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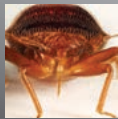
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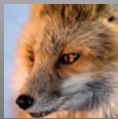
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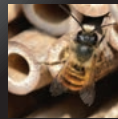
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Professional Pest Controller
the journal of the UK pest management industry



ISSN 2046-5025



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British Pest Control Association

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From servicing to strategy

“



No doubt you'll hear more about BPCA Registered through 2019 from various sources, but all I want to say on this is that BPCA Registered is here to stay. ”

Yes, that's right. You have a new face at the front of your magazine. I'm delighted and proud to introduce myself to you as the new BPCA President.

I could not start my first foreword for PPC magazine without thanking Tom Holmes, my predecessor, for all his efforts over the last three years. He's delivered many successes, navigated many challenges and has left some giant size 10s to fill.

Tom, when you're reading this, on behalf of all PPC readers, we hope you've arrived safely at your new role and it's everything you were looking for.

HOW I GOT HERE

After chairing the Association's Servicing committee for several years, I was elected to be one of the BPCA Vice Presidents in Spring 2018. With Tom duly departing, the Executive Board nominated me for President at the November meeting.

Outside of my BPCA duties, I run a family owned business, Countrywide Environmental, based in Newbury, Berkshire. I've been in the industry for 25 years and I've experienced firsthand the changes (or rather hoops) we have to jump through to maintain our prominent position as public health protectors, to domestic and commercial customers alike.

WHAT GETS MY GOAT

Everyone else seems to have a word or two to say about CPD. So here are some of my thoughts...

As important as it is, CPD isn't something that should stop us from doing our jobs. It shouldn't always be about passing tests. Why doesn't it reflect the practical nature of our trade?

Yes, there are theory elements to it, but I'm a practical guy. I'd like any commitment I make to professional development to have practical elements

too. This is why I'm passionate about ensuring BPCA Registered is ready for now and in the future.

BPCA Registered is a great example of what can change at committee and board level within your governance structure. With a working group and oversight from the Board, the project moved from committee action, to creative discussion, to a tangible innovation.

No doubt you'll hear more about BPCA Registered through 2019 from various sources, but all I want to say on this is that BPCA Registered is here to stay.

We've got more ideas to explore and developments to finish, but I'm very proud of what has been achieved in such a short space of time. Thank you to the many members that have backed BPCA Registered from day one. Without the early adopters nothing would ever innovate or improve!

MAKING FRIENDS

As President I'm looking to see how we can facilitate BPCA's relationship with other agencies in the future, both within the industry, and representing it.

We have a positive story to tell. It's up to all of us to tell it.

People need to appreciate the role we play in protecting public health. Businesses need to appreciate we protect their reputations and financial assets. Society needs to appreciate the complexities of our trade.

It's your role (and mine, and BPCA's) to get those positive messages out there to drive up the value of our industry even further.

Making friends is also important within the industry. We are all stronger together, and we can overcome challenges which come our way with great influence and assertiveness. At BPCA, we have lots in the pipeline and we have got a fair inkling of what's around the corner, but we don't know for sure.

MAYBE THAT'S WHERE YOU COME IN?

If you're someone like I was five years ago, looking to get involved in what the Association does, I'd encourage you to get in touch. Getting involved is a great way to meet other professionals and make positive change for the future of our industry.

I'll be on the BPCA stand along with my board colleagues at PestEx (20-21 March). If you're not registered already, please make the effort to do so, then come and find us. I look a lot like the guy at the top of the page!

So, all-in-all, here's what I'm trying to say: I'm here on an interim ticket and I'm ready to step up.

Hopefully, the Board and wider membership will see what I'm about and might even make this position more formal at the AGM in June, but let's cross that bridge when we come to it.

See you at PestEx.

Best wishes,

PHIL HALPIN

BPCA President
Director, Countrywide
Environmental Services
president@bpc.org.uk



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PROFESSIONAL PEST CONTROLLER
ppconline.org
 Published quarterly by BPCA
 © 2019 BPCA

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 Online CPD quiz = 1 point each
bPCA.org.uk/cpd-quiz
 Remember to log anything else you've learned in your CPD diary for even more points

BASIS PROMPT: PC/49814/19/G
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Continuing the theme of engagement from 2017, 2018 turned out to be a milestone year for the Association with growth to record levels in membership, regional forum attendance and PR coverage in public and trade media.

You may have heard the phrase “culture eats strategy for breakfast” and it’s true. The culture of an organisation often leads to the strategy of an organisation not being delivered.

Businesses large and small suffer from this. You can have the best ever strategy, objectives, targets and plans but the result is that they are not delivered.

But why? It’s mainly because people choose to do what has always been done. They choose to ignore the strategy or relevant plan.

Often people don’t even know what the strategy or plan is because they haven’t been effectively communicated through the organisation, so how can they be expected to contribute to their delivery?

The problems I have encountered in other organisations are typically due to poor communications, poor ownership, poor definition of responsibilities and poor definition of accountabilities.

So, what does all that mean? People will keep on doing what they have always done. It means that there is no clarity on exactly where the organisation is heading, no clarity on what the organisation is expecting to deliver and who is responsible to contribute to that delivery and who is accountable for ensuring it is delivered.

The whole culture of the organisation leads to things simply not happening as they need to happen.

If you’re a sole trader or a small business, you might be saying that this is all only relevant to larger businesses. That’s not true. Every business of any size needs to know where it wants to get to (strategy) and what needs to happen to get there (enablers).

As a sole trader, you are the one responsible and accountable for ensuring that you keep focused and milestones are achieved.

As a business grows in size, ownership and communication become pivotal. Personnel are accustomed to doing things themselves rather than involving the wider team and, guess what, that is what they keep on doing.

As a business BPCA is no different. While we are now one year into this three-year strategy, we have taken quite a bit of time to make sure that our strategic objectives (where we need to get to) and our enablers (how we will get there) are transparent and that accountability and responsibilities are clear.

This has taken time but sometimes you have to slow down in order to speed up. Our work in 2018 focused on ensuring the Executive Board was fully aligned to the strategy, and the enablers, and accountability filtered throughout the group supported by the BPCA Management team.

One sticking point I have discovered with the delivery of strategy is with our committees. All three committees of the Executive Board are structured by type of member (ie servicing members, manufacturers and distributors and then specialist fumigators). This means that all three committees have to own the whole strategy rather than being able to split up that responsibility more effectively.

I suspect that this is why there has been a bit of a bottle-neck when it comes to strategic ownership, understanding and effort has not got beyond the Executive Board.

This needs to change. The committees need to get closer to the strategy of the organisation and this will start to happen over coming months.

We had considered changing the structure of the committees but the proposed change was not supported by either the Servicing committee or the M&D committee and as I write this, I do not yet know what the Board will choose to do now.

One thing that will not change is that we are the trade association for the professional pest management sector and as such we are about doing two things well:

- Driving professionalism
- Being the voice of our members.

Our strategy is fully aligned to these two things and regardless of how our committees are structured, this is what we need to deliver. One thing that is clear is that we need to get better at communicating with all our members on where we are heading, how we are going to get there and how we are getting on delivering that and I will keep you posted as that journey progresses.

IAN ANDREW
BPCA Chief Executive
ian@bpca.org.uk

Amazing insect and pest photographs win Small World Competition

A stunning weevil eye, an Asian hornet's sting and a mouse oviduct all win acclaim in Nikon's 44th annual Small World Photomicrography Competition.

Insects dominate the Nikon Instrument's top 20 annual competition designed to unveil the microscopic beauty hidden from the naked eye.

Pest management professionals will be familiar with a couple of the pest insects included on the list. However, it's unlikely you'll ever have seen them from this perspective.

First place was awarded to Emirati photographer Yousef Al Habshi, who sees the eyes as the windows to stunning insect artwork and research.

The 2018 winning image captures

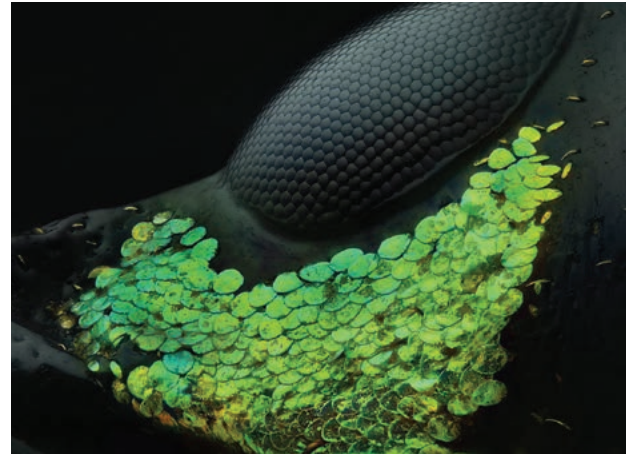
part of the compound eyes and surrounding greenish scales of an Asian red palm weevil.

This type of *Metapocyrtus subquadrulifer* beetle is typically less than 11mm in size and is found in the Philippines.

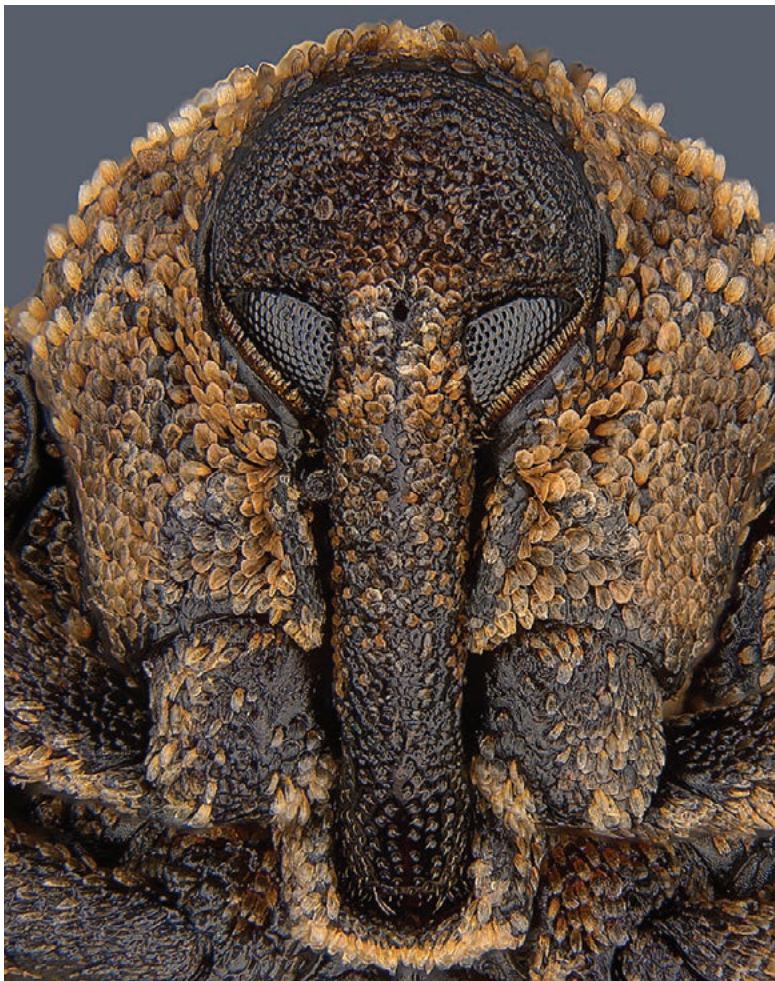
Al Habshi's photography has helped advance the work of his partner, Professor Claude Desplan, of New York University, Abu Dhabi.

His lab and Al Habshi's photos have contributed a better understanding of the red palm weevil and how to better control the population.

The full top 20 gallery of winning images, along with images of distinction, can be viewed at nikonsmallworld.com



First place: Yousef Al Habshi, Abu Dhabi, United Arab Emirates. Eye of a *Metapocyrtus subquadrulifer* beetle. Reflected light; 20x objective lens magnification.



8th place: Pia Scanlon, Department of Primary Industries and Regional Development, Government of Western Australia, South Perth, Australia. *Sternochetus mangiferae* (mango seed weevil). Stereomicroscopy; image stacking; 1x objective lens magnification.



19th place: Pierre Anquet, La Tour-du-Crieu, Ariège, France. *Vespa velutina* (Asian hornet) with venom on its stinger. Reflected light; focus stacking; 6.3x objective lens magnification.



15th place: Antoine Franck, CIRAD – Agricultural Research for Development, Saint Pierre, Réunion, Réunion Island. Mite on a honey bee.

Health and safety at work summary statistics for Great Britain 2018 released by HSE

The Health and Safety Executive (HSE) has released key statistics regarding ill health and injury relating to work in the UK.

Key figures for Great Britain (2017/18) highlighted in the report include:

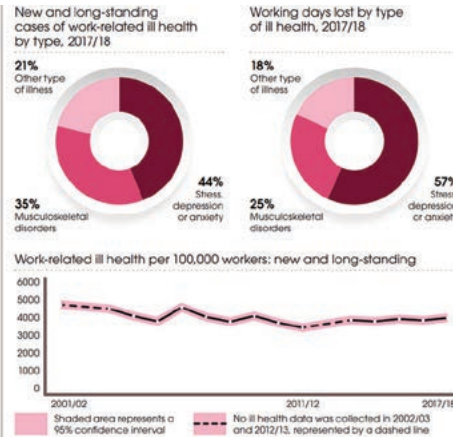
- 1.4 million working people suffering from a work-related illness
- 2,595 mesothelioma deaths due to past asbestos exposures (2016)
- 144 workers killed at work
- 555,000 injuries occurred at work according to the Labour Force Survey
- 71,062 injuries to employees reported under RIDDOR
- 30.7 million working days lost due to work-related illness and workplace injury
- £15 billion estimated cost of injuries and ill health from current working conditions (2016/17).

1.4 million Workers suffering from work-related ill health (new or long-standing) in 2017/18

541,000 Workers suffering from a new case of work-related ill health in 2017/18

26.8 million Working days lost due to work-related ill health in 2017/18

13,000 Deaths each year estimated to be linked to past exposure at work, primarily to chemicals or dust



ILL HEALTH AT WORK

From the statistics, we can see that the rate of self-reported work-related ill health showed a generally downward trend to around 2011/12. Working days lost per worker due to work-related illness showed a generally downward trend until around 2010/11.

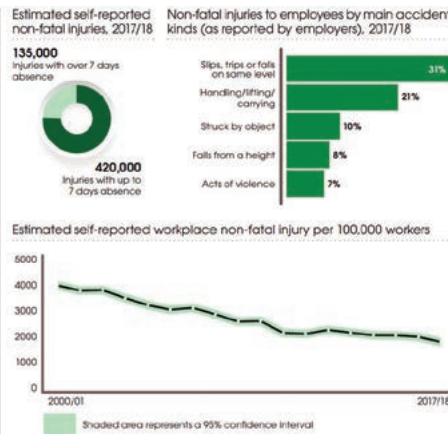
The rate of self-reported work-related stress, depression or anxiety was broadly flat but has shown signs of increasing in recent years. Working days lost due to stress, depression or anxiety account for 57% of all working days lost due to ill health.

144 Workers killed at work in 2017/18

555,000 Non-fatal injuries to workers according to self-reported estimates from the Labour Force Survey in 2017/18

71,062 Employee non-fatal injuries reported by employers under RIDDOR in 2017/18

3.9 million Working days lost due to non-fatal workplace injuries according to self-reported estimates from the Labour Force Survey in 2017/18



INJURY AT WORK

HSE reports a long-term downward trend in the rate of fatal injury to around 2012/13. The rate of self-reported non-fatal injury to workers showed a generally downward trend.

The rate of non-fatal injury to employees reported by employers also showed a long-term downward trend.

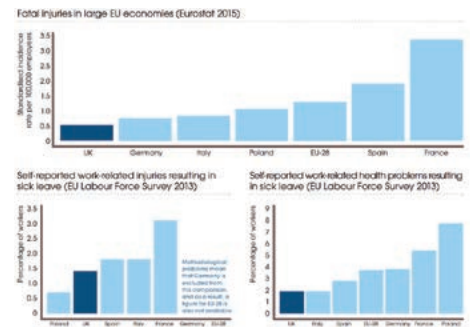


You can view the full graphic report on the HSE website. hse.gov.uk/statistics

COMPARED TO OTHER EUROPEAN COUNTRIES

Comparing HSE's numbers to the rest of Europe, we can see the UK consistently has one of the lowest standardised rates of fatal injury across the EU, lower than other large economies and the EU average.

Non-fatal injuries in the UK were at a similar level to other large economies in 2013. UK rates of work-related ill health resulting in sick leave were lower than most other EU countries.

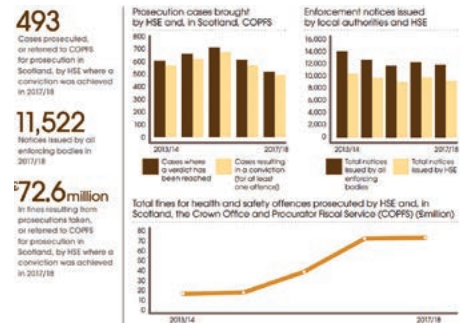


HSE ENFORCEMENT IN NUMBERS

HSE reports this year has seen a fall in the number of cases prosecuted, continuing the trend from the previous year. The number of notices issued by all enforcing bodies showed a small decrease compared to the previous year.

The level of fine issued in 2017/18 is comparable to the previous year which they

state is due to an increase after the introduction of new sentencing guidelines. A feature of these guidelines is that the fine is related to the turnover of organisations and, as a result, large organisations convicted of offences are receiving larger fines than seen prior to their introduction.





Bye bye Tom

BPCA Chief Exec, Ian Andrew says goodbye to Tom Holmes on his last day as BPCA President.

The team presented him with a framed picture of his own words that echoed through many board meetings: "Do fewer things better" was Tom's unofficial catchphrase. We wish him well.

Ben Massey to leave BPCA as Marketing and Communications Manager and Editor of PPC magazine

After a successful tenure as BPCA's Marketing and Communications Manager, Ben Massey has announced that he will be leaving the Association in February.

Ben Massey joined the Association's Senior Management team in July 2016, and since then has been instrumental in adding value to BPCA and its members.

Ben has overseen the redevelopment of the Association's brand, including its website, magazine and communication channels, as well as introducing initiatives to the membership community such as The BPCA Printshop, Contract Sharing Network, and the British Pest Management Awards.

Ben said: "Pest Management is an industry where there is a real difference being made to society, and I think this is a reflection on the special people that make up the professional community.

"I'd like to thank all of the folks that have supported me in a relatively short period of time. This includes members, supporters, suppliers and readers of PPC magazine, and particularly members of BPCA's Executive Board and committee structure. However, my biggest thanks go to the fantastic BPCA Staff team working tirelessly behind the scenes."

Ben leaves BPCA to take up a position of Director of

Marketing and Communications of a retail trade association.

Ian Andrew, BPCA Chief Exec said: "In his time at the Association, Ben's expertise has contributed to too many important projects to be listed here. He has transformed and professionalised the Association's communications both online and in print.

"Ben will be well missed by the many members he's supported and the Executive Board he's served.

"Ben's support and year-round Christmas-cracker jokes will be well missed by the Staff team at every level. We all wish him well with his new venture."



Which? endorsement discounts with your BPCA membership

Which? offers a free referral tool to end-users looking for tradespeople such as pest controllers.

Which? check things like insurances, paperwork and ensure that your consumer-facing element is fully compliant with best practice and consumer law.

The Which? 'health check' is by no means comparable to stringent BS EN16636 audit, desktop audit, training and CPD requirements

all BPCA Servicing members need to go through. However, this does mean BPCA members are more than qualified to be a Which? Trusted Trader, if they so choose.

EXCLUSIVE BPCA OFFER

As BPCA and Which? Trusted Traders are in partnership, they can offer you a 50% discount on your first six months of being a Which? Trusted Trader. The application fee starts from £200+VAT to get assessed for businesses with less than 19 employees.

To find out more, please call Which? on 0117 456 6032 and quote PA-LEAF. Lines are open 9am-5pm Monday to Friday. Alternatively, you can request a call back via their website trustedtraders.which.co.uk/for-traders



Football match saved by pest control

When One Call Stadium froze solid, everyone thought the Saturday match would have to be called off. Pest management company and BPCA member, Thermokil Insect Control Services came up with a unique solution to defrost the pitch.

Life-long Mansfield Town fan and Thermokil director, Ryan Overton, used his heat treatment kit to defrost the pitch just in time for Saturday's match. Normally

reserved for bed bugs and other insect pests, the heat treatment equipment enabled the game to go ahead against Macclesfield Town. Mansfield won the game 3-1.

GOT A STORY TO SHARE?

Send us your pest management stories and we might print them in PPC magazine, our email Bulletin or on the BPCA website.

hello@bpc.org.uk



Poison-resistant rat hotspots identified around Midlands

New hotspots of rats that are resistant to anticoagulant rodenticides have been identified by monitoring carried out at The University of Reading.

A statement from the Campaign for Responsible Rodenticide Use (CRRU), who commissioned the study said: "In East Anglia and West Yorkshire, it identifies for the first time the L120Q gene, responsible for the most severe form of resistance.

