The British Association for Shooting and Conservation

Council Meeting, 20th July, 2006

POLICY ON RAPTORS

Reviewed and updated in 2009

BASC

Summary

The impact of raptors (primarily buzzard, sparrowhawk, hen harrier, peregrine falcon, goshawk and tawny owl) on gamebirds continues to be passionately debated. The reasons are many but currently include recovering and increasing raptor populations, declines in some gamebird populations, real or perceived impact on shooting interests, and strict legal protection of raptors.

Illegal killing of raptors also continues despite the efforts of shooting and countryside organizations, conservation bodies and the police to reduce it.

Calls for the control of raptors have increased, for both population control and licensed killing of individual birds or their translocation. Conflict between game management and other conservation interests has increased as a result of both the illegal killing and calls for control. This adversely affects relationships between shooting and non-shooting bodies. Also harmed is the public image of shooting in general and gamekeeping in particular.

This policy, in support of both game shooting and the conservation of raptors, seeks to assist game managers faced with problems from raptors.

In light of the findings of recent studies into the impact of raptors on wildlife/gamebirds, the legislative framework, and the wish of game managers troubled by raptors to be able to protect their interests, BASC recommends that:

- **The principles set out in the Code of Good Shooting Practice should be respected and followed.**

- **All steps should be taken to eliminate illegal killing of raptors by those claiming to act for or on behalf of game-shooting interests**

- **Game managers and keepers, where raptor problems with gamebirds either occur or may do so, should follow advice available from BASC and others, to minimise those problems.**

- **Where problems are such that losses of gamebirds are considered to be unacceptable, records should be kept of the losses and the measures taken to alleviate them, in a way that shows the effectiveness or otherwise of the measures.**

- **An immediately-responsive licensing system for the destruction or removal/translocation of specific problematic adult raptors, their nests or eggs, be put in place by appropriate government agencies for those situations where serious damage cannot otherwise be prevented.**

- **All steps should be taken to support the current diversionary feeding trials of raptors, and other potentially-useful measures, on grouse moors.**

- **That further research is urgently conducted on the impact of high density buzzard populations, as well as goshawks, on gamebirds.**

- **Game management interests should not artificially maintain or encourage raptor populations, in particular buzzards, through intentional or inadvertent provisioning of carrion, such as dead rabbits, except with care during the late summer/autumn when it may act usefully as a diversionary food source.**

Introduction

While the impact of raptors (in this context, only the birds of prey that commonly predate gamebirds) has been discussed by groups of sporting shooters in the past, it is arguably true that now there is more passionate discussion than ever before. The reasons for this are clear:

- in the first half of the 20th century raptors were routinely killed, trapped or poisoned to reduce their impact on game species;
- in the second half of that century many raptor populations became severely depressed by organo-phosphate pesticides and therefore had little perceived impact;
- over the last twenty or thirty years there has been a recovery of some populations and reintroduction of others to such an extent that some are widely regarded as having a real impact on game interests;
- all raptor populations are fully protected by law and illegal killing carries increasingly heavy penalties, including imprisonment.

There are other reasons for the current level of debate but these are of lesser relevance than those above. These include an increased number of increasingly valuable gamebirds being reared and released for game shooting, a declining population of some wild game birds (red grouse and grey partridge), increased conflict between conservation organisations and some game management interests and an underlying rejection of science in favour of anecdotal experience. It should also be stated that there appears to be an anecdotal presumption that any dead raptor is a direct result of interference by game managers.

There is also concern over the impact of raptors on songbird and wader populations and over the reduced availability of carrion, in the form of fallen stock, to some raptors due to legislation now requiring its removal or burial.

Raptors, gamebirds and game managers

A basic premise of modern ecology is that food availability affects both predator numbers and their distribution. Predators can have short-term impacts on their prey but in the long-term it is the prey that influences the predator, rather than the other way round.

Gamekeepers and land managers argue that in some situations raptors have such an impact on gamebird populations that shooting is no longer commercially viable. This has been proved, in this situation at least, by the Langholm study. The Langholm study, which sought to assess the impact of raptors (hen harrier and

peregrine falcon) on red grouse (Redpath & Thirgood (1997) see below), is frequently cited in support of this.

Gamekeepers undertake many roles in the British countryside but in most situations they maintain a high density of naturally-occurring or released gamebirds. Any management that maintains a high density of food is inevitably going to attract mobile predators, be they foxes, stoats, cats, herons, cormorants or raptors. Gamekeepers manage many of these potentially-problematic situations where they can under current legislation, using scaring and deterrent methods, habitat management, trapping, snaring and shooting.

Some raptors, however, are more mobile than many other predators and are readily attracted to such sites of high gamebird availability. They are attracted: a) during the gamebirds' and the raptors' breeding season b) during the summer and autumn when young raptors are learning to fend for themselves and when many thousands of pheasant and partridge poults are being released, and c) during the winter when game density is often higher in areas managed by gamekeepers than in surrounding areas.

Raptors are also attracted to areas because of the secondary activities associated with game management, e.g. the availability of shot rabbits and deer grallochs or the enhanced habitat diversity.

