



PPC109

32 ADAPT & OVERCOME The lowdown on dynamic integrated pest management 36 NON-NATIVE SPECIES What's going to wash up and spoil your day?

RODENT WARS: PEST CONTROL'S PERENNIAL PROBLEM







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I work in rural environments with lots of other non-target mammals to consider, so I need to be mindful of primary and secondary poisoning to non-target species. I use Selontra[®] as it is non-bioaccumulative and highly palatable, and always have fantastic results with swift control. It's a fantastic product for my toolbox!"

Martyn, ABM Pest Control

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PPCCONTENTS



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Change is the

only constant







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point?

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PPC LIVE 2023: SNEAK PEEK

Calling all UK pest control technicians, managers and company owners!

THE WONDER OF RATS

Alex Wade delves into some of the incredible (and sometimes disgusting) things rats can do.

BAITING AND ENVIRONMENTAL IMPACT

Oliver Madge gives an overview of the purpose of baiting strategies and how environmental surroundings should inform a pest controller's choice of strategy and baits.

PESTWATCH AHOY THERE!

SHIP RATS IN BRITAIN

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A BOUNTIFUL 25 YEARS 37

PPC spoke to Elaine and Martin Rose-King about the pest control journey they've been on through the last quarter century.

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Karen Dawes explores why continuing professional development can be a great tool for a pest professional's development when approached with the right attitude.

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PPC

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BPCA Registered CPD points Online CPD quiz = 1 point each

Remember to log anything else you've learned in your CPD diary for even more points. **bpca.org.uk/add**



Basis Prompt point allocation Reading PPC mag = 2 points Online CPD quiz = 1 point each bpca.org.uk/cpd-quiz

I'm no bait-station kicker or CPD box ticker.

You'd think after 109 issues, we might run out of things to learn about rats and mice.

Rodent control has come a long way since the Egyptians kept cats in their grain stores in 3000 BC.

But the pace of change over the last five-to-ten years – with stewardship, new rodenticides and attitude changes to the products we use - means there's still plenty to learn, no matter how many rat seasons you've been through.

Talking of plenty to learn, BPCA Registered will soon be turning five years old. There have been many conversations about CPD 'point collecting' and its value in the sector.

As a rule, pest professionals love learning but hate burdensome administrative nonsense. Every day is a school day, so recording 20 hours of CPD should be a simple task for every technician.

However, your CPD needs to feel valuable to you as an individual. If you're ticking off the same CPD quizzes every year or find that the resources available are basic and condescending, maybe you're not getting enough from your CPD scheme.

We do our best to pack PPC with interesting articles for all experience levels. If you're on BPCA Registered, remember anything you do that helps you to be a better pest professional counts as CPD – you just have to record it.

You don't need to travel to breakfast meetings or pay for training courses. You can do it in the field, with a colleague, over a bacon buttie with friends, with a YouTube documentary or by following a Google rabbit hole to satisfy your curiosity.

No one wants to be a 'bait box kicker', so why should you settle for a 'CPD box ticker'?

We realise that not all CPD schemes work that way, but if you want to chat with us about BPCA Registered or the CPD materials (like PPC magazine) that BPCA provides, get in touch today.

Scott and Dee PPC editors hello@bpca.org.uk





Cockroaches are famously resilient - for years people believed they could even survive a nuclear war.

What they can't survive is the new laser and artificial intelligence system designed by a scientist at Heriot-Watt University in Edinburgh.

Ildar Rakhmatulin tested his system on cockroaches last year. The findings have now been published in Oriental Insects.

There are a multitude of methods for monitoring and controlling cockroaches like sticky traps, gels and pastes.

Rakhmatulin's system, which was all built using affordable, off-theshelf equipment, detects cockroaches with high accuracy from 1.2m.

The system relies on machine vision, which basically gives a computer the ability to see. Two cameras send signals back to the computer which give the cockroach's position.

That information is used to point the laser towards the cockroach. Machine vision then confirms whether the cockroach is still moving or not.

Rakhmatulin and his coauthors carried out a series of experiments. When they used the laser on low power they could change cockroach behaviour: emitting persistent heat from the laser causes the cockroaches to change position or direction. This means they can be deterred from dark hiding places.

Turning the heat up on the laser meant they could neutralise, or kill, the cockroaches from up to 1.2m.

"This laser system is a selective and eco-friendly pest control method. It's extremely promising", says Rakhmatulin.

"It's a tunable system, so it could be used to protect against mosquitoes, to keep predatory hornets away from bees or parasites from valuable crops or stores."

Rakhmatulin has published his methods, data and equipment used online. However, the open source information comes with a warning

"This system is not suitable for household use. The laser used will cause blindness or serious damage to the eyes.

"I'm sorry for people with cockroaches in their house, but this isn't the solution for them."



HM QUEEN **ELIZABETH II:** 1926-2022

We were deeply saddened to learn of the passing of Her Majesty

Thursday, 8 September 2022. BPCA joined everyone in the United

COMPANY FINED FOR AMATEUR PEST CONTROL ACCIDENT



An engineering company has been fined after one of its employees fell through a roof while installing bird deterrent spikes.

On 13 May 2020, a man working for Craven and Nicholas (Engineering) Ltd on St John's Road in Boston, stepped onto a fragile roof surface and fell six metres through it - suffering serious injuries to his head and left arm.

An investigation by the Health and Safety Executive (HSE) found that this task was not part of the normal work for employees of the company, and they had not properly risk assessed and planned the work at height.

The lack of planning meant that reasonably practicable and recognised control measures that could have prevented the man falling from height, such as the use of purpose designed access equipment and over-boarding of fragile roof surfaces, had not been implemented.

At Lincoln Magistrates Court on Wednesday 21 September, Craven and Nicholas (Engineering) Ltd of St Johns Road in Boston pleaded guilty to breaching Regulations 4(1)(a) and 4(1)(c) of the Work at Height Regulations 2005.

They were fined £14,000 and also ordered to pay £6.541.80 in costs.

Speaking after the hearing, HSE inspector Tim Nicholson said: "Where work at height cannot be avoided, it should be properly planned, adequately supervised and carried out in a safe manner using appropriate equipment.

"Companies should be aware that HSE will not hesitate to take appropriate enforcement action against those that fall below the required standards.

"There is a significant amount of guidance available to help companies protect employees when working at height on the HSE website."

all those whose lives she touched.

96, was both the oldest sovereign in

the country's history and its longest

Queen Elizabeth II, who died aged

serving. She was loved by many and the

events marking her death, which will be Kingdom and across the world in sending condolences to the Queen's family, and to remembered for many years to come, were a fitting tribute.

> Many of you have met the Queen, so if any members want to share those stories send them to hello@bpca.org.uk and we may print them in the next issue of PPC.

AVIAN FLU CONTROL ZONES IN FORCE ACROSS EAST ENGLAND

Following a number of cases of bird flu across the east of England, a regional Avian Influenza Prevention Zone (AIPZ) was declared on 27 September in Norfolk, Suffolk and parts of Essex.

Pest controllers in this area should be especially vigilant with their PPE and hygiene.

There is now a legal requirement for all bird keepers to implement enhanced biosecurity measures to help protect their flocks.

Details of the conditions and a map of the zone can be found on the Gov UK website.



If you have any concerns about the health of your birds, seek prompt advice from your vet.

You should register your poultry, even if only kept as pets, so that Defra can contact you during an outbreak. This is a legal requirement if you have 50 or more birds. Poultry includes chicken, duck, turkey, goose, pigeon (bred for meat), partridge, quail, guinea fowl and pheasant.

Get updates from Animal and Plant Health Agency on notifiable animal disease outbreaks in Great Britain.

gov.uk/guidance/apha-alertsubscription-service

The Queen, on

FREE SSIP HEALTH AND SAFETY CERTIFICATION FOR BPCA MEMBERS



BPCA has teamed up with inspection body CQMS Safety-Scheme to offer

BPCA member companies a free SSIP Health and Safety Certification.

Full BPCA members can get the certification by completing an online assessment directly with CQMS.

BPCA Head of Membership, Dee Ward-Thompson, said: "A SSIP-approved health and safety scheme certification is a fantastic way to show your clients that you understand how to mitigate risks and protect people around your work.

"We've built this relationship with CQMS so member companies of any size can get an industry-recognised certification to prove your commitment to health and safety standards".

What BPCA members get

Take part in this exclusive offer to get:

- An independent external audit of your health and safety management system against recognised industry standards
- A health and safety assessment per the SSIP Core Criteria, an industry recognised standard demonstrating compliance with UK health and safety standards
- A CQMS Safety-Scheme certificate and free use of the corresponding CQMS Safety-Scheme logo
- Added to the CQMS live portal
- Your company details on the SSIP portal
- Mutual recognition with other SSIP schemes, reducing the cost and paperwork burden through the 'deem to satisfy' agreement.

you've completed the certification, you'll be able to demonstrate your health and safety competency when tendering for work.

Dee continued: "Even if you've already got a SSIP-approved health and safety certification, our new member offer will likely benefit your company.

"Completing the free CQMS certification means that you 'deem to satisfy' in other SSIP-approved safety schemes.

"So, if your contractor requires CHAS, SafeContractor, or another SSIP-approved scheme, you can save time and money through the 'deem to satisfy' arrangement".

The offer is now available to all full BPCA members.

Access the benefit To begin your health

and safety certification

with CQMS, book your



assessment online. Enter "BPCA member" in the "How did you hear about CQMS?" part of the application.

cqms-ltd.co.uk/safety-scheme-forsuppliers

WINNERS ANNOUNCED FOR NATIONAL PEST AWARDS 2022



The winners of the National Pest Awards were announced in an unforgettable ceremony in Central London. BPCA members secured the majority of the awards on offer.

The Awards are a prestigious showcase of professional pest controllers across the UK, with the event being organised by Pest magazine and supported by BPCA, NPTA and Basis.

Pest magazine editor Simon King said: "Congratulations to the winners and thank you to the sponsors who made the event possible. We look forward to the National Pest Awards 2023."

BPCA Member winners:

- Unsung Hero of the Year: Tom Lindsay and Dan White, Vergo
- Young Pest Controller of the Year: Gemma Sutherland, Pest Solutions
- Pest Controller of the Year: James Wood, Beaver Pest Control
- Large Company of the Year: Beaver Pest Control
- Pest Business of the Year: Beaver Pest Control
- Small Company of the Year: London Network for Pest Solutions

Other winners:

- Lifetime Achievement Award: Nigel Binns (BPCA ex-president)
- Local Authority of the Year: Liverpool City Council
- Sustainability Initiative of the Year: Luton Borough Council
- Sole Trader of the Year: Stephen Paskin, Ripley
 Pest Management

Congrats to all the winners and members nominated!





UPDATED OPTIONS FOR RODENTICIDE 'PROOF-OF-COMPETENCE' TRAINING

The choice of training for farmers and trainee pest controllers to become recognised competent users and authorised purchasers of professional grade rodenticides has been updated in conjunction with the Campaign for Responsible Rodenticide Use UK (CRRU).

Lantra Awards has developed one Ofgual regulated 'Lantra Awards Level 2 Award in Rodent Management' to replace both 'Rodent Control on Farms' and 'Responsible and Effective Control of Commensal Rodents' certifications.

Head of CRRU Training and Certification Dr Matt Davies says rodenticide stewardship is strengthened by Ofqual regulation. "In addition to the new one from Lantra, RSPH and City & Guilds NPTC courses were already Ofqual regulated," he says. "The remaining options are anticipated to meet this level of regulation soon."

For farmers and pest control trainees, there are now seven courses in total, listed at thinkwildlife.org/ training-certification. In each case,

passing the end of course exam yields a formal qualification/certification accepted at point-of-sale for professional-use rodenticides under the UK Rodenticide Stewardship Regime, operated by CRRU.

The seven courses are:

- RSPH/BPCA Level 2 Award in Pest Management
- RSPH/BPCA Level 2 Certificate in Pest Management
- City & Guilds NPTC Level 2 Award in the Safe Use of Pesticides for Vertebrate Pest Control for Bats and Mice
- Lantra Awards Level 2 Award in Rodent Management
- Killgerm Principles of Rodent Control (Exam through Basis)
- RSPH Level 2 Award in the Safe Use of Rodenticides
- BPCA Using Rodenticides Safely (Exam through Basis).

Separately from these, the Basis Rat Control For Gamekeepers course also remains available.

View the list online thinkwildlife. org/training-certification

BEES ACTIVE IN WOODLAND TREE-TOPS

Wild bees may be just as happy visiting the high canopy of woodlands as they are among the flowers at ground level, according to new research from the University of East Anglia.

Woodland shaded interiors are generally considered a poor habitat for sun-loving bees, but a new study reveals that a diverse community of wild bees are active high up above the shade - among the trees' branches and foliage in the sunlit woodland canopy.

The team said that woodland canopies may play a more significant role in bee conservation than previously thought, with nectar and pollen-rich sycamore trees proving particularly attractive.

Dr Richard Davies, from UEA's School of Biological Sciences, said: "Wild bees are a major contributor to crop pollination services, but to thrive in agricultural landscapes they also need non-crop habitats to provide places to nest and flowers to feed on.



"Shaded woodland interiors are often considered poor foraging habitat for bees, but until now, bee activity in the sunlit woodland canopy has scarcely been investigated."

Lead researcher Guthrie Allen, also from UEA's School of Biological Sciences, said: "We wanted to find out more about the potential for the woodland canopy to support wild bee communities."

Bee communities were investigated across 15 woodland sites in a farmed landscape in Norfolk during late spring. Read the full story at ppconline.org

CONFIRMED ASIAN HORNET SIGHTING IN DOVER

Enhanced surveillance is underway in Dover, following confirmation of an Asian hornet sighting. A photo, taken by a member of the public, was sent to the National Bee Unit (NBU) which confirmed the identification.

The Department for Environment and Rural Affairs (Defra) has not yet confirmed on its website, but updates are at gov.uk/ government/publications/ asian-hornet-uk-sightings

NBU encouraged the public, beekeepers and professional pest managers to remain vigilant for the signs of Asian hornets, particularly near ivy in full flower, which is attractive to the species.

Please report

sightings using the 'Asian Hornet Watch' app for iPhone and Android, or get in touch with Non-native Species Secretariat (NNSS).





WIN £500 WITH THE RETURN OF THE BEST PEST PIC COMPETITION!

BPCA is looking for the best pest photograph and is offering a £500 prize for anyone who captures the perfect image of public health pest control. The competition is now officially open.

All you need to do is tweet your image to **@britpestcontrol** or tag us on Facebook **@Britishpestcontrol** with the hashtag #BestPestPic2023.

The photograph can be of any public health pest or a pest management professional in action, helping to protect people from infestations. The winner will be announced at our industry event PPC Live 2023.

The shortlist and winners

The entries will be shortlisted and the top 10 best pest photographs of the year will be on display around the PPC Live 2023 exhibition hall, which takes place on Wednesday, 22 March 2023 at the Yorkshire Event Centre.

The winning photograph will be picked by a panel of leading experts and members of the BPCA team. Closing date is 3.45pm, 17 February 2023.

