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RSPB Scotland

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Mr Richard Davies
Clerk to the Rural Affairs Committee
The Scottish Parliament
Committee Office
Edinburgh
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21 December 2000

Dear Mr. Davies,

Many thanks for your letter of 13 December.

The RSPB has a working policy which acknowledges that the control of generalist predators, such as red foxes, can aid the conservation of ground nesting birds in certain circumstances. When such predators have been demonstrated to have a significant effect on important bird populations, we will consider the control of foxes to reduce this effect. As we are not a sporting or shooting organisation we consider this matter in terms of maintaining or improving population levels, not in terms of a shootable harvest being available for guns in the autumn/winter.

As a matter of policy the RSPB does not allow fox hunts to use our reserves. Furthermore even in those cases when, for good conservation reasons (as explained above), we decide to control foxes, we do not use dogs for the purpose of catching or killing animals. Nor do we use snares or other non-specific methods. Rather our staff, or experts employed for the purpose shoot foxes by lamping or lying in wait near dens. This approach is somewhat more time consuming than snaring, and requires a greater effort on the part of the staff involved. It is, however, specific with very limited likelihood of involving non-target species.

We are concerned to hear reports that snaring can result in the unintentional capture and death of capercaillies, for example.

To ensure there are no misunderstandings about the use made of dogs on RSPB reserves, may I add that we do use pointing dogs to find capercaillie and other grouse for research and monitoring purposes, and that we see no good reason to proscribe a benign and beneficial activity such as this.

At our Abernethy Forest Reserve, we are continuing a long-term study on the impacts of predators and other factors on capercaillie. Separate studies have found the biggest single cause of mortality to adult capercaillie is collisions against deer fences. The present study has found that the strongest influence on capercaillie productivity is rainy weather in June, and that predation from crows has had a significant impact on dry years at least. We have found no significant effects from foxes to date, but a study in Sweden found they affected productivity and populations of woodland grouse on some Baltic islands. For these reasons we recommenced crow and fox control from February 2000, and will continue to monitor the effects of this work. We hope this will continue to aid our understanding of these issues.

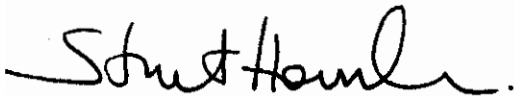


It should be noted that on many estates where foxes are controlled vigorously the decline of capercaillie has continued at a rapid rate, supporting our view that factors such as deer fences and poor productivity are the main cause of decline.

The RSPB is neutral on field sports, a position set out in our Charter. We are therefore not expert in many of the areas currently being debated by the Committee.

I am willing to assist the Committee by giving further evidence if required, although I must point out there is little I can add to the substance of this letter. Nor indeed are we able to comment on hunting issues.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Stuart Housden', followed by a period.

Stuart Housden
Director, RSPB Scotland

RSPB SCOTLAND RESPONSES TO RURAL DEVELOPMENT COMMITTEE

Questions related to Protection of Wild Mammals (Scotland) Bill

GENERAL QUESTIONS

6. *Do you agree that the fox and other vermin control carried out by gamekeepers to protect game birds has a beneficial effect on other bird and animal life?*

A number of studies on this subject have reached quite different conclusions, so it is not appropriate to generalise. Whether or not predator control benefits other wildlife depends upon whether the control is effective in reducing predator abundance; and whether the prey species respond to a decrease in predation rates. It is therefore difficult to predict when and where beneficial effects may occur for other wildlife. Evidence exists to suggest that game management in parts of the UK uplands is beneficial to certain wader species, though it is unclear how much of this benefit arises from predator control or from associated moorland habitat management. Other evidence suggests that in some circumstances fox control does benefit some wader species, but a study on hen harrier breeding success found no beneficial effects to them of predator control on moorland, and we know of no published studies which have demonstrated positive effects of predator control on songbird populations. We are not aware of studies on the effects of fox control other animal life.

