

PCN

PEST CONTROL NEWS®

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ISSUE **115**

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Bite Size...

Fleas

It's been a busy summer for insect bites, with the National Health Service (NHS) reporting a spike in calls, likely due to the now famous heatwave of summer 2018.

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Extended deadline for stoat traps

The Government is planning to allow a further year for the replacement of stoat traps, following fierce lobbying by the National Gamekeepers' Organisation (NGO) and other countryside bodies.

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The news emerged in a notification made by Defra to the European Commission, which oversees Member States' implementation of the Agreement on Humane Trapping Standards (AIHTS).

The notification reveals that in line with a Government public consultation earlier this year, recently approved stoat traps are to be added to the Spring Traps Approvals Order as soon as the Parliamentary timetable

allows but an additional measure removing the use of existing traps for catching stoats is now to be delayed by a year until 1 January 2020.

Defra explained to the European Commission, "We have agreed with stakeholders to delay this removal (as permitted under the Agreement) until 1 January 2020 to give the sector sufficient time to manufacture, supply and deploy new compliant stoat traps."

Welcoming the news, a spokesman for the NGO said, "We have long urged politicians and officials that more time would be required to test, approve, make and market new AIHTS-compliant stoat traps in the large quantities required by gamekeepers and other trappers. This extra year is a very welcome change following our robust response to the Government's public consultation earlier this year."

In that response in May, the NGO told Defra, "If the proposals go ahead unaltered, we will arrive on 1 January 2019 without sufficient practical alternative traps in place

and only two possible outcomes. Either most trapping will have to stop, which would be disastrous in terms of the rural economy and seriously damaging to conservation, both of which the Government is pledged to support. Or, there would be continued use of non-compliant traps, very probably leading to widespread prosecutions of well-meaning individuals who had been left with no legitimate way to continue their livelihoods. Neither scenario is remotely acceptable."

The proposed extension of the deadline till 1 January 2020 will allow for more new trap designs to be tested for AIHTS compliance and for approved new traps to be made, sold, weathered in and deployed in the countryside.

"2020 is not that far away and replacing all non-compliant stoat traps by then will still be tight," said the NGO, "But this extra time heads off the chaos we predicted, and the Government is to be congratulated on hearing the views of rural stakeholders and responding to them."

www.nationalgamekeepers.org.uk

Chartered Institute of
Environmental Health



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5 hours
CPD



CIEH Pest Control Conference: Safeguarding Public Health, will bring together pest control experts to discuss **current issues, good practice, and the risks & challenges** for pest control going forward.

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- Evolving resistance to pesticides
- Remote monitoring in pest control
- Arthropod-borne diseases in housing
- Impact of food technology, innovation & consumer trends on pest management

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RAMPS updated

Ramps UK launch the updated 2018 RAMPS UK Code of Good Practice and new label tags for Phostoxin® and Talunex®.

Label changes in the conditions relating to the use of both Phostoxin® and Talunex® for the non-agricultural control of brown rats resulted in the UK marketing companies putting a temporary suspension on the use of both products for rodent control until a clear and workable process could be agreed by all UK stakeholders.

Additional label requirements for the non-agricultural control of brown rats, moles and rabbits regarding risk areas and gas level monitoring have also been introduced which required clear guidance for operators and trainers.

The updated 2018 version of the RAMPS UK Code of Good Practice has been produced reflecting these changes and give clear additional guidance on all aspects of agricultural and non-agricultural control of brown rats, moles and rabbits.

Key changes to the code are as follows: –

- Page 4 RAMPS Code for Users – Identification of the Fumigation area and Risk area.
- Page 8 & 9 Appendix 3 Gas Level Monitoring – Gives guidance on the monitoring of phosphine gas around the risk area and when granting clearance on conclusion of the treatment.
- Page 10 Appendix 4 Post Treatment Cleaning of Applicators – Gives additional guidance on the cleaning and transport of applicators.

The RAMPS UK Code of Good Practice should be used in conjunction with the new tag labels that combine the agricultural and non-agricultural use of aluminium phosphide for the control of brown rats, moles and rabbits.

As a result of these amendments the suspension of brown rat control has now been lifted.

The 2018 version of the RAMPS UK Code of Good Practice is available on:

www.ramps-uk.org



Free information

Free information materials support CPD and best practice rodent control.

A new set of information materials supporting effective and responsible rodenticide use has been published by UK Rodenticide Stewardship and is available free of charge to all users.

Topics are: Exposure of wildlife to rodenticides; Direct bait application in burrows; Environmental risk assessments; and Changes to classifications and pack sizes. Each one includes detailed notes and some offer suggested additional reading.

The modules can be downloaded from bit.ly/2AM8CG2. They have been compiled by Campaign for Responsible Rodenticide Use UK experts, co-ordinated through CRRU work groups. More are in the pipeline, according to the CRRU Training & Certification work group leader Dr Matthew Davies.

“For the time being, participation in continuous professional development (CPD) is not a condition for proof of competence to purchase stewardship-label rodenticides,” he explains. “Even so, CPD is strongly advised and supported by CRRU UK.

“In addition to DIY use by committed pest controllers, farmers and gamekeepers, the modules can, as one example, be used to support CPD by registered trainers with relevant stewardship-certification organisations including BASIS, City & Guilds and LANTRA.

“CRRU will monitor uptake of CPD materials as an indicator of rodenticide users’ appetites for pursuing best possible practice,” Dr Davies adds.

“This information will be included in rodenticide stewardship’s reporting to the UK Government panel that oversees its operation.”

www.thinkwildlife.org



European Union Exit

Working closely with the Department for Environment, Food and Rural Affairs (DEFRA) and the Environment Agency (EA), HSE has an important role to play in the UK’s chemicals regulatory process.

The UK is strongly committed to the effective and safe management of chemicals and they have confirmed that will not change when we leave the EU.

The HSE have released a notice that is intended to provide information regarding developments in the EU withdrawal negotiations for businesses affected by chemicals regulatory processes. It explains the terms of the political agreement reached between the negotiators of the United Kingdom and the European Union in March 2018. The terms of that agreement are not yet legally binding, and remain subject to signature and ratification/conclusion between the parties.

For the full notice from the HSE visit the EU Exit webpage linked below, for an update to chemical businesses (5 July 2018) on the implementation period and the UK’s aims for its future partnership with the EU.

https://webcommunities.hse.gov.uk/connect.ti/eu.exit/view?-objectId=56115&exp=e1&utm_source=govdelivery&utm_medium=ebulletin&utm_campaign=eu-exit-5-jul&utm_content=text-link

Fleas

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It's been a busy summer for insect bites, with the National Health Service (NHS) reporting a spike in calls, likely due to the now famous 2018 summer heatwave.

Calls to the NHS helpline 111 regarding insect bites were almost double the rate than that of a more typical summer.

Many of the calls were thought to be due to biting flies like horseflies of the family Tabanidae, blackflies family Simuliidae, mosquitoes of the family Culicidae and biting midges of the family Ceratopogonidae.

With an exciting Football World Cup still relatively fresh in the memory, a recent study showed that of more than 1,800 football supporters injured in one season 28 suffered insect bites or stings.

As we move on from the summer months the next most important biting insect for the British public will become the nuisance that is the cat flea *Ctenocephalides felis*.

Thirteen years of data from a leading supplier of insect identification services shows that the number of cat flea samples received peaks dramatically from August, through September and October, so it is perfect timing for a recap on flea biology and control.

FLEA BIOLOGY

Life cycle

The flea life cycle is one of complete metamorphosis, progressing from egg – larva – pupa – adult.

This life cycle can be completed in good conditions (warm temperature, presence of a suitable host) in approximately one month, using the cat flea *Ctenocephalides felis* as a guide.

The pupal stage is significant because fleas can survive, waiting, for several months in the absence of a host and in cool conditions before emerging *en masse* when someone / something enters the undisturbed area again. This explains the ‘mass attack’ sometimes experienced when entering vacant properties.

Control of fleas in vacant properties can be challenging with typical water-based insecticides. This is likely because a large portion of the flea population is still in the pupal stage which is encased within a silk outer layer. What does silk do? It repels water. Anecdotally, oil-based insecticides can be quite effective when used for flea control in vacant premises, possibly penetrating the silken layer.

Ever wondered how long fleas can live for? The record is held by starved fleas of wild rodents in Russia, which are recorded as having lived for up to 369 days (over a year!) in cool conditions. Cat fleas surviving for 2-4 months is a more normal situation e.g. in warm conditions and regular opportunities to take a blood meal from a suitable host.

What do fleas eat?

Blood of course. The adults are bloodsucking ectoparasites, feasting on host blood via piercing and sucking mouthparts. So rather than saying ‘I’ve been bitten’ we should technically say ‘I’ve been pierced and sucked’ but as one sounds politer than the other it becomes a matter of preference.

This is where the fleas Order ‘Siphonaptera’ earn their name – ‘siphon’ for siphoning off blood and ‘a-ptera’ as in ‘without wings’ (Ptera means ‘wing’ and ‘a’ means without – *Tech ed.*).

Well that’s the adult diet covered but remember they undergo complete metamorphosis with an active and feeding larval stage. What exactly do flea larvae eat then? The answer is that they consume miscellaneous organic debris such as particles of food and faeces. The most important part of their diet is part-digested blood excreted by adult fleas. Can you see why vacuuming and cleanliness can be an important part of flea management? Removal of the larval food source can be beneficial.

While still discussing the diet of fleas, here is a quick quiz question. Which flea species is the most common on domestic dogs in the UK?

- a) Dog flea *Ctenocephalides canis*
- b) Cat flea *Ctenocephalides felis*

The answer, perhaps surprisingly is that the *cat flea* is more commonly associated with domestic dogs in the UK than the dog flea. In fact, the cat flea breeds perfectly well on dog blood and is not host-specific to the cat.

Note that cat fleas cannot reproduce in a practical setting when feeding on human blood – they can just maintain themselves and that is all. The cat flea is without a doubt the flea found most commonly associated with domestic cats in the UK. Should then the cat flea be renamed to ‘domestic companion animal flea’? Maybe not, as it doesn’t exactly trip off the tongue.

Vacuuming

One point on vacuuming though. What has the impact of modern bag-less vacuum cleaners had on prevalence of fleas and their activity in domestic homes? Some of the larger-capacity reservoirs are quite loose-fitting and it is easy to understand how fleas might escape from vacuum cleaners and move into other previously flea-free rooms as the appliance is moved around. Perhaps the larger capacity bag-less vacuum cleaners are not disposed of as frequently and securely as the more traditional bag cleaners? The loose contents, tipped into the kitchen waste bin, rather than a small old-style bag being tied up and disposed of in an outdoor bin.