Rules

- You must only submit your own photograph
- The picture must be taken in the UK
- The photograph must contain a public health pest or a picture of pest professionals protecting people through pest management
- You must submit the photo via social media (Twitter or Facebook) with the hashtag #BestPestPic2023
- The images must not contain any blood, gore or be of an animal in distress
- You may submit up to ten images
- You must be able to send us a high-resolution version of the image if you're shortlisted.



Terms and conditions

This competition is open to residents of the UK, Channel Islands, Isle of Man and Republic of Ireland aged 18 years or over, except for employees of the British Pest Control Association (BPCA), their families or anyone else associated with this competition.

Pest Control Association (BPCA), their families or anyone else associated with this competition. All information detailing how to enter this competition forms part of these terms and conditions. It is a condition of entry that all rules are accepted as final and that the competitor agrees to abide by these rules. The decision of the judges is final and no correspondence will be entered into. Submission of an entry will be taken to mean acceptance of these terms and conditions.

Image files must be 200 dpi and between 1MB and 3MB.

All entries must be received by the advertised closing time and date.

By submitting a photograph, you agree BPCA may have unlimited use of the photograph for any promotional activity in print or digitally. You may enter a maximum of ten

You may enter a maximum of ten photographs for consideration. Any photographs submitted after that will not be considered.

The prize can be collected at PPC Live 2023 (Wednesday, 22 March 2023 at the Yorkshire Event Centre) after the winner is selected. If you cannot make the event and you are shortlisted, BPCA will endeavour to make sure you get your prize money should your photograph be selected.



RAT WOMAN: OUR LIVES - A REVIEW

We're always pleased to see the profile of professional pest control raised on prime-time TV. But with misconceptions about our profession and TV

producers controlling the edit, it's easy to agitate social media warriors or feed the old stereotypes of killers rather than carers. But, this documentary plays out very differently and is a pleasure to watch.

Rat Woman is an observational documentary and part of the Our Lives series. This episode follows BPCA member company North West Pest Control, run by Patricia Page – the hero of this story.

The crew follows Patricia and her team on several jobs. Incredibly the 30-minute show features rats, mice, wasps, pigeons, cockroaches, and even feral honey bees – showing pest control is more than just calling the 'rat man' (or 'rat woman').

Patricia doesn't set a foot wrong; she is respectful and compassionate to clients and the animals she manages.

In one scene, Patricia explains the public health risk of wasps while recognising their place in the ecosystem. She advocates for public health but still takes the time to relocate a golf ball-sized nest, so it can continue to deal with garden aphids. Her elderly customer is safe and the nest wasn't destroyed. No subject is too controversial for Patricia to talk about. Her no-kill policy for feral honey bees sees her joined by her local 'bee whisperer', who helps her

> expertly relocate a beard of bees to a new home. This may seem to be pedestrian to us but, for many viewers, this dispels the myth that our first port of call is to kill.

"I don't do it to make me feel good. I do it because I understand what they're going through.

And I understand the pain and the anguish that they're going through. Everyone fits into the roles in life and I think I was born to be a rat woman." Patricia Page, The Rat Woman

Later, Patricia expertly explains the risks of secondary infestations caused by a pigeon nest in a loft, justifying why eggs must be removed and reassuring us that the egg is chick-less. I'm sure she had many fooled when she spoke of 'poached pigeon egg' for breakfast, but Patricia's endearing humour holds this story together.

Patricia's wit and the true companionship of a familyrun pest control company can't help but make you smile.

In one shot, where Patricia is removing a tiny wasp nest: "I might keep my mouth shut for this one because I don't want to irritate her". In a beat, she turns to her technician and says: "And no, I'm not talking about my wife, before you say anything smart, rat boy".

Talking of technicians, Conor is another star. He reminisces about forgetting rat carcasses in his pocket and his partner finding them in the laundry basket.

Overall, Patricia and her team paint pest control people as eccentric (which we are) but also as passionate professionals who love nature, people and hard work.

Patricia and her team do us all a service. She's a champion of balancing public health and respecting animals. She serves us all by starring in this short documentary and showcasing the very best of what our crucial sector does.

Thanks, Patricia - keep up the fantastic work,

Watch Rat Woman

Rat Woman is available to watch on BBC iPlayer. bbc.co.uk/iplayer/episode/m001bv3b/ourlives-series-6-rat-woman



NEW APPOINTMENTS AT PELSIS



Global pest control manufacturer and distributor Pelsis Group has appointed Scott Gammon as General Manager for its UK and Nordics operations.

Scott joins Pelsis from Rentokil Initial where he was Area Operations Manager, having worked for the business for 17 years. Scott

will oversee Pelsis Group distribution businesses in the UK, Ireland and Nordic regions.

Former BPCA president Tom Holmes has also been appointed as the group's Global Portfolio Lead for its fly killer product category.

Tom transitions from his role as Head of Pro-Pest Development of the groups distribution division, Edialux Professional.

He will focus on strategy and portfolio development for Pelsis, which operates fly killer brands, Brandenburg and Insect-O-Cutor.

Speaking about the appointments, Pelsis Chief Operating Officer Cahal McQuillan said: "We are pleased to welcome Scott to the business as General Manager and congratulate Tom on his appointment as Global Portfolio Lead for our market leading fly killer category.

"The business has exciting plans for the future as we continue to develop and supply new, innovative products and provide support to our retail and professional customers."



PLC, was successful in gaining

the globally recognised Carbon Neutral certification for the seventh consecutive year, further demonstrating continuous commitment towards the environment.

The audit to measure the greenhouse gas (GHG) emissions associated with the operations of the company in Sri Lanka was conducted by The Climate and Conservation Consortium (CCC) [formerly The Carbon Consulting Company].

CCC has been guiding Exterminators PLC on its sustainability journey in managing and mitigating organisational emissions for the past seven years. This latest achievement is also a part of a larger vision of the pest control company to become a more responsible corporate citizen.

The Carbon Neutral Certification for Exterminators PLC was awarded by The Sustainable Future Group (SFG), Sri Lanka's only sustainability verification and certification body.

SRI-LANKAN BASED EXTERMINATORS **CARBON NEUTRAL FOR SEVENTH YEAR**

BPCA Observer member Exterminators

Compliance at Exterminators PLC, explained: "The direct and indirect effects of pesticides on wildlife, waterways and the environment at large may be harmful and are entirely undesirable. Customers are becoming more averse to chemical use and businesses today are expected to be less harmful. more transparent and to actively participate in making positive changes to be sustainable and improve the environment.

Shehani De Waas, Manager Operations and

"As a leader in the industry and the SME sector, we believe that we have a moral obligation to respond to this new paradigm: to adopt a business model of increased accountability."

Sajeewa Ranasinghe, Manager -Sustainability Assurance and Advisory Services at SFG, commented at the certificate handover: "Exterminators PLC has been a leader in sustainability in its respective industry in Sri Lanka for a long time now. The company's dedication to measure, manage, and negate its emissions-related environmental impact annually is truly an encouraging feat and one that should be emulated by corporates in any sector. We are proud to have partnered with Exterminators PLC on its sustainability journey."

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NEW MEMBERS

Full servicing members

- Envirosafe Pest Control, West Malling
- Pale Horse Pest Control, Bristol
- Resolvapest, Preston

Observer members:

- Al Mirqab Facilities Management Company, Qatar
- Hasad Company, Saudi Arabia
- Mazmo Environmental Services, United Arab Emirates
- Rush Pest Control Company, Saudi Arabia

MADE

IN

FRANCE



You'll see some changes in the BPCA Staff team soon, when our BPCA Registered Scheme Administrator, Katrina Jellyman, goes on maternity leave in December (insert



collective excited squeal!).

I'm sure you join the BPCA Staff team in wishing Katrina all the best on her amazing adventure, with her fiancé and their new arrival.



MIAMI VICE?

While out on a family holiday in Florida, Stuart Blair from Graham Environmental Services took a trip south to Miami to do a little bit of unusual pest control.

"Over a period of eight weeks I arranged to go out with two guys I had been speaking with on social media, after seeing some of their YouTube content.

"Both of them are well known for the removal of invasive pests in the region and we spent some time dispatching iguanas with air rifles.

"I had a great time trying something new and made some fantastic memories while doing some pest control...a busman's holiday!"



BUGGED IN BAHRAIN

Neil Wotherspoon from Elite Pest Management sent in this picture from Bahrain, while doing some auditing and training. "After delivering some training on cockroaches and bed bugs a few of them said they have them in their accommodation. I sent them home with sticky pads and this was the result of what they showed me! Needless to say this has been escalated to a higher power!"







FREE COD EVENTS

Event type	Webinar - Members only	MENNERS Local forum	n Virt	ual forum
Name		When?	CPD	Sponsor
WEST (CHELT	ENHAM)	23 November	6	Killgerm
DIGITAL 16		29 November	3	Edialux
MIDLANDS (T	WYCROSS ZOO)	6 December	6	Lodi UK
JOIN US FOR THE BPCA 80th ANNIVERSARY MEAL AND NETWORKING EVENT WARRINGTON 30 November COALVILLE 5 December LONDON 12 December				
Bird managem	ent licences in 2023	18 January	1	
ESSEX		1 February	6	Pestfix
Bee removal b	asics for pest professionals	15 February	1	
DIGITAL 17 Int	ernational Women's Day	8 March	3	Pelsis
BPCA PERCEVER SAVE THE DATE: THE PROFESSIONAL PEST CONTROL SHOW 22 March 2023 Yorkshire Event Centre, Harrogate				
Social insects and control	: biology, behaviour	29 March	1	Ê
How to set up	pest management contracts	19 April	1	
Tiny flies: drai	n and fruit fly pest control	3 May	1	A



+ 23/11/23

Non-member 'open day' Special online event for pest management companies that are NOT members of BPCA. Learn about membership, meet Board members and ask questions. Learn more and book at bpca.org.uk/secret

Name	When?	CPD	Sponsor
GLASGOW	24 May	6	Deadline
DIGITAL 18 World Pest Day	6 June	3	Killgerm
The Consumer Rights Act for pest controllers	14 June	1	
Nuisance pests and how to manage them	12 July	1	
Biting insect pests and their control	2 August	1	
DIGITAL 19	16 August	3	BASF
BRISTOL	20 September	6	Lodi UK
Drains and rat control for pest professionals	27 September	1	
DIGITAL 20	4 October	3	Bayer
Rodenticide stewardship and environmental risk assessments	18 October	1	
MANCHESTER	22 November	6	1env + Pelgar
Non-pest mammals in the UK	29 November	1	
Control of Substances Hazardous to Health (COSHH) for pest control	20 December	1	

bpca.org.uk/events

PESTS IN THE PRESS: JULY TO SEPTEMBER 2022

Press activity ramped up with appearances on television and radio for BPCA as a long hot summer drifted into autumn, while seasonal pests including wasps and maggots generated plenty of headlines in print and online.

Activity in Q3

Work to position BPCA as a voice for the industry in the press is continuing to bear fruit. National and regional news sites cover newly-released advice as well as quoting previously issued information from the Association.

BPCA's guide to 'Things that go buzz' proved popular in regionals and sector-specific titles including Landscaping Matters, Local Gardener and Garden Forum in July. Enquiries from the media included information requests from iNews, BBC Radio Hereford & Worcester and Tomorrow's Cleaning.

The focus in August was largely on wasps, with some titles reinforcing BPCA's key messages in headlines such as: "'Call in the professionals' is message on wasp pests".

BPCA wasp advice was included in articles from the South Wales Guardian and Oxford Mail to South West Farmer and Glasgow Evening Times.

Also in August, comments from a previous press release on false widow spiders resurfaced in articles across the UK from The Daily Mirror to Coventry Telegraph and Hull Daily Mail.

An interview request from GB News resulted in Technical Manager Natalie Bungay appearing live on Breakfast with Eamonn and Ellie on Thursday, August 25, explaining why many people will see spiders and invertebrates moving indoors as the weather turns colder.

Natalie also advised viewers to call the RSPCA rather than a BPCA member in the rare instance a snake is discovered indoors, and offered Eamonn some advice on how to tackle his annual ant problem at home.

Warnings on wasps continued to gain coverage into September, alongside an article encouraging householders to check bins for maggots after a long hot summer.

On Wednesday, September 14, it was the turn of Technical Officer John Horsley to face the media with an interview on the consumer programme You and Yours, presented by Peter White, on BBC Radio 4.

John was called in to comment on bed bugs and the difficulty in tackling them as part of a debate about the right to a refund for holiday-makers who discover they are sharing their accommodation with the pest.

Stories about bed bugs popped up in regional and national titles at least once in each month over Q3, with BPCA advice guoted each time.



TOP 3 HEADLINES

WASP NEST? DON'T BE STUNG INTO DIY ACTION Dorset Echo

HOUSEHOLDS ON MAGGOT ALERT Basingstoke and North Hampshire Gazette

> **BUZZ OFF! Daily Star**

ARTICLES TO-DATE 2022 379

CIRCULATION 170,625,536

Press releases issued in September included articles on fleas and ticks, with features about woodlice, rats and mice planned in the run up to Christmas, alongside some targeted stories about the role of rodenticides in farming.

Read all about it!

Spot something in the press? Idea for a press release? Tell us. hello@bpca.org.uk

PESTS IN POLITICS: AUTUMN 2022

A new Prime Minister means a whole host of new government ministers to start making relationships with. British politics is still incredibly turbulent. However, BPCA's lobbying work continues. Stay up-to-date with all things pest in the UK parliament and devolved administrations. PPC helps keep you firmly in the loop.

Glue traps

Wales

The Agriculture (Wales) Bill has been published, committing to a complete prohibition of using snares and glue traps.

Unlike the Glue Traps (Offences) Act, the Agriculture (Wales) Bill has no provision for pest professionals to use glue boards under licence at this time.

BPCA has been invited to give evidence defending glue boards at the Welsh Parliament in November.

lan Andrew, BPCA Chief Exec, said: "We've repeatedly explained to the Welsh government that pest professionals have no alternative tool in their kits to protect vulnerable people and vital infrastructure when speed is essential.

"Through our conversations with UK MPs and Ministers, we successfully campaigned for the Glue Traps (Offences) Bill (now Act) to be amended to include a licensing scheme in England.

"The Welsh government seems much less open to helping us protect its citizens from public health pests. Giving evidence at the Welsh Parliament is probably our last opportunity to have our voices heard."

Lesley Griffiths MS, Minister for Rural Affairs and North Wales, and Trefnydd, said in a statement: "Wales will be the first of the UK nations to completely ban the use of snares and glue traps".

Scotland

Scotland has announced a plan to ban glue traps through a Wildlife Management (Grouse) Bill in 2022/23. Scottish Ministers have previously announced that their intention is to ban the use and sale of glue traps.

At the time of writing civil servants have indicated a consultation on the proposed ban on rodent glue boards should be published soon. However, a date has not yet been confirmed.

England

BPCA continues to regularly communicate with Defra civil servants to work out how the licences for pest professionals under the Glue Traps (Offences) Act will work in practice.

While the Act has received Royal Assent, you can continue to use glue traps during the two-year lead-in period set out by the Government, during which



the licensing scheme will be created and rolled out.

Given the intentions of the Welsh and Scottish governments, Defra has indicated they're exploring whether there are any opportunities to align. What this means in practice is still unclear.

