pest

The independent UK pest management magazine

Managing moths

Issue 45
June & July 2016

Fast & Effective Control

of wasp nests, bedbugs, ants, fleas & cockroaches

quartz AZ

PROFESSIONAL

Killing Powder

- Quartz AZ ***kills on contact***
- Azamethiphos is a new active ingredient to the UK market
- Controls insects in all difficult environments
- Non agitating

0.5% azamethiphos

NOW TARGETING:

WASP & HORNET NESTS | FLEAS | ANTS | COCKROACHES | BEDBUGS

Order your supplies today. Call or email Lodi UK on:

Tel: 01384 404242 Email: sales@lodi-uk.com

www.lodi-uk.com

Use Biocides safely. Always read the label and product information before use. Quartz AZ contains Azamethiphos 0.5%.

pest

Pest is published six times a year

Editorial contacts:

Editor & publisher: **Frances McKim**
Associate editor & publisher: **Helen Riby**

Helen Riby *Frances McKim*

Aims

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.

Send us your news

Send your news or views to:
Email: editor@pestmagazine.co.uk
Tel: 01509 233219
Or write to us at:
Pest, Foxhill, Stanford on Soar, Loughborough, Leicestershire LE12 5PZ
We'd love to hear from you.

Advertisers

Please contact the editor as above or visit our website at www.pestmagazine.co.uk

The legal stuff

Pest is published by Foxhill Publishing Limited Registered in England No: 6737319

Printed by **PPS Print**, www.pps-print.com

Use pesticides & biocides safely. Always read the label and product information before use.

Contents

Let's pull together

Stewardship and Brexit, two issues that, as we write, are still dividing the pest control industry.

By the time you read this, the result of the Brexit vote will be known. Whatever the people decide, it won't make any difference to the UK Rodenticide Stewardship Regime. The die is cast and the desire to protect the environment and reduce rodenticide use will still be a major political driver, whatever the result.

To make stewardship work, the industry must pull together. Whilst we do sympathise with those who feel threatened by stewardship – change is never easy – we have to ask one important question: If people feel they are having to alter the way they operate so drastically, is there really a place for them, long term, in this industry? We revisit some of the arguments on page 7.

There's a second plea for the industry to pull together and that's when it comes to proving professionalism. We finally have a robust CPD system in BASIS PROMPT see pages 27-31, which has the critical mass to actually achieve something and what's happening?
A rival scheme is being set-up! It's bonkers!

Enjoy your read.

Be first with the news – visit www.pestmagazine.co.uk

Get more news at www.pestmagazine.co.uk where you see this symbol

read more on the web WWW

UK leads the way

The UK is leading the rest of Europe in embracing the European standard for pest management services, EN 16636:2015. Much of this is thanks to the British Pest Control Association (BPCA) which is not only promoting the standard, but is also putting its money where its mouth is and funding independent audits against the standard for all BPCA members. Audits are conducted by the independent body, Bureau Veritas (BV) and replace the old BPCA assessments. By June 2017, BPCA will be able to say that all its companies operate to the European professional standard.

read more on the web WWW

Litchfield opts for Opkill

Lichfield District Council has entered into a five year contract with Opkill Pest Control for the council's pest control activities. Managing director, Chris McKeown, commented: "We are highly delighted to have been chosen to provide Lichfield's pest control service and we are looking forward to the years ahead. Opkill is a small family run business which we began in 2013 from a base in Worcester. Over the years, through general word of mouth and good feedback, we have grown and now cover the entire West Midlands."

Left to right: are Opkil's Stephen Sanders, Glyn Brookshaw and Debbie Lawton with managing director Chris McKeown holding Harris hawk, Charlie

NBC Environment launched

NBC ENVIRONMENT

NBC Environment is the new name for NBC Bird & Pest Solutions. With the new company name comes a new logo, enhanced website and new location – all part of the changes implemented by this Norfolk-based independent bird control consultancy which provides bird, ecology and pest solutions throughout the UK.

read more on the web WWW

BPCA wins national training award

The British Pest Control Association (BPCA) was named winner of the New Product Development category in the MemCom Awards – a nationwide competition that rewards marketing excellence.

The award which was for the development of the Association's new interactive e-Learning package was presented at an awards ceremony in London on 19 May 2016.

With the MemCom award from BPCA are Mandy McCarthy-Ward (left), training manager and Danni Bromley, training administrator

Mandy McCarthy-Ward, training manager for BPCA said: "We developed the first-ever interactive e-Learning course for the pest control sector and have seen some fantastic results. Pass rates have improved by more than 10% already and the number of people taking the programme has risen sharply."

Bayer sells and looks to buy

It was announced on 19 May 2016 that Bayer had agreed the sale of its garden consumer business to SBM Développement (SBM). This encompasses the Bayer Garden and USA-based Bayer Advanced businesses in Europe and North America. So there is no confusion, the sale only involves the garden consumer side of the Bayer Environmental Science business. Readers can rest assured the pest control professional team remains unaltered. It's business as usual.

Meanwhile, Bayer has put forward a mega dollar bid to acquire chemical giant, Monsanto. If successful this would create the world's largest seed and pesticide business.

read more on the web www

Top sustainability award for CIEH

15 Hatfields, the Chartered Institute of Environmental Health's (CIEH) events venue in London, has received the top Gold award from Green Tourism, the largest and most established sustainable certification programme in the world.

The accolade follows a rigorous inspection held in April 2016. The venue scored highly in energy management, purchasing policies and practices, efforts to support organic and local producers, implementing robust waste reduction and recycling and overall management approach to sustainability.

Microsculpture organisers, from left: Ken Sethi, Genesis Imaging, Tanya Cochrane, Microsculpture video producer, Scott Billings and James Hogan, Oxford Museum of Natural History and Levon Biss

Hidden beauty of insects revealed

A recently opened photographic exhibition at the Oxford University Museum of Natural History reveals, in breathtaking clarity, the often surprising beauty of insects. The exhibition, called *Microscuplture*, runs until 30 October 2016, features the work of UK photographer, Levon Biss.

Each picture measures up to three metres across and is seen alongside the tiny insect specimen photographed. Each picture in *Microscuplture* is created from around 8,000 individual photographs. Segments of the specimen are lit and photographed separately, 'stacked' to maintain sharp focus throughout, then combined into a single high-resolution file.

New chief executive for BASIS

Stephen Jacob was appointed chief executive officer for BASIS Registration, the independent standards setting and auditing organisation in April. In the pest management sector BASIS is best known as the administrator for the PROMPT professional pest controllers register, see pages 27 to 31 of this issue.

Stephen has been acting chief executive since the departure of Rob Simpson in November 2015. He joined BASIS as business development manager in 2011 from Sentry, one of the largest farming companies in the UK, where in addition to hands-on farm management he also spent time as a farm business consultant.

Whilst his background may be rather agricultural; his early career was in the seed breeding business, originally in R&D but later transferring to the commercial side of the business, he has taken an active interest in the pest control sector for the past five years. He has been instrumental in the development of the PROMPT register and in the RAMPS set-up.

Stephen sees many similarities between crop protection and pest control. "Both require a forensic approach to identify and then treat/control the problem," he says.

As for the future he says that the character of BASIS is changing: "With over 11,000 individuals on our various professional registers we are now very much a members' organisation. That means we need to ensure our own staff have the skills to provide the service our members need, so staff development and retention will be a key priority as we go forward."

Stephen is married to Vicki and has two children (Isabel 17 and Henry 14). Outside work he enjoys nothing better than a good walk in the Peak District where he now lives.

Congratulations David and Nakita

David Haskins and his beautiful fiancée, Nakita Przytocki

Sorry girls, he's gone and done it! On 3 June, David Haskins, sales director from Barrettine, fell onto one knee and popped the question to his long-time girlfriend Nakita Przytocki. Luckily for David, the answer was 'yes'. Readers may remember Nakita as she was, for many years, the purchasing manager for Barrettine.

The world of pest control worked its magic for David, as he first met Nakita 10 years ago at a dinner hosted by Barrettine in Covent Garden, London – David then worked for Huck Nets. David admits it was love at first sight. After joining Barrettine he worked alongside Nakita for over seven years before finally plucking up courage to ask her out! Nakita now works as the purchasing manager for Macfarlane Packaging in Bristol.

Friends from within the industry played a role in the proposal weekend's activities. Gareth Turner from IPM in Enfield flew the pair from Denham aerodrome to West Lodge Park, where David proposed, before flying them back to Covent Garden. Here they stayed at the Radisson Blu as arranged by Radisson's Adam Sonna. This was rounded-off by a trip to see *Guys & Dolls* organised by Paul Cooper from the London Borough of Newham.

Adios Mike

After ten years with Manchester City Council, the last five of which were as pest control services manager, Mike Fowler is bidding farewell, not just to pest control, but also to Manchester and the UK. He is off to sunnier climes to take up a teaching job.

When he became Manchester's pest control services manager in 2011 he was tasked with transforming the pest control unit into a cost neutral, commercially-based service. The unit has maintained the delivery of low cost pest control to Manchester's residents whilst also ensuring it's own future.

During his tenure, the Manchester unit became members of the British Pest Control Association, gained accredited membership of WHICH Trusted Traders and got all staff onto the BASIS PROMPT register. Mike has also been chair of the Manchester Metropolitan Borough Technical Advisory Group, a member of the BPCA Servicing Committee and, since 2012, a member of the BASIS PROMPT Committee.

Product development specialist

Killgerm has appointed Mark Ward to the position of product development specialist. He takes over the mantle previously occupied by Paul Hoyes, who retired earlier this year.

Mark has over 20 years of experience in the pest control industry, both in terms of front line service provision and also in management roles. He joins Killgerm from Sheffield City Council where he has worked for the past 12 years. His roles at Sheffield included front line pest control officer, environmental enforcement officer and, most recently, environmental services team leader.

Out of work, Mark recently completed a six year honours degree course with the Open University, earning himself a BSc in Environmental Studies.

Stewardship is not perfect but we've got to make it work

Those in the industry who have worked long and hard to defend the use of rodenticides in the UK are the first to admit that the new UK Stewardship Regime isn't perfect. It's a compromise. The interest groups involved have been (and still are) many and varied.

On the whole however what we now have is a workable compromise. We should be thankful that UK professionals have been given scope to use their professionalism. Some countries have taken a much more prescriptive approach.

Let's remember too that, just because stewardship has been agreed, doesn't mean the threat to rodenticides has gone away. Far from it there are plenty of people in Parliament (and not just the European Parliament) who would like to see them banned. Making stewardship a success is our best way of defending the professional use of rodenticides as essential tools in public health protection.

Some still have doubts

That said we know that a number of our readers still have doubts about stewardship. Some have even felt so strongly they have emailed us. Their concerns are truly felt and should not be ignored.

One of the more recent emails was from a pest controller with 50 years in the industry who was particularly worried about the use of rodenticides by amateurs. He's not the only one. The gist of his concern is *that all rodenticides can be a problem when in the wrong hands and that amateurs, not professionals, should be regulated and questioned by those selling poisons, because professionals know what they are doing, whereas most of the general public do not even read the instructions on the label.*

Agreed, amateurs don't read the labels very often, but then we've come across some 'so called' professionals who pay scant attention to the label. Reports from pest controllers taking on new customers about the lax standards of their predecessors are also common.

Dealing with the cowboys

Stewardship will actually help the industry deal with these 'cowboys'. How? Because labels on products are legally binding so the new stewardship-compliant labels starting to appear on professional anticoagulant rodenticides, will provide the industry with legal ammunition.

Suppliers can only sell product to users who can prove their competence and show that they hold a recognised qualification, so those with no qualifications will simply find it very hard to buy professional use products. And if they do manage to procure some product they can be prosecuted for doing so, as can the supplier who sold it. They will be breaking the law by using it too.

But what about those amateurs? Why are similar restrictions not being enforced on the public? The answer is that the Competent Authority for biocides in the UK, the Health & Safety Executive (HSE), has decided that it considers: 'the potential risk to human health and the environment of amateur uses of rodenticides insufficient to require its inclusion in the stewardship regime.'

How much and where it's used

Why has HSE come to this decision? There appear to be two reasons. Firstly, the amount of bait put down over a year by amateurs is a fraction of that used by professionals (pest controllers, farmers and gamekeepers combined). Home DIY jobs usually amount to one or two bait points, whereas professionals will regularly be putting down 10 or 20 at a time. Secondly, the majority of rodenticide used by the public is to control mice, indoors, making it much less likely that non-target species eat it.

Finally, let's not forget that amateur use is already regulated. For example, pack sizes are now restricted to 1.5 kg. Of course amateurs can buy multiple packs but it will cost them. Changes in the way rodenticides are classified (see page 33) also has major implications for the concentration of amateur products and discussions at EU level are already suggesting regulations governing amateur use will be tightened in future. It's a moving picture so watch this space.

Look out for new labels

Anticoagulant rodenticide products sporting the new stewardship labels will be on distributors' shelves any day. Indeed by the time you read this they may already have arrived. To purchase and use any of these products you must have completed a certificated user's point of sale declaration for each distributor you buy from.

Suppliers must keep a declaration for each customer, along with a copy of that customer's CRRU-approved proof of competence certificate. There are no exceptions with Internet suppliers also required to hold these documents. Where customers are not known to the supplier, photo ID, such as a BASIS PROMPT card, will also be required.

