

PCN

PEST CONTROL NEWS®

THE MAGAZINE FOR THE PEST CONTROL INDUSTRY

September 2020



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Bitesize...

Grey silverfish control

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The rise of the grey silverfish *Ctenolepisma longicaudata* has been well documented in Pest Control News.

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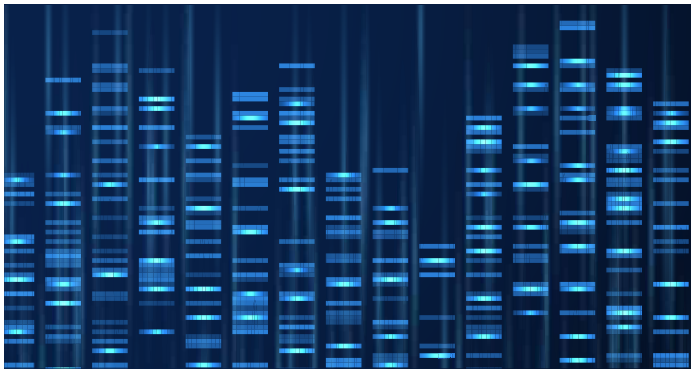


Two Killgerm Area Sales Managers Achieve RSPH Level 3 Award in Pest Management

Killgerm have announced that Laurence Barnard and Tim Bloomer, Area Sales Managers, have achieved the RSPH Level 3 Award in Pest Management.

Mark Butler, Company Biologist at Killgerm commented, "This is a fantastic achievement for Laurence and Tim and I congratulate them on their success. The RSPH Level 3 Award in Pest Management is an externally accredited qualification and remains the "gold standard" in the industry. Success in this qualification indicates not only sound technical knowledge and practical skills but also a willingness to move beyond Level 2. It is an ideal qualification for the more able pest professional."

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Free Rodenticide Resistance Testing Service Resumes

Free DNA testing for rodenticide resistance in rats and mice has resumed with the Campaign for Responsible Rodenticide Use. Chairman Dr Alan Buckle calls for tail samples of freshly killed rats and mice from pest controllers, farmers and gamekeepers who think they may have resistance problems.

The DNA tests will be conducted by the Animal and Plant Health Agency (APHA), Weybridge, Surrey. Details how to collect, store and send samples to APHA are available at thinkwildlife.org/downloads.

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New Permanent ICUP Website

The permanent ICUP website is a searchable site which holds the full papers and poster abstracts from all nine ICUP conferences, free to view and download. At over 1000 documents, it is probably the largest collection of free-access urban pest papers, anywhere. Feel free to explore it at icup.org.uk. There are many fascinating papers in there!

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Pest Control News Dinner Postponed

Following the announcement from NPTA regarding the postponement of PestTech, it is with great sadness that we have to postpone PCN Dinner 2020 until 2021. We hope that you will be able to join us for PCN Dinner 2021 and make it the best one yet!

www.pestcontrolnews.com/news



Asian Hornet Week 2020 7-13 September

We are asking everyone to be vigilant in looking out for this alien species, the Asian Hornet, *Vespa velutina*. This hornet could decimate our pollinators including our honey bees, it is important to have everyone actively looking for it.

Follow the BBKA on social media and share the Asian hornet week posts to help raise awareness.

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Working through lockdown

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PCN interviews five pest control officers about working through lockdown, the issues they faced, the challenges they had and how it changed their working lives.



Paul Bates

Cleankill Pest Control

Cleankill Pest Control is recognised as one of the UK's leading private pest control companies with hundreds of clients across London, Surrey, Kent, Sussex, Hampshire, Bucks, Bristol and the rest of the country.

Have you worked through lockdown?

We have worked all the way through lockdown, although when all this happened, I was in the Caribbean! I had a lot of catching up to do! We furloughed 55% of the staff and stopped doing routine visits, but we were still dealing with emergencies.

Have you seen an increase in calls during lockdown?

We noticed an increase in domestic calls during lockdown. I wrote a blog post about how there is much more of a mental pressure about pests in domestic properties. For example, a couple who are both at work during the week, wake up in the morning and see 1 or 2 clothes moths around, then come back at around 7 or 8pm at night and see a couple of clothes moths, and its not really a big issue. But if you are stuck indoors, effectively 24 hours a day, and you are seeing clothes moths all the time, it suddenly becomes a much bigger issue.

How have your staff adapted to the changes?

I have been sending out a weekly newsletter to all of our staff and the end of each newsletter I am reminding them that although the pests don't realise

that Covid-19 is a problem, our customers do and we have found that our customers are much more sensitive when we go into their properties. Changing people's mindsets was difficult as sometimes the information was not taken on board as quickly as we would have liked.

Have you changed your approach to a treatment due to lockdown?

We do a lot of treatments against cockroaches in blocks of flats, and in the past we would have sent a letter to every flat in the block stating when we were going to be there and we would just do a block treatment and send 3 or 4 technicians in to do it. Now, every individual flat has to have its own risk assessment because we have to ask the question 'has anybody had any Covid-19 symptoms within the last 14 days', and 'is anybody in the property shielding?', whereas in the past we would have simply knocked on the door, done the treatment and then 10 minutes later we would be on to the next one. Now we have to do an individual risk assessment for each property, so things like block treatments are taking a lot longer.

Have you used any downtime to plan for the future?

We instructed the sales staff to start planning for the next year. We advised the technicians that now was the time to start refreshing their memories and reading available information to build their knowledge and earn CPD points.

Due to event cancellations we have been able to almost treble our marketing budget for advertising over the last 3 months. The other thing that I have done is greatly increased my LinkedIn presence, because we have found that this is becoming quite an important marketing tool for us.

What have you found the most challenging about working during lockdown?

The most challenging thing was trying to understand lockdown! In the middle of March nobody in the country would have known what the word furlough meant. We had to rapidly come to terms with that. We had staff that were shielding due to themselves or their partners being high-risk and trying to set up all the systems that people needed in order to be able to work from home.



Chris Cagienard

Pest Solutions

Pest Solutions are a Glasgow based company providing a complete range of pest control, prevention and bird control services for both domestic and commercial environments.

How have you navigated lockdown?

Lockdown has been a journey! After some confusion at the beginning on what was safe, what was right and how to respond, we have been opening back up and most of our team are back, with an additional five team members as well!

How has it affected your business?

We set a fairly ambitious 30% growth target for the year, and when lockdown was announced, we thought that there was no chance that we would be able to achieve that target given that everything was shut down, but now I think that we aren't going to be that far away!

How has it affected your customers?

Initially when lockdown started, I didn't know if we were going to get a lot of cancellations, or what customers would expect of us. We have tried to be very supportive of our customers and have had very few cancellations. People have moved onto service and payment holidays, while we remain committed to educating people about the reasons why pest control is important and why they should continue doing it. This has paid off as most people have returned or have expressed a desire to return once their business reopens. After planning for the worst and preparing to lose 20% of our business, we continued to hope for the best and I am very thankful that this has not happened.

Some customers have pushed their service visits further apart to save money during lockdown and then ended up having a problem that was going to stop them reopening their business. We have

completed a treatment and then in the majority of these cases, have been able to restore the normal service intervals for the customer and not charged them extra in a bid to keep their high 98% retention rate and to do to help customers out.

What about domestic work?

After drawing back from domestic work at the beginning of lockdown and letting customers know that we couldn't attend at that time, it has been fairly plain sailing. The technicians now phone the customer ahead of their arrival and talk them through the procedure and complete a checklist to make sure that it is safe to enter the property. The technicians can use their discretion as to whether it is safe to enter a property or not after completing the risk assessment with the customer, as everyone's safety is priority.

Have you utilised video calling for engaging with customers?

We have had situations where our customers have had serious issues that they wanted to do something about but have refused to allow technicians access to their property. In those situations, we have delivered traps and provided instructions and education on Skype calls to talk people through what to do. We provided this service at a loss because we felt it was better to try and help the customer. It's not a viable method of doing pest control because obviously you can't give an amateur access to professional use products and you can't replace the instincts of a professional pest controller.

Have any staff undertaken additional training?

We have had a staff member that would have taken the RSPH Level 2 exams if it hadn't been for lockdown, and he has been completing a lot of additional training. He is BPCA registered and is on target to hit 100 CPD points before the end of the year, so he is doing exceptionally well. All our staff have achieved their required CPD points for the year and have been completing training courses online. We find that this has changed the atmosphere in the team and everyone is interested in bettering themselves which is definitely something that we would like to see continue.

What have you found the most challenging about working during lockdown?

The most challenging thing about working through lockdown was making sure that everyone was safe and following the correct procedures. Trying to adapt and keep the team spirit going while staying apart was a challenge but we have tried our best.



Martin Hull

Hullternative Pest Control Service Ltd

Hullternative Pest Control Services Ltd is a Birmingham based, family-run company, with a reputation for providing a reliable and professional service as well as excellent customer care.

How has lockdown been for you?

Things have not been too bad, it's just been difficult to get into calls. We furloughed all the staff, and there was just one of the other directors and I,

who were not furloughed and we were doing the emergency call outs. We weren't doing any contract work because most places were closed, but we do a lot of work for the NHS, so we must be on standby if anything happens in their health centres, for example flying ants. We were probably going out 2-3 times a week and just trying to cram all the calls into those days.

Have you seen an increase in domestic calls?

We have seen a massive increase in domestic calls, but people were very sceptical about letting us in. We had all the correct PPE, the gloves, the face visors, coveralls, etc. but I think people were trying to leave things alone until lockdown was lifted, depending on how serious the problem was. For example, if it was ants, they would just live with it for a few weeks. We did have a couple of calls from domestic premises where they had rats in the house that they wanted us to go out and deal with, but we made the customers aware of how we worked. We would ask them to go and wait in the garden while we inspected the house or vice versa, just so that the social distancing was there.

Have you adapted your working practises to become Covid secure?

We use risk assessments, method statements, Covid risk assessment, COSHH regulations and then your own common sense as to whether you should be doing the job. We have to wear PPE anyway, working with poisons and insecticides, but even then we are going mad with it and making sure that any job we are doing we are wearing a mask with it, whereas you don't tend to wear a mask laying bait traps or anything.

Have you seen a change in rodent behaviour?

We have had so many domestic calls for rats and mice in houses. We have to explain to customers that because restaurants are closed, there is less waste in the bins for rats to eat so the rats are having to find alternative food sources and then going through domestic bins. Our workload for these types of jobs has tripled, which in a way is good for us, but not good for the customer.

Has lockdown affected your business?

Our turnover has taken a hit, not a major one but the biggest thing for us is the contract work. Because we couldn't get into the premises for a couple of months, or if it's a restaurant that has been closed, they have put us on hold for a quarter but fortunately it has started to balance out with the increase in domestic work.

Have you offered any disinfection services during lockdown?

We have offered disinfection services before and we have continued to do this throughout lockdown. We have done touchpoint treatments and fogging treatments and we have seen an increase in these, particularly in offices. I think this is something that will continue over the next few months as people are very conscious of wiping surfaces down and keeping touch points clean.

Have you had increased calls for a particular type of pest?

We have seen an increase in cockroaches and bedbugs for some reason. We have seen a rise in these types of calls in houses of multiple occupancy but also in restaurants. With the restaurants been closed, the cockroaches must have been breeding like mad because treatments haven't been carried out, so people are discovering this when they go back to prepare for reopening. So we have done some really good fumigation treatments, but this was a lot easier because there was nobody on the premises, there were no staff in there and there was no food in there so we were able to do a really good fogging treatment.

What have you found the most challenging about working during lockdown?

The biggest challenge was getting into places and customers putting our services on hold, but on the flip side, we have had a lot more domestic calls. Kitting everyone out in the new PPE has been a challenge for us. It is challenging times, but it is the new normal so we just try to adjust the best we can. We always joke with our customers that we are the fourth emergency service!



Wayne & Sarah Beck

The Pest Master

The Pest Master is a family run business that has been servicing Derbyshire for over 10 years, specialising in both commercial and domestic pest control.

Have you continued to work through lockdown?

We have worked through lockdown, but we have had to adapt. When the lockdown first happened, we asked our domestic customers if they wanted us to carry on with any current treatments, or stay away for now, and most of our domestic customers wanted us to stay away. Where possible we would go and remove poison from properties and replace it with cameras and the Wedge system so that we could still monitor what was going on.

It sounds like you have made good use of remote monitoring tools.

We had a lady that had had a bad experience with squirrels in the past and was very nervous. We were able to use the Wedge system to monitor her property and each day we were able to reassure her that nothing had been triggered and because of the heartbeat alert that is sent weekly, we were able to doubly reassure her that the equipment was still working as it should be.

The commercial premises that we look after all closed overnight and because we couldn't go and monitor the poison on a regular basis, we switched it out for monitoring systems and kept an eye on things that way instead.

We had a weekly check in with all of our customers just so that we could make sure there were no emergencies and that everyone was safe and happy. We had a lot of praise during this time and luckily for us and our customers alike, we had no issues arise!

Have you offered disinfection treatments to customers?

We have offered disinfection treatments following a rodent treatment for around 4 years before lockdown, so we sent out a communication to all our commercial accounts and advised them that this was a treatment that we could offer, that we had been doing for many years and it was effective against coronavirus. We provide this service for a large customer where we service 3 of their depots every week and we disinfect their offices and some vehicles. We see it as a massive achievement from our point of view because we have helped them to continue working.

Have you changed your approach to treatment due to the lockdown?

You have to be much more aware of people and your surroundings, not just for your own safety, but for the safety of everyone else as well. Treatments have become more clinical. We appreciate that customers might be nervous if they have mice or rats in their loft, which is bad enough by itself, but then to have someone come to their house, who they don't know, they don't know where else this person has been, so we have to be more careful and mindful of how people may feel. We like to get in touch with people

and make sure that they have a timeslot and they know what time we will be arriving, and that we will be wearing all the appropriate PPE. Some people prefer to be out of the house when we do things which we can always accommodate.

