

**Briefing for the Public Petitions Committee****Petition Number:** [PE1750](#)**Main Petitioner:** Alex Hogg on behalf of [Scottish Gamekeepers Association](#)**Subject:** Independent Monitoring of Satellite tags fitted to raptors

Calls on the Parliament to urge the Scottish Government to introduce independent monitoring of satellite tags fitted to raptor species, to assist the police and courts in potential wildlife crime cases and to provide data transparency.

**Background**

The movements of many birds of prey in Scotland are studied through the use of satellite transmitters or 'tags' attached to birds. Much of this work is carried out in the voluntary sector. Satellite tagging methodologies and hardware have developed over time, with tags becoming smaller and more lightweight. Organisations involved in tagging projects include [RSPB Scotland](#), the [Scottish Raptor Study Group](#) and the [Roy Dennis Wildlife Foundation](#).

When a tag ceases to send a signal there may be several reasons: power failure, damage or destruction of the tag (and possibly the bird). Where a signal remains the same for several transmissions, the tag may have become detached, or it may be attached to a dead bird. In some cases, human interference may be the cause of signal failure.

The Scottish Government-led Partnership for Action Against Wildlife Crime ([PAW Scotland website provides information](#)) on action to take in reporting suspected illegal activity in relation to birds of prey. The Scottish Government has also published a [Collection of Evidence Protocol for Incidents of Raptor Crime](#) which provides guidance for people involved in satellite tracking of raptors, including in what circumstances to contact the police, what information to provide, and in what circumstances incidents should be publicised.

A 2019 [peer-reviewed article on patterns of satellite tagged hen harrier disappearances](#) found that satellite-tag data combined with remotely sensed data can be used to pinpoint areas associated with illegal activity. The study predicts that as the technology of devices advances, the likelihood of pinpointing illegal activity is likely to increase.

The petitioner argues that there are issues with lack of transparency around how satellite tag data are collected and shared, and variability in technology and practices resulting in challenges when data is sought to be used as evidence of wildlife crime. The petitioner is advocating for satellite tags to be

monitored by government or a government-approved body, which could provide the police with instant data access and independent resources to interpret data.

## **Wildlife crime against birds of prey and wildlife crime reporting**

Wild birds in Scotland are protected in the [Wildlife and Countryside Act 1981](#). All birds, their nests and eggs are protected by law and it is an offence to intentionally kill, injure or take any wild bird, subject to certain exceptions (e.g. killing of birds [under General Licence](#) where there are no alternatives). PAW Scotland [state regarding bird of prey persecution](#):

“Wildlife crime, especially that against birds, remains a significant threat to the conservation of a number of species in Scotland...

This problem is increasingly well documented in the scientific literature and deliberate human killing has been demonstrated to be one of the main threats to species such as golden eagles, hen harriers and the reintroduced red kites...

It is likely that those bird or mammal victims that are found each year are a small proportion of the actual deaths. Those engaged in this activity have a good opportunity to conceal evidence and the chance of finding evidence that hasn't been removed is slim.”

## **Scottish Government action**

### **Wildlife crime reporting**

Scottish Ministers must lay an annual wildlife crime report under the Wildlife and Natural Environment (Scotland) Act 2011. The Government published the [Wildlife crime in Scotland: 2017 annual report](#) in December 2018. Wildlife crime priorities are set at UK level by the Wildlife Crime Tasking and Coordinating Group (which includes the Police, the Partnership for Action against Wildlife, National Wildlife Crime Unit, and the Joint Nature Conservation Committee). Priorities include raptor persecution.

Raptor persecution offences fell by 56% in this reporting period from 25 in 2015-16 to 11 in 2016-17. The PAW Scotland Raptor Group discussed the fall in the number of birds submitted for investigation in relation to suspected criminality and considered that this may be due to birds being shot (rather than poisoned) and removed. The Cabinet Secretary for Environment, Climate Change and Land Reform states in the foreword to the report:

“I am aware that there were a number of incidents where tagged birds of prey disappeared during the course of the year (six golden eagles, three hen harriers). These incidents are not recorded as crimes by Police Scotland. However the number of these incidents in recent years, and the circumstances where neither the missing bird nor satellite tag are recovered combined with what we know about the reliability of these tags

when used in other countries, strongly suggests that many of these incidents are likely to be the result of illegal killing of these birds.”

### **Golden eagle satellite tagging review**

In 2017, SNH published the report, [‘Analyses of the fates of satellite tracked golden eagles in Scotland’](#) – following a request by the Scottish Government for an investigation of the fates of satellite tagged raptors, especially golden eagles. The report reviewed movements of golden eagles tagged during 2004 - 2016. It found that:

- Of 131 young eagles tracked, as many as 41 (31%) disappeared (presumably died) under suspicious circumstances significantly connected with contemporaneous records of illegal persecution.
- Some, but not all, areas managed as grouse moors were strongly associated with the disappearance of many of the tagged eagles.
- Tagging revealed that the persecution is suppressing the golden eagle population in the central and eastern Highlands, and hampering recovery.
- The review considered evidence on welfare implications of satellite tagging and overall, found no evidence that tagging golden eagles in Scotland causes harm to birds, either physically, behaviourally, or demographically.

The Scottish Gamekeepers Association (SGA) commissioned a review of the report and said that it contained “significant shortcomings” and evidence of “unconscious bias” (this review has not been published). The [SGA state that](#) tag ownership provides “publicity and political leverage, without the requirement of a standard of evidence normally expected for accusations of criminality.”