Whilst, in theory, you have until 30 September 2016 to continue to buy 'old' pre-stewardship labelled rodenticides, don't bank on supplies being available. Distributors will want to sell 'old' stock as soon as they can. Don't be surprised either if some distributors decide to bring in stewardship checks as soon as they get their first stocks of stewardship-labelled product. Running the new system will be difficult enough without the added complication of having some anticoagulant rodenticides outside it.

All pre-stewardship labelled products must be used by 31 March 2017. Remember the label instructions, such as where the product can be used, are legally binding and there will be differences, particularly on where products can be used, so don't assume you know what's on the label.

The HSE has published a useful, searchable rodenticide database so you can check what the new authorisations contain. Go to: webcommunities.hse.gov.uk/connect.ti/pesticides/view?objectId=10116

Next Day
Pest Control Supplies

PestFix®

The Family Run Distributor That Prides Itself On Putting You The Customer FIRST!

BIRD CONTROL • INSECT CONTROL
RODENT CONTROL • ANIMAL CONTROL

Your Favourite Brands All Under One Roof

FREE WRITTEN
QUOTES
WITHIN THE HOUR +
FREE TELEPHONE SUPPORT

FREE UK MAINLAND
DELIVERY
ON ORDERS OVER £200

30 DAY INTEREST FREE
CREDIT ACCOUNTS
AVAILABLE

NEXT DAY
DELIVERY
FROM JUST £7.99

The Pestfix Promise

NO TIERED Price Schemes

NO MINIMUM Annual Spend

NO MINIMUM Order Quantities

NO SHORT TERM Seasonal Promotions

Just Our Lowest Prices All Year Round

BPCA British Pest Control Association MEMBER

npta National Pest Technicians Association MEMBER

THINK WILDLIFE Campaign for Responsible Rodenticide Use

PROMPT

RSPH Level 2 Certificate In Pest Management

sales@pestfix.co.uk • www.pestfix.co.uk
PestFix - Unit 1D Littlehampton Marina • Ferry Road • Littlehampton • West Sussex BN17 5DS
Telephone: 01903 538 488

BPCA AGM proves a fiery affair

The British Pest Control Association (BPCA) held its Annual General Meeting (AGM) at Yarnfield Park Training centre in Staffordshire on 14 June. The formal AGM was combined with one of BPCA's regional training fora. By combining the two it did ensure good attendance, with nearly 50 people at each event.

With the balance of the formalities at the AGM quickly dealt with, the main event was the passing-on of the presidential baton from then president, Martin Harvey, to newly-elected president, Paul Rodman of Kent-based Monitor Pest Control.

Unfortunately Martin was unable to attend, so Henry Mott (the president preceding Martin) did the honours. He also ably read out an address prepared by Martin summarising his time in office. In it, Martin said he liked to think that during his time at the helm he had made a difference. Some of the highlights mentioned included: the finalisation and publishing of the Association's strategic plan – this made both the Association and Executive Board more accountable and the fact that 100% of all technicians from BPCA member companies now have to hold one of the recognised qualifications and be a member of PROMPT. This requirement had led to 34 companies leaving the Association, but 25 of these had since rejoined. The introduction of the European Standard for Pest Management Services EN16636 was also identified as a highlight.

Consultants not consulted

Following the AGM the meeting was thrown open for a discussion. First on his feet was Dr John Simmons from Acheta Consulting who made his views about the article which had appeared in the most recent edition of PPC 83, in which the BPCA announced the launch of its new commercial consultancy service, perfectly clear. In brief, John said he totally rejected the idea that BPCA could offer an independent, or commercial, consultancy service. The manner and speed of its introduction, without any prior consultation, neither with the Servicing nor Manufacturing & Distribution Committees, nor with BPCA consultant members was, he felt, contemptuous. He concluded by saying: "BPCA is in effect setting itself up in a position of unfair competition against its own consultant members. The Association realised this would attract criticism, but that commercial considerations of likely income to the Association overruled this."

Echoing this apparent money-making attitude was Paul Hoyes, representing Rupert Broome from Killgerm, who was abroad on business. He said: "The stated ethos of the BPCA is that it is a 'not-for-profit organisation which acts in the interests of our members'. This consultancy scheme fulfils neither of these objectives. In addition, the accounts for the year show a healthy profit of over £49,000. Is the Association proposing to either refund this or reduce subscriptions?"

Finally Mike Ayres, from Precision Pest Management Solutions – a member company that offers both servicing and consultancy – said: "This proposal treads on our toes. It would come at a highly subsidised rate, which members would be paying for."

Regrettably the Executive Board was unable to comment as this subject was an agenda item for its meeting that very afternoon.
A statement released later that evening said:

"Having listened to the membership, the BPCA Executive Board has agreed to withdraw the BPCA consultancy service, recently launched within PPC 83.

The initiative was proposed following requests for further support from some of the servicing members.

Paul Rodman from Monitor Pest Control is the new BPCA president. Henry Mott stood in for outgoing president Martin Harvey

Following the launch of the BPCA consultancy service, the Association received correspondence from some of the membership, along with further comments at the open forum (following today's AGM). The BPCA Executive Board recognises that there has been insufficient discussion and communication through the existing committee structure on this matter. With this in mind, the Association will now engage with the membership, in order to understand and discuss their broader needs with regards to support, so as to drive professionalism throughout our industry."


Raising their voices in protest were, left to right: Mike Ayres of Precision Pest Management Solutions, Dr John Simmons of Acheta Consulting and Paul Hoyes representing Killgerm


The formalities of the AGM were quickly dealt with before the open discussion began

George Houston from Precision Consulting

Think like a mouse

George Houston is general manager of Precision Consulting (part of Precision Pest Management Solutions). He spends a lot of time working in Europe and the UK visiting interesting and often challenging sites advising pest control companies and food manufacturers who are experiencing pest problems. In this article he shares his experience of dealing with some difficult mouse infestations.

I am very aware that there are common features to many mouse infestations. Most of these are well known to the majority of pest controllers: mice living in cavity walls, mice harbouring in spaces in palletised goods, using electrical conduits to move around buildings and so on.

Over the past few years, I have had to deal with many infestations of mice, which have proved difficult for the local pest professionals. Extensive investigations have revealed mice living in all the usual places, but there is one location common to all of these sites that had been missed by the local pest controllers and which turned out to be a major infestation location – the roof – and more especially, large, flat roofs.

In all of the sites where I have found mice living in, and on, roofs, there is associated activity in cavity walls. There is often evidence (droppings primarily, but sometimes a dead or dying mouse) in locations that seem to be completely separate from the main known areas of activity. This will sometimes present as a single dropping in the middle of the floor, or a mouse lying dead on a gantry.

Understanding what is happening requires us to think like a mouse and the mouse is a three-dimensional animal, happy to move up or down a building, as well as horizontally along ledges or edges. For me, it is an important step to remind myself of just what a mouse needs to survive. Food, water (in some form, even if just through sufficiently moist food) and harbourage. If I am finding mice in an empty office on the top floor of a building, I need to identify where it is finding food.

If I find evidence of mice in large open space, I need to identify where it is finding harbourage.

These basic questions will lead to the answer to the big question that we should always be asking ourselves, 'Where are they now?' In the two cases outlined overleaf the answer was 'the roof'.

Case 1

This is a large food manufacturer producing dehydrated product. The building is around 50 years old and is a traditional concrete and brick building with steel support girders.

Mice had been identified in many locations when I was called in. Detailed investigation using tracking powder, endoscopes, motion sensor cameras and baiting/trapping data showed an extensive infestation throughout the entire property.

Once proper controls were put in place and the population was reduced (within two weeks), it became clear that there were two walls in the building which were focal points for mice. Baiting of the cavities was showing that mice were moving through the walls, but despite extensive use of tracking powders, we could not find mice leaving the wall cavity to enter the main manufacturing part of the building – which the client was very happy about!

However, since there were multiple access points from the cavities into the manufacturing and warehousing areas, (some of which could not be reached due to plant geometry), it was essential that we identified where the mice were living and feeding. Clearly there had to be a source of food we were not finding.

To do this, we referred to the construction plan of the building, and traced the joints between the walls. Wall heads (some 20 metres high in some cases) were inspected, and droppings were found, many of which were old. We did notice that in one section, where the product dust was sticking to the walls, there was a clean point beside a roof support beam. Why would this be so? Possibly, a mouse was moving at this very high level. This led to an investigation of the roof.

At first glance, the roof seemed to be very secure. However, there was clearly a lot of product on the roof (being blown out by extraction systems), plenty of water and, when we looked closely, quite a lot of mouse droppings.

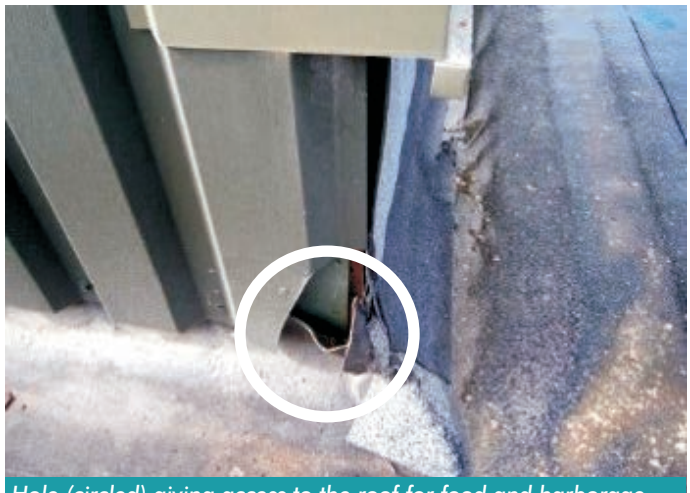
At this point, it is important to really understand how the roof you are looking at is constructed. In this factory, the drawings related to the original design and there had been many changes over the years. Indeed, the drawings themselves were only in outline and did not show the level of detail we needed. There was only one thing to do – we had to get the client to start to strip down part of the roof!

The most obvious place to start was where the wall head was raised above the level of the roof. Panelling here looked suspicious, and there were a few droppings below the panels. We started by removing the facing panels and found more droppings – mice were certainly living here.

The next section to be checked was the covering over the top of the wall head. Clearly this entailed some risk, since damage to the covering of bituminised roof sheets could result in water penetration. With care, engineers were able to remove the cover. Mouse droppings, and a beautiful mouse hole through the lining below the lead flashing was found. It was clear that the mice in the walls were moving on and off the roof, probably using the roof as the food resource.

Subsequent to this investigation, we arranged for the local pest control company to establish mouse baiting points on the roof, at the same time instructing the client to remove as much food debris from the roof as possible. The baiting proved very successful, and the activity within the walls ceased within a few weeks.

It remains a critical part of the mouse detection and control system at the site that roof baits and/or traps are in place. Proofing has been carried out extensively to seal visible gaps, but as our experience of investigating this showed, some harbourages cannot be identified without major building works and I would be hesitant to suggest that every hole that a mouse could use on a roof would be found.



Hole (circled) giving access to the roof for food and harborage

Think like a mouse and include a thorough inspection of the roof in your surveys

Mouse droppings in bait box shows clear evidence of roof activity

Mouse hole (circled) below the flashing

Case 2

This is a very large food manufacturer, in a property which in places is nearly 100 years old, who has been experiencing sporadic mouse activity.

The most recent incident was the capture in traps of two mice in a redundant office suite above the finished goods warehouse. Close investigation of the warehouse showed no signs of mice, although there was mouse activity associated with mice burrowing up from the sub-floor in an adjacent building. An occasional, apparently random, mouse dropping was being found at irregular intervals in the middle of the warehouse floor.

The office suite has been empty for many years and there is no food nearby. Could mice be moving from the space between the floor of the office and the roof of the warehouse?

The office suite has been built at one end of the warehouse, so level with the office floor is the bituminised roof, with raised window panels, of the warehouse. Given my experience in Case 1 and similar experiences in many other sites, I was instantly suspicious of the roof.

Test baits were placed on the roof but showed no evidence of takes. However, an examination, using binoculars, of the underside of the roof revealed that there were holes between the structural members of the walls and the roof.

Smear marks could be seen and the locations of the spaces matched closely the places where droppings were being found on the floor. It quickly became apparent that mice were living in the roof cavity and moving horizontally across the ceiling. Since they were not able to access the outer surface of the roof, food must be being gained from elsewhere.

Detailed examination of the historical structure of the building revealed that in the past the corridor leading to the warehouse had been an external yard. The floor panels (very large concrete panels) had originally been laid on a deep sandy substrate. This we could show (using an endoscope) was being tunnelled by mice, who were then able to access the wall cavities and move vertically into the walls, then into the roof cavity.

Essentially, we were dealing with a three-dimensional, very narrow mouse burrow! Control was established by baiting below the floor panels, and getting baits into the walls and ceiling spaces.

The element which was most interesting was that the mice were moving up many metres and colonising the roof/ceiling cavity. The age and structure of this building means that there are access points to and from the exterior roof surface into the cavities. These are often found at the corners and edges of the protruding glazed windows on the roof.

Hole (circled) giving mice access from the cavity wall to the flat roof

Clear damage to the roof was found behind the panel

Mouse droppings (circled) – clear evidence of activity behind the panel

To conclude: Consider all possibilities – think roof!

My experience with mouse infestations has shown me that it is foolish and counter-productive to always rely on mice to go round wall/floor edges. The knowledge base we have on mouse activity in buildings is growing rapidly. It is critically important, when trying to establish control of an infestation, to consider all possibilities. The roof of a building is a resource that is often rich in food material (leaves, seeds, bird droppings, product waste) and harbourages (cavities, debris, lift housings and air handling units) and needs to be considered when developing a control stratagem.