High raptor densities can, therefore, be expected to occur in areas of high gamebird density. Consequently the greatest concerns are likely to be where management is most intense and when its aims are to produce large numbers of birds for driven shooting. It is common that reported losses to raptors are greatest in such areas. In less-intensively managed areas, where gamekeepers may not be employed, shoots also report losses to raptors. For small DIY shoots the loss of a few gamebirds can be more significant than similar losses on larger, more commercial shoots.

These aspects aside, raptors are relatively long-lived birds and frequently have a low annual reproductive output. Consequently, the loss of experienced adult birds can have considerable significance for raptor populations, their ability to maintain current population levels, or to increase. Recent work on buzzards in the south west of England, for example, has shown that, for this species at least, in a high density population only 25% of adults present were breeding (Walls et al., 2004).

One of the problems inevitably associated with the raptor/gamebird issue are the widespread reports from gamekeepers and managers that raptors have a real and damaging impact on gamebirds and the economics and practice of shooting. As a result there is a tension between game managers who suffer the problems caused and governmental and other organisations that rely on science to guide management actions.

Previous studies on the impact of raptors

A number of studies, some carried out by shooting organisations, have sought to understand the impact of raptors on gamebirds as well as give advice to game managers on how to minimize any such impacts. They have also enabled a comparison to be made between what gamekeepers and others believe the impact is

and what it actually appears to be. Key studies are summarised below.

The BASC survey (BASC, 1997) was subjective, in that gamekeeper members gave their own views of the seriousness of raptors predation on gamebirds. This was followed up by a more objective release pen study (Allan et al., 2000). This had parallels with the recent SNH/SHU study on racing pigeons (Henderson et al., 2004), in that in each study the work was commissioned by those most interested in the subject but was carried out by independent researchers. In each case the anecdotal evidence of high levels of loss (whether pheasants, in or around release pens, or racing pigeons around lofts) could not be scientifically substantiated. This is a critical point, supported by other research, and one to which this paper will return.

The Langholm study (Redpath & Thirgood, 1997) was undoubtedly the most detailed, monitoring the impact of hen harriers and peregrine falcons on a red grouse population. Various interpretations have been made of the results but it is clear that the increased density of hen harriers and peregrine falcons reduced autumn grouse abundance by 50%, leading to cessation of shooting. 10 years of work at Langholm has shown that a declining grouse stock was matched by a decline in hen harrier chick production (Baines, 2004).

More recent work in Sussex (Watson, 2004) has also shown that the impact of sparrowhawk predation was highest when wild grey partridge densities were lowest (below 5 pairs per 1200 hectares.) Other studies have demonstrated the density-dependent mortality of waders, such as redshank, through sparrowhawk predation in winter (Whitfield, 2003) while many anecdotal references have been made to the impact of raptors on songbirds, moorland waders and other declining species.

No studies on game shoots have looked specifically at the disturbance caused by raptors during the shooting season. Anecdotal evidence indicates that in some situations foraging raptors can and do cause disturbance to adult game-birds to such an extent that the shoot is seriously disrupted. This disruption affects the shoot not just on single days but throughout the season.

The most recent study of the impact of birds of prey on gamebirds was completed in 2005 (Park et al, 2005), in a commissioned report to Scotland's Moorland Forum by the University of Stirling's Centre for Conservation Science and BTO Scotland. This was a desk study of all available literature intended to throw light on that impact in a Scottish context, which BASC contributed towards and helped supervise.

It concluded that there are few quantitative studies of the impacts of raptors on gamebirds in Scotland, with the exception of studies of hen harrier and peregrine impacts on red grouse. (There is evidence from Langholm that hen harriers and peregrines were capable of preventing red grouse numbers, present at relatively low densities, from increasing, so reducing shooting bags. The reduction of grouse numbers led to driven shooting being abandoned. Watson (2004) had shown that sparrowhawk predation could reduce breeding densities of grey partridge, and that this impact was highest when the populations were low. The numbers of red-legged partridges and pheasant taken by raptors from release pens varies considerably, and in a few cases, raptors have been documented as killing relatively large numbers.

On the whole raptors accounted for only a small proportion of total losses that occurred before birds were shot. The impact of raptor predation on subsequent shooting bags in these studies is unknown.)

With one exception, studies to assess gamebird losses to raptors at release pens have been conducted outwith Scotland, and the report recommends a study to determine the loss of pheasants before and after release. In order to quantify the economic impact that predatory birds have on game management, knowledge of the number of birds taken by the predators that are subsequently unavailable for shooting and of the numbers of birds actually shot is required. To date, no study has provided this level of information, and the Stirling University/BTO Scotland study recommended that further work be conducted to collate available information and highlight key areas where information is lacking.

Anecdote vs. science

When asked, most gamekeepers (61%) in the 1997 BASC study said that raptors cause problems to both wild and released gamebirds. As previously suggested, the reported problems were more common among professional 'keepers (70%) compared with 35% of amateur 'keepers. Problems were also reported more frequently for wild bird shoots: 100% for partridge shoots and 84% for grouse shoots. (Nine years later the problems are reported to have increased in both scale and distribution.)

