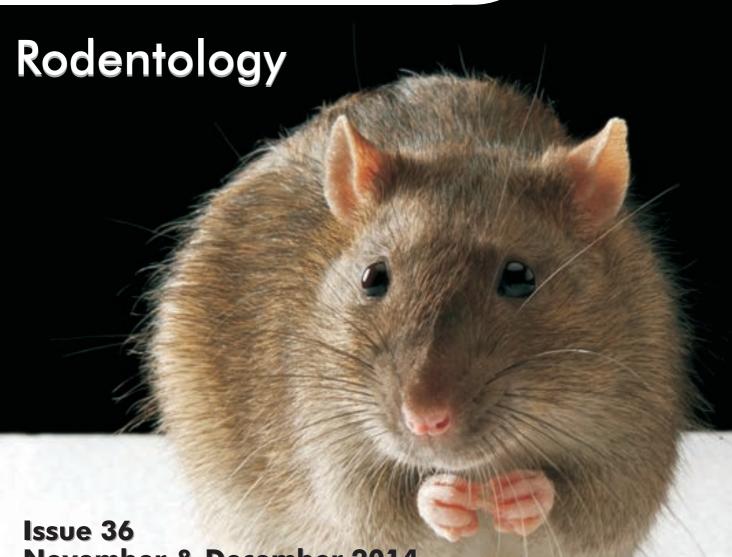


The independent UK pest management magazine



November & December 2014











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Rosy future for most...

It's been a hectic autumn in the **Pest** office with a lot to report on from the autumn round of events. The industry mood globally, as we have walked the exhibition floors, has been generally optimistic with a number of companies reporting increased activity – although, of course, they wouldn't tell us if sales were down, would they! A number of speakers too have highlighted potential new business opportunities for UK pest professionals – on farms once stewardship arrives, in mole and rabbit control as restrictions on aluminium phosphide kick-in and in urban deer management.

Also in the UK, the Chancellor's autumn statement and the comments made subsequently by political parties of all persuasions, indicate public expenditure cuts will continue as an important part of deficit reduction, whichever party gets in next May. That's not good news for our surviving local authority pest control units.

As Christmas approaches we expect you, like us, will be looking forward to time with your families and friends and a well earned rest over the Christmas break. On that note we'd like to wish you all a Happy Christmas and look forward to bringing you more news, views and technical reports in 2015.

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I.N.D.I.A. acquired

Earlier this summer, wellknown Paduabased Italian biocides manufacturer INDIA Industrie Chimiche was

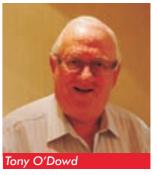


taken over by the Induchim Group, a company with over 25 years of experience in toll manufacturing of biocidal and plant protection products. In August the offices were moved to their new headquarters. The new address is: INDIA, Via Sorgaglia, 25, Arre, Padova, 35020, Italy.

Changes at Killgerm

Tony O'Dowd, Killgerm area sales manager for the West Midlands, Wales and Ireland is to retire at the end of the year. Tony who has been with Killgerm for 25 years, is one of the industry's 'characters' and will be much missed – if for no other reason, who will lead the late-night singing in the bar after the *Pest Control News* dinner at PestTech?

Graham Bingham, Killgerm area sales manager for Scotland will take on responsibility for Northern Ireland. From 1 January 2015, Killgerm sales director, Peter Fielding, will become senior



sales manager and reduce his activities to three days a week as he wishes to spend more time with his family. Peter will continue to look after customers in Cumbria, Northumberland, County Durham, Tyne & Wear, North and East Yorkshire. Finally, technical adviser Ian Parry, who joined Killgerm in October 2013 is to be area sales manager for West & South Yorkshire, Cheshire, Greater Manchester, Lancashire & North Wales.

Welcome to new people at Bayer

Bayer has appointed Steve Bishop as product manager for professional products. Having grown-up in Staffordshire, Steve gained an Agriculture and Food Science degree at Nottingham University, and a masters in Environmental Science at Cranfield. Along the way he undertook a two year training programme with Rentokil Initial, followed by five years working at Polypipe, as marketing manager. Away from work he is a qualified falconer and keen rugby player.



Also new to Bayer is Katie Marwick, campaign planner for professional products. Katie has a degree in advertising and media from Coventry University. Finally, Greg Collins has been appointed to look after Bayer distributors in Ireland.

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People in the news



Congratulations to Dr Matt Davies, technical editor of *Pest Control News* and Killgerm's technical adviser, who has recently obtained a PhD in medical entomology from Aston University. Matt's research covered the isolation and characterisation of bacteria associated with flying insects in health care facilities with particular emphasis on *Clostridium*

Matt Davies difficile

Congratulations also go to Dr Richard Burton from the Royal Society for Public Health (RSPH) who has been promoted to deputy director (Head of Qualifications). This follows the retirement of Dr Chris Suter. Richard is well-known within the industry for all his efforts surrounding pest control training and qualifications.



All go at what was P + L

First-off was the announcement on 20 October that P+L Systems had acquired the Environmental Care Group of De Ceuster of Sint-Katelijne-Waver, Belgium for an undisclosed sum.

This is a substantial acquisition for the company as it comprises the chemical formulation and manufacturing companies of Denka International, based in Barneveld, Holland, and the Edialux-Formulex distribution business based in Bornem, Belgium with subsidiaries in the Netherlands, France and Switzerland. In total it involves 135 employees.

To mark the transformation of the business, the Group has decided to re-brand as 'Pelsis'. The new look includes a fresh logo, but retains the recognisable red and grey colours long associated with the company. In addition the Pelsis Group now includes the newly

acquired Edialux, Luxan and Denka brands, as well as SX Environmental, Insect-O-Cutor, Network and Synergetic.



SX Environmental has moved

As if there wasn't enough to get straight, SX Environmental moved out of their former home at Leigh-on-Sea, Essex and as of 1 December are now all up and running at nearby Basildon. The new address is: SX Environmental Supplies, Unit 2, Scimitar Park Industrial Estate, Courtauld Road, Basildon, Essex, SS13 1ND. Tel: 0800 0851451.





Communications award for Rentokil

Pestaurant, Rentokil Initial's pop-up restaurant that challenged passers-by in 11 countries to try an array of pest-related food, was crowned the Grand Prix winner in this year's CorpComms awards. The awards are organised by the magazine for corporate communicators.

The first event, which took place in the City of London in August 2013, offered diners an array of exotic cuisine, including sweet chilli pigeon burgers, salt and vinegar crickets and chocolate-dipped ants. In 2014 the event went international with Pestaurants organised in 11 countries, including Lithuania, Australia and Trinidad.

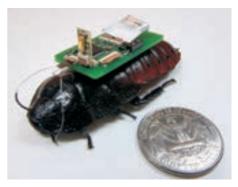




Cockroaches to the rescue

Researchers at North Carolina State University, USA have developed technology that allows cyborg cockroaches, or biobots,

to pick-up sounds with small microphones and seek out the source of the sound. The technology is designed to help emergency personnel find and rescue survivors in the aftermath of a disaster.



"In a collapsed building, sound is the best way to find survivors," said Dr Alper Bozkurt, an assistant professor of electrical and computer engineering at NC State. The biobots are equipped with electronic backpacks that control the cockroach's movements.

Two Kent companies merge

Westerham-based Safeguard Pest Control and Arrowguard Pest Control Services from West Malling, Kent are joining forces to create a unified business which, they say, will then be able to tackle all aspects of pest control. Both are privately owned companies. Arrowguard was formed in 1970 and Safeguard in 1986. Both will continue trading under their own names.

A sense of social responsibility

Based in Tooting, London, Beaver Pest Control is helping less fortunate people living in the area. Most recently, this November, they attended the South London Jobs Fair.

The idea is that housing association tenants go to the fair where they have opportunity to talk to potential employers about different jobs and what they entail. If there is an interest on both sides then things can be taken further. As Beaver partner David Lodge explained: "We took on a tenant in the office via this process the last time we attended and have also given numerous tenants taster days in the field. They get a chance to see what pest control is about and also gain some experience to add to their CV.

"Before working in pest control I was involved in social work, so as a company we have always played our part in voluntary community activities. Recently, an increasing number of our buyers, or tender documents, ask for proof of corporate social responsibility (CSR). We feel proud to be able to demonstrate what we have already been doing in our local community," concluded David.





Congratulations

We are sure all readers, especially NPTA members and those who

attend PestTech, would like to send congratulations to Julie (née Gillies) who became Mrs Julie Haresign when she married Steve on 18 October.

Here the happy couple were spotted at the *Pest Control* News dinner following this year's busy but successful PestTech event.



Rob Fryatt made global ambassador

At the international reception at PestWorld 2014, sponsored by Univar Environmental Science, the first inaugural awards to recognise individuals who have played a significant part on the international pest control stage were presented.