What have you found the most challenging about working during lockdown?

When you love what you do and you enjoy helping people and solving people's problems, not been able to go to certain places and having to explain to people that you can't do things to help them at that time was really difficult. We have been lucky that we are able to offer the disinfectant treatments in order to generate the business but not been able to do the work that we would normally do, in the normal timescales, was challenging. We are lucky that we have been able to continue and thrive and not had to worry about grants and loans and we have been able to help keep other businesses going as well.



Chris Cunningham

Premier Pest Control

Premier Pest Control is a specialist pest control company based in the heart of Bradford, West Yorkshire, servicing commercial organisations, mainly food and packaging companies, throughout the UK, while also protecting NHS Hospital Trusts and Local Authorities.

How has lockdown affected your business?

Professionally the lockdown doesn't make too much difference. We have been working all the way through in one form or another. As a company we deal with loads of food factories and that's our main work. Some factories said that they were closing for the foreseeable future, but the nation needs to be fed, so things did open back up quite quickly. We also look after the food supply for the NHS as well and that is something that must continue, so we have been relatively lucky in that respect that our core business was not shut down.

We are as busy as we have ever been and to a large extent that is due to the make-up of our customer base. We are probably 90-95% as busy as we were before. We are getting a lot of enquiries for domestic work and it is not really our speciality but we did step up and it's very hard to refuse somebody that is desperate because they have got a rat running round in their house and they can't get anyone to step up and do the work, we felt the moral need to help them out.

Has lockdown changed the way you worked?

We informed our customers that, if required, we would do our service at midnight to avoid the risk of infection transmission - we will do whatever it takes to protect our staff and customers. We also created a self-treatment pack for amateur use, so that we can still help householders who we wouldn't normally deal with. The packs contained all the equipment and instructions that were needed, and we delivered these to customers, sometimes free of charge as it is difficult times for everyone and not everyone has a lot of money. We also delivered these to nursing

homes where there was a Covid outbreak which meant that we couldn't attend. We advised them where the equipment needed to go, how to place it and what to look out for, so technology has really helped us to achieve what we needed to.

We have been using Zoom and Microsoft teams with our bigger customers. I have a lurcher that likes to get involved and pop her head up over the table and my son likes to play his electric guitar so people are wondering what the noise is but they are very accepting!

Have you made use of any remote monitoring tools?

We use cameras for pest control. We protect airports from bird strikes and we use a lot of cameras in those situations where we get the images sent to our mobile phones and then we can see if there is a problem there. We will be looking closely at flyDetect as we can see the benefit for the food industry. We are waiting to see what new technology becomes available that we can investigate and see if it is something that would be of use to us.

Have you or your staff completed any additional training during lockdown?

Lots of people have been on hand to help us through any problems that we had. We have had a lot of help from BPCA, NPTA and Killgerm during the pandemic with numerous training courses, often provided free of charge, which was very much appreciated!

We've been doing a lot of online training and inhouse training and people have really stepped up and used this time to learn new things and reinforce things that they already knew.

What have you found the most challenging about working during lockdown?

We have, as with all businesses and individuals, suffered the emotional roller coaster of keeping ourselves, customers, colleagues and families safe during an extremely worrying pandemic, the like of which we have never experienced before.

It has been very stressful for me as a business owner but then there are always people much worse off and people have lost their lives. It has been unprecedented, and people are looking to us for leadership and it is very difficult when you don't have the information that you need. The local lockdown happened for us last night and we had worried employees not sure if they could go to work or not and all we had was a small paragraph of information.

Communication is the key, with our staff, customers and government bodies. It is important to recognise that people all have differing situations, needs and concerns. With persistence and calm communication, we have found that all problems can be managed, even Covid.





Introduction to Social Media

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What is a social network?

A social network is a dedicated website or other application which enables users to communicate with each other by posting information, comments, messages, images etc.

Why use social media?

Figures taken from Digital 2019 report from We Are Social and Hootsuite show that out of a total UK population of 66.77 million people, a huge 95% of those people are internet users! 67% of those people are active social media users – that's people who are actively logging into their social media accounts. The report also found that the average daily time spent using social media was 1 hour and 50 minutes, so there is an opportunity for you to get your message out to a large number of people on social media.

What are the benefits to your business?

- Build business contacts
- Increase brand awareness
- Increase sales
- Drive traffic to your website
- SEO benefits

Popular social networks



Facebook

Facebook is the largest social network in the world with over 1 billion users. You may use Facebook in your personal life and not give it a second thought, however you can also use it for your business and post updates, including pictures, videos and links to other websites, and engage with existing customers, suppliers and potential new customers.

Popular with everyone! The fastest growing demographic on Facebook during 2019 was adults over 55.



Twitter

People use Twitter to connect with others and discover new things. Twitter is the home of breaking news, and you can be sure that as soon as something is happening, people are talking about it on Twitter! Over 500 million tweets are sent every day across the world. Twitter is perfect if you have a lot to say as you can share content more frequently because things move so fast.

Popular with millennials and young professionals.



LinkedIn

LinkedIn is the world's largest professional network and provides immense opportunities for businesses to connect with the largest online network of job seekers, employees, partners and more. You can use LinkedIn to identify and connect with potential customers and industry contacts.

LinkedIn Groups are perfect for networking and engaging with others in the industry.

You may wish to take advantage of the Showcase page. These standalone pages have their own followers, status updates and functionalities, just like a company page. They can be used to promote a certain part of your business or a particular brand.

Popular with professionals and industry experts.



Instagram

The image sharing platform where people go to be inspired and discover new things was the fastest growing social media platform in 2019. Over 95 million photos are shared every day on Instagram. The engagement rate is 10x higher than Facebook and 84x higher than Twitter! Instagram also has a suite of useful apps to help you make the most out of your content.

Popular with 18-44 year olds, who made up 73% of Instagram's users in 2019.



YouTube

The world's largest video sharing social network and second largest search engine, behind Google.



Snapchat

Lets users send photos or videos to friends that disappear after a short amount of time.



TikTok

TikTok is the destination for short form mobile video. It has surpassed LinkedIn, Twitter and Snapchat in terms of the number of monthly active users.

Optimising your social media profiles

It is important to optimise your social media profiles to make sure that you are giving existing and potential customers the best impression. Start by making sure that you have an easily recognisable profile picture, usually a logo, and provide a consistent business description across all channels, so that people know that they are in the right place. Be sure to lead with the most important information though, as only the first 140 characters will appear in search engine results. Don't forget to include a link to your website as well.

How to create a social media strategy

A social media strategy is a summary of everything you plan to do and hope to achieve on social media.

1. Set your objectives

Define what you want to achieve on social media. Make sure that your goals are specific, measurable, attainable, relevant and time bound.

2. Define your target audience

In order to speak to your customers effectively, you need to know what type of people are most likely to be interested in your content, or services. They are likely to have some common characteristics, like demographics and behaviours. You can have as many different target audiences as you want, and you can be as specific as you like.

A good place to start when looking at your target audience is your current customer base, if you are targeting domestic customers, what do they have in common? Use these characteristics to develop a profile of your ideal customer and try to complete the sentence: "Our target market is [gender] aged [age range], who live in [place or type of place]."

3. Content

There are many options when considering what kind of content to post on social media including photos, videos, blog posts, infographics and customer reviews. Determine what kind of content and what topics will resonate with your audience and establish the tone, style and even the repetition. Try to avoid overly promotional content and instead focus on the benefits that your content can provide to your customers.

4. Measure your progress

Once you have started posted content to your social media channels, the next step is the measure its success. Most social networks will provide you with some form of analytics, where you can see how many people have viewed your content, how many have clicked etc. This will allow you to identify your best and worst performing content and make adjustments where necessary.

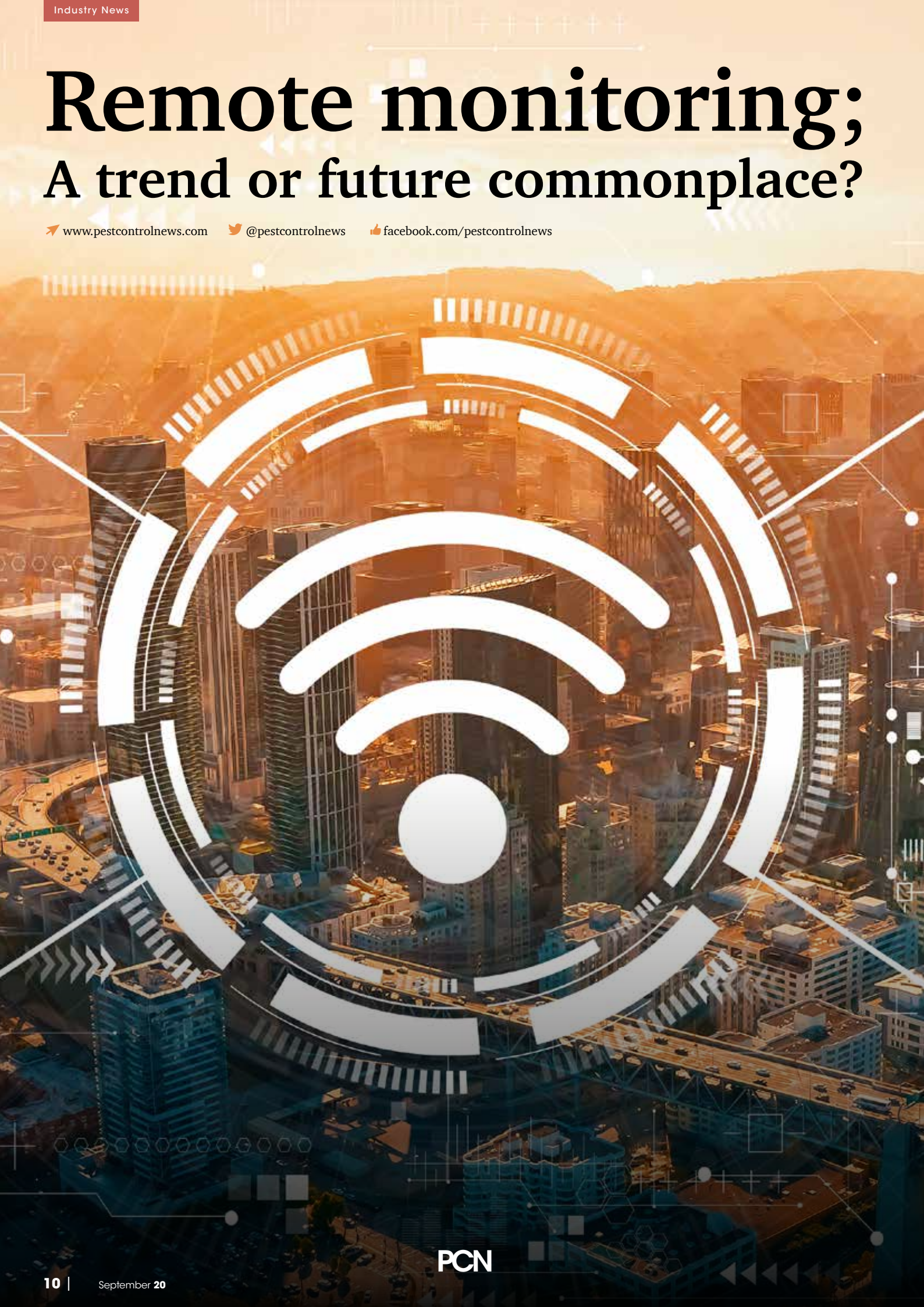


Remote monitoring; A trend or future commonplace?

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With more remote monitoring systems arriving on the UK market it seems digital monitoring is here to stay. Large company investment from the likes of Bayer and Bell Laboratories are a concrete sign that remote rodent monitoring systems are not going anywhere. Remote systems may have started out as a novel trend for the most tech savvy and willing to invest among us, but as prices come down and the market for remote systems opens up, there will be a system to suit all budgets in the not too distant future.

Why do we need remote monitoring?

Pest controllers have always had an issue of not being able to be on site 24 hours a day, 365 days a year. Remote monitoring (in whichever form is chosen) may well prove to be the missing link. Wildlife and trail cameras have also improved in recent years and are quickly becoming a go to for questionable pests, challenging scenarios and surveillance. As we ease out of lockdown, remote monitoring technologies could have been crucial for maintaining service in these unprecedented times – the wonderment of hindsight, but lessons for the future.

There is also the huge bonus of safety. Those awkward rodent monitoring points deep in a fully automated, guarded pick and pack warehouse, roof space, false ceiling, wall voids, floor voids, unattended sites - problem solved. Access is only needed to set up the system and if there are any captures or alerts, effectively and safely monitoring these high-risk areas. Not that this takes anything away from the professional pest controller – it simply adds to the arsenal. An extra tool to define presence, monitor more widely, satisfy auditors and allow more time for inspection and observation on site as opposed to time spent monitor checking. The system may also help to tick several audit requirements.

Another clear sign of the investment from industry suppliers is from PestWest, at the moment the only manufacturer to develop a remote fly monitor in the form of the FlyDetect® range of electronic fly units. This system uses a tiny camera to take a photo of the glue board in the unit. The system can be customised with alerts at certain fly count numbers, and also take readings for temperature and humidity (invaluable if you are the person carrying out trend analysis, where temperature and time of year is essential for expected trends and limits).

What is available?

There a few established systems already, including the GreenTrap online system (GTO) with monitoring sensors that detect movement on whatever monitoring point has been installed.

Rentokil's PestConnect system, Futura's Emitter system, Victor's VLink (building on their electric shock traps with digital links and alerts).

The Wedge system from Traptec, adding digital alert capability to normal rat and mouse traps, now with a central hub base station.

Signal, one of the most recent to market; has nevertheless quickly become established due to the all in one solution. There are several types of monitor available, all with the sensing system built in. For example, the mouse trap base has the digital alert chip, the battery and everything else all in the base. A break back trap looks like a normal break back trap with a very clever technology inside.

