration; the visual appearance of traps, bait stations and other methods can sometimes make customers feel uneasy. Despite you taking your responsibilities seriously, the public perception is that they would simply rather not know you are doing the right thing (or indeed anything). Prominent traps are therefore a problem, and a variety of disguised products are available from bait stations that look like rocks or electrical utility boxes through to flying insect traps designed to look like high-end light fittings.

Food, glorious food

This is one thing that will attract all pests. Consider theme parks across the country; not only are the rides aimed at the younger (or young at heart) generations, but so is the range of food and refreshments provided including fizzy drinks, popcorn and ice cream. This nicely coincides with school summer holidays, but also when pests such as wasps are at their most active in searching for food substitutes when their nest hierarchy has gone into decline; or garden ants looking to feed their own next generation.

If a site provides accommodation you may face problems with bed bugs, possibly the fastest increasing and most difficult to eradicate pest. The UK leisure tourism industry relies on selling a relaxing and pleasant experience. Bugs in the bed or pesticides in the room don't particularly assist this feel-good philosophy.

So, now it's not just about controlling pests; it's understanding their lifecycle and biology that can contribute to their prevention. Whatever the site, venue or attraction, an organised management plan can often reduce the impact on the paying guests and thus improve their overall experience. But how can you prove a negative? The fact that members of the public were not affected by pests does not mean they will all write in to congratulate the site on how good a job they had done. But as both a large theme park in Berkshire and a prestigious London hotel found a couple of years ago, get it wrong and soon the TV companies are all over the story, causing significant harm to reputation. The Facebook/ Twitter generation can tell thousands of people around the world about a pest sighting in your premises, backed up by photographic evidence, and all before they have even left the site. Once out there, this reputational damage is difficult if not impossible to remove or counter. Don't believe me? Just Google 'football ground rat' or 'theme park wasp' to see what I mean.

Even the site specification can contribute to the risk of pest infestations; for example most contracts require six-weekly inspections (eight per annum) for rats and mice spaced throughout the year. Many will tell you this is either the only way to control rodents or this is the breeding cycle of rodents; the one thing that is certain is that this approach is now seen by many as out of date. With potential changes in both legislation and product labels ahead, activities like permanent toxic baiting become illegal. In practice this means not simply throwing pesticides at the symptoms of a pest infestation. Instead the professional pest controller will identify the root causes of the infestation and provide the complete solution – providing

"Risk mitigation is at the heart of pesticide legislation."

information, staff training and recommendations that remove the root causes thus preventing re-infestation further down the line.

Pest activity is traditionally seen as seasonal. During the warm summer months rodents are a lesser issue; but activity continues throughout the year and can cause failure under the contract specification. So why is little additional focus put on seasonal pests and monitoring to prevent an infestation? Or why are specifications not reviewed as pests are either controlled or 'come into season'? Is it the recommendations from the pest contractor or far too rigid service specifications that focus on the routine?