"This gene renders first generation anticoagulant rodenticides and two of the second generation groups ineffective.

"It is widespread across the whole of central southern England and also found increasingly outside that area."

They continue: "Another serious concern is that three different types of resistant rats are now found in West Yorkshire and on the Anglo-Welsh border.

"Also, a worry is the almost complete lack of data from central England."

Update to the Spring Traps Approval (Scotland) Amendment Order 2018

BPCA can confirm that the Spring Traps Approval (Scotland) Amendment Order 2018 laid before the Scottish Parliament is now in force as of 3 January 2019.

In summary, the following spring traps have been removed from the STAO:

- Fenn Vermin Trap mk I
- Fenn Vermin Trap mk II
- Fenn Vermin Trap mk III (Imbra, Juby, Lloyd, Sawyer).

VIDEO: Introducing the British Pest Control Association



We've put together a video to let people know what BPCA is, how

the Association can help with domestic or professional pest problems, and what you can do to get involved.

bPCA.org.uk/about

Significant developments from rodenticide stewardship in 2018



The Campaign for Responsible Rodenticide Use (CRRU) UK has released

its 2018 annual report into the state of the UK rodenticide stewardship regime.

The UK rodenticide stewardship regime implemented several commitments in 2018, including:

- Point of sale audits for compliance with regime rules on purchaser proof of competence
- Audits of approved farm assurance scheme members' premises to meet new standards aligned with the CRRU Code of Best Practice
- New professional development (CPD) modules from CRRU to support user training and competence.

These are highlights from the third annual UK Rodenticide Stewardship report, published by the Campaign for Responsible Rodenticide Use UK under its remit to an HSE-led Government Oversight Group.

It also confirms that all monitoring requirements were met and reports from independent contractors were submitted to HSE/GOG.

THE DIFFERENCE TO NON-TARGET SPECIES

One of these is the all-important barn owl liver residue monitoring, according to CRRU chairman Dr Alan Buckle.

“ This shows some decline in residues but none large enough to be scientifically or statistically significant. Even so, it does show that there was no significant increase in residues following the removal of the 'indoor only' restriction on products containing brodifacoum, difethialone and flocoumafen. ”

DR ALAN BUCKLE, CRRU CHAIRMAN

THE FUTURE FOR RODENTICIDES

New product labels with legally binding instructions for use were also introduced arising from another major review of rodenticides by the European Commission.

These place even more restrictions on the use of rodenticides and, particularly, on permanent baiting.

Dee Ward-Thompson, BPCA Technical Manager and CRRU Best Practice Work Group Leader stated in the report: "Rodenticide use practice has changed substantially during the last 12 months with product labels, after renewal, reflecting the requirements of the new ECHA Summary of Product Specification (SPC) documents for the first time.

"The workgroup continuously monitors these changes to decide whether existing CRRU best practice guidance documents need to be updated.

"Changes to the rules about permanent baiting were important enough to require the 2016 CRRU document to be substantially revised and reissued (CRRU UK, 2018a)."

Dee continues: "Further consideration of the foundation document, the CRRU Code of Best Practice (CRRU UK, 2015), is currently ongoing with the possibility of revision in 2019."

Dr Buckle calls for continued vigilance and commitment to rodenticide stewardship from everyone involved.

“ We must all work to make sure that every element of the stewardship regime is implemented with full rigour to reduce rodenticide residues in UK wildlife in the near future. As imminently as 2020, HSE has signalled there will be an in-depth review of the stewardship regime and rodenticide impacts on wildlife, with possible further restrictions if targets are not met. ”

DR ALAN BUCKLE, CRRU CHAIRMAN

MORE INFORMATION

The 2018 annual report, available from the CRRU UK website, is updated and published annually as part of the UK Rodenticide Stewardship Regime's monitoring programme. thinkwildlife.org/downloads

Ficam® D successfully reapproved for future use... but with caveat



BPCA member company, Bayer has announced that Ficam® D has been reapproved by the Health and Safety Executive (HSE). However, the new label will no longer allow

for the use of this pesticide outdoors.

Bayer states that Ficam® D (UK-2018-1136) is used for over 95% of wasp nest treatments in the UK.

The new label requirements, applied to the product by HSE, will limit its use to indoors only.

Steve Bishop, Bayer Product Manager explains: "Although the reapproval comes with the caveat that Ficam® D can only be applied indoors, our regulatory team has worked with the HSE to ensure that treatments can still be made to internal voids while the operative is outdoors."

Ficam® D was available with an updated label from the end of January 2019, stating the new areas of use.

Any current stock can still be used up to 25 July 2019.

Dee Ward-Thompson, BPCA Technical Manager, said on the changes: "It's always disappointing to see the arsenal of tools we use to protect public health get smaller – even if it's not unsurprising.

"Chemical manufacturers work incredibly hard to keep products on the shelves. I have no doubt that the Bayer Pest Solutions Team presented a compelling case to get their product reapproved."

More generally on wasp control, Dee said: "Many of our European colleagues have no access to Ficam® D at all. For a trained professional, the alteration of a product label won't stop them from being able to protect homes and businesses.

"Bayer is offering advice specifically on the label change, and your supplier will be able to help you with more general questions.

"BPCA's Technical team is on hand for BPCA member companies."

pestsolutions@bayer.com

BRC Global Standard for Food Safety updates



Issue 8 of the British Retail Consortium (BRC) Global Standard for Food Safety is now out with an accompanying BPCA guidance document for members.

Most pest management professionals will be familiar with the BRC Global Standard for Food Safety currently in its seventh issues.

The document requires certain standards of pest management within sites that conform to the BRC specifications.

In July 2018 BPCA was invited to take part in a webinar explaining the upcoming transition from this current Issue 7 to a new Issue 8.

CHANGES FOR PEST MANAGEMENT

It is important to note (and pleasing!) that in terms of pest management, very little has changed from Issue 7. The term "pest control" has been updated to the more contemporary "pest management", suggesting a commitment to prevention and education. A section has been added about bird management, that states: "The site shall have adequate measures in place to prevent birds from entering

buildings or roosting above loading or unloading areas."

Natalie Bungay, BPCA Technical Officers, offers pest management professionals the following advice: "For the most part, you should continue what you are doing on your BRC Food sites. Just make sure you're aware of potential bird ingress points, roosting areas, or area of low pressure and recommend proofing measures accordingly."

UPDATED GUIDANCE DOCUMENT

The BPCA Guidance Document for British Retail Consortium (BRC) Global Standard for Food Safety Issue 8 is now available to download in the member document area (login required).

bpc.org.uk/member-documents



- **New issue 8 free download at the BRC bookshop**
- **4.14 (Pest Management) has changed very little from issue 7 but bird management now included**
- **BPCA has published updated guidance for members**

2019 employment law changes

We've pulled together several changes to employment law in 2019 that will affect many pest management companies that employ any staff. Take a quick look through the changes to make sure you're ready!

NATIONAL MINIMUM WAGE INCREASING

From 1 April 2019, the so-called national living wage and other national minimum wage rates are set to increase.

The rates are: 25+ = £8.21; 21-24 = £7.70; 18-20 = £6.15; 16-17 = £4.35; apprentice rate = £3.90.

EXTENDED ITEMISED PAY STATEMENT TO WORKERS

From 6 April 2019, workers will have a right to itemised pay statements in the same way employees do.

A worker is anyone who does work for your company but does not have an employment contract and is not a self-employed independent contractor.

Where a worker's pay varies depending on when they've worked, you must include on the itemised pay statement the number of hours worked for which variable pay is received.

INCREASED STATUTORY SICK AND FAMILY PAY RATES

On 6 April 2019, the weekly rate for statutory sick pay is increasing to £94.25.

On 7 April 2019, the weekly amount for family pay will increase to £148.68 for 2019-20. The rate applies for maternity pay, adoption pay, paternity pay, shared parental pay and maternity allowance.

NEXT YEAR: PARENTAL BEREAVEMENT LEAVE AND PAY

It has been confirmed that the government intends to introduce a right for bereaved parents to take paid time off work.

The new right will come into effect from April 2020, however, we'd recommend reviewing your bereavement/compassionate leave policy now.

The right is expected to mean bereaved parents will be able to take two weeks off paid (either as two separate weeks or one two-week period).

BPCA members have free access to dozens of pages of information on employment law and HR Calculators through BPCA BusinessShield. bpc.business-shield.co.uk (login required)

BING BONG!
Next stop...

FREE!
pestex.org/
register

**CHANGE
HERE**
for connections
to the pest
management
community!

BPCA
PestEx

The pest management show

20-21 MARCH 2019 / EXCEL, LONDON

VISIT
pestex.org

EMAIL
events@bpca.org.uk

CONNECT
#PestEx2019

Over 2,500 pest management professionals are scheduled to arrive at the London ExCeL on 20-21 March - will you be one of them?

Potentially the largest UK gathering of people interested in public health pest control will be assembling for the biggest exhibition and conference we've ever planned. At the time of printing, we've already got over 1,000 guests pre-registered with more coming in every day. Everyone's invited. Everyone's welcome.

The theme for PestEx 2019 is making connections. Over the two days the BPCA team is focusing on making it as straightforward and enjoyable as possible for attendees to connect with new ideas, new businesses and strengthen existing connections. Hope to see you there!

“ I'd say for anybody looking to develop in the pest management industry, whether that be professionally or commercially, this show is unmissable. ”

CHRIS CAGIENARD,
PESTEX 2017 ATTENDEE

Reasons to attend

- Technical pest management seminars (pages 14-17)
- Free better business seminars tailored to the pest sector (pages 16-18)
- Over 100 pest control product and service suppliers from around the world (page 13)
- Competitions and prize draws throughout the show (see below)
- All the latest news and product updates from across the sector
- Keep up with your continual professional development and get your points
- Attend the British Pest Management Awards ceremony (page 19)
- A massive BPMA Afterparty at the end of day one (page 2)
- A chance to try RESISTANCE WARS - the pest management arcade game (page 12)
- Connect with your trade, community, colleagues and peers.

**Don't be a mug!
Register for
PestEx now**

Pre-register for PestEx 2019 and receive a free PestEx 2019 mug and get entered into a prize draw for a professional coffee machine to keep it topped up.

Guests will be able to collect a free limited edition PestEx travel mug from the BPCA stand, while stocks last.

Registered guests will also receive updates about the event as they happen to ensure they are informed when drawing up their plan for visiting the pest management show.

pestex.org/register



WIN!

**REGISTER BEFORE
19 MARCH!**

Anyone who registers for PestEx before 19 March is in with a chance of winning a Sage Barista Express Bean-to-Cup Coffee Machine from John Lewis worth over £450.

“ Shows like PestEx are great for business. I'm looking forward to having the industry under one roof so I can connect and catch up with existing contacts, as well as make a few new ones. ”

IAN ANDREW, BPCA CHIEF EXECUTIVE

**THERE'S
MORE!
SEE OVER!**

Exhibitors and floor plan confirmed as of February 2019

- 5 **1ENV SOLUTIONS** 1env.co.uk
- 81 **A & M HAWK** amhawk.co.uk
- 7a **ABATE PEST FRANCHISE** pestfranchise.co.uk
- 106 **ADKALIS** adkalis.com
- 72c **AIRGUN TRAINING AND EDUCATION ORGANISATION (ATEO)** ateo.org.uk
- 82 **AIROFOG** airofog.com
- 101 **ALCOCHEM HYGIENE** alcochemhygiene.com
- 78 **ALERT HOUSE** trapsensor.com
- 88 **AP&G CATCHMASTER** catchmasterpro.com
- 65 **BÁBOLNA BIO** babolna-bio.com
- 87 **BARRETTINE ENVIRONMENTAL HEALTH** barrettineenv.co.uk
- 52 **BASF** basf.com
- 8 **BASIS REGISTRATION** basis-prompt.co.uk
- 36 **BAYER CROPSCIENCE** environmentalscience.bayer.co.uk
- 10 **BEEGONE - LIVE BEE REMOVAL** beegone.co.uk
- 43 **BELL LABORATORIES** belllabs.com
- 29 **BIOGENIUS** biogenius.de
- 95 **BIOPREPARATY** biopreparaty.eu
- 99 **BIOSIX** biosix.eu
- 114a **BIRCHMEIER** birchmeier.com
- 53 **BLEU LINE GROUP & SPRAYTEAM** bleuline.it
- 86 **BOWER (INSECT-A-CLEAR)** bower.co.uk
- 42 **BRADSHAW BENNETT** pestcontrolinsurance.co.uk
- 112 **BRANDENBURG** b-one.com
- 0 **BRITISH PEST CONTROL ASSOCIATION (BPCA)** bpca.org.uk
- 13 **CAMPAIGN FOR RESPONSIBLE RODENTICIDE USE (CRRU)** thinkwildlife.org
- 17 **CAPE SPC** cape-spc.com
- 9 **CEPA** cepa-europe.org
- 18 **CHABANNE SAS** oisipic.fr
- 115 **CLIVERTON INSURANCE** cliverton.co.uk
- 14 **DEADLINE** rentokilproducts.com
- 51 **DEEVAL INTERNATIONAL** deeval.co.uk
- 67 **DEFENDER BIRD SPIKES** birdspikesonline.co.uk
- 46 **DETIA DEGESCH GMBH** detia-degesch.de
- 28 **EARTH CARE PRODUCTS** earthcareproducts.biz
- 108 **EUROTRAP** eurotrap.net
- 15a **GLORIA HOUSE AND GARDEN** gloriagarten.de
- 37 **GREENTRAPONLINE** greentraponline.dk
- 73 **GSG URBANGUARD** gsg-vertrieb.de
- 72a **HEATWORK** heatwork.com
- 40 **HOCKLEY INTERNATIONAL** hockley.co.uk
- 113 **HUCK NETS UK** huck-net.co.uk
- 38 **I2LRESEARCH** i2LResearch.com
- 55 **IGEBA GERAETEBAU** igeba.de
- 27 **INPEST** geaitaly.it
- 19 **INSECTRON BY BERSON** bersonuv.com
- 103 **INTER-CHINA** deanpestcontrol.com
- 7a **INTERNATIONAL PEST CONTROL** international-pest-control.com
- 21 **INTERNATIONAL PHEROMONE SYSTEMS** internationalpheromone.co.uk
- 71 **IPESTCONTROL** frowein808.de
- 79 **IPM SQUARE** ipest.co.il
- 66 **IRTO TRIO** irtotrio.hu
- 96 **KAELTIA COMPLIANCE SERVICES** kaeltia.com
- 24 **KILLGERM CHEMICALS** killgerm.com
- 76 **KNESS PEST DEFENSE** kness.com
- 82a **LANCE LAB** lancelab.com
- 16 **LANTRA AWARDS** lantra.co.uk
- 91 **LODI UK** lodi-uk.com
- 110 **LONGRAY** longrayfog.com
- 69 **MERLIN ENVIRONMENTAL SOLUTIONS** merlinenvironmental.co.uk
- 89 **MESTO SPRAYERS** mesto.de/en
- 94 **METEX** metexonline.com
- 70 **MOUSESTOP (BY IPEST CONTROL BV)** mousetop.com
- 74 **MYLVA** mylva.eu
- 102 **NATIONAL PEST TECHNICIANS ASSOCIATION (NPTA)** npta.org.uk
- 54 **OCTAVIUS HUNT** octaviushunt.co.uk
- 3 **ORKIN** orkin.com
- 68 **ORMA - ITALY** ormatorino.com
- 109 **OSD GROUP** ecobirds.com
- 15b **PANKO MONITORING TRAPS** panko.pl
- 41 **PELGAR INTERNATIONAL** pelgar.co.uk
- 44 **PELSIS** pelsis.com
- 12 **PEST-GO (URBAN FOX CONTROL LONDON)** urbanfoxcontrollondon.co.uk
- 102 **PEST MANAGEMENT ALLIANCE (PMA)** pmalliance.org.uk
- 1 **PEST TRADER** pesttrader.com
- 92 **PESTFIX** pestfix.co.uk
- 22 **PESTSCAN** pestscan.co.uk
- 26 **PESTWEST ELECTRONICS** pestwest.com
- 83 **PLASTDIVERSITY** plastdiversity.com
- 72b **PROCATCH** procatch.com
- 48 **PUREAN SOLUTIONS AND TECHNOLOGY** purean.co.uk
- 45 **QUIMUNSA** quimunsa.com
- 34 **RAT PAK PEST CONTROL PRODUCTS** ratpak.co.uk
- 13 **RODENTICIDE RESISTANCE ACTION GROUP (RRAG)** bpca.org.uk/rrag
- 93 **ROYAL SOCIETY FOR PUBLIC HEALTH (RSPH)** rspgh.org.uk
- 114 **RUSSELL IPM** russellipm.com
- 105 **SAMI TECH** sami.tech
- 90 **SERVICETRACKER** servicetrackersystems.com
- 31 **SERVICEPRO** servicepro.com/pest-control-software
- 84 **SIA SITNO** sitno.biz
- 11 **SM BURE** smbure-foggingmachine.com
- 71a **SPM GLOBAL** spmglobal.co
- 98 **SUMITOMO CHEMICAL** sumitomo-chem.co.jp
- 23 **SYNGENTA CROP PROTECTION AG** syngenta.com
- 39 **TELEX HONG KONG INDUSTRY** birdcontrol.cn
- 72d **THERMOKIL INTERNATIONAL** thermokilservices.co.uk
- 107 **UNICHEM** en.unichem.si
- 56 **VEBI ISTITUTO BIOCHIMICO** vebiexport.com
- 80 **VECTORNATE USA** vectorfog.com
- 2 **WILDLIFE CONTROL SUPPLIES EU** shopwcseu.com
- 65a **WOODSTREAM EUROPE** woodstream.com
- 111 **XCLUDER** getxcluder.com
- 30 **YANCO** yanco.co.uk



Defend the world from giant mutant rats!

Join the RESISTANCE WARS

Make sure you come to find us on the BPCA stand and try your hand at our new arcade game "resistance wars".

Inspired by the arcade classic, PacMan, RESISTANCE WARS sees you take control of our pest management hero. You'll be

picking up irresponsibly-abandoned bait, acquiring various products used for IPM, and avoiding giant mutant killer rats.

We'll be keeping a scoreboard throughout the day and our top three scorers will win prizes.

WIN A GREAT PRIZE!

1ST SONY PLAYSTATION CLASSIC

2ND CLASSIC BRIT BEER PACK

3RD £25 LOVE2SHOP VOUCHER



FIRE EXIT

FIRE EXIT

- 13 CRRU & RRAG
- 12 PEST-GO
- 11 SMBURE
- 10 BEEGONE
- 9 CEPA
- 8 BASIS
- 7a ABATE
- 7 IPC
- 5 1ENV
- 3 ORKIN
- 2 WILDLIFE CONTROL
- 1 PEST TRADER

48 PUREAN SOLUTIONS **51 DEEVAL**



14 DEADLINE

15a GLORIA **19 INSECTRON**

15b PANKO

16 LANTRA **18 CHABANNE**

17 CAPEPC

21 IPS **22 PESTSCAN**

23 SYNGENTA

46 DETIA DEGESCH

45 OJIMUNSA

44 PELSIS

40 HOCKLEY **41 PELGAR**

39 TELEX (HK) IND.

38 IZL RESEARCH **42 BRADSHAW BENNETT**

37 GREENTRAP **43 BELL LABS**

TECHNICAL THEATRE
Sponsored by
BASF
The Chemical Company

52 BASF **53 BLEU LINE** **54 OCTAVIUS HUNT**

56 VEBI **55 IGEBA**

65 BABOLNA BIO **65a WOOD-STREAM**

66 IRTOTRIO **67 DEFENDER BIRD SPIKES**

99 BIOSIX **98 SUMITOMO**

101 ALCOCHEM **96 KAEITIA**

93 RSPH **94 METEX**

92 PESTFIX

COFFEE LOUNGE

69 MERLIN **68 ORMA**

70 MOUSESTOP **71 IPESTCONTROL** **71a SPM**

91 LODI

88 AP&G CATCH-MASTER **90 SERVICE TRACKER**

89 MESTO

36 BAYER **34 RAT PAK**

72a HEATWORK **72b PROCATCH** **73 GSG** **74 MYLVA**

72c ATEO **72d THERMOKIL** **76 KNESS**

31 SERVICEPRO **30 YANCO** **29 BIOGENIUS** **28 EARTHCARE**

26 PESTWEST **27 INPEST**

78 ALERTHOUSE **79 IPM SQUARE** **80 VECTORNATE** **81 A&M HAWK**

83 PLASTODIVERSITY **82 AIROFOG** **82a LANCE LAB**

BUSINESS THEATRE
Sponsored by
BusinessShield

24 KILLGERM

84 SITNO **87 BARRETTINE**

86 BOWER

- 102 NPFA & PMA
- 103 INTER-CHINA
- 105 SAMITECH
- 106 ADKALIS
- 107 UNICHEM
- 108 EUROTRAP
- 109 OSD GROUP
- 110 LONGRAY
- 111 XCLUDER
- 112 BRANDENBURG
- 113 HUCKNETS
- 114a BIRCHMEIER
- 114 RUSSELL IPM
- 115 CLIVERTON

ORGANISER'S OFFICE

ENTRANCE AND REGISTRATION DESKS

THERE'S MORE! SEE OVER!