Northern Ireland

The Northern Irish government has indicated they have no current plans to ban glue boards.

Temporary accommodation standards

On 21 September Sam Tarry MP (Ilford South) asked the Secretary of State for Levelling Up, Housing and Communities, what steps his Department is taking to ensure that properties (a) are pest-free and (b) provide a safe environment for residents.

Lee Rowley MP (North East Derbyshire) and Parliamentary Under Secretary of State in the Department for Levelling Up, Housing and Communities replied: "Local authorities have a statutory duty to provide temporary accommodation for households owed the main homelessness duty until suitable long-term accommodation can be offered to them. They must ensure accommodation is suitable in relation to the applicant and to all members of their household who normally reside with them, or who might reasonably be expected to reside with them, and there is a right of appeal.

"Housing authorities should, as a minimum, ensure that all temporary accommodation is free of Category 1 hazards as identified by the Housing Health and Safety Rating System (HHSRS).

"We have given local authorities very strong powers to take enforcement action when they identify seriously hazardous conditions, including the power to issue heavy fines."

Biocides

Many active substances used for pest management are coming up for renewal. Under the GB BPR, active substance approvals will expire unless a renewal application is submitted at least 550 days before the expiry date.

BPCA anticipates that the majority of these active ingredients will be renewed. However, the additional costs involved in registering a product specifically for the smaller UK market (under GB BPR) post-Brexit means that some actives may not be financially viable for renewal.

Approval holders for biocidal products and active ingredients post-Brexit have to pay their existing ECHA fee to gain access to the EU-27, and a further

£200,000 for the renewal of active substances under the UK framework for access to the GB market.

BPCA continues to lobby the HSE to develop and implement a system that doesn't jeopardise UK trade or risk human health.

28 December 2022:

- Cholecalciferol (CAS 67-97-0 EC 200-673-2) in product type 14
- Warfarin (CAS 81-81-2 EC 201-377-6) in product type 14
- Difenacoum (CAS 56073-07-5 EC 259-978-4) in product type 14
- Bromadiolone (CAS 28772-56-7 EC 249-205-914) in product type 14
- Difethialone (CAS 104653-34-1 EC n/a) in product type 14
- Brodifacoum (CAS 56073-10-0 EC 259-980-5) in product type 14
- Flocoumafen (CAS 90035-08-8 EC 421-960-014) in product type 14
- Chlorophacinone (CAS 3691-35-8 EC 223-003-0) in product type 14
- Coumatetralyl (CAS 5836-29-3 EC 227-424-0) in product type 14
- Polyhexamethylene biguanide hydrochloride with a mean number-average molecular weight (Mn) of 1600 and a mean polydispersity (PDI) of 1.8 (PHMB (1600;1.8)) (CAS 27083-27-8 / 32289-58-0 EC n/a) in product types 2, 3 and 11
- Muscalure (CAS 27519-02-4 EC 248-505-7) in product type 19.

HSE new hazard classifications

The Health and Safety Executive (HSE) is considering adding new hazard classifications for chemicals. 'Endocrine disruptors' is one of the proposed new hazard warnings relevant to pest control products.

The impact of this could be that we see more restrictions on use and more substances at risk as manufacturers choose not to support certain products or actives.

European Union (EU) rodenticide renewals

The EU is examining anticoagulants and looking at putting them into a risk hierarchy based on overall risk. They're also closely looking at the use of hardware and traps as part of IPM as alternatives.

There's a social-economic analysis of AVKs being conducted which is almost solely looking at the economic factors. This will form part of the consideration in keeping AVKs available across the EU. BPCA will publish more on this report when it's available.

NANOGREEN ACQUIRES KRYPTON ENVIRONMENTAL SERVICES

Nanogreen acquires BPCA member Krypton Environmental Services to round off their Soft Facilities Management offering.

John Richards, Founder at Krypton Environmental, commented: "I have worked with Nanogreen for a couple of years and watched how their organisation has put both the environment and people first.

"When we started our discussion about the acquisition it absolutely aligned to my goals and now working alongside Chris and Craig, we can make both Krypton and Nanogreen a formidable force for good while delivering high service levels."

"This has been a game changer for Nanogreen and Krypton. We have been truly fortunate in finding an organisation so enthusiastic and dedicated as Krypton, thanks to John and his efforts," said Chris Horgan, Director at Nanogreen.

Craig Duff, also a Director at Nanogreen, added: "Krypton not only provides valued added services to our combined client base, but it also provides our companies with an extra opportunity to change industries and help clients who are aligned to our values. It gives them the chance to reinvent their corporate social responsibility; for a fairer, cleaner society as a valuable part of their procurement chain.

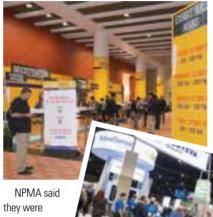
"We look forward to our continued growth and our journey in facilities management alongside the new members of our Nanogreen Family."

THE PEST CONTROL INDUSTRY FLOCKS TO BOSTON FOR PESTWORLD 2022

The professional pest control industry was out in force at this year's PestWorld 2022 event held in Boston, Massachusetts, USA over the four days of 11-14 October 2022.

For most international delegates it had been three years since they had had a chance to attend due to the Covid-19 restrictions.

The organisers, the National Pest Management Association (NPMA), extended a warm welcome to all delegates and there was certainly something of a party atmosphere throughout the event.



they were delighted by the

attendance figures

which were approaching pre-Covid levels, despite lingering health fears regarding international travel.

For those who would like to attend PestWorld 2023, put the dates of 17-20 October 2023 in the diary. The venue is the Hawaii Convention Centre, Honolulu.

For the full review, visit ppconline.org

DAVID FRENCH ELECTED RSPH FELLOW



David French, from BPCA member company 5 Star Pest Control, has been elected as a Fellow of the Royal Society of Public Health (RSPH).

A fellowship is awarded to individuals who demonstrate a career commitment to the improvement of public health and wellbeing, and achieve qualifications

to Post Graduate or similar, through academic or industry bodies.

5 Star Pest Control was formed in 2009 by David. Previously, he was the General Manager of Hillbans Pest Control, where he played a key role in the company's development, before building his own successful business.

David commented: "I am especially proud to have been elected as a fellow of this prestigious body. It represents the highpoint in a career dedicated to pest control on the Isle of Wight."

To find out more about becoming an RSPH Fellow, visit **rsph.org.uk/ membership/grades/fellow.html**





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HOW-TO SESSIONS Get hands on with pest management equipment. Learn by rolling your sleeves up and getting involved.

Practical application equipment for surface spray treatments Avril Turner, Killgerm

The literal ins and outs of bird netting Elaine Bliss, PestFix

Set up digital pest management Gary Nicholas, Envu



INDOOR SEMINAR THEATRE

Learn from real pest experts in our 100-seat theatre.

Bed bugs in 2023 Richard and Alexia Naylor, Bed **Bug Foundation**

Accreditation standards: meeting food industry specifications

Grahame Turner, PestAcuity and Dee Ward-Thompson, BPCA

Invasive species: upcoming threats, a new strategy and inspectorate

Niall Moore and Iain Henderson, Non-Native Species Secretariat and Non-Native Species Inspectorate

Root cause analysis for pest professionals Alex Wade, Wade Environmental and John Horsley, BPCA

Non-chemical rodent control Sharon Hughes, BASF

OUTDOOR DEMONSTRATIONS

Get outside practical demonstrations of pest management ideas in our 65-seat outside the theatre.

Environmental risk assessments in action John Horsley and Natalie Bungay, BPCA

Old meets new: traditional tools for modern rural pest management Simon Whitehead

Bio-acoustics for bird management: why it works and why it doesn't Peter Bowers-Davis, Integrum Services

((



FORUM SESSIONS

Get involved in the big debates in pest management right now.

Topics include:

The future of qualifications: is the Level 2 Award in Pest **Management dead?**

Diversity: is pest control just for men?

Technical: is resistance our biggest challenge in 2023?

Products: do we need rodenticides?

Regulations: should we be licensed to practice pest control?

ppconline.org/live

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An online CPD quiz based on this feature is now available on the BPCA website. BPCA Registered members and affiliates can take a CPD quiz at any time **bpca.org.uk/cpd-quiz** or sign up at **bpca.org.uk/affiliate**

"...we have mice creating urine pillars and rats defecating in discrete latrines."

Rats are fascinating. We spend so much of our time around them, chasing them and tracking them, but when was the last time you stopped to truly watch them, in order to appreciate how, or even why, they act in the way that they do? In this article, Alex Wade from Wade Environmental delves into some of the incredible (and sometimes disgusting) things rats can do.

R ats are by far and away one of the most adaptable animals on the planet. Despite having the individual intellectual capacity of half a spinach sandwich, they are collectively a veritable powerhouse of problem solving and tenacity.

Individually rats may not rate too highly, despite being able to demonstrate tenacious problem-solving skills – but collectively they enhance these skills to powerhouse level.

What is it that makes them such perilously persistent pests? Well, it's some of the incredible adaptations they have developed that have allowed them to survive alongside mankind for such a long time.

We will have a look at a few of these adaptations over the next couple of pages; adaptations that are totally incomprehensible to us, but utterly extraordinary to rodents.

Follow your nose

Humans have one sense of smell, and it is relatively limited.

Granted we are acutely aware when we have stepped in something decidedly unpleasant, or we might be pleasantly surprised at a new perfume. And that is largely where it ends. We certainly don't use our sense of smell to make complicated choices, plot intricate navigational routes or to ascertain the age, sex or fertility of other humans... at least I hope you don't! Yet these are some of the things that a rat is able to achieve with its nose and this is because rats have two unique senses of 'smell'.

RODENT WARS

The first sense is much like our own but vastly more powerful.

Indeed, the chemoreceptors within a rodent's nose directly correlate to specific regions within their brains, meaning when they experience a scent they aren't necessarily associating it with a memory, but with a detailed image map concocted through the chemical analysis of that smell.

This means that they are able to pick up the most minute of scents, as well as being able to distinguish between smells that to us would be utterly alike.

This heightened sense of smell really comes to the fore when you consider the fact that rodents are primarily operating in low (to zero) light environments, in addition to having outrageously awful eyesight, resulting in a feature of the rat which is likely to be providing the bulk of a rat's navigational drive and exploratory behaviour. The second mechanism of 'smell' is provided by a structure called the vomeronasal organ.

VONDER OF RATS

> This allows rodents to detect both proteins and pheromones, with the combination of these in a single 'scent' able to convey a stunning range of complicated information.

And where would evolution deign to secrete these informational markers? Well, in urine, naturally.

It is, in fact, the reason we have mice creating urine pillars and rats defecating in discrete latrines.

Time to dispel a common myth: far from having weak bladders or defecating simply when the mood takes them, rats and mice will use these eliminatory events to leave behind a messenger board of information, such as their age, sex, health, social status and even individual recognition.

Next time you see a urine pillar or a latrine pile, think to yourself: that crap is rat Twitter.

Winning by a hair

Now, if having a highly-sensitive schnoz isn't super power enough, consider the rat's whiskers.

TECHNICAL

Unlike our own 'whiskers', the whiskers of rodents (and in fact most mammals) form a complicated network of sensors called the vibrissae system.

Around a rat's muzzle is a particular arrangement of highly specialised hairs. These are notably thicker, longer and stiffer than the average hairs found on the rest of the rat's coat, but the differences don't just end there.

The follicle for this hair is much more intricate than those of most other hairs. It is a swollen sinus of fluid surrounded by nerves and muscles.

As unappealing as that may have sounded, it actually means that this long thick hair turns into a precision instrument designed to collect detailed information on its environment.

The nerves surrounding that sinus are so sensitive that they are capable of picking up the size, shape and texture of objects as well as being able to sense changes in air pressure.

In addition, these hairs can be moved back and forth, allowing the rat to interact with objects which are still some distance away from its nose.

Moreover, the degree of fidelity for this mobile sensory web is assumed to be equivalent to that of our own fingertips.

When a rat's macro-vibrissae (big whiskers) encounter an unexpected object, they will stop and reorient their bodies towards this object for investigation.

Then a series of micro-vibrissae (smaller whiskers) will then dab against this object, helping to build up an ever more complicated mental image of the object in the rodent's mind.

Think now to the last time you saw a rat encountering a new object or a trap; more often than not their body posture will be stretched out towards the object keeping their body back, their nose towards the object and their whiskers all reaching towards the new object.

Sounds like trouble

Finally, their sense of hearing.

Rats are capable of both hearing and communicating in the ultrasonic wavelengths, as well as the more limited range of frequencies that humans can hear.

The reasons they do this are surprisingly clever.

There are two benefits to using ultrasound over other frequencies. Firstly, because most animals are primarily attuned to the more normalised bandwidth of frequencies, it gives rodents a 'secure' channel over which to communicate over short distances.

The second reason has a little bit more to do with physics.

Ultrasound is made up of vibrations that occur at very high frequencies, unlike something like infrasound which is made up of vibrations at very low frequencies.

Infrasound is how animals like elephants and whales communicate over great distances; the sound waves are so long and pliable that they can travel a long way, and more importantly they can easily bend and deflect around corners.

Think of a car in an urban environment – you can hear the bass rumble while that car might be around a street

corner and usually well before the other sounds associated with the engine.

The reverse is true for ultrasonics, which are decidedly less adroit at 'bending' and usually get reflected straight back to the sender. This makes ultrasonics great for things like medical devices looking for kidney stones, and equally as great for rat pups wanting to get the attention of mum.

Rat pups communicate within these frequencies precisely because ultrasound is so poor at travelling long distances. After all, if you are a small tasty morsel around the same dimensions as a jelly baby, the last thing you want to do is highlight your location to every predator out there looking for something to snack on.

> "...if having a highly-sensitive schnoz isn't super power enough, consider the rat's whiskers."

These are just a few of the fascinating and unexpected ways that a rat experiences the world.

It is important to remember, compared to animals like us whose primary sensory cues are visual, that the world 'looks' very different to a rat.

They sense the world with a preternatural acuity that we cannot even begin to fathom and the adaptations above are just the surface of our understanding.

We must always try to 'think like a rat', but this is certainly something much harder to do than to say.

ODENT WARS

"Because of the concerns the industry has over the use of rodenticides, it could be presumed that we almost fail to level the balance of risk, by using rodenticides that are not the most effective for the situation presented."

BATTROSAND for the situat presented." DENTROSAND for the situat presented."

In this article, BASF's competent pest consultant, Oliver Madge, gives an overview of the purpose of baiting strategies and how environmental surroundings should inform a pest controller's choice of strategy and baits.

any attitudes towards the use and efficacy of rodenticides have changed significantly over the last few years, especially considering environmental assessments, resistance around the UK and a much greater awareness of secondary poisoning.

But how do these concerns and the Campaign for Responsible Rodenticide Use (CRRU) revised best practice impact how rodenticides are used? The approach to the use of 'baits' has become more of a considered process, but which is the 'right one' to use and how should it be used?