All of the above are already available in the UK. The Bayer Rodent Monitoring System (RMS) and Bell Laboratories system are both expected on the UK market very soon, forecast for 2021.

What will help?

Flexibility is needed for all the products that service the remote monitoring arena. Flexibility will be in the shape of the type of the monitor, from remote sensors to integral traps. We may even see glue boards with movement sensors becoming a feature.



Even the most technologically sound mind can get frustrated by new technology, so the correct support for product set up is essential. Practise beforehand may also be a valuable exercise before heading off to site to install a new system.

Has pest control finally reached a digital age?

In summary with advancing technology in all other areas of our being, digital pest control might just be the boost that brings us right up to date. However, it is not a case of conducting a routine visit by just looking on our mobile phone or tablet. The pest professional still has to be skilled, digital pest control monitoring may be just what is needed to do a safer job and monitor a wider area. Most importantly it should allow extra time for the paramount site inspection rather than box checking, with the added bonus of being able to monitor 24/7 in real time thus saving labour for call outs and false activations. Future digital remote monitoring will no doubt encompass all other types of pest monitor too.



Futura's Emitter Trail Camera



REMINDER:

Alternatives to Ficam® W

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Now that the 8th June has passed, the point at which any Ficam® W stock held by distributors had to be sold by, it is worthwhile revisiting the alternatives to this product. Note that pest controllers can store and use Ficam® W until 10th December 2020.

Bayer have of course launched an alternative solution which will cover most scenarios where Ficam® W would have been used.

“Our K-Othrine® Partix™ is a broad-spectrum insecticide providing 12-week residual control of a broad spectrum of pests. The state-of-the-art formulation technology has allowed us to reduce the active substance levels in the treatment environment while still offering a high level of control,” according to Alan Morris of Bayer.

What alternatives do we have?

Novel formulations are now available

A feature of Ficam® W is the residual formulation and suitability for porous surfaces such as brickwork.

K-Othrine® Partix™ is a residual suspension concentrate suitable for porous surfaces, based on a novel formulation involving carnauba wax. The natural wax further reduces the environmental impact following application while also protecting the active from degradation, UV light and moisture which helps to provide better residual control. The product can be effective for up to 12 weeks when controlling general insects and up to eight weeks for bed bugs and spiders. Furthermore, this novel formulation has particles 10 times the size of typical insecticides, so the application remains on the surface increasing bioavailability and contact to the pest, allowing more effective residual control. This increased particle size means it provides a much more consistent performance on absorbent surfaces such as wood and concrete, resulting in increased product efficacy.

Resistance management is still possible

It is expected that alternative products will come to the fore in terms of resistance management, such as those containing insect growth regulators (IGRs), with options for physical control including immobilisation and temperature.

Physical mode of action products coming to the fore

Under the radar somewhat is the recent introduction of a ‘molecular mesh’ / ‘sprayable entrapping’ product, for insect control, described as a resistance-breaking and novel technique that causes external immobilisation of target species. The drawbacks, of direct application being required and no residuality, are outweighed by the significant benefits.

Crucially the ‘molecular mesh’ works purely by physical means (by external immobilization) and, as confirmed by the Health and Safety Executive, falls outside of the definition of biocidal products and therefore the requirements of the Biocidal Products Regulations. What this means, in practice, is a degree of flexibility in application including treatment against a broad range of arthropod pests across many areas of use. Vazor® Provecta is the name.

Another option for insect control is the use of aerosol freezing sprays, such as Vazor® Ice and similar, that work by lowering the temperature of the treated insects to below their tolerable threshold. While a freezing aerosol may not always be suitable for an entire treatment, there is a place for these products especially for spot treatments in sensitive situations to supplement other control measures.

Other wettable powders and sachet products still exist

If the wettable powder aspect of Ficam® W is key, remember that Cytrol Forte WP is available. Yes, ‘WP’ stands for wettable powder!

Seek technical support

At a potentially difficult and confusing time, regarding changes to familiar insecticides, it is important to contact highly qualified and experienced technical advisors to help guide you through this period. Pest Control News took advice from technical advisors at Killgerm Chemicals when producing this reminder. With six technical advisors and a dedicated in-house entomologist having vast insect knowledge at Killgerm Chemicals UK, boasting more than a combined 165 years of experience in insect biology and control, you know who to trust for unbiased and reliable technical support when you need it most.



Killgerm nears £30,000 donation mark

Water for Kids aims to preserve and protect the good health of children and communities in the developing world by assisting in the provision of safe drinking water, good sanitation and other public health related measures.

Since 2013 Killgerm have donated almost £30,000 to Water for Kids. The average cost of a project in Uganda is £1,500, where the average community includes 500 people.

This means that Killgerm have enabled 10,000 people to access safe, sustainable water and hygiene training for the first time.

While the world unites to battle Covid-19, the provision of safe water, sanitation and hygiene training is the safest and simplest method of combating this disease and others, including waterborne diseases, which are still the leading cause of child mortality in Africa.

Clean water and good hygiene saves peoples lives and you can join Killgerm in making a difference.

With the postponement of PCN Dinner, we ask that you continue to support Water for Kids in these challenging times and make a donation or become a corporate supporter.

Visit waterforkids.org.uk to get involved.



Field trials of bromadiolone, difenacoum and brodifacoum versus Hampshire-Berkshire resistant rats

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PCN reports on field trials of commonly used anticoagulant rodenticides showing they are ineffective, in almost all central-southern England (read on for other areas!), due to resistance in Norway rats.

The findings show that difenacoum and bromadiolone should not be used against 'Hampshire-Berkshire resistant' *Rattus norvegicus* and that brodifacoum was effective.

The recently published paper, by Buckle et al., can be found here <https://www.sciencedirect.com/science/article/abs/pii/S0261219420302349>

How long has this resistance been around and where is it found?

Anticoagulant resistance has been present in Norway rats (*Rattus norvegicus*) in Hampshire and Berkshire for decades. The Norway rat (*Rattus norvegicus*) anticoagulant resistance focus in central southern England was first identified in 1969. Fifty years later this focus has become one of the most extensive and severe anticoagulant resistance phenomena found anywhere in the world. All first-generation anticoagulants and two of the second generation, bromadiolone and difenacoum, are resisted by rats carrying the L120Q mutation. Presently, the focus covers almost all of central-southern England, and L120Q rats are increasingly found more widely across the UK. There is also evidence of pockets of this Hampshire-Berkshire resistance in many other parts of the UK, including East and West Sussex, Wiltshire, Somerset, Devon, Monmouthshire, Yorkshire and the counties of East Anglia.

Why hadn't more potent anticoagulants been used to tackle resistance?

A regulatory restriction on the use of resistance-breakers brodifacoum, difethialone and flocoumafen in the UK ('indoors only') effectively prevented their use against Norway rats for more than 30 years. It was during this time that L120Q spread to cover most of central-southern England and elsewhere in the UK, as described. This meant that until 2016, only bromadiolone and difenacoum were available for external use for the control of anticoagulant-resistant Norway rats.

Has use of ineffective rodenticides caused wildlife contamination?

Carefully monitored applications of bromadiolone bait on a farm in West Berkshire proved entirely ineffective, with 830kg of bait consumed on the farm over an eight month period, resulting in no measurable reduction in the size of the infestation. The use of bait markers revealed that one rat survived the consumption of at least 450g of bromadiolone bait. Such a massive environmental emission of a second-generation anticoagulant, when replicated elsewhere in anticoagulant resistance foci, because the more potent resistance-breaking compounds could not be used, may go some way to explain both the large current extent of resistance foci in the UK and the prevalence of residues of bromadiolone and difenacoum in UK wildlife.

Is it just a single mutation to blame for treatment failures?

Compounding the genetic resistance are behavioural traits and the environment of farms in the area. In Hampshire rats were often reluctant to consume novel foods (neophobia), resulting in control being delayed for many weeks. There was also frequent failure on these farms to achieve complete control. These differences were attributed to rat behavioural responses to farming practices and the structures of the farmsteads themselves. In Wales, mixed arable and livestock farms (mainly dairy and sheep) present highly disturbed environments, where food sources and harbourage change frequently. In such situations, rats quickly overcome their suspicion of novel objects and new foods to acquire the resources they need. There was little animal husbandry on many Hampshire farms and farmsteads presented habitats where food sources, often bulk grain flat-stores (i.e. large quantities of cereals held in metal-sided bins on concrete floors), were stable over long periods.



Rats established feeding patterns undisturbed and were reluctant to divert their feeding onto novel food, such as rodenticide baits, and away from known, stable and abundant alternative food resources.

The Berkshire resistant rats also have a change to their metabolism, leading to an accelerated anticoagulant detoxification, i.e. a second and additional type of resistance.

What is the main finding of the study i.e. did brodifacoum work?

A consistent pattern emerges from this study on the field efficacy of anticoagulants against Hampshire/Berkshire L120Q rats. The difenacoum and bromadiolone treatments were substantially ineffective and the two applications of baits carrying brodifacoum were both highly effective. Bromadiolone (50 ppm), difenacoum (50 ppm) and brodifacoum (23 ppm) baits were each applied on two farmsteads where it had been established that Norway rats carried the L120Q mutation. Preliminary DNA resistance tests conducted at the farms found only one of 107 rats to be susceptible and 86.9% to be homozygous resistant (note – homozygous is 'worse' as you have two copies of the resistance gene). The bromadiolone and difenacoum applications were either partially or wholly ineffective; brodifacoum treatments were fully effective. Quantities of active substances used varied between farms and substances; but more bromadiolone and difenacoum baits were applied than brodifacoum baits during the treatments. Results confirm the high incidence of resistance and support advice that bromadiolone and difenacoum should not be used against L120Q rats, especially important where they are prevalent.

If more brodifacoum is used, will there be greater risk to wildlife?

In the brodifacoum treatments, the relatively smaller quantities of active substance emitted resulted in the virtual eradication of the rat infestations and, therefore, both to a lower overall SGAR emission and shorter duration of potential secondary exposure of predators. Important regulatory changes have been introduced recently in the UK concerning the permitted uses of the second-generation anticoagulants. Firstly, as mentioned above, the more potent anticoagulants, brodifacoum, difethialone and flocoumafen, have been authorised for use outdoors. This has made available, for the first time, potentially highly-effective resistance-breaking active substances for use in resistance foci, such as that of Norway rat L120Q resistance studied here. However, so far, no significant increase in total SGAR residues has been detected in the chosen sentinel species, barn owl, as a result of the regulatory change which occurred in 2016 to permit the use outdoors of the resistance-breaking SGARs.

What does the future hold?

Anticoagulant resistance is a significant threat to the continued effective use of these active substances and resistance management strategies are required to extend the useful lives of these essential products. Prolonged use of resisted anticoagulants has resulted in a high prevalence of homozygosity and resistance spread. Failed treatments result in prolonged feeding on anticoagulant bait and leave Norway rats alive carrying, presumably, high residues. It remains to be seen whether the use of now-permitted effective substances, and the introduction of a rodenticide stewardship regime, will curtail the spread of resistance and reduce anticoagulant residues in wildlife.

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Efficient, reliable & cost effective rodent control

Storm[®] Ultra Secure is a new wax-free rodenticide bait that combines the palatability of a soft block with the durability of a hard block. It is at least twice as palatable as leading anticoagulant wax block baits. This single feed 25 ppm flocoumafen bait controls rodent infestations effectively, including rats and mice resistant to anticoagulants. It withstands extreme temperatures and is ideally suited for locations where competing food sources are palatable and readily available. If you need to control rodents, take them by Storm..

- Ultra palatable** for rats and mice
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Pulse Baiting in a bakery

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How pulse baiting and Storm Ultra Secure helped a pest controller reduce the amount of bait and visits needed to control rats at a rural bakery.

Phil Schendel became a pest controller in 1997 and is a BPCA registered advanced technician. He is also a member of BASIS, the Chartered Institute of Environmental Health, and the Royal Society for Public Health. Having had limited success with other baits, Phil chose to begin implementing pulse baiting with Storm Ultra Secure earlier this year. “It has been working really well and has helped me to achieve control at a variety of sites more quickly than other baits I have used,” explains Phil.

Phil received a call from a bakery on the Welsh border about forty miles from his office in Welshpool. “The bakery explained they had a pest problem, but they were unsure as to whether it was rats or mice,” says Phil. On his first visit he found clear signs of brown rats. “The bakery was situated on a rural business estate. It was a new build and excavated soil around the perimeter of the building from the construction work had caused standing water,” he explains. Frequently used rat runs were apparent and a combination of the soil banks, nearby bins and the area around the standing water gave all the signs of a significant rat infestation.

Six active burrows were found which led to a thorough environmental risk assessment of the site to establish the best method of control. “It was important to establish what course of action could be taken before implementing a baiting schedule. It was also crucial to identify any non-target species both within and beyond the site boundaries,” says Phil. He used a non-toxic monitoring bait and checked the take after five days. “By recording the take, it was easy to establish that I was dealing with rats and it also gave me an indication of the numbers in the area,” says Phil.

Having assessed the site it was clear that removing the bins and the soil embankment would help to remove food sources, access, and potential harbourage. “I plugged drain holes in the bins to prevent rats from entering them to feed and removed rubbish and other objects that rats could use for cover,” he explains. Burrows were marked on a site plan and external trapping stations were fixed to the building along with snap traps inside the building.

After seven days, a follow up inspection identified that the rats had gnawed holes in one of the bins and the new drain plugs had also been gnawed. “I did catch several young rats. However, the initial measures carried out were not sufficient,” says Phil. “It was clear that chemical control was necessary, so I made the site ready and chose to use Storm Ultra Secure because I had used it successfully at other similar sites,” he adds.

Storm Ultra Secure is a 25ppm, single feed anticoagulant that contains the potent active ingredient Flocoumafen. The securable bait is well suited to areas where bait boxes are required. Phil used the pulse baiting technique which helped reduce the number of visits he made to the site.

