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Issue 53 October & November 2017













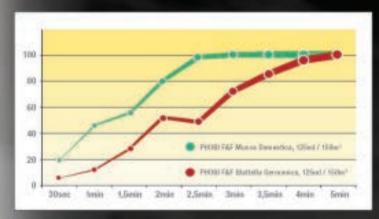
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As the industry's only independent magazine, **Pest** aims to deliver a mix of unbiased news, impartial advice and topical technical features. We are committed to being as inclusive as possible covering every sector of the pest management industry.

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Global change has local impact

Within our **Pest** publications we have frequently commented how international our business has become. For an individual pest controller worried about how they are going to get rid of the rats on a particular contract, this might appear a trifle irrelevant. But – it's not. Some pests, particularly rodents, are virtually the same the world over. By being international, ideas and techniques can be exchanged and, by pooling our markets together, the total sum enables the developers of new active ingredients to refine their discoveries for the professional pest control sector. Let's face it, for the multinational chemical and biotechnology companies, pest control uses are simply spin-offs, specialist markets away from their main interest – agriculture.

In the article on pages 20 and 21, we have tried to pull together the recent commercial activities of these international organisations, as well as those of the servicing companies who certainly have global aspirations. By seeing these presented as a whole, the scale and rate of change becomes more apparent.

Closer to home, we highlight new whistle blowing arrangements for UK Rodenticide Stewardship point-of-sale infringements and outline findings from the first Barn Owl Monitoring Study – a key measure of stewardship success. Enjoy!

Interpreting the news at www.pestmagazine.co.uk

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Babies extra!

In early September, having just returned home from his day's activities Jason Swaby's phone rang. He's worked as a technician for South Londonbased Beaver Pest



Control for over 10 years, so he's grown used to some pretty unusual call-outs. But this wasn't a work call – it was from a family at the church where Jason worships. Could he come quickly to take a young girl who had just gone into labour to hospital.

Within minutes of his arrival however it became apparent the baby was going to come before he could get the mother to hospital. Accompanied only by the girl's grandmother and instructed by a 999 operator, Jason had to calmly get on with it. Within minutes a bouncing baby boy made his entrance.

Jason had no previous experience of birth, so this was quite an event. He somewhat nonchalantly described it as "a great experience." Well done Jason.

Link between rubbish and rodents is clear

The streets of Birmingham are clearly illustrating the connection between rubbish and rats. With bin men intermittently on strike for the past three months, it's hardly surprising the residents have been complaining about the likely plague of rodents.

It makes you wonder how councils are fairing which have already implemented collections every three weeks, let alone those that are trialling every four.

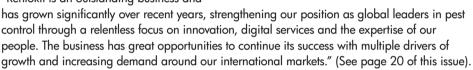
If any of our readers have experience of this we would be delighted to hear from you. Email: editor@pestmagazine.co.uk

Queens Award presented to Rentokil Initial

The Queen's Award for Enterprise for International Trade was presented to Rentokil Initial by Michael More-Molyneux, Her Majesty's Lord-Lieutenant of Surrey on 14 September. The award was accepted on behalf of the company by chief executive Andy Ransom. The accolade marks significant growth in international pest control revenues over a five-year period.

Andy Ransom said: "We are extremely proud to receive The Queen's Award for Enterprise. Being acknowledged in this way is a fantastic achievement and is testament to the hard work and commitment of our colleagues across the world.

"Rentokil is an outstanding business and



The Award was presented during the official opening ceremony for the new £2 million UK Innovation, Science and Training Centre in Crawley, West Sussex, which is to be known as the Power Centre.



More Asian hornets found

On 26 September the National Bee Unit confirmed a sighting of the Asian hornet at an apiary near Woolacombe in Devon. The nest was treated with insecticide on 28 September, then taken away for testing.

This is the first confirmed sighting since last year, when a nest was discovered in the Tetbury area in Gloucestershire. That Asian hornet incursion was successfully contained by bee inspectors who promptly tracked down and destroyed the nest.

Nicola Spence, Defra Deputy Director for Plant and Bee Health, said: "Following the successful containment of the Asian hornet incursion in Gloucestershire last year, we have a well-established protocol in place to eradicate them and control any potential spread. We remain vigilant across the country, working closely with the National Bee Unit and their nationwide network of bee inspectors."

But good news too...

Meanwhile at the other end of the country, in late September West Lothian Council's pest control team found a nest of the rare British native dark honey bee (Apis mellifera mellifera), at a callout in Winchburgh, near Edinburgh. A resident had reported two wasp nests and, on inspection, one of the nests was actually a honey bee nest. A specialist beekeeper was contacted to remove the swarm who identified the bees.

Dark native honey bees were nearly wiped out by disease at the end of the 19th century. The majority of bees now in the UK originate from bees imported from Europe. They are larger,

darker and have thicker, longer hair than the more common European honey bees, and are better suited to survive in the UK climate.

West Lothian Council's pest control supervisor, Craig Seath, said: "It's very unusual to find these bees in West Lothian. They are an endangered species so every effort must be made to protect them. The destruction of their nest would have also resulted in a large fine for anyone involved."



New birds of prev course launched

Derbyshire-based The Bird Control Company (TBCC) has launched a training course designed specifically for bird control companies using, or thinking of using, hawks.

As one of the first companies to use hawks, TBCC is aware that the industry has been using birds of prey to disperse avian pests for many years. However, until now, says TBBC, there has been no bespoke training available to those working, or wishing to become involved, in this part of the industry.

We know of many companies and individuals who use traditional falconry techniques for this work," explained Sarah Kirkland from TBCC. "This is a huge mistake, often leading to safety issues with the public and animals alike. All handlers and their hawks should



be correctly selected and trained."

This two-day course, limited to six participants, is due to run in January 2018 in Chesterfield. Email: info@bird-control-company.co.uk for details.

James scoops top award

Pest control technician, James McKenna, 24, has been awarded the prize for the highest scores in this year's RSPH Level 2 certificate exams. James, a pest control technician covering the Bournemouth area for Rentokil, scored an impressive 95%, 94% and 91%, respectively, in the three units in the test – the highest in the country!

He received his award during the Royal Society for Public Health's (RSPH) AGM held in London on 14 September from RSPH trustee Prof Carol Wallace. Each year between 500 - 600 people sit the exams for RSPH Level 2 certificate, around half from Rentokil.

James, a graduate in animal behaviour from the University of Chester, is currently studying for a Masters degree in Environmental Science at the University of the West of England in Bristol.

Asked what brought him to Rentokil, he said: "I wanted to join a rewarding graduate scheme that would give me the chance to put my degree into practice and provide me with lots of opportunities for progression."





New regional manager for Bell Laboratories



Shyam Lakhani has joined Bell Laboratories as their new regional manager for the UK, Ireland and sub-Saharan Africa. Shyam takes on the role formerly held by Brady Hudson, who is now with Killgerm.

Based in Leicester, he joins Bell from Heineken where he had worked in various positions over five years, most recently, as a regional sales manager. In that role, Shyam led, developed and managed profitable market share growth through direct, indirect and leased and tenanted routes to market.

Changes in the Killgerm technical department

After 21 years at the helm of the Killgerm technical department, Professor Moray Anderson finally hung up his microscope and retired at the end of August. Moray joined Killgerm in 1996 as technical director, responsible for developing all Killgerm's training, technical

support, insect identification and auditing roles.

Qualified as a forensic entomologist, he was also a visiting professor at the University of Florida, a senior lecturer in entomology and course tutor for the University of Birmingham's Certificate in Urban Pest Management. He was made a member of the Pest Control News Hall of Fame in 2007.

Closer to home, at **Pest** we were delighted to invite Moray to join our technical advisory board where he has played a significant role.

We are sure everyone in the industry will miss Moray. Although a learned expert, he was never too serious to crack a joke, often at his own expense. Happy retirement Moray and we raise our glasses to you with a wee dram of the amber nectar!

Carrying on the excellent work in the technical department is Dr Matthew Davies who becomes its new head. Matthew comes well equipped having already had 12 years experience in the industry. He is also the technical editor for *Pest Control News*, leads the CRRU UK Training and Certification Work Group, was the Chair of the 9th International Conference on Urban Pests 2017 and holds a PhD from Aston University.







Promotion for Helen Ainsworth

Having only joined BASF late in 2016, it's onwards and upwards for Helen Ainsworth. From 1 October 2017, Helen took on the role of country sales manager for the UK, Nordics & Baltics – the post previously held by Gavin Wood.

Helen moved to BASF as their new UK northern sales manager. For the five years before this, she was technical



training manager for Barrettine Environmental Health.

Helen has been involved with professional pest control all her working life having had spells with Certis, before their withdrawal from pest control, Luxan, Forward Environmental Services and Rentokil Pest Control.

She has also served as treasurer for RAMPS (UK) and has been a member of the BPCA Executive Board.

New president and chair at CIEH

Commencing in January 2018, retailing and food expert, Dawn Welham, will take up the presidency of the Chartered Institute of Environmental Health (CIEH) from Tim Everett.

With a 30-year career in retailing and management Dawn was formerly technical director of Asda-



Walmart and a member of the BRC's international advisory board. A chartered EHP and CIEH member since 1987, Dawn is currently technical director at Authenticate IS.

She took her environmental health degree at Manchester Metropolitan University and was an EHO for Wakefield MDC before joining Asda as an environmental health team manager in 1999. She has worked across the EU and in the US, South Africa, Australia, Indonesia and China.

Following Andy Statham as chair from next year is Siraj Choudhury. A local government manager and solicitor with Spelthorne Borough Council, Siraj has served as an appointed member of the CIEH's

board of trustees since 2015. He also holds a masters in spatial planning and a further diploma in local government law.

Siraj said: "I first encountered environmental health issues as a legal aid housing lawyer, helping people who were experiencing statutory nuisance and disrepair. While for the legal team at Spelthorne, I helped EHOs to bring prosecutions on a range of environmental health offences."



Simon Forrester to move on...

Having been chief executive of the British Pest Control Association since August 2010, it has been announced that Simon Forrester will be leaving BPCA in January 2018.

He is taking up the position of chief executive of the National Association of Jewellers based in Birmingham..

Simon is no stranger to the world of trade associations as prior to BPCA he was chief executive at the Association of Interior Specialists (AIS) based in Solihull. Before this he worked for the British Association of Conference Destinations and the British Dietetic Association.

During his tenure at BPCA he has led a forward-thinking and

committed team to deliver the innovation, diversification and growth that BPCA has enjoyed.

Simon commented: "It's been an incredibly difficult decision for me but it's time for someone with fresh ideas to take the association to another level."

Congratulations Simon, you certainly leave a much stronger and more professional organisation than the one you joined.

A more detailed appreciation of Simon's achievements is planned for a future issue of **Pest** magazine.





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When birds were found in the belfry of the remote Kettleburgh church, Abate Pest Management Services, based at Morley near Wymondham, was called in to prevent further catastrophic damage.

The Grade 1 listed, medieval Suffolk church had been invaded by birds gaining access to the belfry, housed within the 14th century tower. The bells and the church building itself had both suffered damage from acidic bird droppings. Left unattended this would have resulted in major damage to both.

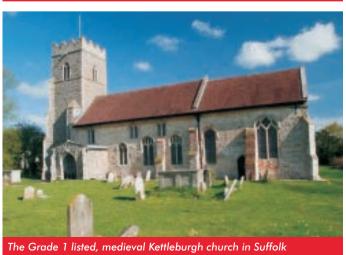
Managing director, Jon Blake, explained: "The church was suffering from the effects of birds gaining access to the belfry. They had made a considerable mess and something needed to be done to protect the building and the bells. We were called in to clear the affected areas and prevent the birds from getting in again. We carried out a professional assessment of the belfry, looking at any risk factors and the most suitable materials to use."