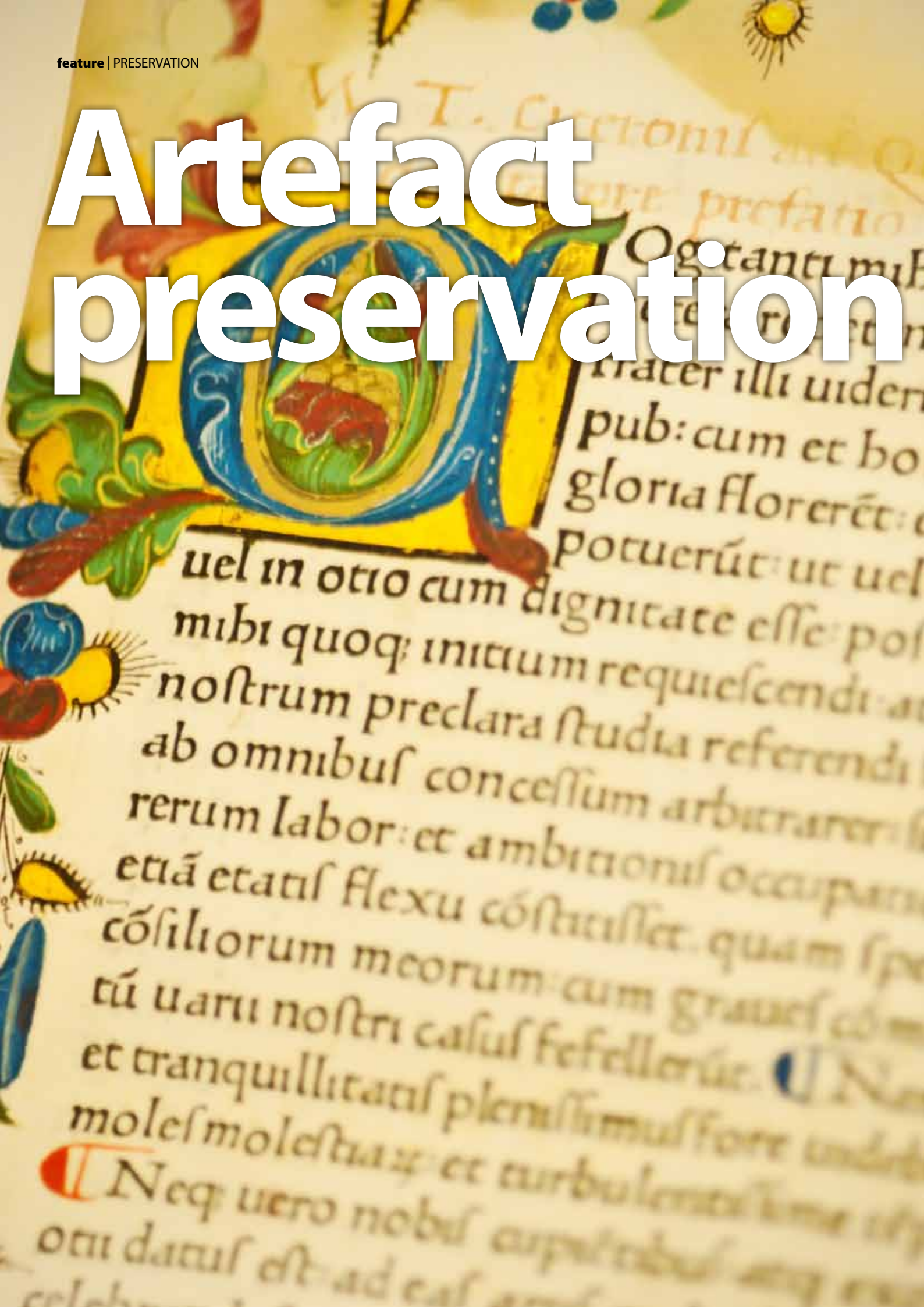
The future is uncertain about the continued use of pesticides, attitudes to the traditional contracted services and use of pesticides are changing.

In contrast, the food industry has frequent independent audits and assessments. This can be seen as policing the pest controller, but really it should be seen as almost an MOT for due diligence. Biannual or quarterly assessments, reviewing the situation can provide guidance and make sure that the right specification is in place, delivered by competent individuals, and that value for money for all aspects of pest activity, is being received and best practice is being applied; not just what is traditional or easy to deliver.

Prevention must be the primary objective when dealing with pests and if this is not possible then engineering controls need to be implemented to reduce the risk of pest infestations; but they must be specific to the needs of the site and the type of pest. It's not as easy as many people believe, and legislation may make it harder; but then with a bit of logic, applied effort and support, it can be achieved.

Oliver Madge has been working in the pest industry for over 20 years. www.pe.st is an independent provider of on-site training and biologist/site inspections.

Artefact preservation



All too often, pest control in museums is a reaction to the discovery of evidence of pest activity, such as damage to objects or elements of the building. Professional pest controllers and the British Pest Control Association deal with a number of pest species in a vast array of locations.

When we talk about pests, we often automatically think about the common species that are known to transfer disease and infection, such as rodents, cockroaches and flies. However, not all pest species are what we would term as public health pests, and the presence of some pests does not automatically mean there is an associated risk to people's health. But, in the right environment, many pests can be incredibly destructive and will decimate their preferred food source.

Prevention

As always, prevention is better than cure, so be proactive with your pest control measures. If you think there may be bird species roosting and nesting on your building, it is essential that you take action. Birds' nests are reservoirs of infestation for a number of insect pests, including those that will damage fabrics such as clothes moths and carpet beetles. Nests are often made up of animal derived products (feathers), making them perfect breeding sites for textile pests. If you have birds in the loft of your property, they must be removed and the area treated, or you will always have the potential for fabric pests. However, always remember to use a professional contractor as all birds in the United Kingdom are protected species, and must be dealt with in line with legislation.