“Reducing visits and the amount of bait required was the main incentive for me to use this method. Because the site was a relatively long distance for me to travel it helped considerably to have a rodenticide that I could pulse bait with,” says Phil.

“I recorded a 100% bait take on my first follow up visit,” says Phil. Having replenished the bait twice, Phil followed up for a third time. “I recorded a 20% take and recovered dead rats from the soil bank within 10 metres of the bakery. I could see no reason to suspect resistance because there have been no sightings reported and no takes from the non-toxic monitoring bait that replaced the rodenticide blocks after I achieved control,” says Phil.

By pulse baiting Phil was able to reduce the cost of bait needed to establish control. “I used 75 grams of bait per station and only had to replenish each of them twice, which is far less than I would have had to with a multi-feed” he explains. Due to the remote location of the bakery, Phil was able to save time and money on fuel. “If I had been using a multi-feed product, I would have had to do the journey three more times at a considerable cost in terms of treatment time, travel time and fuel,” says Phil.

Phil delivered control quickly, using less bait and fewer visits. Pulse baiting also had the advantage of reducing the risk to non-target species. “I was able to reduce the risk of bait being exposed to non-targets by using less bait over a shorter period. The palatability of the product is a huge advantage when using bait stations and I have consistently recorded high takes using it this year,” says Phil.

Phil has tried other 25ppm products in the past with varying levels of success. “I have tried a 25ppm Brodifacoum pasta with mice. My experience was the mice covered it over in the boxes and there was no take. I have also tried a single feed Brodifacoum bait, but again I had very little take. Storm Ultra Secure is different. It has the benefit of being 25ppm, and is very palatable, so the take is high. It has become my go to product for this type of work,” concludes Phil.





Remote rodenticide compliance auditing scheme is set to continue after early success

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A remote auditing scheme set up during the lockdown to ensure that checks on traders' compliance with the CRRU UK rodenticide stewardship regime point-of-sale process can continue, has been hailed as a success.

Launched by BASIS – which operates the independent pest control CPD register PROMPT - the scheme replaces the usual on-site inspection visits, which had to be suspended to meet the social distancing requirements of the Government's coronavirus lockdown in March.

Instead, the auditing team has been carrying out their work online, using a mobile /web-based application such as WhatsApp, Video Call or Zoom.

The audits – some of which are carried out as part of the BASIS Stores Inspection Scheme - were launched in 2017 as part of a joint venture with the Campaign for Responsible Rodenticide Use to ensure that anyone who sells rodenticides, whether to the trade or to retail and from their own premises or over the internet, comply with stewardship requirements around the sale of professional rodenticide products.

Audits are a key part of the CRRU's rodenticide stewardship scheme because they provide evidence that the entire supply chain is controlling availability of the products to all users including professional pest controllers.

Retailers are subject to audits once a year and those who fail to comply with any aspect of the stewardship regime face losing their authorisation to sell the products in question – creating a problem for their customers who need to purchase them for their work.

Lindsay Smith, Auditing and Compliance Manager at BASIS, said: "We visit every member once during our year-long audit cycle, but since March, those visits haven't been possible because of the need to keep everyone safe during the lockdown.

"As an alternative, we decided to carry out the visits online, using Zoom or WhatsApp, and they've worked really well. Each virtual visit takes about an hour depending on if we are also looking at their pesticide store or just the point of sale and we are able to take them through each requirement and look at the paperwork including evidence of users certification without having to go to visit them.

"The feedback from the retailers has been positive and, while the country has yet to return to normal, we plan to continue with the remote audits to ensure that the supply of rodenticides is not affected and that everyone is following the correct procedures."

One of the auditors who has adapted to the new normal is Peter Scott, who has worked for BASIS for 10 years and carries out nearly 200 visits

each year both for professional pesticide stores and also rodenticide point of sale audits, covering an area from mid and south Wales across to Northamptonshire.

He explained that companies are informed of their online appointment in advance to ensure that they can get the paperwork ready to show him via their mobile phones – Peter favours using WhatsApp – before he asks them to take him on a virtual tour of the premises, showing him key locations and features along the way.

These may include a visible inspection of racking, an inspection of fire extinguishers to ensure that they are compliant and a scan of the floor for pesticide stores but where rodenticide sales are concerned the paperwork is seen and checked over to ensure traceability of sales when it comes to professional rodenticide products.

Peter said: "It's been very straightforward to switch to remote auditing, especially for those retailers that I have worked with for a long time, whose operations I am familiar with and who know what I am looking for.

"I have done about 40 to 50 online inspections now and they've all gone smoothly. I ask them to show me examples of their recent sales so I can check everything is maintained correctly.

"For companies who also have a pesticide store, I ask them to show me round the store. After doing this job for so long, I know what I'm looking for and what areas of concern there might be, such as overstocking the shelves, out-of-date PPE, or damage to the floor at the bottom of the loading ramp.

"I haven't encountered any major problems, the most I've had to do is make a note to advise the retailers what they need to do for next time, but generally they've all passed their inspections."

Peter added that while he misses the personal contact with retailers and driving around some of the country's most attractive scenery, he agrees that the online audits have proven their worth during the lockdown.

He said: "I've not had any negative experiences with the remote audits and one or two companies have asked if we could continue with them all the time, because there is no doubt that they do save a lot of time.

"I could see the value in doing that in some cases, especially for the smaller retailers, but I would still prefer to carry out visits to those premises that I've never visited before because that way you get a better understanding of the layout and what the weak points are."

Bromadiolone ‘toxic to reproduction’ classification is questioned following new data

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The ‘toxic to reproduction’ classification imposed on many rodenticides has been queried following results from a new study.

The paper by Chetot et al., available here <https://www.sciencedirect.com/science/article/abs/pii/S0890623820300162>, is summarised by PCN as follows.

Anticoagulants are not recommended during pregnancy because warfarin is associated with a malformation syndrome “the fetal warfarin syndrome” (FWS). Anticoagulants are also used for rodent management worldwide. Recently, the Committee for Risk Assessment responsible for the European chemical legislation for advances on the safe use of chemicals had classed 8 anticoagulant used as rodenticides in the reprotoxic category 1A or 1B. This classification emerges from a read-across prediction of toxicity considering the Warfarin malformation syndrome.

Using a rat model, the new study demonstrated that warfarin used at the human therapeutic dose induces teratogenicity (abnormal development of the foetus), while in the same conditions bromadiolone does not induce any teratogenic effect, challenging the classification of all anticoagulants as reprotoxic molecules.

The first aim of the study was to check the effects of warfarin at a human therapeutic dose because no experimental data was available for such dosage. When warfarin was used at human therapeutic dose, skull length reduction was noted in test rats.

The second part of the study was to investigate the effects of other anticoagulant rodenticides in order to challenge the European “read-across” approach and the legitimacy of classifying all as reprotoxic. Bromadiolone, a second-generation molecule was chosen in this study because of its different properties versus warfarin (bromadiolone has a longer persistence in tissues and a greater toxicity) and because of its intensive use in Europe for rodent management. As no previous study was available for bromadiolone, the study of its potential teratogenic properties was explored in rats as previously done for warfarin.

What experiments were done?

The similar biology of rats and humans suggests placental transfer of anticoagulants is presumably similar. The study was carried out after a pre-natal exposure and also after a post-natal exposure because the foetal-warfarin syndrome was noted when exposure of rats occurred after birth. Rats were dosed with bromadiolone during gestation and no significant decrease in the length of bone structures was observed in foetuses.

What are the key messages / results?

No teratogenic effect (abnormal development) was detected following foetal exposure to bromadiolone. Results suggested a limited placental transfer of bromadiolone.

Results demonstrated that bromadiolone and warfarin anticoagulant rodenticides, in experimental conditions, do not show similar embryotoxic potential. Further works need to be performed to explain the difference observed and to confirm the classification of all anticoagulant rodenticides as reprotoxic molecules.

The ‘toxic to reproduction’ classification resulted in some lower-strength products – will this be bad news for resistance management?

This classification has led the European Authorities to define a limit concentration in baits not to be exceeded for sale to the general public. This has led to a decrease in concentrations of active substances in some baits and may have a negative impact on the selection of resistant rodent strains. Numerous mutations of *Vkorc1* leading to resistance have been described in rats and mice in Europe and a decrease in active substance concentrations in baits could promote the dispersion of these resistance alleles and make it even more difficult to manage rodents.

Note that lower-strength anticoagulants can remain effective

PCN reminds readers that lower-strength anticoagulants can remain effective and this is confirmed in another recent study.

A 2019 paper by Frankova et al., <https://www.nature.com/articles/s41598-019-53299-8> makes this point.

European Union Regulation (EU) 2016/1179 resulted in the production and application of some rodenticides with nearly half dose (<30 ppm) of anticoagulants. However, published data on the biological efficacy of rodenticides with decreased doses are scarce in the EU. Therefore, this work compared the efficacy of the original high-dose (50 ppm) and new lower dose (25 ppm) brodifacoum-based baits in the offspring of wild-caught house mice *Mus musculus*.

The low-dose baits (25 ppm) were tested under field conditions, in two populations, showing 95.7% and 99.8% efficacy. The obtained results highlighted the good efficacy of the new baits based on low-dose brodifacoum in non-resistant mouse populations. However, further validation is required regarding the remaining anticoagulant compounds and resistant rodent populations.



Bell Laboratories announces important label changes for Contrac!

Permanent Baiting is now available for Contrac Blox, Pellets and Sachets.



Michael Sims, UK, ROI, Sub Saharan Africa Manager, is delighted to announce that Bell Laboratories now have permanent baiting on the Contrac label, it is a massive enhancement to the Contrac range. There have been many updates over the past six months with the Contrac range with a new 36 month extended shelf life, now permanent baiting, we also have the availability of burrow baiting on the label which a number of our customers have been requesting over the last year or so.

Prior to COVID-19 I was attending workshops and trade shows all over the UK, our customers have always raised the question on Burrow baiting and Permanent baiting on our Contrac Blox, Pellets and Sachets. It's great to be able to come back to the customer with an answer to their question and to accommodate the product which they have in their everyday arsenal of pest control products.

Our regulatory team back in Madison, US, have been working around the clock to get these important additions added to the label. I thank them for their time and effort they put into these amendments and the continued hard work behind the scenes to make our products even stronger within the industry.

It's huge to be able to release this news to our customers especially in such unpleasant times with COVID-19 taking such a highpoint in the industry. I remain supportive to any of our customers who are seeking any help or advice out there. Please may I ask our customers that any Contrac or Solo which you have in the field has the most up to date label, please contact your local distributor should you need a label.

Pest control has always been an essential service to ensure public health and safety. Now, more than ever, the work of pest management professionals is critical to protect the spread of disease and damage at homes, hospitals, businesses and schools. At Bell, we are working non-stop to ensure the industry has all the tools they need in the fight against rodents, whenever they need them. We've got your back in these difficult times, and are working alongside you. For the essential services you provide we say thank you.



Six general licences re-issued for the control of wild birds

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Following on from this issue's piece on the upcoming 40th anniversary of the Wildlife and Countryside Act 1981, readers will note the impact that this legislation is still having. Notably, Defra has announced that six general licences for the control of wild birds have been reissued on a temporary basis ahead of new licences coming into force on 1st January 2021.

The licences GL26, GL28, GL31, GL34, GL35 and GL36 were reissued from 1st August to 31st December. No action is required by licence users, beyond the ongoing requirement to act in accordance with the licence conditions.

Defra announced a longer-term review of general licensing in June 2019 which has made significant progress. The re-issue period is necessary to thoroughly analyse the evidence and to fully develop a general licensing solution for protected sites.

Defra is committed to achieving a general licensing regime for wild birds which is both robust and workable for users, ensuring that longer-term licensing arrangements are informed by the best available evidence. As part of the process, Defra will seek Natural England's statutory advice.

Defra intends to publish new licences in November to allow user groups to become acquainted with the changes before they officially come into force on 1st January 2021.

Environment Secretary George Eustice said:

"It is vital that we have a robust long-term licensing system which balances the needs of users and our wildlife. Our general licensing review has made significant progress, however more time is needed to ensure that we have carefully considered all of the relevant evidence, and to fully develop a general licensing solution for our protected sites."

"Our extensive consultation and review process will be completed in the coming months, with the new licences coming into force on 1st January 2021."

The general licences allow users to kill or take certain species of wild birds for a range of purposes such as the protection of livestock and crops, conservation, or public health and safety.

Following a legal challenge by Wild Justice in April 2019, Natural England revoked three general licences and subsequently issued three licences (GL26, GL28 and GL31) to cover some of the species and purposes covered by the original licences that were revoked. Defra subsequently issued three interim licences (GL34, 35 and 36) while the longer-term licencing requirements were reviewed. NE's licences have remained in place, since they allow for specified activity on European protected sites which are not covered by Defra's licences.

The six general licences are:

- Carrion crows: licence to kill or take them to prevent serious damage to livestock (GL26)
- Canada geese: licence to kill or take them for public health and safety (GL28)
- Woodpigeons: licence to kill or take them to prevent serious damage to crops (GL31)
- Licence to kill or take wild birds to conserve wild birds and to conserve flora and fauna (GL34)
- Licence to kill or take wild birds to preserve public health or public safety (GL35)
- Licence to kill or take wild birds to prevent serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, fisheries or inland waters (GL36)



General licences introduced for the humane trapping of stoats

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New measures to improve the welfare of trapped stoats in line with internationally agreed standards.

From 1st April 2020, any trapping of stoats will only be lawful under the authority of a licence issued under the Wildlife and Countryside Act 1981, for instance to help conserve birds or livestock.

Natural England has developed two general licences to permit the trapping of stoats in specific circumstances in England. These cover the conservation of wild birds (GL38) and the prevention of serious damage to livestock (GL39).