7. *If you had continued with your previous policy of not controlling foxes [at Abernethy], what do you think would be the effect on bird populations? If there was a ban on the use of dogs as proscribed by the Bill, do you think the fox population would rise? From a conservation perspective, what will happen if fox numbers increase because of this Bill? Will it have an effect on all ground nesting birds?*

If we had continued the period of no fox or crow control at Abernethy (which formed part of a scientific study, rather than representing the general policy of the society - see Q15), the evidence suggests that in dry years, capercaillie productivity would be affected. There was no similar evidence of the effect of predators on black grouse. As other species were not studied, we cannot comment on them, though obviously we would not expect foxes to affect the important tree-nesting species in pinewoods. Also, there is no evidence of a rise in occupied fox dens in the period when we did not undertake fox control (see table under Q16).

We cannot predict whether the fox population of Scotland would rise should this bill be passed. This is not an area of RSPB expertise, and we cannot guess what other methods of fox control might be used more frequently in those circumstances, or what their effects might be on fox populations.

If fox numbers were to increase then there is evidence from the UK and mainland Europe to suggest that this could have a detrimental effect on certain ground nesting bird populations, (but almost certainly not all species of ground nesting birds). The experimental studies are described in the answer to Q6. The circumstantial studies mostly relate to gamebirds and waders - e.g. studies in Scandinavia which document increases and subsequent decreases in black grouse and capercaillie populations as fox numbers first declined and then recovered following an outbreak of sarcoptic mange.

8. *We have been assured that shooting would not provide adequate control of these foxes, which would escape due to the ban. Gamekeepers say that increased snaring would not be a viable option because time would not allow the extra snares to be checked every 24 hours (as required by Law). Do you agree?*

As we have no figures on the number of foxes killed in Scotland by hunts or with dogs, we are in no position to judge whether shooting might provide adequate alternative controls. Similarly, we are not in a position to judge whether gamekeepers might wish or be able to use more snares.

The RSPB does not use snares on its reserves: in our view these are too indiscriminate a means of capture of animals. We would not wish legal changes to relax the frequency of visits to snares which is required at present; it is important that animals trapped in error have a chance to be released. We would not welcome an increase in snares in areas with woodland grouse such as capercaillie, as recent evidence suggests that many capercaillies are caught in snares set for foxes. A paper shortly to be published in 'Scottish Birds' records 46 instances of capercaillies being caught accidentally in the last 30 years in the Cairngorms area. The Capercaillie Biodiversity Action Plan Group has recently contacted both the Game Conservancy Trust and the British Association for Shooting and Conservation, to ask them to request members not to snare in capercaillie woods, because of the risk to the birds.

9. *Numbers of Lapwing and other waders are declining. Do you think an increase in fox numbers will accelerate this decline?*

Our assessment of recent surveys of waders in Scotland is that there is no clear evidence that these populations are declining generally, though post-war land use changes have undoubtedly influenced wader populations. Some areas show increases, and some show decreases over the last decade. The region where declines are most apparent, Shetland, has no foxes. There is evidence from Northern Ireland that foxes can significantly reduce curlew nesting success to an extent that annual curlew productivity falls below that considered to maintain the population. The curlew population is currently declining in Northern Ireland. Another study, which compared sites with similar habitats, suggested that sites with more foxes tend to have lower lapwing nest survival. Also sites with higher fox numbers were more likely to be sites with declining lapwing populations. A number of studies elsewhere in Europe suggest that fox predation can have a significant impact on both annual productivity and population size of a range of wading birds. If an increase in fox populations occurred in the habitats occupied by breeding waders, this would be likely to increase the chances that the wader populations will decline, but it is far from clear that fox predation is driving wader breeding success.

LEGAL QUESTIONS

10. *Please will you advise the committee what sort of amendment would be required to allow you to continue to use pointing dogs to find capercaillie.*

An appropriate amendment, if it were needed, would be one which allowed the licensing by Scottish Natural Heritage of the use of limited, specified numbers of dogs to find and enable the capture (but not the killing) of birds or mammals for scientific or research purposes, or to allow the ringing or marking, or examination of the ring or mark, on wild birds or mammals.