Industry concerns

In accordance with all best practices and product labels in the UK, we need to complete the various assessments, as well as read the label of course! A task-specific COSHH assessment should be second nature for everyone. Environmental risk assessments (ERAs), which are mainly based on non-target species and any 'potential impact' of using rodenticides, are initially a bit harder to get your head around. The key point is that ERAs should be unique to the location (or local environment) in which the treatment is planned.

As an industry, we provide services based on the potential of rats and mice spreading diseases, gnawing cables, causing severe economic damage and causing non-compliance with legislation or food standards.

Because of the concerns the industry has over the use of rodenticides, it could be presumed that we almost fail to level the balance of risk, by using rodenticides that are not the most effective for the situation presented.

The safe and effective use of rodenticides is reliant on the skill and knowledge of an individual collecting all the information and forming a considered approach.

These outcomes fall into a new term

referred to as a baiting strategy, so let's have a look at how this works in practice.

There is not necessarily a single definition – the correct baiting strategy is the best option for that situation. As with all pest management jobs, be they for rodents, insects or birds; the correct strategy is defined by the site specific conditions.

A strategy should be put together after all the information has been collected from a site survey.

To consider what a baiting strategy should look like and how it should be implemented, there are local factors that need to be included within the assessment process.

Of course, to be in line with professional standards and the hierarchy of controls, the use of traps should also be considered as part of the eradication campaign strategy as well.

Let's examine some examples of points to consider, but this should not be considered an exhaustive list...

Pest risk assessment

If rodent activity presents a higher risk to either human health or building structure, then it should be controlled as quickly as possible.

Multi-feeds can take much longer to effectively control a population. Single-feeds are quicker, but both have significant negative impacts if secondary poisoning occurs.

Included within this is the time to death, so when a rodent has consumed a lethal dose, it is still active for a few days, continuing to spread the risk.

Speed baiting overcomes both of these outcomes, in that it's not bioaccumulative and stops rodents after 24 hours of a lethal dose.

Primary poisoning

This is one factor to consider, but with two potential outcomes.

Of course, we don't want to poison any nontargets, but when rodenticides are applied there is always a risk to some degree, we just need to mitigate this risk as much as possible and justify the options applied. Where there is significant risk then we may need to go back to the drawing board. You should always consider what is (potentially) going to eat the bait that has been applied.

You also need to think about larger non-target species (NTS), such as a dog or a fox. Or maybe it's a smaller animal such as a field mouse. This may sound strange, but these NTS do have different risks.

If there are concerns that larger NTS may access the bait, then this may be mitigated by the way the

rodenticides are presented. Typically, a covered and protected approach or the

A tamper-resistant box (TRB)

use of a plastic/metal tamper-resistant box (TRB) would be suitable for larger animals such as dogs.

However, external TRBs are pretty much an attraction for smaller NTS, because of the fact the boxes provide shelter and refuge and so, it may be true that this doesn't reduce the poisoning risk but increases it.

A factor to consider in using multi-feeds to control pest activity is how much rodenticide would be required. Saturation baiting requires rodents to eat repetitively to achieve a lethal dose; bait replenishment needs to be undertaken more frequently to ensure that a surplus of bait is always available. A lot more bait needs to be used to control the pest. This could be seen as a higher risk to the NTS.

Pulse baiting should mean a rodent consumes a lethal dose in a single feed. Some products require less consumption to achieve control, so overall less rodenticide needs to be applied. When considering the volume to be applied, less could be applied more safely and so present less risk to NTS.

Secondary poisoning

If the risk is an animal eating the dead (scavenging) or dying (predatory) rodent, then you need to consider if the product you're using has the most suitable active ingredient. For example, Cholecalciferol isn't an anti-coagulant and isn't bioaccumulative. 3) anticoagulants, either multi or single-feeds,

build up in body tissue and have the potential to be transferred up the local wildlife food chain. So, their use shouldn't be considered in situations where secondary poisoning is a significant risk.

All traditional

An added disadvantage with anticoagulants is that once a lethal dose has been eaten, the rodent continues to eat during the time to death which could be many days.

So in reality these rodents could consume more rodenticide than needed and this is also retained within body tissue or stomach content.

This is so serious that if we don't all understand what baiting strategies should look like and how they operate in practice, there may be a very simple outcome: anti-coagulants are withdrawn from the market. This a very sobering possibility and, as Dr Alan Buckle representing CRRU recently wrote, "we have all been warned".

CHOLECALCIFEROL

Cholecalciferol stops the rodents from continually eating once a lethal dose has been consumed, which means that less bait is eaten overall. Which means that less rodenticide needs to be applied in the first place.

/continued...

BAITING AND ENVIRONMENTAL IMPACT

Resistance

CRRU is continually looking for tail samples from around the UK. These tails are used to discover whether a particular population of rats, or mice, have a resistant gene **thinkwildlife**. org/free-tests-of-rodenticide-resistancestatus-from-crru

The Rodenticide Resistance Action Committee (RRAC) has a fantastic interactive app available on Android phones which provides updates on resistance patterns in your area **rrac.info**

"Baiting strategies can change the service approach that pest controllers deliver as part of an eradication campaign."

Users who continue to apply multi-feed rodenticides and anyone who is not 100% aware of the level of resistance in their area, in both urban and rural locations, are simply adding to the overall risk associated with rodenticide use.

Resistant rodents will consume rodenticides, which are then usually replaced by the rodenticide user, as it has been eaten.

These resistant rodents are in turn breeding, often producing resistant offspring, which will be eating the multi-feed bait. The bait is then replaced as it has been eaten and on it goes. Overall, more rodenticides are being applied.

Formulations

Where baits needed to be consumed or last over a longer period of time (for example inbetween the usual four or six-weekly 'routine' cycle) a common approach was to apply more bait and/or in longer-lasting formulations, such as hard wax blocks.

But maybe this hard block isn't a staple food source for the target rodents, be that in an urban fast food establishment or a rural farm situation.

Formulations are also an important part of bait security within application techniques.

Where 'T-bag' formulations are being used, these can provide higher palatability, certainly over hard wax blocks, but they have no preformatted hole to help secure the block.

Could the weather also affect the formulation? T-bag blocks are generally harder in colder environments, so they could be liable to snap more easily. Warmer summer months may release the oils and then they leak through their paper envelope.

Selontra[®] has a pre-formed hole to allow the block to be secured with wire or into a TRB without the risk of splitting, and the wrapper is designed to protect the bait while allowing the rodents to use their sense of smell to find the bait appealing.

Summary

Baiting strategies can change the service approach that pest controllers deliver as part of an eradication campaign.



Pre-formed hole to allow the block to be secured with wire or into a TRB

Speed or pulse baiting requires less rodenticide to be applied, which means less being applied during follow-ups (which saves money), and fewer follow-ups as the rodents will have been controlled (which again, saves more money).

How the bait is to be presented, ie covered and protected or in bait stations, is also part of the overall strategy, albeit this 'application technique' is also a subject matter in its own right.

During each follow-up visit, reassess the site and remaining infestation and bait accordingly - don't just do more of the same.

It would be great if there was a simple definition for baiting strategy – or would it?

Every site is different, which should mean that every baiting strategy may need to be different.

The skill of a pest professional is in being able to balance the use of rodenticides and non-chemical methods, to gain effective control and minimise the risk that pests present, while also minimising local environmental impact.

PESTWATCH **AHOY**SHIP RATS IN BRITAIN

British mammals for nearly 60 years. His interest in ship rats began in the 1970s when, as a student at Bristol University, he obtained specimens of ship rats from Avonmouth Docks. He then went on to study their impact in other parts of the world.

Professor Stephen Harris has studied

rying to establish the status of ship rats in Britain is surprisingly difficult. In 2018, for instance, The Mammal Society published an article declaring that, "It is believed that the black [ship] rat has a population of zero in the UK now but it cannot be considered extinct here until an exhaustive survey has been conducted".

In Ireland, none were reported from the mainland between 2010 and 2015, although there is a long-standing population on the island of Lambay off the east coast.

While there were a few records for the UK mainland between 2000 and 2009, some of these may have been due to misidentification.

The problem is that this information is based "Have vou on reports from encountered a naturalists, who ship rat infestation?" rarely have access **260** RESPONDENTS to ports, dock areas and other sites where ship rats are **46** HAD **ENCOUNTERED** SHIP RATS

most likely to be encountered, so the paucity

Identifying black/ship rats

It is not always obvious when you see a black (ship) rat. The key differences are the larger ears and longer tail compared to a Norway rat. Black (ship) rats come in different colours, and you are more likely to encounter one of the brown colour varieties in Britain.

of records is unsurprising Last century, changes in the status of ship rats were monitored using questionnaire surveys of port health and local authorities, and

records provided by pest control experts, the very people who are most likely to encounter ship rats. These consistently identified a number of ports and coastal infestations, with the occasional inland population.

The British Pest Control Association organised an online survey in early September 2022, asking whether any members had encountered a ship rat infestation, where it was, and how long ago.

Most infestations were still in docks and ports, with the population at Tilbury featuring regularly (10 reports). Other infestations were at Southampton (3 reports), with one each for Belfast, Felixstowe, Folkestone, Glasgow, Immingham, Ipswich, London, Manchester and Plymouth. Inland populations of ship rats were reported from Hamilton, Huntingdon, Llanynys (north Wales), Newmarket, Norwich and Wakefield, in County Mayo in the west of Ireland, and domestic premises on the island of Sark.

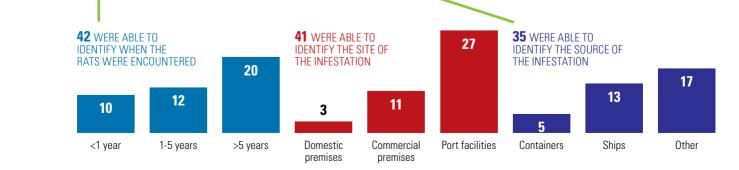
Despite the widespread perception that ship rats are nearing extinction in Britain and Ireland, there are still a number of established, and temporary, populations. The one at Tilbury, for instance, has been reported a number of times over the last 40 years, although it is unclear whether it was present continuously throughout this period or re-established by new arrivals via port shipping. Unfortunately, since there is no central repository of information, it is hard to establish how often ship rats are introduced to Britain and Ireland, how frequently they are moved around the country, and how long these infestations persist.

To fill this gap in our knowledge, it would be really valuable if pest control professionals could send any ship rat records (and common rat and house mouse records, which are also under-reported) to The Mammal Society's recording scheme. It is quick and easy to do please download the app from mammal.org. uk/volunteering/mammal-mapper



I am extremely grateful to Scott Johnstone for organising the online survey, Dr Pat Morris for supplying photos, Dr Alan

Buckle for insightful discussions, and to all the people who contributed to the survey.



iotos: Dr Pat Morris

FOLLOV DEALING WITH DEAD RODENT ODOURS YOUR NOSE

Our clients are often confronted with horrible odours from dead rodents. PPC asked Bill Vaughan from Earth Care to talk us through the approaches available to deal with those nasty smells.

remove the carcass such as in a wall void, then the cost and time on site increase significantly not to mention

possible issues with the quality of the repair work." R odent deaths happen naturally or because of a rodenticide treatment. If you're lucky, you'll find and remove the carcass before any smells get too bad. However, if the carcass is removed, the area should be treated to avoid lingering foul odours from the body fluids of the carcass.

Failing to treat the smell means you could be losing money when you're called back later.

But what if you can't find the rodent? You may suspect the carcass is in an attic in the insulation, a crawl space, a wall void, or some other inaccessible place.

Demolition is an option to find and remove the carcasses in a wall void or crawl space. However, demolition would not be viable if it's in or behind a masonry wall.

Earth Care

We produce the Earth Care Odor Remover Bag. EarthCare Bags use a blend of natural minerals put through a proprietary process that enables it to be very effective in ridding dead rodent odours. The EarthCare bag requires no registration, is safe to use around children and pets, is clean to use, and lasts approximately three months.

DEALING WITH ODOURS: YOUR OPTIONS

Do nothing

After hunting and not finding the carcass, the technician can tell the customer the odour will most likely disappear in a couple of weeks and just spray some room fragrance to cover up the smell. However, most clients will not be happy with this solution.

Masking agents

Masking agents work well in covering up an unpleasant smell with a more desirable fragrance. They also work right away.

Sometimes the fragrance of the masking agent may be offensive to the customer, and some people are allergic to certain scents. In either case, you end up with a blend of a pleasant fragrance and dead rodent odour!

When the fragrance wears off, the customer is left with a foul odour again, which can result in a callback. The foul odour will persist until the carcass has dehydrated, which could take two weeks or longer.

RODENT WARS



Ozone generators

Ozone generators cannot run in a room where humans or animals are present because ozone attacks the mucous membranes in the lungs and destroys fabrics. The machine must run for at least one hour, then the room must be aired out, and the machine retrieved.

If the carcass is not found and removed, the odour will return when the machine is no longer running.

This method is typically more costly since the technician would need to be on-site two times, once to install and close up the structure and a second time to ensure the machine is off, open up the structure to air it out and remove the machine.

Ozone generators are an unpopular solution due to the health hazard, the cost of the machine, the time on site required and the likelihood of the odour reappearing, creating a callback. In addition, there is a potential liability issue.

Ozone generators are often sold online falsely as air purifiers, and I'd personally avoid them.

Enzyme sprays

Enzyme sprays are usually very effective in eliminating airborne odours quickly. Enzyme sprays must come into contact with the odour producer; therefore, the carcass must be found.

If the dead carcass is found in an attic on insulation, remove the carcass and the insulation the animal was lying on.

If the carcass is on a structural member, then it should be treated with the enzyme. If not, a return visit may be requested due to the residual odour.

In addition, if demolition is required to remove the carcass, such as in a wall void, then the cost and time on site increase significantly, not to mention possible issues with the quality of the repair work.

Anions

Anions are particles with a negative charge that attract ions (positive charge), just like opposite poles of a magnet.

Most odour molecules, such as from dead rodents, urine, mildew etc, are ions. lons cling to the surface of anions, and once this happens, an ion exchange typically takes place, giving up one atom of oxygen or nitrogen in the process, changing the makeup of the ion, and removing its odour.

Anions constantly adsorb the odour from a dead carcass even if it is not removed. If there is a dead rodent in an attic or wall void, hang a bag in every room you smell the odour.

If the carcass is in an attic or crawl space, hang an additional bag in that area, but always hang at least one bag in the room where people are. It is best to hang one pouch for every ten square metres. The odour should be gone in 24 hours.

Activated carbon (AC) can be used as an anion to adsorb odours, but there are several drawbacks besides the messy black dust. AC pores clog, reducing its effective life, not ideal when it is expected to last until the dead carcass dehydrates.

AC absorbs oxygen as well, so care should be taken when used in confined spaces without sufficient ventilation to replenish the oxygen. AC is highly flammable, and the dust is explosive when exposed to the heat of a flame. The presence of water assists ignition, as do contaminants such as oil.

Providing options to treat rodent odours will improve customer satisfaction and avoid callbacks. Choose your odour treatment carefully, and remember that not all options will be viable in every situation.

