Preliminary Report of Ecological Study of Highland Pheasants in Nepal - March to May 1980

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Introduction

This report briefly summarises the observations made of pheasants during:

A. The WPA trek in the Solu Khumbu, Everest National Park, 12 - 19 March 1980, for which the Principal Investigator was Tour Leader.

B. The study of pheasants in the Pipar area of the Annapurna Himal, north of Pokhara, West-Central Nepal from 5 April - 3 May 1980.

C. The expedition to locate Cheer Pheasant *Catreus wallichii* to the east of the Pipar area and to try to find the easternmost limits of its range, 4 May - 25 May 1980.

This is not a scientific report; scientific results will, together with those of 1979, be written up fully as a thesis at the University of Durham to be submitted for an M.Sc. degree later this year (1980). A copy of this thesis will be presented to WPA.

2. The World Pheasant Association trek, from 14 - 1? March, started from the airstrip at Lukla (2800m) up into the Everest National Park as far as Thyangboche Monastery, and returned to Lukla.

Pheasants were first encountered on the trail between Namche Bazar and Phunki Tenga on 14 March. Single birds and groups of up to ? Impeyan Pheasant *Lophophorus impejanus* were seen and heard above and below the trail between 3200m and 3400m; no females were observed. Near Phunki Tenga, a covey of 6 Blood Pheasant *Ithaginis cruentus* (5 males, 1 female) were seen feeding in *Abies/Betula* forest at 3250m.

On 15 March no pheasants were seen on the trail up to or around the Thyangboche Monastery where much unsightly rubbish was in evidence in the surrounding woodland. Returning through *Abies/Betula* woodland to Phunki Tenga, a group of 5 female Impeyan Pheasant were seen feeding in *Betula*, in addition to a female Musk Deer *Moschus moschiferus*.

On 16 March we camped at the hamlet of Kyenjima (3400m) between Phunki Tenga and Khumjung, and this was clearly the best area for pheasant observations. Single male Impeyan Pheasants were seen feeding in *Betula* woodland and scrub throughout the day. A covey of 14 Blood Pheasants (approx. 7 males, 7 females) was also seen feeding in the same woodland. From 1600 hours onwards, Impeyan Pheasants were very much in evidence feeding in the terraced fields. A total of 15 - 20 were observed until dusk, mostly feeding singly or in loose single sex groups of up to 5 birds. The relative tameness of these birds and the ease of observation was striking in contrast to their behaviour elsewhere in Nepal (Lelliott 1980) or indeed in their range (A.J. Gaston pers. comm.). A large number of photographs were taken by members of the group

17 March: Passing from Kyenjima through Khumjung and Namche, 3 male

Impeyan Pheasants were sighted in addition to 2 Tibetan Snowcock
<u>Tetraogallus tibetanus</u> at 3750m.

19 March: Plucked Satyr Tragopan <u>Tragopan satyra</u> feathers were found at our lunch site by the Dudh Kosi River near Phakding at approx. 2600m. The bird is thought to have been trapped by local people or porters and indicates that this species exists close to, if not actually within the lower limits of the Everest National Park. At Lukla in the afternoon, 3 members of the group found 2 Kalij Pheasants <u>Lophura leucomelana</u>, 1 female Satyr Tragopan, and 1 Serow (<u>Capricornis sumatraensis</u>) in an area of scrub close to the trail behind Lukla at 2800m. 3 Kalij Pheasant were seen in the same area on the following morning.

The trek was very successful from every point of view and 4 species of pheasant were seen, some at very close range, in addition to Snowcock, Himalayan Tahr <u>Hemitragus jemlahicus</u>, Musk Deer, Serow, and many other species.

B. Four weeks were spent in the River area (28° 25'N, 83° 57'E) north of Pokhara continuing the study of 4 Himalayan pheasant species started in 1979. The area has been described in Lelliott (1979, 1980). This year it was intended to execute a full habitat survey, but since no other fieldworkers were able to join the [illegible], this was not possible. In the study, observations were made from hides and by direct encounter as in 1979. Full details will be reported in the [illegible] thesis. The [illegible] studied were Blood Pheasant, Satyr Tragopan, Impeyan Pheasant, and Koklass Pheasant <u>Pucrasia macrolopha</u>. In addition, observations were also made of Common Hill Partridge <u>Arborophila torqueola</u>, Kalij Pheasant, and Snow Partridge <u>Lerwa lerwa</u>, which will be reported briefly.

Census counts of [illegible] and Koklass were made during the month of fieldwork [illegible] April and on 1 May a total of [illegible] calling males were

heard over an area of approx. 2.4 km² giving an average density of [illegible] pairs per square kilometre of suitable habitat (assuming monogamy). This compares with a density of 4.6 pairs over the same area on 20/22 May 197[illegible] suggesting a decrease in population. However, the different dates on which the surveys were carried out may account for some of the discrepancy. Other unknown factors may also be involved.