Prevention should also be managed via a pest control contract with a competent pest control company that is a member of the BPCA. Pest controllers have access to a number of monitoring tools and lures that can act as an early warning system for your properties and collections. However, monitors are only beneficial if they are maintained and inspected on a regular basis, so it is essential that a contract is in place and that you visited frequently by a professional pest controller, who leaves detailed reports advising you how to maintain a pest free environment.

Unfortunately, even with the most comprehensive controls, you still may fall foul of pests. It is not usually practical to totally exclude all pests from a building, so it is important that they are denied a suitable environment in which to feed and breed when they do get in. Many insect pests can fly and may enter properties through open doors and windows, and if this occurs your pest contractor will need to respond rapidly. With moths and beetles it is the larvae that cause all the damage. The longer you have adult insects in your property, the more eggs they lay and the more activity there will be to control. So act quickly if you see any insects, and inform your pest controller.

The key to avoiding pest infestations is to understand the conditions under which they thrive. By denying them the four things they need - food, warmth, humidity and harbourage - it is possible to prevent them from becoming established. The four factors are often inter-linked and achieving the right balance is not always straightforward, but it is also important you develop the right procedures.

> "Textile pests will be a constant threat as they could literally eat some of your most important attractions before your very eyes."

An essential part of any pest prevention policy in a museum or gallery is to keep pests out of collections. Insects can be introduced from many sources including new acquisitions, objects on loan from other collections and items returned from loan. A quarantine area for incoming materials would be a good way to prevent a new pest being introduced.

Objects must be checked for infestation before being allowed into the main collection areas, whether storage or display. Inspection may reveal insect damage, eggs or small larvae. Similarly, the emergence of holes from wood-boring insects may be apparent, however not so obvious if there are any developing larvae hidden in the item. Therefore in this case, an incubation period may be necessary to determine whether an infestation is active or long dead

Don't forget – it can be difficult to identify when insect damage has occurred, so it is important that a condition report is made for all objects loaned to other organisations, and is checked thoroughly on their return.

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Buildings - keeping pests out

Most modern buildings successfully prevent the entry of pests by careful design and detailing of potential entry points such as doors, windows and vents. Building standards and the improvements to heating and ventilation systems have also played a part in creating environments that are generally less attractive to insect pests. If you are planning a new building then it is worth discussing the special needs of your collection with the architect and including this in the initial design brief. Excluding pests from older and historic buildings is often far more difficult, because of the unacceptable appearance of some proofing methods. You may need to take advice from a pest control consultant who has experience of dealing with such situations.

> "Excluding pests from older and historic buildings is often far more difficult, because of the unacceptable appearance of some proofing."

In the first instance action should be taken to:

1. Isolate any objects suspected of being infested, to prevent spread of infestation to other objects.
2. Clean infested areas and remove insect bodies, droppings and debris from the museum in a sealed container.
3. Dispose of debris in such a way that it does not become a potential food source for new pests that might then re-infest the site.
4. Decide on the most appropriate treatment.

The Cure

The most effective pest control measures are preventive; the avoidance and exclusion methods described above should be the priority. Only when these methods prove ineffective should professional treatments be considered. If pests are found in objects or in the building then a decision must be made on whether some remedial action is necessary and, if so, what it should be.

Treatments

Dealing with any pests and chemical related treatments is best left to professional pest controllers to prevent any legal ramifications, failed treatments or damage to collections. However you do need to ensure that the techniques and chemicals your contractor uses are safe for your staff, visitors and the collections. Ask your pest control contractor who will have experience of working in a museum environment. Your area museum council should also be able to advise.

The choice of treatment method will depend upon the severity of the infestation, the type of material and the value of the object.

The treatment of objects should only be carried out after taking the advice of a conservation or collections care specialist. In many situations, the application of an appropriate residual insecticide such as permethrin micro-emulsion will be sufficient to tackle an isolated outbreak of insect infestation. If your museum collection is made up of fragile and precious items, the pest control industry can offer you a number of new and innovative solutions to your textile pest issues. Some standard insecticide formulations may not be suitable for treating specialist items.

However heat, cold, carbon dioxide and even hormone confusion can all be used as controlling agents for textile pests, so ensure your contractor is considering such processes to preserve the integrity of your collections. These developments in the pest control industry mean that museums now have a number of options for treatments that will prevent or eradicate pests, if carried out correctly.

