

## Environmental Risk Mitigation - SGARs

*Let's get the information right*

A presentation by



David Ramsden MBE



Barn Owl Trust – *Conserving the Barn Owl and its Environment*



# % of populations that consume SGAR-poisoned prey

<100% of Kestrels

<94% of Red Kites

<91% of Barn Owls

31% of Polecats

30% of Weasels

23% of Stoats

20% of Tawny Owls



(victims are unlikely to be found)

Thanks to:



The vast majority of Kestrels, Red Kites  
and Barn Owls carry sub-lethal doses

The key question is:

Does low-level contamination  
have significant effects?



## Sub-lethal effects (1)

Observed sub-lethal effects of SGARs on owls include:

- Bruising
- Lethargy

How do (low-level) contaminated predators *feel*?

*Are they less inclined to hunt?*



## Sub-lethal effects (2)

# Does it matter?

Barn Owl declines:

(pre and post 1989)

Clutch size

5.86 dropped to 4.7

Brood size

3.4 dropped to 3.2 Sig. linear decline from 1990-2005 (BTO)

Young fledging

2.6 dropped to 2.5

29% of nesting attempts completely fail

Numbers remain low - only 1 farm in 75 has a Barn Owl nest

it is widely recognised that BBS methodology is not well-suited to nocturnal species. BTO declined to give a figure - Avian Population Estimates paper in British Birds FEB 2013

SGAR contamination is a possible factor so **YES it matters**

Along with food supply, climate change etc.



Widespread low-level contamination matters

So, how *DO* they feel?



## Sub-lethal effects (3) – How do low-level victims *feel*?

(nobody knows)

(As well as bruising, vomiting, diarrhoea, and fever)

Effects of Warfarin on humans include the feeling of:

# Nausea

and Warfarin is 100 to 1,000 times **less** acutely toxic than SGARs

(Walker *et. al* 2008)

The effects of low-level contamination are unknown



What we do know is:

Overall, impact of SGARs (on predators) is *definitely negative*





The overall impact on predators is *definitely negative*

So, what do we know about  
SGAR use on farmland?



# SGAR use on farmland

- 76% of farms use SGARs (*Garthwaite et. al 1999; Dason et. al 2003*)
- Out of 133 farms I monitored for 32 - 48 months, **89% used SGARs constantly**
- 80% of farmers use the SGARs themselves
  - Only 1% get training**
  - 57% rely entirely on labelling information
  - Only 11% keep records**
  - Only 30% remove uneaten bait**
  - Less than 1% search for carcasses** (*Tosh et. al 2011*)
  - 94% keep baits covered** (simple logic)



# Why do farmers largely ignore instructions? (except covering)

Either they:

- don't read the label

Or:

- they read the label but, the information on the label doesn't motivate them to follow the instructions

(some gain their knowledge of SGAR use elsewhere, e.g. internet)



So, lets look at

*the messages users are  
currently being given*



## Current messages to users (1)

(understatement and half-truths)

The industry via its CRRU state:



“Several species of wildlife in the UK carry low-level residues of some of the commonly-used rodenticides in their bodies. There is no evidence that these have any adverse effects, either on the individual animals that carry them or on wildlife populations.”

A more truthful statement would be:

“Owls and other predators have died as a direct result of eating poisoned rodents. Additionally, the low-level contamination of predatory species by rodenticides is extremely widespread. Whether or not this is having adverse effects on individuals or wildlife populations is currently unknown.”



## Current messages to users (2)

The industry via CRRU says that **WIIS data** provides “confidence” that ‘approved use’ does not present a significant risk to wildlife\*.



In fact,

**WIIS DATA DOES NOT PROVIDE ANY SUCH CONFIDENCE**

In the case of SGARs, it is almost always impossible for WIIS to establish where the poised predator caught the poisoned prey

(a typical home range contains 20-130 farms, SGARS are slow acting, and a BO can move 6km in 10 min)

\* The implication of the above statement is that ‘approved use’ rarely causes secondary poisoning.