QUESTIONS RELATING TO WALES

3. *You state in your submission that you do not use dogs to "catch or kill" and that it is RSPB policy not to allow fox hunts on the reserves. Can you, however, confirm whether the RSPB called out the BANWY Valley Fox Hounds and the Berwyn Fox Hounds around Lake Vyrnwy and on the local moors to protect rare species as referred to in Hansard Vol 307,1998?*

The RSPB did not call out the Banwy or Berwyn fox hounds, and has never done so. The statement referred to in Hansard of 6 March 1998 (1351), was made by Mr Owen Paterson, MP for Shropshire North, and is incorrect. The correct information was given on 13 March 1998, and states that "the request was made by Severn-Trent Water" (Hansard 13 March 1998 (856)). Severn-Trent Water are the owners of this land and they pay for the hounds to come onto the estate a few times per year. The RSPB is not consulted. The hounds are put through the forestry to flush foxes and go onto the edge of the moor if a fox breaks cover. We have never seen them on the main moorland of the reserve.

4. *I am advised that on the Ineshir Reserve in Wales, hounds flushed 13 foxes to waiting guns in November 2000. It is further understood that hounds are used six times each winter on that particular reserve. Separately, the Chairman of the Welsh Farmers' Fox Control Association, which has been operational for 20 years, controls foxes on land owned by the RSPB throughout Wales and tells me that is a very efficient form of control. What are your comments on this?*

This did not take place on the RSPB's Ynys Hir Reserve. We think this refers to an event held at Cors Fochno, the National Nature Reserve nearby, which is managed by the Countryside Council for Wales. RSPB was not involved in this and is not involved in the management of this site.

As regards the Chairman of the Welsh Farmers' Fox Control Association's comments, the RSPB in Wales does not invite hounds or hunts onto RSPB reserves, and they do not carry out any activities at our request. We refuse any requests to hunt our reserves. However, at several reserves, we know the local hunts visit once or twice per year. This happens where we have no powers to prevent hunting, e.g. where we are not the landowner or where our management agreement does not allow it, or where hunting had been the practice before we became involved in the sites and has been tolerated to maintain good relations with our neighbours. This usually involves RSPB being informed when a hunt is taking place. In all cases we would prefer there to be no hunting at all. For our purposes, we consider shooting to be the most efficient method of fox control when it is needed on reserves.

QUESTIONS RELATING TO CAPERCAILLIE

5. *You state that "on many estates where foxes are controlled vigorously the decline of capercaillie has continued at a rapid rate, supporting our view that factors such as deer fences and poor productivity are the main cause of decline." Which estates are you referring to, and will you please provide detailed evidence in order to support the conclusion offered. Have you shared this evidence and findings with the landowners, gamekeepers or others involved in the management of such estates?*

Estates which have experienced declines include Glen Tanar, Kinveachy, Littlewood, Dupplin and Balmoral (Ballochbuie). There is a decline at Rothiemurchus, though the number increased in 2000. (see Figure 1 attached). This evidence is based on counts of hens in summer across the same areas of wood in each year. These data, combined with other sites, indicate that the capercaillie are declining at 16% per annum. The data from these estates were collected by Dr. R. Moss (formerly with ITE) and Dr D. Baines (Game Conservancy Trust). In contrast, numbers of capercaillie at Abernethy (where almost all fencing has been removed and fox control took place for only half of the 1990s) are similar now to those in 1989 (see Q13). Much work has been published on the causes of declines and the importance of fence deaths to these (see Q19).

Since September 1999 RSPB, SNH and FC have funded a dedicated Capercaillie Project Officer who shares all capercaillie research findings with staff on key estates during the course of frequent site visits. On most of these estates rigorous fox control has been in place for several decades, yet the number of cock capercaillie at all known leks is decreasing. This trend is apparent from lek counts organised by the RSPB in recent years (in association with landowners) and from comparisons of these counts with counts made by keepers in previous years. In addition to those mentioned above, estates where capercaillie lek counts have been decreasing, despite long-standing fox control programmes, include Atholl, Darnaway, Edinglassie, Glenkindie, Invercauld, Lethen and Mar Lodge.