This is not to say that vacuuming is a bad idea in flea management of course. One American study shows that insecticide deposits remain tightly bound to carpet fibres even after vacuuming. Other studies show vacuuming removes 90% of flea eggs, 50% of larvae and up to 95% of adult fleas – an underrated method.

Remember to use a HEPA filter vacuum cleaner to prevent the re-circulation of insect fragments which may cause allergic asthma.

A strategy for flea control

The following strategy for flea control is inspired by Bayer guidance. Their official strategy for flea control leaflet can be found here:

<https://www.environmentalscience.bayer.co.uk/-/media/PRFUnitedKingdom/Marketing%20material/Bayer%20Flea%20Control%20Guide.ashx?la=en-GB>



Procedure for identifying and control

1. Survey

The purpose of a survey is to identify the focus of flea activity. Identifying the flea species is a crucial step – this may give information about whether there is a rodent, bird or other animal host or even nesting that can be removed because not all flea problems will be related to cats and dogs. Flea monitors capture adult fleas and the sticky pads can then be submitted to an entomologist for reliable identification. Where host animals are present, ask the occupier which areas are frequented by their pet, these are likely seats of flea activity.



2. Pre-Treatment Preparation

Before treatment ensure:

- Vacuum the premises, paying attention to floors and upholstered furniture. The purpose of this is to remove animal hair, organic debris and eggs, larvae, pupae and adult fleas. An added benefit of vacuuming is that the vibrations can trigger adults to emerge from their dormant pupal stage. Of course, this is when the adult fleas begin to contact insecticide deposits. Steam cleaning may be necessary as an additional measure in particularly dirty or challenging conditions.
- Remember that vacuuming efforts should be focussed under furniture, chairs, sofa cushions, cracks and crevices in floors and along walls (wall-floor junctions) as these are areas typically frequented by host animals like cats and dogs. Take care to dispose of the contents of the vacuum cleaner securely and in an outside waste bin to minimise the risk of transferring fleas throughout the property.
- Ensure access to the floor, so the whole floor area can be treated, by removing items that would otherwise cause obstruction.
- It is recommended that tile and concrete floors are swept and washed or vacuumed.
- Dispose of or wash (in hot soapy water) pet bedding to remove fleas. Nests of birds or other animal nesting material, if shown to be a source of flea activity, should be removed (subject to any statutory protection of the wildlife involved).
- The pet or animal owner needs to play their part and they should be advised to treat their animal with a relevant flea control product. This provides the greatest chance of total control as both the residence and host have been appropriately treated.

3. Treatment

Treatments should consider:

- Interior: Floor areas should be thoroughly sprayed with a high-quality residual insecticide, according to label directions. Insecticidal powder, fog / mist, aerosol or smoke treatments may also be useful in conjunction with a residual treatment.

Insecticide residues should be left undisturbed for as long as possible to ensure maximum residual activity. The key point regarding insecticide use is to follow product label directions.

Raising the bar



The National Pest Technicians Association (NPTA) has been taking significant steps forward in its development and for the support that it can offer to its members. First formed in the early 1990's in response to Local Authority membership not being permitted (at the time) by the British Pest Control Association (BPCA) it has now grown well beyond what its creators first envisaged and now has Nationwide coverage including both Northern Ireland and the Irish Republic. The NPTA is unique in its approach about its role as a trade organisation in that it is run by pest controllers for pest controllers.

The NPTA Management board is made up of 8 volunteer part time members who give up their time readily and work tirelessly for the benefit of its members and the industry at large. In fact, some former board members who are now retired from the board still lend a hand when required, demonstrating their lifetime commitment to our industry. These board members have too many years' experience to count within the pest sector and have a wide range of knowledge and expertise. Within the last few years the NPTA has moved from its location in Kinoulton, Nottinghamshire to new offices in Eastwood. With the recent appointment of a new technical manager (John Hope) the NPTA has now increased the number of full time staff employed by the organisation, demonstrating its commitment to ongoing expansion and support for its membership. The office is run by the extremely experienced Julie Gillies who has been employed by the NPTA almost since its inception and manages two full time administrators (Donna and Maxine) who deal with an ever-growing number of calls from NPTA members and the general public.

John is Environmental Health qualified and has a broad understanding of public health, health and safety and food safety and has the added benefit of 25 years practical experience in the pest industry. With the aim of improving the service it offers to its membership, John wants to consult with members and determine what they want from the association. His vision is to create a more professional and technically competent pest control industry. We are currently in trying times as an industry, with increased regulation; stricter controls on the use of anticoagulant rodenticides and changes afoot for insecticides and as such, need to work together to stay ahead of the game.

The organisation continues to work with many influential bodies in order that it can fully represent its members. Amongst others, these include the CIEH (Chartered Institute of

Environmental Health); NPAP (National Pest Advisory Panel); PMA (Pest Management Alliance); CRRU (Campaign for Responsible Rodenticide Use); BRC (British Retail Consortium) and BPCA (British Pest Control Association).

In addition to the services already offered to its members the NPTA aims to deliver the following:

- Problem site support
- Fast and efficient technical support
- Field biologist inspections for those companies who want to tender for BRC and large supermarket supply manufacturers. At present, many smaller pest control companies who offer a great service to their customers, are prevented from tendering for such work as they cannot afford to employ full time field biologists. The NPTA will endeavor to provide this service to its members at a discounted rate

The NPTA is also updating the paperwork and documentation that can be offered to its membership. This will result in a Resource Centre area of the website, available only to members where documents can be downloaded. This will include health & safety documentation; treatment paperwork; customer information booklets as well as others. This will hopefully provide a valuable resource to small businesses and those setting up for the first time.

The NPTA has always aimed to deliver the more niche type training courses and aims to increase the Basis Prompt accredited training courses it offers. These will be held Nationally, but at regional level to increase the knowledge and competence of its membership. However, the NPTA recognises that the summer months are a particularly busy time for pest controllers and therefore plans to run most of these courses over the cooler and quieter winter months.

Training courses are yet to be decided on as member consultation is key here to help identify

where the training needs are. However, they intend to offer pest specific training; pest insect ID training sessions; health & safety and risk assessment training and food safety awareness.

The NPTA continue to run PestTech, considered by many to be the 'premier pest control exhibition' in the UK. PestTech caters for every sector of the industry with exhibitors covering every facet connected with vertebrate and invertebrate management, this exhibition is essential for all those involved within the industry or on its periphery.

The exhibition has come a long way since its inception over 20 years ago. Although for many years it was held at the National Motorcycle Museum, it has now outgrown this venue and will now be held in Milton Keynes at the Arena MK.

Exhibitors are fast subscribing to the event and this year promises to be one of the pest ever (pun intended) events ever held. In holding with its tradition of providing interactive displays, this year's event will be packed with not to be missed interesting and unmissable practical demonstrations as well as informative seminars and talks.

The NPTA also has an accredited membership scheme which it is keen to encourage more of its members to take up. There are many added advantages to this membership which requires the member to be audited at a set frequency and means that these members can be recommended without reservation.

In conclusion the NPTA continues to go from strength to strength and is well set for the future and to face the many challenges thrown at our industry by external influences.

For more information or to discuss any of the points raised in this article, please contact the NPTA on 01773 717716 or office@npta.org.uk

PestWest do a TOP job at St John's market



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The much-loved market closed its doors for a £2 million refurbishment. Stripped of its 1970s décor the market was turned in to a bright, modern establishment to make it a more welcoming place to shop.



The grand refurbishment followed a change in management, which saw Liverpool City Council take back control and maintenance of the Liverpool markets.

The change presented an opportunity for the council to upgrade the old and tired looking markets and refresh its look, to a much cleaner and livelier place to meet the needs and expectations of today's shoppers.

The makeover included the need for a better pest management system, more specifically, the council required more efficient flying insect control units.

Liverpool City Council reached out to Ian Parry, Area Sales Manager of Killgerm, for his advice and expertise in flying insect control.

Ian said, "We have a great relationship with Liverpool City Council, and having worked with them in pest management before, it was great to be invited to help them with their refurbishment and present the best possible solution for them. In this case, I thought the PestWest On Top Pro and Sunburst was the best answer."

Thirty-two fly control units were installed in total, made up of ten Sunburst white units, twenty On Top Pro white units and two Nemesis Quattro IP24 units.

Steve Abrams, Business and Pest Control Manager for the Liverpool City Council said, "We have worked with Killgerm and Ian for years. It felt only right that we asked them to advise us on fly control. The units we chose are very effective. Not only do they look stylish and subtle, but they do the job, which is the main thing."

It seems like Steve is not the only one who is impressed. Market stall holders are also pleased with the result. Mauro, the owner of Italian restaurant, Case Buone, said, "The On Top Pro is working great. There has been a big difference since the units have been put in place."

Shirley from Kavannah's Café also agreed, "For what we do (catering service) it's much better than the wall units. The On Top Pro is very discreet, which is what you want in this kind of working environment. It is fabulous!"

Laura, who works in Jack's Coffee Shop added, "The units are very good. They are doing the job well. They do help a lot considering we are working with food."

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Killgerm's technical team were recently asked to provide an update on public health pest control for the Edinburgh City Council pest control team.

