



The illegal killing of birds of prey  
in **Scotland in 2009**

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## **Executive summary**

In 2009 a white-tailed eagle, two golden eagles, four red kites, and 21 buzzards were confirmed by the Scottish Government as being victims of illegal poisoning. Baits laced with highly toxic and illegal poisons continued to be deliberately laid out in the open in Scotland's countryside. A red kite was shot and a further four buzzards were confirmed as shot or trapped. Peregrines and hen harriers nesting on driven grouse moors again "disappeared" in circumstances that suggested deliberate human interference.

These shocking statistics can be added to the catalogue of shame documenting the last 20 years of relentless human killing of Scotland's protected bird of prey species. During this period, more than 450 birds of prey have been killed by illegal poisoning, with a further 320 confirmed as shot, trapped or with their nests destroyed. It is therefore no surprise that there are substantial areas of suitable habitat in Scotland currently unoccupied by breeding birds of prey as a direct result of such illegal activity. The scientific literature now has many authoritative reports and papers which document the impact such illegal killing is having on the Scottish populations of iconic species, such as golden eagle, hen harrier and red kite.

This RSPB Scotland report documents known incidents of the illegal killing of birds of prey in 2009; it outlines the evidence that illustrates that the crimes recorded here represent a fraction of the actual total; and makes recommendations towards improving the detection of these crimes and the successful prosecution of the perpetrators. As ever, we are grateful to members of the public, estate employees, Scottish police forces, National Wildlife Crime Unit, and many others who provide the data on which this report is based. We particularly welcome recent Partnership for Action against Wildlife Crime initiatives, coordinated by the Scottish Government designed to tackle wildlife crime against birds of prey. Finally, we are grateful for the support of Scottish Natural Heritage in helping to fund the production of this report.

## **Introduction**

The majority of landowners and their employees in Scotland act responsibly and within the law with regards to the protection of birds of prey and other wildlife. RSPB Scotland has long-established partnerships with many land managers, gamekeepers and farmers, who have assisted in conservation work with species such as black grouse, corncrake, capercaillie and osprey and with re-introduction schemes for red kites and white-tailed eagles. Unfortunately, however, it is evident that a significant number of individuals or estates persist with the outdated practice of illegal killing of birds of prey, behaviour that is rightly condemned by landowning representatives as well as conservation organisations and the Scottish Government.

The deliberate and illegal killing of Scotland's birds of prey has been a prominent issue for many decades. This matter is of serious conservation concern as it has been clearly demonstrated in the scientific literature to have a serious impact on the populations and ranges of some of our most vulnerable bird species. Illegal killing of birds of prey contravenes both European Union and domestic legislation designed to safeguard and enhance bird populations. This illegal activity discredits the international reputation of Scotland as a place that takes pride in its natural heritage and undermines important industries, including tourism, that depend upon wildlife and a rich landscape.

Many species, whose populations were either seriously reduced or eliminated from much of Scotland in the 19th and early 20th centuries, have made significant recoveries in recent years through natural re-colonisation (eg common buzzard) or through reintroduction by conservation agencies as in the case of red kites. This has followed a reduction in killing sufficient to allow these recoveries as legislation to protect these species has been strengthened and attitudes towards predators have become more enlightened and based upon a better understanding of ecology. In addition, the populations of several species, such as peregrine, have only recently recovered from the long lasting impact of organochlorine pesticides, such as DDT, in the 1960s, which decimated many raptor populations.

Sadly, this overall positive trend has not been universal. The poor conservation status of some species of birds of prey (for example, golden eagle and hen harrier) remains of serious concern. It is clear that in some regions of Scotland, particularly in parts of the eastern and southern uplands, the intolerance shown towards protected predators and the law remains deeply ingrained, with no regard to the conservation status of the targeted birds and animals.

Over the last 20 years, hundreds of protected birds of prey have been confirmed, by government laboratory testing or post-mortem, as being the victims of illegal poison abuse, shooting, trapping or nest destruction in Scotland. The majority of these victims have been discovered purely by chance, by hillwalkers, birdwatchers, dog walkers and other members of the public visiting Scotland's countryside. Other casualties have been found during police, RSPB Scotland or SGRPID follow-ups to these incidents.

This is RSPB Scotland's 16th annual review of the illegal killing of birds of prey in Scotland; it describes the extent of the *known* criminal destruction of birds of prey during 2009. However, given that much of the killing takes place in remote areas, in circumstances where direct witnesses are few and far between and where material evidence can be easily concealed or destroyed by the perpetrators, a large proportion of these incidents will never be uncovered or reported. It is readily

apparent, therefore, that the numbers of incidents outlined in this report must be regarded very much as minimum figures.

## Definition of incidents

Incidents are classified and described in the report as follows:

- **"confirmed" cases** – incidents where definite illegal acts were disclosed, that is the substantive evidence included birds or baits confirmed by Science and Advice for Scottish Agriculture (SASA – formerly Scottish Agricultural Science Agency) as containing illegal poisons; an offence seen/found by a witness and/or confirmed by post-mortem, illegally-set traps etc
- **"probable" cases** – those where the available evidence points to illegality as by far the most likely explanation but where the proof of an offence is not categorical
- **"possible" cases** – where an illegal act is a possible explanation but where another explanation would also fit the known facts.

Incidents are separated on the basis that any bait, victim, group of baits, victims etc that are:

- found on a different date
- found sufficiently far apart to be represented by a different six-figure grid reference
- found at the same grid reference and on the same date but in circumstances that otherwise separate them (decomposed beside a fresh bait – ie the bait could not have been responsible for the death of the victim).

are classified as separate incidents.

### 2009 incidents

As with all preceding years' reports, threats to raptors are quantified under two main headings, these being:

- the illegal use of poisons or poison baits
- other illegal killing: nest destruction, shooting and trapping.

## Poisoning

Poisoning constitutes the greatest actual or potential threat of all forms of illegal activity, as it is totally indiscriminate. In contrast to shooting and to much trapping activity, which requires a sustained effort by the criminal concerned to produce a limited return, poisoning can have a substantial impact with only minimal effort. Poison baits continue to be lethal over a period of days or weeks and can kill multiple victims without further effort by the poisoner. Any poison bait used in the open within habitat used by birds of prey has the potential to kill those birds. This is true regardless of the intentions of the perpetrator.



*Poisoned golden eagle near  
Bridge of Orchy, June 2009*

In this report, we document actual cases of poisoned raptors, incidents where only a poison bait was found and the victim (if any) was not identified and incidents where the victim was not a bird of prey but the location and circumstances put birds of prey at risk.

A total of 68 allegations or reports of poisoning activity in 2009 was received by RSPB Scotland (1999-2008 average = 58). All reports to RSPB Scotland came from identifiable individuals.

- 46 were confirmed as pesticide abuse killing or threatening raptors (1999-2008 average = 27) and seven further cases involved the possession of pesticides suspected to be for an illegal purpose.

This total of 46 confirmed incidents is the worst RSPB Scotland has recorded in a single year. It is important to reiterate, however, that this figure merely represents those victims and/or baits that were actually discovered and that the real number of casualties will be considerably higher. While comparing figures from year to year is misleading, it is abundantly clear that this indiscriminate and obscene practice continues to be widespread, particularly in areas dominated by game management, and shows no sign of declining, despite public condemnation following recent high profile cases.

Confirmed abuse incidents are summarised in Table 1.