The prophylactic use of rodenticides externally is being discouraged where problems do not exist (CRRU Code of Practice and rodenticide stewardship). Indeed it is now illegal in some European countries, including Holland. This holds especially true for using toxic materials on roofs. Careful assessment of the risks needs to be undertaken and the consequences to wildlife considered. However, through good inspection methods, non-toxic baits (for a short time) and motion sensor cameras, it is not difficult to establish the presence of mouse activity on a roof. Once the presence has been confirmed, it is relatively straightforward to establish baiting points and begin to control the problem.

In summary, if you are experiencing a stubborn mouse problem, or an extensive, well-established mouse infestation, I recommend that you get onto the roof (where safe of course!) and check for activity there. You may be surprised how often you will find that evidence.

Combatting the clothes moth


A lovely jumper ruined

Clothes moths are an increasing problem. In homes, across the country, this pest is munching its way through cashmere cardigans, tweed jackets and wool carpets. *Pest* editor, Frances McKim, has worked with Dr Reiner Pospischil to pull together a feature on this small, but formidable pest. We hope you will find it useful when dealing with this troublesome pest.

Let's begin with a technical review of the distribution, development and identification of this old-fashioned pest which, just like the bed bug, is making its presence felt in the 21st century

Distribution

The clothes moth (*Tineola bisselliella*), also known as the webbing clothes moth, occurs worldwide. The species is not native to Europe. It probably originated from Africa, where it lives in birds' nests and in the fur remains of mummified animal bodies.

It causes damage to a wide variety of natural products of animal origin, especially woven wool fibres, rugs, furs and feathers. It has the unusual ability to digest keratin, a protein forming the principal constituent of these materials.

Appearance

The moth's wingspan is 12 to 16 mm. The front wings are coloured shiny golden-yellow to brownish and, at rest, are folded, roof-like, above the abdomen. The hind wings are greyish yellow. A fringe covers the side and rear edges of both pairs of wings.

The oval eggs are 0.6 mm long and ivory in colour. The yellowish-white larvae are up to 9 mm long with a brown-coloured head, neck and anal shield. The posterior margin of the head capsule is usually coloured much darker than the rest of the head. The intestine shines through the cuticle depending on the colour of the food consumed. The pupa is about 7 mm long and light brown.

Development

The females lay up to 200 eggs, singly, or in small batches on the food substrate, preferably on rough surfaces and in cracks and crevices. The larvae hatch at temperatures above 20°C within four to ten days. At lower temperatures, the embryonic development may be extended to as much as three weeks.

Shortly after hatching, the young larvae start spinning a tubular quiver made of silk, within which they weave wool threads, excreta (frass) and other substrate from the vicinity.

The quiver may reach 10 to 12 times the body length, is attached to the base and is open at both ends. The larvae may leave this quiver temporarily, but feeding occurs within the protection of the spun webbing.

Food quality and ambient temperature have a major impact on the development time of the larvae, which may take between two months and several years. The number of larval stages varies between five and 12 but can reach up to 45 under adverse

Clothes moth larvae on the surface of woollen fabric

Clothes moth larva in tubular quiver

Head capsule of clothes moth larva with the typically dark coloured posterior margin

conditions. The larvae develop at between 10°C and 33°C. However, they can survive freezing at temperatures down to minus 15°C for up to three weeks, depending on their larval stage.

For pupation, the larvae spin a 15 to 20 mm long closed quiver.

The adults don't feed and are only active at night. The females usually die within 16 days of laying their eggs, males can live up to 28 days.

Significance

As the clothes moth is native to warmer regions, it can only develop under dry and warm conditions inside buildings. The males can fly and are found both inside and outside houses and sometimes in birds' nests, but breeding does not occur here. The females are poor fliers and tend to stay close to where they developed. However, they can run amazingly quickly in comparison to other moth species.

The larvae remain in protected areas such as in airing cupboards and wardrobes, meaning their feeding activity is not immediately detected. Damage is caused by the larvae gnawing holes in the fabric.

Garments which are not needed for several months are at risk and are particularly favoured if soiled with food debris, hair, dander, sweat or urine. Natural wool carpets are affected, especially if under cabinets, beds or other furniture, where the larvae are well protected.

The larvae will only eat wool of animal origin. Mixtures of synthetic fibres and natural wool are attacked when the wool content is more than 20%. Cotton is not affected. In museums the webbing clothes moth causes damage particularly to textile archives and animal or bird specimens.

A new problem area is in the construction of modern buildings, where wool is used as natural insulating material in the walls. The larvae may destroy the insulation within a few years.

In larger buildings, for example shopping centres and warehouses, clothes moth males can sometimes be found on sticky traps with no substrate nearby suitable for an infestation by the larvae.

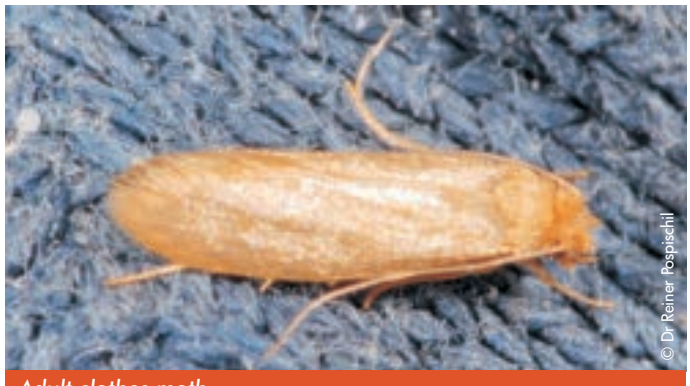
In this case air conditioners, vents, suspended ceilings and cavities in the walls should be inspected. Pigeons or other small animals that die in ventilation shafts or cavities can be the cause of moth development. The pigeon moth (*Tinea columbariella*), which is similar to the clothes moth, can also be found on mummified pigeons.


© Dr Reiner Pospischil

Heavy infestation of clothes moth covering the whole surface of the woollen substrate


© Dr Reiner Pospischil

Tubular quiver covered with larval faeces


© Dr Reiner Pospischil

Adult clothes moth

Moths in residence – what next?

Key to successful moth control is the extermination of the entire infestation in the building.

How control is approached varies between those tools basically aimed at the amateur homeowner right through to professional pest controllers. In practice, it is likely a combination of several of these approaches will be employed.

What is undoubtedly essential though, is undertaking a really thorough inspection prior to the start of any treatment.

Hygiene

Like so many other public health pests, good hygiene is critical. Don't underestimate the worth of a good vacuum cleaner as moths hate being disturbed. Only clean clothes should be stored. Moth larvae can survive on accumulations of fluff and lint in the back or bottom of cupboards and drawers, or even what has fallen down between floorboards. If pets are resident, animal hair and feathers can accumulate and, again, even small amounts can support clothes moth larvae.

Mothballs, moth strips and lavender sheets

Although somewhat traditional, mothballs, moth strips and lavender sheets can still be recommended.

The traditional mothball, popular with previous generations, has however been banned in Europe since 2008 due to the possible carcinogenic nature of the active substance, naphthalene. Cedar wood balls and lavender sheets have taken their place acting as adult moth repellents. A range of products – cassettes, sheets and balls – containing transfluthrin and offering three to six months control are available on the retail market, for example from Rentokil.

Washing and dry cleaning

Your customer should be advised, where possible, to wash items for 20 to 30 minutes in water that is at least 50°C. Dry cleaning might be the only suitable option for some fabrics.

Heat treatment

As with bed bugs, heat kills all stages of development. Several pest control companies offer heat pod treatments where infested items are heated to between 54°C to 60°C for a period of at least one hour.

Freezing

Clothes can be bagged and placed into freezers for two weeks at temperatures below -20°C. Some pest control companies have invested in industrial sized freezers.

Monitor but not control

If you go to any of the UK distributors' website and search on 'clothes moth' what comes up is a series of products which say they monitor or trap this insect. Some have pheromone attractants included – some do not. As it says on their labels, these products monitor and they do provide a useful indication of levels of infestation. However, a recognised control method is required to eliminate the infestation.

Moth monitors

There is a whole range of these available, both for the retail and professional markets. These products monitor, they do not provide control. See box on page 16.

Pheromones

This elegant solution, Exosex Tabs, relies on Entostat powder, formulated with minute quantities of a synthetic version of the clothes moth sex pheromone, being picked up and transferred to further male moths. This process (auto-confusion) spreads sexual confusion throughout the male moth population thereby interrupting the mating cycle and reducing the moth population. Unlike moth monitors, this system does offer control, although not quickly.

Parasitic wasps

Cards containing Trichogramma parasitic wasp larvae are placed within wardrobes. When the adult wasp emerges it lays its own parasitic egg in the clothes moth egg.

Control is therefore achieved, but as with Exosex Tabs, it is not speedy and the cards containing the wasp larvae need fortnightly replacement. This bio-control method is used on mainland Europe. Supplies of the wasps can be sourced, on request, from the horticultural bio-control company, Agralan based in Wiltshire.

Chemical control

Residual spraying, especially if woollen carpets are affected, is one option. ULV treatments in large spaces are also possible. But remember that adult moths and larvae are often hidden in folded stored clothing, blankets etc where ULV won't reach.

Now confused moths in the retail sector

Winchester-based Exosect has signed a distribution deal with on-line retailer, Total Wardrobe Care. This company has launched a retail version of Exosect's professional product, Exosex Tabs (available from Pest Trader). It is being marketed under the brand name, Moth Decoy.

Total Wardrobe Care's founder and owner, Julia Dee comments: "This technology offers the missing component for clothes moth management in the home. Since the removal of moth balls in the EU, many homeowners, despite their rigorous cleaning and storage practices, have endured immense upheaval and cost to rid their homes of this destructive pest."

Down, but not out!

Despite being banned for sale in Europe since 2008, a simple search on Amazon revealed mothballs containing naphthalene are freely available for sale. Judging by the satisfied customers' comments left on the website, these are being put to other uses in addition to clothes moths – as a repellent for moles and cats being just two. Disgraceful.

Moths on a massive scale

Judging by the column inches in the popular press, problems with moths in domestic environments seem to be on the rise. What the exact cause is remains a matter of debate.

But taking it one step further than Auntie's favourite jumper, several professional pest controllers report being called in to treat private individual's collections of clothes – some single items of designer wear being worth thousands of pounds each!

Royal Opera House costumes

On an even larger scale is the Royal Opera House Covent Garden's costume collection. At any one time, it comprises of around 2,000 costumes at Covent Garden plus around 750,000 older costumes at its permanent store in South Wales.

This historic collection includes dresses worn by Maria Callas along with outfits from the 1950's which Margot Fonteyn performed in. Mending moth damage is one of the many reasons the Royal Opera house employs more than ten seamstresses. As far as moth control goes, success has been achieved using Exosec Tabs and, more recently, constant treatment using heat.

In 2011 the Westminster headquarters of the Department for Environment, Food and Rural Affairs (Defra) suffered a moth problem on an industrial scale. The whole building, housing 850 civil servants, was closed over one weekend for treatment. No doubt to the Department's chagrin they were christened the 'Ministry for Moths' and their work 'Moth-balled'!

Parliament takes moths seriously

But going right to the seat of government, the Houses of Parliament also takes moths very seriously.

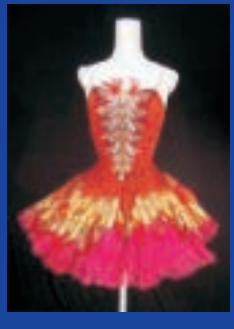
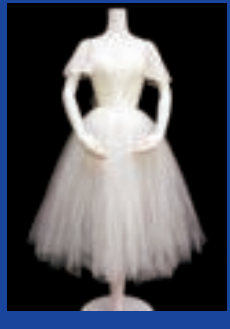
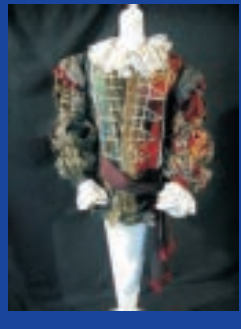
The clothes moth population needs to be controlled to prevent damage to furnishings, including historic Pugin furnishings in the Palace of Westminster, and textiles.

Art at risk

The Parliamentary Art Collection, which includes one of the largest collections of contemporary art textiles in public ownership, is also at significant risk from infestation. All are irreplaceable and expensive to repair. It is therefore more cost effective to prevent damage in the first place by controlling moth populations.

In 2014/5 there were 923 moth monitoring devices in place across the Parliamentary estate. These recorded nearly 14,000 moth detections, triggering action to control the population. The cost for traps during 2014/5 was £2,640, a decline from £4,712.50 in the previous year.


© Russ London


The Royal Opera House, Covent Garden is very aware of the threat clothes moths pose to its costume collection


© Diliff

RP Rewards
Customer Loyalty Scheme

10% off list prices on all products*

Free printing with no minimum orders or setup charges

Free delivery with no minimum order value

Free £20 amazon gift card for first 50* customers to register

2 reward points for every £1 spent
1 Point for you & 1 Point for charity 500 points are worth £5 (£2.50 for you & £2.50 for charity)

Join now at www.ratpak.co.uk/rewards

RSPCA · British Heart Foundation · Cancer Research UK · Royal British Legion · Save the Children

RatPak
Pest Control Products

Tel 01522 686070 - Fax 01522 691112 - www.ratpak.co.uk - E-mail sales@ratpak.co.uk

*RP Rewards is only available to professional pest control companies. Rat Pak Pest Control Products is a trading name of Rat Pak Engineering Ltd

Non-target research: some surprising species at risk


© Dieter TD
© Olaf1541
© Luc Viator

The introduction of the UK Rodenticide Stewardship Regime is forcing pest professionals to reassess their use of these useful products. One practice in particular – outdoor permanent baiting – has been highlighted as playing a significant part in non-target species contamination.