Overall, in Great Britain, sparrowhawks, buzzards, tawny owls and peregrine falcons were cited as those causing greatest problems. In Scotland tawny owls were less important but hen harriers and goshawks more important. Losses at pheasant release pens were reported to range from less than 1% to more than 10% (the reported mean losses were fewer than 5% and individual losses often less than 1%). Other research, conducted mainly in England, had also shown that less than 5% of pheasant poults are taken by raptors (Lloyd, 1976).

For many years, racing pigeon owners have contended that both sparrowhawks and peregrine falcons cause serious and escalating losses of valuable and valued birds. Again, independent research, the most recent of which was commissioned by SNH and the Scottish Homing Union (Henderson et al., 2004) shows losses to be at 1% to sparrowhawks and 2% to peregrine falcons.

These findings could be interpreted to mean either that:

a) Scientific studies somehow fail to detect the true losses to raptors, and/or
b) Anecdotal evidence is exaggerated.

Legal and practical aspects relating to the control of raptors

All raptor species in the UK currently are protected under the Wildlife and Countryside Act (1981), and the Wildlife (Northern Ireland) Order 1985, both implementing the obligations from the 1979 EU Birds Directive. In addition, the Nature Conservation (Scotland) Act 2005 provides for protection of the unoccupied nest sites of certain raptor species.

Under the Wildlife and Countryside Act, s16 (s18 of the Wildlife (NI) Order) licences can be issued potentially for the removal or destruction of individual raptors, their nests or eggs, for such reasons as conserving wild birds and preventing serious damage to, *inter alia*, livestock, which, in this context, includes gamebirds. Such licences must comply with Article 9 of the Birds' Directive, which allows for the control of birds to prevent serious damage to crops, livestock, forests, fisheries and water, and the protection of flora and fauna.

Before any such licences to control raptors in the interests of game (either as livestock or as wild birds) could be considered, it will be required to demonstrate no other satisfactory solutions were effective. Both the Scottish Executive and Defra have confirmed this is the case (see Appendix I).

With respect to pheasants in release pens, the ADAS study (Allen et al, 2000) led to the production by BASC (funded by SNH, JNCC and RSPB) of a booklet giving practical advice to gamekeepers and others on reducing impacts of raptors on their birds ("Birds of prey at pheasant release pens – a practical guide for game managers and gamekeepers"). It is likely that applicants for licences relating to pheasants would be required to show that such recommended measures had been tried but without success. These are outlined in Appendix II.

With respect to red grouse, efforts continue, not least by Scotland's Moorland Forum, and EN-led groups in England, (both involving key stakeholders) to find ways of managing problems from raptors. A number of possibilities are being considered. Diversionary feeding of hen harriers remains to be fully evaluated and may not be completed until 2008. Some quota system to manage hen harrier nesting density on grouse moors, in turn, may not be considered until the diversionary feeding trials have been completed. It is possible that the timing of these projects will negatively influence the willingness of governmental and other agencies to consider licensed control measures in the meantime.

Apart from air safety, one licence is known to have been issued to date in Scotland for raptor control, although for health and safety reasons. However other licences have been regularly issued for the control of ravens, mergansers, eider, goldeneye etc, providing precedents for controlling otherwise-protected problematic species. It is anticipated, however, that the European Commission could challenge the issuing of licences for raptor control by the Scottish Executive. This is primarily due to the current level of illegal killing of raptors in the UK. The European Commission is currently considering court proceedings (under Article 226 of the Treaty of Rome) against the UK government for such infringements.

If game interests can establish that raptors (either singly or collectively) are causing serious damage to wild birds or livestock (pheasants or partridges in a release pen), and that no other non-lethal method of control is practical or effective, then licences could be issued and not necessarily challenged by the European Commission. Such licences could be for the removal of an individual bird, removal of a number of birds under a quota, or removal or destruction of eggs or nests.

Further studies

The Stirling University/BTO Scotland study has recommended more research into

several aspects of the issue and its resolution but, as yet, no firm plans have appeared and any results will be some years away. After a number of studies establishing that raptors have only a minimal impact on racing pigeons, little further research is likely on this front.

Since the ADAS study for BASC and partners, BASC has planned to continue the field study of raptor predation on gamebirds, focusing particularly on goshawks and the denser buzzard populations of Scotland. This has been on hold awaiting the outcome of the Moorland Forum commissioned study, but which, now, is also amongst that study's recommendations.

Recommendations

In light of the foregoing, BASC recommends that:

- **The principles set out in the Code of Good Shooting Practice should be respected and followed.**

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- **Game managers and keepers, where raptor problems with gamebirds either occur or may do so, should follow advice available from BASC and others, to minimise those problems.**

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Appendix I

Guidance Note for Individual Licence Applications

In April 2009 SNH published guidance on licences to control predatory birds such as sparrowhawk, buzzard, goshawk and raven, the guidance can be found at: http://www.snh.org.uk/licences/li-advguide.asp

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