

Open letter to DEFRA, HSE, PSD, English Nature and others involved with overseeing the regulation of rodenticide products.

Over the past few years it has become apparent that there is a drive towards the restriction on the use of rodenticides in general, and the ways in which they can be used as well as tighter control over what to do with the “waste” associated with the control measures used. I understand that non-target species should not suffer and I also understand that secondary poisoning can be a problem. Barrier baiting farms and other commercial buildings is a very good way of preventing a passing rodent from establishing a colony before it becomes a problem. It would appear that this form of control is one which is no longer seen as acceptable as can be seen from the label of the rodenticides. As far as I can gather the preferred method of dealing with an infestation of rats is to survey the area, proof and otherwise make the property less favourable for the rats, bait (aiming to place baits in a natural state as possible making use of available site cover to provide protection against non-target species access (from: Rural Development Service Technical Advice Note 35 Rats: Control on livestock units; available from <http://www.defra.gov.uk/wildlife-countryside/vertebrates>), looking for and removing all rodent bodies and on completion removing all bait so as not to pose a risk to other wildlife. If barrier baiting is to be carried out, which can only be done if a risk assessment shows that this is necessary, then again as far as I can gather the best approach is to use non-toxic bait and to change this to a toxic bait once a problem has been identified. This is all very logical and excellent for the wildlife, at least it would be if I knew nothing about pest control (some may argue that I don't).

One of the problems with waiting for rats to take up residency and then dealing with the problem is the fact that rats suffer from neophobia (= new object fear), which means that the tamper resistant bait box that the bait is placed in if it was not already there may not be visited for a few weeks. Assuming that the bait box was already in place and contained a non-toxic bait we then only need to change the bait to a toxic version in order to control the animal. Again neophobia can kick in as the toxic bait is not the same as the non-toxic giving a much longer time for control than if a toxic bait was already in place.

I have often heard the argument that the non-toxic indicator baits pose no threat to non-target species and are therefore better. This is of course true however when a pest operative discovers that a non-toxic indicator bait has been taken (these tend to be of the wax block type) (s)he replaces the non-toxic bait with a toxic one without knowing what animal took the bait in the first place, and no I do not think that tooth marks on the block (if still there) tell me what took the bait (can you tell the difference between a young rat's tooth marks and those of an adult mouse? let alone the difference between the various mice?). So regardless of which of the two systems was used there is no advantage to the non-target species which took the bait but there is a difference to the length of time needed to control a potential rat problem and the use of a toxic bait first time round wins.

A lot of my (rural) pest control work is at farms, set generally in the middle of fields with overgrown hedges, ditches and other people's land around which means that there is always a threat of incoming rats and therefore barrier baiting is just about the only way to proceed. Yes proofing has its place but most farm buildings are that old that to make them rodent proof they need knocking down and rebuilding. Even most food premises are run from properties that are far from rodent proof unless they are specifically built by the company to be so.

As far as the secondary poisoning and the primary poisoning of non-target species goes the advice is to use the lowest level of anticoagulant rodenticide to treat the problem which then leaves the more potent rodenticides if a resistance problem arises. Should the treatment be in an area which has been identified as having a potential for resistance then obviously the more potent rodenticides should be used. The problem here is that this information is not (easily?) available in sufficient detail to allow an informed choice of bait to be carried out. I also understand that the information available is not exactly up to date. If a resistance problem does arise then there is very little else to use. The use of acute poisons is no longer allowed (I think) so other than using a firearm of some description (no doubt the anti-shooting lobby will put a stop to this fairly soon), using dogs with or without ferrets (again likely to be banned if certain groups get their way) or using traps, non of which are very good anyway, there is nothing that can be used (at least legally).

Regarding the disposal of rodent bodies and other pest carcasses it would appear that the current thinking from government is that risk the refuse (to use a general term) poses to the environment etc. is not the inherent risk that the refuse poses such as a piece of glass which can cut or an animal carcass

which may pose a disease risk but rather where or who produced the refuse. So gamekeepers can bury any rats they kill (with rodenticides) and presumably any entrails from deer shot, yet a farmer or indeed a pest technician is not allowed to bury any rats killed. The risk to humans, livestock and the environment is exactly the same from both rats or do gamekeepers have a magic touch? At the seminars held recently at Pest Tech we (pest technicians) were asked whether we would favour burial or burning as a means of disposal of rodent carcasses. There is however a third method of disposal which may be worth looking at: using blow fly larvae to consume the flesh of any rodents leaving only the bones and hair. My understanding is that Sorex once carried out trials in which they tried to get an anticoagulant to stick to maggots so that they could then be used to poison moles underground as an alternative to strychnine hydrochloride. They were unable to get the anticoagulant to stay on or in the maggot so that any rodent having been poisoned by anticoagulants would not pass the anticoagulant onto the maggot. This then means that if a dead rodent was collected, dipped in disinfectant and "seeded" with blowfly larvae or eggs and kept in a warm container which would not allow anything to enter or escape within no time at all only bones and hair would be left (neither or which would contain anticoagulant) and the resulting maggots could be fed to birds, fish or reptiles or allowed to hatch into flies and released or killed using an electronic fly killer. If necessary the hair could also be disposed of using the various hide and carpet beetles. This would have to be verified of course but this could be a way forward for the pest controller who only has a few rodents to dispose of rather than having to store them in a freezer until they can be collected or taken to a waste disposal site.

What organisations or groups have an input when deciding what goes in the statutory conditions box on pesticide labels? and is there an input from any practical pest control operatives from both rural and urban areas?

Who is supposed to be making sure that public health issues are maintained so that rats (and other pests) are adequately controlled or able to be controlled?

As already mentioned scientific information regarding rodenticides and the risk that they pose to non-target species and secondary poisoning risks is not readily available. Presumably this is available but where? Could the various associations not be updated with the various papers that come out so that they can either print them or make their members aware of them and where to find them.

Are there any bodies looking at the various ways in which waste can be disposed of and if so who are they and do they actually have any practical pest control experience?

Where can information be found regarding the decomposition of poisons, in decomposing carcasses, in living creatures, in sprouting grain (if poisoned and capable of sprouting) and what by products do they create and what effect are they likely to have on the environment (including animals)?