After cleaning up the mess the Abate team fitted special small gauge, galvanized weld mesh inside the existing louvres on the side openings of the belfry to prevent the birds from re-entering.

Jon concluded saying: "Care always needs to be taken when carrying out pest control in churches and other places of worship. Consideration must be taken of the people who work, or worship there and of the specific needs of such historic buildings."











Whistle blowing made easier

The Campaign for Responsible Rodenticide Use (CRRU) UK has introduced a reporting process for suspected breaches of UK Rodenticide Stewardship Regime point-of-sale checks.

As regular readers of **Pest** will know, CRRU is the industry-led organisation charged with implementing the UK Rodenticide Stewardship Regime. One of the pillars of stewardship is the point-of-sale checks that must now be conducted by all sellers of professional rodenticides.

The rules apply to online sellers as well as traditional rodenticide distributors and cover all professional users - gamekeepers, farmers and pest management professionals.

All buyers of professional use rodenticides must provide an approved certificate of competence or, for farmers, documentation confirming membership of an approved farm assurance scheme. If this documentation is not provided the seller is forbidden to supply.

When the point-of-sale checks were

announced, many in the industry welcomed the move, recognising that by ensuring all sellers follow the rules the 'cowboys' could be kept out.

At the same time, many also expressed concern about how the new rules would be policed. This new, easy-to-use online reporting system for suspected breaches of the point-of-sale checks means that pest professionals can now act as the eyes and ears of the UK Stewardship Regime.

But what happens when a report is received? CRRU says that all rodenticide product authorisation holders have committed to investigate allegations of non-compliance and then report their findings and actions taken to CRRU.

the HSE-led Government Oversight Group.

Report sellers who you suspect are ignoring point of sale rules at: www.thinkwildlife.org/stewardshipregime/crru-uk-point-of-sale-noncompliance-reporting/

and CRD Compliance and withdrawal of supply from non-compliant outlets.

Please note the new reporting system is for point-ofsale issues only. Incidents of suspected bad practice in rodenticide use, or rodenticide poisoning of non-target species, should be reported to the Wildlife Incident Investigation Service on 0800 321600.









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Trap selection advice

In the last edition of **Pest** we outlined how mole traps and rodent break-back traps are exempt from UK welfare regulations.

We also highlighted research by Dr Sandra Baker and her team at Oxford University that has shown how this exemption has encouraged the proliferation of ineffective and

inhumane traps and we called on Dr Baker to tell us which brands of trap performed the best in her tests and which pest professionals should avoid.

Most powerful trap not necessarily the most humane

It turns out, however, that whilst the research identified the most powerful traps by measuring impact momentum and clamping force, it does not necessarily follow that the most powerful trap is the most humane trap.

Dr Baker explains: "In our 2012 study we measured mechanical performance (in the form of impact momentum and clamping force) and revealed big concerns about the variation in performance among traps. However, our study didn't look at body strike location, which is obviously also vital in terms of saying which traps are best for both welfare and efficiency and therefore which traps can be recommended.

"Because we didn't test strike location it would not be fair on trap

manufacturers for us to identify certain brands as 'best' based purely on our mechanical study. The most powerful traps may not strike accurately and could therefore be very inhumane. The only way to test both trap power and trap strike location is through killing trials.

"This is how the Animal & Plant Health Agency (APHA) test regulated traps for approval – and that is why we have proposed that APHA could test unregulated traps in the same way through a Voluntary Trap Approval Scheme."

She continued: "I would however be prepared to say that your readers should avoid traps which have both acute opening angles and 'jaw' type springs, since these were consistently weak and regardless of whether they were accurate in terms of strike location, they would still be weak."

German government approved traps available

Pest has also been contacted by Daniel Schroeer from Futura in Germany. Daniel explained that Futura's Gorilla trap is the first break back trap worldwide to be government approved.

Whilst, as is the case here in the UK, there is no legal requirement for snap traps to meet any approval standards in Germany, Futura asked the German Federal Environmental Office to conduct detailed kill tests. To pass these official tests, traps must render a house mouse irreversibly unconscious within 30 to 60 seconds.

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Barn owls are key to rodenticides' future

Two of the ways in which the Government Oversight Group will measure the success or failure of the UK Rodenticide Stewardship Regime involve barn owls – their breeding success and a reduction in levels of rodenticide in barn owl livers. A new report on breeding success provides essential context against which to judge stewardship performance.

Barn owls were chosen as an indicator species because there is good historical data for comparison purposes. As a first step, a new Barn Owl Monitoring Study has been published by the UK Rodenticide Stewardship Regime. The study tracks barn owl breeding success across five areas of the UK over at least three years up to 2015. It has been funded by the Campaign for Responsible Rodenticide Use (CRRU) UK with field work conducted by the Wildlife Conservation Partnership (WCP) and analysed at the University of Reading.

Going forward this Barn Owl Monitoring Study (BOMS) will be repeated annually by the same team. These studies will also provide context for the Predatory Birds Monitoring Scheme (PBMS), which with funding from CRRU, is tracking liver residues of rodenticides annually in UK barn owls.

Both studies will be reported to the Health & Saftey Executive (HSE), which leads the Government Oversight Group for rodenticide stewardship, to assess the effectiveness of the regime.

The new report identifies that barn owl breeding success from 2011 to 2015 showed significant fluctuations from year-to-year. The report notes that these wide fluctuations were probably caused by a range of factors.

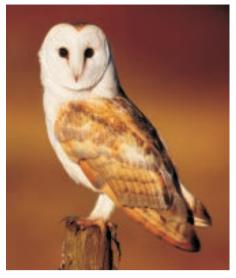
The most important are:

- Annual changes in small mammal abundance ie availability of prey;
- Extreme weather events at critical times during the barn owls's annual cycle.

Of the five years studied, breeding was lowest in 2013, when only 23 out of 99 nests monitored produced fledglings. The most successful year was 2014 when young owls flew from 78 of 121 nests monitored. The productivity per nest ranged from 2.43 birds in 2012 to 4.31 in 2014.

2013 was one of the worst breeding seasons since 1958. A major factor was the availability of voles. March was particularly cold. Vole numbers were reported to be very low throughout the first quarter. However, numbers recovered rapidly soon after, climaxing in 2014. This availability of food, combined with the mild winter of 2013/14, followed by an early spring and one of the warmest summers on record, enabled barn owls to have one of their most productive breeding seasons for decades in 2014.

When vole numbers are particularly low most barn owls remain at their winter roosts and make little attempt to occupy breeding sites. This means that in years such as these barn owls go unrecorded and, if population estimates are based on these years alone, they can prove wildly inaccurate.



The report says that studies in the UK carried out from 1988 to 2015 indicate that reproductive performance in barn owls has not changed much. Although PBMS shows that many barn owls are exposed to rodenticides and BOMS shows that breeding success varies from year to year, co-author Colin Shawyer (WCP) says there has been a substantial increase in barn owl numbers since 1997, when the last comprehensive UK survey showed there were about 4,000 breeding pairs.

Looking specifically at what might be expected to happen if anticoagulant rodenticides were having an impact on breeding success the report says: "It is difficult to see how the annual fluctuations in barn owl productivity observed in the data of the BOMS can be associated with the approved use of rodenticides across the agricultural landscape. If this were the case, the resulting decline in barn owl productivity would be expected to be relatively consistent year on year, to reflect the consistent use of these products, which clearly it is not."

A copy can be downloaded from the **Pest** Library.



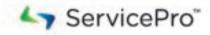
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Maximising hits on rodent bait stations

Urban rodentologist, Dr Bobby Corrigan, explains how pest professionals can put science to work when using bait stations for rodents.

Rodent bait stations are a major part of commensal rodent Integrated Pest Management (IPM) programmes the world over. As pest professionals, we install them around and sometimes inside many of our clients' facilities for two reasons: First, to provide a preventive measure for any rodents that might approach the building from other areas and, secondly, to control a current rodent infestation in the grounds or within the building.

Once installed, we (and our clients) assume three things will happen:

- 1 The targeted rodents will actually encounter the stations;
- 2 The rodents will enter the stations;
- 3 The rodents will feed on whatever type of bait we've placed inside.

Unfortunately it doesn't always occur like this. The reality is that rodents do not always interact with our installed bait stations. Or, they don't interact with the stations and their baits quickly enough to achieve what the customer is expecting – a fast solution to their rodent problem.

But why not? What factors are at play that might cause some, or all, of your bait stations to be left unvisited even when you and your customer know there are still rodents active at the site?

- Are the rodents aware of the stations?
- Or, did they find the stations, but then disregard them?
- Or, were the rodents skittish and fearful of these new objects?

The goal of this article is to present an overview of the research associated with rodent biology and behaviour as it applies to their interactions with our bait stations.

By us better understanding rodents in this regard, we can maximise our chances of rodents finding, entering and feeding on ('hitting') our bait stations.

The principles discussed here apply to both rats and mice, although the Norway rat is emphasised because it is with this rat most of the work has been done.

Behaviour around bait stations

Over the past six or seven decades, scientists have gathered insight on the behaviour of rodents in response to objects, such as bait boxes, that appear suddenly within their



This article first appeared in *Pest Control Technology*, the leading pest management magazine in the USA.



environment. Generally speaking, this behaviour is complex and varying (sometimes significantly) from one rodent colony to the next and it depends on several factors. One of the most important is the density of a particular rodent colony. That is, how many rodents are sharing the same resources in a limited area.

Think about a rat infestation in a building's basement, a building site, an urban park, an unkempt back-garden and so forth. What scientists have learned is that rarely are any two rodent infestations exactly alike.

The following discussion, summarised in a numbered list, is a partial selection of the research findings. These findings can help us to implement better and more profitable rodent control services.

Entry into new bait stations

Why do (or why don't) rats enter our newly installed bait stations?

1 The length of time it takes for rats to enter a new bait station installed in their territory can differ dramatically. Entry might occur in as soon as one day. Or it can take days, weeks or months. Or, they may never investigate your bait stations. Whether it is sooner or later depends to a large extent on the stability of the environment. For example, for how long has the food, water and shelter remained available and unchanged over time? Have several generations of rodents been able to

grow and thrive within the environment? If the location and/or building has been beneficial to the rodent colony and has allowed it to produce and rear its offspring successfully, the rats (at least some) may be skittish of interacting with bait stations, or traps that suddenly appear.

- Skittishness towards new stations and objects may be particularly strong with the adult females (i.e. breeders).
- 3 Skittish behaviour is stronger towards new bait containers than toward new food.

The role of odours

What do smells have to do with it?

- The odours associated with individual rodents, and the rodent colony in general, can play an important role in the feeding, social and reproductive behaviour within a colony. These odours (often containing pheromones) may also affect rodents' responses to our bait stations, traps and baits. In studies with Norway rats on farms, those bait stations installed in places where the highest levels of colony activity occured and thus where deposited rats signs (droppings, urine, rub marks, etc) were at their highest, received the highest number of hits on the stations. What's more, the social interactions among the rats affected which specific stations the rats visited and which rats within the colony were permitted to feed in the stations.
- 2 Norway rats often follow trails left by other rats to find food. In part, this is because such trails are laden with the scent of colony and family members.
- 3 Similarly, whether or not the rats 'hit' the bait they find inside a bait station can be affected by the odours previous rats have left in, on or around the station. This is the same behaviour in which rodents leave odours associated with the entries to their burrow holes leading to their nests and harbourages. Such odours can be present in their droppings, urine and urogenital secretions.