A technical and business schedule not to be missed

The PestEx 2019 seminar schedule packs in illustrious speakers from across the sector. Delivered by industry experts, we've called in favours from all our friends to make sure you leave PestEx that little bit better informed. All seminars are completely free and open to everyone. We've managed to pack out the full two-day schedule with business and technical talks, specifically designed to help you be a better pest controller or grow your pest management business.

Wednesday 20 March 2019

TECHNICAL THEATRE Sponsored by BASF

10:00 - 10:45

Can we stem the tide? Invasive non-native species
Niall Moore, Chief Non-native Species Officer (England), Non-Native Species Secretariat

Although invasive non-native species have been introduced to Britain by man for thousands of years, the rate of introductions and their impact is steadily rising.

We now have ~2,000 non-native species established in Great Britain with 10-12 more being added each year. The government is leading the way in Europe on tackling the problem - primarily by attempting to tackle pathways of introduction, preventing species (eg Asian hornet) from establishing by rapidly responding to verified reports and by eradicating or containing species that are already here.

Pest management professionals need constant vigilance to ensure we detect new species early enough to respond appropriately.

11:00 - 11:45

Cockroach foraging behaviour and biology
Steve Broadbent, Regional Director for Australia, Ensystem

This talk reviews recent scientific studies of cockroach behavioural responses when feeding and foraging, to enable professional pest managers to optimise their control programs.

Control of cockroaches using the fundamental elements of IPM

(inspection-guided baiting) has been proven to significantly reduce cockroach populations, but correct placement and a sound understanding of cockroach foraging behaviour are paramount for success. Understanding how cockroaches adapt and behave allows us to improve bait placement techniques.

While the horizontal transfer of bait active from one cockroach to another is generally considered to play an important role in cockroach management, its relative importance in overall cockroach mortality is often misunderstood.

Steve has more than 40 years of industry experience, having commenced his career as a government Research Entomologist in the United Kingdom, before moving to Australia. He has authored many peer-reviewed scientific papers, contributed technical book chapters and magazine articles and consulted on pest management issues for many major projects including the Australian Olympics Village, Turtle Sanctuaries in Malaysia, and with the National Parks and Wildlife Service and Charles Darwin Foundation in the World Heritage Galapagos Islands. He has also authored a best-selling book, Your Sacred Path.

“The seminar schedule on its own is worth the trip. I encourage leaders and front-line guys to take the time to update your knowledge. Best practice, labels and products all change. Professionals need to stay on the right side of the law and a step ahead of the competition.”
 DEE WARD-THOMPSON, BPCA TECHNICAL MANAGER

SPEED VIEW

THE SEMINARS

TECHNICAL THEATRE
 Sponsored by BASF

BUSINESS THEATRE
 Sponsored by BPCA BusinessShield

DAY ONE: Wednesday 20 March

| | | | |
|---------------|---|-------|---|
| 10:00 | CAN WE STEM THE TIDE? INVASIVE NON-NATIVE SPECIES Niall Moore, Non-Native Species Secretariat | 10:00 | SITE-SPECIFIC PEST RISK ASSESSMENTS John Lloyd, Technical Consultant and Company Entomologist |
| 11:00 | COCKROACH FORAGING BEHAVIOUR AND BIOLOGY Steve Broadbent, Ensystem | 11:15 | WHEN IT GOES WRONG Martin Ball, Wildlife Incident Investigation Scheme |
| 12:00 | RODENT CONTROL CHALLENGES AND SOLUTIONS Sharon Hughes, BASF | 12:15 | RODENT RISKS: CLOSURE AND PROSECUTION STORIES Dr Belinda Stuart-Moonlight, Chartered Environmental Health practitioner and expert witness |
| 13:00 | BED BUGS - NEW FINDINGS ON HOW TO DETECT AN UNWANTED SLEEPING PARTNER Dr Jette Knudsen, Nattaro Labs AB | 13:15 | HOW TO HACK SMART HOMES AND BUSINESS Tony Gee, Pen Test Partners |
| 14:00 | 10 YEARS OF RAT AND MOUSE CONTROL PROCEDURES Paul Charlson, National Pest Advisory Panel (NPAP), CIEH | 14:15 | USE THE LAW TO SELL YOUR SERVICES Paul Westgate, Westgate Pest Control |
| 15:00 | PROTECTING JERSEY FROM ASIAN HORNETS Bob Hogg, Absolute Pest Control and Jersey Beekeepers' Association | 15:15 | SHOULD I GIVE UP, OR JUST KEEP ON CHASING PAYMENTS? Peter Wallwork, The Credit Services Association |
| 16:15 | BRITISH PEST MANAGEMENT AWARDS CEREMONY | | |
| 18:30 TO LATE | BPMA AND PESTEX AFTERPARTY Giant Robot, Canary Wharf Buy tickets at bpc.org.uk/afterparty | | |

DAY TWO: Thursday 21 March

| | | | |
|-------|---|-------|--|
| 10:00 | ACQUISITION, INCUBATION AND TRANSFER OF BACTERIA BY HOUSEHOLD INSECTS Matthew Davies, Killgerm Federica Boiocchi, Aston University, Birmingham | 10:15 | OUR TERMS AND CONDITIONS APPLY...MAYBE? David Quinton, Which? |
| 11:15 | BUILDING GREAT PEST MANAGEMENT PROGRAMMES Richard Moseley, Bayer | 11:15 | DON'T GET CAUGHT IN THE GDPR TRAP! Louise Coldwell, Killgerm |
| 12:15 | A WORLD WITHOUT PESTICIDES Alex Wade, Pelgar | 12:15 | SITE-SPECIFIC VERSUS GENERAL RISK ASSESSMENTS Barry Nicol, Stallard Kane and BPCA BusinessShield |
| 13:30 | AIB INTERNATIONAL: THE FIRST 100 YEARS Jeff Wilson, VP Operations, Europe, Africa, Asia, AIB International | 13:15 | REPUTATION MANAGEMENT - PREPARING FOR THE UNEXPECTED Jane Shepherd MCIPR, Shepherd PR |
| 14:30 | EXPECTATIONS FROM PEST MONITORING IN FOOD MANUFACTURING Ferenc Varga, Food Safety Manager, Nestlé | 14:15 | BPCA OPEN FORUM The BPCA team, chaired by Ian Andrew, Chief Exec, BPCA |
| 15:30 | WINNING BIG: SLAs AND TENDERING Kevin Higgins, BPCA Dee Ward-Thompson, BPCA Richard Harris, Harris Associates | | |



POINTS AVAILABLE

**1 CPD point each seminar
(max 12 points over two days)**

12:00 - 12:45

Rodent control – challenges and solutions

Sharon Hughes, Global Technical Marketing Manager, BASF

With current rodent control challenges facing pest controllers, one of the essential areas of knowledge is an understanding of rodent behaviour. This talk will provide an overview of aspects of rat behaviour that are important to consider for effective control.

Changing regulatory requirements, increasing occurrences of anticoagulant resistance, concerns regarding the environmental impact of rodent control and competition from palatable competitor foods are all issues pest controllers face on a daily basis.

Sharon Hughes will explore these issues and tell us about some of the innovations BASF have developed to provide solutions to help overcome these challenges.

13:00 - 13:45

Bed bugs – new findings on how to detect an unwanted sleeping partner

Dr Jette Knudsen, Nattaro Labs, Sweden

Bed bugs are rated as the most difficult pest to get rid of by professional pest controllers. Bed bugs usually only leave their concealed, safe harbours during feeding. This cryptic way of living in combination with a lack of an immediate bite reaction in many human hosts makes early detection difficult.

Within 10 weeks under optimal conditions, a bed bug population founded by a single mated female may go from linear to exponential growth. Thus, it is of utmost importance to detect an infestation as early as possible.

Dr Knudsen's knowledge about bed bug biology and behaviour together with many years' of research in chemical ecology, have led to new possibilities to detect bed bugs. By using a lure

that mimics the scent of a bed bug harbourage it is possible to attract females and males as well as all stages of bed bug nymphs.

After earning her PhD she worked as a researcher at the Danish Environmental Research Institute (1993-1995), followed by a postdoc at Aarhus University, positioned in Ecuador (1996-1997). After that she served as associate professor in chemical ecology at Gothenburg University (1998-2003) and then continued her work in the Pheromone group, Lund University, Sweden (2005-2012). Her interest in the chemical ecology of bed bugs was raised during fieldwork in Kenya in 2006. Since 2013 she has worked with the biology and chemical ecology of bed bugs at Nattaro Labs, Sweden.

14:00 - 14:45

10 years of rat and mouse control procedures

Paul Charlson, NPAP Secretary, National Pest Advisory Panel (NPAP), CIEH

Given the significant changes implemented through the UK Rodenticide Stewardship Regime since that time, the Rat and Mouse Control Procedures Manual has been rewritten and updated. It builds on the exemplary work of the Campaign for Responsible Rodenticide Use (CRRU) by providing additional detail on the vital controls required when carrying out rat and mouse treatments.

The presentation will provide an overview of the work of NPAP and provide insight into the content of the updated NPAP manual.

Paul Charlson is currently the Secretary of the Chartered Institute of Environmental Health National Pest Advisory Panel (NPAP). In 2009, NPAP released a Rat and Mouse Control Procedures Manual, which was the first of several documents produced by NPAP that aimed to provide advice to the industry on different pest species.

15:00 - 15:45

Protecting Jersey from Asian hornets

Bob Hogg, Absolute Pest Control

Bob will look at the progression of *Vespa velutina nigrithorax* across Europe and Jersey's attempts to slow its progress, the methods used to find the nests and what's involved in organising against this serious predator of honey bees and other pollinators.

Bob will consider the types of nest likely to be found at different times of year and ways to destroy or remove them, the protection and equipment that is used.

With help from pest controllers, Bob has been developing techniques to remove nests alive and kill the hornets without the use of pesticides so that they are available for research and education and why live removal is the only option in some situations.

This talk is for:

- Anyone interested in the biology, behaviour and identification of Asian hornets
- Pest controllers or companies who are serious about preventing the spread of invasive species
- Anyone who wants to be entertained by the incredibly charismatic Mr Hogg and his adventures.

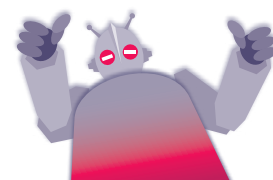
From a standing start in July 2017 Bob has become an accidental expert on the Asian hornet *Vespa velutina* and is one of the few people stupid enough to have kept them as pets. He is a former President of the Jersey Beekeepers' Association and while he has done many things in his life, he is happy to admit to having few talents. He is, he says, "like a duck: always dabbling with his bum in the air and is a little quackers."

His first pet was a wasp, which he describes as a short-lived relationship which ended painfully for both parties. This hasn't stopped him from being interested in all the things that others would prefer to avoid.

16:15 - 17:00

British Pest Management Awards ceremony

The BPMAs are back and they're bigger and better than before. We'll be celebrating excellence in pest management at the end of day one of PestEx. Everyone's welcome to help us celebrate the difference individuals and companies can make to public health, food safety, environmental sustainability and economic significance through pest management.



18:30 - LATE

GIANT ROBOT, CANARY WHARF

The BPMA and PestEx Afterparty

Join us in celebrating pest management at the PestEx and BPMA aftershow party. Join us after day one of PestEx and at the Giant Robot rooftop. Whether you were up for an award or just want to unwind after a busy day at PestEx, join us for the biggest pest party in town. Spaces are limited and this is a ticketed event, so pre-book your tickets at bpca.org.uk/afterparty

Correct as of February 2019. Schedule subject to change. Check pestex.org for the latest updates.

**THERE'S MORE!
SEE OVER!**

BUSINESS THEATRE

Sponsored by BPCA BusinessShield

10:00 - 11:00

Site-specific pest risk assessments

John Lloyd, Technical Consultant and Company Entomologist, Independent Pest Management and Insect Consultancy

Site-specific pest risk assessments (SSPRAs) are frequently overlooked by contractors, but they are essential for any Integrated Pest Management programme.

SSPRAs provide a way to assess which pests are likely to occur, highlight potential risks presented by pests and they help reduce the risk of pest incidents occurring. SSPRAs also help you implement appropriate pest monitoring and control measures and therefore set the blueprint for your IPM programme.

Whatever your site, and whatever your pests, implementing SSPRAs will help you manage your sites (and your clients) successfully. Find out how in this insightful talk by consultant, entomologist and popular PPC writer, John Lloyd.

11.15 - 12:00

When it goes wrong

Martin Ball, Wildlife Incident Investigation Scheme (WIIS)

The talk will focus on the Wildlife Incident Investigation Scheme (WIIS) which makes enquiries into the death or illness of wildlife, pets and beneficial invertebrates that may have resulted from pesticide poisoning. It will cover some key areas of rodent control and feral bee control where operational weaknesses and potential legal breaches have been identified from WIIS investigations, and highlight the sort of documentary information that would be expected to be available to demonstrate that a suitable pest control operation had been carried out. Enforcement expectations will be covered, and images shown of poor practice.

Martin Ball is an Inspector of Health and Safety working in the enforcement team of the Chemicals Regulation Division (CRD), which is part of the Health and Safety Executive (HSE).

12:15 - 13:00

Rodent risks: Closure and prosecution stories

Dr Belinda Stuart-Moonlight, Chartered Environmental Health Practitioner, Managing Director Moonlight Environmental

Google 'rodent risks to health' and you would be forgiven for imagining your health was in mortal danger if you were exposed to a mouse or rat. Contrast this with another question: how many outbreaks of foodborne diseases are you aware of caused by infested food premises?

Infestations are a major cause of food business closure where an enforcer considers there is 'an imminent risk to health'. This presentation aims to provide a balanced overview of some of the microbiological risks, imminent or otherwise, of harm to human health from rodents. Such risks not necessarily being the same for rats and mice.

Belinda acted as an expert witness in the recent Croydon v Poundworld case. Here, a store had a significant mouse infestation and the evidence examined at trial along with the judgement provide a landmark insight into how risks are translated into fines at sentencing. Pest control operatives and managers will benefit from an understanding of how the risk of harm to human health is assessed by enforcers and ultimately the Courts.

Dr Belinda Stuart-Moonlight, Managing Director Moonlight Environmental, is a chartered environmental health practitioner and expert witness. She started out as an EHO before carrying out disease risk research at King's College, University of London. She currently undertakes consultancy, auditing and training but more than

half of her work is as an expert witness in the fields of infectious intestinal disease, food and health and safety. She examines risks and their control. She has worked on notable rodent infestation cases and regularly appears on BBC Watchdog and radio talking about microbiological risk.

13:15 - 14:00

How to hack smart homes and business

Tony Gee, Associate Partner and Speaker, Pen Test Partners

With the advent of smart technology ever more pervasive are we at risk of our homes and businesses hacking us? Join us as we show how the Internet of Things is bringing attackers inside our houses spying on our CCTV, hacking our kettles and stealing our stuff. Watch as we demonstrate how easy it is to hack common devices such as your children's doll, your smart padlock or... your connected sex toy.

Although this talk will focus on devices typically used at home, the same flaws are in your smart devices, SCADA networks and corporate devices you use to manage your business.

Tony speaks the world over at technology events highlighting key risks with the internet of things (IoT), automotive and maritime and key payment systems. Tony is able to illustrate and demonstrate critical issues in these systems in a way the audiences of all levels can understand. He has spoken at PCI events in Europe and Asia, at the SC Congress in London, technical conferences such as BSides and many other partner events, including speaking at the US Congress and the European Parliament.

Tony has over 13 years of security experience, he has worked both as an internal blue team consultant within the finance industry and for the technology partner for the world leading Oyster card system and more latterly as an external security tester and auditor.

14:15 - 15:00

Use the law to sell your services

Paul Westgate, BPCA Trainer and Managing Director of Westgate Pest Control

As pest controllers, we are impacted on a daily basis by numerous rules and regulations which seem only to exist to make our lives harder. Paul Westgate, MD of Westgate Pest Control takes a glass half full look at some of these to see how they can be of benefit to those working in pest control and considers whether we are looking at these rules and regulations in the wrong way. Perhaps we could use them to our advantage, to help our business and people to develop.

By improving your knowledge of the fundamentals of cockroach baiting and understanding the science of bait formulation, as it relates to cockroach behavioural responses, you can gain an edge on your competition with quicker, longer-lasting results.

15:15 - 16:00

Should I give up, or just keep on chasing payments?

Peter Wallwork, The Credit Services Association

Recovering debt. Most pest management companies, no matter the size, are bound to learn something from this seminar focusing on the fine art of recovering monies owed.

Peter, CEO of the Credit Services Association, shares advice on how to effectively manage escalation of chasing debt and what trigger signs and scenarios to look out for. Peter will also present guidance on how to select a debt collection agency most relevant to your needs.

Thursday 21 March 2019

TECHNICAL THEATRE Sponsored by BASF

10:00 - 11:00

Acquisition, incubation and transfer of bacteria by household insects

Dr Matthew Davies, Killgerm Federica Boiocchi, Aston University, Birmingham

Federica Boiocchi is a second-year PhD student in biomedical sciences at Aston University, Birmingham. Her project is supported by Aston University and Killgerm Chemicals. The aim of her research is to explore the diversity and distribution of indoor arthropod communities and evaluate the microbiological risks related to arthropod presence in the household environment.

She is particularly interested in all arthropods that enter homes and bacteria that they may carry. Dr Matthew Davies and Federica will team up to talk about the new research and tell you how the findings apply to your daily practice as pest management professionals.

11:15 - 12:00

Building great pest management programmes

Richard Moseley, National Account and Technical Manager, Bayer CropScience

In the first large-scale piece of research of its kind, Bayer and the British Retail Consortium have sought honest opinions from professionals within the food manufacturing industry, to understand the different requirements from both pest control officers and food safety managers.

Bayer and BRC conducted five detailed qualitative interviews with technical managers of large pest management companies in the USA and UK to map the stages of their working relationship. They then interviewed 200 pest technicians and an online surveyed 200 quality assurance and food safety managers (FSMs).

We'll catch up with Richard to see what new information there is. His talk will feature practical, well-researched pest management tips for company owners and technicians.

12:15 - 13:15

A world without pesticides

Alex Wade, Technical Manager, Pelgar International

We've all seen products available to pest managers become more and more restricted, with favourite products getting significant label restrictions or disappearing from suppliers' shelves completely.

This talk speculates on how the world might look without pesticides. Alex will look at how historical pesticide restrictions have affected the human population, and how modern restrictions around the world have affected pest management.

This talk is for:

- Anyone interested in the future of public health pesticides
- Anyone with a keen interest in pest management history and international pest management practices.

13:30 - 14:15

AIB International: the first 100 years

Jeff Wilson, VP Operations, Europe, Africa, Asia, AIB International

AIB International has empowered the global food industry to elevate food safety since 1919, and this year sees the special centenary celebration. Jeff will be taking us on an amazing journey, detailing how instrumental AIB has been in growing food safety and hygiene standards and providing trusted solutions over the last 100 years.

Jeff Wilson is experienced in technical, quality, production, and health and safety management and possesses lead auditor qualifications, with a 25 year career over a range of blue-chip businesses in the food sector.

14:30 - 15:15

Expectations from pest monitoring in food manufacturing

Ferenc Varga, Food Safety Manager, Nestlé

Most food manufacturers, in the UK at least, contract out their pest

management activities. Some maintain a certain level of pest management expertise in house, others less so. Whatever the case, there are some pre-requisite expectations of the monitoring component of the service provided from the contractor. Central to all of the monitoring activities is that pest trending is much more than a lagging indicator, it is the driver of corrective actions leading ultimately to a pest-free manufacturing facility. Efficient IPM depends highly on whether the data itself effectively reflects the existing pest risk status – hence the data should have been derived from a comprehensive site risk assessment leading to a sufficient number of appropriately placed pest monitoring devices.

15:30 - 16:15

Winning big: SLAs and tendering

**Kevin Higgins, BPCA
Dee Ward-Thompson, BPCA
Richard Harris, Harris Associates**

Ever wanted to know what people look for in tenders? Do you qualify for this work? Can SMEs bid for a tender? What is this minefield of questions are actually looking for?

Between Kevin and Dee, they've supported hundreds of pest management companies with their Service Level Agreements (SLAs) and to apply for tenders. This presentation will help guide you through the tendering process, give you tips on what they are looking for and outline some of the pitfalls.

Kevin and Dee will be giving a sneak peek of a huge project they've been working on regarding the future of how end-users might approach the pest management tendering process.

This talk is for:

- Companies of any size that want to start bidding on tenders to learn about the process
- Companies already bidding for tenders to win more

- Anyone who wants to better understand how SLAs work and how to put them together
- End-users thinking about what should be in their pest control specification documents.

BUSINESS THEATRE

Sponsored by BPCA BusinessShield

10:15 - 11:00

Our terms and conditions apply...maybe?