Tragopans were counted on 1[illegible] May 19[illegible] revealing a total of 7 calling males in 2.4 km² giving a density of [illegible] pairs per square km. of suitable habitat (assuming monogamy). Again, this is down on the 1979 density ([illegible].2 pairs) which was estimated on 21/2[illegible] May 197[illegible].

Since this type of census is only a relative count of the number of birds in a given area, and the surveys were executed on different dates over the 2 years (but with very similar weather conditions) we should not immediately assume that the population is in decline. Instead, further surveys should be conducted in future years (if possible by Nepali personnel) to document fluctuations. Also, further research should be undertaken, both in the field and in captivity, to determine the calling patterns of these species.

Some photography of Blood Pheasant, Satyr Tragopan, and [illegible] Hill Partridge was carried out in addition to recording of [illegible]. Incidental observations of the activity of the local people visiting the [illegible] were made. [illegible] however, the [illegible] venture to this height except for shikaris (hunters) who are more interested in [illegible] than pheasants.

With regard to the setting up of a possible game reserve in the [illegible] area, there are a number of factors that need to be taken into consideration, namely:

1. The area obviously needs to be large enough to maintain a stable [illegible] of all 4 species (5 including Kalij [illegible]) within it. Choosing the size of each population is bound to be arbitrary, but the [illegible] alternative sizes of reserve as described below should be [illegible] large.

2. The [illegible] 'Sanctuary', an area [illegible] the [illegible] of the [illegible] river, [illegible], is of considerable beauty and [illegible] tourist

trek. It has been proposed ([illegible] 1977) that this should be designated as a 'recreation area' which would give some degree of protection to the wildlife and forests within it. There is however, very little chance of including the [illegible] area within such a 'recreation area' since the Annapurna Sanctuary lies 15km to the north-east and has natural boundaries - the inclusion of [illegible] would appear senseless.

3. Access to much of the [illegible] reserve will be very difficult due to the steep slopes and thick forest; all 3 alternatives suggested below contain large areas of unexplored steep dense forest which would however, be beneficial to the wildlife.

4. [illegible] has the advantage that it is relatively close ([illegible] km direct - approx. 3 days walk) to Pokhara, Nepal's development capital, with fairly easy access to the main camp site.

5. At present, [illegible] supports good populations of 4 species of Himalayan pheasants; it is one of the few areas known where these species occur in such a narrow altitudinal range and may well be unique in this respect. The Blood Pheasant is here near the western end of its range and the Koklass is at the eastern limit of its range.

6. Whether the reserve is established or not, a concerted effort should be made to educate the local people in conservation. Since trapping of pheasants is carried out at all times of the year, emphasis should initially be placed on a closed season from April to October to allow breeding to take place undisturbed.

7. The eastern boundary of the reserve will almost certainly have to be the Modi Khola (river) since there is no really practical alternative (but see Boundary alternative c) below). This means that the eastern limit of the reserve will descend to approx. 1500m, thus taking in the habitat of Kalij pheasant.

[illegible]. Point 7. means that 5 of the 6 known species of Nepalese pheasant would be included within the proposed reserve. The species not included, the Cheer Pheasant Catreus wallichii is known to occur approx. [illegible] km to the west, or possibly closer (see section 9).

.. [illegible] ent settlements are included in any of the alternative sizes of the proposed reserve below, except for [illegible] village, in the extreme south-eastern corner. Summer settlements (go[illegible]), [illegible], [illegible] cattle herds and [illegible] exist throughout the [illegible] but should in no way be discouraged since the grazing, [illegible] and disturbance at pre[illegible]ent levels bear no threat to wildlife.

The following are 3 alternative proposals for the boundaries of the suggested reserve (see also the accompanying map):

(a) [illegible]stern limit following the [illegible] from the [illegible] junction (grid ref. 574[illegible]1) southwards to [illegible] junction ([illegible]) at [illegible] village.
Southern limit from [illegible]ti-[illegible] junction ([illegible]) north-[illegible] up the [illegible] to 11,[illegible]' ([illegible]m) at junction with unnamed stream branch ([illegible]).
[illegible]stern limit from [illegible]-unnamed stream junction ([illegible]) north-[illegible] stream to peak at 1[illegible]' (43[illegible]m) ([illegible]).
Northern limit from peak ([illegible]) [illegible] down the upper [illegible] Khola to junction with [illegible]ti Khola (574[illegible]91).
This alternative takes in the whole of the study area of [illegible], [illegible] to the [illegible]st, [illegible] to the north, and an area of [illegible] dense [illegible] forest on the [illegible]st slope of the [illegible]ti valley, through which the [illegible] path to [illegible] passes.