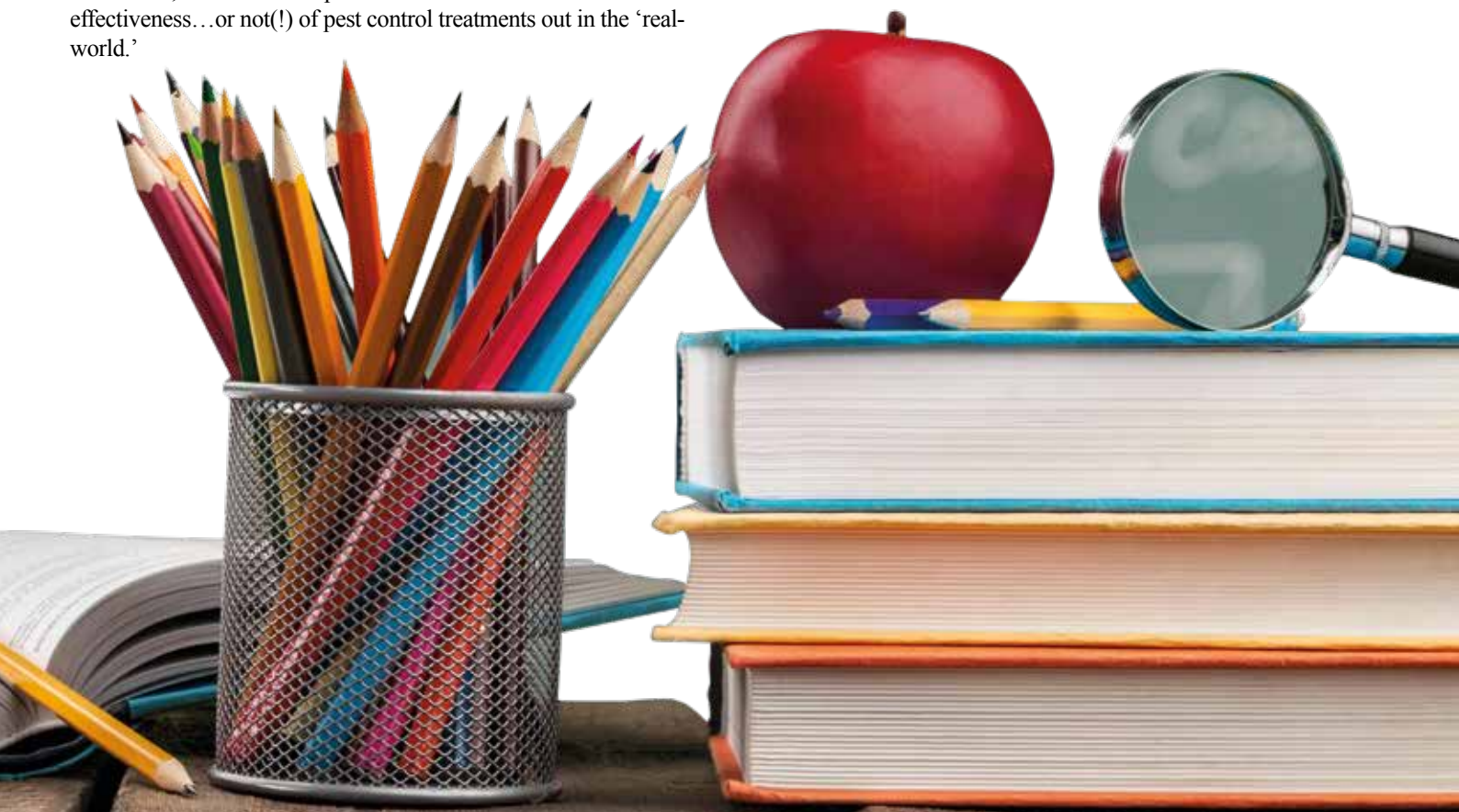
The pest control unit recognises that refreshing their knowledge of pest biology and behaviour, as well as understanding the latest changes to legislation and innovations in treatment methods, is vitally important when it comes to running an effective, safe and efficient pest control service.

Continuing professional development is so important in the pest control industry today.

The team were very enthusiastic and kept the trainer busy with some very interesting, well thought out and challenging questions.

As trainers, we value the input and the anecdotal feedback on the effectiveness...or not(!) of pest control treatments out in the 'real-world.'

Of the day, pest control officer, Jim Byrne, commented, "A fantastic day was had by one and all, given by Robin Moss and Graham Bingham. A wealth of knowledge and experience was presented to our team by experts in the pest control industry. This has given our technicians the information and tools required to tackle the challenges ahead in this ever-changing industry. The responsibilities to the environment are in our hands. We are now better prepared to serve and deliver a professional service to the people of Edinburgh."



British Retail Consortium Version 8

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With Version 8 of BRC hitting us, we look a little at what's new and how to conform. Essentially, not too much is changing about pest management, but this will hopefully give some insight into how we can perform better by satisfying the BRC auditor. So, the timeline is as follows:



We are reliably informed that any sites due their audit prior to February 2019 will be audited under the V7 standard. So, this gives us a little time to ensure all areas are up to speed.

Before getting into the Pest Management section, the audit protocol is going to change. Instead of one huge audit, it may be split over several visits at different times of year. Audited sections will be based on risk. Reading between the lines and the recent BRC online seminar discussion, this is aimed at preventing sites 'prepping for audits'.

The Version 8 is encouraging progression from the previous Version 7. Here is a new point -

'1.1.2 The site's senior management shall have a documented strategic plan for the development and continuing improvement of food safety culture. This shall include:

- defined activities involving all sections of the company
- an action plan indicating how the activities will be undertaken and intended timescales
- review of the effectiveness of completed activities'

On notes for this section, 'auditors will not be attempting to audit the culture of the site but will be looking at how sites have implemented the above points. Effectiveness will be assessed only on the sites 2nd Issue 8 audit'.

This may impact on pest management with pest control as a significant part of the food safety culture on sites. Pest awareness may be part of this, encouraging development and awareness of the potential gravity a pest situation could carry on site and consequentially the audit.

3.5.3.1 V8 brings in risk-based assessment of supplied services, therefore the pest controller or servicing company shall be approved based on compliance and risk. It would be up to the site to determine parameters on this and assess as they see appropriate.

No massive changes have been found in the V8 for pest control, apart from nearly all previous use of 'pest control' has been replaced by 'pest management'. However, there are two new additions, firstly a reference to legislation. 'Pest management programmes shall comply with applicable legislation'.

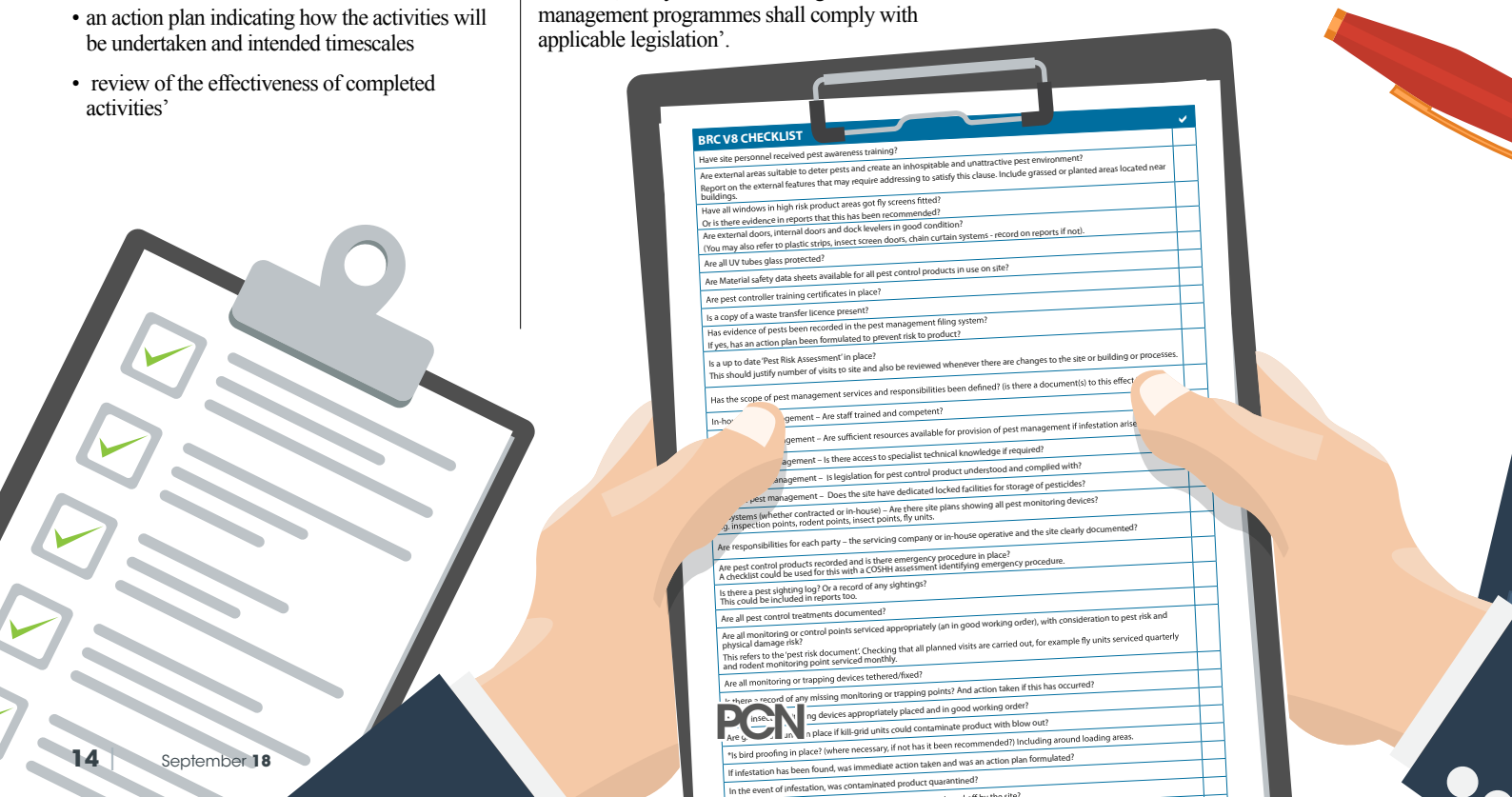
So, this could include following the CRRU code of practice and conducting an environmental risk assessment.

Although no specifics are mentioned, as the pest controller, we should all be aware of the relevant legislation related to our profession. Basically, follow the best practice guides, approved codes of conduct and all COSHH Regulations, all of which should be covered in normal operation.

For the pest risk assessment, there is a new addition in section 4.12.2. We must now review the pest risk assessment when there has been a significant pest issue, if we haven't already reviewed it!

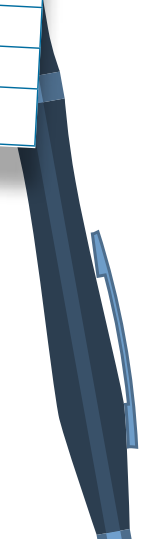
Also section 4.14.7. This relates to bird proofing. 'The site shall have adequate measures in place to prevent birds from entering buildings or roosting above loading or unloading areas.'

This could be the push that some sites need to action recommendations from the pest controller.