Feeding behaviour

What are rats' likes and dislikes about their food and eating locations?

In general, rats prefer to feed at sites within, or close to, cover. If good food is discovered in open and exposed areas, they will drag the food to a cover, or to



Rodents follow trails made by other colony members to locate food and cover. This trail through the turf is a well-used path by rats at night. A bait station could be established at the start of the trail (bottom centre of photo)

- some area in which they fed successfully in the past.
- In severe infestations, rats have been seen feeding in groups of a dozen or more at the same spot. When a large bait station is installed in the right spot, several members of a family will enter and feed inside the one station.
- 3 Some scientists believe it is important for

adult rodents to have ample space around them while feeding to facilitate consuming enough food. Some adult rodents, for example, might consume more food if they can 'sit up' on their haunches and hold the food with their paws while eating. This might require upwards of seven inches or more of ceiling space for Norway rats.



An active rodent hole. Note the rat hairs stuck to the perimeter of the hole, the droppings nearby the rat's hole and the 'smudge marks' along the edge of the concrete (bottom right). Rats will often leave their 'scent' in their faeces and within their smudges and secretions to facilitate recognition and familiarity for themselves and other colony members. Of course, it is desirable to have such odours become associated with your bait stations



Richard Marsh Owner of The PestAway Group



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Ten points to take away

The following ten recommendations are some take-away points. I also have included what has worked for me over the years when dealing with 'finicky' (i.e. tough-to-control) rodents.

Together, these tips may help increase the chances of rodents quickly visiting your bait stations. Still, keep in mind that in any infestation there can be unknown forces at play, or even previous experiences the rats have learned from, that can affect the outcome of any rodent control programme.

- According to the late Dr Peter Cornwell, the renowned urban entomologist: "The success of the treatment depends on the detail of the inspection." His adage applies very well to rodent control using bait stations. Before installing any bait stations, it is wise, from both a service aspect and a business aspect, to first analyse the situation. Ask yourself: "Where are the rodents getting their food and water?" Then, assuming earthen burrows are not obvious, "Where is the rodent harbourage?" Think about the environmental resources such as warmth, cover (shadows, hard-to-reach narrow pathways), quiet zones, as well as the structural elements the rodents prefer such as corners, utility lines and structural voids.
- Once you've studied the situation, then investigate the affected areas to pinpoint the rodent's high-activity areas. This is done by observing for active rodent signs (ARS) such as droppings, belly smears, gnaw marks, hairs, obvious rodent trails and the like. In those areas in which the ARS are the most numerous and concentrated (and especially in those areas where the ARS match their environmental resources mentioned previously), think of these areas as the little red balloons you see on a Google map for where to 'drop' a bait station.
- 3 If possible, locate your stations directly next to (not on) the active trails. Missing a colony's favourite trail by only ten feet can make the difference in whether or not the rodents will hit your bait stations.
- 4 Once the stations begin to receive hits, they should not be moved even slightly; nor should any changes be made to the stations for the remainder of the control period.
- 5 If large stations are warranted, wooden bait stations can be used. I have used these stations repeatedly over the years, with excellent results, when for whatever reasons the rats wouldn't readily enter the conventional plastic black stations I'd installed. Wooden bait stations are simple to build and can be constructed at commercial joiners shops for reasonable costs.
- 6 Establishing bait stations in the rats' high-activity zones and then pre-baiting the stations with foods familiar to the rats in that specific area and/or using any of the attractive monitoring baits can sometimes cause rodents to overcome or reduce their skittishness towards the new bait stations. Once the presence and location of the stations become familiar to the rat colony, and they readily take to the pre-baiting food, then stations will begin to contain the 'colony scent'. The pre-baiting foods can then be removed and replaced with the rodent bait, but the non-toxic monitoring baits, if used, can be left in place.
- 7 Inspect for areas that provide rodents with cover (low-hanging bushes, behind rubbish piles and shadowy corners). Once found, look for any ARS that indicate the rodents are active at that specific location. If so, it's a good bait station point.
- 8 Using forceps (always a handy tool for pest professionals to carry), collect any faecal pellets found nearby and place a



couple of droppings immediately outside both entryways of the stations. Also, place a couple of droppings immediately inside the entry way of the station.

- 9 If you are baiting for Norway rats in situations in which the rats have earthen burrows nearby, collect scoops of soil from the main entrance of their burrow system and place this soil into both entry ways of the new bait stations (in the same manner as installing droppings described previously).
- 10 If scraps of food wrappers, cardboard, small rocks, pieces of wood or other items are available at the targeted rodent site and contain any obvious rodent markings (urine stains, body smears, hairs) install some of these 'familiar items' in and/or around the entry holes and the floor of the stations. Cover as much of the floor with these and other familiar materials as possible (soil, leaves, grasses, etc). This technique may be especially useful for those rat infestations that have been long established and have well established trails.

Summary

Rodent bait stations are only of value in controlling commensal rodents if rodents encounter, enter and feed upon the baits inside. Our clients aren't paying for a line of black boxes. They are paying us to provide a service based on our expertise and our ability to analyse their specific situation. So, it's not about how many stations you install, it's about the number of bait stations installed at the most effective rodent spots.

A pest professional who installs ten bait stations in the best location based on first analysing each site and reading the signs the colony leaves and identifying their specific activity zones will be far more effective than a service person that hurriedly installs 40 bait stations in a simple perimeter line around a building. This is usually more 'linear coverage' than 'effective coverage'.

Take the time to design and implement a quality bait station plan based on good inspection and analysis techniques.

Getting the rodents to 'hit' the stations quickly is the goal right?

We are paid not only for the amount of equipment we use, but for our expertise that guides how we use our equipment. By doing so, we provide what the customer is in fact paying for – the most expedient and safest solution to their rodent problem as is possible.



TARGETING LOCAL PESTS ON A GLOBAL SCALE



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Vanessa launches PestLady

Having worked for a local pest control company for just over four years, Crawley-based Vanessa Akers recently decided to go it alone and start her own company in West Sussex. It was a bold and brave decision, but she thought it would give her more flexibility and more control of her work/life balance.

Not only did she have to form a company, but also had to come up with a name, logo and branding. So, Vanessa started doodling on odd bits of paper to find the name that was not only descriptive but also memorable.

She came up with PestLady. The logo is certainly distinctive with the mouse and bold green and white lettering and Vanessa feels this describes to a tee that she is a female pest control technician. Right from the start, Vanessa is thinking big. She explains that the name isn't personal, meaning there is room for future expansion – that is if she finds the right ladies who want to get involved.

Vanessa has found that although people have been surprised to see a female technician, quite often they have felt more comfortable with her taking care of their unwanted pests.

She sees her target audience as local domestic and small businesses and has set up a Facebook page to get her company known on social media. She has also invested in some local advertising. The feedback received has been very positive and she's amazed how many people are already aware of the name. It's clearly early days, but things are going well for Vanessa who is aiming to create a strong and loyal client base.

Think female!

One of the biggest challenges for UK pest control is recruitment – as our article on pages 25 to 27 of this edition discusses. Yet, as Vanessa Akers has shown there is a preference within some market sectors, for female technicians. Women account for just over half of the UK population, yet make up a very small percentage of the country's pest controllers. Is the recruitment answer to think female?

But, attracting women to this traditionally male workforce is no easy task. Our thanks to USA's Professional Women in Pest Management (PWIPM) for the following recruitment and retention tips:

- 1 Rethink your requirements. Making small equipment changes will widen your candidate pool and show women that they can also do the job in the same way as their male counterparts.
- **2 Update your job descriptions.** The language used can significantly affect their appeal to men versus women.
- **3 Showcase the women in your company.** People are more likely to apply for positions where they can easily see themselves. Most pest control websites show male technicians. What message does it send to female applicants if women are only shown as customers?
- 4 Highlight your training programme. Women tend to not apply for a job unless they meet almost all of the requirements listed. Showing your training programme and educational opportunities will show female applicants how they can gain the knowledge and experience needed for the job.
- **5 Offer support.** Teach them about safety and how to avoid a hazardous work environment. Give them lessons on self-defence and how to avoid and deflect harassment.





And the bigger

Pest control is a dynamic business. Companies come and companies go. But one of the most noticeable recent trends is that of company acquisition. The big companies are on a spending spree, so the big boys are just getting bigger. Over the months and years at **Pest** we have covered these individual movements, but for the benefit of readers we have tried to assemble the most recent and significant movements. What relevance does this have for those at the sharp end of pest management? **Pest** editor Frances McKim investigates.

Within the industry mergers and acquisitions, know by the jargon M&A, usually occur either between service companies or between suppliers – meaning manufacturers or distributors.

The servicing company sector

With service companies, sometimes it's simply a natural joining of local or regional service partners who have a history of working together and may share specialist services, such as bird work or fumigation. However, increasingly the impetus is the drive from the larger players to increase their market coverage especially into more markets worldwide.

Rentokil has deep pockets

Mention take-overs within the servicing sector and undoubtedly Rentokil's activities will spring to mind.

Back in the 1990s, the then chief executive Sir Clive Thompson set his stall out to achieve 20% growth in earnings every year, leading to his nickname of 'Mr 20 per cent'. All sorts of acquisitions were made and new business sectors entered, many of which failed to live up to expectations.

With the appointment of the current chief executive, Andy Ransom, in 2013 the company is now concentrating on its three core business; one being pest control and it has divested a large proportion on non-core activities.

With funds clearly available for mergers and acquisitions, Rentokil has been on something of a spending spree.

Take North America for example, in the last three years it has acquired 97 pest control companies, the most significant being Steritech in 2005 for \$425m. Today Rentokil stands as number three in the US servicing market. In February 2017 a joint venture with PCI Pest Control Ltd in India was announced. A 57% stake was acquired in the new joint venture making Rentokil the largest provider of pest control services and products in India.

Across the globe, 54 companies have been acquired since 2016. At home in the UK, a significant purchase in January 2017 was Cannon Pest Control (part of the OCS Group).

Sweden's Anticimex also growing

Founded in Sweden in 1934, Anticimex only took its very first hesitant steps towards an international presence in 1973 with the launch of Anticimex in Norway followed by expansion into Denmark, Finland, Germany and the Netherlands in the 2000s.

Since then its rate of globalisation has picked up and Anticimex is now the world's fourth largest pest control servicing company with 142 branches in 17 countries. With its recent US acquisitions, Anticimex is now one of the top 15 servicing companies in the USA.

Asked about the company's future international plans, Ola Nordh, head of mergers & acquisitions for the Anticimex Group said: "Our ambition is to be become the global leader in pest control and M&A is a core component of our global growth strategy. Anticimex does not have any presence in the UK but we may decide to enter the UK market at some point in the future."

Far from a one way street

Whilst the US pest control market is prime territory to move into as it, alone, accounts for almost half of the world's pest control servicing market, the acquisitions trail is far from all one way.

America's largest pest control organisation, Atlanta-based Rollins, via its subsidiary Orkin, has not only been acquiring US companies, but has also set its sights on global markets.

Traditionally Orkin's business model has been one of franchises which now extend to over 70 separate franchisees in more than 45 countries, including 12 in China. This makes Orkin the number two global player.

A new approach has been the acquisition of established companies. In Australia, for example, the acquisitions have been highly strategic: first Allpest the leading company in Western Australia, followed by Statewide in Victoria and, last year, Murray Pest Control, the premier company in South Australia. In Europe a bridgehead was established with the acquisition of Kent-based Safeguard Pest Control in June 2016.

Merger mania by manufacturers

There has been a flurry of corporate growth by acquisitions and mergers within the manufacturer sector.