David Quinton, Which?

Since the introduction of the Consumer Rights Act, businesses should have reviewed their terms and conditions, 'the small print' that they make domestic customers sign up to. A general test of fairness should have been applied to terms but far too many businesses have not done that and are using unfair Ts and Cs that are illegal and have a detrimental effect on the reputation of the business as well as potentially fuelling complaints.

All too often businesses are found to be using unfair terms that can be illegal and off-putting for the customer. Since 2015 it has got harder to know what you can and can't make your customers agree to. Get it wrong and you can find your contracts worthless and you could find yourself caught in a trap with the authorities and lawyers. Find out more on what the biggest common mistakes are during this session.

Dave has worked in trading standards for over 40 years. He has enforced a wide range of consumer protection legislation dealing with rogue traders and dodgy business practices along the way while also advising businesses on a range of compliance issues.

Five years ago he helped set up Which? Trusted traders, an endorsement scheme designed to put consumers in touch with reliable and responsible businesses. The scheme assesses traders to a high standard before they can carry the Which? branding and now has over 8,000 members.

**THERE'S
MORE!
SEE OVER!**

11:15 - 12:00

Don't get caught in the GDPR trap!

Louise Coldwell, Killgerm

Let's make sure the only things getting caught in traps are the pests! Louise will give a simplified overview of GDPR and outline the implications for your business, helping you stay better protected.

12:15 - 13:00

Site-specific versus general risk assessments

Barry Nicol, Stallard Kane and BPCA BusinessShield

It's time to cut through the red tape and keep health and safety simple, while ensuring compliance.

Join Barry from BPCA BusinessShield as he discusses

the process of risk assessments and when you should look at site specific documents compared to general ones. This interactive session will give you some essential knowledge to take away which you can implement in your business immediately and which will help save you time in the process.

13:15 - 14:00

Reputation management - preparing for the unexpected

Jane Shepherd MCIPR, PR Director, Shepherd PR

A crisis in your business can not only affect your commercial performance, it can also lead to long-lasting reputational damage. In this session delegates will learn about the importance

of dealing with the media effectively if and when things go wrong, and how to minimise the negative impact of a crisis through effective and controlled communications. They will also learn how to build a business continuity plan, set up a crisis team and the need to rehearse and manage social media engagement to stay on message.

As well as a career in PR stemming more than 15 years, Jane draws on previous experience gained in her role as a Media Operations Officer in the Royal Air Force – handling news stories at a national and international level – as well as a media trainer for organisations including the Environment Agency and the Nuclear Accident Response Organisation.

14:15 - 15:00

BPCA open forum

The BPCA team, chaired by Ian Andrew, Chief Exec, BPCA

We'll be packing the business seminar room with BPCA Staff members so you can ask questions and get the practical advice you need to maximise the value of your membership. We'll have staff available from the training, events, marketing, technical and membership teams, so between them they'll be able to give you practical advice for growing your business and getting the very most out of your membership benefits.

This seminar is for BPCA members in any membership category or anyone interested in becoming one in the future.

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BRITISH Pest Management AWARDS 2019



SHORTLIST ANNOUNCED!

The shortlist for the second ever British Pest Management Awards has been announced. With significantly more nominations, plus new awards, the independent judging panel had their work cut out for them.

Back by popular demand, the British Pest Management Awards 2019 is a huge celebration of the excellent job the pest management sector does to protect public health.

In less than a month, the awards ceremony will take place at the end of day one of PestEx, the pest management show, at London ExCeL. You're all invited to the Technical Theatre at the end of the day to see the ceremony take place.

The celebrations will then move on to Giant Robot on Canary Wharf with the ticketed Afterparty. We'll be hopping on the DLR and grabbing a drink and some food, and congratulating our winners (more details on the Afterparty on page 2).

Kevin Higgins, Chair of the BPMA judging panel, said: "Congratulations to all the shortlisted companies and individuals. It really was a mammoth task going through so many applications and narrowing down to this short list.

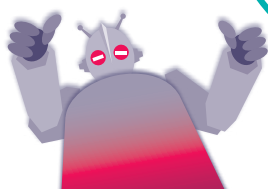
"Just getting this far through the process is an achievement, so I hope you'll all celebrate your achievement, whether it's with us at the BPMA Afterparty, or with your colleagues.

"Thank you again to our judging panel. Their hard work and integrity make the BPMAs possible."

WATCH THE AWARDS CEREMONY

You can join us for the awards ceremony at the end of day one of PestEx.

Register for free now
pestex.org/register



JOIN IN WITH THE CELEBRATIONS

The PestEx and BPMA Afterparty is open to everyone. Book your ticket now
bpca.org.uk/afterparty

COMMUNITY INITIATIVE OF THE YEAR

- The Tree Bee Society
- Nottingham Pest Control
- Contego

INNOVATION OF THE YEAR

- Pestpro Bird Solutions Limited
- NBC Environmental Limited
- Action Force Environmental

TEAM OF THE YEAR

- Lancaster City Council Unbugged
- Cleankill Pest Control
- NBC Environmental Limited, Northern Team
- Rokill Pest Control Services

UNSUNG HERO

- Paula Kearn, Deadline Products/Rentokil-Initial
- Adam Obee, ARK Pest Control Limited
- Ken Vigar, Safeguard Pest Control & Environmental Services Limited
- Paul Bates, Cleankill Pest Control

YOUNG TECHNICIAN OF THE YEAR

- Sam Sharpe, Environmental Pest Control
- Lewis Clarke, Dealey Pest Control
- George Rickwood, Rokill Pest Control Services
- Oliver Roe, Cleankill Pest Control

LOCAL AUTHORITY OF THE YEAR

- Manchester City Council Pest Control Service
- London Network for Pest Solutions
- Lancaster City Council Unbugged

SOLE TRADER OF THE YEAR

- Stevan Bevan
- Jon Wilkins, The Pest Detective
- Phil Martin, PGM & Sons Pest Control
- Louise Chapman

SMALL COMPANY OF THE YEAR

- Tactical Environmental Services
- Lancashire Bird Control Limited
- Thermokil Insect Control Services Limited
- Abate Limited
- Sun Pest Control
- CSS

COMPANY OF THE YEAR

- RCA Pest Services Limited
- Cleankill Pest Control
- Rokill Pest Control Services
- Safeguard Pest Control & Environmental Services Ltd
- Contego

LIFETIME ACHIEVEMENT OF THE YEAR

- Jonathan Wade (winner)

CATEGORIES NOT AWARDED

Collectively the judging panel felt that nominations shortlisted for Technician of the Year, Del Norton and Marketing Campaign of the Year were not of sufficient quality (with enough evidence) to merit being awarded.



WHO'S ON THE JUDGING PANEL?

Anne Godfrey
NPAP CIEH

Steve Hallam
NPTA

Kevin Higgins
Chair, BPCA

Frances McKim
Editor, Pest magazine

Henry Mott
CEPA

IN PROFILE

Dr Jonathan Wade

On 20 March 2019, Dr Jonathan Wade will officially receive his British Pest Management Lifetime Achievement Award 2019. There's no way we can cover all of Jonathan's distinguished career in global pest management. Instead, we present an extra long interview with the man himself, introduced by his son, Alex Wade, Technical Manager at Pelgar International.



WANT TO SEE JONATHAN GET HIS AWARD?

You can join us for the awards ceremony at the end of day one of PestEx.

Register for free now

pestex.org/register

Dr Wade, JO to all those who met him, aside from being my father, has been my most stalwart tutor for my entire career. All I have learned (more than he'd care to admit) can be laid at his feet.

Growing up with his adventures for his job would captivate me. Stories of his time in the Middle East; the tales he would come home with of bizarre settlements out in the desert; ships caught in quarantines; the cultures both at home and abroad that he immersed himself in. The people he met: the princes, paupers and all those in-between; he strove to help all with no bias or preconceptions.

From these parables and from his insights, his experience and his technical expertise, he gave not only myself but everyone he met, a passion for our industry, for our work, compassion for the people and animals we deal with daily and a commitment to seeing a job well done. By his example, leading as always from the front, he set the bar high for integrity, knowledge and excellence.

First of all, congratulations on your award. What an amazing life you've lead. How did you get into all this?

This is an easy one. I moved from Yorkshire to Liverpool to study Marine Biology as they have a research centre at Port Erin on the Isle of Man. I soon realised that I really didn't get on with people in the Marine Biology team and could think of nothing worse than spending years in a small community there.

Instead, I jumped ship to Parasitology which took me to Liverpool's School of Tropical Medicine and is where this life story began.

How has pest management changed in your lifetime?

Like most things pest management has become extremely sophisticated and focused. This is sometimes good and sometimes bad – just like political correctness.

By far and away the biggest change in this industry is professional culture. My



OH GOOD HEAVENS, IT WAS SO RAW. ONE AFTERNOON IN DUBAI A TIGER WAS DROPPED OFF AND LEFT IN MY COURTYARD.

first introductions to 'pest controllers' in the eighties were the one man and his dog rat catcher unwilling to listen to even the smallest bit of advice I had ready to donate. This change may be driven by fear of being sued out of your shoes, but it's more likely because businesses have to find efficiency savings in time and money, and pest management businesses who can offer that will do well.

The same goes for international markets too, perhaps even to a greater extent. Working in parts of Eastern Europe I must say the thirst for education and training is significant, especially through knowledge sharing, show and tell and discursive approaches.

What was it like working in different countries? Did you ever see anything that took your breath away?

Oh good heavens, it was so raw. One afternoon in Dubai a tiger was dropped off and left in my courtyard. A young man had owned the 2-year-old animal as a pet and after he left to buy a bear from Turkey, his mother could not stand the tiger anymore, and so brought it (in the same box it had lived in since young) to our offices.

Crazily, all that was between the one-time cub and the growing crowd of many

hundreds of onlookers was thin chicken wire, and so I selected to tranquillize the animal to give me more time and move it to safety.

Unfortunately due to one thing and another (mainly due to having a 'bodyguard' shooter panic and discharge his automatic shotgun – several times over my shoulder) we were unable to save the animal, and subsequently had to shoo the ravenous locals away from the tiger who were all looking for a talisman or 'lucky bit'! Somewhere in this episode is how I became deaf in my left ear.

Similar dramatic experiences included wild mandrills, 2,000 dead buffalo during Ramadan, and an episode of a supposed mad cow, which ended with police and automatic weapons.

I quickly learned at that time, there were some pretty ignorant people doing some pretty ignorant things. Professionally there was never a dull day, and Dubai often took me well out of my comfort zone. But on reflection, I helped to bring some order to a part of the world that needed it, and in doing so (I hope) helped to protect the people and animals in the local community. For many years Dubai has been taken off the risk zone for Malaria transmission.

Have you got any milestone moments that stand out?

Yes, I have a few. The time in Dubai where the labs and testing facilities we built under the radar were burnt down as collateral damage by some residents who had set their adjacent house on fire.

The government understood the impact we were making and rebuilt our pest control operations area bigger and better, with laboratories, insectaries and an excellent new training centre. As a legacy, that showed me that I'd made a difference



PELGAR WAS BUILT USING THE EFFORTS OF MY SONS BEN AND ALEX, AND THEIR FRIENDS IN THE EARLY DAYS.

to Dubai; that public health was being supported at the top level, and I was able to return to the UK safe in the knowledge it was in much better shape than when I arrived.

I also remember fondly leaving a large organisation to set up Pelgar International.

I have immense respect for anybody who is setting up their own business because it is a big decision to make and especially difficult when forces act against you. It was a great moment when we were able to start paying our own wages, and previously antagonistic companies started to knock on our door for the innovations we'd been working tirelessly on for many years.

However, above all that my fondest memory was working with two of my sons. Pelgar was built using the efforts of my sons Ben and Alex, and their friends in the early days. Alex continues to be a strong, committed player in the business.

Looking ahead, what do you think will change in the future for pests?

One thing that isn't going to change is a pest will still be a pest when it's in the wrong place at the wrong time. Is society going to change? Maybe, but not quickly. Is the pest management going to change? I'd argue, yes.

Every year for the last 30 years, thousands of tonnes of rat poison are sold in the UK and rat issues aren't going away – if anything they may be getting worse. We need to influence and impact their environments so they are no longer welcome, then rodent numbers will fall naturally.

The internet and Mr Google are allowing people to be better educated, so more people will look to DIY means to resolve problems rather than pay. However, a little knowledge can be a dangerous thing and the industry needs to help by educating the public on the value pest management brings, rather than see them as competitors.

For anyone looking to progress in the industry, have you got any words of wisdom?

I have been very lucky and never had a dull day in a lifetime. Not everyone is so fortunate and progress can be very slow. But... if you never try, you will never succeed.

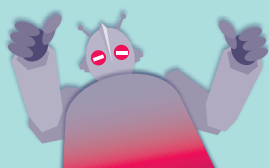
I'd always say don't let anyone bully you, either within your company or from outside.

If you are a business leader or someone managing a team, always work for your employees and they will work for you. And, if you want to make a difference you have to be patient, you won't get your own way the first time, but keep hacking away and you'll get there.

Thank you so much, Jonathan. Is there anyone you'd like us to thank in PPC on your behalf?

Momentously to my wife, Julie. She stood by me when I jumped from Zeneca to start Pelgar and she had three sons to care for with an uncertain future.

I'd also say thank you to Gareth Capel-Williams for nominating me for the award, but also for his support over the years we've worked on this amazing animal together [Pelgar]. It's great to look out and see something that wasn't there 25 years ago.



TOAST JONATHAN (AND HIS TIGER)

The PestEx and BPMA Afterparty is open to everyone. Book your ticket now bpca.org.uk/afterparty



CURRICULUM VITAE

Jonathan began in academia at the Liverpool School of Tropical Medicine, moved to international shores to establish public health services in areas of desperate need, and concluded with developing innovations and products to protect people from issues in public health.

- 1971** Zoology BSc from University of Liverpool
- 1974** PhD on artificial feeding systems for haematophagous arthropods from Liverpool School of Tropical Medicine
- 1976** Post-doctoral researcher on prevention of disease transmission (Filariasis) through genetic manipulation of mosquito symbionts
- 1978** Government advisor delivering a focussed program on control of *Musca sorbens*, vector of Trachoma, Libya
- 1980** Head of Pest Control for the Emirate of Dubai
- 1987** Honorary Lectureship from Medical Entomology Department at the Liverpool School of Tropical Medicine
- 1988** Technical Manager in ICI Public Health, then Zeneca
- 1990** Regional Technical Manager for Near East, South America and Western Europe
- 1995** Technical Director for Pelgar International Ltd
- 2018** Retired.

PestEx top tips



BEFORE

REGISTER TODAY

The pest management show is going to have queues for admission! Take the fast track and pre-register online. It takes two minutes pestex.org/register

SAVE THE DATE

We all get busy, but staying connected with your community is just as important as any regular work. Make sure the work diary on 20-21 March says "PestEx".

BRING A FRIEND

You'll be surprised how useful it is having a second (or third) pair of eyes looking

out for you. If you're the boss, bring a couple of your team with you to show them what the pest community looks like.

TELL PEOPLE YOU'RE GOING

Going to events like the pest management show helps to prove to your clients that you're serious about your profession. Do a social media update, a news item on your website or even pop it on your 'out-of-office'.

HAVE A PLAN...

The full seminar schedule and exhibitors floorplan is on pages 13-18 so make good use of it and put a star next to any

presentations or exhibitors you really want to visit. With 100 exhibitors and two seminar theatres, you need to maximise your time to make meaningful connections.

...BUT BE FLEXIBLE

Keep an open mind as you walk through the exhibition. Opportunity often strikes where it's least expected!

BOOK SOMEWHERE TO STAY

The only way to properly experience PestEx is a two-day visit. Hotels around the ExCeL book up quickly. If you're struggling, look for a hotel a short tube ride away or an AirBnB.

DURING

TAKE BUSINESS CARDS

PestEx is all about making connections. Have a pocket full of business cards ready to hand out. You never know where the right connection might lead!

ARRIVE AT SEMINARS EARLY

The seminar theatres have limited seating and are first come, first served. Arrive early to make sure you don't leave disappointed.

TAKE NOTES

When we go to tradeshows, our show guides are always covered in important scrawls and new ideas. We'd say take a pen - but we're sure you'll find a few new ones across the exhibition hall.

ASK QUESTIONS

There's no better place to have all your pest related queries answered than

PestEx. How often do you have the biggest names in pest management from around the world in the same room?

TAKE A SELFIE

Send a couple of tweets, update your company Facebook and take loads of pictures of what you're doing at PestEx. Clients love to see companies that take pride in being a part of their professional community!

AFTER

READ ALL THE THINGS

Don't get us wrong, plenty of stuff will be on the recycling pile by Friday lunchtime - just make sure that you've at least scanned all the literature for anything important or interesting.

FEEDBACK TO THE TEAM

The entire point of the pest management show is to connect with new ideas and grow as a business. Spread the knowledge and capitalise on any good ideas while the information's still fresh.

FOLLOW UP WITH CONTACTS

The longer you leave it, the more likely you are to forget who was offering what and pricing might even change. Capitalise on the human connection and you might just end up with a discount for your troubles.



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ON YOUR PEST BEHAVIOUR

Rat behaviour in rodent control

With current rodent control challenges facing pest controllers, one of the essential areas of knowledge is an understanding of rodent behaviour.

This article by Sharon Hughes, Global Technical Marketing Manager at BASF, provides an overview of aspects of rat behaviour that are important to consider for effective control.

FEAR OF THE NEW

Rats are exploratory; however, at the same time, they are naturally neophobic (the fear and avoidance of new objects). Neophobia is a survival mechanism to protect from the new and unknown and often occurs when rats are presented with freshly placed rodenticide bait or bait box or monitoring devices.

The resulting neophobic response of the rat is to either ignore the bait completely until it feels confident that it poses no danger (which may be days or weeks) or to take a small taste to see if the bait has any negative effects before returning to feed more freely. Levels of rat neophobia will be lower in infestations which are exposed to regular disturbances and higher in infestations where disturbances are rare.



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



[CONTINUED >](#)

ON YOUR PEST BEHAVIOUR

To help reduce a neophobic response, acclimatise the bait boxes in situ before the bait is added (as in the rural study mentioned opposite). The position of each bait point, as determined by a thorough survey, is also important: “it is not about how many bait stations you install, it’s about the number of bait stations installed at the most effective rodent spots” (Bobby Corrigan).

It has been reported that neophobia to bait boxes may be reduced by acclimatising the boxes with scent marked materials such as soil, rat faeces. However, if the scent mark is of a dominant rat this may have an adverse effect.



Rat urine pillars

TASTE TEST

It is important to apply the most palatable bait for that location so that when the rat takes a small taste of bait it finds it palatable and wants to return to eat more. This quick acceptance of baits may also depend on the type of diet that the rat was already feeding on, including its palatability, nutritional value and ingredients. Hence pasta baits are often more accepted in urban areas where the alternative food is fatty, while grain-based baits are more readily accepted in rural areas.

The quicker the rat recognises the bait as a food source, the quicker it will start to feed on the bait and the

Fear factor

There is evidence that in some areas of the UK, eg Hampshire and Berkshire, there are highly neophobic rats -- that is they exhibit ‘enhanced neophobia’.

These rats are extremely difficult to control even with burrow baiting. This ‘enhanced neophobia’ can be classed as behavioural resistance and may be genetically based. The worst case of neophobia in



rats I have experienced was on an agricultural site where the rats took 15 weeks to enter bait boxes. Only when rats entered the boxes was bait placed in them, and control was then achieved relatively quickly.

However, if bait had been placed in the boxes at the start of the 15 weeks, not only would the bait have been untouched by the rats, it would have been present in the environment far longer than necessary with a new risk assessment required after 35 days (five weeks).

quicker control is affected. Typically, wax blocks are the least palatable bait type due to their lower palatability and wax being the least recognised as a food source. However, blocks are securable and so offer a stewardship advantage. Linked to this, as rats have such a sensitive sense of smell (olfactory sense), baits that have an overpowering odour may be unaccepted by the rats.

FAVOURITE ROUTES

Effective rat control requires the monitoring of the rats’ foraging behaviour. Rats generally move along the same pathway forming noticeable runs or leaving smear marks or faecal droppings along the route. Rats typically move along routes previously used and remembered using kinesthesia (muscle awareness/muscle memory) and touch.

When using bait, it is important to intercept the rat along its foraging route, before it encounters the alternative food source. Having such a predetermined travel path is seen as a survival mechanism for both assuring that the route used is safe and providing a quick tried and tested escape route from danger. However, it has been reported that rats may pass several bait points to feed at their favourite feeding location. Therefore, sufficient bait points must be in place to allow for the natural behaviour of rats and to maximise control. It cannot be automatically assumed that a bait point by a burrow means that the rats from that burrow will feed from that bait point.

Hoarding of food by rats is part of their natural behaviour, and this hoarding increases as the rats approach adulthood (Meehan). During one trial, using unsecured bait, the bait take was

as expected, but the control achieved was not. On investigation, we found 2.5kg of bait removed from numerous bait boxes and hoarded in one spot.