**Table 1: confirmed poison abuse incidents, 2009**

Month	Poison	Victim	Bait	Location	Area
January	Alpha-chloralose	Tawny owl		Edradynate	Perthshire
January	Carbofuran	Cat		Hurlford	East Ayrshire
February	Carbofuran	Raven		Strathdearn	Inverness-shire
March	Carbofuran	Buzzard		nr Heriot	Borders
March	Alpha-chloralose	Buzzard		nr Ardgay	Ross-shire
March	Alpha-chloralose	Buzzard (2)		Edradynate	Perthshire
March	Carbofuran	Buzzard		nr Heriot	Borders
March	Carbofuran	Buzzard		Glenogil	Angus
March	Carbofuran	Buzzard		Glenogil	Angus
March	Carbofuran		Rabbit	Leadhills	South Lanarkshire
March	Carbofuran	Raven		Leadhills	South Lanarkshire
April	Carbofuran	Buzzard	Pigeon	nr Newmilns	East Ayrshire
April	Alpha-chloralose	Carrion crow		nr Coulter	South Lanarkshire
April	Alpha-chloralose	Buzzard		Edradynate	Perthshire
April	Alpha-chloralose	Buzzard		Edradynate	Perthshire
April	Alpha-chloralose	Buzzard		Edradynate	Perthshire
April	Carbofuran		Rabbit	Leadhills	South Lanarkshire
April	Carbofuran	Red kite		nr Farr	Inverness-shire
April	Carbofuran	Magpie		Leadhills	South Lanarkshire
April	Carbofuran	Raven		Leadhills	South Lanarkshire
April	Alpha-chloralose	Buzzard		Glen Esk	Angus
May	Aldicarb	Cat		Coldstream	Borders
May	Mevinphos	Raven (2)		Delnabo	Moray
May	Carbofuran	Buzzard		Ballindalloch	Moray
June	Carbofuran	Red kite		nr Heriot	Borders
June	Carbofuran		Rabbit (1), Pigeon (2)	nr Heriot	Borders
June	Carbofuran		Rabbit	nr Heriot	Borders

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Month	Poison	Victim	Bait	Location	Area
June	Carbofuran	Buzzard		nr Stow	Borders
June	Alpha-chloralose	Red kite		Tannadice	Angus
June	Carbofuran	Golden eagle		nr Bridge of Orchy	Argyll
June	Carbofuran	Fox		nr Bridge of Orchy	Argyll
June	Carbofuran		Sheep	nr Bridge of Orchy	Argyll
June	Mevinphos		Rabbit	nr Tomintoul	Moray
July	Carbofuran	Golden eagle		Millden	Angus
August	Carbofuran	White-tailed eagle		Glenogil	Angus
August	Carbofuran + Alpha-chloralose	Buzzard	Pheasant	Redmyre	Perthshire
August	Alpha-chloralose	Cat			Strathclyde
September	Alphachloralose		Egg (2)		Aberdeenshire
September	Carbofuran	Buzzard		Carfraemill	Borders
September	Carbofuran	Cat (2)		Cumnock	East Ayrshire
October	Carbofuran	Red kite		nr Dunkeld	Perthshire
October	Alpha-chloralose	Buzzard	Rabbit	Culter Allers	South Lanarkshire
November	Carbofuran	Buzzard (2)		nr Castle Douglas	Dumfries-shire
November	Alpha-chloralose		Rabbit	Culter Allers	South Lanarkshire
November	Alpha-chloralose	Buzzard		Culter Allers	South Lanarkshire
November	Alpha-chloralose	Buzzard		Culter Allers	South Lanarkshire

In addition to the incidents documented above, stockpiles or traces of prohibited or illegally used chemicals were found at seven premises/addresses during follow-up operations in which RSPB Scotland staff assisted the statutory agencies on searches, using powers exercised under warrant or the Food and Environmental Protection Act. It is hoped that these confirmations of possession of illegal chemicals by criminals involved in the deliberate killing of birds of prey will lead to successful prosecutions and/or penalties imposed under cross compliance.

As has been the norm in recent years, carbofuran (or mixtures containing this chemical) has continued to dominate as the “poison of choice” in the vast majority of incidents recorded, despite the fact that this substance was withdrawn from approval as a legitimate agricultural pesticide in December 2001. However, despite mere possession being a criminal offence, there continues to be little evidence suggesting a decline in the use of this chemical. It featured in 28 of the 46 (60.9%) incidents confirmed in 2009, compared to 82.7% of the total of 197 incidents confirmed between 2003–2008. Since the first case known to RSPB Scotland of carbofuran illegally used as a poison for killing wildlife in 1988, its abuse has become widespread, and since 1997 has been the most widely abused pesticide for killing protected wildlife.

This position was formerly held by alphachloralose; this chemical is only available to the public at low concentrations in rodenticide



products, approved only for killing mice. Products containing alphachloralose at higher concentrations (including for control of birds such as feral pigeons) can only be bought, held and used by pest controllers under licence. However, it has continued to feature in a number of incidents every year. The last two years appear to indicate a resurgence in the use of this pesticide, with it noted in six of 28 (21.4%) incidents in 2008 and 16 of 46 (34.8%) incidents in 2009. These figures compare with the pesticide being noted in 6.51% of the total of 169 incidents confirmed during 2003–07. It is impossible to say, however, whether this represents a real increase in the use of this poison or simply a greater proportion of incidents being detected.

The monthly distribution of confirmed poisoning incidents in 2009 was similar to that noted in previous years, with a major peak in the spring and a smaller secondary peak in the autumn.

**Figure 1: confirmed poisoning incidents 1989-2009**

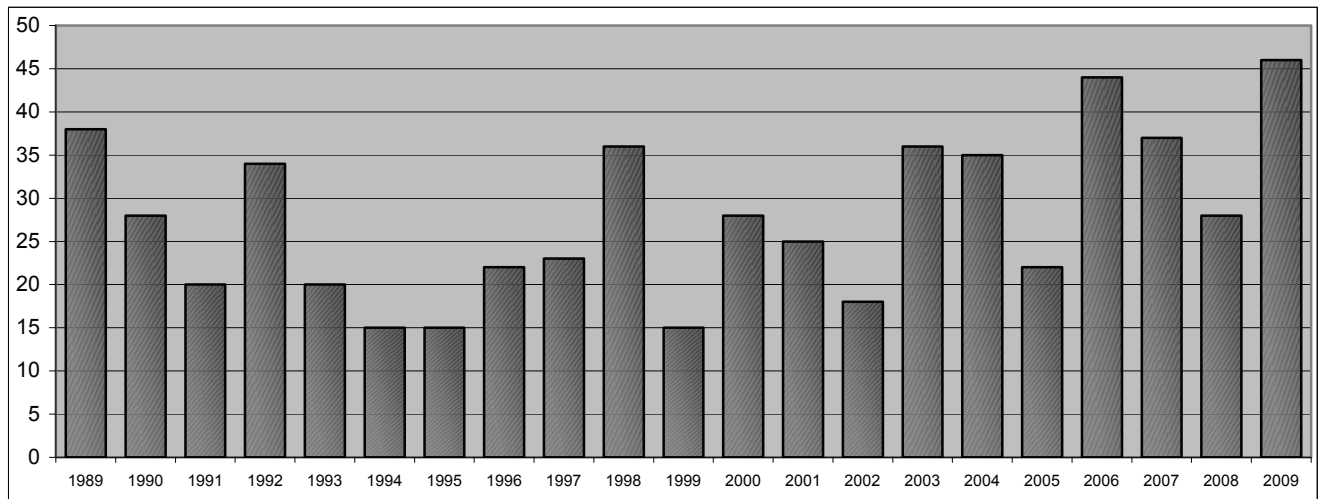


Table 2 documents the number of confirmed victims of poison abuse recorded since 1989. Whilst widespread species such as the buzzard and corvids (the latter included under “other bird species”) are, predictably, the most numerous victims, it is undoubtedly the number of scarce species, of international conservation concern, such as red kite, golden eagle and white-tailed eagle that provide the most shocking testament to the indiscriminate nature of this criminal practice. As many of these birds were discovered by members of the public, in remote areas, purely by chance, one can appreciate that the figures are indicative of a much bigger problem.