The changes mean that any trap used for stoats must be certified to meet the welfare standards set out in the Agreement on International Humane Trapping Standards and approved for use against stoats in the UK.

The move follows a Defra-led consultation in 2018 on the implementation of these standards.

If you need a licence to use a trap in Scotland or Wales and Northern Ireland, you must contact the relevant licensing authority in that country.

A hard act to follow

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In his final contribution to the industry Pete Newbrook, formerly Wirral Council's Pest Control Manager, looks forward to next year's 40th anniversary of the introduction of the *Wildlife and Countryside Act 1981* and takes a retrospective view at how this legislation changed pest control practices.

With 2020 progressing and 2021 just around the corner, it must seem strange for more or less everyone in our industry to consider that there was a time when *The Wildlife and Countryside Act 1981* didn't influence our thinking, and dictate our actions - indeed I can only think of a handful of friends and colleagues still in the industry who remember its coming.

Modern generations of pest controllers will perhaps know little of the history of the 1981 Act and rather the requirements and how it affects, say, bird control and the constraints placed upon us regarding other species. Let us therefore consider how this comprehensive piece of legislation for England, Wales and Scotland came about, and how broad its requirements are in dealing with the fauna and flora of Great Britain - Northern Ireland not being included in the Act.

With the United Kingdom joining the EEC (as it was in those days) back in 1973, there was a desire by politicians to align many of our laws with our continental neighbours across a range of issues, including conservation.

The Bern Convention of 1979 on the conservation of European Wildlife and Natural Habitats covered the natural heritage of Europe in encouraging European nation co-operation in protecting such habitats, along with the conservation of flora and fauna, including migratory species and endangered species.

The European Directive 79/409/EEC on the conservation of wild birds was adopted on 2nd April 1979. The main provisions included: protection of vulnerable species; classification of Special Protection Areas, protection for all wild birds; and restrictions on killing/selling/keeping wild birds. The convention became open for signature on 19th September 1979 as a binding international legal instrument. It came into force in 1982 with the UK ratifying the convention and adopting the European Directive and from 1981 passing several such acts, with the *Wildlife and Countryside Act 1981* being at the forefront.

As a young pest technician learning my trade in the late nineteen-seventies and into the new decade of the eighties, I remember only too well the discussions in the industry at that time around the introduction of this Act of Parliament and the speculation and, yes, the apprehensions of what we must expect. I recall draft copies of the act being distributed and reading of the protection it would afford to a wide range of species, both plant and animal, and of speculation that it would even be illegal to pick a wildflower. One of the first things we noticed though was the lack of mention and inclusion of control methods of rats and mice, and of insect pests - the very bread and butter of local authority pest control work and an important part of private sector work. Indeed, in retrospect why should it? *The Public Health Act 1936 (amended 1961)* and the *Prevention of Damage by Pests Act 1949* adequately dealt with the *control and eradication* of insect and rodent "vermin" species. So what was the big deal? The big deal was this new legislation dealt with the *conservation* of species, especially native ones, while still to that end allowing us to control an established alien species which threatened the equilibrium (Grey squirrel versus Red squirrel - Schedule 9) along with exceptions to the protection afforded to bird species, where control of those was necessary. Right, so it did affect us, then.

Many pest controllers today will probably assume that the legal constraints and requirements to be observed for, say, the taking and killing of pest birds started with the introduction of the 1981 Act, and before then it was a “free for all”, but nothing could be farther from the truth. The 1981 Act replaced the *Protection of Birds Act 1954 - 1967*, which itself replaced and repealed the *Wild Birds Protection Act 1902*. This new Act was more comprehensive in its specification, for example the necessity (as an above-mentioned exception) to be able to control birds for the purposes of “air safety”. Although there were of course pest birds existing in 1902 there were no aircraft engines to catastrophically ingest them – the first recognised powered flight in Great Britain not taking place until October 1908.

The term “General Licence” was one with which many pest controllers were going to have to become familiar and to study what this actually allowed them to do. In addition, the 1981 Act repealed and replaced the *Conservation of Wild Creatures and Wild Plants Act 1975*, while giving further protection to, for example, foxes against control measures employing live baits and decoys, self-locking snares and bows and crossbows.

The case of the grey squirrel is an interesting one. Introduced deliberately into Great Britain from the Eastern states and provinces of North America from 1876 through to 1929 as “fashionable additions to estates” it has prospered and has become far more numerous than the native red squirrel. It now “enjoys” a peculiar status in British law, in while being a rodent - and quite a destructive one at that - it is not vermin as, say, the Norway rat is, and therefore cannot be controlled with a standard rodenticide bait (note that a specifically authorised grey squirrel bait exists), while at the same time being an “alien species” meaning that if caught it has to be humanely dispatched and not released into the wild.



Another example is the eighteen species of bat native to the UK, in addition to one or two other species which accidentally visit our shores from the continent, which similarly received protection in the *Wildlife and Countryside Act 1981* (Schedule 5). This protection has been strengthened in further legislation in 1994 and 2007 to make bats amongst the most protected of any animal. These extraordinary mammals and their legendary sonic echo navigation ability consume many thousands of tons of insects per year. Such insects would otherwise be far more numerous. The species of pipistrelle bat we have in Britain are particularly prone to roost in the loft spaces of dwellings. Pest controllers have had to be especially careful when carrying out pest treatment work in roof and void spaces to make certain any bats present are not harmed or disturbed. This required the creation of “environmental” risk assessments back then and/or the re-writing of existing risk assessments (lets be honest though, how many pest control outfits had risk assessments in 1981?) which became vitally important to comply with the then new law. I hope that in the intervening forty years bat species and other non-target species have benefitted from this far-sighted legislation.

While it is, of course, not the purpose of this article to pick over in detail the minutiae of the 1981 Act - because the Act can be consulted, read and re-read to one’s hearts content - but rather to encapsulate how it affected pest controllers at the time, and the legacy it has produced. Firstly this lengthy piece of legislation is divided into four parts; Part I (the part pest controllers need to be especially aware of) deals with bird protection, bird control and non-native species control, Part II with nature and conservation, Part III with public rights of way and Part IV with miscellaneous and general. Within those four parts there are 17 schedules of which schedules 1 – 10 cover species which are of relevance to our industry. Next there are comprehensive definitive lists of species afforded such protection and how they may be dealt with where exceptions apply. Then there are the requirements for obtaining licences to control those species under the prescribed exceptional circumstances, with whom and indications as to with whom responsibility lies for enforcement and prosecutions following transgressions, along with penalties for failing to observe such requirements and reasonable defences in law for persons so accused.

For forty years now these issues have surfaced from time to time in journals such as this one and have been reported in national and local press, serving as a reminder that the 1981 Act is very much with us and relevant to our daily activities as pest controllers.

The integrity of the Act can also be demonstrated in the small number of amendments which have been necessary over 40 years, all minor. Many amendments have been just single word changes along with updating levels of fines to keep pace with the effects of inflation while allowing Secretaries of State of the day to add or subtract species mentioned, though few have seen the need over these four decades.

In conclusion, the first point to make is that by studying the pest control industry relevant parts of the legislation, we can familiarise ourselves with what we need to do, to be pest control industry compliant, making it not a hard act to follow. Secondly, as a comprehensive piece of robust legislation it has certainly stood the test of time and most definitely is a hard act to follow.

The *Wildlife and Countryside Act 1981* received Royal Assent on October 30th 1981, for enactment on January 1st 1982.

Pete Newbrook was a Wirral Council pest control technician from July 1977 to 2004, then Deputy Pest Control Manager from 2004 to 2008 before becoming Manager - very nearly 43 years in total. For 12 years he was Wirral Council’s delegate to the Merseyside and Cheshire Pest Control Sub Group, including two terms as Chairman. He also served for 3 years from 2015 to 2018 as an examiner for, and as a consultant to the Royal Society for Public Health. He left Wirral Council in June 2020, retiring both from local government service and the pest control industry.



Grey silverfish control

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The rise of the grey silverfish *Ctenolepisma longicaudata* has been well-documented in Pest Control News.

The importance of this newly appreciated pest species, in the UK, is now reflected in the availability of specific monitoring and control products.

In this article we take a closer look at control measures for the grey silverfish AKA long-tailed silverfish. Much of the advice is taken from the Norwegian Institute of Public Health.

Integrated Pest Management (IPM)

The most sensible method to control the grey silverfish is an Integrated Pest Management (IPM) strategy. The client should deal with population limiting efforts such as housekeeping and hygiene, while the pest controller undertakes the technical inspection and control measures.

Introductions

Problems with the long-tailed silverfish will typically be discovered in private homes, office buildings, schools, libraries and museums. It is also important to be aware of storage facilities for merchandise, distribution terminals for cargo and goods, second-hand stores, and their potential as distribution points for the long-tailed silverfish. The long-tailed silverfish can 'hitch a ride' with pallets, crates, cardboard boxes or furniture to establish in new places. Product packing, crates and boxes are the most likely candidates because wood, corrugated cardboard, polystyrene and plastic provide a multitude of hiding places. These are, of course, good places to inspect for silverfish activity.

Inspection and detection

Firstly, confirm the species with an identification. This is best provided by an entomologist. The long-tailed silverfish is nocturnal and may be difficult to find during the day. By moving furniture, boxes or bookshelves it might be possible to encounter hidden individuals. The long-tailed silverfish are also found behind skirting, under doorsteps and inside boxed-in areas. The opening-up of such permanent cavities can reveal day-resting individuals. It is also possible to conduct night-inspections, as it will be easier to find individuals at this time, due to the night-time activity of this insect.

The use of monitors, recommended for at least a 14-day period, is also a useful method of detection.

Collecting specimens via monitoring allows identification between the long-tailed silverfish and the common silverfish. Bathrooms, kitchens and laundry rooms are hot-spots for the long-tailed silverfish.

Cleaning

The long-tailed silverfish can feed on most human food. Small amounts of food debris, on the floor or behind ovens or refrigerators, can be enough for silverfish to survive. This should be removed by vacuuming of the floor and furniture as well as behind more permanent installations such as ovens and refrigerators.

Environmental adjustments

Dry conditions could limit long-tailed silverfish development because the eggs and the early stages require higher moisture levels. However, efforts to reduce humidity are not as important for the long-tailed silverfish as they are for the common silverfish due to differing moisture requirements. Furthermore, dry conditions in all cracks and crevices are difficult to achieve. It is probably beneficial to limit the use of water during cleaning. Excess water may easily run underneath skirting, kitchen cabinets and cavities underneath furniture to provide the long-tailed silverfish with the moisture they need. Use of dehumidifiers, heat and aeration, can reduce moisture availability.

Killing of established individuals

The delayed hatch of long-tailed silverfish eggs can be problematic. It may take as long as 2 months for eggs to hatch after removal of the last female. These new individuals also need to be removed by control measures. Individuals escaping the treatment may also become adults and deposit new eggs, which emphasises the need for thorough control.

Monitors

Sticky monitors are suitable for detection and monitoring. Experiments show that baited monitors catch more than un-baited traps.

- Place near cracks and crevices where silverfish or grey silverfish like to hide.
- Position one trap every 25 square metres or more if you wish to pinpoint an infestation.
- Lie on a flat surface or peel off the strip on the bottom of the trap, to reveal glue, to attach the monitor to a wall or skirting board.
- Replace every 6-8 weeks unless the trap is full earlier.

Toxic baits

Several commercially available baits, tested against the common silverfish and the firebrat, are consumed even in the presence of competing food sources and the active ingredients indoxacarb, fipronil and abamectin produce significant mortality. Baits with indoxacarb, already in use against cockroaches and ants in Norway, provide good control in trials against the long-tailed silverfish. Norwegian field trials, with indoxacarb baits, have shown more than 90% population reduction within 10 to 12 weeks. Comparable field results have been observed in the Netherlands when using Maxforce Platin (Gutsmann, 2019).

Note that only Maxforce Platin (1% Clothianidin) is currently authorised as a silverfish *C. longicaudata* bait in the UK.



An important success factor in both the Norwegian and the Dutch bait tests has been to use many, evenly distributed, small droplets of bait to increase the probability of ingestion by the long-tailed silverfish. It is important to bait areas where silverfish aggregate (as per cockroach baiting strategies) because bait drops close to harbourages will increase the probability for ingestion. The use of small cracks and crevices as natural bait stations is recommended as these places are also areas of movement and hiding for silverfish. Such placement also reduces the probability of unintended contact, by non-target species, with the bait. It is also important to remove competing food sources to increase probability of ingestion.

Insecticide sprays

The effect of different active ingredients is not studied in the long-tailed silverfish, but the common silverfish is controlled by permethrin in low doses and it is expected that the effect is the same for the long-tailed silverfish. Insecticide sprays should only be a minor part of an IPM-solution. Application of insecticide sprays should be directed towards aggregations and harbourages. This means the targeted use of small amounts of product in cavities, cracks and crevices, behind skirting and other objects. A possible risk of spray application of biocides, such as repellent pyrethroids, is avoidance of treated areas by the insects and subsequent increased dispersal to new areas.

Heat and cold treatment

Heat treatment appears to have a control potential against the long-tailed silverfish. Death occurs within 2 hours at 42-44°C. The long-tailed silverfish will quickly die at temperatures above 50°C.

Knowledge regarding cold tolerance is absent.

Desiccant dust

Experiments with the common silverfish show that populations will succumb to desiccants. However, the *common silverfish is more dependent on moisture*. This means results are not directly transferrable to long-tailed silverfish but they indicate that desiccants may contribute in an IPM-strategy.

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ID Corner

In this edition of the ID corner we cover microorganisms relevant to the public health pest control industry.