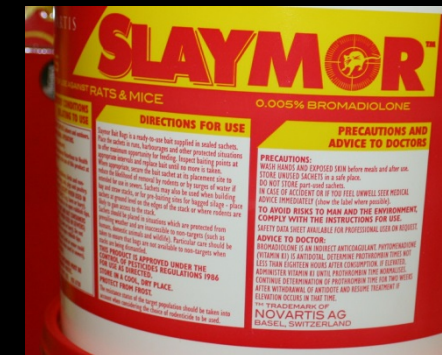
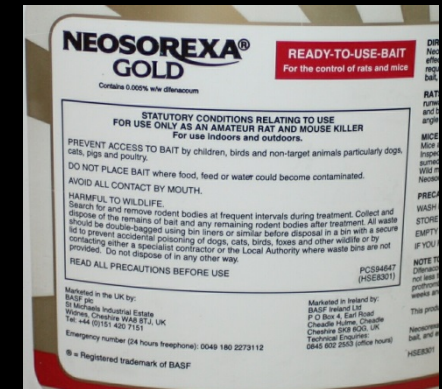
This is **UNFOUNDED**



# Current messages to users (3)

Relevant SGAR labelling concentrates on:  
(and relevant parts of the CRRU code)

1. Bait covering
2. Carcass disposal
3. Removal of uneaten bait



## 1. *Bait covering*

94% of farmers keep baits covered

### **WHAT MANY DON'T RELISE IS:**

Targets carry poison out into the open within their bodies **THIS IS UNPREVENTABLE**

No matter how much baits are covered, non-target mice and voles can always access them **UNPREVENTABLE**

Rats carry and drop baits **UNPREVENTABLE**

The idea that bait covering can effectively minimise secondary poisoning is **NOT TRUE**





## 2. Carcass removal Less than 1% of farmers search for carcasses

- Carcasses may contain more SGAR than is required to kill the victim
- Scavengers such as Foxes and Red Kites are at greatest risk
- To Barn Owls, carcass removal is irrelevant (because they rarely take dead prey)



Rodenticide victim

The idea that carcass removal protects Barn Owls **IS WRONG**



### 3. Removal of uneaten bait

Only 30% of farmers remove it

- Throwpacks and scatterpacks are almost never removed (only as the bale stack is dismantled)
- Bait left after targets are dead is highly likely to be eaten by non-target mice voles and shrews
- Long term, permanent, & 'preventative' baiting = increased risk of secondary poisoning and resistance
- Although it will sometimes help, **the removal of uneaten bait cannot possibly prevent secondary poisoning** (it's already happened)



## *Current messages to users (4)* **CURRENT SGAR LABELLING**

- “Secondary poisoning” **NOT EVEN MENTIONED!**
- The fact high priority species are affected **NOT MENTIONED**
- The extent of predator contamination (<100%) **NOT MENTIONED**
- The mechanism of secondary poisoning **NOT EXPLAINED**
- The fact that bait covering is ineffective **NOT MENTIONED**
- The fact that carcass removal doesn't protect predators **NOT MENTIONED**
- & Bait removal at end cannot prevent sec. poisoning **NOT MENTIONED**
- The principal of *Last Resort Use* **NOT MENTIONED**



Is it surprising?

Given the appalling lack of  
information on products:

it's hardly surprising that:

**SGARs are being used as a first resort**

**Users are not motivated to follow the instructions**



# Campaign against accidental or illegal poisoning *Survey*

(WIIIS publicity arm) (2008)

101 farmers, game keepers and pest control operators said:

- Only 14% believed they didn't need any advice or information regarding the control of rodents
- 78% sought advice about safe and responsible use from suppliers and manufacturers
- 88% had not heard of the CRRU Code

Irrespective of all that...



Irrespective of all that...

Under **United Nations *Guidelines for Consumer Protection* (1999)** product purchasers have a **Right to be Informed** – *‘to be given facts needed to make an informed choice, and to be protected against dishonest or **misleading** advertising and labelling’*

Under **Section 14 of the Sale of Goods Act (1979)** everything that is said about a product must not be **misleading**



## *Disclosure of information*

In order to **NOT BE MISLEADING**

Product labels need to:

- 1) state 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*



## Additional labelling needed

- (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 a field 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.**





*Let's*

*get the information right,*

*best practise guidelines/codes should be the best*

*establish certification for rural users*

*monitor the outcome,*

*and use enforcement if necessary*



Thank you for listening