**Table 2: number of confirmed victims of poison abuse in Scotland, 1989-2009)**

Year	Species									Total
	Red kite	Golden eagle	White-tailed eagle	Buzzard	Peregrine	Hen harrier	Raven	Other bird species	Animals	
1989	1	1		21	3		3	66	9	104
1990		2		11		2		24	8	47
1991		1		12				4	15	32
1992				13		1		9	22	45
1993	1	1		17				60	3	82
1994		1		12	2			4	4	23
1995				12	1	1		5	4	23
1996		1	1	17	1				1	21
1997	4	1		7	2		1	7	9	31
1998	4	2		23	2			3	9	43
1999	1	2		7			2		1	13
2000	4	3		23				15	1	46
2001	10	1		9				9	2	31
2002	1	2	2	7	2			28		42
2003	10		1	23	3		4	33	1	75
2004	3			40	3			5	3	54
2005	2	1		14			2	3		22
2006	5	2		26	1		6	4	1	45
2007	12	1		15	4		2	3	4	41
2008	2		1	14			3		1	21
2009	4	2	1	21			5	3	6	42
<b>Total</b>	<b>64</b>	<b>24</b>	<b>6</b>	<b>344</b>	<b>24</b>	<b>4</b>	<b>28</b>	<b>285</b>	<b>104</b>	<b>883</b>

**Case study: a white-tailed eagle poisoned**



*Poisoned white-tailed eagle, Glen Ogil, Angus, August 2009*

On the 6 August 2009, a dead white-tailed eagle found on the Glenogil Estate, Angus was confirmed to have been poisoned by the banned pesticide carbofuran. This bird was one of the 15 donated by the people of Norway to Scotland in June 2008 as part of the ongoing East Scotland Release Project, a partnership between RSPB Scotland, Scottish Natural Heritage and Forestry Commission Scotland.

In May 2006, a dead rabbit laced with carbofuran was discovered on the same estate and in June 2006, a follow-up operation by Tayside Police and partner organisations yielded another poisoned bait, and found that samples taken from estate vehicles and equipment tested positive for carbofuran. The estate owner had £107,000 withdrawn from his single farm payment by Scottish Government. We understand that this penalty is currently being appealed.

In May 2008, a white-tailed eagle was found poisoned just outside the estate. Three days later, a follow-up by Tayside Police and RSPB Scotland discovered a dead buzzard and remains of a hare in the same area. On estate boundary fence posts, 32 pieces of meat were found. All these tested positive for carbofuran and other pesticides. Despite the

seriousness and scale of the incidents, RSPB Scotland remains concerned that there was no follow-up enforcement action. In March 2009, Tayside Police and RSPB Scotland recovered two further dead buzzards from the estate, both tested positive for carbofuran.

Duncan Orr Ewing, head of species and land management at RSPB Scotland, said it was an “utterly despicable crime” and pointed out that “once again it has been found in an area where sporting estates dominate the landscape”.

He said the “litany of incidents” in “certain parts of the Angus Glens” should “justify the deployment of all possible resources to identify those responsible and then consider the full range of sanctions to tackle the perpetrators”.

Scottish Environment Minister Roseanna Cunningham MSP condemned the “appalling crime against a magnificent bird of prey. It is a cruel irony that the sea eagle, reintroduced following extinction, is still being persecuted”.

#### **Other illegal killing**

Other illegal killing typically involves one of the following methods:

- nest destruction – removal or destroying of eggs or young and/or physical removal of nest
- shooting
- use of uncovered spring traps – on poles or on the ground with or without bait
- use of cage traps – with either live or dead bait.

In 2009, 62 reports were received by RSPB Scotland in which offences of this type were alleged (1999–2008 average = 77). Of these, nine were “confirmed” (as defined previously) and 19 were classed as “probable” cases of illegal killing. The probable incidents include cases where live, injured birds were recorded, nesting attempts that failed where there was some evidence suggesting human interference, and victims too decomposed to permit a complete analysis. In the remaining 34 cases, there was either insufficient evidence to either substantiate or disprove the original report.

The confirmed incidents are outlined in Table 3, with a summary of probable incidents in Table 4.

**Table 3: confirmed incidents of illegal killing of birds of prey in Scotland, 2009**

Month	Method	Victim	Location	Area
Jan	Shot	Buzzard	nr Whitecross	Falkirk
Feb	Attempted shooting of escaped falconry bird	Peregrine hybrid	nr Braco	Perthshire
April	Bird caught in spring trap	Buzzard	nr Ellon	Aberdeenshire
Jun	Shot	Buzzard	nr Strathdon	Aberdeenshire
Jun	Illegal Crow Trap		nr Tomintoul	Moray
July	Bird deliberately run over with vehicle	Sparrowhawk		Glasgow
Sep	Set spring-trap in illegal circumstances		nr Balloch	West Dunbartonshire
Sep	Shot	Buzzard	Redmyre	Perthshire
Dec	Shot	Red kite	Braco	Perthshire

**Table 4: probable incidents of illegal killing of birds of prey in Scotland, 2009**

Month	Circumstances	Victim	Location	Area
February	Dead bird found – injuries suggested it had been caught and released from a spring trap in the recent past	Red kite	nr Braco	Perthshire
March	Remains of bird found buried	Buzzard	nr Tarland	Aberdeenshire
March	Remains of bird found buried	Buzzard	nr Tarland	Aberdeenshire
March	Remains of bird found stuffed	Buzzard	nr Aboyne	Aberdeenshire
March	Suspected shooting bait found been recovered previously		Leadhills	South Lanarkshire
March	Remains of bird found stuffed in hole	Buzzard	Leadhills	South Lanarkshire
Mar - Apr	Breeding adults disappeared. Site failed suspiciously in previous two years	Peregrine	nr Muirkirk	East Ayrshire
April	Carcass found close to three others in area where multiple victims have been recovered previously	Buzzard	Leadhills	South Lanarkshire
April	Carcass found close to three others in area where multiple victims have been recovered previously	Buzzard	Leadhills	South Lanarkshire
April	Carcass found close to three others in area where multiple victims have been recovered previously	Buzzard	Leadhills	South Lanarkshire
April	Carcass found close to three others in area where multiple victims have been recovered previously	Buzzard	Leadhills	South Lanarkshire
April - May	Nest failed & adult disappeared. Shotgun cartridge found above nest	Peregrine	nr Thornhill	Dumfries-shire

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Month	Circumstances	Victim	Location	Area
May	Adult pair disappeared	Hen harrier	Glentromie	Inverness-shire
May	Eggs/chicks disappeared - repeat of previous years' incidents	Peregrine	nr Dolphinton	South Lanarkshire
May - Jun	Both adults disappeared	Hen harrier	nr Bonar Bridge	Sutherland
Jun	Egg found smashed below nest	Golden eagle	nr Killin	Stirlingshire
Jun	Eggs and adults disappeared - evidence of human access to nest	Hen harrier	nr Muirkirk	East Ayrshire
Jul - Aug	Eggs and adults disappeared - evidence of human access to nest	Hen harrier	nr Muirkirk	East Ayrshire
Sep	Dead bird found, suspected pole trapped	Tawny owl		Nairn

**Table 5: number of confirmed victims of shooting, trapping or nest destruction in Scotland, 1989-2009**

Year	Species								Total
	Red kite	Golden eagle	Buzzard	Peregrine	Hen harrier	Goshawk	Sparrowhawk	Kestrel	
1989		5	1	4	4		1	1	16
1990			2	5	13		1	4	25
1991		4	5		1	1	2	4	17
1992	1		11	4	5			3	24
1993		2	2	3	7	1	1	1	19*
1994		2	12	3	8				25
1995		1	13	5		1	1		21
1996			7	1	3			2	13
1997			11	6		2		1	20
1998		2	7	2			2		13
1999			2	3					5
2000			1	5	4	2			12
2001			8			1	2		11
2002	1		8	3					12
2003	1		7	4	3				15
2004			4	3			1	5	13
2005			2	7		1		1	11
2006			15	1					16
2007		1	10	1	1	1		1	15
2008	1		5			1	1	3	11
2009	1		4				1		6
<b>Total</b>	<b>5</b>	<b>17</b>	<b>137</b>	<b>60</b>	<b>49</b>	<b>11</b>	<b>13</b>	<b>26</b>	<b>320*</b>

\*In addition, a white-tailed eagle and an osprey were shooting victims in 1993.