The three mega-deals currently on the go are:

- Bayer's (Germany) \$66 billion bid for Monsanto (USA);
- ChemChina's (China) \$43 billion bid for Syngenta (Switzerland);
- DuPont-Dow \$60 billion merger of equals (both USA).

From announcement to completion can take many months as approval has to be sought from the various government agencies.







Completion is due by the end of 2017 for all three of these deals.

Readers could be forgiven for wondering what the relevance is to them of such enormous corporate deals, but don't forget the majority of the chemicals used in professional pest control are developed and marketed by these organisations. Use within our sector is very much a 'specialist area'; basically a spin-off, or extended use, of an active ingredient developed for the far larger agricultural market. The risk is always there that these 'specialist market sectors' are simply spun-off in their entirety.

Challenge of new pest threats

Speaking about the challenges faced by new pest threats at PestWorld 2016, Jeff Cox, global head of Syngenta's Lawn & Garden business sector said: "At the heart of the matter is the acute need for new active ingredients to control rapidly evolving pest and vector borne diseases. Yet, as an industry, we face key strategic challenges.

"The number of companies with the investment power and resources to conduct research and development (R&D) is falling. At the same time, the costs of R&D are increasing as the requirements of regulators become increasingly challenging.

"Regulatory pressures have also impacted agricultural R&D. The increased costs of developing insecticides and other pesticides to meet regulatory standards often results in products with a narrower spectrum of control. This, in turn, makes it increasingly unlikely that agricultural product R&D will generate spin-offs for the pest control industry as they have in the past.

"On average, it costs \$280 million to research and develop a single active ingredient. At the manufacturer level, professional pest management is worth approximately \$2 billion, so even if we invest at 10% of sales, that only yields \$200 million for the total industry R&D. However, as a company, Syngenta has made a commitment to invest in specific R&D for professional pest management," he concluded.

On a more modest yet international scale

Not quite up to mega-multinational levels, but the recent acquisitions by the USA-based Curtis Gilmour Group is noteworthy. Since 2016 the company has added Wales-based AgriSense, and Silvandersson from Sweden to its original portfolio of

B&G Equipment and Curtis Dyno-Fog, both located in the USA. This has made the company a significant supplier on the global stage.

Closer to home, the Pelsis spending spree is likely to continue as it was announced on 25 August 2017 that LDC (part of Lloyds Banking Group) has backed a management buyout of Pelsis, in a multi-million-pound deal.

Pelsis currently operates across 11 locations in Europe, Asia and North America and supplies customers in more than 80 countries. This latest investment will support the acquisition of further assets in the pest control marketplace, building on the past acquisitions of brands including Insect-O-Cutor, Network, Edialux and Pest-Stop.

To conclude

So in both the service and manufacturing communities it is the multinational company that is increasingly dominant. Decisions are being taken further and further away from customers and employees with day-to-day knowledge and understanding of the business.

As can be seen from the comments by Jeff Cox from Syngenta, these decisions are being driven by factors outside of the control of the pest management industry, yet they are likely to have a significant impact upon it.

However, these international consolidations do lead to the interchange of personnel and ideas between countries, bringing new and innovative ideas and products with them. Pest management as a market is neither immune to this increasing internationalism nor to the increasing dominance of larger players. Looking on the bright side, this industry is still a long way from the dominance of a few single players, unlike in the multinational telecoms market!







New era begins

It's all change for PestTech in 2017 and the final details are still to be released. Here's what we've found out, so far, about the new PestTech.

PestTech has changed. Whether that's for better, or for worse, remains to be seen but on the plus side, there's an impressive new venue. It's the Coventry Ricoh where, as football fans will know, Coventry City plays and, for those happier with an oval ball, it's also home to the Wasps Rugby Club.

The timing has change too. This popular one-day event is a week later than usual, so be careful to mark your diary for Wednesday 15 November, ten days after the bonfire fireworks, which usually coincide with the event. This isn't a deliberate switch but one imposed on the organisers, The National Pest Technicians Association (NPTA), by the Ricoh. To be fair to the Ricoh management, the snooker, which took their original date, is no doubt a more lucrative event for them in bonfire week.

Follow signs to Ericcson Hall 2

The PestTech 2017 exhibition will be in Ericsson Hall 2 with the associated seminars held in the Ricoh Business Suite on the first floor. The exhibitors will no doubt welcome the easy access and the extra ceiling height compared to the old National Motorcycle Musem venue and offering them plenty of room to 'strut their stuff'.

For those wanting to hold business meetings during the event there's also plenty of room in the Ricoh's cafes and bars. Parking should be easier too, although do be careful to follow the signs for Car Park B, otherwise you could be in for a nasty shock on departure.

As before, PestTech 2017 will be free to enter and you can pre-register to save time on arrival. Don't be fooled by the PestTech website which, at the moment, says pre-registration is now open but offers no link. Just go to www.pesttech.org.uk/contact-us/ and you can complete the online form.

The exhibitors

Most of the usual suspects are exhibiting with a few new faces and some companies returning to the show, presumably to check out the new venue. First timers we've spotted on the exhibitor list which is printed left as at 10 October are:

- Octavius Hunt Europe's largest manufacturer of smoke pesticides based in Bristol;
- The Forces Group FM which includes Pestforce (UK) a network for pest control and environmental technicians;
- BRC SAS a French manufacturer of Electronic Fly Killers. The company also attended PestEx for the first time in 2017;
- DOA Italifters lifting equipment supplies;
- Rundlebeck Art & Taxidermy.

And returning to PestTech are:

- Jones & Son Devon manufacturers of bird spikes and other deterrents;
- County Workwear suppliers of quality uniforms and other workwear suitable for corporate branding.

| Exhibitor | Exhibitor | |
|--------------------------------------|--|--|
| 1env Solutions | Killgerm | |
| Agrisense | Kness | |
| Airgun Training & | Lantra | |
| Education Organisation | Lodi UK | |
| Barrettine | National Working Terrier Foundation | |
| BASF | | |
| BASIS PROMPT | NPTA | |
| Bat Conservation Trust | Octavius Hunt | |
| Bayer | PelGar International | |
| Bell Laboratories | Pelsis | |
| Blattodea Culture Group | Perdix | |
| Bower Products | PestFix | |
| ВРСА | Pest Management Alliance | |
| Bradshaw Bennett | Pest Trader | |
| BRC sas | PestWest | |
| Cliverton Insurance | Rat Pak | |
| Colin's Traps | Rentokil Products Roythorne Solicitors | |
| County Workwear | | |
| Campaign for Responsible | RSPH | |
| Rodenticide Use | Rundlebeck Art & | |
| Doa Italifters | Taxidermy | |
| Forces Group FM | Russell IPM | |
| Hockley International | ServicePro | |
| Huck Nets | Service Tracker | |
| Inspector Pipes | Syngenta | |
| International Herpetological Society | WaspBane | |
| International Pest Control | W F Fountain Insurance | |
| Jones & Son | Woodstream | |
| | | |

New products

Evhibitor

Many companies hold back new products for launch during the show so there's bound to be plenty new to see.

Here at **Pest** we know that Pelsis has something up its sleeve, so be sure to check out the Pelsis display.

On the Barrettine stand, we hear that Jim Steele's new rat trap – the Ratgon – will be on display. Ratagon was featured in

Pest 51: June & July 2017 when we reported that inventor Jim Steele had won a £60,000 business support package to develop what he describes as a rat trap that brings trapping into the 21st century. That's got to be worth seeing.



Getting to the Ricoh

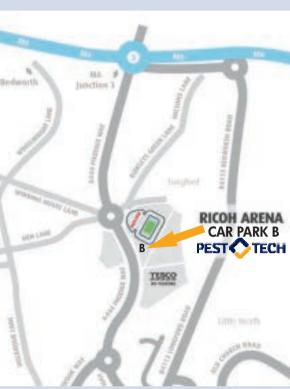
The Ricoh Arena is accessible from the M6 Junction 3 and also from the M40 junction 15. The post code is CV6 6AQ

To get to M6 Junction 3:

- From the north use the M1 and M69 to join the M6 at Junction 2;
- From the north west take the M6 southbound:
- From the south east use the M1 to join the M6 at Junction 19;
- From the east use the A14 to join the M6 at Junction 19.

From M6 Junction 3

Leave the M6 at Junction 3. Take the 2nd exit onto the A444 (signposted Coventry). At the next roundabout, take the 1st exit onto Rowleys Green Lane, then at the next roundabout take the 2nd exit onto Judds Lane to arrive at the Ricoh Arena.



From the M40 Junction 15

Take the A46, Warwick Bypass signposted Coventry. Continue to join the A444. Be in the left hand lane signposted City Centre to join London Road, the A4114.

Continue to the Ring Road. Stay in right-hand lane and take 2nd exit onto the Ring Road.

Leave the Ring Road at junction 3 and at take 2nd exit from the roundabout onto Sky Blue Way. At next roundabout, take 1st exit onto A444, signposted Nuneaton.

Stay on A444 over several roundabouts until you see the Ricoh Arena on your right. At the roundabout adjacent to the Ricoh Arena take 3rd exit onto Rowleys Green Lane, then 2nd exit onto Judds Lane to arrive at the Ricoh Arena.













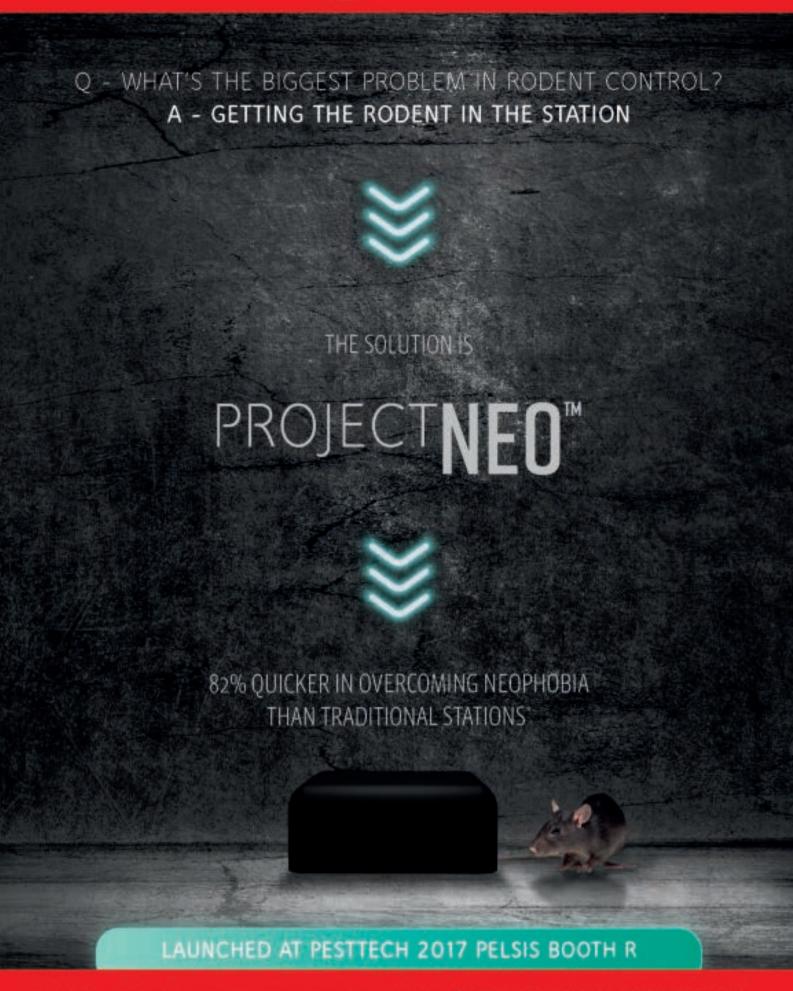




Seminars all in the Ricoh Business Lounge

| Schillians all in the kicon basiness Lounge | | |
|--|--------------------------|--|
| Keep up-to-date | Wednesday 15 November | |
| The industry moves on: Where are we now? Update from The Pest Management Alliance & BASIS PROMPT Setting the standard: Update on NPTA accredited membership | 09.45 - 10.15 | |
| Pest Control News workshop Controlling house mice in the food industry by Chris Swindells, Acheta Consulting Changes surrounding aluminium phosphide by David Cross, Rentokill | 10.30 - 12.00 | |
| Emerging pests by Dr Matthew Davies, Killgerm UK | 12.30 - 13.15 | |
| Flies on waste; changes and challenges by Clive Boase, The Pest Management Consultancy | 13.30 - 14.15 | |
| Invasive species by Chris Woodard, Pest Control Services | 14.30 - 15.15 | |





Mind the gap Is a lack of talent stifling our industry?