FURTHER READING

Hazardous Ozone-Generating Air Purifiers, California Air **Resources Board** arb.ca.gov/our-work/programs/air-cleaners-ozoneproducts/hazardous-ozone-generating-air-purifiers

Activated charcoal hazard cameochemicals.noaa.gov/chemical/10765

OSHA Hazard Information Bulletins, Fire Hazard from Carbon Adsorption Deodorising

> osha.gov/publications/ hib19970730

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RODENTICIDE UPDATE STEVARDSHIP



Dr Alan Buckle is Chairman of the Campaign for Responsible Rodenticide Use (CRRU) UK. He gives an overview to PPC on where the stewardship scheme is at and where it's going.

t is difficult to say when the CRRU-run stewardship regime began, because introduction of its measures occurred in stages. The most logical start point is October 2016, when the first professional rodenticides went onto the market carrying labels requiring proof of competence for purchase and compliance with the CRRU Code of Best Practice when used (see **thinkwildlife.org/downloads**).

The regime has been running for six years now, so it's time to assess what has been achieved and what hasn't.

Indeed, as I write, re-assessment of the regime is ongoing after a review meeting in May 2021 between the Health and Safety Executive (HSE), the Government Oversight Group (GOG) and CRRU.

The parties remain in discussion to determine what changes to the regime are required to enable it to meet its environmental targets.

The GOG comprises representatives of the HSE, which holds the Chair, and others from Defra, UK Health Security Agency, Natural England and representatives of devolved administrations in Northern Ireland, Wales and Scotland.

These targets were set at the beginning of the regime by HSE/GOG. The main one, quoted here from government documents is that: "There should be a significant decrease in the exposure of the sentinel species – barn owl – in terms of sum residues of SGARs (second-generation anticoagulant rodenticides) detected in livers of barn owl carcasses collected over the first four years". (See hse.gov.uk/biocides/ Rodenticides-Stewardship-Regime-GOG-rev-Feb2019.pdf).

The barn owl was chosen as stewardship's sentinel species because of the long run of historical data we had on this species before stewardship – allowing before/after comparison.

One of many monitoring requirements, set upon CRRU by HSE/GOG, was that the regime pays for analysis of 100 barn owl samples taken from birds found dead in the UK; these are mostly road casualties and not killed by rodenticides.

The work is done by the independent UK Centre for Ecology and Hydrology (see **pbms.ceh.ac.uk/content/ pbms-reports**). Information gathered is analysed statistically in several different ways against the HSE/GOG targets. But the result is that there has been no significant decrease in exposure of owls, and therefore in residues they carry, over a six-year period of stewardship monitoring.

Although not one of the formal monitoring metrics, this is most easily seen in the percentage of owls that carry residues of one or more SGARs (see figure 1).

Independent from CRRU, government departments also monitor SGAR levels in red kites and the picture is pretty much the same (see figure 2).

Recent research by other workers, including RSPB and UKCEH, has focused on SGARs in kestrels and sparrowhawks.

But a reduction in residues in birds of prey is not the only change that CRRU is required to bring about. Other objectives of stewardship, determined by HSE/ GOG, are a "competent workforce", "governance of the supply chain" and to have in place procedures for "monitoring compliance".

To support a competent workforce, CRRU has developed a range of codes and guidance documents that explain all aspects of best practice.

Central to this is the CRRU Code of Best Practice mentioned earlier, which was updated in 2020 to take account of developments in product label recommendations and rodenticide regulation.

There is also CRRU guidance on the practice of permanent baiting, environmental risk assessments and other aspects of rodenticide use, to support and promote best practice.

Workforce competency

Changes in workforce competence are measured in periodic surveys conducted for CRRU by independent market research specialists.

Every two to three years, hundreds of rodenticide users from three main professional user groups – professional pest management, gamekeeping and farming – are contacted and asked questions designed to test their knowledge, attitudes and practice (KAP).

The answers show us that we have travelled a long way since the beginning of stewardship.

Improvements are obvious in almost all measurements of competence across all user groups.



Figure 3 shows you some of the questions, the answers received and the changes that have presumably occurred. However, these surveys also show where more effort is required to change understanding and practice further.

Another measure of workforce competence is the number of people each year who take CRRU-approved courses and pass subsequent examinations.

Up to July 2022, 37,000 people had taken these courses and obtained certification.

These certificates of competence are an essential component of supply chain governance, because only those who possess approved certification can purchase professional rodenticide products.

Without confidence that these certificates are presented at every sale, we could have no certainty that this requirement is being met on the ground.

Therefore, on behalf of CRRU, BASIS Registration Limited conducts an administrative audit of every pointof-sale in the UK that sells professional rodenticides.

There are about 700 BASIS-registered UK outlets and every year, and in each one, BASIS auditors check that necessary documentation was presented during sales of professional rodenticides.

With all these changes for the better, why has this work failed to produce the significant reduction in wildlife exposure we all hoped to see? This is the question at the centre of the ongoing HSE/GOG review of stewardship.

There are several possible answers and it is likely to be a combination of factors. This is because we have endeavoured to influence a complex system, involving change to knowledge and consequent behaviour of tens of thousands of individual users; this in turn influences the complicated biological system that is movement of SGAR residues, along different contamination pathways, into wildlife.

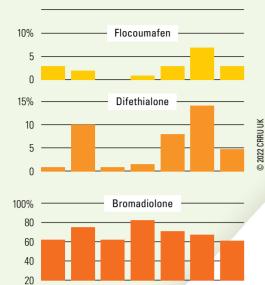
One possibility is that we have simply not given it enough time. Although the first stewardship-labelled products came to the market in 2016, it was not until two years later that all provisions and controls of stewardship were fully implemented.

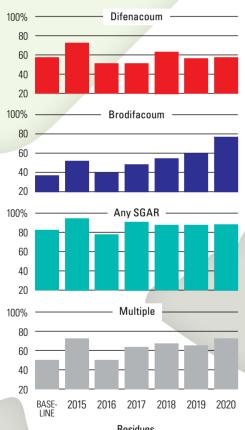
Obviously, this becomes a less likely explanation as more years pass.

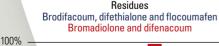
TECHNICAL

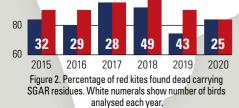
PCOs

Figure 1 below: Annual percentage of barn owls carrying SGAR residues. Sample size 100 in all years. The 'multiple' graph shows those owls that carry residues of two or more different SGARs

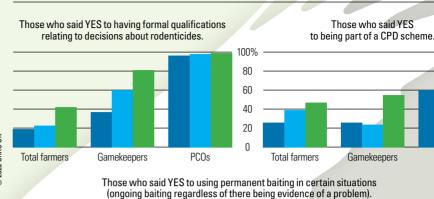


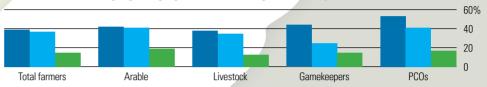






2017 2020 Figure 3 below: Results from knowledge, attitude and practice surveys. 2015





Are we addressing the right people?

I have many times heard those in professional pest management tell me they often see gross misuse of rodenticides by the general public.

From the outset, CRRU and stewardship were not required to deal with this user group because it was considered by HSE/GOG that they use, comparatively, small quantities of rodenticide baits carrying lower levels of active substance.

It is a gross generalisation but probably largely true that, among all users of rodenticides, bait applied by the general public is less likely to enter wildlife than that used by professional pest controllers, gamekeepers and farmers out in the countryside.

Did we underestimate the importance of this user group?

Are we focused on the wrong things?

For some time, the practice of permanent baiting, that is the use of baits as a protective barrier at sites without a current rodent infestation, was blamed for wildlife contamination.

This was because permanent bait stations are often entered by small wild mammals, field mice and voles, and these are a prey base for many wildlife species that we know carry SGAR residues.

Consequently, UK regulators restricted the use of this practice, and CRRU issued strict guidance on circumstances in which it can and cannot be applied.

CRRU KAP surveys show that these applications have substantially declined (see figure 3), and this is a good thing, but still it hasn't reduced wildlife residues as anticipated.

Coinciding with the start of stewardship was a relaxation of a rule in existence for almost 30 years.

This was that the most potent resistancebreaking SGARs were restricted to use indoors only, virtually disgualifying their use against rats, with the consequent spread of resistance across the UK (see thinkwildlife.org/download)

It was expected that this would bring about an increase in wildlife casualties but thankfully this didn't happen during stewardship's early years.

Gamekeepers

However, there are recent disturbing reports of gross and widespread misuse and abuse of brodifacoum products away from buildings, absolutely contrary to labels of all products carrying this substance.

This has led to a reported increase in wildlife casualties (see hse.gov.uk/pesticides/reducingenvironmental-impact/wildlife/wildlifeincident-investigation-scheme.htm).

CRRU has questioned if 'delinquents' can be allowed to affect legal use of rodenticides by a competent majority to protect human and animal health.

But what is happening is exactly what was feared when the 'indoor only' rule was relaxed

Throughout, the government has said that the CRRU stewardship regime meets its 'high-level principles' and is 'fit for purpose'. But the failure to meet environmental objectives remains a significant issue (see hse.gov.uk/biocides/rodenticides.htm).

CRRU and HSE/GOG are in discussion about the regime, with this looming warning from government issued after each annual review: "Depending on the outcome of the above, changes could range from minor modifications to the Rodenticide Stewardship Regime (eq improved training or awareness), changes to the approved uses (eg amendment of the approval of specific products) or revocation of uses/products."

The term 'last chance saloon' has been used by CRRU to describe the situation; that seems about right!



BPCA EMAIL technical@bpca.org.uk

ASK THE TECHNICAL TEAM

INBOX

SENT ARCHIVE

BIN

SPAM

Why aren't rats non-native species if they're from Norway?

Non-native species (NNS) are animals or plants that have been introduced (deliberately or accidentally) by human activity to an area in which they do not naturally occur. Some animals and plants may have been transported here a long time ago and be considered 'naturalised', but these are still non-native species. Rattus norvegicus (Norwegian rat) is not listed as a non-native species of concern in the UK.

Why do rats' teeth never stop growing?

Rodents are mammals that have extra-large incisors. Unlike human teeth that grow and then stop when they have reached a desired length, rodents have incisor teeth that constantly grow without stopping. This is because teeth are rootless. This is a big benefit to rodents as they can continuously chew hard food sources such as bone and nuts, but also provide them with the ability to chew through items like drinks cans and bin lids to access a food source.

In what ways can infections or disease spread to humans from rats?

Obviously if you were to be scratched or bitten by a rodent, this could break the skin and allow bacteria to enter the body, causing disease or infection. But bacteria from rats can also get into the human body through digestion (not washing hands before eating), respiratory system, pre-existing cuts or a mucus membrane such as the eyes. They affect people differently and in some cases can be fatal.

Will rats eat chickens?

Yes, rats have been known to attack and eat baby chickens. They've also been known, when desperate, to attack adult chickens.

Having said that, they're more likely to eat the chicken feed than the chickens. Why make dinner hard for yourself?

ODENT WARS

Can you get secondary infestations from rats?

Having another infestation alongside a rat issue is not unheard of. Rats can damage sewerage infrastructure which can allow drain fly access into your property. Or chewed up pipework such as a dishwasher waste pipe could promote fruit fly infestation.

In more commercial areas, external bin stores could have food pulled out of them, this could also cause insect infestation and attract other animals such as foxes. Rats also carry a variety of ectoparasites with them, such as fleas, ticks, lice and mites. If anyone has any good examples of secondary infestations caused by rats, feel free to send us your stories and we might include them in the next issue of PPC magazine!

Should I charge for collecting rodent carcasses?

No. If you are carrying out rodent control, and as a result of that control, you have dead carcasses to remove, it should be part of the work quoted for. Technically, you have 'created' the waste so you need to deal with it. If you are using rodenticide, it is a legal requirement, by way of the label, for you to search for and dispose of dead carcasses.



WHO YOU GONNA CALL? The members of our technical team are happy to come out to visit sites with BPCA members who are struggling with a tough infestation and need hands-on advice. Get in touch!



technical@bpca.org.uk 01332 294 288 twitter.com/britpestcontrol



Some animals and plants may have been transported here a long time ago and are considered 'naturalised', but these are still nonnative species.

Disposing of waste should be part of your quote.

Rats love to chew everything and teeth that arow constantly help with that.

Rats carry a variety of ectoparasites.

Bacteria associated with rats can infect us in more ways than just bites and scratches.

DRAIN SURVEYS NEW CODE OF BEST PRACTICE

BPCA teamed up with drain survey experts Davy Brown and David Lodge, to provide a new Code of Best Practice on carrying out drain surveys for pest activity. In this article, Davy Brown gives an overview of what the new Code contains and its uses.

here are now more pest management professionals carrying out drain works than ever, ranging from drain survey inspections through to basic drain repairs and the installation of rat blocker valves.

There are several reasons for this increase. Firstly, social media has allowed specialist contractors to showcase their work and pest controllers can see what can be achieved with the correct equipment and techniques.

Improved training on the subject has given many pest controllers the confidence to branch out and undertake their own surveys.

And lastly, an abundance of cheap, often substandard equipment available on the web has unfortunately tempted many to add a drainage service to their existing pest control business.

The National Association of Drainage Contractors (NADC) has worked with the British Pest Control Association for a couple of years, as the two industries slowly but surely merge in this vital area of rodent investigation works.

Through this collaboration, a Code of Best Practice will soon be published so that the works are done with consideration of effectiveness, safety, and professionalism in mind.

Topics covered in the COBP include:

Health and safety

Drains and sewers are obviously not the nicest of places and there are real dangers involved in this kind of work, to both the contractor and their clients, so risk assessment is vital.

The risks include working in confined spaces, working at height, flood, drowning, explosion and disease. Only trained and competent contractors should be undertaking these works.

Drain survey reporting

It is important that the client is made aware of what kind of survey and report they are going to receive, along with a clear pricing structure at the quote stage. It is recommended that all surveys are recorded and the customer receives video files, data sheets of each run surveyed, a colour-coded site plan and a written report.

There are numerous software packages available that will assist in putting together professional-looking and detailed reports.





Insurance

The COBP requires all contractors have the relevant insurances in place to cover the works they undertake.

Many pest control contractors may be operating under their original policy set up with pest control in mind, with no amendments for the undertaking of drainage inspection and repair, or the risks that these activities pose to them, their staff, clients, or their client's property.

Rat blocker valves

There has been a major increase in the use of rat blocker valves in the last ten years, which more than anything highlights the need for the COBP with regards to rodent related drainage works.

The installation of these valves will in most cases involve confined space works, and yes, hanging upside down in a metre deep chamber to install a valve is confined space working!

This is often undertaken by lone workers who have not assessed the risks involved.

Drainage law

It is vital that any contractors, working in and around the sewer and drainage network, have full knowledge of drainage law and ownership.

Large sections of the network come under the jurisdiction of the water companies (sewerage undertakers) and only they or their appointed contractors can clean, inspect, and repair these sections.

Drain repairs

Most customers will expect whoever undertakes a successful drain survey inspection to then provide them with a permanent solution to their problem and this will often require a drain repair. Special thanks to Joe Strong from Beaver and David Rambridge from NADC for working with us on the Code.