This conclusion is largely based on commonsense. Non-target species visit bait stations to feed and are then predated on by predatory birds and mammals. The result, rodenticide active substances end up in non-target species. Now, new research from The Netherlands has provided hard evidence on which species are visiting bait stations and it's by no means only field mice and voles!

Pest would like to thank Bruce Schoelitsz and Mike Brooks from Kennis- en Adviescentrum Dierplagen (KAD), the centre for urban pest expertise in The Netherlands for sending in this report.

It is widely accepted that the management outdoors of pests, such as rodents can pose a risk to non-target species. This may be through primary poisoning, where non-target animals are directly exposed to the active substances by feeding on the bait, secondary poisoning (by accumulation in the food chain) and/or through the contamination of the environment, for example, water, which is subsequently drunk by non-target species.

With secondary poisoning, the active ingredients accumulate in the food chain, poisoning predators and scavengers feeding on prey and/or carcasses that contain the active ingredient.

By repeatedly feeding on poisoned prey or carcases, these active substances accumulate in the body of the predator/scavenger animals. Even though predators and scavengers repeatedly take in only small amounts of the active substance, this may have a negative impact on them long term.

The effects of secondary poisoning may be underestimated by referring to LD_{50} data, LD_{50} is the dose at which 50% of a test population dies. For many non-target species data are not available and given that susceptibility to the active ingredients can vary widely between species, extrapolation to other species is unreliable.

Furthermore, other negative effects are often not taken into account. Accumulation of anticoagulants may lead to reduced reproductive success (bleeding of the reproductive system), fatigue (bleeding in the lungs, resulting in respiration difficulties) and pain (because of accumulation of blood in cavities).

Rodenticide active ingredients are found in large portions of tested non-target animals worldwide, including The Netherlands and the UK. Examples of such animals include: owls, buzzards, martens, hedgehogs and foxes.

The risk of primary poisoning is, of course, reduced by using bait stations.

The question, however, remains, do other species enter these stations and feed on the bait? And, if so, which species ▶▶▶

are involved? To find out, KAD started a pilot in 2013. This was followed, in cooperation with the HAS Hogeschool's-Hertogenbosch, by a more extensive study in 2014.

Bait station set-up

Activity in bait stations was studied in six locations: two residential blocks, two business areas and two agricultural areas (a pig farm and a dairy farm). At each location, 20 bait stations were sited in positions that would have been selected by a pest professional.

Two types of bait station were used.

Type I (25x18x9 cm) is a light station, with round openings in both sides of the box. By closing the lid, a tunnel is created through which animals are able to move. A food reservoir is present across nearly the entire length of the station and borders the tunnel by a low standing edge. Boxes were placed for a total period of 10 weeks.

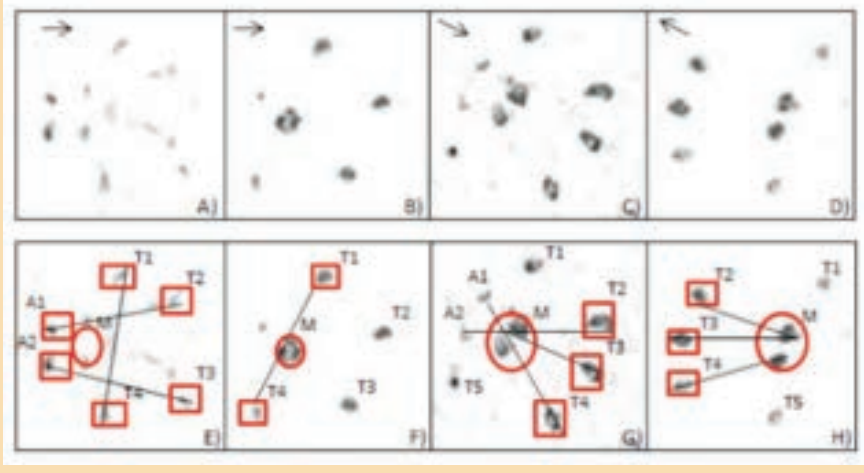
After eight weeks, 15 of the Type I stations were replaced by Type II stations so that there were five Type II bait stations at one residential, one commercial and one agricultural location.

The Type II (30x29x16.5 cm) stations are the tamper-proof variety most commonly used in the UK. They are made of thicker plastic and contain two food reservoirs that are completely separated from the tunnel by a wall. The bait is only accessible via a hole in the centre of the wall. Animals therefore need to enter the station completely to reach the bait.

All stations were filled with 120 grams of non-toxic hulled oats and the tunnels were provided with tracking patches. Tracking patches were used to register and analyse tracks of animals. Stations were checked three times a week, bait was replaced or refilled and tracking patches were replaced.

At each of the six locations in the trial, 20 bait stations were sited in line with professional pest control practice

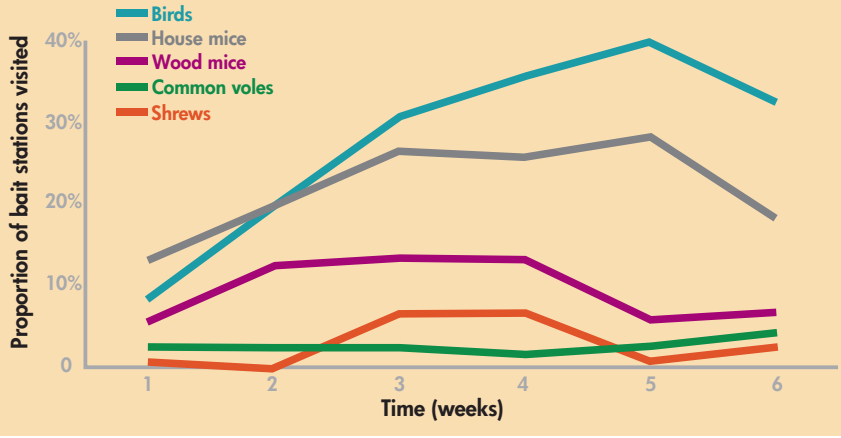
Identifying the mice species visiting the bait stations



Top row: Prints of front and hind feet of mice on four tracking patches: A, B, C & D
Lower row: T = toe pad; A = accessorial pad, M = middle pad. To identify the species the researchers measured the distance between these pads. For the front feet the length A1 to T2 was a key measurement. For the hind feet (which often lack A), the distance between M and T2 was important

Additionally, wildlife cameras (one minute active, one minute delay) were used to support the data and to aid identification when tracks could not be identified. Finally, with a permit from the Dutch authorities, Sherman live-traps were also used to trap small mammals over the course of two nights. Live-traps contained food for several species (fruit, vegetables and insects) and nesting materials and were checked every three hours (21.00, 24.00, 03.00 and 06.00).

Proportion of bait stations visited by small mammals and birds each week



Which species visit bait stations?

A total of 1,978 tracks were registered on the tracking patches with 40% of the tracks from small mammals. Only 14% of these tracks were definitely identified as from the house mouse. Other tracks were from wood mice, voles (including the common vole), and shrews. In the Sherman live-traps, the bank vole was also trapped, taking the number of rodent species to four. Other species caught with the live-traps were wood mice and common voles. Neither the roof rat, nor the Norwegian rat were encountered at any of the locations.

Jackdaws feeding from a bait station during the study

Approximately 20% of the tracks were from birds. A total of ten species of bird were spotted with the wildlife cameras: jackdaw, magpie, robin, dunnock, carrier pigeon, moorhen, blackbird, homester, ringdove and great tit.

The large species, such as the moorhen and magpie, were only observed using Type I bait stations. Smaller species, such as the robin and dunnock, were seen entering both types of station.

A third of the tracks were from snails and slugs. This may not be a surprise, as bait being rendered useless by snails and slugs is often observed by pest professionals. Finally, a small portion of tracking patches (less than 1% of the total) contained tracks of amphibians and predators (cat and stoat). Several cats and a fox were spotted near the bait stations by the wildlife cameras.

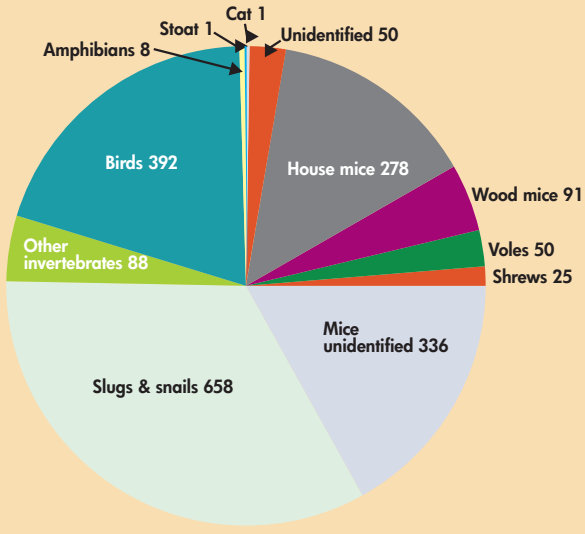
Regardless of location (residential, industrial or agricultural), or type of bait station, more tracks of non-target species were found than tracks of target species (house mouse, roof rat and Norwegian rat).

An important observation was the rate at which birds adapt to the bait stations. Although stations were visited most by house mice in the first week after placement, the number of stations visited by birds was larger during the following weeks. The total number of stations visited by birds was also larger. This is possibly due to the higher mobility of the birds, as compared to mice, and the high level of intelligence of some bird species, that quickly learn to recognise the bait stations as a source of food.

Implications for pest management

Unlike secondary poisoning, that mainly occurs in predators and scavengers, primary poisoning with anticoagulant rodenticides mainly affects direct competitors of rats and mice, i.e. small mammals and birds. Several of these competitors are very efficient in finding the food in the stations. It is, therefore, very important to perform control actions with toxic bait as fast and efficiently as possible, so that the bait can be removed as quickly as possible. The permanent placement of toxic bait, or neglecting to remove bait after control actions are complete, significantly increases the risk of poisoning of non-target species.

Species and numbers visiting the bait stations



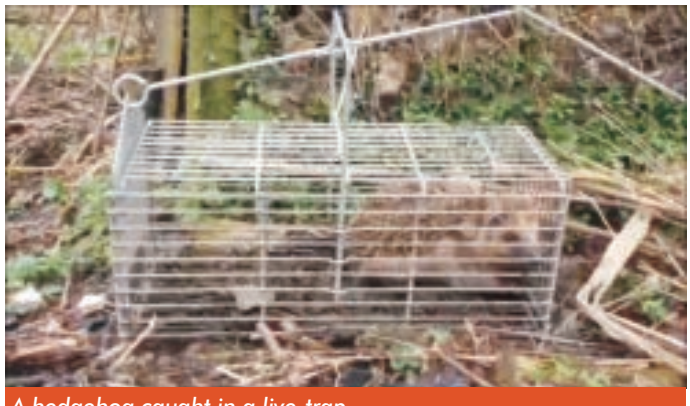
Trapping

From the study, it is clear that small mammals and birds are at risk of poisoning and thereby of contributing to secondary poisoning.

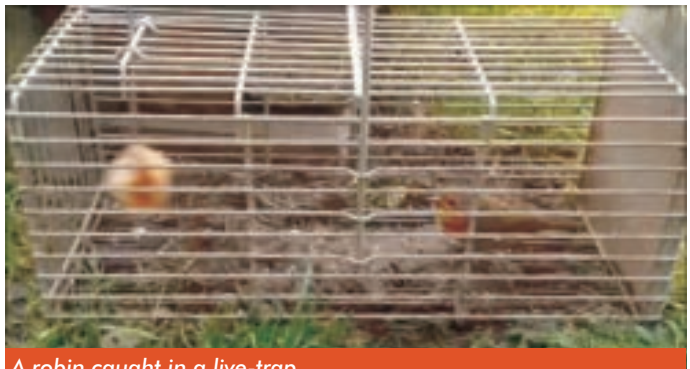
In The Netherlands, as in the UK, steps are being taken to reduce the use of rodenticides outdoors to minimise the problem of non-target species poisoning. Indeed, the steps implemented in Holland are more prescriptive than here in the UK, see ***Pest*** issue 44: April & May 2016.

Under the Dutch Protocol one of the conditions that must be met is that non-chemical control methods, such as snap traps and live-traps must be used before anticoagulant rodenticides can be employed. These methods, however, are not without risk for non-target animals and this needs to be taken into account.

According to this study, small mammals and birds readily ▶▶▶



A hedgehog caught in a live-trap



A robin caught in a live-trap

find the bait provided in bait stations. There is therefore a risk that these animals get trapped by snap traps, even when the traps are placed in bait stations. Inquisitive species may even be trapped when no bait is used at all.

Out of the frying pan...