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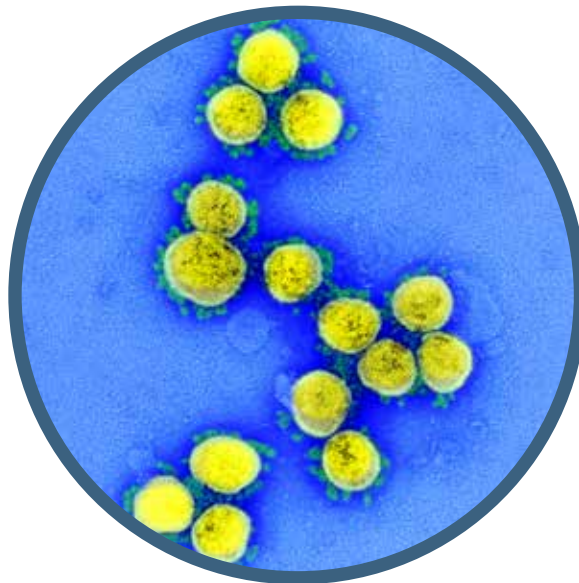
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Coronavirus - Severe acute respiratory syndrome type 2. | SARS-CoV-2 (VIRUS) Family: Coronaviridae

The virus causes the disease COVID-19 in humans. It is thought to have a zoonotic origin.

Coronavirus is an enveloped virus with a single-stranded RNA genome. The virus particles are spherical in shape and 50 to 200nm in diameter.



The spikes on the outer edge of the virus particles give coronaviruses their name - 'crown-like'.

There are other coronaviruses that infect mammals and birds although most of the associated diseases are not serious.

E. coli | *Escherichia coli* (BACTERIA) Familia: Enterobacteriaceae

Bacteria that forms an essential part of the microbiota of the human gastrointestinal tract. 'Gut bacteria'.

It is a model organism used in laboratory experiments.



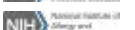
There are virulent strains that can cause intestinal infections among other serious pathologies.

E. coli can contaminate food and may result in 'food poisoning'. Hygiene and disinfection measures are of special importance in preventing contamination.

Top image: Virus SARS-CoV-2. Electron micrograph. NIAID



Bottom image: Bacteria *Escherichia coli*. Electron micrograph. NIAID



Plasmodium | *Plasmodium* spp (PROTOZOA) **Causing Malaria** | Family: Plasmodiidae

Malaria is an illness produced by parasites of the genus *Plasmodium* (Protozoa).

Humans and other vertebrates act as hosts.



Mosquitoes of the genus *Anopheles* act as a vector of the parasite.

The key to controlling malaria transmission is to control the mosquito vectors.

Fungus | *Aspergillus* spp (FUNGUS) Family: Trichocomaceae

Aspergillus is a large genus with hundreds of different species of fungus.

Some species are of economic importance in the field of food and medicines.



Can cause different diseases in people, some of which result in serious illness.

Aspergillus can be controlled by disinfectants and air filtration.

Top photo: Malaria sporozoites (*Plasmodium*), the infectious form of the malaria parasite that is vectored into people by mosquitoes. Optical microscopy. NIAID



Bottom photo: Fungus *Aspergillus* spp on a decaying banana. Visible to the human eye.

Quality VS Cost:

What to look for when choosing UV tubes

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When purchasing tubes to replace those in a unit, it is imperative to remember that not all of the available tubes are of the same quality. There is a great discrepancy in the output levels from the various tubes available and also in their longevity. Tests performed by PestWest found a wide variation among the performance from different manufacturers' lamps of similar rating, both in terms of initial UV output and rate of degradation of UV output against time.

For these reasons it is absolutely essential to select tubes from quality manufacturers. So, how can you tell what are good quality tubes? Reputable manufacturers like PestWest will be able to supply supportive data for their tubes. This data will outline details of spectral output levels and also details of the output level over time, etc. There is often a great temptation to purchase less expensive tubes, this is always false economy in the long run.

It is a fact, known to all who work with ultraviolet fly control units that the ultraviolet light produced by the phosphors within the tubes deteriorates over time. As a result of the fall in output of the UV light, it has become standard practice within the responsible pest control industry to replace UV tubes when the output has fallen to less than 30% of the initial value. It is felt by most people that with good quality tubes this equates to around 8 months of operation.

We are therefore advising that UV tubes must be changed at least once per year and preferably at the beginning of the flying insect season. This replacement frequency is also largely the one recommended by the International Food Safety Standards (BRC, AIB, IFS, ISO 22000, etc.) and external auditors.

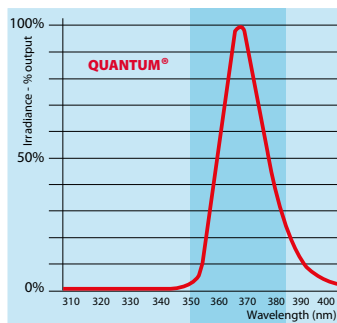
Another point which is worth considering is associated with pest control contracts. If a pest control operator has been given a pest control contract which includes the placement and maintenance of fly control units then the contractor will be contracted to keep premises pest/fly free. If the contractor is found to be fitting tubes which are of poor quality, then the contractor could be adjudged to be in breach of that contract which could lead to a dispute between the contractor and customer.

Furthermore, it is incumbent upon the contractor, in order to fulfil the contract, to change the UV producing tubes at the correct intervals to ensure maximum efficacy of the units. If the contractor is not changing the tubes at the correct intervals to ensure optimum operation, again the judgement may be that the contract is not being fulfilled.

These may seem slightly obscure points, however, the details of pest control contracts are being examined more and more closely. Therefore, in order to avoid any unnecessary conflict between contractor and customer change the tubes at the correct intervals and use good quality tubes.

Differences between fluorescent lamps

What is often not appreciated is that the blue light we see, is not the prime attractant for the flying insects, it is the UV light. This is important because fluorescent tubes employ the shorter wavelength of UV light and these are created by certain types of phosphors in the tubes, so the output of UV light decreases more rapidly than the equivalent "white light tubes". Therefore, just because the tube is lit and we can see light, doesn't mean to say it is still producing enough UV to attract insects.



The most important factors when considering the choice of fluorescent tube is not only how high the initial Ultraviolet (UV) light output is, but how well does the lamp maintain this output over a period of a year. The UV output of all insect

attracting fluorescent lamps will reduce over time due to a slow degradation of the fluorescent powder coatings on the inside of the glass tube. The rate of this degradation varies between manufacturers. Higher quality lamps have the slower degradation rates compared with cheaper brands, due to the design of the lamp and the quality of the materials used. Lower UV output levels in lamps used in electronic fly traps will reduce the attraction to flying insects.

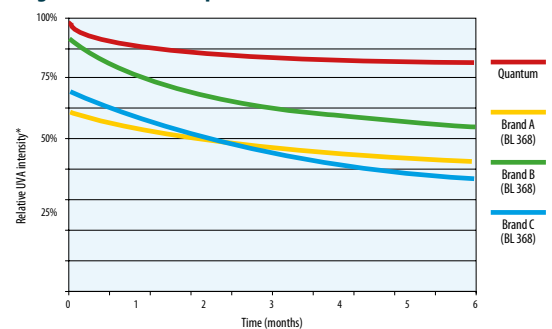
Maintaining high UVA output

UVA light emitted from tubes varies greatly depending on the type of phosphors used and the quality of the manufacturing process. The wrong phosphor mix and any lack of quality control leads to very low product performance.

The special phosphor mix used in Quantum® tubes and a quality control system to international standards give high initial UVA output while maintaining more UVA light over the tube's lifetime. As a result, PestWest Quantum tubes guarantee the user highly effective performance throughout their entire lifespan.

A study comparing the UV output over time of various lamps on the market, revealed there were vast differences in both initial output and the degradation rate.

Degradation of UVA output with time



*measured at 1m in μW/cm² relative to the Quantum tube equalling 100% when new
The study on the UVA light output above compares the PestWest Quantum tubes against several popular generic BL368 UVA tube brands.

Shatterproof Coating

Not all shatterproof coatings are the same because their quality depends on the materials used. Some shatterproof coatings will significantly reduce UVA output.

As the market continues to grow, it has attracted further manufacturers and third-party coaters of UVA lamps offering shatterproof versions. The use of various plastic coatings / sleeves which heavily attenuate the critical output wavelengths of UVA fluorescent lamps has increased. This compromises lamp performance output and affects catch rates. Further degradation (yellowing) of the shatterproof coating after only 2,000 hours operation is also sometimes experienced.

Since the introduction of IEC 61549 Fragment Retention Lamp Standard, it has become a benchmark of compliance and performance to which manufacturers, end users and authoritative bodies recognise. However, it is limited to general fluorescent lamps and does not cover any photometric characteristic standards for UVA versions.

Due to no standardisation within this area, sub-standard products which attenuate >10% between 350 -370nm cannot be differentiated between professional products which only attenuate <5%. In some severe cases this can lead to rapid deterioration of the fragment retention coating, for example, when attenuation is -30%.

PestWest Quantum shatterproof tubes are coated with a high quality FEP shatterproof coating which has an excellent UVA transmission of around 95%. The FEP coating also features excellent impact resistance and guaranteed glass retention. It will not melt, flake, discolour nor drip and complies with international standard EN 61549 for shatterproof tube coatings.

In conclusion, we recommend always taking an evidence-based approach regarding the UV lamps available for flying insect control and make an informed choice.



Are fruit flies your bugbear?

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Are you exasperated by these indignant little menaces? They may be small but can cause a big problem.

Fruit flies (commonly *Drosophila melanogaster*) with their bright red eyes can form huge clouds of intimidation when disturbed; lazily sinking back to whence they came. Enough drama, back to the technical... species identification. As with all flies, ensure you have the correct species, fruit flies in general are fairly simple to ID. There are several fruit flies (*Drosophila* sp.) in the same family and they have similar features. Look for their bright red eyes (a useful defining feature in many species) on this small fly (approx. 2.5-4.0mm). Their abdomen is typically buff in colour with dark brown to black transverse rings. As for flying, their wings have an iridescent sheen and they are not great fliers so don't tend to make it too far from the emergence site.

Fruit flies have one of the fastest life cycles of any fly. They can complete from egg to adult in 7 days (with warm enough temperatures of approx. 28°C and with sufficient food supply and moisture). This is some feat and can explain why vast numbers can occur very quickly. The female fruit fly could lay up to 500 eggs in her lifetime.

Another fruit fly variant is the Dark-eyed fruit fly (*Drosophila repleta*) a little larger than the common fruit fly, with dark red eyes. These flies still prefer rotting and fermenting matter, but instead of hanging around the breeding area they tend to be found alighting on higher walls and surfaces.

These pesky little flies can cause real issues, how do we do something about them? The key is always finding the source of the flies. The breeding matter, the attractive nutrient rich soup the larvae require to feed, grow, pupate and then emerge as the adult and start all over again. Hygiene is absolutely paramount, as with all flies but a very small amount of food is needed (be it solid, semi-liquid or liquid). Even vinegar for example, another common name is 'vinegar flies'. The food and/or breeding source just needs to be rotting, ripening or fermenting.

Where to start?

Start in the usual areas where fruit flies crop up. In bar areas, look for food accumulations around footings and around drinks fridges. Are areas clear under fitments and all around the wall floor junctions? Sink areas are also key due to the potential for water and organic matter mix, check for leaks, check for debris. Also check for slimy residues as this is an indication it is not being cleaned as often as it should.

Front serving areas – it's essential to check drip trays as these can easily block up. The tiny drainage hole can harbour fruit flies amongst the accumulated residues. Inspect under the sink, ensure no leaks or gaps in the stainless-steel fitments. All gaps should be sealed to prevent leaks and residue build up.

Bottle bins are also a firm favorite, simply moving the bottle bin a little will disturb the fruit flies. Other dispenser machines should also be checked – soft drinks, fruit and hot drinks machines. Check behind the bin especially, as debris often falls behind.

Food preparation and storage areas - again check under units and fitments. Key areas for residue build up are areas less frequently cleaned, such as behind ovens, behind fryers and can both easily harbour liquid and solid food debris and be neglected. Pot wash areas are also key, they are warm and wet with organic debris, culminating in a perfect area for fruit flies. Areas of fruit and vegetable prep are obvious hangouts, but grease traps and catch trays are less obvious. They should be regularly cleaned. Hidden or less obvious areas are often missed, providing fruit flies with time to breed and multiply. Are all items stored correctly? Are containers pest proof? This can be the difference between pest invasion or evasion.

Common to all areas: Sinks and drains, redundant or in use. Flooring and potentially tiles if they are loose. Any spillages should be cleaned ASAP, cloths should be stored appropriately, as should mop buckets and mops. No debris or water should be left in them. Don't be afraid to ask for and review cleaning schedules with staff. Drains are particularly key and should be free flowing at all times. General cleanliness and proofing.

Summary

How to treat? General hygiene is always important. If hygiene on the surface is amiss, then you can guarantee deeper down it is even worse.



Drains are key in fruit fly control; beyond plug holes, floor drains are key. The build-up of debris combined with the damp atmosphere is perfect for fruit flies. This is why it essential that drains are to remain free flowing. Once a build-up deeper down occurs, it can take much more than a quick flush out. Novel chemicals that contain digestive enzymes are at the forefront of clearing the sources of fruit flies and also, on occasion, drain fly issues. Treating the drain in this way along with maintenance treatments on a regular basis, can be very beneficial towards preventing debris accumulation and the prevention of flies at the source.

Last resort: insecticides, space treatments or possibly residual spray or wipe down treatments. However, these treatments can usually only treat the adult stages. In severe situations, hygiene, drains and insecticides may be necessary to quickly gain control.