The very first Global Ambassador Award went to Rob Fryatt of Sussex-based Xenex Associates. Part of the citation described Rob as: "A global ambassador for the pest management industry before we even realised that we were an industry. He is fluent in multiple

languages and has travelled and spoken at pest management meetings in virtually every country in the world."

Unfortunately for the first time in many years Rob was not present at PestWorld and so unable to receive his award in person.

The other recipient was Alberto Ponjoan of Servicios Depec, Spain.



PhotoRATic competition

All readers are invited to take part in this competition organised by PelGar. The idea is to find interesting, amusing or intriguing images



of rodents in the wild in any geographical location. The photos can be of rats or mice, the damage they cause, ingenious home-made traps etc. So, send in the rodentrelated images spotted through your camera lens.

Closing date for entries is 13 February 2015. Win £300 worth of PelGar products plus smaller spot prizes for commended images. Full details at <u>plgr.co.uk/JNt</u> Happy snapping!





SGARs stewardship here in the New Year

Sarah Shore and Nicola Gregg from the Health and Safety Executive (HSE) were brave enough to join the panel for the Second-Generation Anticoagulant Rodenticides (SGARs) workshop, organised by Pest Control News during PestTech 2014.

They confirmed that the stewardship proposals submitted by the Professional Pest Control and Local Authority Sector Group have been largely accepted. The proposals are now going through a final consultation which will be completed by Christmas. This, HSE explained, is pretty much a formality and HSE is not expecting any

Left to right: Dave Oldbury, Iain Turner, Sarah Shore, Nicola Gregg and Rupert Broome

drastic changes for our sector. Full details of what it will mean for pest professionals will no doubt be available in the New Year, but as Killgerm's Rupert Broome said: "The professional pest control sector is in good

shape to meet the demands of stewardship

because we are already committed to training to RSPH Level 2, or its equivalent and we already have a good CPD system in place."

He explained how distributors will be introducing more stringent proof of competence checks before supplying products and that manufacturers and suppliers will fund research into residue levels in barn owls so that regulators can measure the impact of stewardship on non-target species. Manufacturers and suppliers have also committed to share, in confidence, with HSE details of the quantity of SGARs they sell.

HSE also explained that going forward all SGARs will be treated the same by HSE, so no distinction between 'indoor' and 'outdoor' products. However, that is not to say that manufacturers won't make



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Standard start!

CEPA CEN service standard about ready for launch

The new Confederaton of European Pest Control Associations (CEPA) CEN standard will be launched next spring. It is something that the European pest management industry should be proud of – a professional service standard that provides a 'quality kite mark'. Associate editor Helen Riby reports.

The new European Standard for Pest Management Services (now known as the CEPA CEN Standard) is reaching its final stages. The official Europe-wide launch date is set as 17 March 2015 in Brussels. Catching-up with CEPA's director general, Roland Higgins, at last month's Parasitec event, he was able to add some useful detail on how service companies will be audited.

As the UK's Dr Chris Suter had pointed out at the PestTech seminar on this subject, without a proper auditing process, unscrupulous pest controllers could simply claim to be meeting the standard when they quite clearly are not. "The integrity and reputation of the standard will depend on having a good auditing process," he said.

Roland Higgins explained how auditors will be appointed and trained. There is to be a CEPA steering committee to evaluate and appoint CEPA Certified Certification Bodies. He emphasised that members of the steering committee will be from European trade associations, not commercial companies. These CEPA Certified Certification Bodies (CBs) will have to prove their independence and ability by meeting key criteria. This includes holding two internationals ISO standards – 17065 and 19011.

CBs will have to submit a list of potential auditors to CEPA with short CVs to show evidence of pest management awareness. Then, before these auditors can go ahead and do any auditing to the CEPA CEN Standard they will have to undergo special training. This will be organised by trade associations on a country-by-country basis. The process of selecting and training auditors will begin in early 2015.

The CEPA certification process will be valid for three years with an intermediate verification at the halfway point. Once certified, companies will be able to use the CEPA Certified logo. CEPA will be providing a toolkit to allow pest control companies to conduct their



Unveiling the logo for the CEPA CEN Standard at Parasitec are Bertrand Montmoreau, left and Roland Higgins from CEPA



Instrumental in producing the standard, the UK's Rob Fryatt, left, who chaired the CEN Workgroup and Dr Chris Suter

own internal audits prior to the official audit. Certified businesses will be listed, by country of operation, in a searchable database on the CEPA website.

From a more parochial UK perspective, it is expected that the UK standards body, that's the British Standards Institute (BSI), will publish the UK version early next year, so servicing companies will be able to get their hands on the detail then.



Life afloat!

Neil Barnett is in his tenth year as a pest professional, having come to the industry for a change in lifestyle quite late in life when he was 50. He's just done it again – changed his lifestyle that is. We asked Neil to explain how he's managing to make life afloat compatible with continuing his successful business in pest control.

When I started as a pest technician ten years ago I did it because I wanted a lifestyle change. I'd had enough of the stress during the previous 30 years in the haulage and shipping business. It was very tough at first, but so rewarding and different to anything I'd done before. Today my business is predominately urban with a combination of commercial and domestic work. The usual mice and rats, wasps, ants, plus the other insects we come across. I have an occasional dabble with mole and pigeon control too.

I love the variety of my job, out and about in my van dealing with challenging situations and meeting different people. After having been stuck in an office day after day for 30 years it has been a stark and enjoyable contrast.

I'm also on the management board of the National Pest Technicians Association (NPTA) because, having been given so much help from people in the industry over the years and, particularly, from the NPTA when I first began this wonderful new career, I wanted to give something back.

A passion for boats

As well as my pest business, my other passion is boating. Having been on numerous canal boat holidays over the years my wife Christine and I had always fancied actually living on the water. 'When we retire' has always been our mantra and to be honest I couldn't see a practical way of doing this while I was still working

time we had our annual two week narrowboat holiday this desire grew.

Don't do it!

There were so many reasons for us not to do it. Where would I store my equipment? What would I use as an office? Where would I be able to store all the paperwork? It would be hard enough anyway downsizing into a 60ft x 7ft 'tube' from a four bedroom house where we'd lived for 35 years, let alone accommodating the needs of the business as well!

Then what about communications.

Thankfully these days with mobile phone and internet it's far easier than it would have been even a few years ago, but would these be reliable enough? A missed phone call is potentially a missed job. An unreliable internet connection could, at worst, wreak havoc and, at best, be a major inconvenience to my business.

There would be the issue of where we would live. A marina would be the solution because they have all the facilities we'd need to make life more comfortable,

particularly being plugged into National Grid electricity

to allow us to run all the appliances one has when living in a house. The problem is that there aren't many marinas to choose from. We'd ideally need to live in the middle of my trading area, or at least within easy reach of it. It's not like a house or flat



where we could live virtually where we wanted. Fortunatley in the West Midlands we're blessed with a plethora of canals and rivers (more canals than Venice, so they say), but we wouldn't want to moor our boat just anywhere along the canal.

Despite all these obstacles, we began to tentatively search the 'boats for sale' pages in the boating magazines, more to get a feel for the market than anything, but very soon the inevitable happened and we came upon the boat of our dreams. Much agonising and deliberation ensued, but it wasn't long before we both came to the decision to take the plunge and worry about overcoming the problems later.

Offer accepted

Our offer was accepted and we became the proud owners of a 62ft long narrowboat. So began our task of trying to fulfil our quest to live aboard it. We decided to let the house unfurnished. Emptying it of furniture and 30+ years of accumulated 'clutter', proved to be a mammoth task, but we achieved it using a combination of trips to the charity shops and local tip combined with the hiring of a few refuse skips. Any items we wanted to keep went into my son's loft or the loft of our house. This included all the pest business related paperwork – copy invoices, bank statements, report sheets and so on.

Paperless office

Naturally, living on a boat with such limited space there wouldn't be room for all that paperwork so from then on everything was done 'electronically'. Sales invoices sent to customers by email and copies kept on my computer (and memory stick). Most purchase invoices are received by email these days so they are stored the same way,





I decided to keep my stores at the house as it has a lockable shed and I have an agreement with the tenants for me to come and go as I please. This saved me having to find an alternative and one which I'd no doubt have to pay for too.

After thoroughly investigating the best options I sorted a decent mobile internet connection and the business land-line phone number was ported to my mobile so there would be no longer a need for it to be in a specific location. We found a nice marina which was within my trading area, but on the very fringe so there is more travelling involved.

No regrets

So, we've been living on the boat on the Trent and Mersey Canal near Lichfield for 18 months now and I have no regrets whatsoever. I can't deny that it is a little more difficult running the business

the fact that my stores are 16 miles away. The change with the admin to 'paper free' took some getting used to as well, but now I've refined it into a relatively smooth and pain free process.

