
CAIRNGORMS NATIONAL PARK AUTHORITY

FOR DECISION

Title: REVIEW OF CAPERCAILLIE CONSERVATION AND MANAGEMENT

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Purpose:

This paper presents the current position on capercaillie conservation in the Cairngorms National Park, taking into consideration discussions with stakeholders following the NatureScot Scientific Advisory Committee report and presents a series of recommendations for CNPA activity going forwards.

Recommendations:

That the Board:

- a) provide advice to staff on the approaches that they wish to see the CNPA work with NatureScot and others to develop on the issue of predator control within the core caper area;
- b) support the development of a wider diversionary feeding approach within the core caper area;
- c) agree that CNPA and NS lead further consultation to develop a range of delivery options for nature refuges, building on the approach of the Cairngorms Capercaillie Project;
- d) agree that CNPA and NS work closely with Scottish Forestry, as part of the FGS review, to ensure that from 2024 the scheme can support the marking and removal of fences that pose a risk to capercaillie;
- e) CNPA support the delivery of habitat enhancement and expansion, landscape scale survey and monitoring approaches, further research into genetic diversity and other developing areas of scientific research and preparations for reinforcement work in the Cairngorms National Park;
- f) agree that CNPA and NS provide strategic oversight of capercaillie conservation in the Cairngorms by co-ordinating and overseeing the collective delivery of a clear place-based strategy.

Review of Capercaillie Conservation and Management – FOR DECISION

Background

1. A new report by a subgroup of the NatureScot Scientific Advisory Committee has advised on ways to help reverse the fortunes of capercaillie in Scotland, which could be lost within two to three decades if we don't move quickly.
2. The sub-group concluded that renewed intensive measures are needed if the population is to be conserved. These should focus on options that will improve breeding success (primarily egg and young chick survival), but there may also be scope for increasing juvenile survival and continuing to minimise known threats to adult survival.
3. The report lists four options that are likely to have the greatest immediate positive impact on the population:
 - a) Predator control. The evidence suggests that removal of crows, foxes and pine martens would likely lead to an improvement in breeding success. However, any control of pine martens would be contentious, given its protected status.
 - b) Diversionary feeding of predators. An alternative approach to removing predators is to provide them with alternative food during the breeding season, which has been shown to improve the breeding success of other ground nesting birds.
 - c) Reducing disturbance. Greater consideration could be made of creating more/larger refuges from human disturbance through the closure of paths and tracks either temporarily during the breeding season or by permanent removal.
 - d) Fence marking/removal. While there has been much progress in marking or removing deer fences, many remain and so can be contributing to juvenile and adult mortality.
4. It is unlikely that employing a single option of those listed will be sufficient to prevent further population declines. Instead, action should be taken on all key areas and any interventions will need to be carried out on as wide a scale as possible within the core area of Badenoch and Strathspey.
5. Any delay in enacting these might result in the population declining to a point where extinction becomes inevitable. It would be preferable to adopt an adaptive management approach, in which the effectiveness of the intervention measures is continually monitored, and the management regime adjusted accordingly. Modelling should prove a useful, and possibly essential accompaniment to any adaptive management programme.

Stakeholder Engagement

6. Following publication, CNPA and NatureScot engaged a range of stakeholders to consider the findings of the report and investigate the options in the broader context

of interactions with wider biodiversity and communities, costs, practicalities and further reaching policy implications.

7. From 5th - 25th April, the views from over 100 stakeholders were gathered via an online questionnaire, meetings with groups, organisations and individuals, including special meetings of the Scottish Capercaillie Group and the Cairngorms Local Outdoor Access Forum, and written correspondence. These were also combined with the related views from members of the public received over the last two years by the Cairngorms Capercaillie Project and by CNPA in relation to the draft National Park Partnership Plan.
8. Building on all the views shared and feedback received, on 4th May CNPA and NS hosted a facilitated workshop for organisations, agencies, land managers and technical experts to help develop more detailed proposals on the four areas of action. Participants focused-in on how a series of draft proposals could potentially be delivered by examining in more detail the likelihood of success, feasibility, resource required, costs, wider implications, whether further evidence is needed, risks and opportunities.