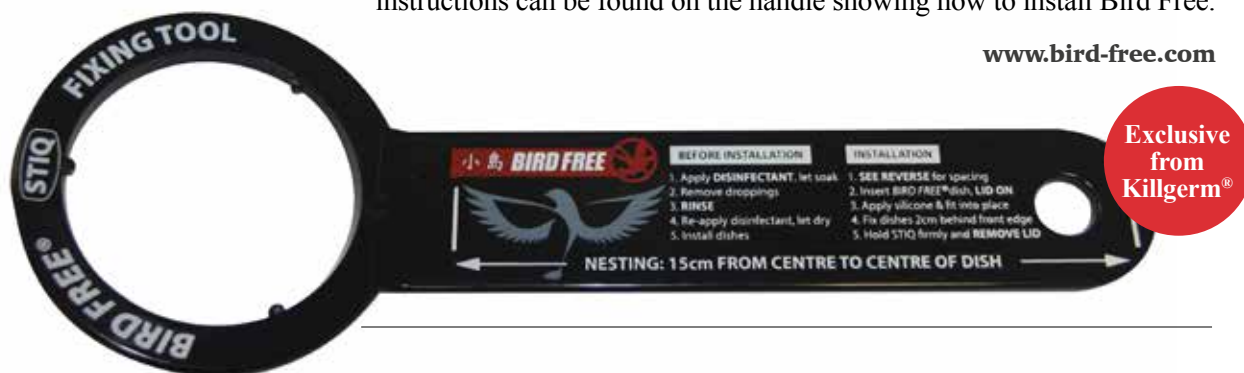


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Installing Bird Free is now even easier thanks to the Stiq.

It is designed to lock Bird Free dishes into place, allowing for quicker lid removal. The Stiq is the go-to tool to use on any jobs involving Bird Free. A hole on the handle allows it to loop onto anything. The 6" handle length shows the minimum recommended distance between Bird Free dishes and helpful instructions can be found on the handle showing how to install Bird Free.

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Vazor® Provecta is now available in 5 litre containers.

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Killgerm® Hand Sanitiser (Nilaqua) is an alcohol-free, quick drying hand sanitiser that offers post application protection for up to 6 hours. Based on two active ingredients, Didecyl Dimethyl Ammonium Chloride and Quaternary Ammonium Compounds, it kills up to 99.9999% of ‘germs’, including Coronavirus, MRSA, *Clostridium difficile*, Norovirus and more. Killgerm Hand Sanitiser (Nilaqua) is non-skin drying and non-skin irritating. EN1500 approved product (Hygienic Hand Rub test - pass).

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Deadline Pyfog

The water-based formulation is specifically designed for use in a thermal fogger.

The non-persistent formulation provides quick knockdown with minimal environmental impact. This makes it suitable for use in both domestic and commercial premises, the formulation is ideal when quick knockdown and low residuality is required.

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Deadline Pydust

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Deadline Pyspray

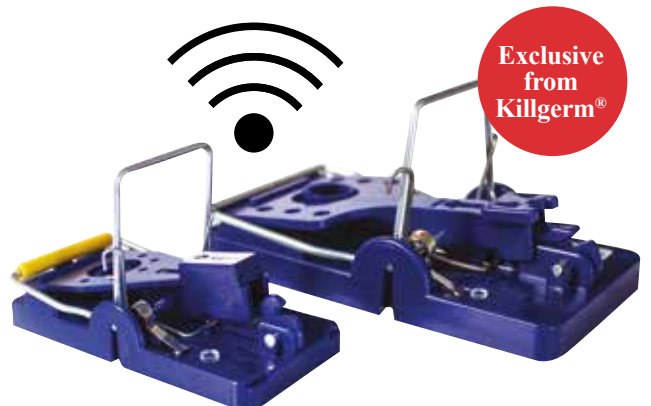
The oil based ready to use formulation is specifically designed for rapid broad-spectrum control and is suitable for use in sensitive areas such as food factories and hospitals. The formulation can be used internally or externally for the control of flying and crawling insects. It can be applied using a sprayer or alternatively it can be brushed directly onto a target surface for precision application.

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Choosing your “new normal”

BPCA Chief Exec reflects on lockdown

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There is no map for what organisations are facing at the moment because none of us has been through anything similar in our working careers. BPCA Chief Exec, Ian Andrew, shares his lockdown reflections.

Like most businesses, we went into lockdown almost overnight. At BPCA, we're a small team but that doesn't lessen the logistical issues we had to overcome. Getting all the right kit to the right people, so that everything worked as it did when we were sitting in the office was no small task.

DAY JOB? WHAT DAY JOB?

We then had an overload of government information we had to sift and sort in a manner that worked for members. At the same time, we had to get our public affairs work from 0-to-60 in no time at all, due to our initial lack of inclusion in the key worker categories.

It was a real game of two quite different halves as the Marketing and Comms team were rushed off their feet with updates, guidance and letters to elected members in Westminster and the devolved governments.

The Technical team was similarly swamped with members seeking advice on whether they could continue working, how they could work safely and what risk assessments they should undertake.

Work for the events team quickly fell off a cliff face, but thankfully our experience in running webinars stood us in good stead for getting digital events up and running.

Our training delivery teetered on the same cliff-edge as we could no longer run our physical courses and exams. In many ways, we completed a digital transformation of our training offering in four months. We launched digital classroom courses, e-learning packages and a digital Certificate in Bird Management. Soon we'll be launching the digital Advanced Technician in Pest Management qualification.

BACK TO NORMAL OR NEW NORMALITY?

Our first physical training Level 2 Award in Pest Management course since lockdown ran in July and the preparations were tough, however the feedback was extremely positive from those who attended. That's another bridge crossed.

Our next challenge will be moving back into the office. Feedback from the team suggests most are not in a rush to get back, particularly those reliant on public transport.

The important thing is getting back to business - even if this is not getting back to normal. But it's not just about doing what we did before. For example, we are confident that PestEx will run next March. We believe it will. ExCeL believes it will.

That being said, we still must think about what our digital options are. There is duplication in workload just to cover off any contingencies.

CHANGE FOR THE WORSE

Looking more generally at some of the unintended consequences of lockdown, some of these features we need to ensure don't remain in the new normal.

In many cases, the boundaries of work/life balance have blurred and there has been a near expectation of availability beyond the typical working hours. That's not good for people's wellbeing.

How many of us have been answering emails and texts, posting on social media while participating in a Zoom meeting? We have all spent much longer staring at a computer screen, often ignoring good practice. This is not sustainable in the long term from a health perspective.

Consultation has at times gone out the window because we had to be fleet of foot and do what was believed to be the right thing at the time. That's OK in a crisis. While agility is good, the checks and balances of governance are also good!

MEMBERSHIP FIRST

Trade Associations will go down one of three routes. Some will disappear or merge. Some have gone into hibernation. Others, including BPCA, have been busier than ever.

We had corners to fight for our members; our sector being recognised as essential and our workers being recognised as key. Being the voice of our members in the sector and beyond has helped prove our worth during this crisis. That, alongside all the guidance and support we've provided, has hopefully been of value.

As with everything, if you don't look at our website, read our emails, see our social media posts or read our bulletins, you're going to end up missing out.

Having a voice is vital for all our engagement with Governments. Whether that's the ongoing efforts to avoid a ban of glueboards in Scotland or the issues over bird licensing generally across Westminster and the devolved nations.



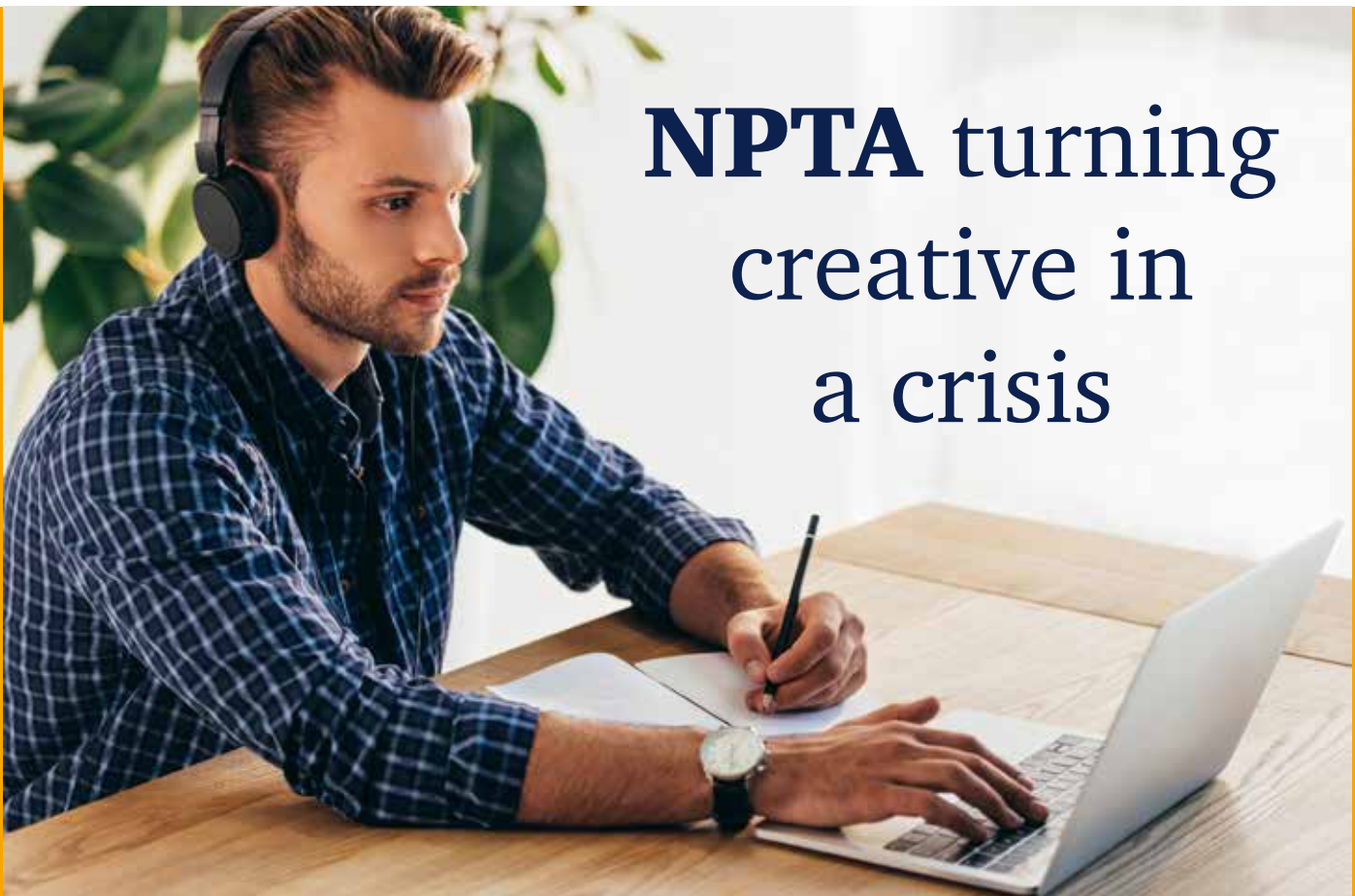
We have a lot more still to offer. Our investment in delivering services digitally has been significant and done at speed. Making as much as possible accessible online will continue. Additionally, we'll shortly launch a new suite of updated Codes of Best Practice and guidance documents.

Guess what makes all this happen? Our members. Our main sources of income are our member subscriptions, the revenue from our training courses, qualifications and our events. Members are what being a Trade Association is all about. Our members share their ideas and guide our decisions.

There is much to reflect on as we come out of lockdown. Some of it positive, some less so and some we hope we never have to repeat again!



NPTA turning creative in a crisis



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Unfortunately, we start with some extremely sad news in that PestTech has had to be cancelled this year. As we're sure you're already aware, the coronavirus (COVID-19) pandemic has meant that following Government guidelines it's now vital to limit social contact and avoid large gatherings, an almost impossible task at such a large exhibition. For this reason, we've made the very difficult decision to postpone PestTech 2020 which was due to take place on 11th November, focusing on alternative support measures for members instead.

However, it is often said that necessity is the mother of invention and the current crisis has created something of an L & D revolution in the pest control industry, with the likes of Killgerm and some manufacturers now offering pest control training online.

Most training venues have been through a period of closure, making physical training sessions impossible. Add to this the necessity to obtain sufficient CPD points for the year and you have got added stress to what is already a difficult situation.

Coronavirus has no doubt been a catalyst for a change in thinking and approach in how we conduct business, and training is no exception. Here at the NPTA we have embraced this new way of thinking and are now offering free online training webinars for our members. These comprise of relatively short (up to an hour) videos which provide simple to use and informative training that can be done in the comfort of your own home, with the added benefit of making CPD points available.

When you consider the implications to business of face to face training, they are numerous. Firstly, you give up time where you could be making money. Then consider how you are going to have to deal with that awkward or desperate customer whom you cannot visit as you are sitting in a classroom. Secondly, it is sometimes not just the training day, some have to travel to these courses meaning having to give up, potentially a day either side of the training. Add to this the cost of hotels, meals etc.

Add all these costs together, then you have to weigh up the benefits of attending a physical training session.

However, most of us now (this is an NPTA requirement) are part of a continual professional development scheme, so have to undertake training in order to get the required number of points for the year.

Video webinars undoubtedly increase the knowledge base and benefit a large number of people but have the disadvantage for participants of not being able to ask questions or clarify any point they do not fully understand.

Therefore, we are now exploring the possibility of conducting interactive video training sessions that can be done from the members own home or office, making it a cost effective way for practitioners to stay up to date with industry changes and improving their skillset. It is our plan to use the technology which is now readily available to conduct sessions via video link where these training sessions can be interactive and allow for discussion, which in our view is a key part of any session as it complements learning.

Of course, this will not replace all training and pest control is a practical industry where sometimes you must be 'hands on'. But, for certain scenarios, it may play a very important role in increasing knowledge while making training more accessible.

Please feel free to contact us with your views on this approach and let us know if this is something you would be interested in.

 **NPTA**
tomorrow's association
for today's technician



RSPH Looks Towards the Future

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The pest control industry has continued to operate throughout the Covid-19 pandemic, even with all the restrictions put in place to limit the spread of the virus.

RSPH has also carried on working throughout the pandemic, although the office has been closed since lockdown was imposed in March.