But any of these minor inconveniences are more than compensated for by the change in lifestyle. After living in suburbia all my life it's so wonderful returning home from a day spent working amongst bleak commercial industrial estates, or mile after mile of inner city housing. Life is so tranguil living 'on the water' and surrounded by wildlife we never saw when living in the city.

We've watched the swans teaching their cygnets to fly, the squabbling Canada Geese, coots, moor-hens and the inevitable ducks. We sit and watch the swifts and terns swooping over the water, a pair of buzzards circling and, occasionally, some woodpeckers come to visit us. We have a resident kingfisher who regularly perches on our boat headlight, letting us sit and watch it from no more than a couple of feet away.

We regularly go for days out on the boat and often just the half hour cruise to our local pub. No worries about being breathalysed on the canal, and if we want to really indulge in the alcoholic matter, we just stay moored-up overnight outside the pub. It's quite novel to be able to take one's home to the pub, and when we go away for a couple of weeks holiday on the boat Christine loves the fact that there is no packing to do. We just untie the ropes and off we go. What's more, there isn't a pile of washing when we return either, because we have a washing machine on board.

Living on a boat is not for everybody of course, but we love it and have no regrets whatsoever and I've proved that it is indeed possible to overcome all the problems and continue to run my pest business whilst at the same time enjoying this wonderful new lifestyle.



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The science of urban rodentology

Rodentology focuses not only on the biology and behaviour of common urban rodent species, but also addresses scientific approaches for their management. In this article, which first appeared in *Pest Control Technology*, the leading American pest management magazine, the renowned rodentologist, Dr Bobby Corrigan of RMC Pest Management Consulting explains how several different but inter-related sciences underpin effective rodent management.

As is likely obvious, mammalogy is the scientific study of mammals. About 5,419 species of mammals exist and they are classified into about 29 orders. Rodentology is a branch of mammalogy that examines the study of rodents (the word rodent means 'gnawing mammal'). The Rodentia is the largest order of mammals and among the most successful. The order Rodentia contains about 2,277 species with a few new species being added every couple of years. This equates to 42% of all species of mammals on Earth being a rodent! For comparison, humans belong to the primates within the family Hominidae, which contains but six species, (i.e. only 1% of all mammal species).

Urban rodentology is a sub-discipline of rodentology, (as urban entomology is a sub-discipline of general entomology). Urban

rodentology focuses not only on the biology and behaviour of the rodent species most commonly associated within and impacting cities and towns, but also addresses scientific approaches for their management.

A complex science

As with most sciences, urban rodentology is a complex subject. However, the following points present a capsule view of this study:

 Urban rodentology deals with live, intelligent mammals that are capable of adapting to a wide array of habitats ranging from simple garden sheds to complex skyscrapers; from a





suburban kitchen to a super grocery store and so on.

- Urban rodentology involves multiple rodent species; each species unique.
- It demands interdisciplinary approaches, from medical significance to understanding the structural components of everyday buildings; from the chemistry of rodenticides to choices of urban landscaping, etc.
- Because urban rodents are so successful, they are found the world over, in nearly all cities and towns, as well as rural areas and even as feral mammals living away from humans. Urban rodents are found in tropical cities to remote islands off the coast of Alaska; in dry deserts and in wetlands; in coal mines and high up in the Andes.

The purpose of this article is to examine more closely the complex but fascinating science of urban rodentology. But more importantly, we want to consider why an understanding of urban rodentology is so essential to pest professionals the world over in ensuring successful (i.e. effective and profitable) management programmes of rodent pests.

Primary and secondary rodents

For the purpose of urban rodent management programmes, we can divide urban rodent pests into two groups: primary and secondary urban rodents. Depending on the global city or region, other species of rats and mice are also important pests. For example, the Bandicoot and Polynesian rats are important in many parts of Asia and the Pacific Rim countries. Wood mice invade buildings during cold seasons in many European countries and so on.

In order of significance, the primary urban rodent species in many parts of the world are:

- 1) House mouse, Mus musculus;
- 2) Norway (brown) rat, Rattus norvegicus, and,
- 3) Roof (black) rat, Rattus rattus.

These three species are often referred to as 'commensal,' 'domestic'

and 'old world rats and mice'. These rodents belong to the mammalian subfamily, *Murinae*, after the early Latin word origin of 'mur' meaning 'mouse'. In this subfamily alone, there are 519 species. Worldwide, within the mouse genus Mus, there are about 38 species, while about 64 species occur within the rat genus *Rattus*.

Formula for success

Our urban rodents are well recognized for being among the most successful of the successful rodents. In fact, the everyday house mouse has been characterized by some scientists as perhaps the second most successful mammal on Earth, right behind *Homo sapiens*.

So how can we scientifically explain the success of these mammals? There are at least six impressive reasons:

- 1) A high degree of adaptability to many different structural and infrastructural environments;
- 2) Very fast reproductive rates when resources are plentiful;
- 3) Ability to squeeze families or a local colony into relatively small spaces;
- 4) Some members of local colonies possess highly secretive, elusive behaviours; are active at night; remain alert and immobile per any strange sound, etc.
- 5) Body shapes and colours to avoid detection and predation (i.e. same colour as shadows and the ground); capable of scurrying quickly from shadow to shadow; and,
- 6) Intelligence and cognitive abilities. (Among animals, intelligence is difficult to precisely define. However, general indications of intelligence include the ability to learn, matched with behavioural flexibility. Rats, for example, are considered to be highly intelligent, because research has proved they can learn and perform new tasks an important asset when entering a new building or area for the first time.)



The Norway rat is considered highly intelligent for its ability to adapt to different urban situations and to learn from its experiences in and around our buildings. As such, they are a constant challenge for pest professionals the world over

Species specific successes

In addition to the six general qualities listed above, each of the three primary species also possess a number of individual qualities that make them successful. (Editor's note: House mouse and Norway rat are the primary species encountered in the UK with only occasional reports of roof (black) rat sightings, mainly at ports.)

The house mouse

- Often referred to by mammalogists as the 'master of adaptation'.
- Found virtually in all urban and most non-urban environments, R J Berry, the famous English biologist, refers to the mouse as a 'mammalian weed'.
- Its small size enables it to nest and hide in areas 'right under our noses'. One overlooked napkin box in a restaurant storage closet can harbour 25 mice. Eight mice have been found nesting beneath a hollowed-out hard roll in a bakery.
- Not all mice in a colony are 'curious'. Some mice are like rats, they may avoid new objects such as traps and bait boxes completely. All control programmes should account for 'curious' and non-curious mice.
- Short home ranges enable the mouse to avoid encountering traps and bait stations if the equipment is not spaced accurately based on detailed inspections.
- Fast track to sexual maturity when resources are abundant. House mice have been found to be sexually mature in 35 to 40 days in ideal environments (e.g. a supermarket that doesn't detail clean beneath the gondolas).

The Norway rat

- Because of its intelligence, mammalogists have referred to the Norway rat as 'diabolically clever'.
- Research shows rats are capable of decision making based on previous experience. New research published only earlier in the summer showed that rats can also regret bad decisions.
- Similar to the house mouse, rats can hugger-mugger their families into relatively small spaces. It's not uncommon to discover an entire family of rats occupying a single concrete hollow block within a partition wall.
- Rats have adapted to consuming many different food items, or, the same food item over and over as their environment dictates. And should their normal food suddenly become unavailable (i.e. due to a clean-up or removal), city rats can readily shift over and live on the natural foods found in their environment (earthworms, plant seeds, berries, birds and bird's eggs, acorns, cockroaches, fish and virtually any local mammal, bird, or reptile of smaller size).
- Rat colonies in urban areas can harbour with their natural homes of earthen burrows (in parks, around structural landscaping); or, they can be readily at home within the walls, floors and ceilings of urban structures of all types. Serious rat infestations commonly develop high up in the ceilings of apartments and office buildings.
- Depending on the availability of food, water and harbourage, the brown rat can establish both short and long home ranges from 25 feet to upwards of 450 radial feet from their nests.
- Rats have been tracked dispersing relatively long distances of up to five miles round trip in one night and returning successfully to the same nests. These types of feats help explain



how rats explore and exploit new neighbourhoods where resources are more abundant.

■ Some colony members can, for a complex array of reasons, be highly secretive and remain cautious of new objects (traps or bait stations) or even new arrangements of objects familiar to them within their daily routine. Pest professionals the world over have high regard for the extraordinary efforts it requires to capture the 'smart rats' encountered from time to time.

The roof (or black) rat

- Because the roof rat occupies and is active in the spaces above the typical field of vision of humans and many ground-dwelling prey (cats, dogs, foxes), this species is often among the most elusive of the three urban species.
- Inside buildings, the roof rat commonly nests up in difficult-to-access spaces of soffits, attics, floor-ceiling voids, leafy nests up in tree tops, dense foliage nests (and therefore, rodent proofing should be a mandatory element of roof rat control services).
- Roof rats can have extended home ranges upwards of 500 feet (and more), crossing the property lines of several different property owners. This can complicate control programmes.
- Because most roof rats tend to be black in colour and



TECHNICAL Rodent science

their travelways located in dark and shadowy elevated areas, roof rats can remain out-of-sight and out-of-mind — until the numbers increase to a problem level.