The new Code will be available to read in full soon. All BPCA Codes of Best Practice are freely available on the BPCA website. Remember that BPCA Codes of Best Practice must be followed by BPCA member companies for them to remain compliant. **bpca.org.uk/codes**

About the author

Davy Brown is co-owner of RatDetection.Com and sits on the training committee for the National Association of Drainage Contractors. He also wrote the Drain and Sewer Pest Awareness Course, which he delivers on behalf of Killgerm Chemicals.



The National Association of Drainage Contractors offer a full suite of training for those operating in or looking to operate in this arm of the industry. Through The National Drainage Academy they offer detailed training courses in: excavation and repair methods; certified drain surveying; confined space training; safety, health and environmental awareness (SHEA) – drains and sewers; and more. **nadc.org.uk**

National Drainage Academy nationaldrainageacademy.co.uk

Energy and Utility Skills Register **eusr.co.uk**







Pest identification will give you the majority of the information you need to best select the type of treatment you intend to complete.

If you don't know what pest you're dealing with, how can you possibly recommend the best proofing options, non-toxic treatments or even more importantly, the potential pesticide treatments you can legally use?

And equally, how can you be sure the methods you've chosen will work?

It's not always possible to get visual identification so you may need to look for other clues.

Droppings can be a good tool to use to narrow your identification down. Small droppings around 5mm in size and pointed at both ends are typical of a mouse, whereas 10mm long droppings pointed at both ends will be a rat.

From these droppings, it's difficult to say if it's a field mouse or house mouse but you've already begun to narrow your search.

The crumble test is a good tool for identifying bat droppings. Simply rub the dropping between your fingers and if it crumbles into a fine dust, maybe full of insect wings and exoskeletons, voila!

For more info on identifying droppings, check out our article at **bpca.org.uk/** guesswhosepoo

Cached food could also be a good indicator of what type of pest you're dealing with, and in some cases it can help with that field or house mouse dilemma. Field mice, as well as rats and grey squirrels, will store food for times when they need it, in winter for example.

If you find mouse droppings in a garage and stored food in the same area, this points to field mice.

In bait boxes placed outside, you could find stored food and again, it would be important to identify what is storing this as it could be field mice or rats, both of which require different treatment options.



Sometimes you can become too fixated on one area, so try to get a second pair

to get a second pail of eyes to look at it or speak with a colleague."

To solve a problem and have the best chance of avoiding reinfestation, you will need to find the root cause. Otherwise you can treat and treat until you're blue in the face, but the pests will keep coming!

This can be quite simple on some jobs, for instance if the problem is related to a hole in a wall, get those proofing materials out.

On others this could be more complex and may require you to do some good old-fashioned investigation work.

I remember a site that had repeated rat issues. Just inspecting the external areas for ingress points revealed several problem areas, from gaps under the doors to an old hydraulic lift and louvred plant room covers.

It wasn't clear which of these allowed pest ingress, so I began by proofing the ones I had materials for, and planned to return with materials for the other areas.

Sometimes you can become too fixated on one area, so try to get a second pair of eyes to look at it or speak with a colleague. They may have experienced a similar situation or can give you a new perspective.

Just spending a little extra time on your first visit to find the root cause could save you significant time later.

This will also give you your baseline to track what you found and proofed, and to identify the outcome from that action.

BASICS FOR PEST CONTROL SUCCESS

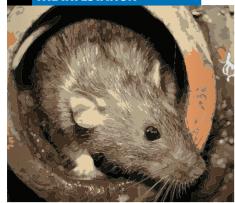
We asked BPCA Technical Support Officer John Horsley to tell us his top five steps, big or small, to improve pest management outcomes.

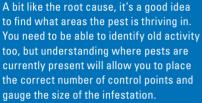
When we're carrying out pest control we occasionally find that one site where nothing we do seems to work. You probably won't have to think too far back to remember the last one that was a real head scratcher.

It can be hard enough to deal with a pest issue when just taking into account the location you find them. Add in environmental management, resistance and product restriction, and sometimes it can almost feel impossible to find that perfect solution.

However there are things you can do to make sure you deal with that pest as effectively as possible.

3 IDENTIFY THE EXTENT OF THE INFESTATION





It's easy to become focused on one area, without realising just the other side of the office wall could be more or another infestation.

This is of the utmost importance when dealing with house mice. Single house mouse territories are confined to only a few square metres and it's tempting to stop searching and only treat that instance. But what if other territories are dotted about, say, a warehouse?

By finding all the areas of activity you can place the correct number of bait points in the correct places to deal with that infestation.

Don't leave any stone unturned; as long as it's safe to do so, look inside inspection hatches or behind closed doors. I've found lots of rodents nesting inside cavity walls or in that plant room cupboard that only gets opened once a year.

Be respectful and be safe, but be inquisitive. You never know what you will find behind that locked door.

"Don't leave any stone unturned; as long as it's safe to do so, look inside inspection hatches or behind closed doors."



Only a bad pest controller will throw down whatever they have to hand, without considering formulation or amount (see point 5), or even resistance.

For example, when we look at using rodenticides, it's important to know what resistance might be present in your area. Resistance is an ever-increasing problem, so selecting an appropriate active ingredient that will work and won't make resistance problems worse in your location is key.

Using a product with known resistance in your area will only delay success or stop the treatment from being successful all together.

In recent years there has been a lot of work carried out around resistance and you can find out more about this through the Rodenticide Resistance Action Group (RRAG) **bpca.org.uk/rrag**

Bait quality is also important. Be mindful of the environment you are placing the bait in, as damp, mouldy, and dusty bait is less likely to be eaten. That's right – pests are fussy!

In some environments, baits can become unpalatable in mere hours.

Manufacturers use good quality ingredients to make these baits as palatable as possible. Some also contain products to prolong their palatability in damp areas or have been individually wrapped to protect them.

When we look at trapping I think it goes without saying: using a mouse trap for rats isn't going to work. Not only will you have a failed treatment, you will likely cause unnecessary suffering which breaks the law and is morally wrong.

And don't forget some simple housekeeping tricks, like cleaning out bait boxes or traps if you're reusing. Best practice says that giving these a brush out and a wipe over with a dry cloth is best practice. Boxes that are cleaned with disinfectants could leave enough of a scent for rodents to avoid entering them.

FOLLOW MANUFACTURER GUIDELINES

"...never forget that the label is key."

And finally! We all know it's a legal requirement to follow the product label but it's also important to understand them.

If a product says that you can use 100g in a specific area, I recommend having a guide on how much 100g is.

This could be measuring out 100g of bait on a set of scales and putting it in a sealed bag, which will give you a reference for what 100g of bait looks like. You could also take a measuring jug out with you, after putting the quantity of bait you require in the jug and marking where it comes to with a marker pen. This will give you an accurate guide to prevent under and over-baiting, which often leads to a treatment failure.

This also links with bait positioning: it's common for pesticides used in mouse control to be placed every metre or so. With rats, it's five metres for heavy infestations and ten metres for light infestations.

We can't place boxes closer than this if using the maximum amount of bait in each box. But equally, placing them further apart could lead to the boxes not being found by rodents.

And never forget that the label is key. You might think you know the labels by heart, but with restrictions on products forever changing and pests being removed, it's always good to check labels regularly.

If you successfully put all these pieces of the pest control puzzle together, there's no reason you won't be well placed to put a successful treatment together.

Your tips here

Why do you think pest control treatments fail? Send us your thoughts and we might print them in our next issue. hello@bpca.org.uk

ADAPT& SUSTAINABILITY AND DYNAMIC INTEGRATED EST MANAGEMENT

'Monitoring is one of the most important parts of an IPM strategy. There are many aspects to consider from the palatability and toxicity of the bait, to ease of activity detection and bait shyness."

Dynamic integrated pest management (IPM) is a more sustainable approach to pest control. Here, Envu explains how it minimises the impact on the environment, reduces the risk to non-target species and lowers the likelihood of pest populations developing resistance.

PM is based on the understanding of pests, their behaviour, and the environment. It uses a wide variety of non-chemical and chemical techniques, as well as monitoring to inform decision-making.

Over time, IPM techniques are adapted to reflect changes in the pest population. These changes may be a result of effective control or a response to the control tools being used.

For example, you can use monitoring traps and baiting to understand a rat infestation, identify how rodents are gaining access and pinpoint potential attractants such as food sources.

By eliminating these factors and using an effective rodenticide, you can not only bring the current infestation under control but reduce the risk of future pest issues.

Continued monitoring after treatment confirms effectiveness. It'll also mean you can spot and treat any new issues quickly, before they escalate into an infestation.

Benefits of IPM

Using an IPM strategy has multiple benefits. As well as minimising risk to people and the environment, an IPM strategy develops understanding of root causes of pest problems.

It can reduce the likelihood of resistance developing in rodent populations, be more effective and longer-lasting.

The British Pest Control Association says "From an environmental perspective, rodenticides can pose a risk to non-target animals such as birds of prey whose main food source is the very rodent that may be unintentionally poisoned. The key is, we don't want this to happen, so reducing the use of rodenticides is important. Using IPM addresses this."

Monitoring

Monitoring is one of the most important parts of an IPM strategy. There are many aspects to consider from the palatability and toxicity of the bait, to ease of activity detection and bait shyness.

Using a highly palatable non-toxic bait during the monitoring phases of an IPM strategy drastically reduces the total amount of active ingredient used in the treatment of an infestation, making pest control safer for humans, companion animals, livestock, wildlife, and the environment.

When considering the essential monitoring phases, it's critical that the evidence of a pest problem is easily identifiable.

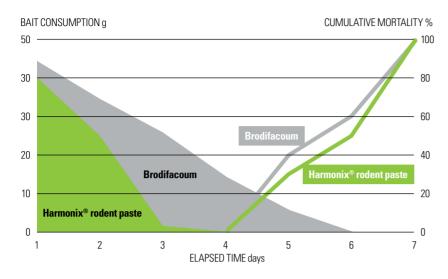
Not only does this help with accurate detection but makes assessments more efficient.

Gnaw marks on your non-toxic bait are obvious signs of rodent activity, and some of these baits allow droppings of rodents that have consumed the product to be easily seen with a UV torch.

Monitoring can reveal attractants such as food sources as well as runways, harbourages and nest sites. Removing food sources and improving hygiene practices presents very little risk to non-target species and is an essential part of IPM.

> With a greater understanding of pests and their habits, you can be more targeted in placing traps or

BAIT CONSUMPTION AND MORTALITY Lab trial with five male and five female mice



rodenticides, further reducing the amount of active substance used and minimising the risk to non-target species.

After the initial treatment, continued monitoring will enable early identification of new infestations, and early treatment.

Treatment and prevention

Just like monitoring, there are a number of factors to consider when choosing appropriate treatments.

"Increasingly in the last decade or so, the industry has recognised the need for a more physical and non-chemical approach to pest management, and we are making great strides to better understanding IPM and how to implement it with efficiency and efficacy.

"An IPM programme ensures that chemical approaches are only utilised where it is necessary and, in conjunction with other control and exclusion methods such as environmental management, proofing and the use of traps", BPCA suggests.

Non-chemical controls such as removing attractants, blocking access and improving hygiene are the backbone of IPM strategies. They will not only contribute to the initial treatment by removing alternate food sources (as you increase the likelihood that rodents will eat the bait) but also prevent further infestations.

When it comes to chemical control, choose one which is proven to be both highly effective and reduces risks to the environment.

For example, the active substance cholecalciferol has proven to be highly effective on all target rodent species and has no known resistance. Its stop-feeding effect saves up to 50% on bait, minimising the amount of active substance entering the environment. It's nonpersistent and non-bioaccumulative. "Non-chemical controls such as removing attractants, blocking access and improving hygiene are the backbone of IPM strategies."

Holistic and sustainable pest management

Dynamic integrated pest management is a holistic and sustainable approach to pest control incorporating a wide range of controls, and importantly monitoring before and after treatment.

There are a number of factors to consider when monitoring pest issues. Ensure that the bait used is palatable and it is easy to see whether it's been taken by the pests. Ideally use a non-toxic bait – not only does this minimise the risk to people and other non-target species, but it also helps prevent the development of resistance.

When it comes to treatment, support chemical controls with non-chemical solutions. Choose a proven, fast-acting rodenticide which minimises the risk to the environment.



WOOD PIGEON CONTROL WOOD PIGEON CONTROL



Dave Archer is an expert on wildlife management and rural pest control. In this issue of PPC, he tells all about his experience of dealing with wood pigeons.

Why do we use scientific or Latin names?

You may notice that often, when a species of bird, animal or insect is the subject, the author will use the Latin name for the particular species.

There is a very good reason for this and it's not the author being pedantic. If we were discussing feral pigeons you may call them town pigeons, I may call them exracers, someone else may call them street pigeons and so on.

They may be known by another term elsewhere in the world. Another broad term is 'seagulls'; do we mean herring gulls, lesser black-backed gulls, great blackbacked gulls or black headed gulls?

With those options, we begin to see the point of maintaining correct nomenclature.

By using the Latin name specific to that species, we avoid confusion or doubt about the genus concerned.

he wood pigeon, Columba Palumbus, is Britain's largest and most prolific pigeon. While most urban pigeon problems occur in feral pigeon (Columba Livia Domestica) colonies, rural wood pigeons cause huge agricultural losses by means of their insatiable appetite for arable crops.

Yes, that big fella that raids your bird table and constantly picks a fight with his neighbours - him and his thousands of other comrades!

For urban situations, proofing against feral pigeon colonies is normally the preferred method of prevention. In rural situations, shooting wood pigeons over crops is the control method normally deployed.

In the mid 1970s, when I started pigeon shooting, the primary piece of pertinent legislation was the Protection of Birds Act 1967.

In those far off, halcyon days it was generally accepted that wood pigeons were an agricultural pest that could be shot by authorised persons at any time but this has now changed.

The Wildlife and Countryside Act 1981 and particularly the General Licence (GL 43) allows for wood pigeon control in certain situations, as long as other methods have been considered (but not necessarily deployed).

Briefly, it is up to the shooter to prove the birds are causing or are likely to cause a problem in the immediate area. It is no longer acceptable to shoot wood pigeons just for sport.

First things first

So how does one go about shooting wood pigeons? Firstly, you must have the landowner's permission (preferably in writing) and know the farm boundaries!

A good knowledge of crops is essential. If you are asked to shoot over a field of feed beans but

the only beans you know are in a blue tin with a ring pull, you need to learn about crops before you learn about pigeons.

A shotgun certificate is needed before you can obtain a shotgun. Any trawl of the internet's shooting organisations will give all the information needed as the application process is quite complex.

Never consider any form of firearm use before training and mentoring. Many years ago I used to take keen novices out shooting and quietly place a watermelon on the ground around ten yards away.

When the area was totally safe, I shot the watermelon with a shotgun and, in an instant, the fruit simply wasn't there anymore. Pieces of it were some ten metres or so away with a hole left in the ground, and pieces of fruit floating raining back down. Salutary lesson indeed!

Reconnoitre and stage your arena

Wood pigeons can be shot at any time of year, but problems worsen during harvest or on winter crops (oilseed rape etc) when the birds are hungry and can devastate large swathes in a matter of a week or so, and also in summertime on ripening grain. I have only just come back from a field of standing wheat that was nearly lost to pigeon predation.