Research by **Pest** magazine suggests that recruitment is becoming a real issue for many professional pest control businesses. Is this skills gap now at such a level that its hampering growth or, worse, endangering service levels? What can be done to attract new talent into our industry?

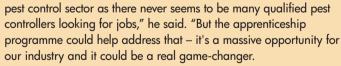
Research by **Pest** magazine has revealed that many pest control businesses are finding it increasingly difficult to attract quality frontline staff. Because of this many are turning instead to raw recruits – investing substantial amounts of both time and money to train people new to the sector.

At the same time, plans for a new apprenticeship scheme in pest control are well advanced. The new scheme is being developed as part of the Government's Trailblazers project. Could it provide a long-term solution to the skills gap?

Phil Halpin, a member of the

Apprenticeship Employers
Development group set-up by the
British Pest Control Association
(BPCA) to develop the standards
and assessments for the
apprenticeship, describes the
move as a major step forward for
an industry he says is gripped by
a shortage of skilled technicians.

"There are definitely issues with the supply of labour within the



"There has never been a traditional route into the sector, so the skills gap is nothing new. But this could open up new avenues and mean professional pest control can market itself to a different audience. Hopefully, once it's up and running, the scheme will deliver what

we've needed for years – new people coming into the industry, but assuring quality is key."

Changing perceptions

Phil, who runs Reading-based Countrywide Environmental Services and is also Vice President of the British Pest Control Association (BPCA), hopes the scheme will help change the perception of pest control as a potential career.

"Pest control can sometimes be perceived as an unusual profession, and perhaps it's not the first job on people's wish list. But I think the sector undersells itself quite a lot – after all, pest controllers save lives, prevent disease and contamination, and have a vital role in protecting public health.

"We need to change the way people think and get those messages over to people considering their next career move, whatever their age. We need to sell the benefits of a career in this trade to potential candidates and this apprenticeship programme could play a significant part in that," he concluded.

Creating a recognised route

Adam Hawley, managing director of Guardian Pest Control and chairman of the National Pest Technicians Association (NPTA), agrees the scheme could be an important step towards creating a recognised route into the industry.

He said: "There's a massive skills shortage within pest control because nobody with any knowledge is coming into the industry at a young age.

"There's just no formal route through which young people can join the sector with at least some knowledge or qualifications and that's a key issue for me.

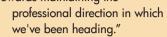


Phil Haplin

OPINION Attracting talent

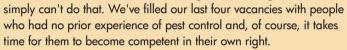
"If there was a recognised apprenticeship scheme across the UK, it would mean there was almost a production line of new talent coming along all the time. It might take a few years to have a significant effect, but it would be an important

step towards maintaining the



Lincoln-based Guardian is among a growing number of companies which have switched to employing individuals with no prior knowledge of the trade.

Adam explains: "We would like to take on new staff who have the skills and experience to hit the ground running, but we



"I don't think the skills shortage is a new problem, it always seems to have been that way. But at least it seems that the industry has now sat down and worked out what to do and how to go about improving things."

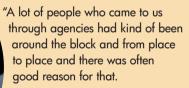
Attracting quality staff is hard

Adam Hawley

Chris Davis, technical and training manager for Croydon-based Cleankill, agrees lack of quality within the job's market is an issue.

He said: "I do find it difficult to attract quality staff combining

both technical knowledge and excellent people skills.



"Because of the difficulties we've had in the past, we're now moving towards choosing candidates based on their attitude, personality and

communication skills rather than pure experience or ability.

"Obviously they're then subject to a training period and won't be fully up to speed for a while so it takes a lot longer.

Creating a larger pool of talent

Chris Davis

"An apprenticeship scheme has been talked about in the past. It could certainly help bring new people to the industry and ensure there was a larger pool of candidates from which employers could choose."

Cleankill now regularly takes on staff with no prior knowledge of the trade, as Chris says that's something that can work surprisingly well.

"We then put them on a training programme where they work alongside experienced staff and learn about rodent control, biology, health and safety etc before taking the RSPH Level 2 in Pest Management course.

"It takes time to do it that way, of course, but you end up with the right person in the right job at the end of it and it's a policy which has worked well for us. The trouble comes if we ever need to replace an experienced member of staff quickly – in that situation,

you don't always have the luxury of time to train from scratch.

"We use recruitment agencies and advertise on the BPCA website, but we'd love to see more genuinely talented and committed candidates come through our doors," he concluded.

Dave Perrett, operations manager at Rokill, admits his options for new staff are often hindered by a 'limited pool' of talent and he is another manager who has moved towards a 'people first' policy.

He said: "It's very difficult to find high-quality people with pest control experience and you can spend a long time doing so without necessarily getting the right one in the end.

"So, we now look at the qualities of an individual before anything else,

regardless of their employment history. It means that once the training period is over and the courses are passed, we end up with the ideal candidate."

Rokill, based in Hampshire, has no problems in attracting inexperienced candidates for pest technician roles.

Advertisements on internet-based

jobs boards typically attract around 100 applicants with a record of more than 250.

High retention rates

Dave Perrett

But perhaps that's not surprising when you learn the company ensures its investment in staff is rewarded with high retention rates.

"We operate a six-tier grade system which means our employees are generally incentivised and rewarded," said Dave. "They move on to higher salaries and more challenging work the higher they move up the scale and that seems to work very well."

More recent phenomenon in Wales

The skills shortage seems to be more of a recent phenomenon in Wales, where recruitment at Abergavenny-based P&P Pest Control has become increasingly problematic in recent years.

Joint owner Phil Smith said: "We find it very difficult to find the right people these days and it's definitely less straightforward than it used to be. We look for people with both academic qualifications and practical experience but often that person simply doesn't exist, in our area anyway.

"Salaries are not the issue and our staff retention is very good – I think we've lost only three members of staff in 20 years. But

on and the second secon

Phil Smith

it's not a glamorous job and young people looking for a career seem less likely to choose pest control, or a practical career in general, than they used to."

Academies not apprenticeships

Phil believes academies, rather than an apprenticeship scheme, could be the answer. "If there were academic institutions somehow linked to pest control, departments or even just courses within existing colleges, that might help to create a fresh source of talent."



Recruitment at the top end of the pest control ladder has also changed in recent years according to Dr John

Simmons, of Acheta Consulting, which provides inspection, training and consultancy services primarily for

food manufacturers.

Having advertised via the more traditional routes and desperate to find suitable candidates, John advertised one recent vacancy in the Polish edition of Pest Control News - and still received no response.



He said: "Attracting new staff has become noticeably more challenging over the last few years. We're fishing from a small pool as we're looking to turn experienced pest controllers into technically excellent field biologists, but the response when we advertise vacancies is often much smaller than it used to be and, in some cases, non-existent.

"If there's a choice of two suitable candidates, then it's a very good result – but that's not usually the case anymore. Perhaps people are happier to stay where they are these days or rate job security higher than they once did, I don't know.

"The quality of technical staff applying for jobs also seems to have decreased in recent years – that could be down to a lack of training and development within pest control companies themselves."

Training from scratch

The pest control job's market is anything but fluid for Leeds-based

Precision Pest Management, which takes on both technicians and field biologists. Boss Sarah Ayers finds applicants properly qualified to fill either role scarce and tends instead to train graduates from scratch 'before they get bad habits'.

"There are always a lot of unskilled candidates for any job we advertise but skilled people are much more difficult to come by," she said.



Sarah Ayers

"The introduction of a requirement for professional credentials by bodies like the BPCA has been great news for the industry as it has raised the bar all round.

"It has meant every company needs to ensure and demonstrate the quality of its workforce, so we spend a lot of time and money providing on-the-job training and sending people on courses.

"The apprenticeship scheme could be a really positive move for all employers, helping to increase the number of those with a basic qualification."

A passion for pest control

Grahame Turner, technical and training manager for Mitie's nationwide pest control business, believes that while apprenticeships will be a 'valuable and progressive' new route into the industry, a lack of trained staff is not necessarily the key issue for the pest control sector.



"There are plenty of people undergoing excellent and extensive specialised training with existing companies," he said.

"The biggest challenge is identifying candidates at interview with the right attitude, aptitude and passion for pest control who will stay in this highly skilled, yet competitive industry once they are trained."

Performance-related bonuses

Staff retention is of paramount importance at Mitie, which has introduced performance-related bonuses to help ensure its technicians remain incentivised. The company has even developed its own 'IPM' (Intelligent Pest Management) app that provides customers with great reports and at the same time provides employees with an at-a-glance picture of their accumulating rewards and encourages them to engage with the business.

Recruitment and retention manager, Karen Gooch, said: "We want our staff to be fully trained and competent to ensure they have the ability, along with the tools, to deliver a 'first-time fix' which is obviously good for the customer and ourselves as a business.

"This system encourages our technicians to get it right first time and has had a dramatic effect on performance. Since IPM was introduced, bonuses have gone up whilst infestations have gone down. It's a win-win situation.

"We've actually found there are lots of trained technicians on the market, but that not all are necessarily right for us. Of those who typically reply to our job adverts, I'd say only five per cent are technicians who work for a competitor.

"People new to the industry, with skills relative to the role of a pest technician often arrive with a better mind set. If they're interested, keen to learn, good communicators and at least relatively local, that usually stands them in good stead to become an effective and efficient technician.

"We pay good wages and provide a great support network including in-house training, technical tools, products and equipment and we ensure they have the customer service skills they need.

"We have the processes in place to ensure they're assessed against set quality targets and with support and monitoring, they have the ability to reach goals and reap the rewards," concluded Karen.



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Much ado about moleing

In the last issue of **Pest 52**: August & September 2017, we reported on the call by Oxford University's Dr Sandra Baker for all mole traps and rodent break back traps to be 'welfare approved'. The article prompted rural pest specialist Dave Archer of DKA Pest Control to send this response about mole traps. It's a practical, field-based viewpoint based on his 40 years of mole-catching experience and contains some forthright opinions on the humaneness and effectiveness of different mole trap designs.

In previous articles I have stated that pest controllers have an absolute duty, both legally and morally, to ensure the work they carry out is performed as humanely as possible. It is reasonably easy for a pest technician to ensure his work is carried out humanely when the control is above ground, as results are visible; but when trapping is carried out underground, I suggest welfare issues are not considered of such importance as they should be.

When it comes to mole trapping, do we have any influence on humaneness? The answer is most certainly yes.

It is reasonably easy for a trapper with the correct training to set mole traps and get results. The trapper may well be pleased when, upon unearthing a trap, a mole is discovered dead within it. Of course that is the intent; to catch a mole. But consideration must be given to the likely timescale from being struck by the trap to the time of death (or, to be more precise, irreversible unconsciousness). Obviously the time delay before the animal becomes unconscious should concern us all.