Roof rats can exist around urban buildings in an on-off pattern. For example, they can interact with building spaces for a few weeks or months at a time, but then leave the building and exist and nest in trees or bushes living on natural foods for weeks or months. This behaviour can frustrate both the servicing pest professional and the affected client.

Secondary urban rodents

Depending on the location, there are other rodents of significance in and around urban areas. In fact, as urban sprawl continues, any one or more of these secondary urban rodents can emerge as a primary rodent pest species. (Editor's note: In the UK such rodents would be grey squirrels, wood or field mice or the edible dormouse in certain locations.) A larger range exists in the USA: Tree squirrels (grey, fox, red and flying), Peromyscus mice (deer mice and white-footed mice), chipmunks, woodchucks, ground squirrels, pack rats (woodrats) and voles.

These rodents also are capable of significantly damaging buildings, contaminating food or posing health threats to humans, their pets and/or their livestock.

Inter-disciplinary in scope

Similar to other aspects of urban pest management, working with urban rodents necessitates involvement in other scientific disciplines as well as other trades and skill sets. Urban rodentology is, for sure, a science but also an art requiring the honed skills of a craftsman.

You can't provide excellent mouse control, say, in a large commercial office building if you don't possess a modicum of knowledge about how an office building is put together. This is because city rodents learn, memorise and mark various utility pipes and chases that allow them to move up and down between floors, as well as which are the safest and fastest routes to go from nest to food (e.g. the office building's coffee break room, or the messiest desks among 100 others). So this involves convincing humans how to maintain desks (altering behaviour) so as to not allow mice to proliferate and spread.

If you have ever tried to control roof or Norway rats infesting ceiling areas of a large vertical apartment complex you understand the



The author took this photo one night as mice were coming and going from beneath a delivery door to a food store. Notice the approaching mouse (see arrow) and heavy mouse smears at the base of the right door. Pest proofing is a scientific sub-discipline and trade of urban rodentology. Most property owners (and even many maintenance staff) have incomplete knowledge about how to properly pest-proof doors, repair holes, cap off block walls and the like



The wood or field mouse is occasionally an indoor pest but, more usually, it becomes the unintended target of permanent outdoor baiting

level of difficulty. Knowing how to read a blueprint to identify various utility chases is more than half the battle. It's fair to say this kind of knowledge is a prerequisite of being able to gain control.

Moreover, the skill sets of pest proofing and building repairs are essential in being involved in rodent pest management (i.e. weather stripping a door is not the same as pest proofing a door; plugging a small hole to exclude rodents isn't as simple as stuffing steel wool into a hole or spraying from a can of expanding foam).

Finally, for those involved in the management of urban rodents, the art and the science of being keenly observant is critical. Greatness in eliminating pest rodents is not about using only great baits and traps, it's about being a great inspector via keen observational skill as to where to place the baits and traps.

Arthur Conan Doyle wrote in his Sherlock Holmes series: "You must be trained to see what others overlook." The clever rodents of our cities and towns require nothing less.

In summary

Pause for a moment to consider the professional management of the 'every day' house mouse among various urban structures that occur on a typical service route for a pest professional anywhere — i.e. a mouse infestation in the following: supermarket; warehouse; suburban home with a garage and a basement; suburban home next door without garage and basement; an office building with hundreds of cubicles and suspended ceilings; an old restaurant in the old part of the city; an elementary school; and so on. Certainly there is no single template of service for any of these situations. In urban rodentology there aren't too many 'service templates' from which to push the 'repeat button'.

Perhaps after reading this, you will be inclined to agree — urban rodentology is as deep a study as is urban entomology, acarology, microbiology or any other of the sciences inter-connected to urban pest management. This science demands site specificity and situational analysis. It is truly a science requiring dedicated, astute and enthusiastic professionals.

Suggested great reads in urban rodentology

Barnett, S A 2001. The Story of Rats. Their impact on us and our impact on them. Allen and Unwin. Crows Nest, Australia. 202pp Berry, R J, 1981a. Town mouse, country mouse: adaptation and adaptability in Mus domesticus. Mamm. Rev. 11:91-136 Bronson F H, 1984. The adaptability of the house mouse. Sci. Amer. 250(3):116-125.



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Bed bugs as disease vectors?

A press release issued on 17 November to coincide with the publication of the scientific paper in American Journal of Tropical Medicine and Hygiene has caused more than a few ripples in the scientific community. **Pest** editor Frances McKim finds out what's got them all excited!

This story begins with a new study from researchers in the Center for Clinical Epidemiology and Biostatistics. at the University of Pennsylvania, USA. They have demonstrated that bed bugs, just like the triatomines ('kissing bugs'), can transmit *Trypanosoma cruzi*, the parasite that causes Chagas disease, one of the most prevalent and deadly diseases in the Americas.

The role of the bloodsucking triatomine bugs as vectors of Chagas disease – which affects six to eight million worldwide, mostly in Latin America and kills about 50,000 a year – has long been recognised. The insects infect people not through their bite but via faeces, which they deposit on their sleeping host, often around the face, after feeding.

Bed bugs (Cimex lectularius), on the other hand, are usually considered disease-free nuisances whose victims can be left with itchy welts from bites and sleepless nights.

In the study published online, senior author Dr Michael Z Levy, assistant professor in the Department of Biostatistics & Epidemiology at the University of Pennsylvania's Perelman School of Medicine and researchers at the Universidad Peruana Cayetano Heredia in Peru, conducted a series of laboratory experiments. These demonstrated bi-directional transmission of *T. Cruzi* between mice and bed bugs.

Readers can view the press release in its entirety on the **Pest** website in the news section.



Triatoma sanguisuga, one of the bugs that is associated with the transmission of Chagas disease in the Americas

The significance of this study is that, to date, there has only been debate, rather than any hard evidence, about whether bed bugs can transmit any disease at all. As a result, bed bugs have always been classified as simply nuisance pests with no associated public health concerns. Consequently they have failed to attract the research funding that is associated with such concerns.

So what does this mean?

Pest asked two bed bug experts for their reaction to this new published research.

Clive Boase's thoughts

First, Clive Boase from the Pest Management Consultancy, UK said: "This is an interesting study and contributes to a thread of research on bed bugs and human trypanosomiasis (Chagas disease) that stretches back decades. In South America, human trypanosomiasis is a potentially fatal disease that is transmitted between people largely by blood-feeding reduviid bugs that live in cracks and crevices in rural dwellings.

"Since 1991, there has been an international programme across South America to eradicate the bug, using indoor treatments with residual insecticides. This has been successful in many areas and the incidence of the disease has fallen dramatically.

"The suggestion arising from this latest study is that, even if the reduviid bugs are eradicated, then bed bugs could become a new vector of this disease thereby reversing all the progress made in the last 25 years.

"However, despite the long co-existence across South America of people, bed bugs and the Chagas disease pathogens, there is no indication yet that bed bugs are actually transmitting it to people. Nonetheless, those responsible for managing the Chagas eradication work in South America should be looking out for cases of local transmission of Chagas in areas where the reduviid bugs have been eradicated.



Cimex lectularius shown to be capable of transmitting Chagas disease in the laboratory but does this really mean it can do so in the field?

"Of course human trypanosomiasis does not occur naturally in the UK, but, interestingly, there is a species of trypanosome that does occur naturally in the UK, in bats and it is transmitted between bats by, yes, you guessed it, the bat bug Cimex pipistrelli!"

Stephen Doggett's view

From Australia, Stephen Doggett from the Department of Medical Entomology at Westmead Hospital, New South Wales commented: "To be honest the result is not all that surprising. Trypansomes were always going to be the best candidate of all pathogens for transmission by bed bugs. However, the fact is that just because a laboratory experiment demonstrates that an insect is a good vector in the lab, it does not necessarily mean that this is the case in the field. Such information must be backed-up by epidemiological evidence and, presently, this does not exist.

"There still is not one piece of evidence that bed bugs have ever transmitted any pathogen to any human. The risk of them doing so is extremely small, if not negligible. Just because we have bed bugs in more economically advantaged nations does not mean that we will see the establishment of Chagas disease; our good health infrastructures will ensure this will not happen.

Thus, I suspect, that this paper will make a lot of noise as many scientists want evidence that bed bugs transmit disease causing pathogens, simply to improve their chances of gaining research funding. We need therefore to take this paper in the context of what it is...no big surprise and really of very little scientific consequence, as there is no risk to those bitten in non-endemic areas for the disease."