## Summary

The continued prevalence of poisoning and other illegal killing of protected birds of prey in Scotland, particularly in upland areas managed for driven grouse shooting, continues to have a significant impact on the conservation status of some of our rarest species. Many of the confirmed and probable victims of illegal activity in 2009 were found in such areas.

It is apparent that the number and nature of the incidents discovered vary substantially from year to year meaning that making a statistically rigorous assessment of the trends is difficult.

Nevertheless, it is our view that:

- there is little overall evidence to suggest that the illegal killing of raptors has declined in recent years
- there has, however, been a decline in illegal killing in the lowlands, and over much of north and west Scotland, making the number of incidents in the managed moorland areas an even starker situation
- for some raptor species and in some habitats (eg hen harriers nesting on driven grouse moors) there is – in contrast – no evidence of a decline in illegal killing or nest destruction
- illegal killing continues at wholly unacceptable levels and is still a significant threat to the populations and ranges of several scarce, slow breeding species.

It is important to reiterate that the number of incidents detected will be a small proportion of the total. The true level of illegal killing of raptors is very difficult to measure due to the nature of the terrain in which these offences take place and the secrecy surrounding such criminal activities.

The level of confirmed cases of illegal poisoning recorded over the last five years indicates that these offences continue to be widespread. As in previous years, the distribution of 2009 incidents, as shown by the maps in the Appendices, reinforces the fact that incidents are not evenly or randomly spread throughout the country, but are increasingly concentrated in the upland areas of the east and south, co-incident with the distribution of driven grouse moors. Indeed this evidence coincides with a geographical analysis of the distribution of poisoning incidents published in peer-reviewed scientific literature, which shows that the illegal use of poison baits to control predators is disproportionately associated with grouse moors in Scotland (Whitfield *et al*, 2003).

## The effects of illegal killing

The level of continued illegal killing of some of our most iconic species continues not only to be a stain on Scotland's reputation but also poses a threat to the populations of some of these species. Raptors' ecological characteristics make them particularly vulnerable to any additional

mortality caused by deliberate killing. Raptors tend to be long-lived, breed slowly and produce few young. The killing of adult birds can thus quickly impact their conservation status.

### **Golden eagle**

Two of these magnificent birds were found poisoned in 2009, in Argyll and Angus. A total of 24 golden eagles were victims of illegal poisoning in the 1989–2009 period.

In 2008, Scottish Natural Heritage (SNH) published *A Conservation Framework for Golden Eagles: implications for their conservation and management in Scotland*. This was produced in partnership with other members of the Scottish Raptor Monitoring Scheme: Scottish Raptor Study Groups, Rare Breeding Birds Panel, RSPB Scotland, BTO Scotland and the Joint Nature Conservation Committee. In summary, the report stated that:

“A number of lines of evidence indicated that illegal persecution of eagles, principally associated with grouse moor management in the central and eastern Highlands, is the most severe constraint on Scottish golden eagles. These lines of evidence, based on population modeling and analyses using a Geographical Information System (GIS) are as follows:

- a) as carrion feeders, golden eagles are particularly vulnerable to poisoned bait. Records of the illegal use of poisoned baits were significantly associated with areas where grouse moors predominated as a land-use. There was no evidence of a decline in records of poisoning on grouse moors between 1981 and 2000, even though poisoning incidents had declined in upland areas away from grouse moors
- b) records of illegal persecution of golden eagles (including poisoning, trapping, shooting) were also more common in those regions where grouse moor management predominated.”

### **Hen harrier**

Previous research into the hen harrier (Bibby and Etheridge, 1993; Etheridge *et al.*, 1997) indicates that this bird is heavily persecuted on managed grouse moors, with productivity significantly lower in these areas compared with breeding attempts elsewhere in the uplands.

Whitfield *et al.*, 2008, found good evidence that hen harrier killing and nest destruction was due to grouse moor interests. Human interference was an important cause of breeding failures and was only recorded on land with an employed gamekeeper. Gamekeepers were implicated or confirmed as responsible for breeding failure due to interference with nesting attempts. The study also highlighted that when human interference is prevalent and when the frequency of observer monitoring of such harrier breeding attempts is low, then simple records of the number of observed failures (even if these could all be accurately ascribed to interference) will underestimate the actual number failing due to human interference.

As has been the pattern of several recent years, in 2009, a number of hen harrier breeding attempts, failed suspiciously, with illegal human interference strongly suspected. In some cases, the same thing happens year after year at particular sites. This evidence has been uncovered through licenced monitoring of breeding attempts by members of the local Raptor Study Groups and RSPB Scotland staff.

Of particular concern is the fact that many of these failures have occurred within the Muirkirk and North Lowther Uplands Special Protection Area (SPA), notified by the Scottish Government due to its international importance for breeding hen harriers. SPAs, and the species they support, are required to be protected under European and domestic legislation. On SPA designation, this area held 6% of the UK breeding female population. By 2009, this figure had dropped to 1%. In 2004, 11 out of 21 nests were successful, fledging 44 young. In 2009, only 12 pairs bred, of which five were successful, fledging 13 young.

Regardless of the number of recent confirmed records of illegal killing, the empirical evidence still shows the hen harrier to be absent or declining in large areas of apparently suitable grouse moor habitat, including sites where it was well established in the recent past, for example in north and east Scotland (Summers *et al*, 2003). In a presentation to the SNH Species Management Conference in October 2008, Thompson *et al* outlined a recent study which showed that, in 2008, in the whole of the UK, there were only five successful pairs of hen harriers nesting on driven grouse moors. This is in stark contrast to the expected 499 pairs that should be successful in this, their favoured habitat. (Thompson *et al*, 2008). This is reflected by the very low numbers of this species, recorded by raptor study groups and other fieldworkers, who monitor this species in east and south-east Scotland, despite the abundance of ideal habitat.

A national survey of the UK hen harrier population is being carried out in 2010. We are pleased to acknowledge that the Scottish Rural Property and Business Association (SRPBA) have encouraged their members to collaborate with the survey. We will report next year on this.

### **Common buzzard**

This species continues to consolidate its population in much of lowland eastern and southern Scotland, despite this being an area that is still marred by illegal killing in some places. Twenty-one buzzards were confirmed poisoned in 2009 (14 in 2008, 14 in 2007, 25 in 2006) and a further four were victims of other offences. This remains the most widely killed species of raptor.

The evidence that buzzard populations seem increasingly resilient to the effects of this illegal killing is one of the strongest empirical indicators of some overall long-term decline in general levels of illegal killing of raptors, particularly poisoning, although on a local level,



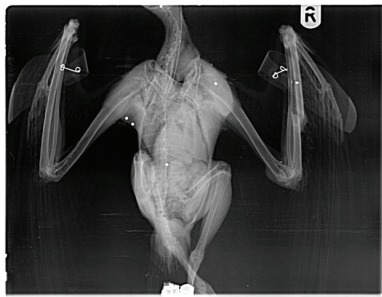
problem areas still persist. There remain parts of the uplands, however, where buzzards should be present, but are noticeably absent.

### **Peregrine**

Scottish Raptor Study Group data consistently identify poorer breeding performance by peregrines on managed grouse moors than on other upland land-use areas. In a situation similar to that of the hen harrier, several breeding attempts in 2009 failed suspiciously, often with a concurrent disappearance of adult birds. In several cases, this was a repeat of several previous years' incidents at the same nest site. This pattern was again particularly noticeable in Dumfries-shire, South Lanarkshire and the Borders.

### **Red kite**

This species became extinct because of sustained killing in Scotland throughout the 19th century (Holloway, 1996); the red kite is currently being re-introduced in joint projects run by Scottish Natural Heritage and RSPB Scotland, with significant and welcome support from local communities, landowners and their staff. This work has been predominantly successful.