A number of RSPH centres have carried on with training learners for the suite of pest management qualifications, and RSPH has worked closely with each of these to ensure that the training is safe, and that appropriate social distancing measures are in place. With the RSPH office closed, the procedures for the delivery of assessments to centres and learners has had to change. This has included how they ensure that exam papers are made available and how completed scripts are returned to RSPH and marked by the examiners.

As RSPH is a regulated awarding organisation, it was also important that the examinations continued to be invigilated appropriately and that there was no difference in the standard required of candidates to pass each of the qualifications. A range of strategies and solutions have been developed to ensure that there was something that each of the centres could work with.

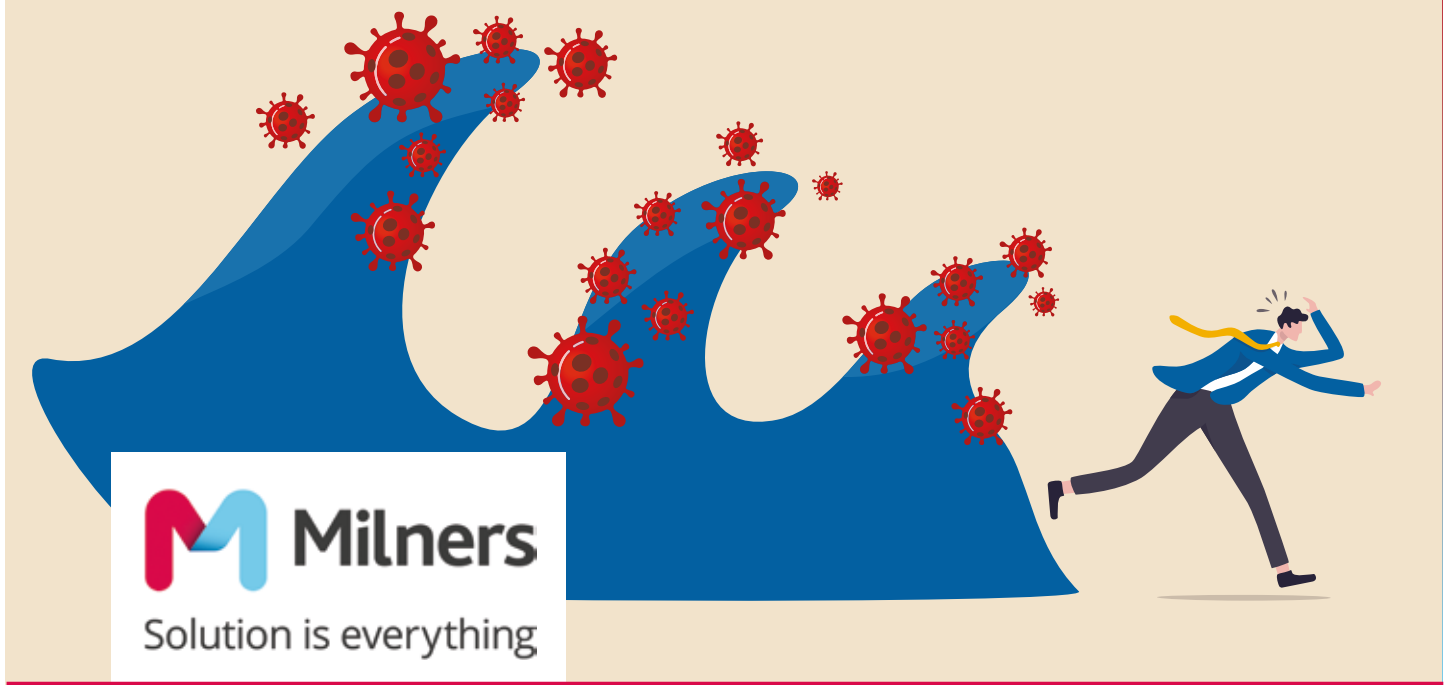
During lockdown, everyone has become used to a more remote way of working, especially with meetings. Before Covid, people used to travel to a convenient location for face to face meetings, but now everyone is familiar with using systems such as Zoom and Microsoft Teams, to meet remotely from the comfort of their own homes. Training and education are no exception to this, if you have school-age children you will be aware of some of the remote learning solutions that schools have employed while they have been shut down. A number of pest management training providers have also switched to remote learning in order to continue to deliver training.

Since lockdown, RSPH has been exploring a number of options for delivering examinations and other assessments remotely and has been in talks with the leading e-assessment platform providers and remote-invigilation companies. RSPH have had to find a balance between convenience and cost, whilst making sure that any system and procedure adopted was fully compliant with regulatory requirements. By the time that you read this copy of Pest Control News, RSPH will have signed a contract with a leading provider and will be testing and trialling the system and procedures with some of their training centres and over the next few months will be rolling out e-assessment for all of their qualifications.

Quite apart from any infection control considerations, remote learning and e-assessment will enable learners to work from home or their place of work, without having to travel to a training centre, and will be able to study at their own pace. While face to face learning is the best option, remote learning certainly has its advantages.

Covid-19 has also provided pest controllers with the opportunity to diversify and use their skills to disinfect premises and outside spaces. However, please be aware that RSPH pest management qualifications are not designed for this purpose and RSPH does not accredit individuals to carry out Covid-19 cleaning operations.

RSPH
ROYAL SOCIETY FOR PUBLIC HEALTH
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COVID-19: A Second Wave?

According to the Academy of Medical Sciences, “the UK must prepare now for a potential new wave of Coronavirus this winter that could be more serious than the first.” Indeed, it appears that anyone with a science degree is predicting the same and so with an official death toll of 45,752 (at the time of writing), it looks like we may be in for a very rough winter indeed. Covid, which may live longer in colder conditions, isn’t getting any weaker, we have no vaccine, track and trace isn’t working and coupled with seasonal flu, this is going to potentially land us in the perfect storm. Please see <https://ourworldindata.org/coronavirus> for truly terrifying real time analytics of the deaths world-wide. And so my question is – what can we as businesses do to survive?

In no particular order, here are a few tips I have harvested:

Learn from the last 4 months: Have your staff been able to work remotely? Have you made use of the furlough schemes and any available finance available (be it CBIL, grants or bounce back loans)? One point worth bearing in mind is that the financial markets are going to harden and borrowing won’t be easy to come by. Sure, there will always be lenders, but the cost of borrowing is going to get a lot dearer with more onerous terms if you fit the tougher criteria. Let’s face it, the banks haven’t exactly been on the side of small businesses and have a habit of looking after themselves, to the business community’s detriment. So, whilst there may be a lull in the storm, repeat the mantra that “cash is king” over and over again. I read of late that a change back to the old days of actually saving and having liquid

reserves in your business is going to be a lot more mainstream instead of the hand to mouth models adopted nowadays with the buy now, pay later salvage net of borrowing.

Be prepared: If you are wanting all your staff to return soon, have you done your risk assessments? Stocked up on PPE and hand sanitizer in case the supply lines get disrupted again? Have you adopted a stringent and thorough cleaning policy? For those working at home – has their workstation been risk assessed? Are they aware of having regular breaks from their screens? What is your contingency plan if one of your staff gets infected and needs to quarantine, how will that impact on your resources and can you cover? Do you change the terms and conditions of a) your employees for working at home and b) your supply contracts to add in a robust force majeure clause?

Financial modelling: Work on these over and over again as the market is changing constantly at the moment, again, plan for the worst and anything else is a bonus. Have you cut your overheads sensibly and wherever possible? We can’t trade in the market we wish to be in but the one that we are actually in and so having those luxury/non-essential personnel or expenses on your books maybe need looking at again especially as the furlough scheme is due to change. One thing that can be predicted is that we aren’t in this together at all and the government assistance will NOT be repeated as quite simply they won’t have the money next time round.

Work differently, work smarter: The days of pressing the flesh and going to corporate hospitality events is a distant memory or at

least for now so how can you engage with your existing and as importantly, your new clients? Use what is available, so at its simplest level – pick up the phone. Its amazing how well received a text or phone call is. As a species communication is part of our social DNA and we want to talk and socialise with other humans. Take it up to the next level and have video conferences on Zoom or Teams, or if that’s a step too far – Facetime or WhatsApp video your clients and colleagues - these are more basic video links but nevertheless still effective.

Keep a close eye on the market and your competition: ‘Knowledge is power’ has never been more true than at present so keep abreast of what’s going on in your world and make your own waves. With the down time, turn your energies to sorting out your admin, making those calls you never quite got around to, read more and try to stay ahead of the pack or make your company different by doing free webinars, increasing your social media presence, and finally talk to your staff a lot more who need you as the boss more than ever to get them through.

This may get quite tough for a lot of companies so please don’t get complacent. If you wish to discuss any of the above issues or other legal challenges please don’t hesitate to contact Giles Ward at Milners Solicitors completely free on **07789 401 411** or [linkedin https://www.linkedin.com/in/giles-ward-pub](https://www.linkedin.com/in/giles-ward-pub) [blicinquiryexpertcommerciallitigationexpertlawfirm/](https://www.linkedin.com/in/giles-ward-pub). This is a complimentary offer to all PCN readers.

Your guide to the pest control 2020 TRAINING DATES



We're looking forward to welcoming you back!

We have put everything in place to ensure our training facilities are COVID-19 secure, allowing you to focus and enjoy all our educational experiences.

We hope to see you soon ~ The Killgerm® Training Team

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.

September 2020

08/09/2020 - Killgerm Principles of Rodent Control – Ossett
09/09/2020 - 10/09/2020 - Killgerm Principles of Insect Control – Ossett
14/09/2020 - Bird Control Theory - Holmes Chapel
15/09/2020 - Bird Control Practical - Holmes Chapel
17/09/2020 - Safe Use of Air Weapons for Bird Control – Reading
22/09/2020 - Killgerm Principles of Rodent Control – Lingfield
22/09/2020 - Pest Control Refresher / Update – Tamworth
23/09/2020 - 24/09/2020 - Killgerm Principles of Insect Control – Lingfield
23/09/2020 - Safe Use of Air Weapons for Bird Control – Bristol
24/09/2020 - Pest Control Refresher / Update – Perth
29/09/2020 - Insect Workshop 1 - Bedbugs & Fleas – Tamworth
29/09/2020 - Killgerm Principles of Rodent Control – Norwich
29/09/2020 - Safe Use of Air Weapons for Bird Control – Kibworth
30/09/2020 - 01/10/2020 - Killgerm Principles of Insect Control - Norwich

October 2020

01/10/2020 - Drainage Investigations & Rat Control – Ossett
01/10/2020 - Practical Bird Netting - Clunby Kirkcaldy
01/10/2020 - Working Safely in Pest Control (IOSH) – Newbury
06/10/2020 - Killgerm Principles of Rodent Control – Ossett
07/10/2020 - Safe Use of Air Weapons for Bird Control – Doncaster
08/10/2020 - Pest Control Refresher / Update – Ossett
13/10/2020 - Killgerm Principles of Rodent Control – Newbury

14/10/2020 - Insect Workshop 1 - Bedbugs & Fleas – Newbury
14/10/2020 - Practical Bird Netting – Ossett
15/10/2020 - Pest Control Refresher / Update – Bristol
21/10/2020 - Bird Control Theory – Bristol
21/10/2020 - Pest Control Refresher / Update – Newbury
21/10/2020 - Trapping Techniques – Killamarsh
22/10/2020 - Bird Control Practical – Bristol
22/10/2020 - Pest Control Refresher / Update – Grangemouth
27/10/2020 - Killgerm Principles of Rodent Control – Tamworth
28/10/2020 - 29/10/2020 - Killgerm Principles of Insect Control - Tamworth

November 2020

10/11/2020 - Killgerm Principles of Rodent Control – Ossett
10/11/2020 - Safe use of Air Weapons for Bird Control - Holmes Chapel
11/11/2020 - 12/11/2020 - Killgerm Principles of Insect Control – Ossett
17/11/2020 - Killgerm Principles of Rodent Control – Perth
18/11/2020 - Practical Bird Netting – Bristol
18/11/2020 - Trapping Techniques – Killamarsh
19/11/2020 - Working Safely in Pest Control (IOSH) – Ossett
24/11/2020 - Killgerm Principles of Rodent Control – Bristol
25/11/2020 - 26/11/2020 - Killgerm Principles of Insect Control - Bristol

December 2020

08/12/2020 - Killgerm Principles of Rodent Control - Ossett

Some courses remain available online. <https://training.killgerm.com/>



To book visit: www.pestsolution.co.uk

14th September 2020

RSPH Level 3 Award in Pest Management
 Day 1 - 14th September 2020
 Day 2 - 15th September 2020
 Day 3 - 19th October 2020

24th September 2020

RSPH Level 2 Award/Certificate in Pest Management
 Day 1 – 24th September 2020
 Day 2 – 25th September 2020
 Day 3 – 1st October 2020
 Day 4 – 2nd October 2020
 Day 5 – 8th October 2020
 Day 6 – 9th October 2020

25th September 2020

RSPH Level 2 Award in the Safe Use of Rodenticides
16th October 2020
 RSPH Level 2 Award in Pest Management
 RSPH Level 2 Certificate in Pest Management

19th November 2020

RSPH Level 2 Award/Certificate in Pest Management
 Day 1 – 19th November 2020
 Day 2 – 20th November 2020
 Day 3 – 26th November 2020
 Day 4 – 27th November 2020
 Day 5 – 3rd December 2020
 Day 6 – 4th December 2020

20th November 2020

RSPH Level 2 Award in the Safe Use of Rodenticides

11th December 2020

RSPH Level 2 Award in Pest Management
 RSPH Level 2 Certificate in Pest Management



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 **SEND**

Xignal's end-to-end solution, from sensor to portal, is easy to use. The LoRa technology communication from the trap to the internet runs via a secure network (ethernet or 4G).

 **REPORT**

Through the Xignal App and online portal, you can monitor the status of all the traps/sensors. You will also receive an email notification of any trap status change, so you can respond quickly to issues.



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