This extreme level of hoarding in such a short time was likely the result of several rats working together. Not all hoarded food is eaten. Hoarding of rodenticide baits is obviously something that as far as is possible needs to be prevented. Hence the use of securable block baits in locations where bait transference is a risk.

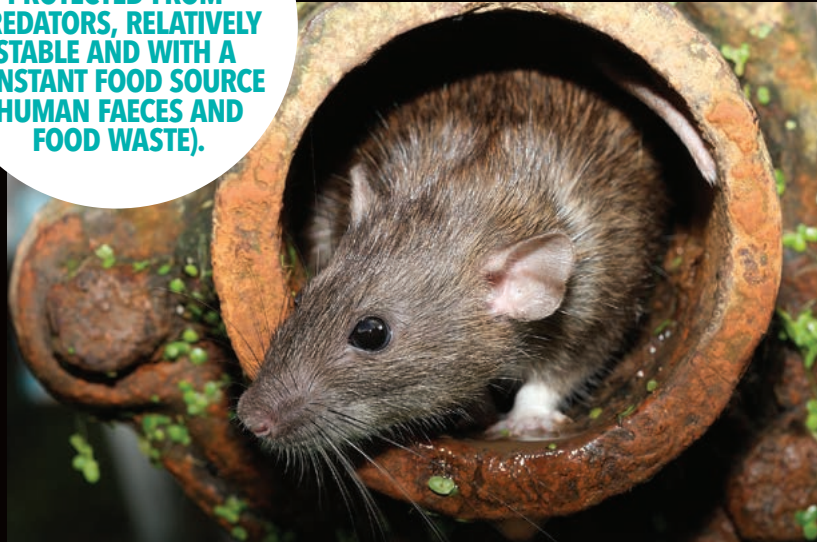
UNDERSTANDING A DAY IN THE LIFE OF A RAT

The movement of rats and mice is characterised by a 24-hour pattern (circadian rhythm). Rats leave their nest for food and water, and breeding. The time when rats are away from their nests is generally between sunset and sunrise, ie they are nocturnal, with most of their eating occurring first and last thing during this period. This moving mainly during the hours of darkness is a safety mechanism to help protect from predation.

A rat’s feeding behaviour reflects its social status, and usually the dominant rats feed exclusively in darkness while the subordinate rats feed in the early daylight hours, thus avoiding any competition or threat from the dominants (Meehan). Therefore, the dominant rats will eat the bait first and die first and the second ‘pulse’ of deaths is from the juveniles or sub-dominants.

In field trials undertaken I have often observed that the first rodent bodies found are that of larger (and assumed dominant) rats and the last rodents to be controlled are the juveniles.

**THE SEWERS
OFFER AN
ENVIRONMENT
PROTECTED FROM
PREDATORS, RELATIVELY
STABLE AND WITH A
CONSTANT FOOD SOURCE
(HUMAN FAECES AND
FOOD WASTE).**



On occasions rats can be seen during daylight hours. There are a few explanations for this:

- The infestation is large and the older/sub-dominant rats cannot compete with dominant rats for food during the safer night time period
- The infestation has been undisturbed and acclimatised to their environment for so long that moving during daylight hours is no longer seen as a danger
- Food is only available during daylight hours
- These daylight foraging rats may now be less neophobic and hence easier to control.

Whatever the reason, sightings of rats during the day usually means the presence of a well-established infestation.

ODOUR SIGNALS

Rats use pheromones (biochemicals) in urine and faeces as a key way to communicate by scent marking. Communication can be for many things including recognition, alarm (fear) signalling, social organisation and reproduction.

The utilisation of these scent markings was suggested above by placing soil, faeces etc, in bait boxes to help overcome neophobia. Urinary pillars (communications signals) consisting of grease, dust, hair and scent marks are common in heavy mouse infestations and have been seen in established rat infestations.

Odour signals of foods preferred by the mother may be passed on from mother to young. Again, it is therefore important to ensure that any bait eaten by the mother is palatable. Locations



with faeces and urine are more attractive to other rodents than those without and provide ideal locations for bait points.

LOOK DOWN, LOOK UP

Brown rats are ground-based and frequently found in burrows. But like many aspects of rat behaviour, there is an opposite. This does not mean that they cannot, or do not climb, and enter premises via roof spaces etc. In fact, they are excellent climbers.

Burrows are located near to food and water sources to reduce the time that has to be spent out in the open and vulnerable.

Burrow baiting means the rat does not have to leave the burrow for food and the bait is not competing with other food sources offering a very effective way of controlling rats. Burrow baiting can also reduce the risk of non-target access to the bait. If securable baits are used for burrow baiting then these can be placed on a wire which is then secured outside the burrow. The bait can then be retrieved and the number of blocks counted to assess what has been taken. Furthermore, at the end of the treatment, the bait can be removed.

The brown rat is also known as the sewer rat. The sewers offer an environment protected from predators, relatively stable and with a constant food source (human faeces and food waste).

However, migration from the sewers to above ground occurs after flooding due to heavy rainfall or disturbance, eg damage (which may be caused by the rats in the first place). This migration results in a new infestation above ground. Alternatively, rats may travel to and from the sewer system each day. In urban areas, new rat infestations are often associated with defective drains.

When rodent activity is persistent despite a comprehensive baiting programme then the sewer system should be inspected as an ongoing source of the rats. In central urban areas, it has been reported that 60-70% of infestations are related to sewer/drainage defects. In some cases, rats may migrate seasonally, returning to the sewers during the winter months to avoid the harsher conditions. Rats may also leave sewers due to overpopulation.

In conclusion, rat behaviour is complex and knowledge of this behaviour is an essential tool in the toolkit of pest controllers.

WANT TO LEARN MORE?

Sharon will be talking about rodent control at PestEx 2019. Register for PestEx for free now.

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



Cockroaches have evolved to exploit our modern urban environments where the structures we build provide a plethora of harbourages, warmth, food and moisture. Steve Broadbent from Ensystem explains that by understanding the cockroaches foraging and social interactions, we can maximise bait placement.

Understanding cockroach foraging behaviour **RECOMMENDED BY ROACHES**



- **German cockroaches are a gregarious species living in mixed-family aggregates**
- **Cockroaches live in aggregate but forage individually, using the knowledge that they each learn for themselves**
- **They learn which nutrients their body requires most and then seek these out**
- **A grouping mechanism leads to the formation of feeding aggregations and the occurrence of collective food selection**
- **Their foraging activity and behaviour are determined by the age of the cockroach.**

German cockroaches (*Blattella germanica* Linnaeus) form a gregarious species. They live in mixed-family aggregates, consisting of roughly equal numbers of males and females, with a typical ratio of 60% nymphs and 40% adults. These aggregates often feed on the same food sources, returning to a communal harbourage after each expedition.

They are largely nocturnal and typically depart their daytime harbourages, to forage for food and water and search for sexual partners, in the early evening. In natural environments, cockroach activity tends to peak two-to-four hours after sunset. In man-made environments their normal circadian rhythm will change to suit the situation, eg in a restaurant that is open until late in the evening, activity will peak around two hours after the lights go out.

PATH INTEGRATION

Studies by researchers such as Durier and Rivault¹ have shown that cockroaches are fully aware of the spatial distribution of food and water in their localised environment. Contrary to the advice often extolled, these studies show that cockroaches do not forage randomly, they are highly efficient in their travels between food, water and their harbourages.

While cockroaches live in aggregate, they forage individually, using the knowledge that they each learn for themselves. This is referred to as path integration, with the cockroaches employing their knowledge of odours and visual cues from previous foraging excursions to develop their own unique navigation system.

Path integration can be considered as a system whereby a cockroach continuously

updates its knowledge base on the direction and distance to a new feature in their harbourage arena², be that food, water or shelter. The recollection of a favourable food source at a specific location is usually linked to olfactory and visual cues, such as food odours and objects around the food source.

NUTRIENT AND ASSOCIATIVE LEARNING

Cockroaches also distinguish food of different nutritional value through a process known as specific nutrient learning. They learn which nutrients their body requires most and then seek these out. Associative learning has also been reported in the American cockroach (*Periplaneta americana* linnaeus), where the insects were able to associate the smell of a food and associate this to the proteins present and required.

In a new environment, when stimuli from food odours and learned visual cues are absent, German cockroaches explore in a random pattern that covers all accessible surfaces in the surrounding environment. Once they find a preferred food source, they will integrate its position into their navigational database, linking it to the learned visual and olfactory cues, and then relating its position in terms of both direction and distance to their harbourage.

On future foraging expeditions, they will then travel directly, more or less taking the shortest route, to the memorised location. This greatly enhances their foraging efficiency.

Cockroaches tend to place a greater emphasis on olfactory cues when seeking out food sources, and visual cues when returning to their harbourages.

INFORMATION SHARING

Once a quality food source is located, they will share information with other cockroaches in close proximity. This grouping mechanism leads to the formation of feeding aggregations and the occurrence of collective food selection. A study by Lihoreau and Rivault³ leads to the conclusion this is due to olfactory cues arising from their feeding nest-mates, suggesting the cue is a yet to be identified foraging pheromone.

Mathematical modelling suggests group foraging may be a less than optimal strategy when large numbers of cockroaches are present. However, there may be benefits to this behaviour since group feeding offers an anti-predation strategy, increasing an individual's chance of escaping threats. Also, since aggregates usually consist of different developmental stages, there may be benefits for nymphs.

Their foraging activity and behaviour are determined by the age of the cockroach.

Cockroaches at different stadia forage differently. Early stadia nymphs forage in a similar manner throughout that stadium, whilst fifth stadium nymphs start to show path integration and evolve more efficient foraging behaviour⁴.

COCKROACH MANAGEMENT

First and second stadia nymphs rarely leave their harbourages, travelling further as they mature until, by the fifth stadium, they are highly active in their foraging. Naturally occurring populations of cockroaches show a relatively constant ratio of nymphs in the total population, of 0.6. This is largely unaffected by the size of the population and is expressed as the nymph-to-total ratio (NTR). Given this high ratio of nymphs, it is important that we target them in baiting programmes.

Durier and Rivault⁵, showed that cockroaches would feed on a gel bait in preference to a prior food source, when it was placed in a new location, at about the same distance from their harbourage as their current feeding source which, in this study was 600mm away, but near a visual landmark known to the cockroaches.

CONTINUED >

This is part one of two articles on cockroaches by Steve.

Look out for 'Creating excellence in cockroach baiting programmes' in the next issue of PPC.

“ Cockroaches also distinguish food of different nutritional value through a process known as specific nutrient learning. They learn which nutrients their body requires most and then seek these out. ”



RECOMMENDED BY ROACHES

When the gel bait was used to replace the original food source at the same location, and also when the gel bait was placed further away than their original food source, the cockroaches largely ignored the gel bait. Thus, the location of baits is important, regardless of the palatability of the bait.

The logical conclusion from this is that baits should be placed as close as possible to cockroach harbourages; with various studies⁶ demonstrating that gel baits applied in small drops at multiple locations provide greater efficacy than simply placing a few large drops or smears of bait.

Placement of multiple bait spots also avoids aggressive behaviour among cockroaches. Dominant cockroaches will aggressively protect a favoured food source, attacking early life-stage cockroaches or less vigorous individuals to defend their food source. While these dominant individuals will later die from the bait toxin; those cockroaches that were chased away, are unlikely to return, as they will have integrated that experience into their knowledge base and stay clear of the area in the future.

In conclusion, baiting programs can be best enhanced by using monitor traps to identify where the cockroach

THE KEY ASPECT OF COCKROACH BAITING IS TO ENSURE THAT PLENTY OF BAIT IS MADE AVAILABLE, ESPECIALLY WHEN DEALING WITH SERIOUS INFESTATIONS.

harbourages are, before placing multiple bait spots near these identified locations. The key aspect of cockroach baiting is to ensure that plenty of bait is made

available, especially when dealing with serious infestations. Selecting a bait that provides high palatability is of primary importance for optimal performance in eliminating cockroach aggregates; with the elimination process aided by the placement of multiple small bait spots in close proximity to cockroach harbourages.



[4] Demark, J.J., Kuczek, T. and Bennett, G.W. (1993) Laboratory analysis of the foraging efficiency of nymphal German cockroaches (Dictyoptera: Blattellidae) between resource sites in an experimental arena. *Annals of the Entomological Society of America* 86, 372-378.

[5] Durier, V. and Rivault, C. (2002) Importance of spatial and olfactory learning on bait consumption in the German cockroach. In: Jones, S.C., Zhai, J. and Robinson, W.H. (eds.) *Proceedings of the Fourth International Conference on Urban Pests*, Charleston, South Carolina, 7-10 July 2002. Pocahontas Press, Blacksburg, Virginia, pp. 59-64.

[6] Durier, V. and Rivault, C. (2003b) Improvement of German cockroach (Dictyoptera: Blattellidae) population by fragmented distribution of gel baits. *Journal of Economic Entomology* 96, 1254-1258.

[1] Durier, V. and Rivault, C. (2001) Effects of spatial knowledge and feeding experience on foraging choices in German cockroaches. *Animal Behaviour* 62, 681-688.

[2] Collett, T.S. and Graham, P. (2004) Animal navigation: path integration, visual landmarks and cognitive map. *Current Biology* 14, R475-R477.

[3] Lihoreau M., Rivault C. (2011) Local enhancement promotes cockroach feeding aggregations. *PLoS ONE* 6(7): e22048. doi:10.1371/journal.pone.0022048

WANT TO LEARN MORE?

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SERVICING STORIES

Empire of the ants

Three blocks of flats. Multiple colonies. Hundreds of thousands of invasive ants. Nigel White, Operations Director of member company Tactical Environmental Services, talks to us about a block treatment of epic proportions.

>Ring, ring<

“Boss, can you help me calculate something?”

“Yeah, sure. What’ve you got?”

“Errrm, how many bait points for 50+ flats, over three blocks, communal areas, and one giant plant room that connects them all?”

“Come on, you’ve done this a thousand times. What’s the mouse activity like at the moment?”

“Its Pharaoh ants.”

“Oh. This may take a while...”



A tricky situation solved by a simple strategy

- 1 Inspect everywhere
- 2 Bait prolifically but responsibly (as per product label)
- 3 Conduct numerous inspections over a 12-week period
- 4 Educate tenants and seek cooperation (we made letters outlining dos and don'ts)
- 5 Dedicate adequate time on site and draw upon a full team of qualified technicians.

The problem lies in the ants' habits. They nest almost anywhere and in some unusual places. Under plants. In appliances. In bins. In voids.

Nest sites are usually located within favourable conditions, not within proximity to food. Their quest for food can take them over 100 feet away from the colony.

Pharaoh ants have some ingenious habits that enable them to spread out within a single or multi-story dwelling and make it difficult for a PCO to locate their base. Their nests nearly always contain multiple queens and new colonies are created by a portion of the old colony, simply moving away with one of the queens.

The case had us scratching our heads. What product should we even use, and in what quantity?

We've done a few Pharaoh ant jobs over the years, but never on this scale or quantity of ants per flat.

On this job, some of the flats had six or seven active colonies. The nests have been active low level, high level - every level. We had nests in bins, extractor fans, under carpets, and even in a dried toilet.

The survey was long and repetitive. 50 different access keys and a whole heap of communal areas.

It was incredible how well the Pharaoh ants had established colonies throughout. We don't know how long they'd have been active for but it's safe to assume it was a fair while.

We also had issues with cleaning staff buying domestic ant powder. This obviously created more issues and is probably part of the reason the ants are so prolific throughout. We made everyone involved aware that this wasn't a good idea even before our treatment was authorised.

After talking it through with our supplier, we decided on an insecticide with a hygroscopic water retaining formulation. The active ingredient imidacloprid is meant to offer long-lasting control in comparison to other gel type baits that tend to lose moisture immediately.

The gel has a delayed action kill meaning the ants would return to the colony to feed the bait to larvae and the queen, which we hoped would lead to the eradication of all the colonies.

Compared to our usual gel this one was very liquidly, and it took an age to set up over the number of bait points we used. The team was sceptical about not using our usual insecticide.

We had a bit of resistance from a few

tenants that had single treatments inside their own flats with no success. They'd also used a gel treatment, but only in several locations in their own kitchens. We had access to all areas in all blocks and intended to make good use of it!

The results have been brilliant. We've had a dramatic reduction in reports and limited occupants reporting sightings.

I know when looking at block treatments sometimes we worry about our costs versus trying to keep the customer happy. But I definitely feel as a rule of thumb, most sites can be solved with, professional products, a great team and time spent on site.



GOT AN INTERESTING PEST STORY?

If you've had a job that our readers could learn from, tell us about it!

 hello@bpca.org.uk

CLUB BED BUG

THE PRACTICAL
IMPLICATIONS OF
BED BUG BIOLOGY
AND BEHAVIOUR



When it comes to bed bugs, the more you know, the more effective you'll be at treating an infestation, Dr Jette Knudsen, a researcher from Nattaro Labs, Sweden shares her detailed insights into bed bug behaviour and biology, so you too can join the bed bug club.



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



**SPEED
VIEW**



- **Inbreeding adapts bed bugs to passive dispersal with humans and a single mated female can start a new infestation**
- **Although human pathogens have been isolated from bed bugs, there are no documented cases of disease transmission**
- **Mating is traumatic to the female as the male pierces and ejaculates directly into her body cavity**
- **Claws help bed bugs to cling to rough surfaces, and the tibial pad helps them move on smooth surfaces**
- **Bed bugs are attracted from a distance to aggregation by volatiles and a non-volatile part such as histamines**
- **Proactive monitoring can detect small introductions before they become established infestations.**

As pest management professionals you will know bed bugs are well adapted to a secluded life in indoor environments: that their flat bodies fit well into cracks and crevices; that they are tolerant to desiccation and can withstand long periods without food. A (maybe not so) fun fact is they can engorge several times their own body mass every few days when a host is present, and moulting in nymphs is determined by access to food.

Control of bed bugs is challenging because tolerance of inbreeding makes them well adapted to passive dispersal with humans and their belongings. A few individuals or a single mated female can start a new infestation. On top of this, bed bugs also move actively between rooms, especially if food becomes scarce, in case of lack of suitable harbourage sites or if disturbed.

To be absolutely clear, although several human pathogens have been isolated from bed bugs, there are no documented cases of actual disease transmission. The major hassle with bed bugs, besides mental stress, is the allergic reaction their bites may trigger.

Increased public awareness of bed bugs and the professional development of pest management services have resulted in a slower increase in the number of treatments per year in several countries. Although the discovery of bed bugs in, for example, hotels, may lead to a bad reputation and economic loss, some hotel owners now announce that they work proactively against bed bugs, assuring customers who are becoming more educated and recognise that bed bugs can still enter adversely in spite of pest management programmes being in place.

EAT

Both the Common and the Tropical bed bug are ectoparasites, living exclusively on blood, chiefly from humans. Both

species have rudimentary wings and reddish-brown, flat bodies when unfed.

They vary in size from 1mm (first instar nymphs) to about 10mm in length in recently fed females.

SLEEP

They form dense aggregates or harbourages of adults and nymphs usually in close proximity to the human host. Aggregated living protects both adults and nymphs, but nymphs are especially shielded against desiccation and their speed of development is increased.

Bed bugs feed at our exposed body parts and being asleep most people do not feel their bite, but later a majority get itchy bumps. However, if people do not react on bites an infestation can go on unnoticed and reach a level where eradication is difficult.

MATE

Usually, mating occurs shortly after feeding. Mating is traumatic to the female as the male pierces and ejaculates directly into her body cavity and excessive matings may shorten females life expectancy. Nymphs gradually increase in size as they pass through five stages before they moult into adults.

REPEAT

A female can take blood meals every 3-4 days, and if mated every 4-5 weeks she can continue to lay 2-5 eggs per day for months. Males do not eat as often as females. The length of the whole bed bug life cycle from eggs to adults depends on temperature and access to food. Below 13°C development ceases and all stages enter into a quiescent state, in which adults can survive for more than a year.

MOVES LIKE JAGGER

Bed bugs have strong legs each with a

tibial pad and two simple claws at the end of each tarsus. The claws help bed bugs to cling to different rough surfaces, and the tibial pad helps them move on smooth surfaces.

The tibial pad is more developed in the Tropical than in the Common bed bug and makes the former a better climber. Furthermore, bed bugs have a tendency to move upward, which along with their climbing ability must be considered when developing traps.

Bed bugs are less active in daytime than at night and they actively seek out dark areas to hide in. They can orientate at very low light intensities and detect light in the range from ultraviolet to blue-red. Bed bugs seem to prefer darker colours to lighter ones, perhaps as an adaptation to hide and become less visible.

CHEMICAL BROTHERS (AND SISTERS)

Volatile and tactile cues are of utmost importance in bed bug intraspecific communication and foraging.

Volatile cues are perceived by different types of scent receptors on the antennae. Bed bugs are attracted from a distance to aggregation by volatiles and a non-volatile part such as histamines. The volatile part of the aggregation pheromone derives from faeces and emissions from bed bug scent glands.