As for shooting pigeons, without doubt the two best methods are decoying over crops, or shooting them coming into their favourite 'sitty' tree.

Look over any crops where pigeons are active and you will normally see them going to sit in the tallest tree on a hedge line to observe what their comrades are doing. All pigeons are social birds and they rely heavily on flock instinct.

The art and field craft of pigeon shooting is to mimic the feeding patterns of wood pigeons on the ground. Flock-covered plastic birds are laid in such a way as to fool other pigeons into coming in to feed.

"Flock-covered plastic birds are laid in such a way as to fool other pigeons into coming in to feed."



Always lay the birds with their heads facing into the wind, as no bird likes to feed with a draught blowing up its backside! Also ensure some of the birds are placed head down as if feeding.

Pigeons are smart! If they see a regimented line of comrades, heads up instead of feeding, they will simply veer off before a chance of a shot is afforded.

A decoy pattern with twenty or so birds randomly spread at a range of around thirty metres from where you are shooting is ideal, but you must leave a gap in the middle for the birds to attempt to land. The best time to shoot your bird is when it is braking just above the decoys coming in to land.

Take the shot

The go-to gun of choice for most pigeon shooters is either a twelve or twenty bore shotgun. I prefer a twelve-bore with a 32g load and fibre wad (no plastic these days please) as pigeon armoury is multi-layered and the feathers are very dense.

Around twenty metres away is a good kill distance, as the shot has spread by this distance and only a few pellets will be in the bird itself. Much closer and it's watermelon time again!

Actually pigeons are not (though they may seem) dumpy and overfed, but are quite lean. The appearance of being a podgy is due to the dense feather mass.

Never shoot above your limits and range, as the desired effect is to kill the bird as it is flying into the decoy pattern.

Pigeons are expert at detecting movement and you need to be totally concealed when shooting. A well-built hide in a hedge is ideal.

It takes years of experience to put the theory and field craft into practice, but when it does and you get known to local farmers, your efforts can be well rewarded. Don't get carried away shooting woodies thinking they are the only visitors to your pattern; you may find stock doves (Columba oneas) amongst the woodies and, as you should know, they are legally protected.

Also, you may shoot certain corvids under GL 43 but not magpies!



Make sure you wear ear protection when shooting. Shotguns are loud and will cause irreparable damage if you don't take care.

Take a drink, and a bit of bread and cheese, if you are out for the whole day. You don't want to be thinking of your grumbling stomach rather than the shooting.

Ensure that you have enough clothing to suit the elements and these garments are of a drab colour.

A good gun dog is a wonderful ally on shooting forays, as they can retrieve many birds that fall in standing crops and would otherwise be lost to the combine or foxes.



"For me, it is not only about pigeon shooting; I love being outdoors in the great British countryside and observing all that goes on. For example, I was out taking photographs for this article and this chap came bounding along at sunset. What animal is it?"

Public relations

The British countryside can be overcrowded in places. I am currently shooting wood pigeons over crops where a footpath meanders around the field headland. Dog walkers and ramblers occasionally pass by – if questioned it is worth spending time explaining what you are doing and why.

Once you have explained why you are controlling pigeons, most people understand the reason why control is needed.

As professionals we need to explain that the crops the pigeons are devouring are the contents of the food that should be ending up on their table. This normally swings their opinion in your favour!

Fair game

So what of the birds that you shoot? To me, it would be unthinkable not to use the breast meat. Either take them off to the game dealers or treat yourself to a wood pigeon breast roasted with a few vegetables, accompanied by a good red wine on a winter evening or flash fried on a warm leaf salad with balsamic vinegar in the summer.

Finally, if you supply any form of wild meat, even in fur or feather, you must be registered with your local authority as a primary producer.

NON-NATIVE SPECIES DO YOU KNOW YOUR OBLIGATIONS?

The team at Scotland-based Pest Solutions encountered a traveller recently, so we asked Managing Director Chris Cagienard to explain the process when dealing with an imported non-native species.

> A s professional pest controllers working in towns and cities throughout the UK, most species we encounter are the usual suspects.

We know our native species well, and can easily identify what is and is not a 'pest' based on our training and experience.

But what about the times when we are faced with the unknown: an animal or insect species that we are unable to identify or have no knowledge of?

For many of us working inland, this is not so likely to happen.

But there are many pest controllers who work in environments where the likelihood of encountering a non-native species is much higher, such as harbour ports, container yards, airports and the like.

What will you do when faced with a non-native species? Are you aware of your obligations? Are you aware of the risks?

I believe this is an area where we lack clear direction as an industry.

The story of Zippy, the Indian palm squirrel

At Pest Solutions, our Aberdeen team regularly work on ships and offshore vessels, as the port of Aberdeen is one of the busiest in the UK (due to the oil industry).

Natasha, one of our Graduate Service Technicians, received a call-out from a ship agency client to deal with a rodent on an exploration vessel that was due to dock.

This ship arrived from India via Malta, and the crew encountered and caught a stowaway rodent identified as a squirrel.

The ship's captain needed the rodent removed from the vessel on safety grounds.

When Natasha and her fellow graduate Clara attended, they found the squirrel had been trapped in a box by the crew. They were able to safely transfer it to a cage to allow them to examine the animal to try to identify it.

It quickly became clear that it was a squirrel, but not one we had seen before. Using zoology training and the power of the internet, they could identify that the rather small and fast-moving fellow was an Indian palm squirrel.

What next?

'Zippy', as they named him, could not remain onboard as he may have damaged sensitive equipment. Would you know what to do next?

There are lots of things to be aware of when dealing with non-native species.

A non-native stowaway animal may be a carrier of diseases that we do not have in the UK, such as rabies. It is your responsibility to understand these risks, and you must ensure that you are wearing suitable PPE so that you are protected from bites or scratches.

It is your responsibility to inform the correct authorities of the existence of any such animal you encounter and to request guidance on how it should be treated. Do you know that you are required to contact, report and request advice from the Animal and Plant Health Agency (APHA)? If you were not aware, you are now.

Campbell at the Animal and Plant Health Agency said: "Every scenario may be different. Disease risks are dynamic, and each situation will need individual risk assessments.

"In the first instance, I recommend calling the numbers detailed according to the location of your incident."

I guessed that the Indian palm squirrel would have originated from India, but Campbell informed me that Malta has a significant resident population of palm squirrels as well. The fact that they were the direct result of

poor control of non-native species is a good example of why we need to be careful. Indeed, many of the species we now count as pasts arrived on our shores from

count as pests arrived on our shores from elsewhere originally. Are you ready to do the right thing when

faced with a non-native species?

Happy ending for Zippy

Natasha and Clara transported Zippy to The New Arc animal sanctuary near Aberdeen, where he underwent a planned period of quarantine and is being well looked after.

The New Arc team are investigating if he can be returned home or if he can be relocated to a more permanent home. His story made many of the UK's newspapers and even gained an article in the New York Post.

Share the wisdom

Every day is a school day. Tell us about your interesting pest-related jobs and your article could appear in a future PPC. **hello@bpca.org.uk**

MEET THE MEMBER

A BOUNTIFUL 25 YEARS

This year Kent-based Bounty Pest Control celebrated 25 years in business. We spoke to Elaine and Martin Rose-King about their pest control journey.

he challenges of running a business over 25 years and overcoming all external difficulties mean that Elaine feels lucky and proud to have gotten so far. Particularly as it wasn't the first choice career for either of them.

"I always wanted to work with animals and started at an early age in the retail pet industry," explains Elaine.

"When I met Martin he was keen on law. Neither of us were able to pursue our chosen careers; I ended up in dentistry and Martin in catering.

"We suffered badly from the early 90's recession, and Martin endured quite a few jobs to get by. The turning point was when he was working as a civil servant and got a diploma from a course in pest control."

When the army base in Ashford closed, Martin touted his services to a company doing pest control for the local authority. When the company's contract came to an end, Elaine and Martin stepped up.

"To start a business was daunting," says Elaine, "Even coming up with the name was tough. With both of us being a touch on the geeky side, and fans of science fiction and action movies, we embarked on a quest for a name to reflect a tribute to escapism, as it had carried us through some really tough times.

"With a glass of wine in hand, sat in our garden, blasted by the evening summer sun, we settled upon the name 'Bounty' and our journey began!"

Bounty's first van was an ex-gas board van – now they run a small fleet of vans.

At present the team consists of Martin and Elaine, plus Carl the technical supervisor, Andrew (Buster) the service supervisor, newest recruit Simon and some work is done via the contract sharing network (a BPCA member benefit). Their son Elliott has re-joined the team after getting a masters degree.

Both Elliott and daughter Lois have picked up pest control alongside their own career pursuits: both are qualified technicians.

Kent is Bounty's main area of operation, and that means that newly emerging invasive species are on the radar for the team. And it's something Martin feels they've picked "Most of us in pest control are curiosity driven, and nothing piques that curiosity more than the idea of a new pest to manage.

"And of course we have Elliott and his degree in environmental management. Pest control wasn't initially going to be his area of interest, but as he's learned more about the Asian tiger mosquito and the Asian hornets, it's developed from there."

What makes Bounty's location a prime target for invasive pests?

"We have lots of touch points in Kent where goods come in and out of the country, so geographically it's an interesting area of operation and we're on one of the frontlines for invasive pests," says Martin.

"We do a lot of work with our local authority, so when Asian tiger mosquitoes were found in around 2016 they came to us, and we began working together to monitor and control them."

Mosquito monitors are checked by the local authority and if there are any red flags, Bounty picks up from there, does geolocation mapping and has done several treatments for Asian tiger mosquitoes.

"We also have our foot in the door in a more tangible way with Asian hornets, too. When we became aware of them, we did a lot of research about Guernsey and their battle with Asian hornets.

"They invited us over and we learned a lot from them, and vice versa. We've got a great friendship with the people out there now, and we've helped them track nests and engaged with the Spring Queening project."

Martin continued, "Elliott switched his masters degree dissertation to Asian hornet awareness as a result of that relationship. That then led to Ashford Beekeepers asking for training on Asian hornets and they asked us to be Asian Hornet Action Team coordinators for the Kent area. And of course, we're nerds – so we said yes."



"We'd like to remember those who have supported and contributed to Bounty over the years: Jack, Lee, Vic, Gary, Jim, Chris, Lois, Dad and Mum, Connor, Roy, Andy and Simon P. Thank you all past and present." Elaine and Martin Rose-King

When a report comes in on the Asian hornet app, it will go to the Animal and Plant Health Agency (APHA) and the National Bee Unit (NBU). They contact the British Beekeepers Association (BBKA), which has an interactive map of Asian hornet verifiers (people who can

> identify the species). But each area has a coordinator for those verifiers, and Bounty now does that for Kent.

> Once a nest has been identified, APHA has its own people that come out to treat the nest, take samples for testing and try to find out if that population is becoming established or not. "We want to help in this area

and we want to do it thoroughly," declares Martin. "It's pretty much all voluntary, the invasive species work we do. We do it because it's an important fight to be a part of and a great learning opportunity.

"It's actually quite time-consuming work, but it has educated us and it's knowledge we want to pass on to other people who might be interested.

"We've now got a climate so mild that we have the conditions for these things to not only arrive here, but to thrive here. And that's what's driven our interest."

What other invasive species are on Bounty's radar at the moment? Martin says Brown dog ticks are an area of interest.

"We haven't come across them yet but our region is one where people come back camping from places like the Netherlands, where they're quite prevalent. And they can infest houses, like bed bugs."

There's an area on the Bounty Pest Control website about invasive species, where you can read more about the work they do and the pests on our doorstep **bountypestcontrol.co.uk/pest_control/file/pestfacts.php**

Elaine said, "We've changed a lot over the years; gone are the days of taking bookings at home while navigating 160 marbles tipped over the floor by a delighted toddler, or the credit card machine set up in our bedroom waking us up at stupid o'clock by downloading the day's takings. "No longer do I have the embarrassment of reps

turning up unannounced at our home when I've got my head wrapped in clingfilm to dye my hair.

"It's cringe moments like those that make us appreciate even more the hard-working team that we have today and Bounty as a whole."

All that's left is to say: Happy birthday to Bounty Pest Control!



VHAI KIND OF IMPACT DO YOU CREATE?

orporate social responsibility has changed the way we, as consumers, think businesses can impact society, away from their actual products or services.

At its most basic level, corporate social responsibility is where businesses aim to contribute to society through activism or charitable practices.

Many large (and small) companies are now B-Corp certified which ensures accountability to people and the planet, via a strict assessment and ongoing reporting **bcorporation.net**

And to younger generations of consumers, socially responsible companies are more important than ever. It's now a common belief that companies should be investing in improving things for their employees, society or communities.

When we hear the phrase 'corporate social responsibility' we often think about mega organisations and their box-ticking; things that companies do to make themselves look good for a PR opportunity. PPC regular Michael Coates explains how that doesn't have to be the case. All can embrace CSR to positively impact the communities they serve.

and how we do it at combatpestcontrol.com/ social-housing-organisations We feel that we punch above our weight when

We feel that we punch above our weight when it comes to social impact, having provided tens of thousands of education days to children in conflict, and therapy and safe housing to children who have experienced trauma – not to mention minefield clearance support and basic survival provisions like clean drinking water.

Community responsibility and

Community responsibility and social accountability

(social impact) is how Combat Pest Control refers

It adds a more meaningful direction to what we

We are all responsible for the communities in

Having a socially responsible business means

Part of our vision at Combat is to educate and assist children in conflict. In 2021, we provided over

which we live and serve, so understanding this

goes a long way. As an industry or business, we

actively going out of your way to do something

about the issues that matter to you and your

community. These can be short campaigns or

33,000 days of education to young women and girls in South Sudan. We also provided therapy and housing for children who experienced trauma. You can read, listen and watch what we do

social impact at Combat

to CSR.

do as a business.

can't just take without giving.

ongoing commitments.

IMPROVE EMPLOYEES' BENEFITS

- Provide employees one day off per year for attending or hosting charity events/fundraisers
- Make recycling and reducing waste a corporate goal – you could even put an employee in charge of it, providing them the opportunity to beef up their skillbase in the process
- Improve your workplace policies, such as maternity and paternity benefits, holiday entitlement or your equality, diversity and inclusion policies
- Do a salary benchmarking exercise, so your employees feel valued and you can be sure you're paying them adequately
- Ask around your community is there a local school that needs a new summer house? Or a dementia-friendly garden that needs building?
- Create a direct debit to a charitable cause
- Organise a company fundraiser
- Explore charitable partnerships.

Whatever you do, make it meaningful and relevant to you. Oh, and be consistent.

WHAT'S IN IT FOR YOU?

Many benefits come by improving your approach to corporate social responsibility, here are a few:

- Improved psychological well-being (for you and your team). Studies have shown giving to charity improves mood, boosts self esteem, can improve drive and motivation
- You become more interesting this could be to potential new staff, customers, partners, local or national media outlets
- Better team cohesion
- The opportunity to meet and work with different people and businesses
- Improved, positive brand reputation and better brand recognition.

Start small, think big

Sometimes these acts of corporate social responsibility are easy to put off for sometime in the future. Common deflections include 'maybe when we are bigger', 'when we make more profit' and 'if only we had more time'.