Hire a professional

Employing the services of a professional pest control company is recommended. The British Pest Control Association has servicing members based around the UK who can provide a pest control service and consultant members that can assist with the implementation of an integrated pest management programme to control any infestation you might have.

TOP 5 PESTS TO WATCH OUT FOR:

1. Common Clothes moth or Case-bearing clothes moth
2. Varigated Carpet Beetle
3. Fur Beetle
4. Larder Beetles
5. Booklice (psocids)

Further information

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

INSECTICIDE FREE PEST CONTROL: NOW THERE'S A THOUGHT

A special report from bestselling business author, Dee Blick.

If truth be told, for the team charged with the smooth running of a museum or visitor attraction, a proactive pest control policy is not always high on the agenda. But, when a pest outbreak does occur, eradicating it becomes a number one priority not least because preserving the integrity of the attraction is of paramount importance but also to protect members of the public and the staff from the health and safety hazards of unwanted pests.

Yet when a company embraces the need for proactive pest control and is working towards 'pesticide free' pest control at that, many pest problems can be stopped in their tracks. Some may not even see the light of day.

Ralph Izod, Managing Director of pest prevention and pest management specialists Dyno-Pest has worked with many London tourist attractions and museums over the last 25 years. He knows, from experience that a holistic 'root and branch' approach to pest control is vital and that today, many of the insecticide treatments can be replaced by treatments that are preventative in nature and that don't use chemicals. Ralph explains "experienced pest control teams know how important it is for museums to protect their exhibits, their staff and members of the public from unwanted pests." He added "that's why every museum needs a pest control policy based on prevention and monitoring with minimum reliance on chemical treatments. The alternative treatments we administer include heat treatments, cryogenics, new generation insecticide gels, pheromone lures and pesticide free materials in preference to the more traditional insecticidal spray treatments that are often dispersed over a wide area. Rodent bait boxes full of toxic bait can be replaced by non toxic monitoring stations which pick up the earliest signs of an infestation within the museum. Where possible it's preferable to control rodents before they even enter the building by protecting the perimeter. Recently it has also become possible to control mice almost invisibly by using specialist bait stations that control rodents within the walls of a building before they become active within the open areas and exhibition spaces."

"Museums and other tourist attractions should be demanding as standard what we call 'Minimum Impact, Maximum Effect' pest control. For example, preserving the exterior of a museum whilst proofing it from pest birds is now possible with low impact highly effective bird control treatments such as fire gel, trapping and electronic deterrent systems, even discreet netting."

But what can a museum do to proactively protect their attractions from the ravages of a pest which has the potential to cause untold damage where chemical treatments are not an option? There are effective preventative alternatives to insecticides in the marketplace. For example moths, a huge problem for museums can now be successfully controlled by means of 'auto-confusion™' a modern sustainable and chemical-free method of intelligent pest management. The net result of 'auto-confusion™' is a significant

measurable reduction in pest moth populations. Once achieved this is sustained through a safe, continuous and cost-effective pest management regime. The treatment protects round-the-clock from the risk of damage caused by the five common species of moth.

Museums should not overlook the importance of implementing simple but effective pest prevention measures including finding and proofing possible pest entry points into the property such as holes around pipes, weep joints and air vents, installing fly screens, having the new breed of electronic fly killers in catering areas and using insect growth regulators. An infestation could have its origins in a delivery or even an incoming attraction, staff should be vigilant when checking incoming deliveries and look for evidence of pests.

"We're also seeing a rise in the number of attractions reporting Bed bugs which will surprise many people who associate this pest with houses and cheap hotels," explains Ralph. "Visitors and staff are unwittingly bringing them into the building, attached to their clothes. However, if members of staff know how to spot the earliest signs of a Bed bug infestation and crucially where to look for Bed bugs, the problem can be contained with professionally delivered chemical-free heat treatment." BPCA offer a staff awareness training course which can be delivered at your workplace and may be a real cost saving benefit to you and your staff team.

Fundamentally for any visitor attraction and museum, pest control has to be assigned a much higher level of importance and should be included in the maintenance budget - that is if pest outbreaks are to be minimised through a combination of preventative treatments and professional inspections.

The first step is to have your building surveyed by a qualified and experienced BPCA member. This service is often offered at no charge and is of tremendous value to institutions.

Further information about training courses or finding your local BPCA member can be found at www.bpca.org.uk

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