The glandular emissions have dual functions: low amounts are attractive, but large amounts are a deterrent and will be employed as an alarm pheromone used to alert conspecifics in case of danger or to stop male mating attempts. Two nymph specific compounds protect nymphs against detrimental male mating attempts.



Bed bug foot claws

CONTINUED >

CLUB BED BUG

Learn the lingo

Intraspecies communication

The interchange of information from one member of a species to another member of the same species

Aggregated living

Cohabiting in ultra-dense environments

Desiccation

The act or process of drying

Conspecific

A member of the same species

Satiated

Containing or holding as much food as possible ie full up!

Bed bugs are alerted by CO₂ in human breath and human heat and odours attract them at short distances. However, the value of a specific signal varies: a satiated bed bug reacts differently to a host signal than a hungry one. Thus, any monitor trap with a lure will only alert and attract a subset of the present bed bugs and is a challenge to bed bug lure and trap developers.

STANDING IN THE WAY OF CONTROL

Of course, strategies based on knowledge of bed bug biology and behaviour are more likely to be successful. But if you don't define issues present through a thorough survey, you could risk applying a strategy which isn't the most relevant to the site.

Combining visual inspections with canine detection and passive or active monitors increase the chance of early detection of infestations.

Passive monitors, like interceptors, used in large numbers, are likely to catch some bed bugs if they are present.

Active monitors attract bed bugs from a distance to traps baited with either a host or harbourage lure. Continuous active monitoring is one approach, used often in the hospitality industry, which can bring bed bugs to bay as soon as they are introduced.

To avoid the unintentional spread of bed bugs I would suggest low or no preparation should be requested of customers. Treatment programmes can integrate a number of methods like vacuuming and a heat/steam/cold treatment together with diatomaceous earth (DE) and a chemical treatment.

DE is mainly used loose, though a DE tape to be installed on bed frames, to maintain the availability of the dust. Recently, a fungal pesticide for bed bug control was also introduced.

However, I have to stress the most successful community-wide bed bug management programmes employ an integrated approach that incorporates education, proactive inspections and monitoring, and appropriate use of both chemical and non-chemical methods.

GIMME THE FUTURE

In my opinion, education is the most significant barrier the world faces against bed bugs.

Bed bugs will continue to pose problems especially in multifamily housing and in a growing number of hotels and other multi-occupancy accommodation providers. Proactive monitoring to detect small introductions before they become established infestations will help to protect such sites, as well as professionals keeping up-to-date with proactive innovations such as diatomaceous earth restrained in tape or bands of fungi on beds and behind skirting boards.

Both now and in the future, introductions and low-level infestations need different treatment approaches than high-level infestations. Improved formulations of certain insecticides in combination with synergists directly applied onto bed bugs can still work but must be applied with care to maintain use.

I think the effect of histamine from bed bug faeces needs further investigation as it has been suggested to trigger asthma attacks which aren't a good headline for the pest management industry. However, recent mappings of the bed bug genome form a promising base from which to innovate new control methods.

When it comes down to it, Integrated Pest Management (IPM) practice of applying knowledge of bed bug biology and behaviour will enable professionals to combine appropriate measures and innovations depending on the result of their inspection.

WANT TO LEARN MORE?

Jette will be talking about bed bug monitoring at PestEx 2019. Register for PestEx for free now.

 pestex.org/register

Bitesize bed bug basics

WHERE TO LOOK FOR BED BUGS

Bed bugs usually hide close to the host, so first place is in and around the bed:

- Search mattresses and bed frames, bedroom fittings, and sofas and chairs in adjoining rooms where the hosts spend some time
- If not found there, they may hide behind skirting boards and in electrical installations, actually, any place that is dark and narrow may potentially hide bed bugs.

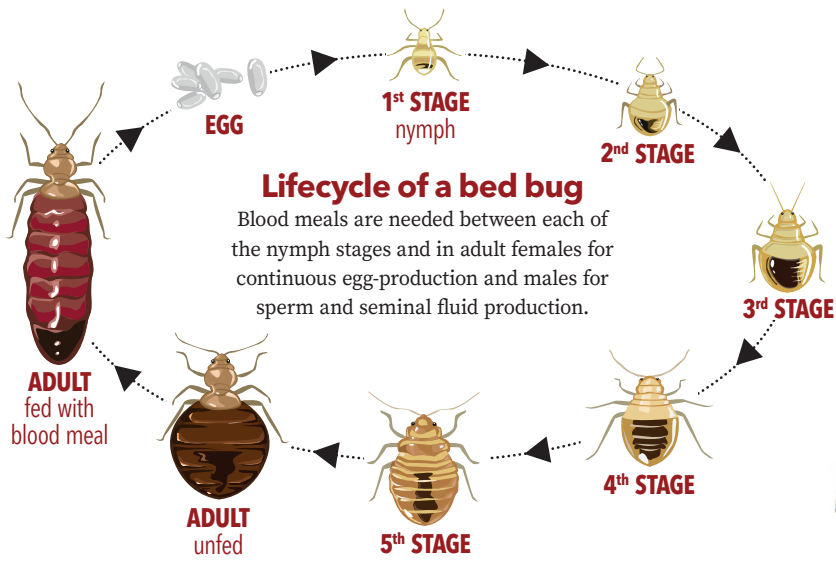
WHAT TO LOOK FOR



Dark spots of defecated blood may indicate the presence of bed bugs and spotting becomes more intense in the vicinity of a harbourage, where dead bed bugs and cast skins, eggs and live nymphs and adult bed bugs may be found.

REASONS WHY WE FAIL TO ERADICATE BED BUGS

- Low treatment efficacy
- Lack of resident and staff awareness
- Presence of clutter
- Lifestyle choices
- Lack of adequate cooperation with management programmes.



ACTIVE BED BUG MONITORING SYSTEM

A lure imitating harbourage pheromones and a pitfall trap to restrain the captured bed bugs.



Pitfall trap, holder and lure pot

UNNOTICED INHABITANTS

Under optimal conditions at 22°C it may take less than ten weeks to complete the whole bed bug life cycle. Consequently, if unnoticed, a bed bug infestation founded by a single mated female laying 2-5 fertilized eggs/day may in less than ten weeks count hundreds of nymphs, and the first adults of the next generation will start to appear.



Unfed and fed bed bugs

At this point, the population will grow exponentially and reach a level where eradication is very difficult. Such a situation is likely to happen when people do not react to bites because an infestation then can go on unnoticed.

RESISTANCE

A bed bug population often exhibit a combination of two or more resistance mechanisms and resistance varies between populations. Bed bugs secluded way of living makes the likelihood of a spray to hit and kill all adult bed bugs, nymphs and eggs minimal. Thus, treatments relying solely on insecticides are more likely to fail to eradicate an infestation than when integrating spraying with additional methods.

BED BUG TAPE - EFFICACY TESTS OF TAPE WITH DIATOMACEOUS EARTH

The wings are opened for better visualization of the construction. The setup simulates the situation bed bugs encounter in a bed with the tape installed: bed bugs pass through the tape on their way to the food (human in bed) and again after they have fed on their way back to their harbourage.



Adult bed bugs were released in the middle of the bed bug rectangle left for an hour, then they were collected and fed on a human volunteer, after which they again were released in the middle of the rectangle. All adult bed bugs died within a week.



Above: pitfall trap with lure pot and captured bed bugs, with close-up (below)



WANT MORE INFORMATION ON BED BUG MANAGEMENT?

European Code of Practice for Bed Bug Management manual is provided free of charge at:

www.bedbugfoundation.org

BACK TO BASICS

LOCATION, LOCATION, LOCATION



We can become overly confident in our preferred method of rodent control and then suddenly we're thrown a curveball. Chris Cagienard investigates the environmental considerations we need to make that influence our rodent control strategy.

“...we must take a step back and focus on maintaining pest free environments by way of giving sound pest prevention advice and educating our customers...”

FOOD MANUFACTURING SITES - MORE THAN THE MINIMUM



Many of us look after some of our nation's best known and most prominent food manufacturing sites ensuring that they maintain pest free environments. Even if you don't currently service these types of sites, I am sure you aspire to do so some day.

On these sites, our activities to control rodent infestations will be governed by supplier audit specifications of bodies such as BRC, Tesco, M&S or similar. Obviously, this involves strict adherence to follow-up procedures and call-out response times among other considerations.

We must meet these criteria to ensure that our service is compliant and that we don't allow our clients to experience any non-conformances due to our failure to meet these expectations. This should be our minimum standard.

We should look to be as proactive as possible and use our skills and training to guide our clients towards actioning recommendations before any infestation occurs to limit the possibility of a rodent infestation becoming a reality.

This is the kind of proactive service that our high-end food industry clients need from us. It is more than possible for us to deliver a service that is 100% audit compliant in that we meet all audit specification requirements when dealing with rodents but that the client may still lose a significant supply contract due to an unacceptable level of pest activity.

I'm sure most of us already do this but we must take a step back and focus on maintaining pest free environments by way of giving sound pest prevention advice and educating our customers. If adherence to the minimum requirements of a follow-up procedure specification is our main focus we have already let the client down.

As professionals in this industry, we are better than that. We are contracted to protect our customer's businesses, reputation, supply contracts and the employment of their workforce from the risk of pest infestations.

HIGH-END RESTAURANTS OR BARS - SOCIAL STIGMA



In the age of social media, it only takes one viral post about the presence of rats or mice in a restaurant or bar to completely destroy the reputation and trade of that business.

I'm almost certain that many of you have experienced similar to me in that the price of contracts for some of these types of sites seem to be being driven further and further down. I would encourage all of us to not participate in this race to the bottom as it is not in the best interests of the customer.

We need to be delivering a service that provides value by providing the right level of service to fully protect the site not only from pests but that protects the business from the potential reputation damage caused by the presence of pests.

When dealing with this type of client are we discussing these risks or does it remain unspoken? Do you have an escalation plan in place to respond quickly to deal with issues such as a rodent infestation quickly in the event of an occurrence?

Consider structuring contracts for these types of site to include a suitable escalation procedure that allows for an assessment of how any rodent infestation should be handled. Are traditional baiting control measures going to bring an infestation under control quick enough or should more direct methods be factored in to rapidly remove the risk to reputation and public health?

We must also ensure that we are giving proactive recommendations and educating our customers on good hygiene and housekeeping to reduce the risk of rodents in the first place.

In reality, we should also extend this concern to all of our customers as although the risk social media impact may be less significant, the more important considerations of health and safety remain the same.

Dealing with rodents in sensitive environments

SENSITIVE HEALTHCARE ENVIRONMENTS



Is the rodent activity you are dealing with in a sensitive healthcare environment? Hospitals, laboratories, care home etc all need a sterile environment - it can be a matter of life or death.

Although a different pest, healthcare is a hot topic in the news recently with a link being made between pigeon fouling and the death of patients at a hospital in Glasgow.

At the time of writing this remains a developing story where all the facts have yet to come to light, so it is not helpful to form any conclusions yet. However, it does clearly demonstrate that it is clear that the presence of pests in a sensitive environment can pose a potentially life-threatening risk to health.

In the case of rodents, and rats, in particular, we know they are incontinent and can propagate disease-causing bacteria in their urine. This can call for an immediate progression to the most extreme methods of control.

It is common in these circumstances to choose to step right past traditional methods of control and straight to physical control measures such as snap traps, live catch traps or even glue boards.

In Scotland, the legality of the use of glue boards is currently being challenged in parliament. For this reason, and to ensure that we avoid inhumane practices as professional pest controllers, we must only perform these treatments if correctly trained and in line with the relevant Codes of Best Practice at all times.

PRESENCE OF A NON-TARGET SPECIES



This situation is a little different from the others as it is a consideration we must give on every job no matter the circumstances.

Every time we arrive at a rodent job we should assess the possibility of the presence of a non-target species. For many technicians working in urban environments it's true this is likely to be a rare occurrence but this doesn't negate the necessity.

This is even more important with the change to rodenticide product labels increasingly becoming species specific. Remember we cannot use rodenticides that have not been correctly tested and passed for the specific pest we are targeting. Presently this includes field mice on most (if not all) product labels.

So, what can we do? If we suspect that field mice or another non-target species are present we must consider alternatives such as:

- Proofing
- Environmental habitat modifications to make the area unfavourable for the rodents
- Physical control (where appropriate).

Most importantly we should be educating our customer about the challenges we are facing and the options available. If we don't keep the customer informed it is possible that their perception of your work may be negatively affected simply because they do not understand what all the fuss is about.

“ Although a different pest, healthcare is a hot topic in the news recently with a link being made between pigeon fouling and the death of patients at a hospital in Glasgow.”

SUMMING UP

A good survey and keeping our customers informed and educated about the facts is the foundation for success when dealing with any pest species in any environment.

Let's make sure that we are using the skills and the training we have developed to show that we are the true professionals in our industry.

We must always consider the potential impacts on our clients' health and safety, or reputation by maintaining pest free environments.

We must do all this while making sure that we are compliant in all of our activities and consider humane practices at the forefront of everything we do.

When you list it all like that, it seems an awful lot. But if we want to be treated as professionals, we all need to take responsibility and act like professionals.

PESTWATCH: Are you foxing clever?

When is a pest not a pest? In this in-depth PestWatch analysis, BPCA's Natalie Bungay returns to the tricky and occasionally prickly subject of *Vulpes vulpes* – the red fox. She'll focus on the whens, whys and ifs of fox control.



HABITAT

The red fox is found in rural, urban and suburban areas throughout mainland Britain, making the fox a familiar sighting, for many.

The red fox is mostly nocturnal although they may still be seen in the daytime if not laid up in suitable covers such as overgrown bushes, cemeteries, railway lines or other similar undisturbed areas. Foxes may go to ground in earths or dens.

Earths may be specifically dug, taken over and enlarged rabbit holes, or may even be part of a badger sett. A makeshift den can be created by a fox underneath a shed or even a buildings floor cavity. This latter activity is what usually spurs the public to get in touch with a pest management company to advise on control.

Many pest companies do not have the in-house resources or knowledge to carry out fox control in a legal, effective and socially acceptable way. In my opinion - the social issues are the trickiest to overcome.

The control of majestic Mr Fox can certainly upset the neighbours, with many people in the UK having a particular affection for the red fox.

CONTINUED OVER >

Calendar of fox activity

MARCH

Around now (March), the vixen will be confined to her earth at one point as this is the peak cubbing season.

The average litter of cubs is usually around five. When cubs are born, they are blind and deaf. Since they are unable to regulate their own body heat, the vixen will not usually leave their side for about 10-11 days.

At birth, the cubs weigh about 100g. As well as not being able to regulate their own heat, they also rely solely on the vixen to stimulate them to urinate and defecate. Since being denned down the vixen relies on her dog fox to bring food - and heaven help him if he's late!

If food hasn't been brought, the vixen will go to the mouth of the earth and give out several contact calls. Like many males of different species, the dog fox will at this time look like he's got the world on his shoulders and appears very lethargic.

APRIL

April will bring the emergence of the cubs from the earths and dens. It will usually be on a nice warm day in April when the cubs venture for the first-time above ground.

After a great play, they will often slump down in a pile and go to sleep out in the open. Playing is an important role in any young cubs' upbringing and it's during this play that pecking orders will begin to be established.

The vixen will still be kennelled down with them but now she will hunt for herself. The dog fox will usually lie close to the earth protecting the cubs from any unwanted attention from cats.

In late March and April, telephone calls from concerned householders peak, thinking that foxes are looking to kill cats to feed to the cubs. This is usually not the case but is a public concern.

This behaviour of the parent fox continues with less and less reliance laid upon them until October when the family group starts to break up and the once previous reliant cub ventures out to fend for itself.

PREVENTION AND TREATMENT

As with all pest management programmes, consider non-lethal control or prevention first. Top priority is prevention.

Make sure you assess and discuss with your customer options such as protected environments for livestock and pets such as rabbits and guinea pigs.

Fencing may also be an option in smaller areas such as domestic garden, but foxes are cunning and the design should take their climbing skill into consideration! The barrier should be at least 2m high with an overhang of about 30cm, as well as the foundation being buried to 30cm for those digging issues!

Ensuring food sources are not available and bins are protected can help reduce the presence of foxes. Speak to your suppliers about fox repellents.

Once you've exhausted the prevention/exclusion route, we may then need to consider lethal control.

LATE MARCH TO EARLY APRIL

It's now when householders report losses of pet rabbits and guinea pigs. These will usually be taken as an easy option for the dog fox with so many mouths to feed.

MAY ONWARDS

To wean the cubs off her milk the vixen will lay away from them during the day, bringing small items of food back for them to move on to solid foods.

Legal options for the lethal control of foxes



SHOOTING

This is not usually applicable in urban areas for obvious reasons. When it is considered, it should only be done by an experienced and appropriately skilled individual with proper licences for the firearm.



SNARING

Snaring is a very emotive subject and you must always ensure you are working within legal parameters. The BASC Code of Best Practice on the use of snares for fox control in England should be consulted.



LIVE TRAPPING

Live cage trapping is a skill to behold as foxes have certainly earned the label 'sly'. Captured foxes should be humanely dispatched by a vet or a skilled marksman. It may be unlawful under animal welfare legislation to release a fox into unfamiliar surroundings.

LEGISLATION REGARDING FOX CONTROL

Always make sure you are familiar with legislation relating to fox control such as:

- Protection of Animals Act 1911 – foxes may not be poisoned
- Wildlife and Countryside Act 1982 – prohibits self-locking snares; free-running snares must be checked once a day
- Wild Mammals Protection Act 1996 – prohibits the cruel treatment of all wild mammals but allows legitimate pest control by humane means
- Animal Welfare Act 2006 – requires all captive animals to be treated humanely.

PESTWATCH:

Are you foxing clever?

WHY CONTROL FOXES?

With greater availability of food in urban areas, the ever-cunning fox has moved closer and closer to human habitation, bringing with it a host of health concerns.

Foxes might kill small domestic pets, however, this is rare. Often foxes are chased off by a pet.

Livestock such as chickens can be targeted by foxes. They regularly kill the entire population, which is perceived as far more than they actually need to. In reality, the fox intends to return for the extra corpses later. We usually discover the massacre before this happens and therefore wrongfully assume it was a random act of brutality!

Nevertheless, the destruction of livestock can be incredibly distressing for the owner.

Livestock aside, foxes raid bins, spreading mess and disease. The mess they make encourage other pests to take up residences such as rats and some fly species.

Even their mating calls (screams) can be very distressing to the average person. It can often be likened to the sound of a screaming woman in utter distress and this can then instigate calls to the police from concerned residents.

Like any other mammal, foxes often carry a range of parasites and diseases that can be passed on to humans and domestic pets. Cats and dogs are far more likely than humans to pick up something nasty from a fox, but the risk of exposure to rabies, leptospirosis, salmonella, campylobacter, e.coli or bovine tuberculosis (TB) from direct

contact with a fox cannot be discounted.

Roundworm (*Toxocara canis*) may be another consideration. The organism can cause blindness in children, although there are no known cases of children contracting this from foxes in the UK.

Foxes will eat virtually anything, from rodents to amphibians to leftovers scavenged from humans. It's this latter food source that brings them closer to us, seeking the much-desired take away discarded on the floor from the night before or, ransacking the waste bins scattered over most cities and towns. This easy food source is an example of how pest species take advantage of our haphazard food containment!

WHEN ARE FOXES A PEST?



It's important to address a possibly unsavoury fact about fox control – particularly for those companies that specialise: it is quite common for fox control to be unnecessary.

If a specific building or area of human habitation experiences foxes underneath their foundations or digging under a garden shed then fox removal may be acceptable. If a school field is being defecated on (causing health issues) then exclusion can be considered.

But, taking a broader look at city or town populations, controlling urban foxes in a practical manner is difficult, expensive, and rarely successful. Several local authorities have tried, particularly in England. Most have now given up any form of fox control. Foxes have been in urban areas for so long that they have reached a state of equilibrium, and regulate their own population size.

It's estimated that there is a mortality rate of 50% per annum, mostly being road deaths. This may sound high, but it is actually much lower than foxes could

PESTWATCH: Calendar

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ants | | | | | | | | | | | | |
| Bed bugs | | | | | | | | | | | | |
| Birds | | | | | | | | | | | | |
| Bluebottles | | | | | | | | | | | | |
| Carpet beetles | | | | | | | | | | | | |
| Clothes moths | | | | | | | | | | | | |
| Cockroaches | | | | | | | | | | | | |
| Death watch beetles* | | | | | | | | | | | | |
| Fleas | | | | | | | | | | | | |
| Foxes | | | | | | | | | | | | |
| Fur beetles | | | | | | | | | | | | |
| Harvest mites | | | | | | | | | | | | |
| Head lice | | | | | | | | | | | | |
| House flies | | | | | | | | | | | | |
| May bugs | | | | | | | | | | | | |
| Mice | | | | | | | | | | | | |
| Mosquitoes | | | | | | | | | | | | |
| Moths | | | | | | | | | | | | |
| Rats | | | | | | | | | | | | |
| Red spider mites | | | | | | | | | | | | |
| Spiders | | | | | | | | | | | | |
| Squirrels | | | | | | | | | | | | |
| Wasps | | | | | | | | | | | | |
| Wood rot | | | | | | | | | | | | |
| Woodworm | | | | | | | | | | | | |

* Beetles emerge

sustain. A large proportion of foxes do not breed each year, and litter sizes are comparatively small (average is under five cubs). The moment you increase the mortality rate through active pest control, the foxes compensate by increasing the number of vixens that breed. So you do not reduce the number of foxes in the area.