But, like anything positive, starting small is often best. If you want to get physically fit you don't start by running a marathon, you start by going for a ten minute walk and build up slowly. Yet, you are still getting fitter.

If you wait for the perfect time to run 26.2 miles, those miles will never come because there's no such thing as a perfect time.

Start with the micro. Do something small; it may look like a drop in the ocean but doing something small enough times makes a big difference.

Externally, this can be as simple as donating monthly to a charity. Internally, you could take a look at the benefits your employees get – can you improve them?

Frequency of impact

To quote James Clear, author of the book Atomic Habits: "Every action you take is a vote for the type of person you wish to become".

This quote resonates with me a lot, especially when it comes to providing social impact.

Combat Pest Control has a four-point vision, which we stick to through thick and thin. Part of this vision is to 'educate and assist children in conflict'. This has been the way since day one and will never change, but to enable this to happen we had to create systems that allowed us to fulfil our vision – operation, financial, admin and vision systems.

Part of this vision system is to (at the end of each month) count up our invoices (we now break it down to domestic and non-domestic). The number of invoices created guides the amount of days of assistance we provide to children in conflict.

At the start, when it was only three of us and two vans, we might provide 30 days of education. Now we are substantially larger, and provided over 2,000 days last month alone. Over time this builds up and the tiny micro impacts create a huge crater of positivity.

My main point here is that you need to create systems that work for you and that allow positive habits to form and social impact to be made.

Reporting

Reporting is a great way to assess what you are doing and what you can do better. Across business this is an essential task.

And you can do it with your social accountability. But don't fear, it can be as simple as counting invoices or searching a charity name in your banking app. It doesn't have to be overly-complicated.

Celebrating impact

I have always thought celebrating and communicating your impact to be extremely useful.

Yes, it allows you to be creative around newsletters, training your team or social media posts. But it also does something else remarkable: it inspires others to take action.

This is the main reason why I have written this article. I want other pest control companies to follow suit and start impacting the world positively (if you aren't already, because we know many of you do some amazing community work). Supply chain

Something often overlooked is your supply chain, especially if you are a large company and subcontract work.

We choose people to work with on a daily basis when running a business, and there's nothing to stop us looking at the companies we buy from, use or contract into, and see what they are doing in their communities, for our environment or what their social impact is in general.

And it goes the other way too. As a company we report and communicate to our clients large and small on our social impact activities. And we are often asked by potential clients what we do in regards to CSR. For us this is a simple conversation to have and often sets us apart.

Values

Whoever you work with or donate to, you need to look at your combined core values. It is almost impossible to forge a long lasting partnership if your values do not align.

Unsure of your values? Write them down! Use other businesses' values as inspiration, such as BPCA's: passion, integrity, expertise and support.

You and your business should be guided by values you hold dear, and it's important to work with others that share similar ones.

Want more?

For more information on corporate social responsibility, visit **combatpestcontrol.com** Combat Pest Control's impact report: **uk.combatpestcontrol.com/view/423196**

"Use other businesses' values as inspiration if you need to, such as BPCA's: passion, integrity, expertise and support."

AT WHAT POINT FIGURING OUT FINANCES FOR YOUR PEST CONTROL BUSINESS BREAKEVEN?

Starting a new business can be a daunting and costly venture. We asked the owner of Blu Bookkeeping, Julie Holland MICB, to give new business owners an overview of the importance of knowing initial business costs and measuring profit.

ne of the important numbers to know in your business is the break-even point of your finances.

Breaking even is when your income (invoices/ sales) covers all your business expenses. Any income after that is profit.

If you know what you must do to break-even, then you know what you have to do for your business to survive, and also, what you can do to succeed, make a profit and grow your business.

Knowing this figure can help you understand if you are charging enough for your services or spending too much. It can also give you a sales figure to aim for each day, so that you know you have enough to pay the bills and make a profit.

Starting out

When any business first starts out, the outgoings are always much higher than any income from sales. This is usually due to the initial costs like advertising, website, stock, equipment, vehicle etc.

When a business breaks even, it is the first positive sign of the potential for making a healthy profit, and a successful business.

Until your business becomes better known, it can take time to bring in a steady stream of customers and contractual work, so knowing the level of sales required to pay all the bills gives you something to work towards and monitor progress.

Where do you get your break-even point from?

Example: Say you do £10k in sales in a month for 100 jobs, it costs you £3k in pesticides/ materials and £4k in other costs like van, insurance etc.

You have spent £7k to create £10k of sales, therefore, you must invoice £7k to cover the cost of the jobs and this is your break-even point. To find a daily break-even point divide £7k by 30 days = £233 per day. The example is extremely simplified, but you get the picture; you can see how powerful knowing that number can be.

Increasing prices means you need to do fewer jobs to break even, which means more time with the kids, in the gym or down the pub!

Discounting, on the other hand, causes your break-even point to go up by reducing your sales line and decreasing your profit which means you need to do more jobs to cover costs.

Using your break-even figure to grow your business

Now you know your BEF (break-even figure), you can set yourself a sales target, either daily or monthly. That target could be a sales figure, or the number of jobs done or increasing your average price per job and could help motivate you to work harder when you know what sales numbers you are aiming for.

Other ways to use the BEF

You could review your prices or review your costs. If sales go up, your break-even point reduces, if you reduce expenses the same happens.

If you want to take on an employee, you can work out how much he/she needs to earn in a day to cover the cost of their employment.

If you want to buy or lease a new van, you can add the cost to the monthly calculation to see what difference it makes to your BEF. If you are considering funding – it's worth noting that your break-even analysis is often a key component of a business plan. If you're thinking about funding for your business or taking on a business loan for a van or equipment, you'll probably need to do a break-even analysis.

Knowing a manageable break-even point will give you peace of mind with the prospect of taking on extra financing or debt.

There are many ways a break-even analysis can impact a pest controller's business decisions, so tracking it every month is essential, especially

if you have plans to grow your business.



ALTER YOUR ATTITUDE TOWARDS CPD

In this article, BPCA's Training and Professional Development Manager, Karen Dawes, explores why continuing professional development (CPD) can be a great tool for a pest professional's development when approached with the right attitude.

n the final quarter of 2022, at BPCA Registered we are busy helping everyone get on track to meet their CPD requirements for the year. Pest professionals are busy people and it is all too easy to forget to record CPD, or to not fully appreciate the types of activities that can count towards your CPD requirement. As a result we still have a couple of members who are yet to record any CPD.

It points to CPD still being seen by many as a 'chore'; a box to be ticked before the time runs out or a stick with which to be beaten into submission.

And the result, as we see far too often, is a mad rush at the end of the year to gather the required 20 points in the quickest and most convenient way possible.

Either way, even the most optimistic of us in the BPCA Registered team don't see it as being an ideal situation.

For those that find themselves rushing to collect points, the choice will most likely be made on what activity is available rather than an identification of any

FIVE KEY STAGES TO CONSIDER:

IDENTIFY THE DEVELOPMENT NEED

This can be in one area or across many. Where are the gaps in the knowledge and skills that can be developed?

A simple 'training needs analysis' can help here; a review of learning and development needs within an organisation.

This review considers the knowledge, skills and behaviours that people need and how to develop them effectively. Once identified these can be appropriately filtered down to employees based on their development goals.

2 PLAN CPD ACTIVITIES

Once you have identified the skills shortages or development areas, the next step is to decide what activities and support will meet the overall development objectives.

In addition to traditional training courses and examinations, BPCA Registered recognises a wide range of activities that support development. These include:

- Coaching and mentoring
- On-the-job training
- Seminars and webinars
- Informal study and self-managed learning
- Reading
- Technical authorship
- Formal and informal discussions
 And use appreciable can also source
- And yes appraisals can also count!

skills or knowledge gaps.

For those trying to remember what they've done, any benefit from their reflections on what they've learned are likely to be limited.

Leaving CPD to the end of the year tends to suggest a lack of any planning around where an individual's development should be focused. The value that can be gained from CPD isn't always recognised – this will only change when we stop talking about CPD in terms of points, and start talking about it in terms of actual development.

When people talk to me about CPD, they tend to talk about it as keeping knowledge and skills up-to-date and yes, that's an important consideration. But that would suggest an element of 'staying still' and simply maintaining the skills you've got.

My view is that as people learn more through development, they will instinctively stay informed, so surely the focus should be on developing skills

3 UNDERTAKE CPD ACTIVITIES

Execute the CPD and learning activities that have been planned, to improve any areas of weakness and close identified knowledge gaps.

These can be planned across the year, either as stand-alone or progressive activities, building up the level of knowledge and skills over time.

REFLECT ON YOUR LEARNING

This is something that we fully believe in at BPCA Registered. Reflection is the process by which you analyse your CPD activity to see the link between what you've learned and the impact on your work.

- As part of this process you reflect on: • What you have learned
- What you have learned
 How your knowledge has increased
- How your knowledge has increased
 What additional skills you have developed
- What additional skills you have developedHow you will put your learning into practice
- How your learning will help with your work.

Because your CPD activities are held in your BPCA Registered diary, you can revisit them at any time. This is particularly helpful if it's something you've learned in the field, and you have recorded evidence of what you've done on video or through photographs. (PD) "Recognising CPD as a route to professional development, rather than a point collecting exercise, is the key to changing attitudes towards it."

rather than maintaining them? Both produce the same outcome but one is significantly more beneficial than the other.

For me, CPD isn't 'one-size fits all'. While BPCA Registered provides the portal for finding CPD and recording what's been completed, the choice of learning activities lies with the pest controller and should support their own personal development.

Recognising CPD as a route to professional development, rather than a point collecting exercise, is the key to changing attitudes towards it.

Businesses that understand the value and benefits to professional development can drive their employees towards CPD that's relevant to the goals of both the employee and the business.

Technicians can feel empowered and motivated because their CPD supports progression of their career. This in turn can provide job satisfaction and help with staff retention.

5 IMPLEMENT NEW LEARNING

The final stage is to take your learning and put it into practice, bringing new knowledge and skills to the workplace.

It's also important as the knowledge and skills that you need can change together with your career ambitions. Reflection can assist you to look at whether you are meeting the objectives set in order to meet your professional goals. And if it isn't then you can adapt your plans accordingly.

BPCA Registered can support you in planning CPD. Within the portal you can set objectives and see at a glance your progress in achieving them.

You can add reflection notes through your diary entries and upload evidence to support those reflections.

We are continuously adding new activities and working hard to ensure that these cover a wide range of subjects and we will always be on hand to support anyone who is struggling to find something they need.

And it's never too late to start planning. If you're one of those who has yet to record any points for this year, then give us a call and let us help you avoid that mad rush at the end of the year.

Find out more

Get in touch with the BPCA Registered team today. 01332 225 114 registered@bpca.org.uk



TRAINING CALENDAR 2023 DATES ADDDED

Courses and exams

Course/exam	From (£)	Exam	Date	Location	
	110111(1)	LAUIT	04-09/12/2022	Looution	
Level 2 Award in Pest	1010	\checkmark	29/01-03/02/2023	Stafford	
Management (residential)	1010	•	04-09/06/2023		
			03/12/2022		
Hands On Practical Training	150		28/01/2023	Stafford	
			18/11/2022		
			09/02/2023		
Principles of Pest Identification	95		23/05/2023	Online	
			26/07/2023		
Bed Bug Control	95		26/01/2023	Online	
Advanced Insect Biology	95		22/11/2022	Online	
Advanced Rodent Biology	95		07/12/2022	Online	
avanoca noacin biology			24/11/2022 1/2 day		
Fundamentals of Rodent Biology	55		17/01/2023 1/2 day	Online	
			24/11/2022 1/2 day		
Fundamentals of Insects Biology	55		17/01/2023 1/2 day	Online	
Root Cause Analysis for Pest			14/11/2022 1/2 day	Online	
Foot Cause Analysis for Pest Fechnicians and Field Biologists	55 ts		08/02/2023 1/2 day		
	55		21/02/2023 1/2 day	Online	
			06/12/2022		
Certificate in Bird Management	t 95 ✓	\checkmark	22/02/2023	- Online	
			14/11/2022	Online	
Formulations and Applications	95		23/02/2023	Hybrid	
Stored Product Insects (SPIs) in	05		08/12/2022	0.1	
Food Factory Environments	95		15/03/2023	Online	
	95		11/11/2022	- Online	
Waste Management			26/04/2023		
Introduction to	95		14/02/2023		
Wildlife Management			16/04/2023		
Aluminium Dhaanhida	010	~	16+17/03/2023	0 11 11	
Aluminium Phosphide	310 🗸		05+06/10/2023	- Southwick	
			02/12/2022		
Becoming a Field Biologist or Technical Inspector	95	02/03/2023	Online		
			02/06/2023		
Starting and Managing Your Own	05		07/11/2022	Online	
Pest Management Business	95		01/03/2023	- Online	
Level 3 Award in Safe Use of	780		27-30/03/2023	- Derby	
Fumigants for the Management of Invertebrate Pests			23-26/10/2023		
			30/11+09/12/2022		
Steps to Leadership Management	t 190		09/03+16/03/2023	– Online	
			, , ,		



training@bpca.org.uk 01332 225 113 bpca.org.uk/training

Bulk booking discounts

and

We now offer discounts on bulk bookings for our Level 2 Award in Pest Management course, for both members and non-members: 0-2 licences - standard price; 3-9 licences - 20% discount; 10+ licences - 40% discount. Exam costs remain the same. Contact the training team to find out more.

Exams only

Exam	From (£)	Date	Location
		09/12/2022	Stafford
RSPH Level 2 Award in Pest Management	155	13/12/2022	Derby
		03/02/2023	Stafford
Technical Inspector Exam		09/12/2022	
	155	13/12/2022	Stafford
		03/02/2023	
RSPH Level 3 Award in the Safe Use		09/12/2022	
of Fumigants for the Management of	305	13/12/2022	Stafford
Invertebrate Pests		03/02/2023	_
Certified Field Biologist	305	13/12/2022	Derby
Certificated Advanced Technican (CAT) in Pest Management	294	Book anytime	Online

Online learning - take at any time

The flexible approach to pest control training, learn at your own pace at times to suit you bpca.org.uk/online-learning

	From (£)	
Full Level 2 Award in Pest Management – online course	300	
Using Rodenticides Safely – online course and exam	75	
Foundation Certificate in Pest Management	FF	
Pest Awareness for Non-technical Staff	55	
Completing Risk Assessments		
Working at Height		
Asbestos Awareness	20	
Manual Handling	20	
Ladder Safety		
соѕнн		



Rodent pest management competency assessment

TAKE THE ONLINE ASSESSMENT **AT ANY TIME** TO SUIT YOU. Using 3D technology, you will be assessed on your ability to identify, control and prevent the re-occurrence of a pest issue in a realistic environment.

The first attempt is free but, if a pass result is not achieved, re-sits will be chargeable.

Terms and conditions

All costs are members only and exclude VAT.

Venue details are provisional and may change - please check the BPCA website before booking.

BPCA reserves the right to cancel a programme if insufficient bookings have been received.

Delegates will be offered an alternative date or a full refund of the programme fee if a programme is cancelled. BPCA will not be liable for any costs incurred by the delegates.



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