

**A RE-APPRAISAL OF THE GREAT HIMALAYAN NATIONAL PARK,
KULLU DISTRICT, HIMACHAL PRADESH, INDIA.**

Principal Investigators:

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Endorsed by: Department of Forest Farming & Conservation,
Government of Himachal Pradesh
International Trust for Nature Conservation

Summary of Objectives:

- (i) To review the boundaries, zoning and management plan for the Great Himalayan National Park.
- (ii) To quantify the extent of grazing and herb collecting activity in the core area of the National Park.
- (iii) To conduct wildlife surveys both in areas visited in 1980/83, and in other areas of the National Park.
- (iv) To prepare a report, incorporating a future management policy for the National Park agreed with the Chief Wildlife Warden of Himachal Pradesh.
- (v) To publish the results of this work more widely.

BACKGROUND

The Great Himalayan National Park covers a map area of 1,716km² (Rodgers & Panwar 1988) in the southeastern corner of District Kullu in the Indian state of Himachal Pradesh (Fig. 1). The State Legislature declared about half this area as Himachal's first National Park in March 1984, the remainder being incorporated after discussions with the Union Department of Environment in 1986. The decision to site the park in this area, its precise demarcation, and a provisional policy for its management, were based on the results of fieldwork that we and others undertook in collaboration with successive Chief Wildlife Wardens and their staff in the Wildlife Wing of the Department of Forest Farming and Conservation (formerly Forest Department), Government of Himachal Pradesh.

During the period November 1979 to October 1980 we coordinated the Himachal Wildlife Project, an extensive series of wildlife surveys in the Kullu (Beas) valley and some other areas of Himachal. In all, we deployed a team of 7 from UK/USA, 14 Indian biologists, plus support staff from the Wildlife Wing. The aims of this work were to establish the distribution of large mammals, birds and their habitats in relation to human impacts on natural forest and alpine ecosystems, and to recommend the location and extent of a representative protected area. We concentrated our efforts in the moist temperate forests (Champion & Seth 1968), a habitat type restricted to the Western Himalayas and best represented in the upper Beas valley.

Our field surveys there verified the presence of an historically complete large mammal and bird fauna, including a number of rare and/or endemic species such as wolf, brown bear, Himalayan black bear, leopard, lynx, bharal, Himalayan ibex, Himalayan tahr, musk deer, serow, western tragopan and cheer pheasant (Gaston et al. 1981a, 1983; Garson & Gaston 1989). Density estimates of ungulate and pheasant populations, and comparisons of numbers of bird species between three main study areas in the Kullu valley convinced us that an exceptionally heavily forested area adjacent to the Sutlej valley in the southeast of the district should be afforded special protection (Gaston et al. 1981b).

Having recommended the approximate location for a protected area, we were invited to collaborate with the Wildlife Wing over determining its boundaries and designing a provisional management plan. This second phase of the work took place in early 1983 (Garson & Gaston 1989), and was followed in less than a year by notification of the National Park by the State Legislature. To date it is the only National Park in India or Pakistan that holds a population of the endangered western tragopan pheasant (King 1981).