*X-ray of red kite shot near Braco, Perthshire in December 2009*

Credit picture to R Pizzi

However, compelling new research by Smart *et al* (2010), into the reasons behind the low expansion rate of the red kite population of north Scotland, shows that the species is being severely restricted by illegal killing. The study, conducted by RSPB Scotland and funded by Scottish Natural Heritage, compares the performance of two red kite populations where equal numbers of young birds were released over the same period as part of the initial phase of reintroducing the species in Scotland and England. The sites were in the Chiltern Hills, in Buckinghamshire in southern England, and the Black Isle, in Ross-shire, in north Scotland.

Whilst the population in the Chilterns has thrived, reaching approximately 320 breeding pairs since the beginning of the reintroduction in 1989 up until 2006, the Black Isle population has struggled, reaching just 41 pairs over the same period. This was much lower than expected, and the population in 2009 had still only reached 49 breeding pairs. This large and growing disparity in population sizes has raised concerns, leading some to suspect that the same human persecution that first drove the species to extinction in Scotland in the 1870s is still occurring today, notably in parts of Invernesshire.

Close monitoring of both of the study populations showed that production of successfully reared and fledged red kite chicks was very similar in north Scotland and the Chilterns, and indeed was amongst the highest in Europe. Thus, lack of food supply and poor breeding performance does not explain the poor growth rate of the north Scotland population.

In fact, the study has shown that low survival rates of young birds in their first and second years of life is the main factor limiting the north

Scotland red kite population growth up until 2006, and that illegal killing accounts almost entirely for these poor survival prospects. Red kites in Scotland and England normally breed for the first time in their second, or more normally their third, year of life, so illegal killing is severely reducing the number of new recruits to the breeding population in north Scotland.

In the absence of illegal killing, scientific modelling has shown that annual survival rates of young kites would have been high enough to allow the north Scotland red kite population to grow at the same rate as that seen in the Chilterns. By 2006, north Scotland should have held over 300 breeding pairs, 250 pairs more than the actual population size today. More encouragingly, if illegal killing were to cease, then the population is likely to respond quickly, reaching 300 breeding pairs within the next 10 years.

The red kite was previously driven to extinction in the late 19th century in Scotland by widespread human persecution, despite the fact that the species poses no threat to legitimate land use activities. Red kites have been reintroduced to the UK since the late 1980s, but between 1989 and 2009, 64 individuals have been found illegally poisoned in Scotland. Four poison abuse victims were found in 2009, with a further bird the victim of shooting.

## **Investigation and prosecutions**

RSPB Scotland Investigations staff continued to liaise with all the Scottish Police forces, Scottish Government Rural Payments and Inspections Directorate (SGRPID) and other agencies in the provision of assistance, advice and personnel for follow up operations, particularly during the investigation of poisoning cases. In addition, we submitted a considerable volume of intelligence, gleaned from a variety of sources, to the National Wildlife Crime Unit. In 2009, staff took part in joint operations with other agencies and the statutory authorities in Perthshire (2), Borders, Angus, Moray, Argyll, South Lanarkshire and Dumfries-shire.

One 2008 case was concluded in 2009:

- A Dumfries-shire gamekeeper was convicted of setting a spring trap in the open at Kirkhill Farm, near Lockerbie, Dumfries-shire on 20 August 2008. At Dumfries Sheriff Court on 12 January 2009, John Galbraith plead guilty to positioning an article to take a wild bird under Section 5 (1) (A) of the Wildlife and Countryside Act 1981 and using an article to kill/take a Schedule 6 mammal under Section 11(2) (B) of the Wildlife and Countryside Act 1981. He was fined £1,400.

A further case, dating from alleged offences in 2006, was concluded in early 2009:

- An Aberdeenshire gamekeeper appeared at Aberdeen Sheriff Court accused of possession of a proscribed pesticide at Clova Estate on 2

November 2006. Alexander Cowe was found not guilty of a charge under Section 15 (A) of the Wildlife and Countryside Act 1981.

### **Prosecution summary**

During 2003–2008, a total number of 157 “cases”<sup>1</sup> involving confirmed illegal poison use and other offences targeting raptors occurred. Of these, 24 cases ended up before the courts, with a guilty verdict returned for at least one charge in 21 (88%) of these. The remaining three cases were found “not proven”. In addition, one conviction was overturned on appeal.

The courts dealt with a total of 153 charges during these cases. “Not guilty” verdicts were returned for 93 (61%), “guilty” verdicts for 54 (35%), and “not proven” for five (3%). One charge was deserted.

Guilty verdicts were returned for charges relating to section 1 (1) (A) of the Wildlife & Countryside Act 1981 (intentionally/recklessly killing a wild bird) in seven cases. Sentences for these charges were - an absolute discharge; fines of £500, £200, £100, £350; a fine of £2,500 (for killing 22 buzzards, a goshawk and a crow); and a 100 hours Community Service Order – this was imposed to cover guilty verdicts on this and three other charges.

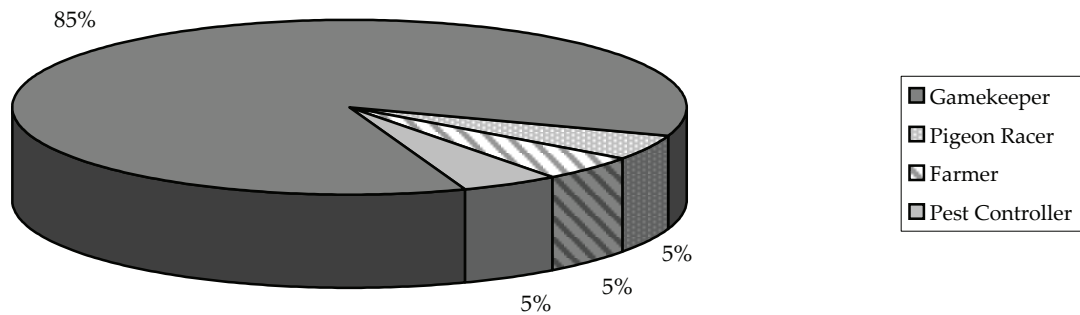
Similarly, guilty verdicts were returned for 13 charges relating to section 15A of the Wildlife & Countryside Act 1981 (possession of a proscribed pesticide). Sentences for these charges were – admonished; fines of £100, £100, £100, £50, £250, £250 & £200; a 100 hours Community Service Order – this was imposed to cover guilty verdicts on three charges under the above section and one other charge; a 220 hours Community Service Order – this was imposed to cover guilty verdicts on two charges under the above section and six other charges.

In all of the 21 guilty verdicts returned for the cases outlined above, the maximum penalty available to the courts was a £5,000 fine and/or six months imprisonment. Indeed, in 2007, the Criminal Proceedings etc. (Reform) (Scotland) Act 2007 increased the maximum penalties for summary offences in Scotland, including those under the Wildlife and Countryside Act. Maximum potential penalties for most Wildlife and Countryside Act part 1 offences in Scotland were doubled, to a £10,000 fine and/or a year's imprisonment. This maximum penalty can be applied separately to each offence, and in cases where an offence involves multiple “victims” - the penalty may be applied separately to each bird or egg.

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<sup>1</sup> A number of these incidents occurred close together, and may have included results of follow-up searches by the police or government officials; where this has occurred, these can be described as “cases”. Therefore, a case can include either a cluster of two or more incidents in a single location or a single isolated incident.

**Figure 1: Occupations/Interests of people convicted for poisoning or illegal killing of birds of prey in Scotland, 2003-08 (21 convictions)**



Sentencing between 2003–8 for crimes against birds of prey, other than in a few notable cases, has been relatively modest within the range of available penalties – in contrast with penalties given for guilty verdicts for egg-collecting offences that have included gaol sentences. Indeed, in nine of 54 charges (17%) where a guilty verdict was returned, the accused was admonished or given an absolute discharge. Poisoning and illegal killing has a far greater impact on bird of prey populations than egg theft, but the Scottish courts have not yet translated this into sanctions when sentencing. We consider the impact of offences on the conservation status of birds illegally killed or put at risk should be material consideration when assessing penalty levels. Egg collecting is usually not as serious as killing birds. This is an area worthy of future consideration by the Partnership for Action Against Wildlife Crime.