It seems therefore that one detrimental method is being exchanged for another. But, this is not entirely true. Although trapping of non-target species is not desirable and should be prevented as much as possible, there are differences between this method and the use of anticoagulant rodenticides. With snap traps it is, for instance, clear exactly what species and how many individuals have been trapped. On the other hand when using toxic bait, it is not always clear which species have been feeding on the bait. This applies to non-toxic monitoring bait too. If it is incorrectly assumed that a target species fed on a bait, thus triggering replacement with toxic baits, it could be argued that non-target species are actually being intentionally poisoned.

Is this really the best place for a bait box?

Furthermore, the management strategy can be changed when non-targets are trapped. Do traps need to be relocated to reduce the non-target catch? Are other measures possible to reduce the chances of trapping non-targets?

Localised impact

In the final analysis the effects of trapping are local and, if adequately handled so that further trapping of non-targets is prevented, they have no impact on the general population. Species that compete with house mice and rats, such as other small rodents and birds, just like mice and rats also have high fecundity. Losses within the population can be compensated relatively quickly.

Problems only arise when these compensating processes cannot occur at all, or fast enough, for example because of continuous exposure to killing agents (permanent baiting), persistent residues, such as those from anticoagulants, or low fecundity.

Other advantages of snap traps are the immediate removal of carcasses and the possibility to control populations that have developed resistance to anticoagulant rodenticides. Using these active substances in resistant populations increases the risk of secondary poisoning. This is because resistant individuals can contain up to five times the amount of anticoagulant in susceptible individuals.

One condition for successful management with snap traps, is that they need to be checked regularly. This is even more important if live-traps are used.

Poor application practice exacerbates the problems of non-target exposure

Uncertainties

There are a number of uncertainties that need further study. What species are usually caught in traps? How many individuals of non-target species are trapped? Is it possible to reduce the risk of trapping non-target species, while maintaining efficacy? And, perhaps most importantly, will the measures being taken reduce the risk of poisoning non-target animals?

Good practice

Good pest management is not only about the amount of rodenticide used. It is also about how it is applied. Is spilled or dragged bait removed? What is done to prevent dragging of the bait out of the stations? What effort is put into finding and removing dead rodents?

Measuring success

Data that can be used to measure the expected reduction in the amount of anticoagulants in non-target species, or the number of species contaminated is not available in the Netherlands so it is not clear how the reduction of risks that are associated with the use of these products around buildings will be measured.

In the UK there is a more specific target – the Health & Safety Executive wants to see a 'significant' reduction in anticoagulant residues in the livers of barn owls. Baseline data from the Centre for Ecology & Hydrology (CEH) is available and the industry is funding CEH to analyse livers from 100 barn owls (natural casualties) annually. Precisely what will be classed as 'significant' is, however, unknown. There has also been a KAP (Knowledge Attitude and Practice) survey conducted amongst pest controllers to provide a baseline. Improvements showing both understanding and implementation of the UK Stewardship Regime will be expected when the survey is repeated.

Bruce Schoelitsz and Mike Brooks would like to thank the students from HAS Hogeschool 's Hertogenbosch with whom this study was performed: Nikkie van Grinsven, Glenn Laurijsse and Joost Tuithof.

YouTube

A video of the animals that use bait stations can be found at the Youtube channel of 'KAD Wageningen'.

PelGar International

CIMETROL SUPER

THE BEST..
IS BACK

Leading the way in **British pest control**

PelGar International Ltd.
Unit 13 Newman Lane, Alton,
Hampshire, GU34 2QR.
Tel. 01420 80744
sales@pelgar.co.uk

NOW AVAILABLE

View our full range of products at www.pelgar.co.uk

Use biocides safely. Always read the label and product information before use.
Cimetrol Super contains 25% w/w cypermethrin, 10% w/w tetramethrin,
20% w/w piperonyl butoxide & 1% w/w pyriproxyfen.

Expand your rodent control...

even in the hardest to reach areas.

New

Innovative rodenticide. All new formulation.

Racumin® Foam is an innovative, non-bait rodenticide from Bayer. Applied in known rodent runways, the foam sticks to the rodent's coat and is ingested through grooming.

- ☑ Quick and easy to apply; ready to use product
- ☑ Tackles palatability & bait shyness issues
- ☑ Can be placed in areas where traditional baiting methods are not possible

Racumin® Foam is the perfect partner to the range of Rodilon® rodenticides. Rodilon® contains the most recently developed anti-coagulant active ingredient, difethialone, and has four of the most palatable bait formulations. The Rodilon® range is approved for indoor use and outdoor use (around buildings) in the UK.

Racumin® FOAM

Rodilon®

USE BIOCIDES SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE. PAY ATTENTION TO THE RISK INDICATIONS AND FOLLOW THE SAFETY PRECAUTIONS ON THE LABEL.
For further product information including warning phrases and symbols refer to product label or www.environmentalscience.bayer.co.uk. Racumin® contains 0.4% w/w coumatetralyl. BPR:UK-2014-0860, IE/BPA 70160.
Rodilon® contains 0.0025% w/w difethialone. BPR: UK-2011-0043, UK-2011-0048, UK-2011-0050, UK-2011-0051. IE/BPA 70181, IE/BPA 70184, IE/BPA 70182, IE/BPA 70183.

Tel: 00800 1214 9451 Email: pestsolutions@bayer.com

Image of can for illustration purposes only, the design of the can is subject to change.

What do points make?

PROMPT® Register

Continuing Professional Development (CPD), love it or hate it – one thing's for sure, it's here to stay! And if you're not already collecting those points, the chances are you soon will be. *Pest* associate editor Helen Riby reports on the increasing importance of the BASIS PROMPT pest controllers' register.

Interest in the BASIS PROMPT pest controllers' register has really taken off. Membership grew at a phenomenal rate rising 650% from 400 to 3,000 between 2009 and 2013. It has since levelled off and currently stands at around 3,250. BASIS believes that's around 40% of the professional pest controllers in the UK. Whether that's an over or underestimate, who knows, as finding a definitive answer to the question of just how many UK pest professionals there are is nigh on impossible.

The biggest surge in membership came between the years 2011 and 2013. Some, but by no means all, of that increase was due to the decision by the British Pest Control Association (BPCA) that all member company technicians had to become members of the PROMPT register before the end of 2014. The increase between 2013 and 2014 was only small so despite rumours that there was some grumbling about the BPCA decision, it seems most member companies simply got on with signing up their technicians well in advance of the 31 December 2014 deadline.

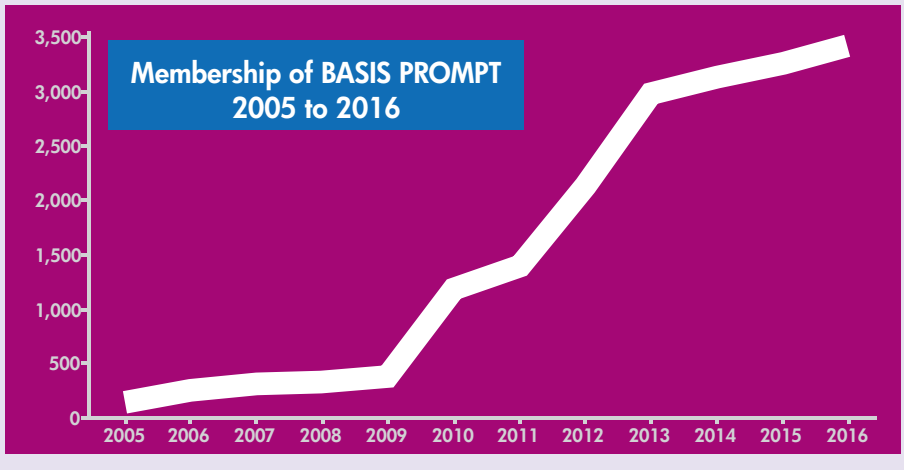
So, it seems that the carrot of the benefits of membership have been just as important as the stick of not being able to stay in BPCA.

PROMPT has actually been around longer than you might think. In fact, the first member still active in pest management is Paul Rodman from Monitor Pest Control in Kent. For those who don't know Monitor, the company has been operating for some 30 years and currently employs eight technicians. Paul is one of the two partners who own and manage the business and has just taken over as president of BPCA.

Paul joined PROMPT sixteen years ago, back in 2000. We asked him why he had been such an early adopter: "It was really because I already had experience of CPD, being a technical member of the Institute of Occupational Safety and Health (IOSH). It just seemed to me to be the right way to go to be able to demonstrate professional competence. Plenty of other professions have similar requirements – lawyers, accountants, medical professionals and so on – so why not pest control professionals?"

Stephen Jacob, BASIS chief executive

As part of a non-profit organisation, the goal of PROMPT is to promote and support professionalism in pest management. The idea is quite simple. Being a member allows you to easily and quickly demonstrate that you know what you are doing. To join the register you need to pass an exam, to stay on the register you must show, through collecting CPD, that you have remained up-to-date. The membership card also doubles up as photo ID, so it's useful when visiting customers' premises where you need to prove who you are. Going forward ▶▶▶



Benefits of PROMPT membership:

- Instantly prove your expertise and ID
- Build customer trust/loyalty
- Use it to market your business – display the logo on your paperwork, website and van – mention it when responding to tenders
- Help the industry avoid further regulation and red tape

that feature is going to be helpful for Rodenticide Stewardship purposes too.

Membership requirements

To join the register as a full member you must hold the RSPH/BPCA Level 2 qualification in pest management, or equivalent. You then complete a straightforward online application form and pay your membership fee of £30. As Paul Rodman pointed out the fee is not going to break the bank: "It's the equivalent to a wasps 'nest."

There is also an associate membership category for new entrants working towards their Level 2 qualification. These individual have two years to complete their studies. Pest controllers born before 1 January 1957 may also be admitted as associates under grandfather rights. A new associate membership has recently been introduced. Called the Associate Rodent Specific category it's designed to support the Rodenticide Stewardship Regime. To join you don't have to have the full Level 2 qualification, just one of the stewardship approved rodent qualifications.

To stay on the register as a full member you

Who is BASIS?

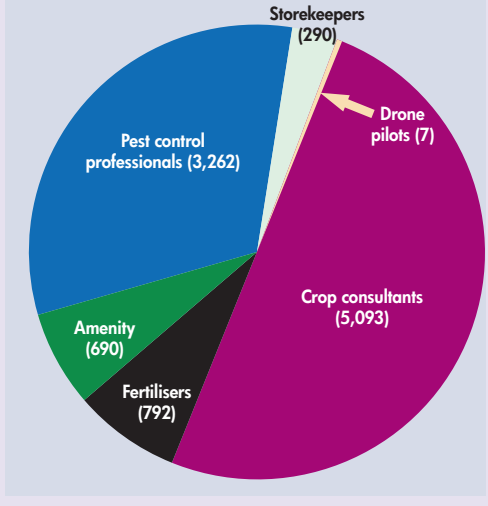
The business of BASIS is the promotion of professional standards in pesticides, fertilisers, public health pest control and allied industries. It has no direct commercial activities and doesn't train anyone. It isn't a trade association, so is not subjected to any pressures to develop business opportunities for its members. What it does do is set syllabuses and exams, approve trainers as competent and administer a number of professional registers. All fees generated from professional register membership, examinations and qualifications are used to service its members, making it a genuine non-profit making organisation and a registered charity.

BASIS was first set-up by the agrochemical industry in 1978 as a voluntary means of improving large-scale agrochemical storage in the UK. It those days BASIS stood for British Agrochemical Standards Inspection Scheme. To this day it still runs the BASIS Store Inspection Scheme which has since been extended to cover smaller agricultural pesticide stores and stores for amenity pesticides. Around 700 stores are inspected every year.

In 1982 BASIS took on a role assessing the competence of those who were selling and supplying pesticides. This activity expanded with the introduction of the Control of Pesticides Regulations 1986. In 1991 the BASIS Professional Register was launched to provide a recognised means for crop protection advisers to demonstrate that they had kept up-to-date. Today BASIS uses all that experience to administer similar professional registers for the amenity sector, public health pest control and the fertiliser industry.

As the pie chart shows the character of BASIS has now changed from an organisation dealing with a small number of pesticide manufacturers and specialist distributor stores, to one that has just over 11,000 members on its various professional registers.

Number of members on the BASIS professional registers



The Board of Trustees of the charity comprises the four founding organisations, namely the Agricultural Industries Confederation, the Crop Protection Association, the Association of Independent Crop Consultants and the National Farmers Union plus the chairmen from each sector-specific committee.

For PROMPT that's currently Sabra Everett from Killgerm. The Chemicals Regulation Directorate (part of the Health & Safety Executive) also attends BASIS Board meetings and understands the importance of CPD. With the Rodenticide Stewardship Regime now in place, HSE will no doubt be taking an even greater interest in the level of CPD completed.

must collect 20 CPD points throughout the PROMPT year, 1 January to 31 December. Associates need just 10 CPD points and there are sliding scales for people who join part way through the year.

Whilst a few pioneers saw the immediate benefits of joining, for the majority of pest controllers it's probably fair to say the idea was ahead of its time. This led to a chicken and egg situation. With just a few members, PROMPT couldn't generate enough income to employ anyone full-time, so there was no one to promote the idea and service levels suffered.

But all that's now changed. Five years ago when Stephen Jacob, now the new BASIS chief executive (see page 6), joined the organisation as business development manager one of his objectives was to get to know pest control and to expand PROMPT membership. With a critical mass achieved, a full-time administrator, Jack Moore, is now devoted to PROMPT. Jack is keen to find out more about pest control so if you see him out and about at pest control events then go and have a chat.