13. *What are the numbers of Capercaillie [at Abernethy] for each year since you became owners?*

We do not have simple figures for the numbers of capercaillie, as it is not practicable to attempt to count all the birds present on a site the size of Abernethy, where the forest extends to about 3350 ha, and the reserve to about 13000 ha. We obtain indices of capercaillie abundance based on detailed transect and lek counts. These are presented in Figures 2 and 3. The population rose to a peak around 1996, but has since returned to about the 1989 level, largely because of wet summers resulting in low productivity in 1997-99. This is in contrast to the population as a whole which has halved since 1994.

19. *How do you know that the main threat to Capercaillie is through deer fencing?*

The fact that deer fencing is a major threat to capercaillie was found out by radio-tagging capercaillie, following their survival and determining their cause of death if found dead. This showed that 8% of adults and 24% of juvenile birds died through fence collisions annually. If this mortality had not occurred, then the population may not have declined, despite the low breeding productivity. We are therefore working to avert this threat to the population, by encouraging the removal or marking of fences. A number of papers have been published on this in refereed scientific journals; the most recent, summarising the population problems of capercaillie, is by authors from ITE, RSPB and GCT in the journal *Ibis* (2000) 142: 259 - 267.

QUESTIONS RELATING TO THE ABERNETHY RESERVE

1. *The gamekeepers say that in mid April some dens show no signs of fox activity and you can only tell if the den is occupied by entering a terrier. If the RSPB do not use terriers, how do you know if a den is occupied?*

It is for this reason that staff at Abernethy do not begin their den rounds until early/mid May by which time there are usually signs of cub activity above ground. The presence of prey remains above ground then confirms an active fox den, rather than that of any other species.

18. *At what time of year do you start checking dens for activity at Abernethy?*

We carry out two den rounds at Abernethy. The first is in early May, the second in early June. With such a large estate and around 150 known potential dens to check, these rounds take between two and three weeks for the first round, and about two weeks for the second round.

- 2a. *You say that you shoot foxes by lamping or lying in wait by dens. How do you deal with foxes in an earth den? How long do you spend at a den before shooting the parents? How successful is this method?*

The den is found and surrounded with long-nets, then staff sit out in the evening to shoot the cubs and adults. Spotlights are used after dark. Usually the vixen is shot on the first or second night. In open situations the dog fox can sometimes be shot as well. Our objective is to reduce the number of foxes present in the bird breeding season.

- 2b. Do you feed the cubs until you shoot the parents? How do you kill the cubs? Do you ever use any methods of fox control other than shooting? Do you use netting to surround the foxes' den in their methods of controlling the fox population?

It is rare for a vixen to be in with the cubs once they are weaned. Once we have set the nets we leave a rabbit or other food items at the den to attract the cubs out, when they are shot. To the best of our knowledge, we have never had a cub escape from a netted den which is visited twice a day, in addition to the work at night. At Abernethy, RSPB staff have only used shooting and nets as control methods. We use netting as outlined above.

12. How many adult foxes are killed at Abernethy, each year since you became owners?

On average 6 adult foxes and 12 cubs have been killed annually since 1992. Details are below.

Year	Adult			Cub			Total
	dog	vixen	not sexed	dog	vixen	not sexed	
before 1992: no control							
1992	2	2		6	4	2	16
1993	1	3		0	1	0	5
1994	6	3	1	6	4	1	21
1995	1	2		7	4	3	17
1996	6	0		8	8	2	24
1997 to 1999: no control							
2000	5	4		10	7		26

16. How many of these adults are killed at dens occupied by cubs?

The average number of adult foxes killed at dens was 2.5 per annum

	dog	vixen	No. of occupied dens
1992	1	2	4
1993	0	1	1
1994	0	1	3
1995	1	2	4
1996	3	0	4
1997	no control	no control	4
1998	no control	no control	3
1999	no control	no control	4
2000	1	3	6

(NB. Purchases of additional areas of land in 1994 and 1999 each brought one additional den into this list from 1995 and 2000)

17. How many dens are there at Abernethy? If there are more than 3, it is suggested that without a large team you run the risk of litters of cubs escaping to cause damage. It has been argued that if a fox escapes, it is more than likely to call the cubs away from the den and distribute them throughout the hills and woods. Is there any way to prevent cubs from leaving the den?