**Case study: The killing of Perthshire buzzards**

In September 2008, Tayside Police contacted RSPB Scotland in conjunction with the finding of two dead buzzards, suspected of having been killed illegally, near Abernyte in Perthshire. We were asked to assist them in a bid to uncover further evidence. On 2nd October 2008, a Tayside Police Wildlife Crime Officer and RSPB Scotland staff found the remains of two dead buzzards adjacent to a pheasant pen. One of these was skeletal, but the other which had died recently, was buried in a hole. The police took the latter bird for X-ray; this revealed the presence, in the carcass, of multiple shotgun pellets.



*Buzzard shot by gamekeeper Graham Kerr, Redmyre, Perthshire, Sept 2009. Kerr was later convicted for killing this bird.*

In August 2009, Tayside Police informed RSPB Scotland that a sick buzzard had been found near the same pheasant pen. The buzzard died and subsequently tested positive for carbofuran and alpha-chloralose. Tayside Police returned to the pen and recovered the remains of a pheasant. This was also tested, and was found to have been laced with carbofuran and alpha-chloralose.

RSPB Scotland staff assisted in the execution of a search warrant in the area, on 9 September 2009. Graham Kerr, the local gamekeeper, was encountered at sheds at Redmyre. After discussion with the Tayside Police Officers, Kerr retrieved, from his Land Rover, a small plastic tub, later confirmed as containing a mixture of carbofuran and alpha-chloralose. Kerr also retrieved a dead buzzard from the rear of his vehicle, which he admitted shooting just prior to the arrival of the police. Two firearms from the vehicle were handed over to Tayside Police.

Kerr admitted, in interview with Tayside Police, shooting the buzzard (recovered from his Land Rover) with a .243 rifle (also present in the vehicle); possession of illegal chemicals (carbofuran and alpha-chloralose); laying the poisoned pheasant bait inside the pen; poisoning the buzzard (found in August 2009); and shooting the buzzard (found buried in 2008). He was subsequently charged with six offences under the Wildlife and Countryside Act (1981).

At Perth Sheriff Court on 24 March 2010, Kerr appeared for sentencing for the two charges for which the Crown had accepted a “guilty” plea. He was fined £400 for shooting the buzzard (on 9 September 2009) and admonished for possession of carbofuran and alphachloralose.

Ironically, on imposing the sentence, Sheriff Robert McReadie told Kerr, “You may not have appreciated how seriously the courts take the illegal destruction of wildlife. I think you will be aware of that now.”

### **Cross compliance**

In late 2007, a farmer near Lauder had £7,919 docked from his single farm payment, for failing to meet the criteria of maintaining his land in Good Agricultural and Environmental Conditions (GAEC). This followed the conviction of his gamekeeper, George Aitken, for a number of offences, including possession and use of illegal poisons, and use of illegal traps.

In August 2008, a landowner at Glen Ogil estate in Angus had £107,650 taken off his single farm payment by the Scottish Government, following the discovery in 2006, of poison baits and evidence of the same illegal poisons in vehicles, gamebags and other equipment used on the estate. The landowner concerned is appealing this decision.

In December 2008, changes to cross compliance rules were made by the European Union, under the Common Agricultural Policy “Health check” process. This included the removal of some articles of the EU Birds Directive meaning that some non-selective methods of killing birds no longer feature. However, the articles forbidding the illegal use of pesticides as well as the illegal killing of wild birds both remain in force. The Scottish Government criteria for assessing whether these particular requirements have been breached, and whether the subsidy recipient is implicated, remain unchanged. A Single Farm Payment recipient implicated in the illegal poisoning, trapping and shooting of

wild birds, or illegal use of pesticides, may still be liable to a penalty under cross-compliance rules, and lose some or all of their farm support payments.

In a parliamentary answer given on 26 March 2010, the Scottish Environment Minister said that action had been taken to “reduce the single farm payments made to five claimants in cases connected with poisoned birds.” On 14 April, in a written parliamentary answer, these claimants were identified as being located within the following Local Authority areas – Scottish Borders (1), Aberdeenshire (1), Angus (1) and South Lanarkshire (2).

### **Thematic review**

In April 2008, RSPB Scotland welcomed the publication of *Natural Justice*, a report presenting the findings of the joint thematic inspection by Her Majesty’s Inspectorate of Constabulary and Her Majesty’s Inspectorate of Prosecution of the arrangements in Scotland for preventing, investigating and prosecuting wildlife crime.

(<http://www.scotland.gov.uk/Resource/Doc/218661/0058716.pdf>).

The report contained some 24 recommendations that were also widely welcomed and accepted by Scottish Government. It is now two years since the report was published, and we welcome the developments with the Partnership Against Wildlife Crime Scotland (PAWS) in ensuring wildlife crime remains at the top of the political agenda.

Her Majesty’s Inspectorate of Constabulary and Her Majesty’s Inspectorate of Prosecution carried out a review of the progress of implementing the recommendations during the summer of 2009. RSPB Scotland staff again met the review team, and submitted a comprehensive written response.

In our response, we suggested that overall and welcoming some progress with delivery, there was still considerable work to be done in implementing many of the recommendations. We had concerns regarding the lack of progress in the appointment of full-time serving police officers as Wildlife and Environmental Crime Officer co-ordinators; we expressed disappointment that several wildlife crime court cases were not led by a wildlife specialist fiscal; we drew attention to the considerable local variation in follow-ups to apparently similar cases by both police and Crown Officer and Procurator Fiscals Service (COPFS). In contrast, however, we welcomed the continued Ministerial input and revitalisation of PAWS, the appointment of an Investigative Support Officer by the National Wildlife Crime Unit, the appointment of full-time WECOs in the Loch Lomond and Trossachs National Park, Fife and in the Scottish Borders and the increased partnership working between the various organisations involved with wildlife crime reduction.

We recommended that a further review should take place within two years.

On publication in November 2009, the review concluded that there had been marked progress in implementing the original recommendations although compliance with some of these was locally variable, or work in progress.

### **Bird of prey campaign**

In 2008, we launched a bird of prey campaign aiming to foster a change of attitudes, by encouraging widespread condemnation of the illegal killing of birds of prey from all sectors of society. It is hoped that this will stimulate the Scottish government to promote more rigorous enforcement and continued review and upgrading of legal mechanisms to bring pressure on the worst offenders. The recently announced 2009 UK Wildlife Crime Priority to tackle “raptor persecution and poisoning” is an encouraging step in the right direction. However, we consider that the “raptor priority” process will need to be accompanied by effective enforcement action on the ground to deliver its objective.

As part of the campaign, RSPB Scotland asked people to sign the campaign pledge, which called for an end to the illegal killing of birds of prey. In addition to thousands of concerned individuals, politicians and representatives of various countryside organisations added their voices. This was most welcome. Those who continue to flout the law damage not only bird of prey conservation, but also the good reputation of the responsible members of the shooting community, with whom we have no quarrel.

On 2 March 2010, a petition was handed in to the Scottish Government by the Director, RSPB Scotland, backed up by the pledges of support from almost 22,000 signatories in Scotland. The petition urged the Scottish Parliament to do more to end the illegal killing of birds of prey by fully implementing the recommendations made in *Natural Justice*. The petition is due to be heard in the Scottish Parliament in May 2010.

## **Conclusions**

Sadly, in Scotland in 2009, the illegal killing of birds of prey continues, seemingly unabated, particularly in upland areas. There is an overwhelming weight of factual and scientific evidence, which demonstrates the impact of illegal killing on the populations of some of our most magnificent bird species. It remains apparent that a significant number of people who own, manage or are employed on some upland sporting estates in particular have no qualms about flouting the law. The use of illegal and highly toxic chemicals to lace baits placed in the open in our countryside, indiscriminately risks the lives not just of wild birds and animals, but domestic pets and even potentially humans as well.