As I have been mole trapping professionally for 40 years, I feel I have some relevant knowledge in this area.

on Cruelty to Wild Animals, rodent breakback traps and mole traps were exempted from the need for welfare approval introduced by the Pests Act 1954.

Five years ago Dr Baker and her team at the Wildlife Conservation Research Unit, at Oxford University's Zoology Department, completed some research on the mechanical performance of these unregulated rat, mouse and mole traps (see **Pest 24**: November & December 2012). This work did not address the area where such traps are likely to strike the victim and therefore no individual traps could be specifically recommended as being more humane than others (see page 11 in this issue). It did, however, measure both the impact momentum and clamping force produced by





In my opinion the process of humaneness begins not only with the selection of the trap type, but also the individual design and quality.

Inferior copies are bad news

Many inferior copies of mole traps are available. These are not only inferior in quality of materials but also in design.

Those who begin their mole trapping services with a certain type of trap are reluctant to change. However, the basic principles of mole catching and the setting of traps is fairly universal and once a trapper attains results with one style of trap it is relatively easy to change type.

I use many different types of trap depending upon individual circumstances. Sometimes trap choice isn't even a conscious decision: you instinctively choose the trap most suited to the situation. The lie of a run, its location, soil conditions, even the weather, has a big influence on trap choice.

In trapping campaigns of the early 1980s, the trend was for scissor type traps. On an amateur basis this is still the case. The design is simple and setting is reasonably straightforward; but that doesn't mean that it is effective. Skill is needed in the location of the trap and setting it in a mole run.

Since the mid 1990s a growing number of pest professionals have taken to using the Duffus or 'Half Barrel' type mole trap. With this trap it is more difficult to set the triggers and set it in a mole run. In general this is why the public still prefer to use scissor type traps.

The following list itemises the most common traps available and my comments on their effectiveness at providing a clean kill.

Duffus or Half-Barrel trap

This is the trap most used by professional mole trappers. It is favoured as it has the potential to trap two moles (one from each end) at any one time. No other trap on the market has this unique capacity. The design is a fairly standard metal half-barrel with catching hoops, trigger wires (mumble pins) and springs. The quality of these traps range from very poor with inferior metal and weak springs to top quality stainless steel actions and springs. The quality of the barrel can be tested by simply attempting to crush it as you would a soft drinks can. Some will crush extremely easily, whist those with stainless steel barrels are very difficult to even flex. Setting the trap and springing it in a test situation will also show how well or poorly the springs perform. Of course the weaker the spring the weaker the action, ergo the weaker the impact on the mole and most likely the slower the kill when sprung.

However, I do have a welfare problem with these types of traps. They may be effective at trapping the mole but they are not efficient in their strike area delivery. The big problem I have with them is that they often catch moles around the abdomen. However hard the catching loop strikes, it will only serve to leave the mole dangling from the underside of the trap. For those who trap intensively on farmland, or where large numbers of moles congregate, it is not unusual to hear your traps spring, especially on a still day. I accept it is only a field test but on many occasions I have pulled a Duffus trap out of the ground after hearing it spring and have found a hapless mole, still alive, in the aforementioned position. I know from experience that it takes around ten minutes or more for the mole to succumb, and I cannot state that my conscience is wholly clear after watching this unhappy scenario.

For those who trap using Duffus traps and find a mole in the trap whilst extricating it, do not assume it died a quick death if it was caught around the stomach to rear legs area: It certainly did not. There are those who state that it is a simple matter to adjust the mumble pin to catch the mole further up the body, but my point is that the standard trap set without any modification will not strike in the vital organs. I have had such concerns regarding this issue that I have visited a trap manufacturer to see if the trap could be constructed with the mumble pin (the hoop that is pushed by the mole to trigger the trap) set closer to the catching loop, thereby ensuring the mole is struck around the vital organs and upper chest area. Apparently, due to the physical attributes of this trap, it is not possible to change its design, or even reduce its overall size.

Scissor type (claw) mole traps

For most one-off, or amateur trapping campaigns, this is the trap of choice. Setting it is a relatively straightforward exercise and it is perhaps the easiest mole trap to set. However, as with the half-barrel trap it really does depend on your trap design. Cheap imitations with chains, spikes on mumble pins and serrated edges to the jaws may look impressive to the uninitiated but they are totally impractical. In addition, size does matter here. A small trap with a powerful spring is always going to sit in the mole run far easier than some huge wide-jawed foreign import.

Although scissor traps are not de-rigeur with many professional trappers I feel this is where, with respect, trappers are missing a trick. Many trappers will simply discount the use of scissor traps, as the two top forks of the scissors sit proudly above the surface of the soil and advertise the mole trap to all and sundry. However, I am a great fan of the Fenn scissor mole trap as illustrated on page 31 due to its small size, the fact that it

does not have forks, more of a flat bar which can easily be hidden in the soil or grass when the trap is set. It can be a very effective trap, which I find provides a strike to the upper body or head in all cases.

There is some experimental evidence that scissor traps may be a bit more likely than Duffus traps to catch moles around the thorax (the majority of Duffus traps caught moles at the abdomen, whereas scissor traps were about equally likely to catch at the abdomen or thorax), but nevertheless 2015 research by Dr Baker showed that the main identifiable cause of death in both scissor and Duffus-trapped moles was acute haemorrhage. Unfortunately it wasn't possible to estimate how long it took these moles to become unconscious or die, but shockingly – none of the moles examined in the research had damaged skulls or vertebrae - even when externally it seemed that some of their backs were broken.

Putange mole traps

These traps, originally of French design, are in my opinion the most humane mole traps of all. The trap design is simplicity itself and traps are often sold for under £2 each. A mole struck by this trap is always hit hard on the upper body or head. One can tell the impact of such traps as the mole is often found with front paws crossed over in the trap and a distinct line in the fur where the bars have struck hard. Putange traps are not easy for novices to set, and a degree of trial and error in the initial stages of attempting to set the trap should be expected. The real benefit of these traps is that the soil around the trap is never disturbed, as the trap simply slides down the run. The mole is rarely suspicious of this trap and a good success rate can be achieved. The downside is that the mumble pin needs to be tied to the trap or else it is lost upon the trap springing. Another drawback is that two traps need to be laid facing in opposite directions, ensuring the mole is caught from



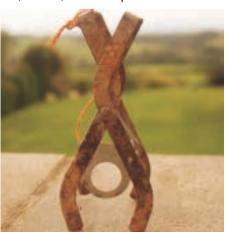


whichever direction it enters the trap area. In addition, a peg needs to be inserted in the trap loops when laid in position to ensure they stay secure. The final drawback is that the traps have to be physically removed from the ground to check if a kill has been achieved. In reality this is far less complicated than it may sound.

I find that flattening all molehills in an area will give a clear indication upon returning to the site as to whether a kill has been achieved. No new hills normally means no more moles! Putanges are perhaps the best traps at being disguised in the ground. If it is in an area of high theft risk (public open spaces etc) the traps are well nigh impossible for the public to discover. Of course this can also be to the mole trappers detriment, as without some form of trap identification the traps can easily be lost! Putange traps soon lose their initial power, so regular replacement is required.

There are other 'American style' Putange traps, with a broader base to the catching prongs. They work on the same principal as the original design.

Again, a small trap, which has the loops facing down into the run as per the Duffus style trap. The loops are longer than in Duffus type traps, which in my opinion gives more of an impact upon the mole when struck. The main body of the trap lays flat on the surface of the run. I find these traps catch the mole higher up the body than certain other traps and therefore I have more confidence in their initial killing capacity. A small sprinkling of loose soil on top of the trap avoids detection by passers by. Being a small trap, much less soil needs removing to set the trap into the run. Incidentally, don't always blame human interference or theft when traps go missing! Foxes and badgers can, and do, remove traps when a mole is



The underrated and excellent Fenn scissor mole trap made in Britain by DB Springs



A selection of traps. From left, back row: Talpex, Duffus and Fenn; middle row: Nash Choker loop and, at the front, two Putange traps and setting tool

caught in them. Certain rogue foxes that frequent areas where I trap are very adept at removing traps. Often on farms where there is no human interference I have found the trap on the surface with what is left of the remains of a mole still pinched in between the catch bars.

Talpex traps are useful for trapping shy moles. The one drawback is that they are very large in comparison to some of the other traps mentioned. Setting a Talpex is a reasonably easy operation. Normally, very fine loose soil is sprinkled over the mumble pin and into the run. When the mole arrives at the trap it assumes the tunnel has collapsed and therefore enters with a degree of confidence. The trap is sprung when the mole attempts to clear the loose soil. It is a strong trap due to the spring power and width of the jaws.

To conclude i

I hope this article gives an insight into mole traps and their effectiveness from a trapper's viewpoint. The list is not exhaustive. There are other traps which I have not included as I have no experience with them. It is not scientific, but from a layman's perspective a good check on the effectiveness of a mole trap is when your finger gets caught in the catch bar! On a 1 to 10 scale of the victim's swearing level, the Putange gets a 'firm' 10!

At the end of the day though the only way to properly identify which traps are most humane is through killing trials, such as those done by the Animal and Plant Health Agency to test and approve regulated spring traps. Dr Baker has proposed this testing/approval service should be used by manufacturers of unregulated traps for moles, rats and mice, through a Voluntary Trap Approval scheme. Perhaps the best thing we mole trappers can do to improve the humaneness of our traps is to support this venture and then, if it is successful, to buy only traps which have been approved?

In my next article I will give tips on how to achieve an effective kill when mole trapping. The choice of trap may go some way to achieving this, but there are other factors that can be deployed to achieve success.

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Protecting our borders &

Will the UK be able to keep invasive mosquito species such as Aedes albopictus, Culex modestus and Aedes japonicus out? Following up on a paper given at the International Conference on Urban Pests (ICUP), **Pest** caught up with Public Health England's Alex Vaux to try to get some answers.

Pest professionals must continue to play a pivotal role within the surveillance programme set up to protect Britain's borders from the threat of the Asian Tiger and other invasive mosquito species.

That's the message from Public Health England (PHE) after evidence of the invasive Asian Tiger mosquito (Aedes albopictus) was found for the second time in the UK.

Alex Vaux, a medical entomologist at PHE, says the discovery in Kent in July this year demonstrates the effectiveness of the strategy put in place to monitor the species.

But he has warned further incursions are still 'highly likely' and says pest professionals are in pole position to help ensure this mosquito, now well established in mainland Europe, does not gain a foothold in Britain.

Surveillance network set up

The surveillance network was first established at ports in 2010 and at service stations at least two years before the first ever eggs from the mosquito – which can carry vector-borne diseases such as chikungunya, dengue fever and, of course, zika – were discovered at a service station in Folkestone in September, 2016.

Led by PHE's Medical Entomology and

Zoonoses Ecology group, the surveillance network is designed to ensure populations of the species are detected as early as possible and eradicated swiftly.

The multi-faceted strategy features active methods designed to target particular locations and passive methods providing a means for relevant groups, including the professional pest control industry, to submit samples for identification.

Mr Vaux said: "Densities of these non-native mosquitoes are increasing within a few hours driving distance of the English Channel so it can be expected that adults of the species will be transported into the country more frequently in future.

"Surveillance at key points of entry remains vital along with a

defined and actionable control strategy to ensure populations are eradicated swiftly upon detection.

"It's vital for pest

professionals to act as a key line of defence in identifying any further incursions and in any eradication programmes that might follow.