The table in Question 16 above gives the number of occupied dens found annually. The way cubs are prevented from leaving the den is covered in Question 2 above.

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20. You state that you employ experts for the purpose of shooting foxes by lamping or lying in wait near dens. Has lamping resulted in the killing of every fox shot, and have you kept any record of their lamping activity: if so, can you send it to the committee.

The recording season for Abernethy is January to December. The table below covers all foxes shot in all the years when control took place. Because of the wooded nature of the reserve lamping is not a major undertaking away from dens or middens. There have been two occasions when adult foxes were not found after shots were fired and the animal was thought to have been hit.

Year	Total cull	spotlight at den	spotlight in nets at den	spotlight at middens	spotlight from vehicle	at dens in daytime	in nets at dens (day)	stalking/ den rounds
1992	4 adults, 12 cubs	3 cubs	0 adults 0 cubs	started in 2000		3 adult 6 cubs	3 cubs	1 adult
1993	4 adults, 1 cub	1 adult	0 adults 0 cubs			0 adult 0 cubs	0 adult 0 cubs	3 adults
1994	10 adults, 11 cubs	1 adult	0 adults 0 cubs			3 cubs 2 adult	8 cubs	9 adults
1995	3 adults, 14 cubs	1 adult	2 cubs			9 cubs 3 adult	2 cubs	1 cub 2 adults
1996	6 adults, 18 cubs	0 adult 0 cubs	0 adults 0 cubs		1 adult	6 cubs	10 cubs	2 cubs
1997-99				Period of no control				
2000	9 adults, 17 cubs	3 adults 4 cubs	0 adults 0 cubs	2 adults	1 adult	1 adult 4 cubs	8 cubs	2 adults 1 cub

11. How many staff do you employ at Abernethy to kill predators, and what this work cost?

In 2000, 3-4 staff members were regularly involved in fox control, plus some contractors, accounting for around 62 man days, at a cost of £5800. 3-4 staff are involved in crow control, accounting for about 44 man days/annum at a current cost of £3300 in staff wages.

14. When did you first introduce in this estate any method of fox control, and when did it cease?

No fox control was undertaken at Abernethy by RSPB before 1992. Fox control took place during 1992 to 1996, was stopped in 1997-99 as part of the predator control experiment, and re-started in 2000.

15. At the start of your submission you acknowledge that controlling predators such as the fox can aid the conservation of ground nesting birds and that where such predators "have been demonstrated to have a significant effect on important bird populations" you will consider the control of foxes to reduce this effect. Was your decision to recommence fox and crow control at Abernethy from February 2000 directly connected to the decline in your capercaillie numbers?

The decision to recommence fox and crow control was based on the results of detailed statistical analysis which showed that capercaillie productivity was negatively related to both June rainfall and a measure of predator activity (the combined effects of crows, foxes and other predators) in the forest. The latter was based on the rate at which 'artificial nests' of hens eggs placed in the forest disappeared during the nesting time of capercaillie. These results mean that in wet Junes, and when predator numbers are high, capercaillie productivity will be low. The productivity needs to average 1 chick per hen capercaillie per annum in order to maintain numbers of adults, and in many years, the productivity was less than this. In the light of these findings we decided to re-instate fox and crow control from 2000, and we are continuing to investigate how the effects of wet weather might be mitigated by changes in vegetation management.

Figure 1. Numbers of hen capercaillie counted in fixed areas in different forests between 1989 and 2000.