Lots to see at PestTech



The use of predator birds to deter pests always attracts plenty of attention

Visitor numbers were up at PestTech 2014 and, with new exhibitors to meet, new products to look at as well as some innovative variations on old ones, there was plenty to see. You needed to have your ears open too, for the seminars, where waste disposal and Second-Generation Anticoagulant Rodenticides (SGARs) stewardship proved particularly popular.

This year 1,268 visitors officially registered at PestTech 2014, that's just over 250 more than in 2013. To this number you do need to add those who sneaked-in via the backdoor. There were just over 50 exhibitor

stands to get round.
Whilst there were useful modifications to some products, there were few really startling new ones – Racumin Foam from Bayer and the new Nano EFK range from Bower, being two exceptions.

However, there were several companies exhibiting for the first time, which is always an encouraging sight. Without doubt the biggest 'splash' was from new distributor, 1 env, with a large, purpose-built stand.

The seminar programme also proved popular. Both the sessions on waste disposal and the *Pest Control News* workshop, attracted big audiences – over 100 for the former and heading towards 150 for the workshop. In the workshop the HSE braved the lion's den to answer questions on SGARs stewardship. (See our report on page 8).

Matt Womersely from the Environment Agency outlined the duty of care that pest professionals have to ensure their waste is managed properly. He covered important concepts such as the hierarchy of waste, the list of wastes and how to identify the type of waste you are dealing with as well a transfer and consignment notes.

The popularity of these sessions is clear evidence of the appetite among pest professionals for detailed information to help them do things right.

The talk on the opportunities presented by urban deer management was interesting. The prediction is that where deer and people come into conflict in the urban environment, which is increasingly the case, it will be



The P+L Systems stand featuring the SX Environmental and Network brands was busy all day long



All smiles. Brady Hudson from Bell Laboratories with Dee Ward-Thompson from Cannon



Past meets future. Peter Crowden immediate past chairman NPTA (left) with Adam Hawley the soon to be chairman of NPTA



David Sharp from BASF, right, explains the rules of the Scalextrics Storm Bait Stop Challenge



Pictured on the Service Pro stand is the PGH Pest Control & Prevention team with owner Peter Higgs, third left, and Jacob Laubscher, right, of Service Pro





Above left: Fancy an insect lolly? Killgerm's Louise Coldwell tests the giveaway. Right: The seminars drew big crowds

more acceptable to the public if professional pest controllers do the culling than the shooting fraternity.

The final seminar of the day was led by in-coming NPTA chairman, Adam Hawley, accompanied by Sabra Fearon, discussing the future direction of NPTA.

Outdoors Simon Whitehead put his ferrets through their paces and visitors could also try their hand with a range of air rifles on the gun range. Unfortunately, due to ill health, Jan Prymeka of JRCS Falconry was unable to fly his spectacular birds of prey.

Unlike previous years, there was no sign of the Professional Women in Pest

Management (PWIPM) but, encouragingly, at least two established pest control companies were visiting accompanied by new, recently-recruited female technicians.

Maybe the soon to be screened BBC2 series – The Ladykillers – will encourage even more ladies to join the industry.

Traffic chaos spoils it for some

Those of us who had to be at the Motorcycle Museum early were unaware of the chaos that ensued in the car park. Julie Haresign (née Gillies) from NPTA explains: "As soon as I was informed we sorted things out but, unfortunately, not before some visitors had already been turned away. The problem was the museum had booked two other events on the same day. Rest assured it won't be happening again!"



1env made their first PestTech appearance. From left Dean Levy, Richard Lunn and Darran Lebeter



Raising funds for charity on the Russell stand: Paul Sidebottom and Deborah Chowdhury



Phil Huggins, left, and David Bowerman, proudly flying the Union Jack. All Bowers EFKs are British made



PestFix brothers, Dan and Matt England, right, were handing out vacuum mugs. Great for pest controllers working outside in winter



Outside the crowds enjoyed Simon Whitehead's ferret display and the air gun range

PestTech prize winners

Fast and furious



Bumper hamper

Once again Russell IPM held a raffle on their stand to raise money for Leukaemia and Lymphoma Research – a cause dear to the heart of raffle organiser, Diana Al-Zaidi, whose grandson Callum Gosling was diagnosed with leukaemia.

Diana said: "I'm always amazed, but so grateful, to everyone at PestTech who supports our raffle. This year was no exception and £610 was raised – a figure Russell will double. This brings our total raised so far to £80,000, so the £100,000 target is getting in sight."

The bumper hamper was won by Declan Donnelly of Northern Pest Control in Londonderry, Northern Ireland – now Declan don't eat it all at once!

Winner of the PestTech Storm Bait Stop Challenge with a truly remarkable time of 35.66 seconds – including two stops in the racing circuit pits – was John Urwin who runs appropriately-named ASAP Vermin Control in Chipping Norton.

With speed and wildlife safety key elements of the service he offers across the South Midlands, John is a great fan of Storm Secure for fast, effective and safe rural rodent control.

"I haven't played with Scalextrics since I was a boy, but I couldn't resist the Storm challenge at PestTech," he said. "It had to be done. I'll wait until the spring before taking my prize of a Red Letter Day experience. I quite fancy an F1 event. Or maybe a tandem parachute jump."

Winning nest



Visitors to the Bayer stand were invited to vote in the *House fit for a queen* competition, which looked for the most impressive and unusual wasps' nest. The winner was a picture of a wasps' nest in a motorbike helmet, taken by David Nicoll, pest control officer for Kier Harlow, Essex. This was an apt winner, having been voted for in the National Motorcycle Museum.

David says he is over the moon to have received the winning prize of £200 worth of Bayer products. "The helmet is by far the strangest place I've seen a wasps' nest, it was found in the back of a customer's shed. I treated the nest with Ficam D, and once eradicated, was given the helmet as a thank you from the customer," explains David.





product award

2014

Muskil gets readers vote

Romax Muskil whole wheat bait from Barrettine Environmental Health took the winner's spot in this year's **Pest** Best Product award but the result was very close.

The fifth year of the Award saw Barrettine return to first position; a position they had achieved in three of the previous years.

A delighted David Haskins, sales director at Barrettine said: "This is the fourth time we have had the privilege of winning this award. We at Barrettine pride ourselves on innovation and we would like to thank all our customers who voted for Romax Muskil whole wheat bait as they clearly appreciated its benefits in use."

In what was a closely fought battle, Bird Free gel, presented in magnetic dishes, from Killgerm took second place. Ian Smith, the supplier of Bird Free, is no stranger to this awards presentation either, having achieved second place in 2012 with a forerunner to this current gel.

Readers may remember that last year they voted in large numbers to ensure the award

went to the telescopic lance XL8, manufactured by County Down-based Lance Lab. This year the company was once again on the podium, as their Mini Flex flexible hose took third place.

Pest editor, Frances McKim joked: "We are thinking of banning Barrettine and their products from this award as they have won it on so many occasions. Obviously their customers like their products and are prepared to say so by voting for them, as the results are based entirely on the votes cast by our readers."



The class of 2014. Left to right: Glenn Pickering and Phil Bowman from Lance Lab, winner David Haskins of Barrettine with Ian Smith from Bird Free and Peter Fielding of Killgerm



Invaders from Oz?

Have you spotted any unusually dark carpet beetles recently? Then take a closer look. They may have originated from a land down under! Museum and heritage pest expert David Pinniger reports that Australian carpet beetles (Anthrenocerus australis) are already established in London and could be travelling to a town near you soon.

In 2012, staff at the Victoria and Albert Museum Museum (V & A) noticed an adult beetle on a sticky trap which looked different from the varied carpet beetles, or Guernsey carpet beetles, usually found in the museum. It was darker and, when you looked at it through the microscope, you could see it had patches of short white hairs rather than scales. What had they found? David Pinniger's expertise was required.

As David explains: "I was given the specimen to look at and recognised it as an Australian carpet beetle Anthrenocerus australis. Although this species is quite common in Australia, there are very few records from the UK."

What's the difference?

Australian carpet beetle adults are different from the varied or Guernsey carpet beetles as they have distinctive patches of white hairs. The image, below left, is of a freshly emerged adult and is not as dark as the mature beetles (see image far right), which looks almost black so telling them apart isn't too difficult.

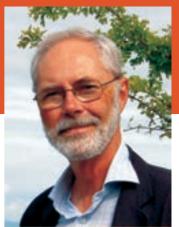
However, the larvae of these two species are very hairy and quite difficult to identify. Anthrenocerus have a distinct tuft of hairs at the back and are very active and move much quicker than Anthrenus larvae.

What do they eat?

Carpet beetle larvae generally

feed on organic material containing animal protein but will also live on some vegetable protein. They will eat wool, fur and feathers and will seriously damage wool textiles and taxidermy specimens. They normally take one year to complete their life cycle but if it is hot, there may be more than one generation a year.