(b) [illegible]stern limit as for (a).
Southern limit from [illegible]ti-[illegible] Khola junction ([illegible]) north-[illegible] up the [illegible] Khola as far as junction with the [illegible] Khola (54[illegible]). [illegible]-west[illegible] up [illegible] Khola [illegible] southern of the [illegible] to the ridge [illegible] at 7[illegible]' ([illegible]m) ([illegible]) south of [illegible]i.
[illegible]stern limit from ridge [illegible] ([illegible]) northwards following the watershed ridge over [illegible], [illegible], then north-eastwards to a peak at 14,0[illegible]' ([illegible]m) (5[illegible]2).
Northern limit from peak at ([illegible] 102) south-eastwards to unnamed 1[illegible],400' (43[illegible]m) peak and then eastwards down upper [illegible] Khola to junction with [illegible]ti Khola (574[illegible]91).

This alternative includes all of (a), and in addition, the area west of the [illegible] Nala, a small part of which (Chumri-Karchan ridge) was visited in Oct/Nov 1979.

(c) Eastern and southern limits are the 7000' (2135m) contour from its junction with the [illegible]thu Nala at ([illegible]3004) southwards to its junction with the [illegible] Nala at ([illegible]6050).

[illegible] limit from the junction of the 7000' (2135m) contour and the [illegible] Nala ([illegible]), northwards [illegible] Nala until its branch to the north-east at (510071); thence northwards up this branch to the small [illegible] of the ridge at 12000' ([illegible]) ([illegible]).

Northern limit from flat ridge [illegible] ([illegible]), westwards to the upper [illegible]thu Nala and then eastwards down the [illegible] Nala to the 7000' (2135m) contour ([illegible]).

This alternative includes [illegible], [illegible], and part of the [illegible] to the south and west. In terms of boundary identification in the field this alternative would present problems [illegible] well marked, but being the smallest area, it is certainly the most manageable.

Approximate sizes of alternatives:

(a) [illegible] km^2
(b) 50 km^2
(c) [illegible] km^2

5. The expedition to locate the Cheer Pheasant Catreus wallichii in this part of the [illegible] was based on experience gained in 197[illegible] [illegible] the [illegible] valley immediately to the east), interviews with local villagers, and the experiences of my sherpa [illegible] in searching for Cheer in previous years. Due to the limited amount of time available, searching had to be concentrated in small areas and consequently no search was conducted east of the [illegible] valley since cheer are not allowed to occur there. Instead, a [illegible] was made [illegible] of the [illegible] through [illegible] the [illegible] Nala, northwards to [illegible], and returning via

[illegible], [illegible], [illegible] to Kalopani in the Kali Gandaki valley. [illegible] travel to suitable cheer habitat took [illegible] days, after which we camped from 10 - 13 [illegible] above [illegible] village (near [illegible]uri) in an area where [illegible] [illegible] had seen and heard cheer in 1977. Although the villagers of [illegible] confirmed that cheer occurred there, none were seen.
On 14 [illegible] we crossed the top of the ridge over to the area above [illegible]uri village and at 05.15 hours we heard 4 individual cheer [illegible] calling at 7300' ([illegible]25m) in [illegible]/Rhododendron woodland and [illegible] cliffs. [illegible] was seen crossing a steep grassy slope to woodland. We camped in this area for 3 nights and heard cheer calling each morning from cliffs and woodland. In contrast to cheer [illegible] heard in the [illegible] Himalayas ([illegible]aston 1980), which can be heard as frequently ([illegible] more frequently) in the evening as in the early morning, the birds we heard called very little in the morning and were not heard at all during the rest of the day. Their occurrence [illegible] very localised, with [illegible] group heard on the [illegible] side of the hill above [illegible]uri, and none on the southern side, above [illegible]. The birds observed certainly occurred very close to [illegible]ir village, cultivated fields, [illegible], [illegible] subject to considerable human disturbance including livestock grazing, fire[illegible] collection and burning of grassland. [illegible] of birds was not in evidence, but in [illegible] 197[illegible] [illegible] of [illegible] [illegible] above [illegible]. Returning to the [illegible] via [illegible], [illegible], [illegible], and [illegible], no cheer were encountered.

In this [illegible] ([illegible]) there is a large [illegible] of possible cheer habitat which was not surveyed due to the lack of time. A fuller survey of the area would be very valuable in determining the status of this species, which is classified in the [illegible]. [illegible] small pockets of cheer have been discovered in [illegible] ([illegible] pers. comm.), it may well be that [illegible] [illegible] [illegible] [illegible] [illegible] which is able to [illegible] its [illegible] considerable human influence. Further, such [illegible] would [illegible] [illegible] [illegible] [illegible] of this little-studied, [illegible] species which could enable the formulation of more effective conservation measures. Cheer [illegible] to [illegible] numbers [illegible] ([illegible], [illegible] [illegible]) [illegible] [illegible] [illegible] [illegible] west

of [illegible]uri. [illegible] Majesty's Government of Nepal [illegible] National [illegible] Wildlife Conservation Office is believed to be considering the establishment of a [illegible] reserve [illegible] the [illegible] [illegible]. [illegible] be [illegible] the [illegible] on the [illegible] not only [illegible] for the establishment of [illegible] reserve, but also [illegible] that [illegible] only threatened [illegible] protection.

[illegible]

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