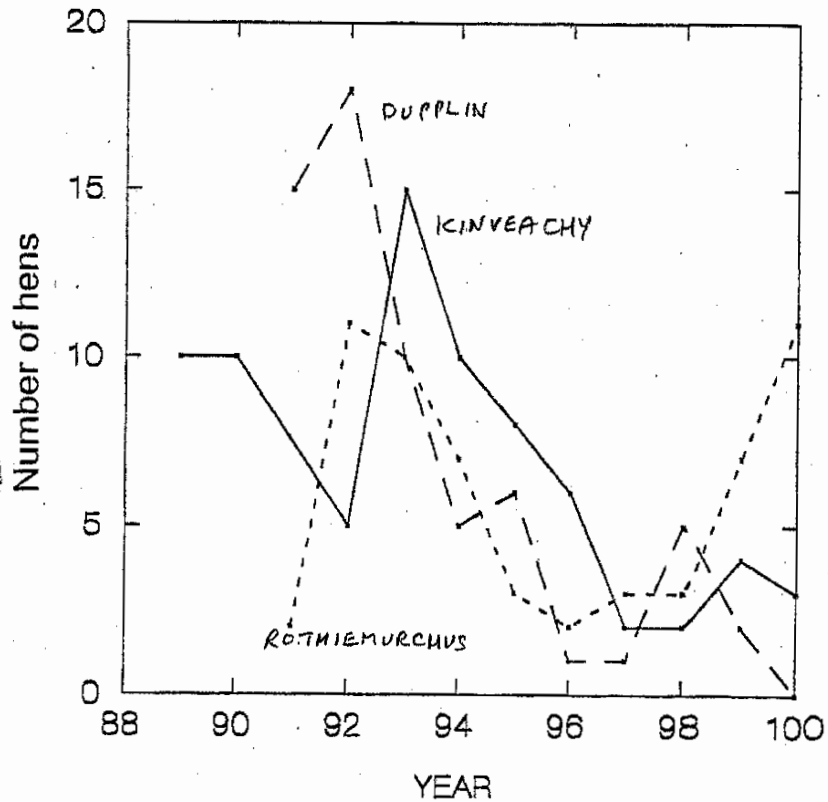
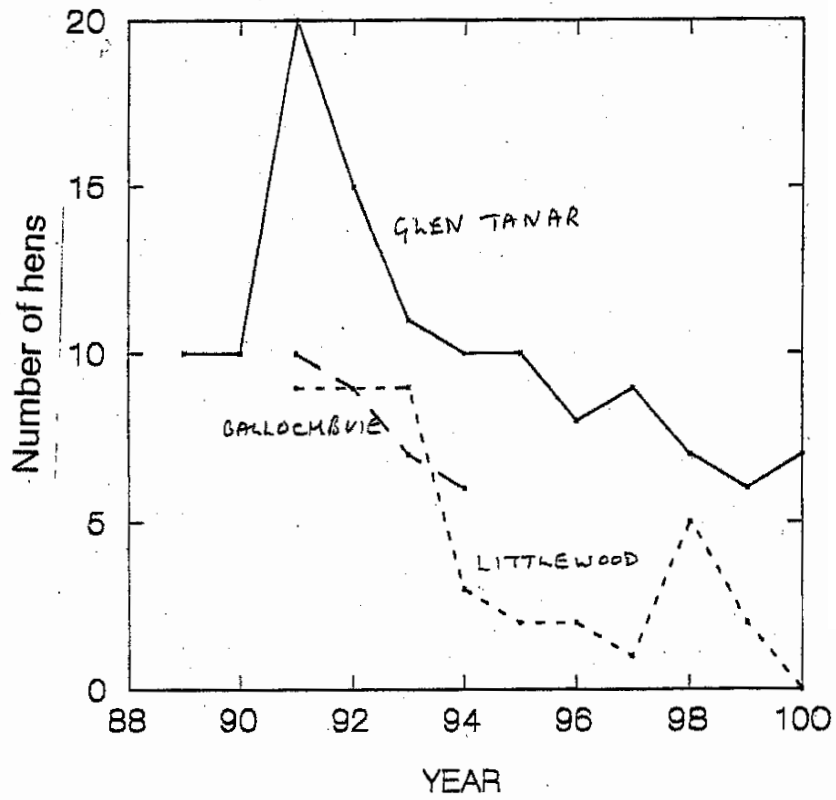


Figure 2. Indices of abundance of capercaillie at Abernethy Forest based on lek counts.