BRC V8 CHECKLIST

Have site personnel received pest awareness training?	<input checked="" type="checkbox"/>
Are external areas suitable to deter pests and create an inhospitable and unattractive pest environment? Report on the external features that may require addressing to satisfy this clause. Include grassed or planted areas located near buildings.	<input type="checkbox"/>
Have all windows in high risk product areas got fly screens fitted? Or is there evidence in reports that this has been recommended?	<input type="checkbox"/>
Are external doors, internal doors and dock levellers in good condition? (You may also refer to plastic strips, insect screen doors, chain curtain systems - record on reports if not).	<input type="checkbox"/>
Are all UV tubes glass protected?	<input type="checkbox"/>
Are Material Safety Data Sheets available for all pest control products in use on site?	<input type="checkbox"/>
Are pest controller training certificates in place?	<input type="checkbox"/>
Is a copy of a waste transfer licence present?	<input type="checkbox"/>
Has evidence of pests been recorded in the pest management filing system? If yes, has an action plan been formulated to prevent risk to product?	<input type="checkbox"/>
Is an up-to-date 'Pest Risk Assessment' in place? This should justify number of visits to site and also be reviewed whenever there are changes to the site or building or processes.	<input type="checkbox"/>
Has the scope of pest management services and responsibilities been defined? (is there a document(s) to this effect in place).	<input type="checkbox"/>
In-house pest management – are staff trained and competent?	<input type="checkbox"/>
In-house pest management – are sufficient resources available for provision of pest management if infestation arises?	<input type="checkbox"/>
In-house pest management – is there access to specialist technical knowledge if required?	<input type="checkbox"/>
In-house pest management – is legislation for pest control product understood and complied with?	<input type="checkbox"/>
In-house pest management – does the site have dedicated locked facilities for storage of pesticides?	<input type="checkbox"/>
All systems (whether contracted or in-house) – are there site plans showing all pest monitoring devices? E.g. inspection points, rodent points, insect points, fly units.	<input type="checkbox"/>
Are responsibilities for each party – the servicing company or in-house operative and the site clearly documented?	<input type="checkbox"/>
Are pest control products recorded and is there emergency procedure in place? A checklist could be used for this with a COSHH assessment identifying emergency procedure.	<input type="checkbox"/>
Is there a pest sighting log? Or a record of any sightings? This could be included in reports too.	<input type="checkbox"/>
Are all pest control treatments documented?	<input type="checkbox"/>
Are all monitoring or control points serviced appropriately (and in good working order), with consideration to pest risk and physical damage risk? This refers to the 'pest risk document'. Checking that all planned visits are carried out, for example fly units serviced quarterly and rodent monitoring point serviced monthly.	<input type="checkbox"/>
Are all monitoring or trapping devices tethered/fixed?	<input type="checkbox"/>
Is there a record of any missing monitoring or trapping points? And action taken if this has occurred?	<input type="checkbox"/>
Are all insect monitoring devices appropriately placed and in good working order?	<input type="checkbox"/>
Are glue board units in place if kill-grid units could contaminate product with blow out?	<input type="checkbox"/>
Is bird proofing in place? (where necessary, if not has it been recommended?) Including around loading areas.	<input type="checkbox"/>
If infestation has been found, was immediate action taken and was an action plan formulated?	<input type="checkbox"/>
In the event of infestation, was contaminated product quarantined?	<input type="checkbox"/>
Have all recommendations from pest management been signed off by the site?	<input type="checkbox"/>
Is there trend analysis from trapping and monitoring devices present? (this should be carried out at least annually).	<input type="checkbox"/>





Know your enemy

The Black Rat

Rattus rattus

R*attus rattus*, also known as the black rat / ship rat / roof rat and an important historical carrier of plague, is so rare in the UK that it is threatened by extinction and if you live-trap one it's illegal to release it.

So, why bother talking about it? Although numbers are very low in the UK, you could still encounter it if you work in port areas. Furthermore, with the amount of trade and shipments from overseas, it is certainly possible for *Rattus rattus* to be found inland via the movement of goods. Now you wouldn't want to be caught out by this species would you...so let's read on about what was once the most abundant rat species in the UK.

In case you are wondering why you cannot release live-trapped black rats back into the wild, it's because of the 'non-indigenous' classification under Schedule 9 of the Wildlife and Countryside Act 1981. Despite this rarity, look at the distribution map of *Rattus rattus* sightings from 1984 to 2016 supplied by the National Biodiversity Network, showing mainly port and coastal areas, but also some inland records. Can you find your own area on the map? If you're on the map, perhaps it's time to keep more of an eye out for this species.



Noting some of the records of inland activity, some of these areas are linked to ports by canals or with container terminals. Most mainland records refer to small, transient groups accidentally introduced in merchandise. It is suspected that there may be *R. rattus* along both banks of the Thames, and there is a long-standing population at Tilbury.

History

Rattus rattus originated from South East Asia, India and China, with remains found in the excavations of an old well at York dating back to the 4th century BC. Findings are also recorded at a dig in the City of London, dating remains back to the 3rd century.

This pest rodent has therefore been with us in this country the longest. It was originally thought to have been brought back with the Crusaders. Without doubt, vessels carrying cargoes of cotton, corn etc. would have provided ideal travelling harbourages along with a ready supply of food.

Most vessels in those days carried pigs, cows, chickens etc. for food on the voyage.

Numbers have declined significantly since the introduction of *R. norvegicus* in the early 18th century pushed *R. rattus* to the margins.

Identification

Colour: Black to brown or grey with lighter underside. Be careful with using colour as a reliable identification feature. In London in 1941-1943, 56% were black, 24% white-bellied, 18% grey-bellied and 2% intermediate.

Ears: Large

Eyes: Large and prominent.

Tail: Longer than head and body

Note: the darker coat colour, large ears, large eyes and long tail are contrasting identification features vs the Norway rat *Rattus norvegicus*.

Weight (adult): 80 - 300 g

Life cycle figures

Litters per year: 4 - 6

Litter size: 4 - 8

Maturity: 2 - 3 months

Average life span: 12 months

Distinctive signs

Droppings are different in appearance to *R. norvegicus* in that they are thinner, slightly curved / tapered, and often with rounded ends, averaging 9mm in length.

Characteristic 'discontinuous loop smears' are observed around beams when *R. rattus* are active. The loop smears produced by *R. rattus* are broken in appearance due to the agility of the species. *R. norvegicus* loop smears around beams are continuous due to their lower level of agility.

Habits relevant to control

R. rattus must drink water daily unless the food source is extremely moist. Liquid baits can be an important part of *R. rattus* management. They are considered omnivorous but if available, fruit and vegetables are preferred so they are more of a '5-a-day' rat vs *R. norvegicus*. If cereal-based baits are proving ineffective, there are contact rodenticides available for *R. rattus* control. Being a very good climber, it is usually found indoors and often found high up which has an impact on the extent of inspection required to determine levels of activity. It's habit of living only within buildings in the UK is thought to have contributed to its decline, making it more vulnerable to control measures than *R. norvegicus*. Decline has also been associated with demolition of dockside seed or flour mills. As it does not live out of doors in towns, it can be found favouring buildings with cavity walls, wall panelling and false ceilings. Crucially, it does not exhibit the same neophobia as *R. norvegicus* and can sometimes enter traps on the first night of setting.



Know your friend

The Domestic Cat

Felis catus

We certainly are a nation of cat lovers and it has been said that images and videos of cats make up some of the most viewed content on the internet. Added to that, the RSPCA estimate there are 8 million pet cats in the UK. With fleas being an important topic in this issue, and becoming especially numerous in homes from August until the end of October, it makes sense to recap how to protect the domestic cat as a non-target species when controlling associated ectoparasites or rodents.

Changes to insecticide labels – ‘read the label’ to protect cats when applying insecticides

It is no secret that a famous wettable-powder insecticide is arguably the industry standard when it comes to residual spray treatments for flea control in the UK. Eagle-eyed readers or those who may have attended recent refresher training will know that a relatively new label change to a favoured product has important implications for flea control when domestic cats are present.

The relevant label text states ‘*Not for use in catteries or where cats are enclosed in a cage/carrier*’ and users should be reminded that this is a statutory condition relating to use i.e. a legal requirement. The familiar label phrase ‘exclude all animals and persons during application / treatment’ remains. A frequently asked question is ‘how long should people and animals keep away from the treated area?’ Treated premises can be re-occupied by children, pets and other animals once the sprayed surfaces are dry.

Anticoagulant rodenticide use, when domestic cats are present

After following the ‘risk hierarchy’ and making relevant assessments (e.g. Environmental Risk Assessment), if it is decided that second generation anticoagulants should be used to control pest rodents, make sure rodenticide LD50’s are also considered when cats are present. It also pays to think about anticoagulant resistance. If house mice *Mus domesticus* are the issue then current resistance guidelines tell users not to apply bromadiolone for mouse control due to evidence of resistance. An alternative active ingredient to bromadiolone is difenacoum which is also quite potent for mouse control. However, the LD50 (lethal dose) of difenacoum-based bait for cats is as low as 40g per kilogram of body weight. Below is a table of LD50s – it is noted that most of the listed rodenticides have a relatively high LD50 towards cats (their risk can be deemed to be lower) whilst being very potent for mouse control. Which active ingredient would you pick for efficient house mouse control, bearing in mind that they eat 20% of their body weight per day, whilst also minimising the risk to domestic cats?



Grams of bait to deliver acute LD50 to species of specified body weight		
	House mice (25g)	Cats (per Kg body weight)
Difenacoum 0.005%	0.4	40
Difethialone 0.005%	1.3	640
Brodifacoum 0.005%	0.2	500
Flocumafen 0.005%	0.3	200

Realistically, contamination of domestic cats with rodenticides is only likely via consumption of poisoned rodents (you’ve seen the cat food ads – cereal rodenticides are not top of the menu) but these are often only a ‘plaything’ rather than an actual food source for a well-fed and occasionally pampered domestic ‘moggie’. A 4kg cat would need to eat many poisoned rodents over time to ingest a dangerous amount of anticoagulant bait. Even though the risks are therefore low, it is a label requirement to search for and remove rodent bodies, the presence of domestic cats inspiring us to keep doing so and even increase the frequency of checking to a little more often.

Cats and public health

Interestingly the parasite *Toxoplasma gondii*, which is a health risk to the unborn child (via acquisition by pregnant women), the elderly or immunocompromised, is passed to humans via cat faeces. Research carried out by Dr Gai Murphy and colleagues at Salford University showed a 51% prevalence of *T. gondii* in the UK house mouse population. Of course, it is house mice that infect cats with *T. gondii* in the first place which is one of the reasons for control of this pest rodent.

Aston University and Killgerm Chemicals present prize-winning research

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PCN has run a series of new ‘science sense’ articles in recent issues, examining the latest research in scientific literature and providing a common-sense summary to readers. Themes have included insects found in association with ‘eco-roofs’, the carriage of antibiotic-resistant bacteria by pests and practical advice about protecting yourself against pest-borne salmonella infection.

Our aim continues, which is for key scientific information to be communicated exactly where it matters – to pest management professionals. Too often the bridge to practitioners isn’t made, but not anymore.



Continuing the theme from PCN issue 114, pest-borne infection features highly in this article. We managed to speak to Federica Boiocchi, a newly adorned prize-winning researcher, who is working on her PhD at Aston University in collaboration with Killgerm Chemicals Ltd.

Arthropods and disease in homes

“The title of my PhD research project is ‘Diversity and distribution of household arthropods and investigation of their associated bacterial community’, which is finding out what is living with you and what is living on them! So, it’s bugs on bugs to keep it simple,” Federica informed us.

When asked what the relevance might be when it comes to pest controllers interpreting future results, Federica was quick to point out the likely practical impacts, saying, “The study of arthropods in UK homes and knowledge of the bacteria that they carry and therefore the risks they present to public health are not well developed. We expect our study to give an informed picture of the insects and other arthropods present in UK homes and

it could even change pest control practices and priorities.”