What you do achieve, however, is a disruption of the fox population, so that new foxes move in to try to take over the territory of the animal that has been killed. Invariably more than one fox moves in, there are fights over the territory, and hence more noise and fouling of gardens. This is because calling and scent marking with both urine and faeces are used to lay claim to a territory.

So, at best, fox control normally leads to a very temporary reduction in the number of foxes at considerable expenditure of time and effort.

However, with all of this said, there can still be a time for fox removal.

If you encounter one of the reasons for fox control mentioned in the previous section (ie in the interest of public health and safety) then methods of lethal control can be legally considered.

FOX FACTS

A group of foxes can be known as a skulk, a leash or an earth.

A fox can run at speeds of up to 30mph and can jump three feet high! This enables them to scramble over six-foot fences if need be.

Specially adapted eyes mean foxes can see best in low light - perfect for a night-time hunter.

Foxes have around 28 different noises they can make to communicate with one another, including blood-curdling mating cries during the breeding season which are sometimes mistaken for a woman's screams.

BPCA EMAIL

enquiry@bpca.org.uk

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Ask the technical team

When you're a BPCA member you can get technical support whenever you need it via our experienced technical team. Here are just a few of the latest questions posed...

INBOX

SENT

ARCHIVE

BIN

SPAM

SUBJECT: INSECT ID

What do I do if I can't identify an insect?

NATALIE REPLIES: Identification of insects is one of the biggest challenges that pest controllers can face, especially as we are not exposed to regular sightings of all of the potential species out there.

Most notably, stored product insects (SPI) such as biscuit beetle or Indian meal moth, and mite species can be tricky to identify. Knowing their origin can be just as important!

So, if you are struggling with an insect identification, pop it over via text or email an image to someone who can have a look.

The BPCA Technical team can help identify an insect for employees of a member company.

If the identification is still causing trouble then you may need an entomologist who can scrutinise it through a microscope. Some suppliers offer this service as do many BPCA Consultant members.

We do an awesome insect training programme if you want to further your own knowledge. Check out bpca.org.uk/training

Remember, there is no shame in needing help with insect ID – you can't possibly know everything!

SUBJECT: COMPLAINTS

I received a complaint and am worried they may call BPCA. What does BPCA do with complaints?

NATALIE REPLIES: BPCA is not here to punish a member if we receive a complaint. We aim to establish what has gone wrong (if anything) and then work with you to put it right. In the meantime, also try to ensure your customer feels satisfied with any resolutions.

BPCA acts as a professional body and as a trade association for member companies who are involved in public health pest management. This includes manufacturers, suppliers, consultants and servicing companies.

The Association promotes, watches over, and advances the interests of such companies and encourages efficient service by them to their clients, whether domestic or commercial. The Association will look at any complaint in conjunction with the Code of Conduct and will try to mediate in any dispute with the aim of achieving a satisfactory outcome. If this process fails, the matter may be brought before the BPCA Executive Board which will decide on appropriate action regarding the member concerned.

SUBJECT: BAD NEIGHBOURS

How do I deal with neighbouring bed bug infestations?

NATALIE REPLIES: Bed bug infestations can be a socially awkward topic of conversation as they are associated (wrongly) with unhygienic environments. We may have all, at some point, dealt with a bed bug issue that just won't quite resolve. At this point, we turn our attentions to neighbour properties attached to the rooms you are dealing with. There is a possibility the bugs are travelling in from a more heavily infested neighbour. If this is a possibility then it is important to address, which can be tricky. These steps should be taken by your customer with your support:

- Ask permission from your customer to talk to

the neighbour and then try to access yourselves initially

- The local authority may help via their environmental action team if you struggle
- If the property is owned by a local authority then you can contact the housing department
- Private properties may be more difficult, but try to speak to the landlord directly – in some cases, the local authority may issue legal notices to control infestations in properties occupied by uncooperative tenants or landlords
- If a problem is found, discussions can commence as to how and who deals with it.



ARE YOU A BPCA MEMBER WITH A TECHNICAL QUERY? GET IN TOUCH...

 enquiry@bpca.org.uk

 01332 294288

 @britpestcontrol

A SERVICE FOR BPCA MEMBERS ONLY PLEASE!

SPEED VIEW

- If you're from a BPCA member company our Technical team can help with tricky insect identifications
- Don't panic if your client complains about you to BPCA – the team is here to help you get the matter resolved, not punish you
- For bed bug infestations originating from a neighbour, local authorities may be able to help with access via their environmental action team.

Are non-payers your biggest pests?

CREDIT CONTROL FOR PROFESSIONAL PEST MANAGEMENT COMPANIES



Did you know in the region of 80% of businesses that suffer late payment are kept waiting one month or longer beyond agreed terms? Is this acceptable in a world where it's easier to communicate with one and another than ever before? No, we don't think so either. Peter Wallwork from the Credit Services Association investigates the tricky problem of non-paying clients.



SPEED VIEW

- **Maintain a healthy cash flow and start with clearly defined terms and conditions that are agreed from the outset**
- **Agree on an upper credit limit and terms with your clients**
- **Define your credit control process and make sure you follow it**
- **A professional with experience and training can take control of credit control more effectively than an internal solution.**

BACS research from 2015 tells us that a staggering £31bn is owed to UK businesses in total, with nearly 90% of the monies owed to SMEs. Late payment means companies rely on bank overdrafts and are often forced to pay their own suppliers late.

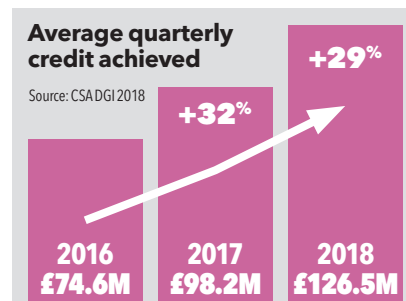
As the Chief Executive of the Credit Services Association, the trade association for debt collection agencies, I'm often asked the same question: "What advice can you give me so I can avoid having to use one of your members?" While I understand the sentiment, the sad reality I am forced to reply with is "mind your own business" – but this does have a double meaning.

MIND YOUR OWN BUSINESS

Best practice credit management (see tips from BPCA's Lorraine overleaf) means maintaining a healthy cashflow and starts with clearly defined terms and conditions that are agreed from the outset, keeping you in control. If you've got control of your credit the likelihood is you won't need to engage with a CSA member but to know we're here, and how the process operates is always worthwhile for business leaders.

Now, even following the best practice, sometimes despite everybody's best efforts, a debt can turn sour. From our

research, we've found that CSA members have secured an average 30% increase in total debt collection (year on year) from the start of 2016 to 2018. While we do expect this average rise to slow down, it does demonstrate that debt collection services are being used more frequently, and certainly, CSA members are collecting significantly more debt each year.



The news that the level of debt owed by businesses is on the increase is perhaps no surprise, but that has not always historically correlated with the levels of debt put out for collection. It might be the case more businesses see no option other than to engage with a third-party when all else fails, and for that, of course, I will champion the CSA membership.

For whatever reason there often appears to be a reluctance for companies to demand money that is rightfully theirs, and I'm here to say there is no shame in this. In fact, when the following scenarios start to happen, this can be a sign to start escalating your approach:

- Dangling the carrot: the promise of future enquiries/work
- The blame game: seeking further authorisation from the boss
- From pillar to post (the big accounts department): not being able to directly contact the right person.

Just like pest management, there's a point where a professional with experience and training can take control more effectively. Outsourced commercial collections agencies play an important part in the overall collections cycle and the smooth running of your business.

The amount of debt, collection companies are now holding I think gives an indication of how often they are now being instructed as well as a more tantalising indication of the state of the economy, and a customer's ability to pay.

CONTINUED OVER>

“
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Are non-payers your biggest pests?

CREDIT CONTROL FOR PROFESSIONAL PEST MANAGEMENT COMPANIES

What to look for from a commercial collection agency

How can you be sure they are legitimate, and acting in your best interests? And how can you be sure that your client or customer will be treated no differently than if they were dealing with them directly themselves?

OFTEN THE INTERVENTION OF A THIRD-PARTY IS SUFFICIENT FOR A CUSTOMER TO SETTLE WHAT IS OUTSTANDING...

Ask if they are members of the Credit Services Association

Although there is no regulatory requirement for an agency to belong to the CSA, those agencies that are members commit to adhering to the CSA's Code of Practice, giving you the assurance that they will act to the highest ethical standards, and treat your customers in the same way you do.

Go by recommendation

Speak to other SMEs and firms who use their services and don't just go by the endorsements on the website.

Look for no-win no-fee

It is unusual to be asked for money up-front or an appointment.

Be clear on commissions

The amount of commission charged on monies collected will vary based on a number of different factors such as the age of the debt, the size of the balance outstanding, and the country from which the money is being collected. Typically, older debt, or debt to be collected from businesses in more challenging territories, will command a higher commission. Whether collecting debts from the UK or overseas, what is essential is to agree both the fee and the process in advance of any work undertaken.

Third party intervention

Some agencies offer a 'letter only – credit control intervention' service for which you can expect to pay a fixed fee for three 'contacts' (ie a letter before action, email, or text service).

Often the intervention of a third-party is sufficient for a customer to settle what is outstanding, and such services can be especially efficient and effective when a larger number of debts are outstanding.

Know what happens to monies collected

Ensure that all monies collected are placed into a dedicated client account. That way your money is better protected.

Choose a sector specialist

Choose an agency that understands your industry and the clients you serve. Make sure their reporting procedures are adapted to your needs, and information supplied when you want it as opposed to when they want you to have it.

Ensure total transparency

Especially in relation to fees and how they are applied, when they are applied, and whether the fees change as the case progresses.

UNDERSTAND YOUR RIGHTS

Businesses should also be aware of their right to charge and claim statutory interest – see gov.uk/late-commercial-payments-interest-debt-recovery/charging-interest-commercial-debt

This can be added to the total outstanding debt you wish to be collected and will usually be automatically added by the agency you appoint.

REMEMBER

Just like with any member of a trade association, if you're unsatisfied by the level of service you have experienced, you can make a complaint against the agency to us and we can investigate and take action where necessary.

BEST PRACTICE PEST CREDIT CONTROL

Chief BPCA credit controller Stephanie Costopoulos gives some helpful hints on keeping a good cash flow.



CREDIT LIMITS

In your terms, you might look to agree on an upper credit limit. This can change depending on how much you understand about the client, and how strong the references are you get from other suppliers (ask for references and carry out your own credit checks).

TERMS

30-90 payment day terms are terrifying and present a challenge for your cash flow. If this is 'company policy', how can you get closer to 30 days than 90?

Know when payment runs are made and put a reminder in your diary. If payments are made ad-hoc this suggests a more flexible system, but I'd argue flexibility of when payments are made are more of a benefit for the client than they are for you.

PROCESS

Define your process. Whether it's something you do once a week or once a month, stick to your routine and make sure it's regimented. I encourage businesses to invoice as soon as possible and have an escalation procedure in place, which might include contacting our friends at the Credit Services Association.

PERSONAL TOUCH

I believe going the extra mile with your customer service gives you significant benefits with credit control.

Check in with your customers now and again, making sure documents and deliveries get to the right people and key contacts know you by name. You'll always know the right person to send invoices and reminders to. Finally, never apologise for chasing a payment. You've done nothing wrong.

HEALTH AND SAFETY

Knowledge is power



Health and safety can strike fear into the most competent of pest control business owners. Risk assessments, policies, and health surveillance can shrink our confidence into a puddle of uncertainty.

We want to give a little bit of history on health and safety in pest management, as well as to understanding the purpose of it. Understanding the 'why' is the most crucial initial element when building your confidence and considering the health, safety and the welfare of your employees.

THE WHY

This is a very straightforward question: why do organisations need to have good health and safety arrangements? The answer is >drum roll< ... to protect everyone from harm, be it physical, psychological or emotional.

The other obvious answer is that it's enshrined into civil and criminal law.

Health and safety rules have been around in some shape or form for a very long time. Laws and legislation have existed since circa 3,000BCE – we're talking Egyptian times here.



LAWS AND LEGISLATION HAVE EXISTED SINCE CIRCA 3,000BCE - WE'RE TALKING EGYPTIAN TIMES HERE.

Law is the cement of society and an essential medium for societal change. Take a moment of contemplation and imagine a world without laws or legislation, rules and regulations.

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HEALTH AND SAFETY

Knowledge is power

If you're like me, then this thought quickly strikes fear and then a founded appreciation of the laws that govern the UK and, in some cases, the world.

Without laws, we would have nowhere to turn if burgled, no justice for physical harm or abuse caused by another, or little hope of conserving our wildlife, environment and ecosystem.

The Health and Safety at Work Act (HASWA) 1974 is no different. HASWA was described as "a bold and far-reaching piece of legislation" by HSE's first Director General, John Locke. It indeed marked a departure from the framework of prescribed and detailed regulations which

was in place at the time.

The Act introduced a new system based on less-prescriptive and more goal-based regulations, supported by guidance and codes of practice. For the first time, employers and employees were to be consulted and engaged in the process of designing a modern health and safety system.

This makes sense. Why have health and safety procedures and practises in place if you are not sharing them with everyone within the organisation?

The Health and Safety Executive (HSE) was formed shortly after 1974 to enforce health and safety law; a duty shared with local authorities.



DRIVING - IS THE VAN SUITABLE FOR THE USER? IS IT COMFORTABLE FOR THE DISTANCES TRAVELLED?

WHAT YOU REALLY NEED TO KNOW

Simply put: if harm could occur, make sure it doesn't.

This also includes that when employees are at work, they should be comfortable, safe, free of strain and have access to basic human rights such as water, clean places to eat and toilets (to mention a few). From the moment an employee steps into an office or jumps in their work van, the employer has a responsibility.

Sit back and visualise a whole days' work of an employee. In this example, a pest control technician, and consider all of the possible hazards they might face:

- Work van – driving; storage of equipment and pesticides
- Pest control jobs – chemicals; traps; customers; the public; equipment use; competency in their work
- Their general welfare – breaks; hours worked; access to facilities such as toilets; workload; stress
- Lone working – weather; the environment.

All of which are areas which should be considered when assessing hazards, risks and what to do to make sure no harm occurs. That is the objective, simple, yes?

The first step is to break down a day's work to see what you need to do to keep everyone safe and healthy. Let's add some more detail to our list:

- Work van – carry out pre-checks on the van (all in working order)
 - Driving – is the van suitable for the user? Is it comfortable for the distances travelled? Are enough rest stops taken? *
- Storage of equipment and pesticides – are pesticides secure and safe from spillage? Does the vehicle have enough space for storage? Is it being overfilled? Waste storage? Hand cleaning products? Separate storage for PPE?
- Using chemicals – suitable PPE? Trained users? COSHH assessments carried out?
- Customers and the public – risk can arise from the interactions we have with other people; consider any potential situations that may involve violence, harassment, and considerations for vulnerable people such as mental health disorders.
- Equipment uses – competency in use; maintenance check; PAT checks; safe storage.
- Welfare – are there enough breaks? Hours worked should be suitable; access to facilities such as toilets can be tricky for field workers; consider workload control to reduce stress.
- Lone working – risk assessments should be carried out and procedures in place to reduce risks from weather and the environment.



Ratwall.co.uk.

No1 in the UK for Rat Blockers

- Un-rivalled range · Unbeatable quality
- Exceptional service

Available from quality product distributors
Ratwall.co.uk for technical information, videos, testimonials and more

Ratwall is great value. Robust, with easy installation and cannot become lost into the drain.

FINALIST
best product award 2017
pest
Ratwall

Ratwall M
by METEX

The Dogs Dangles!
The Nordisk TX11 (aka VERMEND) with sizes up to Ø350mm and 90,000+ installations

NORDISK INNOVATION

Key differences between civil and criminal law

| CIVIL LAW | CRIMINAL LAW |
|---|---|
| Negligence needs to be proven | Breach of the HASAWA |
| A civil wrong proven | A criminal offence |
| Wrong to an individual | Offence against society |
| Heard in civil court | Tried in a criminal court |
| Determines liability | Determines guilt |
| Loss is necessary | Loss not necessary |
| Seeks compensation for loss (financial) | Seeks to punish for breach of law (financial or imprisonment) |
| Balance of probabilities | Guilt proven "beyond all reasonable doubt" |
| Organisation can be insured for this | Insurance will not cover this |

WHAT IF SOMETHING GOES WRONG



Let's take an example of a technician falling from their ladder while trying to access an attic space and fracturing their arm. First, this would be a reportable injury to the HSE under the RIDDOR legislation (that's another topic for another day!). Likely, the individual would need to have hospital treatment, time off work and it may also impact their personal life.

There will be the possibility of two routes of worry for the organisation:

- A civil claim – if an individual suffers loss (injury/ill health or death) the victim, or their dependents, may sue for damages in the civil courts (this is common law)
- A criminal charge – if minimum legal standards are not met then the enforcing authority may prosecute the offender in the criminal courts (this is statute law).

The outcome of either of these will depend upon the evidence submitted to the civil or criminal courts demonstrating how and if the defendant tried to prevent, so far as is reasonably practicable, the incident from occurring.

For example, were ladder checks carried out? Was the ladder in good condition? Was the user (victim) competent to use the ladder? Was the ladder suitable for use in a commercial setting? Was there a risk assessment? Was the victim aware of this risk assessment? The consequences of these outcomes

will, of course, depend upon the severity of the incident and the seriousness of either negligence (civil) and the breach of law (criminal). Fines and compensation payments will be settled on (if any), and there is also a possibility of imprisonment under criminal law if the breach is of a severe nature.

THE MORAL RESPONSIBILITY

Finally, let's look at the implication of something going wrong and a person under the organisation's care experiencing an injury. The moral drivers.

What are the implications for that person? It is important that this is understood as understanding this will shine the light on the responsibility that we all have to protect our colleagues, employees and other associated people with the business:

- Stress of the injury can impact the person
- Pain caused by the injury
- Hobbies may be affected
- Social life can be hindered
- Career progression can be delayed or even hindered entirely
- Financial worries, mortgages, dependents, etc.

SUMMARY

Although the management of health and safety in your workplace may seem daunting and a minefield of possibilities, the key thing to remember is that all you have to do is to protect everyone (so far as is reasonably practicable) against injury, loss and ill health.

Examine the work being done and the tools being used. Consider the individual and their competencies. Make sure that everything you are doing is assessed and you are happy that everything and everyone is as safe as possible.

That is the real aim of health and safety and what the authorities ultimately want.



COMPLETING RISK ASSESSMENTS - ONLINE LEARNING FROM BPCA

Foundation > Online > 4 weeks

BPCA Registered CPD points: 2
Basis Prompt CPD points: 2

Risk assessments can be quite an onerous task if you haven't done it before. Do not fear! Our online learning will have you confident in no time.

Fee

Members: £48 inc VAT

Non-members: £72 inc VAT



MEMBERS ONLY

SUPPORT IS AVAILABLE FOR ALL YOUR HEALTH AND SAFETY CONCERNS



BusinessShield

Through BPCA BusinessShield you can get access to unlimited health and safety, environmental and employment law advice, plus a complimentary review of your current health and safety/employment law standards and documentation. We've even got a BPCA BusinessShield app!

bpc.business-shield.co.uk

The BPCA Technical team is also trained to support you with your health and safety questions. Whether you're in the field and need a second opinion, or you're confused with some paperwork in the office – we're here to help.

MEET THE MEMBER

STARTING A PEST MANAGEMENT COMPANY

Can you do it on your own?

At BPCA HQ we take hundreds of calls every year with people asking us how they start out in pest management and whether it's possible to get into the trade without experience.



Black Dog Pest Solutions UK

Matthew Evitts entered into the pest management sector in March 2017. After spending 20 years as a Gas Safe registered plumber. Based in West Bromwich, Matthew's company Black Dog Pest Solutions has grown steadily since joining BPCA and is now servicing both commercial and residential customers.

Plumber to pest control - how did that happen?

When I was growing up one of my neighbours was a plumber. Even though I used to go out ratting with a friend, between the careers advisor at school and my family at 16, I was railroaded into the plumbing trade.

I was starting to find plumbing too physically demanding so set about trying to get back into pest control which relies more on my mental strength than physical.

My proper introduction to the professional industry was PestEx 2017. My wife and I travelled down to explore getting into the industry.

Between meeting BPCA and the manufacturers and distributor community, PestEx convinced me that there are enough people to support a new entrant like me.

I joined BPCA's Probationary Scheme when I booked on to the General Pest Control (GPC) course. I did the online learning and then passed the Level 2 Award in Pest Management thanks to an excellent six days in Stafford with Paul Westgate and the group I studied with.