Public Health England's Alex Vaux speaking at the recent

International Conference on Urban Pests (ICUP) in Birmingham



FEATURE Keeping them out

"Another important factor is the ability for pest controllers, environmental health officers and members of the public to be able to submit mosquitoes they find to a central point for identification.

"Passive schemes have been used to great effect in Europe and the Mosquito Recording Scheme run by PHE, undertakes this important work here in the UK. Since 2010 this includes the Mosquito Watch scheme that many readers may remember was set up in 2004 by the Chartered Institute of Environmental Health's (CIEH) National Pest Advisory Panel (NPAP) and Killgerm.

"Further development of the citizen science element of surveillance is necessary to strengthen our ability to detect new mosquito species.

"But an active network, including working with professionals at major ports of entry across the country, remains a vital component of the UK's preparedness for incursions of key vectors," said Alex.

Heightened alert

Native to South East Asia, the Aedes albopictus mosquito has spread to Europe through the transport of goods such as used tyres and wet-footed plants. It's a day time biting species so no protection is offered by bed nets. Listed as one of the top 100 invasive species, globally, it's now firmly established in Italy and its presence in northern France has put Britain on heightened alert.

As part of its active surveillance network, PHE operates detection points at more than 30 ports and airports throughout the UK, at motorway service stations and on main routes from the south coast. Indeed it was through focusing on points of entry and high-risk goods that the latest incursion was discovered. Eggs and larvae from the Asian Tiger mosquito were found in oviposition traps at Ashford International truck stop.

Eradication work was carried out by the local authority and subsequent searches of the area revealed no further evidence. PHE has continued to monitor the area.

Effective system - so far

Alex describes the outcome in Kent as a great example of how the surveillance system can be effective and said methods would need to be similarly robust in future to ensure early detection.

Eggs from the Asian Tiger are frost tolerant and could therefore survive in northern Europe, while climate change predictions suggest southern England will soon become a suitable habitat for the species.

He added: "Incursions of invasive mosquitoes are likely to increase in number over the coming years, as Ae. albopictus increases its

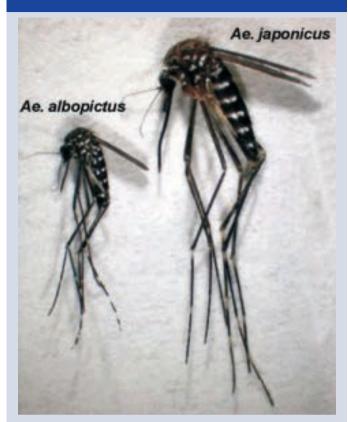
West Nile Virus vector resident in southern England

In his presentation at the International Conference on Urban Pests 2017, Alex Vaux also highlighted research from 2010 by colleagues at PHE working with the University of Greenwich. This work showed that *Culex modestus*, a known vector for West Nile Virus (WNV), was resident in the North Kent Marshes.

International shipping may well have been the route of introduction as it has previously been implicated in the introduction of Cx. modestus to China and there are plenty of shipping terminals in the vicinity of the North Kent Marshes.

All the mosquitoes tested negative for WNV, however the presence of this species does increase the risk of a WNV outbreak in the UK.

Keep an eye out for these two



Aedes japonicus and Aedes albopictus are both black and white mosquitoes but Aedes japonicus is much larger. If you find either of these then please contact PHE via www.gov.uk/guidance/mosquitoes-how-to-report or by email at mosquito@phe.gov.uk

northward spread through Europe

"Another species of concern is Ae. *japonicus*, an invasive mosquito that has recently established in central European countries including France, Belgium, the Netherlands, Germany and Switzerland, following introduction and spread through similar routes to Ae. *albopictus*.

Speaking at the International Conference on Urban Pests (ICUP) in July, Alex explained how Aedes japonicus has become established in central Europe, Belgium, parts of Germany, The Netherlands and northern France. This mosquito is a vector of West Nile Virus, Japanese encephalitis and a number of other diseases.

"With climate and land-use change, importation of vectors and pathogens increase the potential for the establishment of invasive mosquitoes and vector-borne disease. The potential for further incidents brings home the importance of a strong surveillance network."

The Asian Tiger mosquito has black and white stripes on its abdomen and legs, yet identification can be tricky.

"There are a number of similar-looking but naturally occurring species and there are quite a few false alarms from people who mistakenly claim to have found them," explained Alex.

Those who do suspect a discovery of this, or any other invasive mosquito, are urged to contact PHE direct via www.gov.uk/government/collections/mosquitoes or email mosquito@phe.gov.uk

Mossie monitoring and control in practice

Active surveillance for invasive mosquitoes focusses on high risk goods and points of entry. Today some 37 of our airports, ports and 'most at risk' motorway service stations are being monitored. Surveillance is also conducted at the country's two biggest importers of used tyres, one in Devon and one in Lincolnshire, as trade in used tyres is known to have provided transport, albeit inadvertently, for Aedes albapictus eggs across the globe.

The monitoring approach varies.

- The Gravid Aedes trap (GAT) from Biogents in Germany has been chosen for work at airports and ports. It specifically targets Aedes species and is easy to use. Traps are sited close to key areas such as cargo inspection areas. GATs are also used at Eurostar St Pancras. To prevent tampering the traps are placed inside small dog cages. Wherever possible a powered electrical model with the appropriate lures is used.
- For the motorway service stations, which have proved to be one of the main spread routes in mainland Europe, ten ovitraps have been set-up in the vegetation surrounding the car parks. Polystyrene is used as the egg laying substrate in the ovitraps as it floats. This means eggs never come into contact with the water and therefore no larvae can hatch. Two GATs per service station have been set-up and at one site where access, security and power constraints could be overcome, a powered GAT with lure has been installed.
- Traps are not suitable for the used tyre sites so inspections using dippers, torches and nets are made during August and September.

Traps are checked fortnightly from March to October and monthly in the winter. No invasive species have been recorded at seaports, airports nor used tyre facilities. The rapid turnround of tyres is thought to be the reason for UK used tyre facilities remaining 'invasive-free'.

Control programme

In late September 2016, 37 Aedes eggs were detected in an ovitrap at Folkestone services. This was the first recorded incursion of Aedes albopictus into the UK. Because of the risk that eggs may survive over winter and taking into account the fact that this mosquito cannot fly far, PHE recommended treating, or removing, all aquatic habitat at the incursion site and within 300 metres of the site. The liquid mosquito film Aquatain AMF, distributed in the UK

by Barrettine and also available as the own brand Vazor liquid mosquito film from Killgerm, was deployed by Shepway District Council's pest control contractor, Canon Pest Control.

This silicone-based liquid spreads across the surface of standing water forming a very thin film. The low surface tension of the film prevents mosquito larvae and pupae from breathing at the surface, causing them to drown. It also discourages females from laying eggs. The film remains active for four weeks before breaking down into eco-friendly silicates.

As part of the control programme the local council wrote to all local residents to explain why Canon staff would need access to gardens to spray containers such as water butts where the mosquitoes might have laid eggs. Additional monitoring was



also carried out in April this year.

A similar programme has been implemented following the discovery in August 2017 of Asian Tiger mosquito eggs and larvae at the Ashford International truckstop.

Monitoring locations

Airports:

- Belfast City Airport
- Belfast International Airport
- Bristol Airport
- Cardiff Airport
- Gatwick Airport
- Heathrow Airport
- John Lennon Airport
- Luton Airport
- Manchester Airport
- RAF Akrotiri Airport
- Robin Hood Airport
- Stansted Airport

Ports:

- Belfast Port
- Cardiff Port
- Dover Port
- Falmouth Port
- Felixstowe Port
- Heysham Port & Glasson Dock
- Hull Port
- Ipswich Port
- JSPU Limmasol Port
- Liverpool Port
- Manchester Port
- Newport port
- Portsmouth Port
- River Tees Port
- RN Davenport
- RN Portsmouth

Railway Stations:

Eurostar St Pancras

Services stations:

- Medway Services on M2 in Kent
- Sevenoaks Services on M25 in Kent
- Maidstone Services on M20 in Kent
- Ashford Services on M20 in Kent
- Winchester Services on M3 in Hampshire
- Southampton Services on M27 in Hampshire



Switching to IPM

Integrated Pest Management (IPM) can not only improve success rates, it can also reduce the need for call backs and even decrease the amount of rodenticide required to control an infestation. So says Bayer's technical manager, Richard Moseley. In this article Richard explains why he believes it is important to understand and implement an IPM approach to rodent control.

Integrated Pest Management (IPM) is a phrase that can be misunderstood, so it's important that pest controllers gain a good understanding of the practices involved before implementing such an approach in their daily work.

What is Integrated Pest Management?

IPM encompasses the use of every possible tool or practice that is available to help prevent and control pest infestations. There's a whole programme of tasks involved, it's not about simply putting bait down and leaving it to work.

Indeed in many cases of rodent infestation, toxic rodenticide application will not be the automatic first control step.

Hygiene measures to remove food sources, proofing to prevent pest



Bayer's Richard Moseley sees a place for first-generation anticoagulant rodenticides in IPM programmes

access and good storage practice to remove rodent harbourage should all be utilised when applying an integrated management plan. Doing this successfully however will require good communication between the pest controller and the customer.

Another key aspect to consider in any IPM programme is monitoring. Using a non-toxic bait such as Harmonix Monitoring Paste will provide a vital insight into where rodents are active within



IPM in practice

One pest professional who already uses IPM in his daily work is Carl Porter of CPH Environmental, based in Leicestershire.

Working mainly in large-scale commercial food production sites and high specification factories, Carl uses Racumin Paste as part of his rodenticide rotation in order to gain quick and efficient control within his integrated programmes.

"At the sites that I manage, I've trialled several different baits, and I always find that rodents take to Racumin Paste extremely quickly, because it's so palatable."

Carl explains that although a lot of his work is in secure indoor sites, stewardship is still important.

"Along with the rodenticides that I apply, I always monitor activity with non-toxic bait or a tracking dust. This gives me a good understanding of rodent activity across a site, so I know where and when to put down rodenticides in the most efficient and economic manner," says Carl.



Carl Porter has had good results with Racumin Paste

a site, allowing for a more targeted treatment. If you use products that are similar in type, for example non-toxic pasta, followed by a pasta form of rodenticide, the rodents should be used to feeding on this type of bait formulation and will take to it quickly.

Where a rodenticide is required, first generation products should also be considered. Of course, where resistance to first-generation products is a known issue then a second-generation rodenticide should be the product of choice.

It should not be forgotten that IPM is always evolving as technology and formulations improve, so it's important to stay up-to-date with the latest innovations in the industry and to use them to enhance IPM strategies.

How will IPM benefit pest controllers?

Pest professionals will in many cases already be implementing some form of IPM when following the Campaign for Responsible Rodenticide Use (CRRU) rodenticide stewardship guidelines. These cover the outdoor use of rodenticides with the aim of minimising the impact of rodenticides on non-target species.

As detailed in the CRRU code, a wide range of prevention and control measures other than anticoagulant rodenticides should be considered. By using integrated management such as proofing and trapping, applications can be more targeted and more effective, reducing the effects on non-target species and hopefully allowing the continued use of anticoagulant rodenticides as effective rodent control tools for the future.

With a lower amount of rodenticide being applied, and lower toxicity products actively selected over stronger ones, there's a reduced chance of secondary poisoning to non-target species, which is one of the key areas that the CRRU campaign aims to address.

Knowledge of different rodenticide active ingredients and formulations will help technicians to understand where and when to use certain products, as well as how to best apply them within a site specific IPM programme for the greatest chance of success.

The selection of the right rodenticide formulation within a management programme may help to avoid issues such as behavioural resistance and the avoidance of certain products by the target rodent species.