Sampling arthropods in homes

With PCN intrigued as to how the collection of insects and arthropods from UK homes will proceed, Federica explained further, “We’ve already started a pilot study and it’s a ‘Citizen Science’ type sampling effort. This means we are relying on enthusiastic volunteers being recruited.

It’s a great way to do things, as we find enthusiastic collectors who aren’t afraid to ‘pooter’ a live insect as well as inspect crawling or flying insect monitors placed in their homes, especially if spiders are to be found!”

We await with eagerness the results of Federica’s studies which she plans to complete by mid-2020.

Prize-winning research

Federica was admirably modest when quizzed about her prize-winning research so her industrial supervisor, Dr Matthew Davies, Head of Technical Department at Killgerm Chemicals, stepped in to heap on the praise, “We’re delighted that Federica was successful in the poster presentation competition at the Early Career Microbiologist’s Forum Summer Conference which was held at the University of Birmingham in summer this year.

“The poster prize was awarded to Federica by The Institute of Microbiology and Infection, University of Birmingham. Myself and our project leader, Professor Anthony Hilton at Aston University, are really pleased that Federica is getting such recognition at an early stage in her work.

“Federica’s work was a continuation of my studies, in UK hospitals, during the initial Aston University and Killgerm Chemicals collaboration.

“She discovered that the bacteria I isolated from flying insects, sampled in hospitals, were multi-drug resistant, meaning significant levels of antibiotic resistance and enhanced risk to public health.”

Dr Davies continued to tell us about the strength of the competition, “Federica was presenting her work alongside 25 other entries. They represented institutions at Warwick, Belfast, Beirut, Valencia, Exeter, Birmingham, Ireland, Bristol, Liverpool, Huddersfield, London, Ohio (USA), Melbourne (Australia) and Virginia (USA). It’s pleasing to see Killgerm’s HQ, at humble Ossett, crop up on such a list. We are confident that Federica’s research with Aston University, in collaboration with Killgerm Chemicals, will continue to increase the understanding of the public health significance of arthropods and therefore inform future pest control practices.”

Headline facts

- Of a total of 68 bacterial isolates, taken from flying insects, sampled in UK hospitals, over 50% showed a resistant phenotype to at least one class of antibiotics.
- Some bacterial isolates, almost 20% of them, showed resistance to more than one class of antibiotics and were defined as ‘multi-drug resistant’.
- The results mean there could be an enhanced risk to public health from flying insects in UK hospitals.

Microbiological analysis of flying insects collected in the hospital environment and antibiotic resistance profiles of isolated bacterial strains

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Introduction and purpose

Insects are efficient vectors of pathogens. It has been shown that several insect species can spread pathogenic microorganisms in the hospital environment increasing the potential risk for nosocomial infections in hospital wards^{1,2}. This study investigated the culturable bacterial flora of flying insects collected in seven UK hospitals and assessed the antibiotic resistance profile of the bacterial isolates. A clearer understanding of the health risk connected to flying insects in hospitals and health care facilities will help inform infection control measures such as pest control.

Materials and Methods

Collection of flying insects from hospitals

Flying insects were collected from seven hospitals using ultra-violet (UV) light flytraps in the form of Electronic Fly Killers (EFK) and professional sticky traps across 18 months.

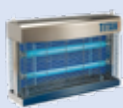


Figure 1. Electronic Fly killer (PestWest*)



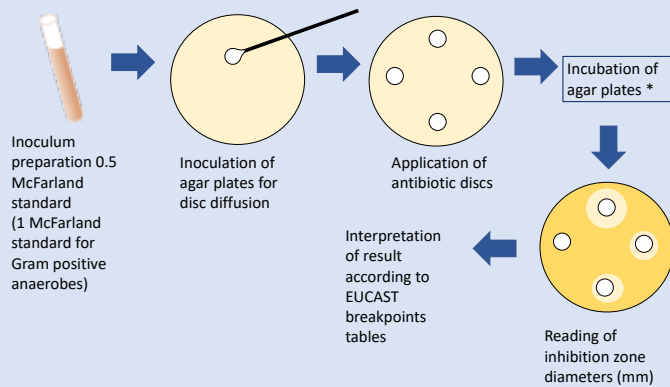
Figure 2. Professional sticky trap (PestWest*)

Microbiological analysis of flying insects collected from hospitals

Individual flying insects assigned the same identification and collected from the same flytrap were pooled into PBS and washed by vortexing for 30 seconds. These external washings were then serially diluted and inoculated onto CCFa+Tc, Nutrient Agar, Mannitol Salt Agar and VRGB agar. Flying insects were then macerated and the above process of dilution and inoculation repeated for the macerates. Bacterial colonies were identified by macroscopic morphology, oxidase and catalase tests API 20E test kits, API Staph test kits, rapid ID 32A API test kits and Bacillus-ID test kits.

Antibiotic susceptibility testing of bacterial isolates

The antibiotic susceptibility profile of bacterial isolates was assessed according to the Antimicrobial Susceptibility Testing (AST) disc diffusion method approved by the European Committee of Antimicrobial Susceptibility Testing (EUCAST). 68 bacterial isolates were tested against several Penicillin, Cephalosporins, Carbapenems, Fluoroquinolones, Aminoglycosides, Tetracyclines, Lincosamides, Macrolides, Glycopeptides and Chloramphenicol. A diagram of the procedure is shown below.



* Non-Fastidious microorganisms: Mueller-Hinton Agar, 16-20 h at 35°C, aerobic conditions
Fastidious microorganism: Mueller-Hinton agar supplemented with horse blood and β-NAD, 16-20 h at 35°C, 5% CO₂ atmosphere

Results

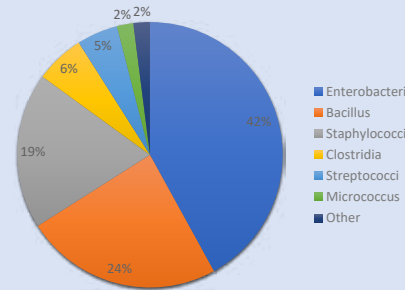


Figure 3. Bacterial groups isolated from flying insects sampled from UK hospitals.

Results showed that Enterobacteriaceae were the most abundant bacteria carried by hospital flying insects accounting for 42% of isolations. *Bacillus* spp. made up 24% and *Staphylococci* 19%. *Clostridia*, *Streptococci*, *Micrococcus* spp. and other species of bacteria accounted for 6%, 5%, 2% and 3% of isolations respectively (Figure 3).

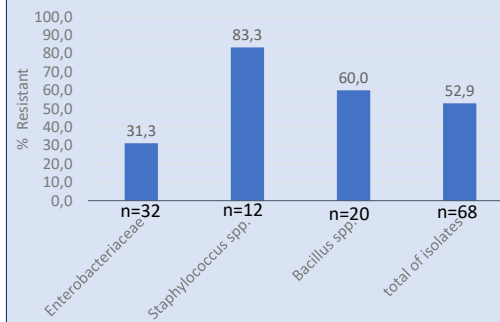


Figure 4. Percentage of bacterial isolates resistant to at least one class of antibiotics.

Class of Antibiotics	Percentage of resistant isolates		
	Enterobacteriaceae	Staphylococcus spp.	Bacillus spp.
Penicillin	25%	66.7%	/
Cephalosporins	3.1%	/	10%
Carbapenems	3.1%	/	/
Monobactams	3.1%	/	/
Tetracycline	/	33.3%	/
Lincosamides	/	50%	30%
Macrolides	/	8.3%	15%
Glycopeptides	/	/	15%
Aminoglycosides	/	/	10%

Table 1. Resistance towards different class of antibiotics of bacterial isolates. / = susceptibility or natural resistance of the bacterial group.

	Enterobacteriaceae (n=32)	Staphylococcus spp. (n=12)	Bacillus spp. (n=20)	Total of strains (n=68)
MDR	3.1 %	41.7 %	15 %	19.1 %

Table 2. Percentage of MDR strains.

Among the 68 bacterial strains tested, 52.9% showed a resistant phenotype to at least one class of antibiotics (Figure 4). Within Enterobacteriaceae, 10 strains showed resistance to at least one class of antibiotics, in particular to Penicillin. Among *Staphylococcus* spp., 10 strains were resistant, mainly to Penicillin G (66.7%) and Clindamycin (50%). Regarding *Bacillus* spp., 12 strains were resistant, especially to Clindamycin (30%) (Table 1). A single strain of *Enterobacter* sp. and of *Clostridium* sp., along with the only two strains of *Streptococcus* spp. isolated from hospitals flying insects and tested for antibiotic resistance, showed to be resistant to more than two classes of antibiotics. Bacterial isolates were assessed for Multi-Drug Resistance (MDR) and among the total of the strains tested 19.1% showed MDR (Table 2).

Discussion

Hospital flying insects carry several pathogenic bacteria resistant to at least one class of antibiotic. Therefore, they may play a significant role in the transport and transmission of resistant and MDR isolates in hospital wards increasing the risk of nosocomial infections and, moreover, they may be involved in the spread of resistant bacteria in the environment. The importance of pest control as part of infection control strategies in hospitals and healthcare facilities is not to be underestimated.

References

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- Máximo, H. J., Felizatti, H. L., Ceccato, M., Cintra-Socolowski, P. & Zeni Beretta, A. L. R. Ants as vectors of pathogenic microorganisms in a hospital in São Paulo county, Brazil. *BMC Res. Notes* 7, 554 (2014).

Decoding product labels: what do they really mean?



In a mini-series of articles, PCN looks to an industry advisor to ‘crack the code’ of product labels.

In this issue we ask about rodenticide label phrases and reach some common-sense answers.

Labels are fulfilling a legal provision of information, as they contain essential instruction. Under the Control of Substances Hazardous to Health (COSHH) Regulations 2002, EU Biocidal Product Regulations (BPR) and Control of Pesticides Regulations (COPR), we are required to read the label.

COSHH covers substances that are hazardous to health. Lead, asbestos and radioactive substances are covered by their own regulations. In relation to pest management, we should always have a COSHH assessment in place for the chemicals we are using. To create a COSHH assessment we need the details from the material safety data sheet (MSDS) and the product label. The label must also include safety information, by law, for potentially dangerous products.

If you don't follow the label, you could be prosecuted. A case in December 2017 saw a company and director prosecuted for unsafe storage of unauthorised biocidal products and phostoxin (aluminium phosphide). The company was fined £100,000 (plus £10,000 costs and victim surcharges of £170). The company Director was fined £1,000 plus victim surcharge of £115 and received a 6-month suspended sentence. One of the principle inspectors said that this could have been avoided if the manufacturer's instructions had been followed. Where do we find the instructions? ... On the label!