Australian carpet beetles are a household pest in Australia, but are not common in other parts of the world. The first recorded UK



David Pinniger reports increased sightings of the Australian carpet beetle

Adult identification



Australian carpet beetle (Anthrenocerus australis)

- Round dark beetles which are 2-3mm long
- Patches of white hairs on thorax and wing cases
- Antennae with a short club



Varied carpet beetle (Anthrenus verbasci)

- Round beetles which are 2-3mm long
- Beetle is covered with a pattern of white, gold and black scales
- Antennae with a short club



Australian carpet beetle on a sticky trap from the Victoria & Albert Museum.

This specimen is much darker than the newly emerged beetle shown in the picture far left



Larva identification



infestation was in a warehouse in North London in 1938. There have been sporadic sightings of adult beetles since then, with a few specimens found in wool warehouses and museum stores. However, the infestation in the V & A Museum was the first recorded infestation in the UK of Anthrenocerus larvae living in a museum.

Removal of the infested carpet and treatment of the area with permethrin appeared to have eradicated the infestation, as no more beetles or larvae were found in 2012. However, a live adult was found in the Museum in April 2013 so it seems as if this species still has a foothold somewhere on the site. A few adult beetles were also found on sticky insect traps in Kensington Palace in 2012 and 2013 and again, in 2014, a small infestation was discovered in a wool carpet. Two adults were seen on sticky traps in another historic house in North London also in 2014.

Further afield, an Anthrenocerus infestation has been found in a flat in Bradford, so this means they are alive and well in Yorkshire as well as in Kensington.

This species would not be likely to live outdoors in the UK, but it seems as if they are now established in London. Are they more widely distributed than we think? There are very few images of Anthrenocerus in pest books except for Urban Pest Control in Australia by Gerozisis and Hadlington and the CSIRO book Insects of Stored Products by David Rees. The species is not in the English Heritage pest poster, but there are a few images on the website www.whatseatingyourcollection.com

So if you find a strange looking carpet beetle and are not sure what species you have got, make sure you check its identity – you might even have Australian carpet beetles in your own house!



A date with the world's most famous mouse

The autumn round of exhibitions and conference kicked-off with the American event – PestWorld 2014. Held annually, the location moves around the country – this year it was pests with Disney as it was held at an hotel in the Disney world resort in Florida between 21-24 October.

However, the world's most famous mouse, Mickey, must have taken fright as he was nowhere to be seen!

Of the 3,300 delegates, including 196 exhibitors, recorded by the organisers, the National Pest Management Association (NPMA) quite a large proportion came from overseas and from a total of 80 countries.

European manufacturers were well represented for example by long standing exhibitor IGEBA from Germany, Silvandersson from Sweden and Plastdiversity from Portugal. Now with established distributors or organisations in the US, UK-based companies such as Russell IPM, PestWest, PelGar International, P+L Systems, Control Zone Products, Brandenburg and International Pest Control all had stands.

Having made their debut last year,

Lincoln-based Rat Pak were once again exhibiting and had on display their brand new revised-design steel bait box.

Making his first trip to PestWorld was Lewis Jenkins, managing director of Berkshire-based Check Services. Looking a trifle bemused, when asked about his impression of PestWorld, Lewis said that he had concluded that there seemed to be little we didn't benefit from in the UK, just more of it. Also making her first visit, on what was obviously a scouting party, was Jan Johnson, of Dewberry Redpoint, the PestEx 2015 exhibition organisers. This seems to have been a successful mission judging by the fact the PestEx exhibition area has had to be extended.

Despite there being little radically new in the



exhibition, PestWorld is always a good international market place for those trading in the professional pest management industry. Many an alliance is struck at this event. Just as at the European events this autumn, there was an overall air of optimism within the industry.

Good news for us all!



Jim Oakes with Shakir & Diana Al-Zaidi from Russell IPM



On the P+L Systems/SX Environmental stand Francisco Nuche (right) greets a customer



Killgerm's Sabra Fearon and Rupert Broome with Lewis Jenkins (centre)



Jim Butcher (left) and Howard White with the new steel bait box from Rat Pak



For life uninterrupted

global commitment from Syngenta

Readers may well have wondered quite what the strap-line – For life uninterrupted – used by Syngenta on all company material means. Certainly we have pondered on this in the **Pest** office. Did it refer to keeping pesky cold callers away from your front door, or maybe it's some new means of barring unwanted emails? Hardly likely!

So it came as something of a relief when Jeff Cox, global head of Lawn and Garden for Syngenta for the last six years, spelt-out its meaning during his opening address in the general session on day three of PestWorld 2014.

He explained how globally, there is rapid urbanisation, creating public health issues and a demand from customers for pest-free homes. In the commercial sector higher regulatory standards dictate that businesses must operate in pest-free environments.

Over time, pest management has evolved into a highly professional, specialist service sector. It began with a one dimensional focus on products, where the pest controller was classified as 'an exterminator' and

armed with containers of chemicals.

Customers simply wanted to know and see that the pests were dead.

Jeff said: "Then customers' needs started to change and the industry responded to this with the professional application of products which were applied discretely. Enhanced technology and improved placement of products meant that pest management went 'behind the scenes'. Exterminating pests wasn't the sole objective anymore – repelling pests and complying with stricter regulatory controls meant a more professional, often invisible approach."

With this approach came the need for assurance – giving the customer complete peace of mind and the knowledge that



Jeff Cox (left) from Syngenta with NPMA president Billy Tesh

everything is being taken care of, before, during and after the event.

Syngenta has responded to this challenge. "Knowledge is the core of our business," added Jeff. "Syngenta is 100% committed to the pest management industry. Working together with pest professionals we can grow through innovation, so as to deliver pest solutions to millions of people around the globe. Our aim is for no pests – for life uninterrupted."

Kness gives local support

Mouse trap manufacturer, Kness Mfg Co, makes its own commitment to the local community. Founded by Austin Enos 'Brick' Kness in 1924, the company remains in family ownership under the watchful eye of its president, Kathy Kness Wauson, a third generation member. Starting out with the creation of the Ketch-All multiple catch mousetrap, the company has developed a range of rodent traps sold the world over.

On their stand at PestWorld, Kness was proud to highlight their commitment to quality products made with care and local to their base in Albia, Iowa. But she was also keen to highlight the role played by dependant adults in their assembly. As Kathy detailed: "We're involved in various outreach efforts here. It is part of our corporate culture to give back to the community. It's a reflection of our company's values."

Adults from a range of organisations play a critical role in the assembly process. The work gives a sense of achievement to an underserved segment of the population. Did you realise the little 'bump' on the plate of the Snap-E trap is there only to assist blind workers



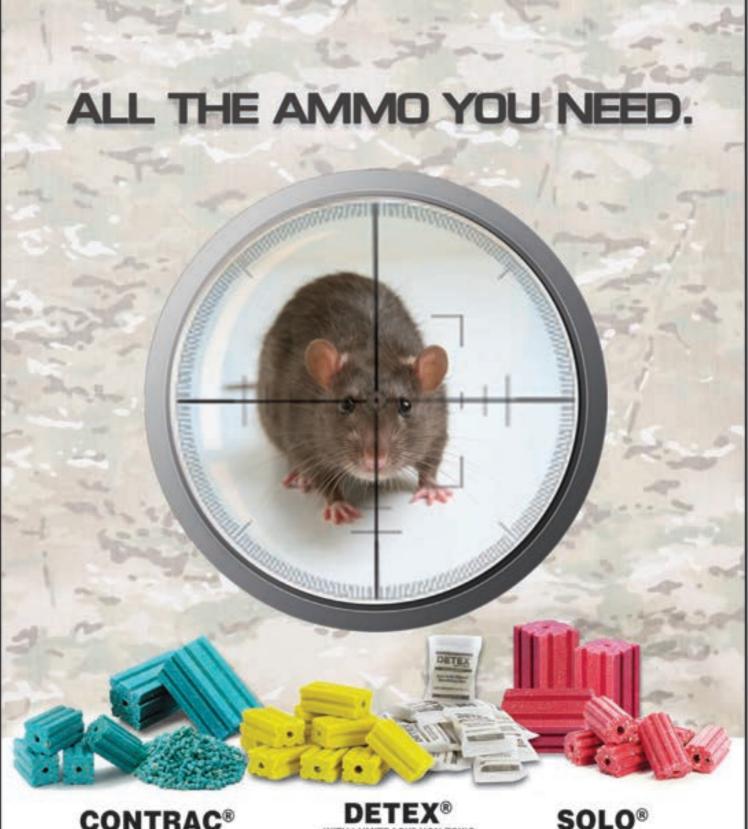
The Kness team at PestWorld, from left: James Hayward, Amanda Harlan, Kathy Kness Wauson, Paul Yu, Nick Fugate, Mike Goza and Tabi Meredith











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In January 2015, an 18 strong international team, led by the Scottish charity, the South Georgia Heritage Trust, will depart from the Falkland Islands in the South Atlantic heading for the remote British Overseas Territory of South Georgia. Their visit will be the third and final stage of a five year programme to rid the island of millions of invasive rats and mice, which are threatening the survival of one of the world's most important seabird sanctuaries.