Feedback from Stakeholder Engagement

9. Generally, the NatureScot Scientific Advisory Committee Report has been welcomed as a much-needed proactive step with a broad sense that it provides enough evidence to build on. There is not however complete agreement that the four areas for action identified by the report are the right things to focus on now. There was a significant response that the benefits of ecosystem conservation rather than single species management, the impacts of climate change, positive results from current habitat management, genetics and ticks could also be very important and justify greater emphasis, alongside the areas for action identified by the report.
10. Some stakeholders felt that, whilst only a small selection of the papers read by the Committee were cited in the Report, there remain gaps in the literature reviewed, particularly in the areas of habitat management and genetic studies. It was also highlighted that the case for refuges is based largely on assumptions, albeit with new studies currently being peer reviewed.

Predator control

11. There is a divergence of opinion regarding whether predator control is beneficial for capercaillie. The SAC report cites published evidence that predator management increases chick survival and lethal control, under license, of some predator species is a well-used and trusted technique across much of the capercaillie range.

12. The applicability of some of the cited evidence is challenged on the grounds that much of the evidence comes from studies that are more than 20 years old and the predator suite is different now. Recent data shows that despite ceasing fox and crow control in Abernethy over the last five years, the number of capercaillie males counted at leks has remained stable since 2013.
13. These divergent views and subsequent policy positions are likely to remain unchanged.
14. Workshop attendees were asked to discuss and assess 3 main proposals:
 - a) continuing with fox and crow control,
 - b) fox and crow control with the addition of controlling pine martens through trap and translocate, and
 - c) fox and crow control with the addition of controlling pine martens through trap, hold and release.
15. Lethal control was not presented as an option as the NS statement accompanying the release of the SAC report stated "...in the case of pine marten this [additional predator control] would be non-lethal, through trap and release to other parts of the UK". Management of other protected species as well as pine marten, for example badgers, was not included as an option for discussion as these were not covered in the SAC report.
16. There was little support for continuing the status quo of controlling only foxes and crows. The current situation of a patchwork of interventions, both spatially and in terms of species being controlled, is not having the demonstrable positive effect required to either justify its continuance or give confidence that nothing further was required, depending on different viewpoints.
17. Continuing with the current situation was perceived by some to be lacking the impetus and imperative to save capercaillie, with associated accusations of inactivity should the species continue to decline. Equally it was welcomed by some as an opportunity to take stock and review the emerging science and data that might support no intervention, leaving space for a decision in a few years' time.
18. Pine marten control through trap and translocate and/or trap, hold and release was generally agreed to be unviable for several reasons, largely based on assessments by organisations currently carrying out marten translocations, including animal welfare issues, the seasonality of natal mothers and chick rearing, very high costs, high risks and low guarantee of success. Little support therefore exists for controlling pine martens through trapping. There is also a renewed call to revisit the option of lethal control.

19. A rapidly developing understanding of the complex interactions within an expanding predator guild is highlighting that removing pine martens, in addition to current predator management, is not guaranteed to have the transformative effect that might be required. Some land managers feel that to be entirely successful, even if pine marten are controlled now, there is likely to be a need to investigate ways to control the numbers of badgers and potentially other protected species in the future. Views were also expressed about the need for 'smart predator control' allowing the structure of predator communities to remain but using appropriate techniques to stop reproduction.
20. Stakeholders subsequently requested two further options to be considered at the workshop: the option of actively choosing not to do any predator control; and the option of controlling (lethally or otherwise) martens and potentially a wider suite of predators, including protected species.

Controlling (lethally or otherwise) martens and potentially a wider suite of predators, including protected species:

21. Undertaking this level of intensive species level intervention does not align with current thinking where action to address biodiversity loss through habitat restoration at a landscape scale is preferred. Some managers are already committed to this wider and deeper approach to address biodiversity loss and are likely to see some of these short-term measures as a backward step. However, habitat restoration cannot address the immediate threat of extinction, hence the need to adopt species-specific management approaches.
22. It is expected that increasing the levels of predator management to include the possibility of lethal control of a protected species and/or the management of a wider suite of meso-predators would require significant investment of time and resource over large areas and long-time scales to be effective on a scale that will sufficiently reduce predator densities. A reduction in pine martens and other protected species may have wider biodiversity impacts that are hard to predict.
23. Additional control would be building on current, effective predator management methodologies and there is a significant existing knowledge, skills, and experience base to build on. This approach could also lead to a reduction in predation on other species and would generate local employment opportunities.
24. An investigation into opportunities for increasing predator management to include protected species is likely to require a review of current legislation and would require a targeted, funded programme. The management of protected species would be a high-profile exercise likely to draw significant attention. Results from the Cairngorms Capercaillie Project consultations indicate that public opinion is divided.