However, some product labels are a little unclear at times, so let's have a look at what some of the common phrases mean, taking rodenticide labels as an example. We will cover an insecticide label in the next issue of PCN.

READY-TO-USE:

No dilution needed.

TARGET PESTS:

These are the species that the product has been tested against and efficacy data has been obtained. If the species does not appear named on the label or is covered by a ‘catch all’ phrase, the product cannot be used for that target. For example, wood mice/ field mice (*Apodemus sylvaticus*) do not appear on rodenticide labels. Therefore, they are a non-target species when it comes to rodenticides and such products are not authorised for the use against *Apodemus sylvaticus*.

FOR THE PROTECTION OF PUBLIC HEALTH, STORED PRODUCTS AND MATERIALS:

According to this statement we should not use the product for anything else other than stated. There isn't really any other justified use, but it's an interesting statement nonetheless. Feeding it to our pet rat would not be following the label instructions. Regardless of the consequences this would not be in the interest of public health or protecting food sources or items.

AREAS OF USE:

There is a list of areas where the product can be used. Some are very specific, and some are much broader. The broader the areas are, the more confusion can arise. For example: -

IN AND AROUND BUILDINGS:

Can be used inside a building and outside a building. The European Commission definition includes – ‘the area around the building that needs to be treated in order to deal with the infestation of the building’. So, if there is rodent

activity in the garden of a house you can apply rodenticide in the garden (think compost heaps, burrows, garden shed) as long as rodent activity is linked to that in the associated house.

OPEN AREAS:

This could be used in an area such as a public park (with evidence of rodent activity in that area). This type of use would also come under specific labelling requirements and bait points should be appropriately labelled whilst in use. For example, if the park that we were treating had rat burrows, and bait was being applied into them, we would need to mark the area with labelling such as a warning sign.

PROFESSIONAL USE ONLY:

The user must hold certification to demonstrate appropriate training. Sellers will also request proof of this certification as all professional-use rodenticides now come under the UK rodenticide stewardship regime. Therefore, to purchase and use rodenticide of certain concentrations and active ingredients, you are required to have evidence of rodenticide training and competency.

DIRECTIONS FOR USE:

Ultimately one of the most important sections on labels. Often rodenticide labels will give specific instructions for use with brown rats, black rats and separately, house mice due to the different behaviors exhibited. The directions will be based on known feeding behaviors, tested in research trials.

INSPECT FREQUENTLY OVER FIRST 10-DAYS:

Often, many times; at short intervals. The 10-day part also relates directly to the predicted time taken for the lethal dose to have an effect, based on several ‘takes’ of a multi-feed rodenticide.

HAZARD SYMBOLS:

The most recent one we are seeing is the ‘exploding chest’ in a red diamond (part of the global harmonization of hazard symbols). It should be accompanied by a risk phrase, but the symbol itself could mean sensitising, mutagenic, carcinogenic, target organ toxicity or toxic to reproduction. The phrases we come across most are ‘may harm the unborn child.’ Or ‘may cause damage to organs (blood) through prolonged or repeated exposure.’



Health hazard/hazardous to the ozone layer: This one has replaced the old black cross in an orange box, so could also be used for ‘irritant’. Again, should be accompanied by a ‘risk phrase’.



Skull and cross bones: One of the oldest ones around, this is a hazard symbol. It can mean toxic and usually means poisonous.



Flammable: Another symbol you may see. The active ingredient is not usually flammable, but sometimes the carrying agent can be. Usually for aerosol products.



IN MOST CASES, ANTICOAGULANT BAIT SHOULD HAVE ACHIEVED CONTROL WITHIN 35 DAYS:

This also ties in with CRRU recommendations and a predicted time for control. The 35-day period should allow all hierarchical levels of a rat colony to have fed and received a lethal dose. So, dominant individuals will feed first, followed by sub-dominants. The final visit should be to remove any rodent bodies, and by day 35 – all should have taken a lethal dose and deceased. It’s not always the case, but that’s the theory and it’s a good reason to aim to use the product for 35 days. However, if there is still activity after this time you should consider why there is still activity, re-risk assess and update your environmental risk assessment. If you can justify the continuation of use of rodenticide externally (e.g. there are still active rodents present) and the use of it is still the best course of action (based on the environmental risk assessment), you can continue to use rodenticide.

RESISTANCE MANAGEMENT:

This is of increasing importance in rodent control. Some labels will advise that active substances (the biologically active chemical – the pesticide/bioicide) are alternated to avoid resistance.

INSTRUCTIONS FOR SAFE HANDLING AND USE:

Emergency procedures and sometimes special conditions of use can be found in this section. Also in this section you may see other instructions, for example, labelling- ‘When the product is being used in public areas, the areas treated must be marked during the treatment period and a notice explaining the risk of primary or secondary poisoning by the anticoagulant as well as indicating the first measures to be taken in case of poisoning must be made available alongside the baits, unless used in tamper-resistant bait boxes.

When tamper-resistant bait stations are used, they should be clearly marked to show that they contain rodenticides and that they should not be

disturbed’. Some newer rodenticide labels require a label to be in place on the outside of the tamper-resistant box. Labels are now available to help fulfil this requirement.

Another similar phrase is:
The dispenser must always be placed in a correctly labelled, tamper-resistant bait station.

STORAGE AND DISPOSAL:

Often very specific points with advice of what to do with dead rodents. Further contact details for large volume disposal can also be found here.

OTHER IMPORTANT INFORMATION:

Such as emergency contact details, authorisation number, batch number, marketing company and expiry date are all also on the label.

In a nutshell, **READ THE LABEL** every time you use the product. Hopefully this is a little clearer.

Customer Communications

A little information can go a long way

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We are all aware of how important it is to record everything, in terms of protecting ourselves, preventing criticism and avoiding possible legal penalties. Completing our paper trail for traceability should be second nature, but are we communicating with our customers in the best way? Are we getting our point across? Do they understand why you are doing what you are doing? Communication is a key skill, essential in the pest management industry as we will always remain primarily a face-to-face service provider.

This is advocated by the RSPH with specific sections within the Level 2 Pest Management suite of qualifications focused on communicating information. Included in Unit PM2.3: Health, Safety and Legal Aspects of Pest Management - Sections 3.2 and 4 are specifically about communication.

Another angle on customer communication has cropped up in the new BRC V8 specification released on 31st August 2018. A new section regarding site culture has been added. The link to pest control and specification conformance is not immediately obvious and not something that can easily be recorded by the pest controller. Pest Awareness training for staff at sites audited to BRC standard will go some way to helping.

The new addition of site culture and therefore education, may play a key part if the site has an infestation or a culture of ignoring problems due to pests. This goes together with pest sighting logs and understanding the consequences of having an infestation in a high-risk area. How many times have we heard from workers on site when asked about any pest sightings and get a nonchalant reply... 'oh yes we see them all the time!' and management know nothing of it. This is where site culture comes to the fore for pest control. An educative journey that says, 'no its not ok and we need to do something about it'. Information, education and understanding of pests at even a basic level is necessary to try to change a culture on site, borne from either dismissive management or a poor level of pest awareness in general.

Extract from RSPH Level 2 in Pest Management syllabus

3.2 - Communicating information to clients: need for clear communication and appropriate responses in difficult situations and with regard to health and safety, to include the importance of effective communication with ethnic minorities and speakers of other languages and awareness of cultural sensibilities; need to report client comments, complaints and suggestions to managers; need to advise clients of pest control measures taken, location of any baits laid and possible future visits to site; need to advise clients of remedial action required with regard to infestations; need to advise clients on housekeeping and maintenance required for prevention of re-infestation; importance of a professional approach to clients; need to suggest alternative remedies in event of objections to specific course of treatment.

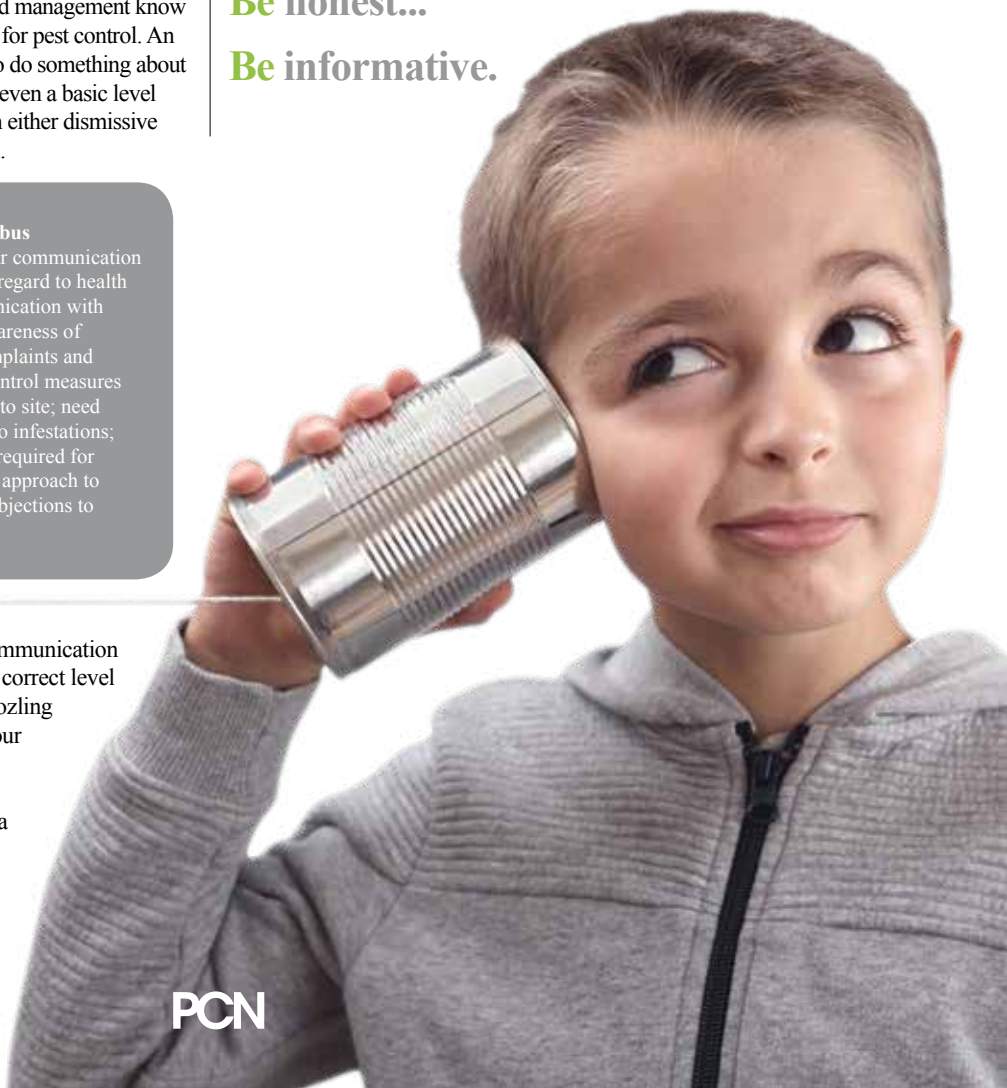
In the above short excerpt, many areas are covered. Communication must be clear – there is a fine line between gauging the correct level of information to communicate and completely bamboozling the customer, even though they may be impressed at your knowledge, they might not fully grasp it. Importantly, remembering that we are the pest controller with the knowledge and its part of our remit to communicate at a level of appropriate understanding to Joe public.