CPD hurdle easier than you think

Talking with pest professionals it is the need to collect CPD that often puts them off joining the PROMPT register. But this shouldn't be the case.

As PROMPT has established itself, more and more opportunities to gain the necessary points have sprung-up. Some of these are as simple as reading this magazine – something you are clearly already doing!

Here at ***Pest*** we pride ourselves in being amongst the first to recognise this growing need for CPD points. Our ***Pest Tests*** were introduced in Issue 3 in June 2009 and have been included in every issue since – that's 43 ***Pest Tests***, counting the one in this edition. As of 9 June 2016, a total of 4,195 ***Pest Tests*** had been completed. Last autumn we launched an online version which has already proved popular, but, worry not, the paper tests will remain for the foreseeable future.

As PROMPT has grown we too have seen significant growth in the uptake of our ***Pest Tests***. As the bar chart shows, we now regularly get around 200 entries per test. Whilst we are delighted our readers are finding these useful, it has put pressure on us to get ▶▶▶

Carry the card

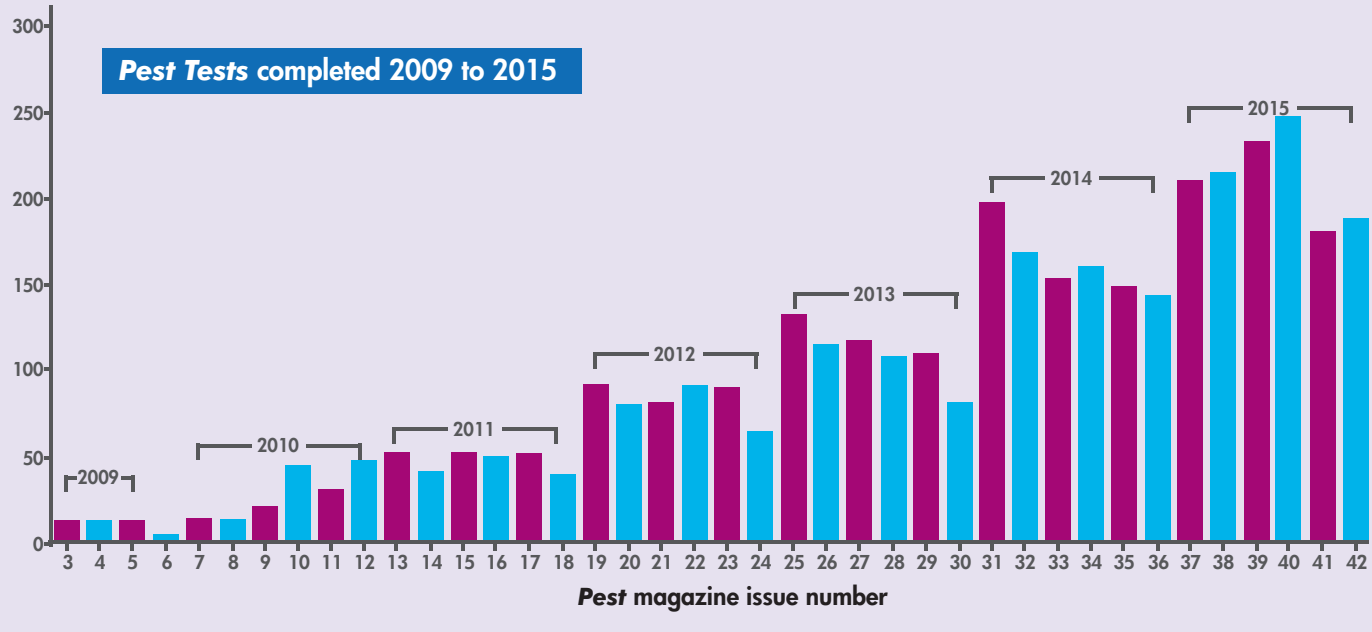
With over 3,000 members BASIS PROMPT has been able to turn some of its attention towards promoting to customers the benefits of choosing a card carrying pest controller.

The PROMPT card doubles as ID

The PR effort has been particularly successful in regional and local press where articles have warned householders to avoid bogus pest controllers by asking to see the BASIS PROMPT ID card.

As BASIS chief executive officer Stephen Jacob explained in one such article recently: "Our identity card is widely recognised as a symbol of quality and professionalism. It helps expert pest controllers to stand out from the crowd. All technicians on our database are fully qualified and up-to-date with the latest products and techniques, so homeowners can be sure that anyone carrying the card is exactly who they say they are."

Speaking at a National Pest Technicians Association (NPTA) regional roadshow in Nottinghamshire on 27 May 2016, Stephen highlighted the success of the PR campaign which has been made possible through the support of BPCA, NPTA, Killgerm, Bell and BASF. 524 articles were published in 2015 with an advertising value equivalent of £80,000 making a return on investment of over 600%. BASIS PROMPT is also now active on Twitter.



them all marked and speedily entered up onto your training records, so do bear with us. But don't worry, even if we get behind during the year, we guarantee to get everything up-to-date before the PROMPT year closes.

As well as reading magazines and doing quizzes on paper, or online, there are plenty of other ways to collect CPD points such as: attending trade association roadshows and technical seminars, going along to distributor-led events and taking part in formal training courses. In-house training also counts, although someone from the company will have to register the training event with BASIS PROMPT so that points can be allocated. Take a look at the table below and you can see how two typical members reached their 20 points with relative ease in 2015. As you can see, it really doesn't mean having to attend lots of expensive external training sessions.

Keeping track of your points total has also been made simple. Either login to the secure member area online, or use the PROMPT App available to download from the Apple store or Google play.

Mirroring the rise in membership has been a rise in the total number of CPD points claimed annually (see graph below). The sharp-eyed among you will notice that simply dividing the total number of points claimed in a year by the number on the register in that year results in a figure that is less than the 20 points required to stay on the register.

There are a number of factors at play here as Jack Moore points out: "First of all there's the churn of membership with some memberships lapsing and new people joining part way through the year and therefore not required to collect the full 20 points. Associates, of course, only need to achieve 10 points, so that lowers the average too."

If we have one criticism of CPD it's the way points are available for people who simply turn up to events like PestTech and PestEx. Spending an hour or two chatting with friends and drinking cups of coffee at these will get you two CPD points, that's the same number of points you'd earn from reading two or three technical articles in ***Pest*** magazine and completing that issue's ***Pest Test*** – the second activity seems to require rather more effort than the first! We've also spotted what can only be described as 'sales meetings' which offer CPD points.

With 800 CPD events requiring points to be allocated in 2015, often with little time in which to evaluate them, we shouldn't really be surprised to find some inconsistencies. Fortunately, it's something Stephen Jacob, in his new capacity has already identified as needing review in the near future.


Jack Moore, BASIS PROMPT administrator

At the end of the day all such professional CPD systems do rely quite heavily on the integrity of the individuals concerned. Event organisers have to be trusted not to sex-up their events to try to get more points. Members claiming, for example, that they have read all six issues of ***Pest*** magazine and so qualify for two CPD points can be checked against the circulation list, but there really is no way of knowing whether they have actually read any articles.

That's not to say the PROMPT register doesn't have some teeth. BASIS reserves the right to attend and audit any event. Similarly any member found to be falsifying CPD

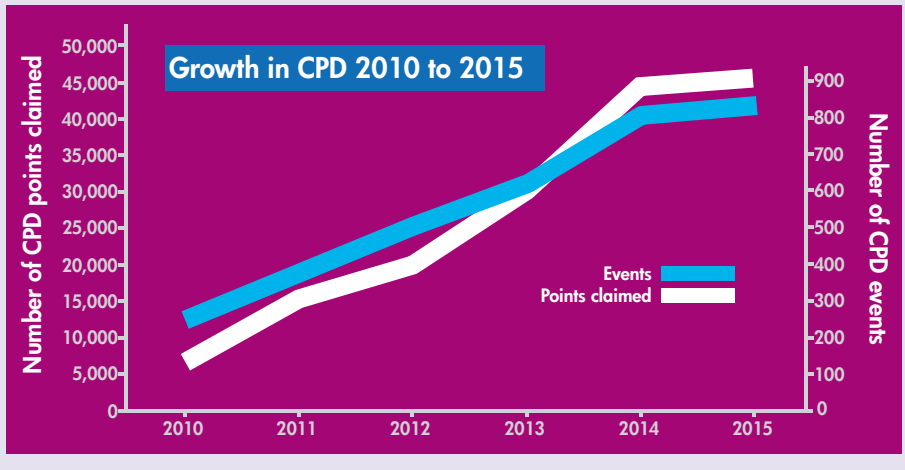
CPD points	Example pest professional 1: Activity	CPD points	Example pest professional 2: Activity
2	BPCA membership	2	NPTA membership
2	*PPC* magazine	2	***Pest*** magazine
2	***Pest*** magazine	2	CRRU UK Code of Best Practice
2	*Pest Control News*	3	Pelsis Roadshow
12	Pelsis Rodent Awareness training	5	NPTA & Killgerm Scottish training day
4	Killgerm workshop	2	PestTech 2015
4	BPCA regional training forum	2	***Pest Test*** 37
2	***Pest Test*** Extra - Insect Dissection	2	***Pest Test*** 38
		2	***Pest Test*** 39
		2	***Pest Test*** 41
30	**Points total**	**24**	**Points total**

PROMPT fees

Standard membership £30+VAT

Discounts:
Membership of the BPCA £25+VAT
Membership of the NPTA £25+VAT
Corporate/Local authority membership £20+VAT

There is no charge for joining within the same year as attaining the qualification that is a prerequisite for membership.



records will have breached the code of ethics signed-up to when joining the register. The ultimate sanction is being struck-off.

There are other safeguards too covering how many points can be claimed from particular types of events. For example, the maximum number of points a full member can claim from completing online/distance learning activities is 12 so, if you do all six ***Pest Tests***, you've used up your quota.

PROMPT benefits too from an established way of dealing with complaints, whether these are from members about training events, or exam results, or from pest control customers about individual members' performance. Going forward the new Professional Standards Committee will play a key role here ensure policies on operating standards are in place and transparent.

Stephen adds that his door is always open for any feedback; good or bad! There's also a new email address to contact with any questions or concerns at prompt-reg@basis.co.uk

A rival CPD scheme?

At PestTech 2015 there was talk of another CPD system being set-up called Pest Passport. But do we really need two systems? BASIS PROMPT has just reached a critical mass where it can really start to make an impact. Customers are only just beginning to understand what being a member of BASIS PROMPT means, so why confuse them?

The argument goes something like this. Competition is healthy, it gives people a choice. But is having a choice a bit of a luxury when it comes to something as non-commercial as proving you're up-to-date?

The leading lights behind this initiative are Oliver Madge, who some might remember from his days at the British Pest Control Association (BPCA), Lantra, the agricultural training and awarding body and the National Pest Technicians Association (NPTA). Oliver clearly knows a lot about the industry and now runs his own training business. He's been working with NPTA and Lantra to develop a modular approach to pest control training. We reported on this in ***Pest*** Issue 42: December 2015 & January 2016 and applauded the new training initiative, which has many benefits. But why does the modular approach need its own CPD system? Why can't it be integrated into the PROMPT system?

We don't know, but we can speculate. Perhaps Lantra had a clever bit of software that had been developed for other purposes and saw an opportunity to re-use it and earn a bit extra income – the fee for Pest Passport we understand will be similar to the PROMPT fee. Perhaps NPTA wanted to differentiate itself from BPCA, which has taken such a strong line making it compulsory for all member company technicians to be on PROMPT? Perhaps the PROMPT system was too rigid, designed for pest controllers who have the full Level 2 qualification? But there are already signs of that changing with the introduction the Associate Rodent Specific membership category.

The industry has really only just started to embrace PROMPT. Let's not go wasting loads of energy re-inventing the wheel. If the wheel we've got isn't quite smooth enough, rather than starting over again, then let's work together to knock off its rough edges and make it work for the whole industry.

Difethialone is different

Dr Romain Lasseur from IZIPEST is a French toxicologist with 15 years experience in rodent and insect pest management research. In this article he reminds us of how the anticoagulants have come to dominate professional rodent control and explains how one of them, difethialone, is uniquely placed to meet the requirements of the new EU classification of anticoagulant rodenticides as 'toxic to reproduction'.


Dr Romain Lasseur

Rodents have a large economic impact in both agriculture and urban areas across Europe and, indeed, the world. This is primarily because of their interest in human food sources. As pest professionals know, such rodents carry a lot of different diseases and for this reason rodent control is essential.

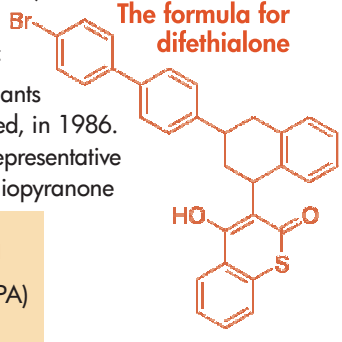
Anticoagulant compounds have become the number one method of control because the anticoagulant active in the bait is not detected by the rodents and because the delayed mode of action of these compounds prevents bait shyness, allowing high levels of control to be achieved.

From 1940 to 1980, new anticoagulant compounds were developed to increase the efficacy of control and to combat resistance to first generation compounds (warfarin, chlorophacinone, diphacinone and coumatetralyl) in both the brown rat and the house mouse *(RRAC, 2015)*. The introduction of the first second-generation anticoagulant rodenticdes (SGARs), bromadiolone and difenacoum, brought improved efficacy in rodent control.