I must admit, I did try and work for



EVERY DAY I'M HELPING PEOPLE TO LIVE A MORE COMFORTABLE LIFE, AND IT'S FANTASTIC TO GET GRATITUDE, BOTH EMOTIONALLY AND FINANCIALLY!

a few firms after I qualified, but I learned very quickly I would prefer to do it my way.

I felt under pressure rushing around and I wanted to educate customers to show

them how to stop problems arising in the future. It was more about jobs done than jobs finished. Proofing services were rarely offered, which is something I really enjoy doing, especially with my knowledge in plumbing and how houses are put together.

And what's life like now you're in pest management?

Compared to plumbing, people are so happy to see you when you turn up at their house or business. The relief is all over their face, and that means a lot to me.

Every day I'm helping people to live a more comfortable life, and it's fantastic to get gratitude, both emotionally and financially!

When I do turn up to a job, I tend to encourage trapping where appropriate as it's what I enjoy most. Plus we all know we should be using poison as a last resort.

I personally enjoy camouflaging my traps with tat from the garden. Believe it or not, it delivers some excellent results, especially with issues related to neophobia. Old wood or plastic doesn't seem to alert the rodents as easily.

Since I set up, I've not had two days the same; not even in the very busy wasp season last year. I'm starting to be known as the Black Country's urban gamekeeper, which is okay with me!

Why Black Dog?

I really didn't want 'kill' in my company name.

I'm not saying it's wrong, but lot's of firms seem to have it, and as we become more environmentally aware I felt the company name needed to connect with people in a different way.

As dogs are 'man's best friend', I figured that would be a good connection to go for. And obviously, we have Sienna, my black labrador. So we simply became Black Dog. What's good about it is that it seems to stick (so far, so good anyway)!

Have you done a job which you're particularly proud of?

Yes. One stands out more than the rest for me. There's a drug and alcohol charity in Walsall which had a longstanding mice issue.

“As you might guess, going digital has proved a good decision – Google particularly. The challenge with going digital is that I can’t do it. I rely on my wife to produce the posts and set the ads going. I need to say thank you at some point, so thanks, Jax!”

It’s the usual story. Lots of pest controllers had attempted to resolve the issue but I spotted the problem. It was simply a vent which needed some wire mesh fixing to it and the issues stopped straightaway.

The poor social workers weren’t able to use the kitchen before, but now they can eat their sandwiches safe in the knowledge nothing has been near them. These guys do amazing work, most of the time with very little thanks, so to be able to help them was rewarding.

Are you where you wanted to be 12 months in?

The wasps really helped me in my first year of business last summer, but I’d like to be a little further on with my commercial services than I am at the moment.

I have secured some regular contract work and lots more enquiries have arrived through December and early January. I am learning how to get myself out there to target new customers, but one thing that doesn’t change is just doing a good job, and getting referrals by word of mouth.

Is there anything you miss from your old life?

I miss being able to copy the answers to the CPD quizzes like we used to in the plumbing trade! It’s so much more professional in the pest control world and I do feel I’m making an investment in my knowledge each time I go to a meeting, or read a magazine.

I loved going to the merchants and having a cup of tea with the other customers to find out what’s what. Working for yourself can be quite lonely

at times, and that’s why I like to go to events in my area to see what other people are challenged with and if they have any ideas that can help me.

It does strike me that even though the people you talk to are your competitors, there is a genuine friendliness from one pest controller to another. It’s like we’re all on the same side no matter who we work for – and that’s one thing I wouldn’t change!

Any advice for someone thinking of starting out in pest management?

Yes. I spent a large portion of my advertising budget placing advertisements in a local listings book – I’m sure you’ll know the ones I mean.

Anyway, I advertised in there because that’s where I used to look when I needed pest control. What I soon realised is that we need to experiment with where we promote and work out where the best pounds are spent.

As you might guess, going digital has proved a good decision – Google particularly. The challenge with going digital is that I can’t do it. I rely on my wife to produce the posts and set the ads going. I need to say thank you at some point, so thanks, Jax!

Jax isn’t a marketing professional; she just started experimenting and it’s working out, especially with the Google My Business page.

So outside of marketing, I’d say to new starters to look after your customers like nothing you have before. Be personable and educate them about why you’re taking a specific approach. The people who have referred business to me have been the type that now values pest control and me as a professional.



Thanks for your time

Matthew. One last question – can you go it alone in pest control?

No. I wouldn’t be where I am today if I didn’t ask for help. There’s no shame in that.

I do think I’d be making progress though, however, it would be slow and I’d be stressed, maybe even considering if I made the right decision. Suppliers, family members and BPCA particularly have been there when I needed them.

Whether it be with guidance, or just being able to put the logo in front of someone and explain what it means – I’ll always appreciate being a member of BPCA.

Thinking of starting out? You’re not alone!

Between the BPCA Probationary Scheme and our unrivalled Training Pathway, BPCA can help you start a company and make it a success.

bpca.org.uk/starting-out

Want the PPC team to come out and meet you? Have an idea for an article you want BPCA to feature?

 hello@bpca.org.uk

Get the training buzzzzzzz



BPCA has partnered with Tree Bee Society to offer some exclusive bee management programmes on the BPCA Training Pathway.



CONFLICT HONEYBEES NESTING IN URBAN DWELLINGS

Foundation > Classroom > 1 day

BPCA Registered CPD points: 10.5

This programme has been designed as an introduction to inform professional pest controllers about the identification, nesting habits and behaviour of the most common pollinator species of bumblebees and honeybees that may be encountered as a conflict species.

Learn

- The importance of pollinators to mankind
- Identification, characteristics and behaviours of the key bumblebee species
- Visual differences between honeybees and wasps
- Habitat conservation
- Health, safety and environmental responsibilities and practices.

Dates

For dates, contact training@bpca.org.uk

Fee

Members:
£185 inc VAT
Non-members:
£205 inc VAT



LIVE REMOVAL OF CONFLICT BEES IN URBAN DWELLINGS

Core > Classroom > 1 day

BPCA Registered CPD points: 10.5

This programme is designed to teach pest controllers how to become approved and competent in live honeybee removal techniques using the 'trap out' method of removal from cavity walls and voids.

This programme follows on from the introduction training Conflict Bees in Urban Dwellings. The 'trap out' method works without causing any harm to the bees in a way that keeps the colony alive, sustainable and viable.

You must complete

- Conflict Honeybees Nesting in Urban Dwellings programme
- L2 Award in Pest Management or Tree Bee Beekeeping qualification.

Learn

- To identify the main casts of the West European honeybee
- To use insecticides against beneficial pollinator species
- Carry out a structural site survey
- Understand the 'trap out' method
- Look after bees and hive safely
- Ensure the correct use of PPE
- Use the hand and power tools needed to install the 'trap out' equipment
- To remove bees and the equipment safely
- Prevent future swarms recolonising the property
- Package the bees and hive ready for the safe return.

Dates

For dates, contact training@bpca.org.uk

Fee

Members: £185 inc VAT
Non-members: £205 inc VAT



BPCA REGISTERED How to join BPCA Registered

If you work for a BPCA member company you'll be automatically enrolled onto BPCA Registered, unless the main contact for your employer opts out.

If you're the main contact for your company and want your organisation to be BPCA Registered, contact our team today and we'll make sure your company is on the scheme. registered@bpca.org.uk

This benefit is only available to BPCA member companies and therefore individual technicians must talk to their employer.



BPCA

Regional Forums

"It's like a mini-PestEx"

Professional pest controllers deserve opportunities to get together to talk about their work and learn from each other. BPCA provides Forums right across the UK. Each Regional Forum has its own agenda and speakers that we put together based on the feedback from visitors.

Join us for all the latest pest management news and updates, and network with colleagues from across your region. Get CPD points for attending, plus we'll provide you with breakfast and the opportunity to talk to pest management suppliers in our mini-exhibitions. Thanks to our sponsors, all our Forums are free to attend whether you work for a BPCA member company or not.

New open forum

Got a pest management question? Need help with a technical problem? The Open Forum is a new part of all BPCA Regional Forums where all attendees can discuss anything that's on their minds and get feedback from the whole Forum.

TAKE PART!

REGISTER FOR FREE
bpca.org.uk/regional-forum

GOT AN IDEA FOR A TALK?
LET US KNOW!

events@bpca.org.uk

JOIN US IN
YORKSHIRE FOR
OUR AGM AND
REGIONAL FORUM
12 June 2019



"ALL SPEAKERS HAD SOME GOOD INFORMATION, AND I LEARNED SOMETHING FROM THEM ALL - THANKS."

BOOK YOUR NEAREST FORUM NOW!

WHY GO TO A REGIONAL FORUM?

- Get those all important CPD points
- Keep up-to-date with the latest news, products and industry changes
- Network with like-minded professionals
- Enjoy a free breakfast roll and refreshments



Every registered guest gets a free bacon roll at each Forum!

2019 SCHEDULE

| | | |
|--|---|--|
| MIDLANDS WEDNESDAY 3 APRIL SPONSOR | SOUTH EAST THURSDAY 5 SEPTEMBER SPONSOR | NORTH EAST WEDNESDAY 16 OCTOBER SPONSOR |
| NORTHERN IRELAND THURSDAY 16 MAY SPONSOR | GLASGOW WEDNESDAY 18 SEPTEMBER SPONSOR | LONDON WEDNESDAY 20 NOVEMBER SPONSOR |
| YORKSHIRE +AGM WEDNESDAY 12 JUNE SPONSOR | WALES THURSDAY 3 OCTOBER SPONSOR | EASTERN COUNTIES WEDNESDAY 11 DECEMBER SPONSOR |

BPCA out and about

You'll never make it to every industry and associated event but thankfully you don't need to! Our team represents BPCA members, and reports back to you via PPC magazine. We talk about:

- The importance of using BPCA members
- Our "Be protected. Professionally." campaign
- Professional training and qualifications
- Raising the profile of public health pest control.

SOFHT PEST CONTROL CONFERENCE

28 FEB 2019

Bristol Golf Club, Bristol
softt.co.uk

BPCA PARTNER, EXHIBITOR AND SPEAKER

DEMENTIA AND NURSING HOME EXPO

26-27 MAR 2019

NEC, Birmingham
carehomeexpo.co.uk

BPCA EXHIBITING

SAVE THE DATE!
REGISTRATION NOW OPEN

BPCA

PestEx

The pest management show

20-21 MARCH 2019 / EXCEL, LONDON

SEE PAGE 11 FOR MORE INFO

Training calendar



COURSES AND EXAMS

| Level | Course/exam | Member Price £ | Exam | Start date | Location |
|--|--|---------------------|-------------------|------------|----------|
| FOUNDATION | Using Rodenticides Safely | 130 | ✓ | 13/05/2019 | Wigan |
| | | | | 09/09/2019 | Derby |
| | | | | 21/10/2019 | South |
| | | | | 11/11/2019 | North |
| | Practical Vertebrate Trapping | 155 | | 27/02/2019 | Hitchin |
| | | | | 14/05/2019 | Wigan |
| | | | | 10/09/2019 | Derby |
| | | | | 22/10/2019 | South |
| | Practical Insect Control | 155 | | 12/11/2019 | North |
| | | | | 28/02/2019 | Hitchin |
| 15/05/2019 | | | | Wigan | |
| 11/09/2019 | | | | Derby | |
| Sales Skills | 155 | | 23/10/2019 | South | |
| Customer Service Essentials | 155 | | 13/11/2019 | North | |
| Starting and Managing Your Own Pest Management Business | 155 | | 25/03/2019 | Derby | |
| | | | 10/05/2019 | Stirling | |
| | | | 20/06/2019 | North | |
| | | | 18/11/2019 | Derby | |
| CORE | General Pest Control - Level 2 Award in Pest Management | 1010 (non resi 803) | ✓ | 02/06/2019 | Stafford |
| | | | | 22/09/2019 | Stafford |
| | | | | 24/11/2019 | Stafford |
| | Certificate in Bird Management | 155 | ✓ | 16/05/2019 | Wigan |
| | | | | 12/09/2019 | Derby |
| | | | | 24/10/2019 | South |
| | Safe Use of Aluminium Phosphide | 310 | ✓ | 14/11/2019 | North |
| | | | | 26/03/2019 | Midlands |
| | Pest Management on Waste Sites | 155 | | 04/09/2019 | Nantwich |
| | | | | 30/04/2019 | Derby |
| Bed Bug Control | 155 | | 07/05/2019 | Stirling | |
| | | | 17/09/2019 | Midlands | |
| Insect Identification | 155 | | 04/12/2019 | North | |
| | | | 08/05/2019 | Stirling | |
| | | | 16/09/2019 | Midlands | |
| Safe Use of Air Weapons for Effective Pest Management | 155 | | 03/12/2019 | North | |
| | | | 09/04/2019 | Nantwich | |
| Managing Pest Control Contracts | 310 | | 29/10/2019 | South | |
| | | | DAY 1: 26/06/2019 | Derby | |
| Becoming a Technical Inspector | 155 | | DAY 2: 24/07/2019 | Derby | |
| | | | 21/05/2019 | South | |
| Becoming a Field Biologist | 155 | | 08/10/2019 | Scotland | |
| | | | 22/05/2019 | South | |
| | | | 09/10/2019 | Scotland | |
| Level 3 Award in the Safe Use of Fumigants for the Management of Invertebrate Pests | 780 | ✓ | 17/12/2019 | North | |
| | | | 04/03/2019 | Derby | |
| | | | 30/09/2019 | Derby | |

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.

EXAMS ONLY

| Exam | Start date | Location |
|--|------------------|------------------|
| RSPH Level 2 Award in Pest Management (£155) BPCA Certificate in Bird Management (£100) BPCA Certificated Technical Inspector (£155) RSPH Level 2 Award in Safe Use of Rodenticides (£40) RSPH Level 3 Award in Safe Use of Fumigants for the Management of Invertebrate Pests (£305) | 15/03/2019 | Stafford |
| | 19/03/2019 | London |
| | 02/04/2019 | Midlands |
| | 17/04/2019 | North |
| | 15/05/2019 | N. Ireland |
| | 24/05/2019 | South |
| | 07/06/2019 | Stafford |
| | 11/06/2019 | Yorkshire |
| | 19/06/2019 | South |
| | 01/08/2019 | North |
| | 15/08/2019 | Derby |
| | 04/09/2019 | South East |
| | 17/09/2019 | Glasgow |
| | 02/10/2019 | Wales |
| | 15/10/2019 | North East |
| BPCA Advanced Technician in Pest Management (£245) BPCA Certificated Field Biologist (£305) | 19/11/2019 | London |
| | 10/12/2019 | Eastern Counties |
| | 28/02/2019 | Somerset |
| | 04/04/2019 | Midlands |
| | 09/05/2019 | Stirling |
| | 17/05/2019 | Northern Ireland |
| | 13/06/2019 | Yorkshire |
| | 17/06/2019 | Derby |
| | 14/08/2019 | Derby |
| | 06/09/2019 | South East |
| | 19/09/2019 | Glasgow |
| | 04/10/2019 | Wales |
| | 17/10/2019 | North East |
| | 21/11/2019 | London |
| | 06/12/2019 | North |
| 12/12/2019 | Eastern Counties | |
| 27/02/2019 | Somerset | |
| 03/04/2019 | Midlands | |
| 16/05/2019 | N. Ireland | |
| 23/05/2019 | South | |
| 12/06/2019 | Yorkshire | |
| 05/09/2019 | South East | |
| 18/09/2019 | Glasgow | |
| 03/10/2019 | Wales | |
| 10/10/2019 | Scotland | |
| 16/10/2019 | North East | |
| 20/11/2019 | London | |
| 11/12/2019 | Eastern Counties | |
| 18/12/2019 | North | |

ONLINE LEARNING

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



| | Member cost | Non-member |
|---|-------------|------------|
| Individual GPC modules | | |
| Introduction to Pest Management: Health, Safety and Legislation; Invertebrates; Vertebrates | £100 | £150 |
| Full General Pest Control Online | £300 | £450 |
| Using Rodenticides Safely | | |
| Online course and exam | £75 | £100 |
| Foundation Certificate in Pest Management | £50 | £75 |
| Completing Risk Assessments | £40 | £60 |

ENQUIRIES AND BOOKINGS



bpc.org.uk/training



training@bpc.org.uk



01332 225 113

A look back at 2018

Continuing the theme of engagement from 2017, 2018 turned out to be a milestone year for the Association with growth to record levels in membership, regional forum attendance and PR coverage in public and trade media.

BPCA REGISTERED

1,500+ INDIVIDUALS

250+ COMPANIES

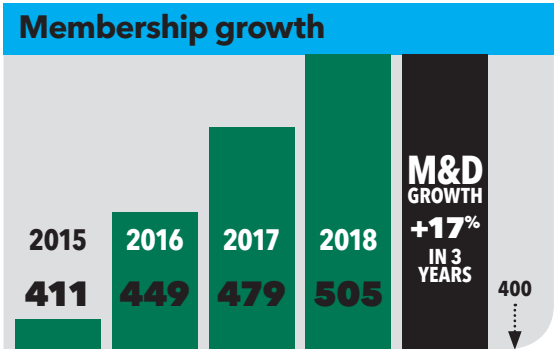
JOINED THE BPCA REGISTERED SCHEME FROM DAY 1

"GREAT FORUM, GOOD PRACTICAL INFO, EXCELLENT NETWORKING OPPORTUNITY."

"ALL SPEAKERS HAD SOME GOOD INFORMATION, AND I LEARNED SOMETHING FROM THEM ALL, THANKS."

Regional Forums

| | |
|---|---|
| EVENTS HELD 12 | BACON SARNIES ISSUED 544 |
| VISITORS PER EVENT ≈45 | MILES TRAVELLED 4.8K |



Spreading the word

- PPC magazine mailed to over **4,500** subscribers
- BPCA Bulletin emailed to over **6,250** subscribers
- Twitter, Facebook and LinkedIn views: **1M+**
- Likes: **>6.4K** Shares and retweets: **>3.9K**
- On average our posts gets **1K** views + **6** likes + **4** shares
- Record high for BPCA's coverage in public and trade media: **£2M** advertising value equivalent (up from £0.8M in 2017)
- BPCA seen by around **600M** people (up from 120M in 2017)

Revenue earned by referrals **>£8m!**

| | Average job value is taken from a poll of BPCA members £ | Total amount earned £ |
|---------------------|--|-----------------------|
| Ants | 92 | 882,740 |
| Bed bugs | 527 | 1,970,453 |
| Bee removal | 74 | 22,200 |
| Birds | 1,124 | 2,437,956 |
| Cockroaches | 258 | 109,134 |
| Fleas | 137 | 108,230 |
| Flies | 121 | 97,647 |
| Foxes | 510 | 486,030 |
| Moths | 200 | 105,200 |
| Other insects | 86 | 146,114 |
| Other mammals | 459 | 111,996 |
| Rats and drains | 190 | 101,460 |
| Rats and mice | 145 | 1,506,695 |
| Squirrels | 158 | 145,360 |
| Wasps | 59 | 567,108 |
| Wildlife management | 225 | 15,075 |
| Consultancy | 407 | 15,059 |
| TOTAL | | £8,828,457 |

Technical audits

Passing BS EN16636 audit is now part of servicing criteria
Over **40,000** miles travelled to support members

| | | | |
|-----------------------------------|------------------------------------|--------------------------------|---|
| AUDITS TAKEN 270 | AUDITS PASSED 267 | PASS RATE 99% | MEMBERS BS EN16636 CERTIFIED 26% |
|-----------------------------------|------------------------------------|--------------------------------|---|



Make sure you update your new BPCA profile with a logo and brief description of your company to attract enquiries!

bpc.org.uk/member-area

BPCA

PPC LIVE

2,280 CPD POINTS CLAIMED!

8.5/10 ✓
PPC Live 2018 as rated by visitors and exhibitors:

100% Exhibitors would recommend PPC Live to customers

128 ✓
Average number of visitors per stand

99% RATED GOOD / EXCELLENT
Quality of indoor seminars

"THE VERY BEST EVENT I HAVE ATTENDED SO FAR IN MY 35 YEARS IN THE PEST CONTROL INDUSTRY. WELL DONE BPCA."
NIGEL, BRISTOL COUNCIL



Come see us at **PestEx**

The Next **EVOLution** of Bait Stations



ONE KEY, ENDLESS SOLUTIONS

What does Tier 1 mean?

In order to receive this distinction from the U.S. Environmental Protection Agency (EPA), a bait station must pass EPA-established protocols that demonstrate tamper-resistance to both children and dogs, as well as possess performance features for weather resistance.



What are the tamper-resistance requirements for children?

Testing protocol requires a testing panel comprised of a minimum of 50 children aged 42 to 51 months being unable to gain access to any station.

What are the tamper-resistance requirements for dogs?

A minimum of 12, young and healthy dogs weighing at least 20kg, are provided unrestricted access to a bait station for at least 2 hours. A station will only pass if all 12 dogs are successfully kept from accessing the bait.



THE WORLD LEADER IN RODENT CONTROL TECHNOLOGY®

www.belllabs.com | emea@belllabs.com