Also highlighted is that we must remain politically correct always. If there is a language barrier, then find a way around it. Is there another member of the family that can translate, or if in a work environment, a colleague or even a translator? Can you write it down for someone else to interpret? Could technology help, online translation or a translation app? All can help to transmit clear information and advice (although be wary of some translation software).

Also essential is the legal standpoint, as your customer may question your actions whilst you are performing within the law. Again, a clear informative message will help to (hopefully) satisfy the most challenging of customers. When legal aspects are involved, it is usually black and white and comes down to a customer potentially asking you to break the law. Imparting a little legal awareness may head off struggles later if asked to break the law. The fines alone could be enough information to make the customer think twice about requesting any 'below-board' actions.

Remember, there is never any shame in saying you don't know. Even more important, to say you don't know but can find out. You can always find out. In summary:

- Be clear...**
- Be concise...**
- Be honest...**
- Be informative.**



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- Ideal for cutting through turf, roots and other obstructions.
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KC89 TRAPPING COMB

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- Made from 6mm zinc plated steel.
- Suitable for squirrel, rat and feral cat cage traps.

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Bird Free is the ideal solution for deterring pigeons away from high structures and buildings without harming them. The ready-to-use dishes are low-profile and quick and easy to apply. Their discreet low-profile dishes contain the firm texture, which enables use on pitched roofs and angled surfaces.

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New Products

www.pestcontrolnews.com

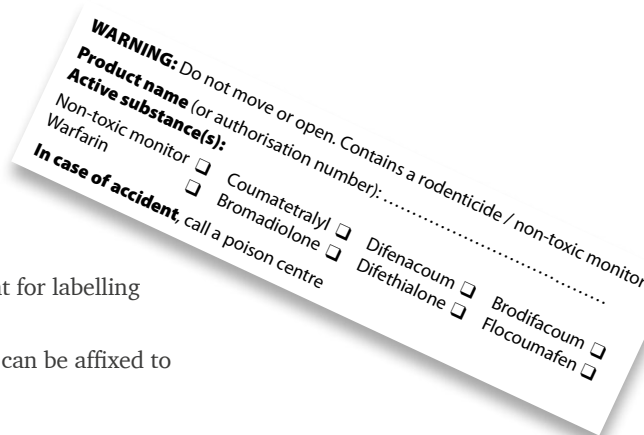
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BAIT STATION WARNING STICKER

- Some rodenticide labels now refer to a requirement for labelling bait stations with certain information.
- This sticker contains the required information and can be affixed to the outside of mouse and rat bait stations.
- Waterproof and resistant to UV-light.
- Can be written on with permanent marker pens or ballpoint pens.

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- Allows the easy filling of a wide range of dusting equipment.
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- Helps to reduce the exposure time to insecticidal powders.
- Reduces waste from spilt powder.
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Kit Maintenance

Gloria 5 litre pneumatic sprayers

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Do you need help with troubleshooting your Gloria 5 litre pneumatic sprayer? Are you unsure which part is being referred to? If so, have a look at the troubleshooting guide below and the superb colour photograph parts diagram – problem solved!

TROUBLESHOOTING GUIDE		
SYMPTOM	POSSIBLE CAUSE	REMEDY
Pump is difficult to operate, or does not appear to be creating pressure.	Piston 'O' ring (6) is dry or damaged.	Lubricate or replace piston 'O' ring.
Piston rises after pumping.	Footvalve (12) damaged or dirty.	Replace footvalve assembly.
Pump is operating, but pressure is being lost from container.	Pump not screwed in tight. Pump sealing 'O' ring (10) damaged.	Tighten pump carefully BUT DO NOT OVERTIGHTEN Replace pump sealing 'O' ring.
Container has pressure but will not spray.	Blocked strainer (44) in trigger valve, or blocked nozzle.	Remove and clean the strainer or nozzle by flushing with water.
Poor spray pattern, even though all strainers appear clear and there is pressure in the container.	Blocked strainer (44) in trigger valve, or blocked nozzle.	Remove and clean, or fit a new nozzle. Never use a metallic object to clean the nozzle, it will ruin the spray pattern and render it useless.



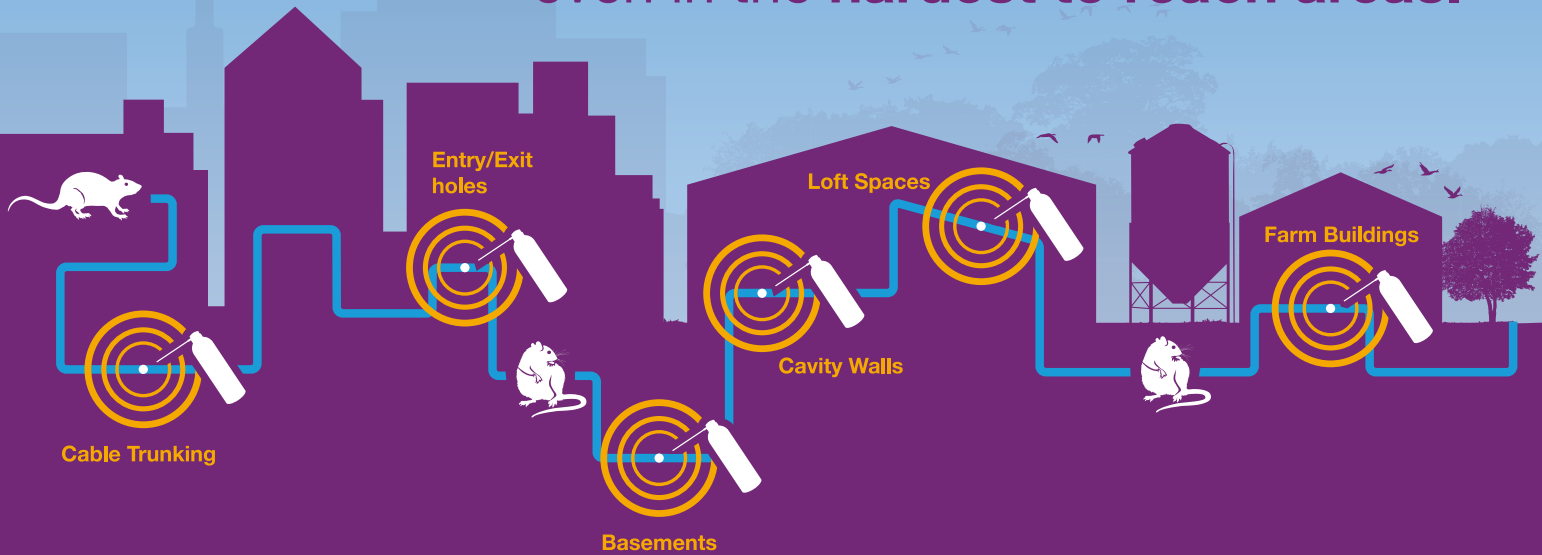
Download the Gloria parts poster at: www.pestcontrolnews.com/gloria_sprayer_a2





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- ☑ Can be placed in areas where traditional baiting methods are not possible



Racumin® FOAM

USE BIOCIDES SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE. PAY ATTENTION TO THE RISK INDICATIONS AND FOLLOW THE SAFETY PRECAUTIONS ON THE LABEL. For further product information including warning phrases and symbols refer to product label or www.environmentalscience.bayer.co.uk. Racumin® contains 0.4% w/w coumatetralyl. BPR:UK-2014-0860, IE/BPA 70160. Racumin® Foam is a registered trademark of Bayer CropScience Ltd. © Copyright of Bayer 2016. Bayer CropScience Ltd, 230 Cambridge Science Park, Milton Road, Cambridge CB4 0WB Tel: 00800 1214 9451 Email: pestsolutions@bayer.com www.environmentalscience.bayer.co.uk

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

PCN

PEST CONTROL NEWS®



PEST CONTROL NEWS® PRESENTS

HONEY, I SHRUNK THE PEST CONTROLLER

PCN DINNER 2018

7th November 2018
Arena MK, Milton Keynes

Dress Code: Smart Casual -
No jeans/ no trainers

£75 pp (+vat)
£750 per table (+vat) 10 people
per table

To arrange accommodation contact
TravelWise on 01924 268 611.
Credit card details will be needed
to secure the booking.

- **Drinks Reception**
- **Charity Raffle**
- **3-Course Meal**
- **Live Music**
- **Free Bar (limited)**

Tickets can be cancelled up to
4 weeks prior the event, tickets
cancelled after this time will be
charged at full price.

Bar will close at 12.30am
Residents can continue the
evening at the Pitchside Bar.

To book your place please contact
Sadie Baldwin 01924 268 433.





NPTA

tomorrow's association
for today's technician

Big Company Support for All Members & See You At Milton Keynes...



The big news of the Summer is the appointment of the NPTA's very first Technical Manager. You can read more about John Hope elsewhere in this magazine, but remember, he covers the whole of the UK and Ireland, so make sure you catch him when he's in your area, as he may not be able to 'pop back' at a moment's notice. We'll let you know when he is due to be in your area, so please make use of him when he's there.

With the HSE now making it clear that they expect Continuing Professional Development as a future measure of professional competence, John's role as a trainer will become crucial for Members. He already has a suite of training presentations available and will develop others as he sees the needs of the Membership. Let him know what you would like help with.

He's also very experienced at dealing with 'high end' food clients, so he may be able to help you secure contracts in a sector that you may not have worked in before.

Having been a technician himself and having managed technicians in his previous jobs, he is ideally placed to give 'Big Company Support' to all members. It's up to you to make the best use of his skills and experience.

You will be able to meet him at our Training Days throughout the country. We still have events at Farnborough, Norwich and Durham in September and at the 'Risk Assessments for Pest Controllers' training course at the 'Rat Farm' near Basingstoke in October.

He will also, of course, be at PestTech 2018 on November the 7th. For further details, see Today's Technician or the NPTA Website.

This year we will be at The MK Dons Arena in Milton Keynes, which offers 'state of the art' facilities – and FREE PARKING. This was the deal breaker that caused us to move from the RICOH Arena in Coventry.

