SGARS AND BARN OWLS

LET'S GET THE INFORMATION RIGHT

At the HSE meeting, David Ramsden MBE, Senior Consorvation Officer gave a presentation on behalf of the Barn Owl Trust. PCN invited him to send us an article explaining the position of the Trust.

At least 76 % of farms in the UK use Second Generation Anti-coagulant Rodenticides (SGARs) and in 80 % of cases the farmers use the products themselves rather than using a Professional Pest Controller. Although 94 % of farmers keep baits covered (which is really good), only 11 % keep records and less than 1 % search for rodent carcasses. Only 30 % of farmers remove uneaten bait at the end of treatment. In fact on a great many farms there never is an *end of treatment*. Out of 133 farms I monitored for 32-48 months in Devon, 89 % used SGARs constantly. Indeed, Dr Alan Buckle of the *Campaign for Responsible Rodenticide Use* now suspects that the proliferation of preventative and permanent baiting in the 80's and 90's was responsible for the increasing levels of predator contamination at the time.

The *Predatory Bird Monitoring Scheme* shows that a shocking 91 % of Barn Owls analysed in 2010 contained SGARs and in 2011 the proportion of contaminated Red Kites reached an all-time high of 94 %. In Kestrels the figure has finally reached 100 %. Although the vast majority of the birds analysed were probably not killed as a direct result of eating poisoned rodents, whether or not SGAR contamination contributed to their deaths *or reduced their nesting success* is unknown.

So, what do we know about the effects of low-level contamination? Not a lot. Anti-coagulants can cause bruising, but this is not necessarily a problem. Lethargy is another known side effect but this is almost impossible to quantify in secretive wild birds that naturally spend most of their time roosting. Perhaps the most relevant question is: *how do they feel?* If low-level contaminated birds feel unwell and are therefore less inclined to hunt, this could be having a significant impact on their survival and productivity. Indeed, Barn Owl nesting success has declined since SGARs proliferated in the 1980's. Given that the vast majority are contaminated, quite small effects on individuals could be highly significant at population level.

So, how *do* they feel? Of course, they can't tell us. But we do know that one of the effects of (the anti-coagulant) *warfarin* on humans is the feeling of *nausea*. Note that warfarin is 100 to 1,000 times LESS acutely toxic than SGARs. There is no doubt that the overall effect of SGARs on predatory birds is negative, but are they having a significant effect at population level? Kestrels are suffering a long-term population decline, Red Kites have generally failed to establish nests away from their release areas and only one farm in 75 has Barn Owls nesting.

The likely main route of contamination is through non-target small mammals (such as Wood Mice and Bank Voles) eating baits laid for rats. This is likely to occur even at sites that have rats but must be even more likely at sites that don't. Permanent baiting also leads to increases in SGAR resistance which leads to even greater SGAR use and availability to non-targets. Permanent baiting may be a money maker for the industry but for wildlife and resistance prevention it's simply *bad practice*.

Only 1 % of farmers get SGAR-use training and 57 % rely entirely on labelling information. So, if most farmers read the label, why do most of them ignore instructions like bait removal and carcass disposal? Either, they don't read the label properly or they read it but the information doesn't motivate them to act accordingly. So let's look at the information SGAR users are being given. In terms of minimising environmental risks, current labelling concentrates on *bait covering*, *carcass disposal* and *removal of uneaten bait*. SGAR labels give the distinct impression that provided you do these three things, unwanted poisoning will be *effectively minimised*. It is amazing how many farmers, and even some pest controllers, think that all you need to do is keep baits covered. In fact, nothing could be further from the truth!

Bait covering cannot possibly prevent secondary poisoning, because rodents that have eaten bait will survive 3-14 days and they carry the poison out into the open within their bodies. No matter how much they are covered, non-target mice and voles will always be able to access baits laid for rats. Rats will sometimes carry baits and drop them away from baiting points. All three of these factors are impossible to prevent. The idea that bait covering can effectively minimise secondary poisoning is NOT TRUE.

Carcass Removal is irrelevant to Barn Owls and Kestrels as they virtually never take dead prey. However, carcasses are eaten by Red Kites and are a very likely source of contamination. The idea that carcass removal protects Barn Owls and Kestrels from secondary poisoning is WRONG.

Removal of uneaten bait is important, but the way that some SGAR products are designed positively encourages users to ignore this instruction. 'Throwpacks' and 'scatterpacks' are incorporated into bale stacks when they are built and can only be removed many months later as the bales are used. No matter how bait is laid, by the time any left-overs are removed it is highly likely that non-target mice and voles have already been feeding on it. Although it will sometimes help, *the removal of uneaten bait cannot possibly prevent secondary poisoning*.

Having just dealt with the inadequacies of the environmental risk minimisation advice given on products, let's now take a look at the information that SGAR labels are failing to provide:

Surely the fact that *secondary poisoning occurs* should be clearly stated on the label? In fact, the words *secondary poisoning* are not even mentioned! The fact that high priority species are affected is also not mentioned. The extent of predator contamination is not mentioned. The mechanism of secondary poisoning is not explained. The fact that bait-covering is ineffective is not mentioned. The fact that carcass removal doesn't protect predators; not mentioned. That bait removal cannot prevent secondary poisoning; not mentioned. Another important omission is clear advice that SGARs should only be used as a last resort (where non-toxic and less-toxic control methods have been recently used and a rodent problem persists). Given the appalling lack of information on products it's hardly surprising that SGARs are being used as a first resort (in many cases unnecessarily) and that most users are not motivated to follow the instructions.

For example, *Slaymor* buckets currently state "TO AVOID RISKS TO MAN AND THE ENVIRONMENT, COMPLY WITH THE INSTRUCTIONS FOR USE".

What it should say is "TO AVOID RISKS TO MAN COMPLY WITH THE INSTRUCTIONS FOR USE. RISKS TO THE ENVIRONMENT CANNOT BE AVOIDED"

By giving the impression that bait covering, carcass disposal, and the removal of uneaten bait can avoid unwanted poisoning, SGAR product labels are clearly *misleading*. This, in spite of the fact that under the Sale of Goods Act 1979, *everything that is said about a product must not be misleading*. In order to not be misleading, SGAR product labels need to: 1) state the environmental risks and known consequences of using the product 2) state the limitations of the recommended risk-minimisation measures such as bait covering. They should also establish the principal of *last resort use*.

The Barn Owl Trust would like to see the following additional wording on all SGAR products:

(1) Owls and other raptors can be killed by the use of this product even if the instructions are strictly followed. This type of rodenticide has been detected in up to 91% of Barn Owls analysed by the *Predatory Bird Monitoring Scheme*.

(2) Please be aware that this product is slow acting and rodents are unlikely to be found dead at baiting points. Typically it takes 3–14 days for poisoned rodents to die. During this time they will still be moving around the site, may move further afield and may be caught and eaten by predators such as Barn Owls. This is termed 'secondary poisoning'.

(3) Bait covering reduces the chance of non-target species eating the poison but *it will not* significantly reduce the secondary poisoning of predators that eat small mammals (Barn Owls, Kestrels, Red Kites, Stoats, Weasels and Polecats etc.).

(4) This product should only be used as a last resort where other control methods, non-toxic products and less-toxic products have been recently used and a rodent problem persists.

If you are thinking to yourself, "*If they put that on the label very few people would buy it*," perhaps you should seriously consider the question - *would that really be a bad thing?*