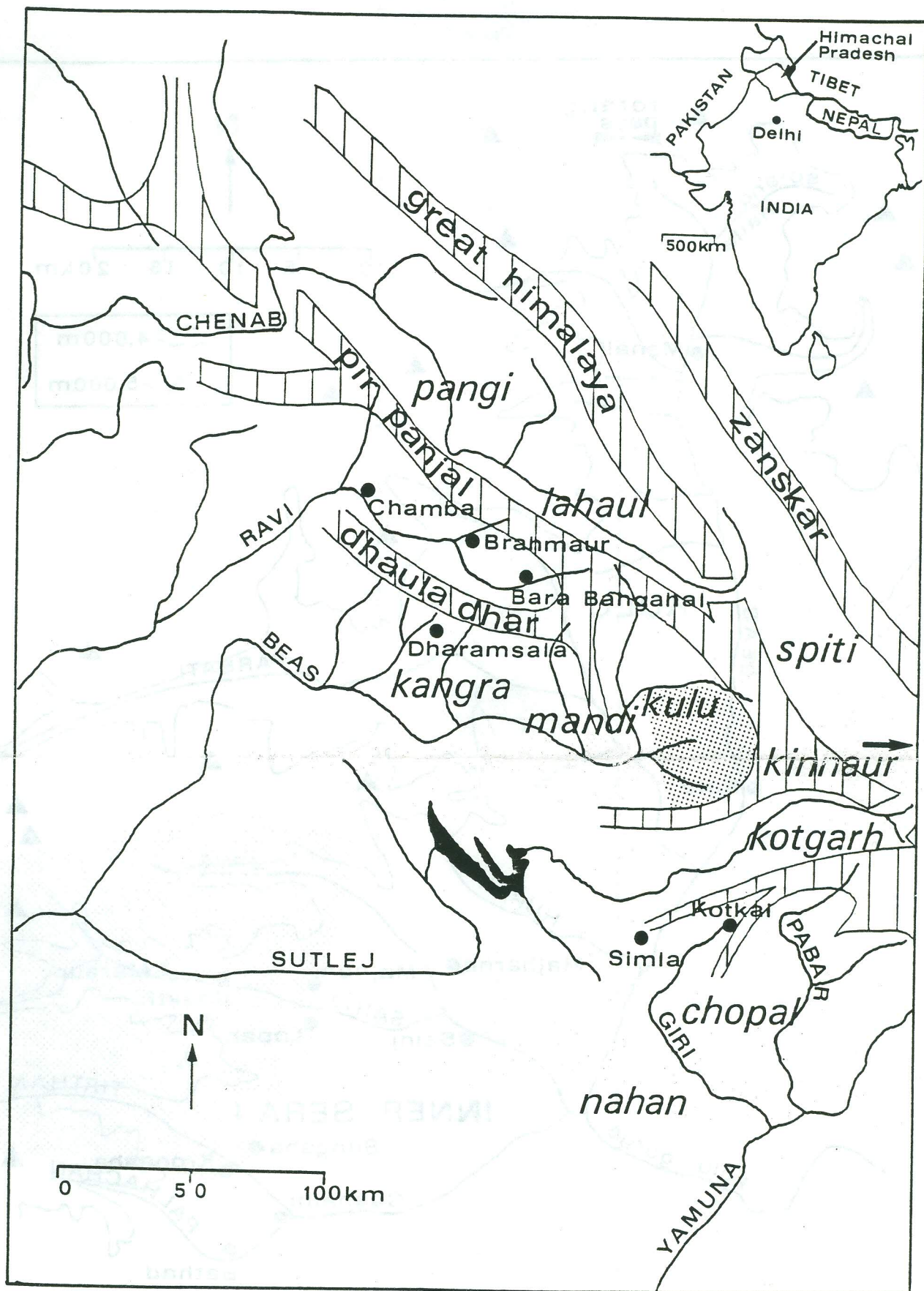


FIG. 1. A map of central Himachal Pradesh (see inset for location in India). The approximate location of the Great Himalayan National Park in Kullu District is indicated by the stippled area.