We commend the revitalisation of PAWS by Scottish Government, including increased partnership working and a greater awareness amongst law-enforcement and prosecution agencies, however to date there has been no discernible downturn in the criminal destruction of

birds of prey. We are however committed to continue to play a full role in the PAWS process and to ensure that tangible outputs are delivered to significantly reduce the illegal killing of birds of prey, alongside other wildlife crimes. We believe that improved enforcement activity will result in a deterrent to those who may be considering illegal activity.

What is evident, from long-term population studies and from anecdotal evidence, is that the victims of illegal killing documented in this, and previous reports, represent the tip of a significant iceberg. The chances of an incident being found are small; of a suspect being identified and charged remote; and of a successful conviction, seemingly negligible. The odds need to be changed so that the enforcement agencies are better resourced, the prosecutors more experienced and the sentences given to those convicted much more meaningful. When this has happened, then we might see a real decline in the illegal killing of our birds of prey.

## **Recommendations**

The key to building on the continued high priority given by the Scottish Government to tackling wildlife crime, of which the illegal killing of birds of prey is a key component, is the effective use of the legislation through robust enforcement. Because incidents involving rare species, will, by their nature, be detected less often than those involving commoner species, enforcement priorities should recognise that the investigation of any incident involving a common species might represent the only opportunity to disrupt a pattern of offending. Any consideration of the scale of illegal activity, and its impact on populations, must incorporate all available published research on the population dynamics of the affected species, as well as recognising that a relatively low number of confirmed offences are directly witnessed.

We are committed to working with the representative bodies of game shooting interests and exemplar estates, to encourage and support good practice and marginalise illegal activity. This should work in tandem with other Scottish Government policies (such as cross compliance through the rural payments system) designed to act as a financial deterrent to illegal activity when “public goods” including birds of prey conservation have not been delivered in return for public subsidies, and wider awareness raising in key sectors.

RSPB Scotland recommends that:

- Scottish Chief Constables appoint at least one full-time Wildlife Crime Officer (WCO) – a serving police officer – in each Scottish force with a fully trained network of part-time WCOs in support (whilst still recognising the valuable contribution that full-time civilian WCOs do and should continue to contribute)
- Chief Constables ensure that their middle managers within the police service understand the importance and significance of swift and effective action against wildlife crime and allow both full-time



and part-time WCOs the time and resources to work effectively and speedily once cases are reported

- there should be thorough consideration giving courts the powers to revoke firearms certificates for those convicted of wildlife crime offences
- the Scottish Courts use the powers granted by the Criminal Justice (Scotland) Act 2003 and the Criminal Proceedings etc. (Reform) (Scotland) Act 2007 to jail those involved with serious wildlife crime offences, particularly the misuse of dangerous, banned poisons
- the Scottish Government should conduct a further review of the penalties available to the courts, and the use of these penalties in wildlife crime cases. We consider that levels of fines should be based on the damage that has been caused to the natural heritage (for example killing a rare or vulnerable species should attract higher fines)
- all cases of wildlife crime should be prosecuted by specialist Environmental Fiscals
- the network of specialist Environmental Fiscals should be increased with better resources and enhanced training provided
- the Crown Office Environmental Fiscals' Forum should ensure that as many cases as possible proceed to trial with charges representing the ecological seriousness of cases
- the Crown Office Procurators Fiscal Forum should review cases that have stalled and learn lessons from cases that have failed
- the Scottish Government and Prosecutors must take steps to ensure the consistent application of rules on admissibility of evidence in order to ensure the considerable public benefits of prosecuting wildlife crime
- the Scottish Government must ensure that the work of Science and Advice for Scottish Agriculture (SASA) and the Veterinary Laboratories Agency (VLA) continues to be supported via appropriate funding
- the list of proscribed chemicals listed in the Nature Conservation (Scotland) Act 2004 is reviewed regularly
- the Scottish Government and Rural Payments Inspectorate (SGRPID) must continue to investigate those in receipt of public land management payments, when wildlife crime offences are committed, and assess whether breaches of cross compliance (and other relevant conditions) have occurred
- SGRPID continues to review the open general licences (which permit the control of "pest" species) to ensure they conform fully with the present conservation status and scientific knowledge of the alleged "problem species" concerned and with proper reference to the EU Birds and Habitats Directives
- the Raptor Persecution Priority Group should take a range of initiatives including encouraging land management groups to provide more intelligence in relation to wildlife crime activity and a clear strategy as to how problem geographical locations will be targeted (as evidenced by the SASA Poisons Map, NWCUC and other relevant data)

- the National Wildlife Crime Unit (NWCU) must be resourced appropriately to ensure the continuity of the Unit. Future NWCU actions should be targeted towards Scottish conservation and wildlife crime priorities
- there must be clear communication between the NWCU, WCO networks, partner organisations and Procurators Fiscal
- there should be a central and accurate system for the recording of wildlife crime incidents and prosecutions in Scotland
- the Partnership for Action Against Wildlife Crime (Scotland) (PAWS) should take a central role in providing advice to the Scottish Government in implementing the findings of the Thematic Review of Wildlife Crime; all recommendations arising from the Thematic Review should be implemented in full
- representative bodies of land managers should lead from the front, working with the police by reporting crimes to stop illegal activity, condemning illegal practices and publicly expelling any members prosecuted for wrongdoing
- conservation agencies should commend and support best practice by sporting estate managers.

## Acknowledgements

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## References

Bibby, CJ & Etheridge, B. (1993) Status of the Hen Harrier *Circus cyaneus* in Scotland in 1988–89. *Bird Study* **40**, 1–11.

Etheridge, B, Summers, RW and Green, RE. (1997) The effects of illegal killing and destruction of nests by humans on the population dynamics of the hen harrier *Circus cyaneus* in Scotland. *Journal of Applied Ecology* **34**, 1081–1105.

Smart, J, Amar, A, Sim, IMW, Etheridge, B, Cameron, D, Christie, G & Wilson, JD. 2010. Illegal killing slows population recovery of a re-introduced raptor of high conservation concern – The Red Kite (*Milvus milvus*). Biological Conservation.

Summers, RW, Green, RE, Etheridge, B and Sim, IMW. (2003) Changes in Hen Harrier (*Circus cyaneus*) numbers in relation to grouse moor management. In *Birds of Prey in a Changing Environment*. The Stationery Office, Edinburgh.