Actively choosing not to do any predator control

25. More aligned with current, ecosystem-based conservation approaches is the active choice not to do any predator management, allowing for a more natural system to self-regulate and promoting conservation of all species, including predators. If successful, this is a more sustainable long-term approach but there is a clear risk that species currently considered highly vulnerable may not have the same levels of resilience to factors such as predation and stochastic events and therefore require sustained and focussed effort.
26. There is currently limited evidence that this approach will improve breeding success, and in the timescale required. Most recent survey results are showing a positive trend in parts of the capercaillie range where there is no predator management taking place. However, data sets are for relatively short periods of time, for a mobile population that occupies large parts of the core range.
27. This approach requires relatively little additional financial and resource investment and would require no further investigation of the legal framework. There is a need for rigorous and transparent monitoring and data sharing to review and adapt to emerging science and population data with the ability to take an adaptive management approach and reinstate predator control if trends change.
28. The assumption is that this approach must be done in tandem with habitat expansion and improvement, the creation of more habitat away from disturbance building resilience into the natural system in the longer term. Should a reinforcement approach be needed then a no intervention predator management policy may need to be revised as the most recent successful reinforcement project required intensive predator control.
29. **Board members are asked to provide advice to staff on the approaches that they wish to see the CNPA work with NatureScot and others to develop on the issue of predator control within the core caper area.**

Diversionsary feeding

30. Diversionsary feeding is generally seen as feasible and more acceptable than predator control, though there are mixed views on whether it is desirable. Some stakeholders strongly disagree with the technique on ethical grounds and feel that diversionsary feeding is not a long-term solution for reducing predator pressure.
31. There is, however, alignment around the idea of starting, as soon as possible, to expand the current small-scale trial in Badenoch and Strathspey, i.e., continuing to use the technique on a trial basis, namely because uncertainty still exists around methods and some of the practicalities and risks. It is felt that a larger trial is unlikely

to have a negative effect if monitored closely and an adaptative management approach is adopted. Indicative costs are also thought to be reasonable.

32. Developing a larger scale trial would take this management technique to the next stage. The current small-scale trial has yet to report, and it is premature to detail outcomes so far, so the current evidence base for supplementary feeding predators of capercaillie is deficient and key to success will lie in answering uncertainties.
33. Supplementary feeding may appeal to some landowners and managers who do not wish to undertake predator control. In that respect diversionary feeding fits in to an approach that does not have to be similar across the whole capercaillie range, and where different solutions may be appropriate in different locations.
34. **It is recommended that the CNPA support the development of a wider diversionary feeding approach within the core caper area and that this is coordinated through the development of a spatial strategy.**

Refuges from human disturbance

35. There is broad support for taking forward work to investigate options for path management, developing refuges and encouraging responsible access to minimise disturbance. Basing this discussion around capercaillie alone is not felt to be the best approach and a broader approach that looks at nature refuges, or safe spaces for wildlife, is strongly encouraged.
36. Whilst support exists, it must be emphasised that this is the start of further conversations. Whilst the Cairngorms Capercaillie Project is working with some communities of place and interest in the National Park, and is strongly advocating a collaborative, co-creation approach, a significant body of recreation and access stakeholders are not currently aware of discussions arising from exploring options in the SAC report and may still react strongly once proposals are discussed more fully and particularly when they become more spatially specific.
37. There is broad support for refuges that employ a greater suite of measures to reduce human disturbance than consistently employed currently and for refuges that are tailored to ensure a proportional response and equity amongst access takers. A proportional response to the situation would identify activities that are known to be high risk e.g., birders at leks and those felt to be low risk e.g., walkers on tracks without dogs and build these relative impacts into proposals, rather than impose widespread restrictions on everyone.
38. There are significant opportunities to celebrate and build on what we already do in promoting SOAC, the deployment of rangers to popular and sensitive sites, continuing the work of the Capercaillie Project, promoting less popular and/or

sensitive areas of Park to visitors, continued investment in well planned, high quality recreational alternatives, and the expansion of forest habitat without new promoted recreation and access provision.