Widespread use of bromadiolone and difenacoum however led to further rodent genetic adaptations to these two compounds, particularly in the brown rat and house mouse. Populations resistant to such compounds remain geographically limited, however, due to an apparent biological resistant cost.

To combat this second wave of resistance, three more SGARs were developed: flocoumafen, difethialone and brodifacoum. Those compounds are widely used now in commensal rodent control across Europe, although in the UK their use has been restricted to indoors only. This restriction will change with the new stewardship-compliant labels (see page 7). All three compounds demonstrate a very high efficacy without, up to now, any reported resistant cases in the field *(RRAC, 2015)*.

Difethialone was the last of the anticoagulants to be developed, in 1986. It is the only representative of the benzothiopyranone chemical family. Its chemical formula is close to brodifacoum but with the presence of a sulphur (S) atom in the aromatic cycle making it uniquely different.



The formula for difethialone

The sulphur atom in an external position in this compound is a major toxicological advantage as it allows the molecule to be stored in the rodent's liver and, as a consequence, it improves the compound's efficacy.

For 25 years, this active ingredient has been used in baits at a 25 ppm (parts per million) concentration *(Lechevin et al, 1988)*. This is the lowest concentration of all the anticoagulant rodenticides, see table.

It means that difethialone baits already meet the regulatory changes that will see all anticoagulant rodenticide active substances re-classified as 'toxic to reproduction' when used in concentrations above 30 ppm – see ***Pest*** Issues 43: February & March 2016, and 44: April & May 2016.

Products classified as 'toxic to reproduction' cannot be sold to the general public.

Active substance	Generation	Resistance	Concentration (ppm)
warfarin	1	YES (large)	100 to 250
chlorophacinone	1	YES	50
coumatetralyl	1	YES	50
bromadiolone	2 (initial)	YES (partial)	50
difenacoum	2 (initial)	YES (partial)	50
flocoumafen	2 (last)	NO	50
brodifacoum	2 (last)	NO	40
difethialone	2 (last)	NO	25

CEPA comments on reclassification

Confederation of European Pest Management Association (CEPA) president, Bertrand Montmoreau expects the official announcement on the reclassification – the ATP (Adaptation to Technical Progress) – will be published by the end of June 2016. "This ATP is very significant as it concerns almost all formulations using anticoagulants." Products with concentrations of active substance greater than, or equal to 30 ppm will have to be withdrawn from amateur use.

Despite a phase-in which allows affected products to remain on the market until 30 June 2018, the impact will be immediate. "In reality it will be inconceivable to go on acting as if nothing had happened. Many countries have already indicated that they will not wait to apply the ban," he said.

New marketing authorisations will be required for any replacement products so there will be no short-term solutions. And many professionals will also have to switch either because customers refuse to allow their use and/or because of employee health concerns. "The risk that we will have to prepare to deal with resistance as a result of the almost exclusive use of one single active anticoagulant substance, seems quite evident."

References

Lechevin, J.C. and Poche, R.M (1988). *Activity of LM2219 (Difethialone), a new anticoagulant rodenticide, in commensal rodents.* Proc. Vertebr. Pest Conf. Paper 13: 59-63.

RRAC (2015) *RRAC guidelines on Anticoagulant Rodenticide Resistance Management. Technical Monograph 2015.* Rodenticide Resistance Action Committee, CropLife International, Brussels. 29 pp.

TRAPPER®

T-Rex™

SUPERIOR DESIGN, SUPERIOR RESULTS

- Patented interlocking teeth of the Trapper T-Rex Rat Snap Trap deliver quick results with a powerful snap
- Aggressive, interlocking teeth for unmatched holding power
- Perfect combination of trigger sensitivity and trap velocity
- Removable bait cup allows trap to be fully serviced without being set

Bell LABORATORIES, INC.

THE WORLD LEADER IN RODENT CONTROL TECHNOLOGY®

www.belllabs.com | emea@belllabs.com

Madison, WI 53704 USA

Courting controversy

Pest professionals – our readers – find plenty to huff and puff about, but each time we include an article on mammal control we invariably receive a flurry of emails representing both ends of the opinion spectrum. This was certainly the case following the article in ***Pest*** issue 44: April & May 2016 about fox control and the plight of 43 lambs on an Exmoor farm.

First, a shortened version from an email sent by John Bryant, the animal welfare consultant for the Humane Wildlife Deterrence Association

"I write about your ***Pest*** issue 44 story 'Carnage!' I consider it to be completely bizarre nonsense. The idea that there could be eight foxes in one field and more on subsequent nights is nonsense. The picture shows eight dead foxes laid out in daylight, next to the bodies of five lambs. The foxes were supposed to have been shot at night and then collected and laid out in daylight, along with some dead lambs.

"By the time the first lambs are born pairs of foxes have set up their territories months before. Even in London a pair of foxes defend territories of 40 acres, say equivalent to 500 - 600 houses and gardens. Some years ago when I was involved in an experiment conducted by Aberdeen University in a sheep rearing estate in the north west of Scotland, a pair of foxes defended a territory of 40 sq km. The idea was to suspend all fox control for a period of three years to see what happened to the fox population and lamb losses. The outcome was that the fox population did not increase and lamb losses to foxes were considerably less than during the previous history of culling on the estate.

"Since then studies by several universities have shown that the impact of sheep farming by foxes (to quote both then MAFF and now Defra) is that fox predation on lambs is 'nationally insignificant'. On many hill farms lamb mortality can be 25% of newly-born lambs. Defra says that 95% of those losses are due to hypothermia, malnutrition, disease and/or mis-mothering, with only 5% due to accidents and predation – much of the latter being by dogs.

"The photographs show that the lambs still have heads, whereas foxes frequently bite the heads off their prey. For the farmer to suggest that 'pest control companies' are dumping foxes in the countryside is not only a slur, but is stupid. Why would pest controllers waste petrol carrying cages full of captured foxes and dump them in the countryside?

"I reckon a gamekeeper has collected up all his fox victims, shot or snared, to get the farmer off the hook for either gross neglect or dog attacks, or even local out of control fox hounds. According to prominent fox hunters, the usual culprit in sheep attacks are the shepherd's own sheep dogs."

On the other side of the coin is Nigel Cameron from Wildlife Management Services in Somerset

"I read, with great interest, your feature on fox control. Dave Archer has produced yet another fascinating article.

"I work closely with a local authority in a city well known for its urban foxes. I too have heard it rumoured that certain fox protection organisations have been cage trapping and relocating urban foxes into rural areas. This is not only an act of appalling cruelty but may also be an offence under The Abandonment of Animals Act 1960. This is a lesser known piece of legislation that all of us in pest control or wildlife management should be aware of.

"I attended a recent BASC firearms course in Devon where, as is usual for such events, we did a round of introductions and reasons for attending. I witnessed a farmer break down in tears when he related to us that he had just lost 50 lambs to foxes and was there to improve his shooting skills. We couldn't help but feel for him. My wife lost all her chickens one night to a fox."


Carnage!
Worst attack by foxes in 45 years
Solving the problem

The last word is left to Dave Archer of Devon-based DKA Pest Control, who contributed to the feature

"Since the publication of the article on the Exmoor farmer and his losses of lambs to foxes and my own 'Solving the problem' feature, I have received many calls and emails from pest controllers and those connected with the industry to say how much they enjoyed the article on fox control. I have received no negative feedback.

"There is a persistent undercurrent of those who feel that foxes do not predate lambs, or are not released by well meaning but misguided individuals, but are these the same people who are receiving phone calls from exasperated farmers? Fortunately not. Perhaps the pest control industry should also publish images of new-born lambs with eyes removed by various members of the corvid family?

"In addition, the fox I shot with three legs and a stitched up stump a few years ago didn't seem totally wild to me – but hey I'm no expert here! Those that give the opposing view would of course state this is pure fabrication – I only state, honestly, what I see.

"Incidentally in over 35 years of rural pest control, I have never seen lambs beheaded by foxes and, in addition, I have shot as many as 15 adult foxes within three fields over the course of a fortnight. I often question the foxes' territorial range in rural areas.

"Those of us that do carry out this work professionally know the facts! How many of us, as pest controllers, know of people that release cage trapped grey squirrels (illegally under the Wildlife and Countryside Act 1981) into the wild. Why would it be any different with organised groups regarding foxes?" I leave it to your readers to make up their own minds."

Poms fight back

For four weeks during late May and into June, a band of fearless British pest controllers featured in a series on *Dave* entitled *Deadliest Pest Down Under*. *Pest* editor, Frances McKim, watched all eight episodes. So how did these Poms rise to the challenge?

Billed by the programme producers, PopKorn, in the pre-screening publicity as 'Nine Brits spent three months in Australia working alongside local pest professionals', this series promised much. Maybe alarm bells should have been ringing though, as it was to be shown on the *Dave* channel, and yes, this series was certainly no documentary. And, to call it 'pest control' definitely stretched a point.

But readers must realise – TV is designed to be entertainment. And entertain it did – that is if you enjoyed seeing our brave bunch of Brits being scared witless. The series title of *Deadliest Pest Down Under* lived up to its description. The TV producer's aim must have been to match our fellow pesties against the largest, scariest and most formidable 'pests' they could find – these were mainly crocodiles, snakes and spiders. In one episode wild boar were the target, but the less said about the culling techniques the better. Rats and cockroaches made a passing appearance, but where they did, these were filmed in conditions designed to 'thrill' – namely a very gruesome abattoir.

In short, the series bore little resemblance to pest control as we know it and few of the skills our intrepid UK bunch possessed had the chance to rise to the top. Checking with Phil Ridley, editor of *Professional Pest Manager*, the leading professional pest control title in Australia, the 'pests' the gang had to face were far from typical. Professional pest controllers in Australia encounter very similar pests and challenges to UK professionals, except for the addition of termites as a key pest. Problem snakes are handled by specialised companies and battling crocs on a crocodile farm is hardly pest control – but it does make good TV.

The scarier the better

So, having dismissed this as any sort of serious pest control programme, what was it? In short it was a series of situations, the scarier and more horrible the better, which the participants (I nearly said contestants) had to face. One felt that at any moment Ant & Dec might jump out to say which 'contestant' was due for elimination!

What was fantastic though was how well our UK pest controllers acquitted themselves. None of them let the side down. If anything, the female competitors, who you felt had probably been selected to come over as 'airheads', really shone and showed considerable inner-steel. For example, Amber Zakrzewski, a horse trainer and former Miss Essex, had no knowledge of pest control, having been selected most likely for her good looks, rather than her skills, showed she was no 'Essex girl'.

In episode one, Norwich-based Louise Chapman, who trades as the Lady Mole Catcher, was obviously totally terrified by the gigantic crocodile which seemed to be eyeing her up for a quick snack. Louise rose to the challenge, did what she was instructed and lived to tell the tale. Having been scared witless, Louise said: "That evening I was in a trance like state, almost as if I'd been drugged, but the sense of achievement was verging on life changing."

The final female cast member, Kasey Sims, who at only 19 years of age was the youngest taking part, visibly grew in confidence and character when she realised

19 year old Kasey Sims visibly grew in confidence as the series progressed

Colin Sims (left) with Mark Bower, both safely back in the UK

Louise Chapman, centre, was terrified of the giant crocodiles, but rose to the challenge

Craig Freeman proved a natural on TV

Former Miss Essex, Amber Zakrzewski was no 'airhead'!

what she actually could do, rather than what she couldn't. "I wanted to prove girls can handle things as well as men," she said. This she certainly did when faced with catching and then transporting a crocodile, as well as a highly poisonous snake. With Kasey in Australia was her Dad, Colin, who runs the family-based pest control business, K&O Pest Control based in South London. It was quite a commitment for them both to decamp to Australia for ten weeks. As one of the most experienced on the trip, Colin didn't feature very much as maybe he was too sensible. But he did show his softer side, being almost in tears, when he had to hold a delightful wallaby he had caught on a main road in Sydney, as it was euthanised due to its injuries.

Rat Pack revisited

Those of us who watched the TV series, the ***Rat Pack*** back in 2009 will have recognised Jimmy Clarke from Environ Pest Control in Fulham, London (see article in ***Pest*** issue 5: September & October 2009). Jimmy just happened to already be in Australia on his own 'walk-about' when he received the call inviting him to join the series. After his ***Rat Pack*** experiences, seasoned TV performer, Jimmy said: "This series was entertainment – not pest control. I've no complaints though as I got to experience a multitude of things I simply couldn't organise for myself. It was real Oz. In addition, there was lots of free time, so I had the chance to go skydiving and swimming on the Great Barrier reef, amongst other things."

Also one to appreciate the opportunities was Mark Bower a wildlife management expert from Birmingham who works for Hereford-based Positive Environmental. He too swam on the Great Barrier reef and spent New Year's Eve watching the fireworks on the Sydney harbour bridge. Like several of the others, he faced the terrors of coming face-to-face with snakes which had got themselves into domestic premises. He summed-up the series as: "Aiming to put Pommies into challenging situations."