The rodents were introduced inadvertently by sealers and whalers to this wildlife oasis over a period of 200 years.

Unloading bait, equipment, food and other supplies

More recently, climate change has caused the retreat of the island's glaciers allowing the rats to gain an ever stronger foothold on South Georgia.

On arrival the team will begin laying bait depots and flying fuel drums, bait, equipment and food from the helideck of the RRS Ernest Shackleton to seven or eight separate forward operating bases. This will include the 95 tonnes of brodifacoum pelleted bait specifically manufactured and packed into shipping containers to make the long journey from Bell Laboratories in Wisconsin, USA.



Once aerial baiting commences, GPS tracking systems will be used to keep an accurate record of bait coverage.

95 tonnes of bait to spread

The objective is to spread 95 tonnes of bait by helicopter with some hand-baiting over an area of 364 square kilometres, including a 227km stretch of sinuous coastline. The three month field operation between January and the end of April will involve almost 450 flying hours, requiring 260 bait pods to be laid and 450 drums of fuel to keep the helicopters in the skies above South Georgia.



95 tonnes of Bell's brodifacoum bait will be used to complete the programme

have been rat reservoirs on the island

Parasitec delivers big time!



It's Paris so good food and a glass of wine is not just nice to have, it's essential!

Parasitec 2014 held from 19 to 21 November was bigger and better than ever. There was a massive 34% increase in the number of exhibitors, bringing the total number of display stands to 90. Visitor numbers were also up, by 17%, to 2,476 and 544 of these were from countries outside France, which probably accounted for the very international feel this year. Pest control is becoming a very globalised industry. Exhibitors came from far and wide, but the UK was well represented with P+L Systems, Huck Nets, PestWest, International Pest Control, Control Zone Products, PelGar International and Russell IPM all on parade!

The exhibition filled two main halls with wider aisles giving the whole event a lighter, airier feel. For its home event, LODI had taken over a whole side hall for its display, which this year included some products, as well as the famous LODI bar. Parasitec is very different to other pest control events with wine and nibbles an important part of the experience.

> Visitors from the UK: Henry Mott (left), BPCA president, and Simon Forrester, BPCA chief executive, with Panetta Agonstino (Tino) from

It was good to see a selection of novel products on display. Some will reach UK





Robert Lockman from LODI shares a joke with Pierre Kabouche from PC Media, organisers of the Parasitec event

Below: Dr Romain Lasseur presented a paper on rodenticide alternatives



Bell Laboratories

Captured on the AP&G Catchmaster stand are: AP&G's Sean Paker, Mark Esculier from the French trade association CS3D and Jonathan Frisch vice president sales & marketing for AP&G



Above, visitors to the Babolna Bio stand find out more about this Hungarian company's products



Pictured with associate editor Helen Riby is Francois Rousset, the first and, so far only, **Pest** reader from Burkina Faso with 'tiny' Nic from PelGar playing peek-a-boo!



Who's top gun? The challenge on the BASF stand was to be the fastest Goliath Gel user

distributors very soon. We spotted James Mendoza from 1env checking out what was on offer, and no doubt other UK distributors will have been doing so too.

Parasitec is in Paris every two years. Being only a short hop from the UK by plane or Eurostar it is well worth a visit, so make a note in your diary for November 2016.

If you fancy something more exotic, then next year in November 2015 Parasitec will be held in Istanbul, Turkey.



From Germany, IGEBA unveiled the new UNIPRO² to the French pest control market



Mine's a croissant! Nic Blaszkowicz from PelGar International enjoys a continental breakfast





Speaker Takfine Herrak from the Ministry of Health in Morocco emphasised the public health imperatives of pest control in his country



From Kness in the USA is visitor Paul Yu with exhibitors Deborah Chowdhury and Diana Al-Zaidi from Russell IPM



No publicity! But who is this? Send your suggestions to editor@pestmagazine.co.uk



Below all the way from Shanghai China, is Airofog





Right: Adam Carew-Reid from Starkeys Products in Perth, Western Australia. Surely the exhibitors who had travelled

the farthest!



There were plenty of visitors and lots of new things to see

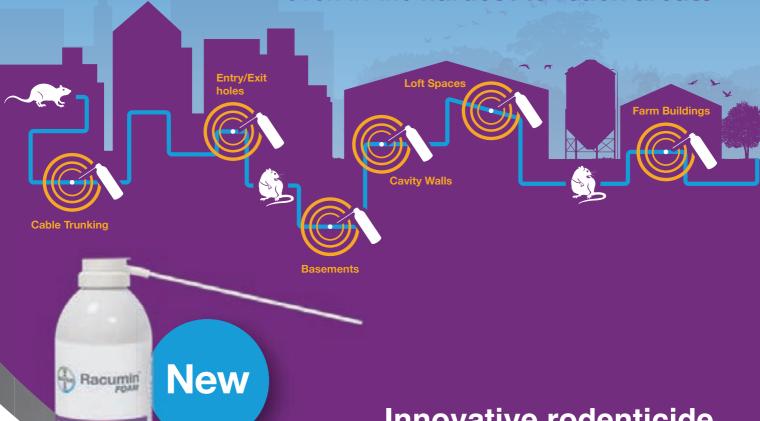
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Racumin® Foam is an innovative, non-bait rodenticide from Bayer. Applied in known rodent runways, the foam sticks to the rodent's coat and is ingested through grooming.

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



New opportunities

from the Barrettine/Pest day

The Barrettine MINT day, run in conjunction with **Pest**, was held at the Hellaby Hall Hotel in Rotherham on Tuesday 14 October.

Speakers Kevin Brown on behalf of RAMPS UK (the Register of Accredited Metallic Phosphide Standards) and Brady Hudson from Bell Laboratories enthused about new business opportunities.

Kevin pointed out that from November 2015 only properly qualified professionals will be able to use aluminium phosphide products. This will create demand among farmers and landowners for this type of work. Brady said that Second-Generation Anticoagulant Rodenticides (SGARs) stewardship has the potential to open up more opportunities on farms. Under stewardship, farmers are likely to have to obtain a qualification before being allowed to use rodenticides. She questioned how many will have the time or inclination to do so, hence they will need a professional.

Other speakers included: Pest's own Helen Riby who reviewed the BASF/**Pest** National UK Pest Management survey, Paul Butt from



Helen Riby and Paul Durgan

Natural England on SGARs stewardship, Bayer's Alan Morris introducing the new product, Racumin Foam and BPCA's Kevin Higgins on waste disposal. Adding some light relief to these serious topics was Paul Durgan, series producer for KEO Films who talked about their new BBC2 series The Ladykillers – pest detectives.



Paul recounted some amusing situations including 'interesting' meetings he has had with the BBC editorial policy team. Paul was concerned about some of the footage involving killing cuddly things being shown before the watershed, but, no the policy team was quite comfortable with the killing, but please could he edit out the bit where the lady pest controller says 'frigging'!



Take the Pest Test

BASIS has made two PROMPT CPD points available if you can demonstrate that you have improved your knowledge, understanding and technical knowhow by passing the **Pest Test** and answering all our questions correctly. So read through our articles on rodentology (pages 13-16), bed bugs as disease vectors (page 19) and Australian carpet beetles (pages 24-25) in this issue of **Pest** and answer the questions below. Try to answer them all in one sitting and without referring back to the articles.

SEND COMPLETED QUESTIONS to: Pest Magazine, Foxhill, Stanford on Soar, Loughborough, Leicestershire LE12 5PZ.

We will mark your **Pest Test** and, if all answers are correct, we will enter the results onto your PROMPT records held by BASIS.

1	About how many orders of mammals are there?			
	a) 9		c) 29	
	b) 19		d) 39	
2	What does the English biologist R J Berry refer to the mouse as?			
	a) A mammalian weed		c) A friendly little character	
	b) A clever mammal		d) A breeding machine	
3	When resources are abundant and in ideal conditions, house mice can be sexually mature within how many days?			
	a) 25-30		c) 35-40	
	ь) 30-35		d) 40-50	
4	How many deaths are estimated to be caused by Chagas disease each year?			
	a) 500		c) 5,000	
	b) 1,000		d) 50,000	
5	How do Australian carpet beetle adults differ from varied, or Guernsey, carpet beetles?			
	a) They are much larger		c) They have distinctive patches of white hairs	
	b) They live outdoors in the UK		d) They will only eat kangaroo fur	
6	When does David Pinniger say the first Australian carpet beetle was recorded in the UK?			
	a) 1918		c) 1958	
	ь) 1938		d) 1968	
Name:				
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200

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Know your enemy

Attractive and informative, this rodent wall chart has been produced by BASF. The most important elements of the behaviour, as well as biology, of each of the three key rodent pest species – brown rat, black rat and house mouse - are clearly set out in this 32×12 inch fully illustrated chart.