39. The three options presented at the workshop were:
- a) 'Quiet place for nature refuge' – including proposals for community-led development and delivery (as per the Cairngorms Capercaillie Project approach) and/ or another approach to co-creation with stakeholders; reducing and removing informal and formal parking spaces; signage, information, and interpretation; no net increase in the number of paths and trails as agreed in relevant recreation management plans; a presumption against organised outdoor access events; and regular ranger patrols.
 - b) 'Safe place for nature refuge' – as above with additional measures for signage delineating an appropriate buffer around the active lek site/s within the refuge; removal of waymarking and rerouting of trails within the buffer; and track side screening.
 - c) 'Secure place for nature refuge' – as above with additional measures for diversion orders for existing rights of way; and temporary, spatially limited path management agreements excluding the exercise of access rights where suitable alternatives are provided.
40. There were divided views of whether we need a mix of the three options across the Park or we move sequentially over time to have a light touch approach and then impose tighter measures over time if that doesn't work. There was some disagreement about what measures should be part of which option and no real consensus. Some views that we should grow a network of refuges from human disturbance over time, starting with a network of smaller refuges that are defined by the likes of low track density.
41. Stakeholders found it hard to discuss proposals as a concept without clear idea of scale of refuges or what exactly they would mean in each area. It is recommended that any further development of proposals is coordinated through a spatial approach that includes broad maps or priorities so that the recreation and access community can respond more fully.
42. **Recommendation: CNPA and NS lead further consultation to develop a range of delivery options for nature refuges, building on the approach of the Cairngorms Capercaillie Project.**

Fencing

43. There is consensus that increased fence marking and removal across the capercaillie range will improve capercaillie survival rates. This work could be actioned relatively quickly, volunteers could help to accelerate the work and additional fence removal will significantly improve landscape qualities.
44. There is a need for more funding and a more pragmatic approach, e.g., to mark fences on a case-by-case basis regardless of their distance from an active lek site which is the current metric for FGS funding. Stakeholders were also keen to remove fencing that has served its purpose, with proposals to mark all fences that pose a risk to capercaillie and then remove them as soon as possible strongly endorsed. The greatest level of alignment exists around this option.
45. The Cairngorms Capercaillie Project continues to provide grants to mark and remove fencing over 1km from an active lek site as short-term solution until July 2023, when the project is due to end.
46. **Recommendation: CNPA and NS will work closely with Scottish Forestry, as part of the FGS review, to ensure that from 2024 the scheme can support the marking of all fences that pose a risk to capercaillie and the removal of fences as soon as possible.**

Areas of work not emphasised for immediate development by the SAC report

47. There is an identified need for further investment in habitat management to expand and connect areas of Scots pine forest across the National Park. More high quality, bigger and better-connected habitat away from areas of high recreational pressure is the long term, sustainable solution. This will provide capercaillie with more space to adapt to climate change, predator pressure and human activity.
48. Habitat improvement is the most important factor to achieve long-term sustainability of the population. This requires appropriate management of existing woodlands, reducing fragmentation, minimising fencing, and supporting the creation of new, more natural, native woodlands. The Cairngorms Capercaillie Project continues to improve over 10,000 hectares of habitat for capercaillie until July 2023, when the project is due to end and CNPA continues to support and facilitate further habitat management and expansion through objectives in the National Park Partnership Plan.
49. The SAC conclusion, after thorough investigation of scientific evidence so far, was there is a clear effect of weather, but not one of climate change. There is likely to be a long-term effect of climate change, but it will be gradual and cannot explain the recent, sudden decline. However, in looking to future management and the options

for mitigation against long term effects, a number of stakeholders feel the impact of climate change on a cold adapted species was underreported and commented on productivity with cold and wet spring weather becoming increasingly frequently and mitigation being limited to habitat expansion and field-layer management.