A TV natural

Also from Birmingham was 'chirpy chappie' Craig Freeman from Stop That Pest. The crew having realised Craig was terrified of spiders, went out of their way to face him with the deadliest, or the largest, they could find. "Everything in Oz is just downright dangerous!" he exclaimed. But Craig must have been a producer's dream as he 'freaked-out', on several occasions. What the TV people may not have realised was that Craig was up for it. Talking to him since his return he said: "I just loved it. The moment the camera was on me, I changed and developed this larger than life personality." Away from the cameras there is certainly a much more measured and professional side to Craig, as he had to consider

Seasoned TV performer, Jimmy Clarke enjoyed the experience

seriously the benefits to his two-man business before embarking on this adventure. "My original aim was to make people more aware of what pest control involved and to channel more work to our business." On this the jury is still out.

Whether viewers really believed this to be real-life Oz pest control – who knows? But without a shadow of a doubt, what the series has done is to change irreversibly the lives of those who took part. Each and every one regarded it as a one-off adventure and they have come home with a more relaxed and 'can do' approach to life. Well done!

Mark Bower took the opportunity to see the New Year's Eve fireworks in Sydney

Nominate now

best product award 2016 pest

Timetable

- **26 January** – ***Pest*** Best New Product Award 2016 launched;
- **26 January to 31 August 2016** – ***Pest*** readers nominate products;
- **1 September 2016** – product shortlist drawn-up;
- **1 September to 30 October 2016** – readers vote to find the winner;
- **31 October 2016** – votes counted;
- **2 November 2016** – winners announced at PestTech.

The *Pest* Best Product Award is now in its seventh year. Over that time it has become a firm favourite with UK pest management professionals.

It gives those working at the sharp end of pest control an opportunity to vote for the product they feel has been the most useful introduction over the previous 20 months.

For the 2016 award that means any product introduced between 1 January 2015 and 31 August 2016.

Whilst only those working in a pest management company, local authority pest control unit or as a self-employed pest controller can vote, anyone with an interest in pest management can nominate their favourite products. And, there is no limit on the number of products you can put forward.

Nominations must arrive in the *Pest* office by Wednesday 31 August 2016. You can complete the printed nomination form oposite and post it in, or simply email editor@pestmagazine.co.uk Alternatively go to the website www.pestmagazine.co.uk/en/news/posts/2016/jan/which-products-will-win-in-2016 and fill in the online nomination form.

2016 winner goes from strength to strength

Racumin Foam from Bayer was the clear winner in the 2016 award. Since scooping the top prize Bayer tell us the product has continued to impress. Richard Moseley, Bayer technical manager says: "We knew Racumin Foam would be a game changer when it was launched in October 2014 – but we didn't expect it to reach the levels of success it has."

The water-based foam formulation is the only one of its type available on the market for use against rats and mice and it works differently to traditional bait rodenticides.

"It's an anticoagulant that works using the rodent's natural grooming habits, taking away the issue of bait palatability," explains Richard.

It can be placed in areas such as access holes and cavity walls where rodents will come into contact with the product, transferring it onto their coat.

As the rodent grooms itself the active ingredient is ingested. Since rats groom 20% of the time, it has become a very useful addition to the pest controller's armoury as part of an integrated approach to pest management.

So how have pest professionals been using the product?

Dan Gaskin, owner, Acclaim Environmental

Acclaim Environmental has a contract with a local bakery that had a mouse infestation that was proving hard to treat. "The mice were running at height among void spaces and along girders in the roof. We tried every conceivable method to control the infestation – glue boards, traps and rodenticides," says Dan.

Some of these tried and tested methods, although effective, can be costly. "The problem with using glue boards was that we had to return to the site daily to check these. I employ a team of very experienced pest controllers and even brought in a consultant for advice. However the thing that solved the problem in the end was Racumin Foam. We used it up high and within a few days the mice had started to run across it. The problem was solved in a matter of days.

Bayer's Richard Moseley

Now all of my team have a can available to use," adds Dan.

Holly Duggan, Fen Tiger Pest Control

Based on the edge of the Lincolnshire Fens, Fen Tiger Pest Control has many contracts on farms with polystyrene lined potato storage facilities. The polystyrene is particularly

attractive for rodents to make runs in.

"A lot of the time, rats that live on farms don't like to eat traditional baits, especially if grain is available nearby. You can really struggle to get them to eat anything other than the grain they are feeding on. Putting Racumin Foam in the runs and hiding places away from the grain has proven to be an excellent solution," explains Holly.


Dan Gaskin, Acclaim Environmental

Zack Ali, Pesky Critters

Zack has found Racumin Foam particularly effective when used in tandem with a traditional baiting programme. On a recent job, the foam was deployed on a site with an extensive rat infestation where the rats were very 'bait-shy'.


Holly Duggan, Fen Tiger

"I've never seen anything like Racumin Foam before," he says. "There are some gel type products available but this is far superior in the way it works. It can be deployed in holes and runs and the fact that it stays damp for a long period means marauding rats cannot avoid coming into contact with it.


Zack Ali, Pesky Critters

"The evidence of its effectiveness was in the rapid results we had over plain rodenticide bait alone. We got control of the infestation within three weeks. It's worth bearing in mind that before we started using Racumin we had been trying to eradicate the rats for six weeks using blocks, grain and pellets. The rats were very neophobic so this product was invaluable in wiping out the colony."


Racumin Foam proved effective at the difficult Pesky Critters' site

Nominations so far

- New defender bird post & wire holder system from Jones & Son
- Vazor DE powder from Killgerm
- Phobi Larvox from Lodi UK
- Aquatain AMF mosquito film from the Bleu Line Group
- Halo Shades EFKs from Pelsis
- Agrilaser Autonomic from PestFix

Nomination form

best product award 2016 pest

I would like to nominate this/these product(s):

1

2

3

4

5

Name:

Organisation:

Tel:

Email:

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

All the rules are at: www.pestmagazine.co.uk/en/news/posts/2016/jan/which-products-will-win-in-2016

Galactic fly killers

The Mercury 30 (left) is a discreet 30W EFK boasting a sleek low profile and stainless steel housing. This unit allows side access to the glue board making it easy to service and offers up to 120m² coverage, explains 1env. Whereas, the larger Jupiter 45W (right) machine, offers coverage of up to 150m².

www.1env.co.uk

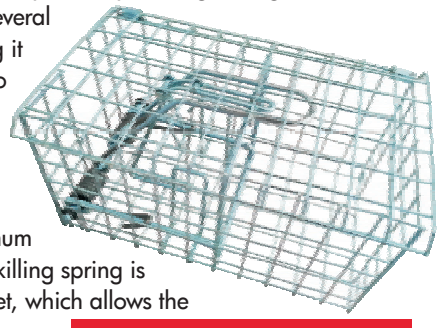
Copper fibres & nice smell added

MouseStop Premium proofing paste from Edialux builds on the traditions of its forerunner, MouseStop Original, but it now includes copper fibres making the product metal detectable and increasing its longevity. Natural herbs have also been added to give a pleasant smell to the product. It is instantly waterproof, making it perfect for use in hygiene sensitive areas as part of an IPM strategy.

www.edialux.co.uk

Specifically designed for squirrels

The Procull squirrel trap is designed and made in the UK. It has been tested against the latest humane standards and was granted 'Approved' status by Defra in March 2016, explains manufacturer, Fourteenacres. Although it may look a bit like a cage trap, the Procull delivers a very quick and humane kill – for most people a far better approach than a live capture trap. The light weight and compact design includes several innovative features, making it simple, safe and effective to use. The trap is self-contained in its own mesh cubby with integral baffles to guide the squirrel to the strike position for the optimum humane kill. The powerful killing spring is engaged after the trap is set, which allows the trigger to be adjusted safely.



www.fourteenacre.co.uk

Effective – Effect

Effect Ultimatum is a residual, broad spectrum, permethrin-based, emulsion concentrate for surface spraying that also contains tetramethrin for quick knockdown. It is suitable for flying and crawling insects both indoors and out.

www.killgerm.com

Mice get a clear run with Ranger

This unit provides the perfect environment for mice to be baited and trapped, says distributor, 1env Solutions. It offers mice a straight line of sight and can hold two mouse traps, side-by-side, at 90 degrees, with space for an electronic signalling device. Alternatively spikes are available for placement of bait blocks.

www.1env.co.uk

Mites in a sticky jam

MiteMax, explains Barrettine, contains an advanced food grade cellulose polymer that acts on contact with both poultry red mite (*Dermanyssus gallinae*) and the flour mite (*Acarus siro*). It produces a sticky trap, rendering mites irreversibly immobile. It offers rapid knockdown, but limited residual activity, so can be used either alone, or in a sequence, with insecticides. The formulation has been developed to penetrate deep into the cracks and crevices that harbour the mites, frequently found in poultry houses.

www.barrettine.com

Both rapid knock-down and residual control

Cimetrol Super is an oil-in-water emulsion, incorporating a micro-capsule suspension and contains a mix of two pyrethroid insecticides (cypermethrin and tetramethrin) plus the insect growth regulator (IGR), pyriproxyfen. This combination of actives means both flushing and rapid action are offered by the pyrethroids, combined with the IGR which ensures that any stubborn insect populations never get to pass their resistant properties onto the next generation. The product is ideal for the treatment of a multitude of insect pests and is especially useful where bed bugs and fleas are a problem.

www.pelgar.co.uk

Magnetic rat trap base

This powerful magnetic base locks rodent snap traps to metal surfaces such as beams, pipes and stanchions. It is easy to use, as the operator simply slides the bait trap into the base, locks it in place and then sets the trap.

www.killgerm.com

SEATTLE
WASHINGTON

OCTOBER 18–21

MARK YOUR CALENDAR FOR

PESTWORLD 2016

MAKING CONNECTIONS • FINDING ANSWERS • INCREASING PROFITS

Visit **www.pestworld2016.org** for the most up-to-date information.

Diary dates

25-29 July 2016

15th Conference on Rodent Biology
Faculty of Science, Palacký University, Olomouc
Czech Republic
http://rodensetspatium.upol.cz/

27-29 August 2016

PestWorld East
Grand Hyatt Hotel, P.O. Goa University, Bambolim, North Goa, Goa, India, 403206
www.npmapestworld.org/education-events/upcoming-events/pestworld-east/

5-7 September 2016

2nd Euroasian Pest-Management Conference
Technopark SLAVA, Nauchny Proezd, Moscow, Russia
www.pestmanagement.su/english/

14-16 September 2016

27th FAOPMA Conference 2016
Sea World Resort and Conference Centre, Gold Coast, Australia
www.aepma.com.au/Conference

27-28 September 2016

2016 CIEH Annual Conference: We can be heroes
East Midlands Conference Centre, Nottingham NG7 2RJ
www.cieh.org/annualconference2016/

18-21 October 2016

PestWorld 2016
Washington Convention Center/Sheraton Seattle Hotel
Seattle, Washington State, USA
www.pestworld2016.org/

2 November 2016

PestTech 2016
National Motorcycle Museum, Birmingham B92 0EJ
www.npta.org.uk/pesttech

16-18 November 2016

Parasitec 2016
Paris Event Center, 20 Avenue de la Porte de la Villette, 75019 Paris, France
www.parasitec.org/

Pest Test 45

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*** and answering all our questions correctly. So read through our articles on rodenticide stewardship (page 7), clothes moth management (pages 14-18) and difethialone (page 33) 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 By when must all pre-stewardship labelled rodenticide products be used up?

- a) 30 September 2016
- b) 1 January 2017
- c) 31 March 2017
- d) 30 September 2017

2 How long can adult male clothes moths live?

- a) Up to a 7 days
- b) Up to a 14 days
- c) Up to a 21 days
- d) Up to a 28 days

3 At what minimum temperature should clothes be washed to eliminate moth larvae?

- a) At least 30°C
- b) At least 40°C
- c) At least 50°C
- d) At least 60°C

4 Why were mothballs banned in Europe in 2008?

- a) They killed too many ladybirds
- b) People didn't like the smell
- c) They didn't work
- d) They were thought to be carcinogenic

5 If you were to attempt clothes moth control using parasitic wasps, how often would the card containing the larvae need replacing?

- a) Every week
- b) Every two weeks
- c) Every month
- d) Every year

6 For the last 25 years, what concentration in parts per million (ppm) has difethialone been used at?

- a) 15 ppm
- b) 25 ppm
- c) 40 ppm
- d) 50 ppm

Name:

Organisation:

Tel:

Email:

PROMPT account number: 200

EASY TO INSTALL LOW PROFILE DISHES

小島 BIRD FREE

BIRD FREE IN ACTION

Protecting the urban environment

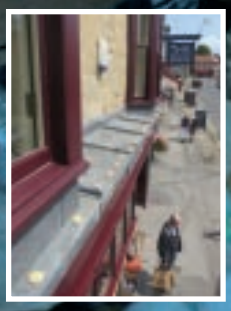
After a few days even the most dominant of birds will give up and the site will then be literally...

BIRD FREE

CABLE TIE

MAGNETIC

REGULAR



READY-TO-USE DISHES

- Cuts your installation time in half
- Quick, easy, mess-free installation
- Making working at heights safer and easier
- Firm texture enables use on pitched roofs and angled surfaces
- More discreet low profile dishes
- Keeps all pest birds away from structures without harming them
- NOW AVAILABLE in magnetic dishes AND with the NEW cable tie fixing

Bird Free Ltd ~ **Email:** ian.smith@bird-free.com **www.bird-free.com**

EXCLUSIVELY DISTRIBUTED BY:
Killgerm Chemicals Ltd., P.O. Box 2, Ossett, W. Yorks. WF5 9NA.
t 01924 268400 f 01924 264757 e info@killgerm.com **www.killgerm.com**

Killgerm®
www.killgerm.com