Good descriptions of each pest's droppings, lifestyle and feeding habits are especially

valuable reminders for pest controllers, as are summary details of their particular reproductive abilities.

Copies available free of charge from BASF. Email: pestinfo@basf.com



Technicians' field quide

The third edition of the Barrettine Environmental Health pest control technicians' field guide has just been published. It's a handy and robust wire-bound, colour booklet, running to 123-pages.

It covers the identification of flying and crawling insects, rodent and non-target rodent pests, stored product insects, bird pest species,

bird control legislation along with the relevant control products.

A 13-page section on pesticide application explains such things as how to calculate insecticide space treatments, spray, dust and gel applications. Also included are rodenticide baiting quidelines.

Copies cost £14.75 with free postage for readers of **Pest** magazine. Email: beh@barrettine.co.uk



Help! Which UV lamp?

Identifying a UV fly killer lamp when it comes to the time to replace it is always a problem, as there is such a wide range on the market.

Calling on their experience and range of stock, Bower Products decided the time was right to make lamp identification easy for everyone. The result: the Bower lamp identification app.

In three easy steps the app guides the user through the maze of technical jargon leading to the ideal lamp. The initial screen has seven buttons to identify the general shape of the lamp. The second screen breaks the search down further (depending upon the lamp type) and finally the third screen gives a list of the brands, wattages and order codes. What could be simpler?

Contact Bower, Email: info@bower.co.uk



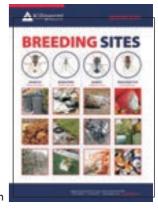
Guide to fly breeding sites

The latest in the line of colourful educational posters from Killgerm covers breeding sites for four of these most frequently encountered pests.

The flying insects covered are: the house fly, blowfly, drain/fruit fly and mosquitoes. Pictures illustrate those sites most likely to act as breeding sites.

Copies are free of charge from Killgerm.

Email: customerservices@killgerm.com



The cockroach bible

For anyone dealing with cockroaches, despite its USA bias, this 170-page manual, containing plenty of colour pictures, is a 'must have' item. In effect, it is an update of the original version published in 1980, but, as author Dr Austin Frishman explains, things have dramatically changed since then.

There are sections covering cockroach evolution, biology, diseases and damage. Then the manual really gets into its stride with chapters on chemical control, IPM, resistance and application equipment. But what makes this reference book unique are the sections dealing with the likes of problem solving, special situations,

> frequently asked questions and a whole series of lists called 'Classic Frishman' – of practical tips and key points.



Now in blue

Yellow, pink and now blue - maybe mice like all these different colours? With the rodent season well underway this new fluorescent blue tracking dust, available in 250a tubs, comes from lenv.



www.1env.co.uk

A trap for ladybirds

The Ladybird Buster System is a new powder trap which aids the control of harlequin ladybirds, (Harmonia axyridis) and other problem ladybirds, without harming any other organism or the environment, explains Killgerm.

This effective, clean and environmentallysound trap uses low density powder made from eggshells to engulf the ladybirds. The QuickSand powder sticks to their 'feet' and hairs preventing them from climbing or flying out. Each trap can hold over 2,000 ladybirds and lasts up to two years, or more, in the average home.



www.killgerm.com

Drop-in for a drink

Rats need to drink and are encouraged to visit traps and bait boxes when baited with NARA Liquid. These clear gel balls contain

99% water plus an aroma attractant, designed for traps and bait stations and making them more attractive to rodents.



www.1env.co.uk

Rotech contact tunnels and Snapbox

This contact tunnel comes in two sizes - one for mice and a larger version for rats. They are ideal for use with contact gels and the new Racumin Foam.

The multi-use Snapbox+ station can be used to safely and securely house not only traps, but also rodenticide bait blocks. With its unique design the trap, says 1 env, can be set from the outside with the addition of a cable tie.

www.1env.co.uk



Glow in the dark

RoTrack UV is a non-toxic bait that contains microencapsulated dve, that once consumed and diaested by the rodent, their droppings will appear bright orange under UV light. Made with a combination of food-grade ingredients, the unique star shape means the bait is both light and easy to use, as well as ideal for the rodents to eat, says the manufacturer, Plastdiversity.

www.facebook.com/rotrackbaits



RTN brackets

Designed with the professional bird contractor in mind, this range of 50 different securing brackets aids the fixing of nets to the most challenging roof installations. Available in various sizes, RTN brackets are strong and durable, manufactured from hot-dipped galvanised steel. A range of fixings to secure the brackets is also available.

www.killgerm.com

Watch-out Mickey

Maybe Woodstream could come up with a collective noun for new mouse traps as the company has just released four onto the UK market? A 'snap' of traps maybe? All sold under the Victor brand, the smallest is Quick mouse trap. It looks like any normal trap. But looks can be deceptive. The bait trough is covered, meaning the mouse needs to be perfectly aligned with the bait and the impact killing bar when it is released – ensuring a guick, humane kill.

The name Clean Kill Tunnel mouse trap gives away its appearance. The tunnel design increases interaction with the mouse, explains Woodstream, meaning once the mouse enters the trap to retrieve the bait, the kill-gate ensures perfect placement for a quick despatch.

Capable of catching three mice at a time without re-setting, the Tri-Kill trap is baited, placed against a wall and the levers pressed down. More sophisticated is the Electronic trap which delivers a high voltage shock using four AA batteries. Again capable of catching three mice, yet if only one mouse is caught it re-sets automatically. A green light indicates a capture





The key to everything

From the manufacturers of the Ultrabait VR (which will remain in production) come three new bait stations, all of which use the same new Versa key. This same key will be used in all future Rat Pak locking products.

Again in steel, the Quicklock Ultra is vandal resistant and has a new and improved stainless steel locking mechanism, utilising the Versa key. Available in both black and green, it is more compact and has a removable lid to aid servicing.

Both in plastic, come the new Quicklock Durabait, for rats, and the Quicklock Microbait for mice, both of which also use the Versa key. These plastic boxes benefit from having an integrated steel lock, as opposed to a traditional plastic lock. This enables a faster, more reliable locking operation, reducing the time required to service bait stations.





A rugged tablet

With users on a budget, MobileWorxs has launched the xTablet Flex 10. It comes with Windows 8.1 on a 10 inch tablet which is more rugged than consumer grade, but without the steep cost premium of traditional rugged devices.

It is packed with the technology and features you need to run all Office and browser based apps on the move. It has a plethora of ports, two cameras, Wi-Fi and Bluetooth connectivity as well as an e-compass ambient light sensor, G-sensor and gyrometer. For full techie details contact MobileWorxs.

www.mobileworxs.com





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Diary dates 2015

7-9 January

Global Bed Bug Summit 2015

Sheraton Denver Downtown Hotel, Denver, Colorado, USA www.npmapestworld.org/events/BedBugSummit

19-20 February

Barcelona Pest Control International Forum

NH Collection Barcelona Constanza, Barcelona, Spain www.bpcif.es/?lang=en

23-26 February

7th European Mosquito Control Association workshop

La Petxina Foundation, Valencia, Spain www.emca2015.com

11-12 March

Disinfestando 2015

Palacongressi, Rimini, Italy www.disinfestazione.org

24-26 March

Facilities Management 2015

NEC, Birmingham www.fm-birmingham.com

25-26 March

PestEx 2015

ExCeL, London www.pestex.org

PestEx ticketing open

PestEx 2015, which is on 25 & 26 March 2015, will be here before we know it so, if you intend to visit, why not register for the event now. Everything can be completed online and it only takes a few minutes. Just visit www.pestex.org and then click on the Book your free place at PestEx button.

Organised by the British Pest Control Association (BPCA), PestEx takes place every two years at London's ExCeL Exhibition Centre. The 2015 event has already attracted more exhibitors than ever.

BPCA's Simon Forrester commented: "Manufacturers from across the globe clearly see PestEx as the place to be to promote and sell products, whilst company owners, managers and technicians

know PestEx is the place to pick up details on all the key innovations, research and best practice."

Don't forget, at PestEx you can earn up to 8 BASIS PROMPT CPD points per day.

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www.pestex.pro

Free PROMPT membership offer ends 31 December

Get your skates on and you could still benefit from the free PROMPT register membership offer, but hurry, you only have until the end of the year. The offer is for pest professionals to join the BASIS PROMPT Professional Register free of charge and with no requirement to collect Continuing Professional Development (CPD) points. It has been made in light of the new requirement that by the end of 2014 all technicians working for British Pest Control Association (BPCA) members must be qualified to a minimum of the Level 2 Award in Pest Management (or equivalent) and be registered on a recognised CPD scheme, such as BASIS PROMPT.



Two PROMPT Continuing Professional Development (CPD) points are awarded to readers of **Pest** magazine. The number you will need to claim your points for 2014 is: PC/34310/14/g