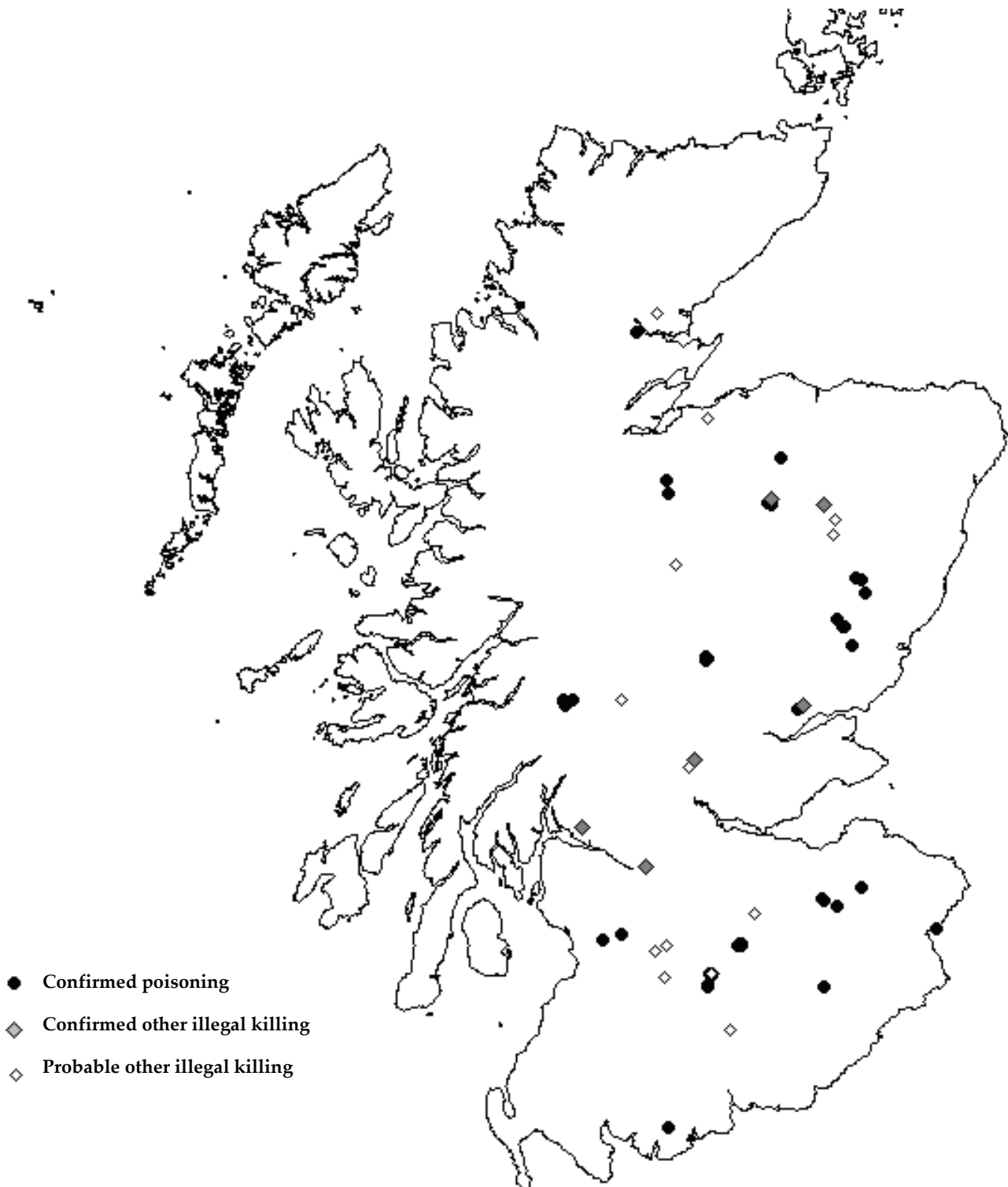
Thompson, D. Thirgood, S, Amar, A, Smith, A and Redpath, S. (2008) Towards reconciling raptor conservation and game management aspirations. Presentation to SNH Species Management Conference

Whitfield, DP, McLeod, DRA, Watson, J, Fielding, AH and Haworth, PF. (2003) The association of grouse moor in Scotland with the illegal use of poisons to control predators. *Biological Conservation* **114**, 157–163.

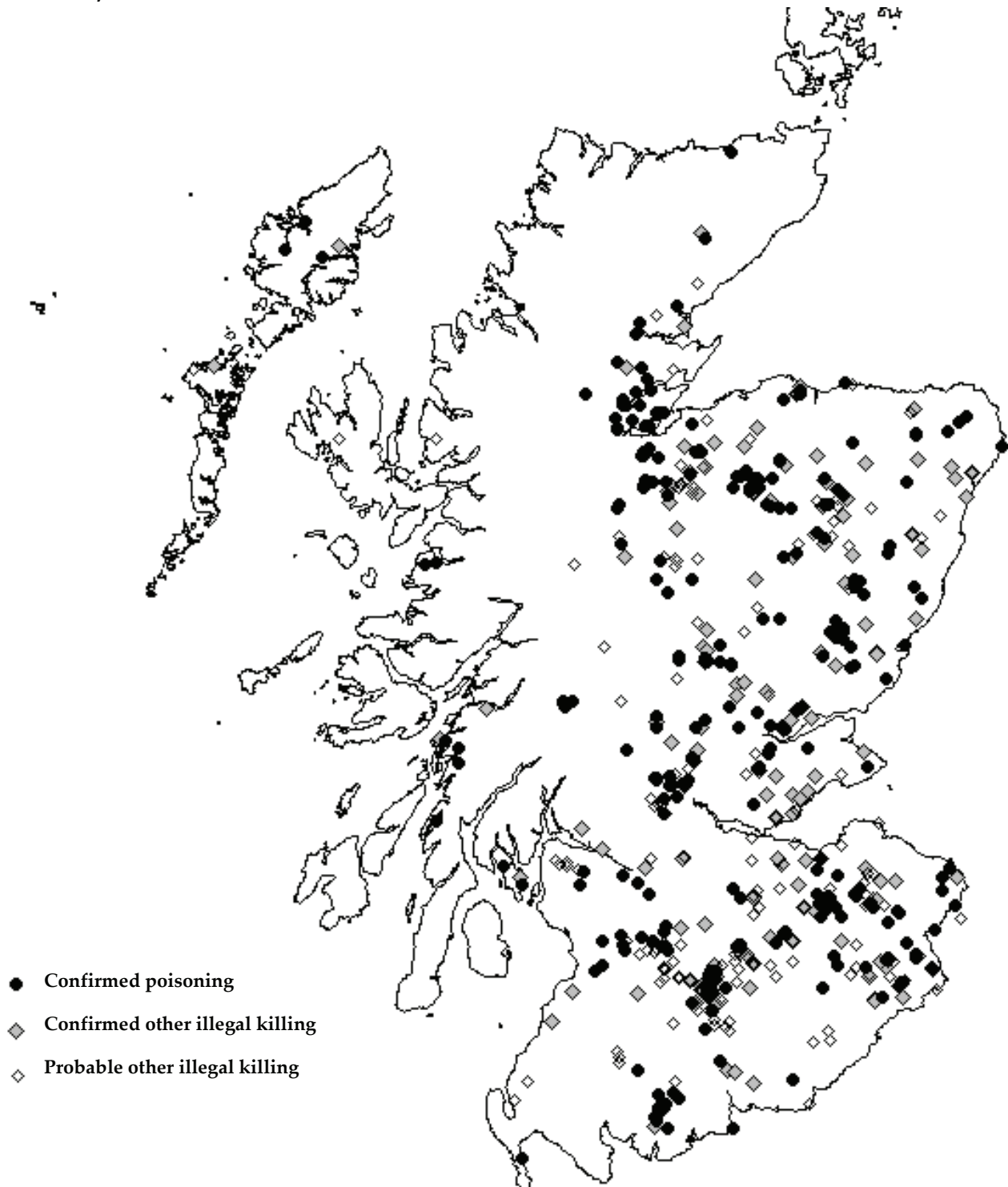
Whitfield, DP, Fielding, AH, & Whitehead, S. (2008) Long-term increase in the fecundity of hen harriers in Wales is explained by reduced human interference and warmer weather. *Animal Conservation* **11** 144–152

Whitfield, DP, Fielding, AH, McLeod, DRA and Haworth, PF (2008) A conservation framework for golden eagles: implications for their conservation and management in Scotland. Scottish Natural Heritage Commissioned Report No.193 (ROAME No. F05AC306).

**Map 1: confirmed poisoning and confirmed and probable incidents of illegal killing of birds of prey in Scotland in 2009.**



**Map 2: confirmed poisoning and confirmed and probable incidents of illegal killing of birds of prey in Scotland, 1999-2009.**



RSPB Scotland annually records incidents relating to bird crime. All wild bird crime incidents should be reported as soon as possible to your local police Wildlife Crime Officer (WCO) or the RSPB. Please call one of our offices below. If the matter is less urgent, you can report it online at [www.rspb.org.uk/reportacrime](http://www.rspb.org.uk/reportacrime)

For more information on birds and the law, contact:

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RSPB Scotland is part of the RSPB, which speaks out for birds and wildlife, tackling the problems that threaten our environment. Nature is amazing – help us keep it that way.

We belong to BirdLife International, the global partnership of bird conservation organisations.



**Scottish Natural Heritage**  
All of nature for all of Scotland

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[www.rspb.org.uk/scotland](http://www.rspb.org.uk/scotland)

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