50. Ongoing research into new conservation approaches is critical to an adaptive and reactive approach to capercaillie conservation. There is strong support for continuing and further research into the efficacy and methodologies of diversionary feeding, interactions in the predator guild and the impact of parasites (ticks).
51. Current monitoring of the capercaillie population is primarily undertaken through brood counting, lek surveys and the 5yr national survey. Brood counting with dogs is considered by some land managers to be intrusive and likely to cause unnecessary disturbance compared to the usefulness of data returned. Other, less intrusive and complementary options for survey and monitoring, including genetic analysis of feathers and use of trail cameras are currently being explored. There is significant advantage in a common approach to survey and monitoring and a full transparency of data to best inform adaptive management. It is recommended this is coordinated via a spatial strategy.
52. The SAC researched genetics and inbreeding and came to the clear conclusion that, at present, with the current population size (derived from the 2015/2016 survey), and especially the short time period since the population was significantly larger, the chance of there being any issue of deleterious level of inbreeding was negligible and therefore reinforcement is not a priority. However, there remains a strong feeling that investigation into the genetics of the population should continue at pace and preparatory work to reinforce the capercaillie population should start now. It is felt that inbreeding, decreasing genetic diversity and increasing vulnerability to infectious disease are likely to become a serious issue, especially if the population continues to decline. The experience with wildcats has shown it takes many years to put mitigation measures based on captive breeding in place, and experience with Galliformes is that they are difficult to rear and release into the wild. Laying the groundwork for capercaillie as soon as possible is therefore felt to be vital.
53. The Cairngorms Capercaillie Project will continue to work with RZSS to identify the genetic diversity of the Cairngorms capercaillie population. This will involve a final report on the genetic diversity of the capercaillie population in the Cairngorms being published in August and an action planning workshop with stakeholders, in response to the report, will take place in September.
54. **Recommendation: CNPA and NS to support the delivery of habitat enhancement and expansion; coordinate landscape scale survey and monitoring approaches; support further research into genetic diversity**

and other developing areas of scientific research; and prepare for reinforcement work in the Cairngorms National Park.

Spatial strategy

55. There is very strong agreement that a spatial strategy, plan and additional resource for the core capercaillie area will help with prioritisation, monitoring and adaptive management.
56. In order to be successful action will need to be taken collaboratively across multiple landholdings where different management objectives are currently being pursued. This will require strong leadership to ensure collective engagement and action is achieved. A governance and management structure will be developed to enable the effective delivery of the strategy. This will include technical advisory groups and pathways for further consultation and engagement with a wide range of interest groups and communities.
57. A spatial strategy would bring together, for example, multi landowner and agency collaborations and plans for:
- a) Long term context and exit strategy
 - b) Habitat expansion and enhancement
 - c) Diversionary feeding trials
 - d) Fence marking and removal
 - e) Research and monitoring
 - f) Mapping of core capercaillie areas
 - g) Mapping of safe spaces/ refuges
 - h) Common signage and messaging
 - i) Communications and engagement
 - j) Reinforcement and translocation plans
 - k) Costed action plans
58. Whilst stakeholders feel there is value in having a strategy, concerns were expressed about the potential for strategy development and writing to delay action on the ground.
59. **Recommendation: CNPA and NS provide strategic oversight of capercaillie conservation in the Cairngorms by co-ordinating and overseeing the collective delivery of a clear place-based strategy.**

Conclusion

60. NatureScot and CNPA are working together to prepare a briefing for Ms Lorna Slater, Minister for Green Skills, Circular Economy and Biodiversity, outlining

conclusions from the work to date and seeking advice on areas of work to progress.

61. The Cairngorms Capercaillie Project continues to work with communities of place and interest to identify opportunities for a wide range of people to play a part in capercaillie conservation, including through the co-creation of plans to minimise disturbance and promote responsible enjoyment. The CCP project board will consider how the outputs from further investigation of options in the SAC report can be incorporated into the approved purposes of the project and the project's legacy.

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31 May 2022

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