Traps, monitors and unpalatable formulations can be avoided in some rodent infestations. The application of a contact formulation, such as Racumin Foam, can be incredibly effective as it is picked up by the rodents as they move through gaps and is ingested via grooming. Racumin Foam can also be a useful integrated management tool as it brings a new dynamic to the treatment process that can help control rodents in complicated treatment environments.

The use of management techniques such as proofing and foliage clearance, complemented with targeted control measures, will help to discourage pest damage and allow rodent outbreaks to be controlled, quickly and efficiently. Hopefully, the integrated approach should allow pest controllers to ultimately maximise the value of their contract by reduced likelihood and frequency of call outs and return visits to infestations.



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Dealing with bats

Dealing with bats can often be a tricky issue and one not encountered every day, so these two recently updated leaflets from the Bat Conservation Trust are useful additions.

The first, Living with Bats helps a pest controller, or their customer, identify which species of bats they might be playing host to and where their favourite roosting spots might be. It then advises what should be done once your bat is identified.



The second leaflet, *Bats and Pest Control* is written specifically for pest controllers faced with the problem of bats, or where bats roost. Most importantly it summarises the legal position of this protected species. It advises what to do if other pests are also encountered – such as rodents, wasps, flies and specifically cluster flies.

Copies are available from the Bat Conservation Trust www.bats.org.uk or from the **Pest** Library.

Handy leaflet for Harmonix

Bayer has published this handy little A5 leaflet to support and explain the company's recently introduced product – Harmonix Monitoring paste.



The leaflet details how this pasta monitoring bait, specially designed for use in sensitive areas and the food industry, remains palatable and attractive to rodents, yet contains none of the eight main food allergens. Details covered include both day and night traceability, palatability, consumption and traceability.

RAMPSUI

Copies from Bayer at email: pestsolutions@bayer.com

Two new bulletins from RAMPS UK

The Register of Accredited Metallic Phosphide Standards in the UK (RAMPS UK) has issued two new bulletins.

The first explains how these fumigants are regulated under two separate sets of regulations, the Plant Protection Product regulations and the Biocidal Product regulations. This presents labelling problems particularly at a time when new authorisations have been emerging on an irregular basis.

To make sure users have up-to-date information, RAMPS UK has agreed with HSE that a system of 'tagging' the new label instructions onto products can be employed.

The second bulletin highlights new gas monitoring requirements. The new level of 0.01 ppm for phosphine clearance is required for all metallic phosphides used for invertebrate fumigation in the EU, whether for food or feed applications (as a Plant Protection Product) or as a biocide. Copies are available from the RAMPS website www.ramps-uk.org/ or from the **Pest** Library.

Pest Test 53

Now also online

BASIS has made two PROMPT CPD points available if you can demonstrate that you have improved your knowledge, understanding and technical know-how by passing the **Pest Test**. So, read through our articles on 'Barn owls key to rodenticides' future' (page 13), 'And the big get bigger' (pages 20 &21), 'Much ado about moleing' (page 29-31) and 'Protecting our borders' (pages 33-35) in this issue of **Pest** and answer the questions below. Try to answer them all in one sitting and without referring back to the articles.

SEND COMPLETED QUESTIONS to: **Pest** Magazine, Foxhill, Stanford on Soar, Loughborough, Leicestershire LE12 5PZ.

We will mark your **Pest Test** and, if all answers are correct, we will enter the results onto your PROMPT record held by BASIS.

| 1 | How frequently will the Barn Owl Monitoring Study be conducted? | | | | | |
|----------------------------|--|--|---------------------|--|--|--|
| | a) Monthly | | c) Every two years | | | |
| | b) Annually | | d) Every five years | | | |
| 2 | Which year did the Barn Owl Monitoring Study identify as the worse breeding season since 1958? | | | | | |
| | a) 2012 | | c) 2014 | | | |
| | ь) 2013 | | d) 2015 | | | |
| 3 | How much R & D investment is required on average to produce a new active ingredient? | | | | | |
| | a) \$28 million | | c)\$280 million | | | |
| | b) \$200 million | | d) \$2 billion | | | |
| 4 | In Dave Archer's opinion which design of mole traps is the most humane? | | | | | |
| Г | a) Duffus | | c) Scissor | | | |
| | b) Nash | | d) Putange | | | |
| 5 | Which invasive mosquito was found at Folkestone Services in 2016? | | | | | |
| | a) Aedes japonicus | | c) Aedes albopictus | | | |
| | b) Culex modestus | | d) Aedes aegypti | | | |
| 6 | Public Health England recommended removing or treating all aquatic habitat within how many metres of the incursion site? | | | | | |
| | a) 100 metres | | c) 600 metres | | | |
| | b) 300 metres | | d) 900 metres | | | |
| Na | Name: | | | | | |
| Organisation: | | | | | | |
| Tel: | | | | | | |
| Em | Email: | | | | | |
| PROMPT account number: 200 | | | | | | |

Who will win the coveted 2017 Best Product Award?

It's time to vote

Which of our fabulous finalist products has helped you the most as a pest professional?

Take a look at the 17 sensational new products shortlisted by **Pest** readers and pictured right. Then make use of your vote in the 2017 UK **Pest** Best Product Award and let us know your favourite(s).

You can vote for two products (your second choice will be taken into account in the event of a tie).

To vote, complete the postal voting form opposite and return it to the editor at the address shown.

Alternatively, you can email editor@pestmagazine.co.uk. Please include your name and organisation in your email as well as the product(s) you want to vote for.

Readers can also vote online at www.pestmagazine.co.uk/en/news/p www.pestmagazine.co.uk/en/news/p www.pestmagazine.co.uk/en/news/p www.pestmagazine.co.uk/en/news/p www.pestmagazine.co.uk/en/news/p www.pestmagazine.co.uk/en/news/p www.pestmagazine.co.uk/en/news/p <a href="https://osts/award/watana-watana-watana-watana-watana-watana-watana-watana-watana-watana-watana-watana-watana-wata

Voting closes at midnight on **FRIDAY** 10 NOVEMBER 2017. The top three products will be announced during PestTech on 15 November and the winners' certificates and trophy presented.

Pest associate editor, Helen Riby, commented: "Now in its eighth year, we have had some truly fantastic winners in the past and we are looking forward to finding out who will be crowned the 2017 winner."





Prism from Insect-O-Cutor



Romax Venom Lipogel from Barrettine Environmental Health



Rakil G from Edialux



Cimetrol Super from PelGar International







best product award 2017

pest



Ratwall from Edialux



Rotech Bullet Rat Bait Station from 1 env Solutions



Protect Sensation from Bábolna Bio



Hidden Kill from Bell Laboratories



Romax Venom Wheat from Barrettine Environmental Health



MouseStop Premium

from Edialux



Rotech Ranger Dual Trap Mouse Station from 1 env Solutions



Harmonix Monitoring Paste from Bayer

Vote now

The new product(s) which has (have) made the largest contribution to my workinglife is (are):

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product award 2017

1 2

Name:

Organisation:

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SEND YOUR COMPLETED FORM to *Pest* Magazine, Foxhill, Stanford on Soar, Loughborough, Leicestershire LE12 5PZ

- 1 Readers may vote for two products, but may only submit one voting form;
- 2 Manufacturers/distributors and their employees cannot vote for their own product.
- 3 Votes submitted after midnight on 10 November 2017 will not be counted.

You can find all the legal stuff at www.pestmagazine.co.uk/en/bpa-rules



Romax Venom Pasta from Barrettine Environmental Health

Istanbul hosts Parasitec 2017

Parasitec 2017 was held in Istanbul, Turkey on 28 and 29 September. This was the second time the organisers, PC Media, the publishers of the leading French magazine NP&i, had taken their event to Istanbul. Once again, the exhibition and associated presentations were well received by local pest management professionals. The WOW Convention Center, situated alongside Istanbul Atatürk Airport was again chosen as the venue and this time the exhibition space was double that of 2015.

Parasitec is based on the idea that the more professionals share their experiences; the more efficient pest control will become.

The exhibition was well supported by local Turkish companies, accounting for 23 of the 42

Organisers from PC Media, from left Edouard Kabouche, Jean Charles Pujol and Pierre Kabouche with Süheyla Yildirim from the Unique Event Company

stands, as well as numerous Italian organisations but exhibitors from elsewhere in Europe were less well represented. Running alongside the exhibition was a series of topical and technical seminars. The session by Bertrand Montmoreau on the CEPA standard was particularly well received.

There were around 1,100 visitors so sightly fewer than in 2015 when 1,235 attended.

On the second day visitors were entertained by a group of PCOs, dressed as houseflies, mosquitoes and mice. Their singing was part of the Istanbul Municipality campaign entitled the Fight Against Vectors, which began in 2016. The aim is to raise awareness about vectors, especially mosquitoes, mice, ticks and houseflies. The music and the lyrics performed by the Vectoran Team were composed by the participants themselves. When they perform, not only do they dress like the vectors but they also use equipment such as back pumps, engine driven sprayers, dippers and ULV machines as drums.



The Vectorans entertained visitors and exhibitors with a sona



Many exhibitors took the opportunity to hold meetings with customers



Italian company the B.L. Group was supporting Roksan, their official distributor in Turkey



Over half of exhibitors were local Turkish companies



PelGar International, back left, was one of the few UK companies to attend

Diary dates

15 November 2017

PestTech 2017

Ricoh Arena, Judds Lane, Longford, Coventry, West Midlands CV6 6AQ www.npta.org.uk/pesttech/

22-24 November 2017

FAOPMA Pest Summit 2017

The Empress Chiang Mai Hotel, Chiang Mai, Thailand www.faopma2017.com/

23 November 2017

The SOFHT Lecture Annual Lunch & Awards 2017

Sheraton Grand, Park Lane, London W1J 7BX www.sofht.co.uk/events/2017-annual-lecture-lunch-and-awards/

24-25 January 2018

PestProtect 2018

Messe Bremen, Findorffstrasse 101 28215 Bremen, Gemany <u>www.pest-protect.eu/</u>

14 March 2018

PPC Live 2018

Three Counties Showground, Malvern, Worcestershire WR13 6NW

www.bpca.org.uk/Upcoming-Events/ppc-live-2018/ppc-live-2018/4335?OccId=6555

Worcestershire to host PPC Live 2018

PPC Live is the British Pest Control Association's (BPCA) free, one-day travelling event held in alternate years to PestEx. On March 14 2018 it goes to the Three Counties Showground, near Malvern.

Ben Massey, BPCA marketing and communications manager said: "We're really excited to be heading to the Three Counties Showground. The venue and location is outstanding and easily accessible for people based in a number of regions. The theme is 'professional pest control together', meaning that there is something for everybody, whether you're a technician, company owner, administrator, client or even someone looking to get into the industry from another trade.

"As we're less than six months away, there will be plenty of information going onto our website about the event in the coming weeks and months, but if any **Pest** readers wanted to fire in any questions, please don't hesitate. We're here to help."

Third time

This will be the third event under the PPC Live banner and if the first two, in Manchester and Peterborough, respectively, are anything to go by, it will prove very popular.

By moving the show around the country, those who are unable to travel long distances get an opportunity to meet existing and potential suppliers face-to-face in the exhibition. They can also update themselves on industry issues and new techniques in the seminar room and the practical demonstration area.

Now with added bacon

BPCA says there will be over 50 exhibitors from across the UK and around the world. For those who register early there's also a free bacon butty on arrival. Of course, one of the most important aspects of all pest control gatherings is the chance to network with likeminded professionals. As is now the norm, Continuing Professional Development (CPD) points will no doubt also be on offer for those on the PROMPT professional register.





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