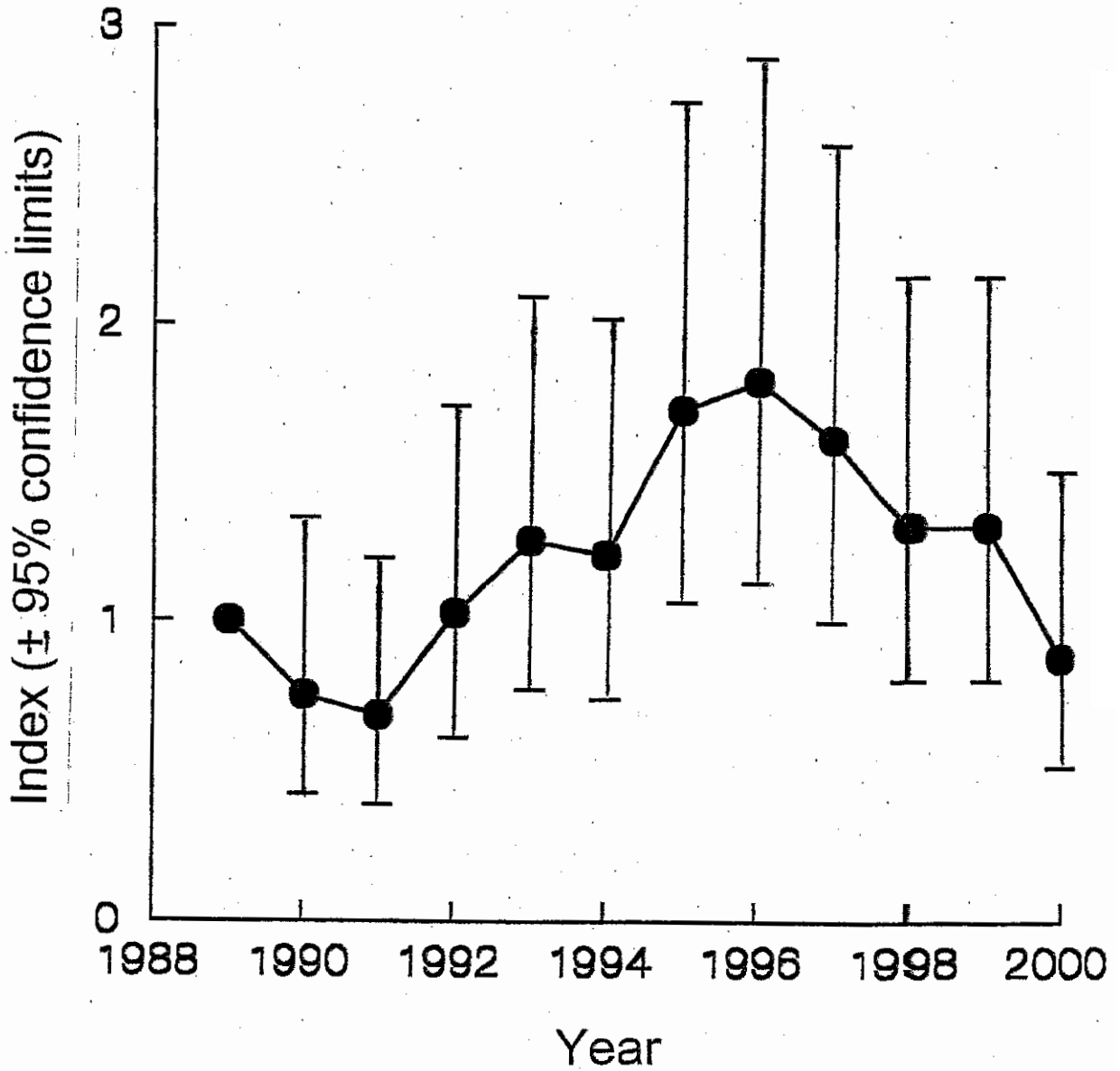


Figure 3. Indices of abundance of capercaillie at Abernethy Forest based on transect counts in winter.