Presentations will include advice on how to extract feral bees from buildings, the Wildlife Incident Investigation Scheme and the latest on the use of Aluminium Phosphide. Add to that over 50 stands from suppliers into the UK industry and you have a lot of reasons to pop up (or down) to Milton Keynes, for the UK's largest annual pest control event.



PCN

DON'T MISS THE PEST CONTROL INDUSTRY'S PREMIER EVENT OF THE YEAR

PEST TECH

www.pesttech.org.uk

MK Arena
Milton Keynes

**Wednesday 7th
November 2018**

9am - 4pm

✓
FREE
ENTRY
✓
FREE
PARKING

**Pest control
exhibition, seminars,
workshops, and
demonstrations.**

**OVER 50
EXHIBITORS**

**Pre-registration
is now open**

www.pesttech.org.uk or
register on the day





- ▶ A value-priced, quick set, hidden kill mouse trap
- ▶ Fully enclosed capture area keeps mouse hidden inside
- ▶ Stealthy design blends into surroundings
- ▶ Easy "no-touch" disposal

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**MEETINGS START AT 8.00AM
FINISH AT 10:30AM SO YOU
DON'T LOSE THE DAY**

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NORTHERN
Manchester – 3rd OCT

SOUTHERN
South London – 31st OCT

MIDLANDS
Stoke-on-Trent – 26th SEPT
Dudley – 27th SEPT
Nottingham – 4th OCT
Kings-Lynn – 1st NOV

**NORTHERN
IRELAND**
Belfast – 12th SEPT

SCOTTISH
Glasgow – 19th SEPT

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WEDNESDAY
20 MARCH 2019
GIANT ROBOT
CANARY WHARF
LONDON



THE VENUE

This time we're heading to Giant Robot, Canary Wharf's street food 'rooftopia'.

At Giant Robot, attendees will be able to choose from a wide range of food and drinks, relax, unwind and network to their heart's content (no seating plan). Nominees will get to celebrate or commiserate with live music and an easy-going atmosphere.

Tickets for the award ceremony (and an evening's food and entertainment) are £79 for BPCA members and £99 for non-members.

For more information email awards@bpca.org.uk

BRITISH Pest Management AWARDS 2019



NOMINATIONS NOW OPEN

The British Pest Management Awards (BPMAs) acknowledge the difference individuals and companies can make to portray a positive image of the pest management industry regarding public health, food safety, environmental sustainability and economic significance.

Nomination deadline is 1 November 2018, after which point entries will be shortlisted and a panel of judges from BPCA, CIEH, NPTA, Pest Magazine and CEPA will select winners and, if suitable, highly commended.

Learn more about the awards, and get tips for submitting entries - bpca.org.uk/awards

Any UK organisation and/or individual can enter the following categories:

ORGANISATION AWARDS

- Company of the year
- Small company of the year
- Sole trader of the year
- Local authority of the year
- Community initiative of the year
- Innovation of the year
- Marketing campaign of the year
- Collaboration of the year

INDIVIDUAL AWARDS

- Technician of the year
- Young technician of the year (below 30)
- Team of the year
- Lifetime achievement award
- Training and development award
- Del Norton fumigation (and controlled environments) award
- Unsung hero



ENTER NOW OR BUY A TICKET!
bpca.org.uk/awards

Timeline
Award ceremony tickets go on sale

1 NOV

BPMA nominations close

DEC

Shortlisting and judging

JAN

Shortlisted entrants contacted

20 MAR

BPMAs 2019 Award Ceremony
DAY ONE OF PESTEX 2019



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No-Deal Brexit

The effect on imports and exports

The government fallout from Theresa May's Chequers plan has put no-deal Brexit firmly back into the realms of possibility. This has caused serious concern within industries that rely on the import and export of goods to function profitably. 29 March 2019 is the deadline for some form of deal to be reached and we are 18 months in to that 2-year negotiating period. It is fair to say that at this advanced stage, neither the government nor the EU has any firm idea about whether a deal will be in place and the shape of any such deal.

The UK can certainly avoid a no-deal Brexit and the chances of leaving the EU without a deal are currently remote, but the risk exists and must be planned for by any business within international or European markets. The need for planning significantly increases when those companies are involved in the import and or export of goods which are heavily regulated such as chemicals and pesticides. Trade using World Trade Organisation (WTO) rules would be the default position in the event of a no-deal Brexit and those rules are significantly different from those which currently govern trade with the EU and agreements the EU has reached with third countries.

The most obvious and impactful changes are customs checks and tariffs on goods. As of 29 March 2019 the UK will be an ex-member of the EU and will according to the majority

experts, inherit the EU's tariff regime. This could have a significant impact on profitability of importing or exporting finished goods or component parts of goods which are subject to tariffs. There may be a requirement to pass any price increase on to the next company in the chain which is eventually reflected in an increased price to the end user. This may require difficult negotiations with parties across the supply chain as everyone tries to react to the new regime.

There is also the issue of border checks which are not required under the EU Free Movement of Goods provision but are mandatory under WTO rules. This probably represents the most significant change for businesses which frequently import and export goods to EU countries because there is a raft of new considerations and potential complications which are simply not in play if border checks are not required. This is complicated further by the hazardous nature of some goods which are used by the pest control industry. Mandatory border checks will inevitably lead to delays in the delivery of goods both from and into the UK from the EU. This issue will be very pronounced in the short term as unless the government makes significant progress in its contingency planning for no-deal Brexit, UK ports and airports are woefully ill equipped for the exponential up-tick in border checks which would be required by failing to secure some form of deal with the EU.

Of course, the best antidote for uncertainty is preparation and while customs congestion may be out of your control, you can attempt to mitigate risk by reviewing your contracts to accommodate for the myriad of heightened risks should trade under WTO rules become a reality. Whether this involves adjusting penalties for delay risk or widening force majeure to accommodate customs grinding to a halt in the immediate aftermath of no-deal Brexit or adjusting trade prices to deal with the effect of tariffs. Whichever space you inhabit in the supply chain it is in your interest to be capable of accommodating the uncertainty which no deal Brexit could bring, if only to avoid a potential dearth of claims for breach of contract both for and against you. By addressing the possibility ahead of time you put yourself in the best position to weather the storm should no-deal Brexit and WTO trading become a reality.

Should you require any advice or assistance please contact the author Giles Ward at Milners Solicitors giles.ward@milnerslaw.com - 0113 3801 850/07789 401411.

Your guide to the pest control 2018 training dates



Killgerm Training run courses nationwide offering different types of courses for different levels of experience and knowledge. Details of all course dates and locations are available online at www.killgerm.com/pest-control-training-calendar; there is also a full list in the Killgerm catalogue on pages 223-225. For further information or to book your place on a course call **01924 268445** or email training@killgerm.com.

2018 TRAINING DATES

OCTOBER 2018

Killgerm Principles of Rodent Control

9th October 2018, Ossett
16th October 2018, Newbury
23rd October 2018, Coventry

Insect Control

24th October 2018, Coventry

Safe Use of Pesticides

25th October 2018, Coventry

Pest Control Refresher

10th October 2018, Ossett
11th October 2018, Bristol

Insect Workshop 1 - Bedbugs and Fleas

3rd October 2018, Aldershot

Safe Use of Air Weapons for Bird Control

3rd October 2018, Doncaster

Specialist Courses: Bird Control

Theory - 9th October 2018, Brisol
Practical - 10th October 2018, Brisol
Theory - 17th October 2018, Ossett
Practical - 18th October 2018, Ossett

Principles Involved in Controlling Pests in Drainage Systems

4th October 2018, Ossett

Safe Use of Aluminium Phosphide for Vertebrate Control

3rd October 2018, Bretton

Trapping Techniques

10th October 2018, Killamarsh

RSPH LEVEL 2 Award in Pest Management - FULLY BOOKED!

Check website for future dates

Day 1 + 2 Monday 15th & Tuesday 16th October 2018
Day 3 + 4 Monday 22nd & Tuesday 23rd October 2018
Day 5 + 6 Monday 29th & Tuesday 30th October 2018
Examination Wednesday 31st October 2018

To book visit - www.killgerm.com



BPCA PROGRAMMES UNTIL DECEMBER 2018

USING RODENTICIDES SAFELY

Course/Exam 25th October Derby
Course/Exam 13th November Stafford

PRACTICAL VERTEBRATE TRAPPING

Course 14th November Stafford

PRACTICAL INSECT CONTROL

Course 15th November Stafford

STARTING AND MANAGING YOUR OWN PEST MANAGEMENT BUSINESS

Course 5th October Midlands
Course 1st November Derby
Course 11th December North West

BED BUG CONTROL

Course 10th October Derby

CERTIFICATE IN BIRD MANAGEMENT

Course/Exam 23rd October Derby
Course/Exam 16th November Stafford

GENERAL PEST CONTROL LEVEL 2 AWARD IN PEST MANAGEMENT

Course/Exam 21st October Stafford
Course/Exam 9th to 14th November Stafford

INSECT IDENTIFICATION

Course 11th October Derby

SAFE USE OF ALUMINIUM PHOSPHIDE

Course/Exam 17th to 18th October Stafford

SAFE USE OF FIREARMS

Course 16th October Stafford

BECOMING A TECHNICAL INSPECTOR

Course 2nd October Derby

RSPH LEVEL 3 AWARD IN SAFE USE OF FUMIGANTS FOR THE MANAGEMENT OF INVERTEBRATE PESTS

Course/Exam 26th to 29th November Derby

MORE DATES AND COURSES

ONLINE AT:

WWW.BPCA.ORG.UK/TRAINING

To book visit www.bpca.co.uk



October 5, 2018

RSPH Level 2 Award in Pest Management

October 5, 2018

RSPH Level 2 Certificate in Pest Management

October 11, 2018

RSPH Level 2 Award in the safe use of Rodenticides

October 18, 2018

Level 2 Award in the Safe Use of Aluminium Phosphide for Vertebrate Pest Control

November 1, 2018

Practical Vertebrate Trapping

To book visit -

www.pestsolution.co.uk

November 8, 2018

RSPH Level 2 Award in the safe use of Rodenticides

November 15, 2018

RSPH Level 2 Award in Pest Management -

Day 1 - 15th November 2018
Day 2 - 16th November 2018
Day 3 - 22nd November 2018
Day 4 - 23rd November 2018
Day 5 - 29th November 2018
Day 6 - 30th November 2018

November 15, 2018

RSPH Level 2 Certificate in Pest Management -

Day 1 - 15th November 2018
Day 2 - 16th November 2018
Day 3 - 22nd November 2018
Day 4 - 23rd November 2018
Day 5 - 29th November 2018
Day 6 - 30th November 2018



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- Firm texture enables use on pitched roofs and angled surfaces
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