### **Consultation on increasing penalties for wildlife crime**

The Scottish Government has [recently consulted \(closed 16 August 2019\)](#) on increasing penalties for wildlife crime. The Wildlife Crime Penalties Review Group conducted [an independent review of penalties for wildlife crime](#) and found that they may not be serving as a sufficient deterrent. The Government proposes to increase maximum available penalties for the worst type of wildlife offences to a prison sentence of five years, an unlimited fine or both.

### **Grouse Moor Management Group (Werritty review)**

In 2017, in response to the findings of the SNH eagle tagging review, the Scottish Government [set up an independent group](#) to look at the environmental impact of grouse moor management and recommend options for regulation. The Group, chaired by Professor Alan Werritty, is expected to publish its report in the coming weeks. The Scottish Government committed to respond to its recommendations in the [2019-2020 Programme for Government](#).

### **2019 SNH eagle tagging trial**

In March 2019, [SNH announced an 18-month trial](#) of a new type of satellite tag, designed to increase understanding of raptor movements. The project is a collaboration between SNH, the Cairngorms National Park Authority and the British Trust for Ornithology. Golden eagles in and around the Cairngorms will

be fitted with a new 'Raptor Tracker' tag, which has been developed with multiple sensors which send a 'distress' signal, with an exact location, if unusual behaviour is detected. If the trial is successful, the groups will explore at further use and potential miniaturisation to allow tagging of other species.

### **SNH Satellite Tagging Training 2019**

In February 2019, SNH and the National Wildlife Crime Unit hosted a raptor satellite tracking workshop, to bring together tagging experts and law enforcement officers to raise awareness of how satellite tags work and how the data can help the police in the investigation of crimes against birds of prey.

### **RSPB Scotland Illegal Killing of Birds of Prey in Scotland Report**

RSPB Scotland's [Illegal Killing of Birds of Prey in Scotland 2015-17](#) report states:

"The Scottish Government should fund a structured programme of satellite tagging of birds of prey, notably golden and white-tailed eagles, hen harriers and red kites. Satellite tagging of birds of prey provides significant evidence as to where raptor persecution is occurring regularly, but is also a deterrent to those wishing to use illegal poisons in the countryside. Suspicious disappearances of satellite-tagged birds of prey should be included in government wildlife crime reports, and included as evidence during consideration of general licence restrictions. The exchange of information between statutory agencies, for assessment in cases considered for general licence restrictions, should be streamlined and sped up significantly. Provision of evidence by third parties to assist in this process should be considered on a case by case basis."

Raptor Persecution Scotland [have said in relation to the use of tag data](#):

"It's crucial that wildlife crime investigators understand the capabilities and constraints of satellite tag data – what they can and can't tell us about a bird's movements, and critically, how to identify evidence from the data to differentiate between a suspected crime against the tagged bird and a genuine technical malfunction of the tag. This understanding can help speed up investigations and help ensure resources can be targeted at the right location as a priority.

From a researcher's perspective it's also important that we have reassurances from the police about how our tag data will be handled and kept secure as part of the police's investigative process."

### **Scottish Parliament Action**

[PE1705 Wildlife crime - penalties and investigation](#) (lodged 26 September 2018) calls on the Parliament to urge the Scottish Government to review legislation relating to the investigation of and penalties applicable to wildlife crime in Scotland. The Public Petitions Committee [agreed in April 2019 to refer the petition](#) to the Environment, Climate Change and Land Reform (ECCLR) Committee for consideration as part of its ongoing work on wildlife crime.

[PE01615: State regulated licensing system for gamebird hunting in Scotland](#) (lodged 22 August 2016) calls on the Scottish Parliament to introduce a licensing system for gamebird hunting and urges the Scottish Government to implement the recommendations of the Review of Wildlife Crime Penalties in Scotland. The Public Petitions Committee took evidence from stakeholders and referred the petition to the ECCLR Committee in [December 2016](#).

In March 2019 the ECCLR Committee took evidence on the [Wildlife crime in Scotland: 2017 annual report](#) from Police Scotland, the Scottish SPCA and the Crown Office and Procurator Fiscal Service. The official report is available [here](#). Regarding the reliability and use of satellite tagging data, Police Scotland said:

“I think that the reliability is improving. They have not always been greatly reliable. In the past six months to a year, there have been instances of birds seeming to disappear and then to reappear due to issues with the tags. That is always a challenge for us.

On the recording of crime, we need to be absolutely certain that a crime has taken place—as opposed to just considering that, in all probability, a crime has taken place—before we can record the incident as a crime. However, that is not to say that the information received is not used as intelligence to support further investigative work, applications to the Crown Office for warrants or any other activity that we want to undertake.”

Alexa Morrison  
**Senior Researcher**

SPICe research specialists are not able to discuss the content of petition briefings with petitioners or other members of the public. However if you have any comments on any petition briefing you can email us at [spice@parliament.scot](mailto:spice@parliament.scot)

Every effort is made to ensure that the information contained in petition briefings is correct at the time of publication. Readers should be aware however that these briefings are not necessarily updated or otherwise amended to reflect subsequent changes.

Published by the Scottish Parliament Information Centre (SPICe), an office of the Scottish Parliamentary Corporate Body, The Scottish Parliament, Edinburgh, EH99 1SP