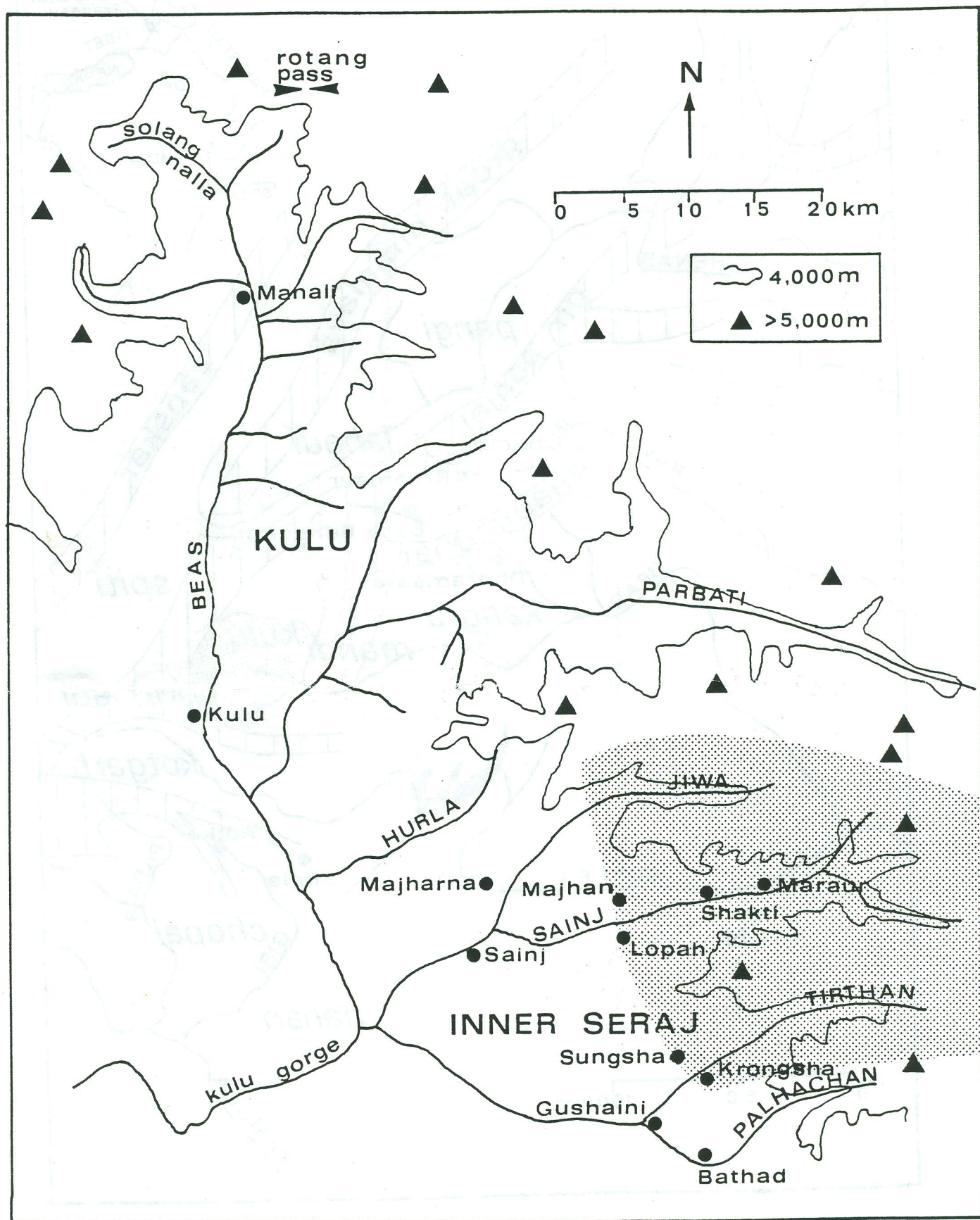


FIG. 2. A map of the upper Beas (Kullu) valley. The stippled area shows the approximate extent of the core area of the Great Himalayan National Park. The buffer zone surrounds it for a distance of 5-15km to the north, west and south. The east is bounded by high peaks and glaciers.

Our original (1983) management proposals for the park were designed to accommodate the long-standing agricultural, pastoral and religious practices of local residents (Garson 1983; Garson & Gaston 1989). We appreciated that without the active cooperation and participation of these people in the running of the park, its long-term protection, management and sustainable exploitation would be impossible. However, in keeping with the legislation relating to India's National Parks, we advocated the relocation of the 16 families living at the villages of Shakti and Maraur in the upper Sainj valley. This would leave the upper Sainj, together with the uninhabited upper Jiwa and Tirthan valleys, as a legitimate core area for the park (Fig. 2).

In agreement with Wildlife Wing staff, we made a number of recommendations about how the core area of the park should be managed:

(i) Displaced families should be given compensation in the form of land and housing nearby in the park's buffer zone, and employment in management or tourism-related activities of the park.

(ii) Only residents of the inhabited buffer zone to the west (Fig. 2) should be permitted to collect minor forest products (e.g. medicinal herbs, mushrooms, bamboo, firewood) there.

(iii) No livestock grazing should be allowed there.

(iv) Religious pilgrimages to the sources of the Sainj and Tirthan rivers should be permitted on an occasional basis, as tradition requires.

(v) Wildlife tourism should be permitted on a small scale there.

(vi) Further ecological research should be encouraged, particularly on the endemic and larger animals, and on the impact of grazing, cutting and burning on the ground vegetation of forests and meadows.

In the buffer zone, we suggested the following additional initiatives, in an effort to increase the level of sustainable self-sufficiency for local residents:

(i) Check posts should be set up at the last villages in the upper Jiwa, Sainj, Tirthan and Palachan valleys, staffed in part by local residents.

(ii) Residents only should have a right to minor forest products and construction timber within this zone.

(iii) Stall-feeding of livestock in the villages should be introduced together with fodder production on village land.

(iv) Social or farm forestry schemes involving the production of firewood and other timber by communities or individuals should be encouraged.

The implementation of several of these recommendations requires the prior revision of the rights of specific families to harvest natural resources, as enshrined in the Settlement (1910) for this area. As 8 years have elapsed since we made our joint recommendations, there is a clear need to review the extent to which they are still desirable and practicable, as well as to assess progress with those that are being implemented.

The U.K. Overseas Development Administration (ODA) recently commissioned a team to prepare plans for a large-scale project on forestry systems in the Kullu and/or Mandi Districts of Himachal. This is scheduled to cover wildlife conservation, reafforestation, social and farm forestry, and livestock management. The team is visiting India for 6 weeks from late April, and will be drafting the full project plan in July 1991. Its members are aware of our previous work, and of this reappraisal visit to the National Park. We hope there will be substantial collaboration between us in future in connection with the conservation of wildlife in Himachal.

Several areas within the original (1983) and expanded (1986) boundaries of the National Park have not yet been subjected to any substantial wildlife survey work. These include the uninhabited upper Jiwa and Hurla valleys (Fig. 2), as well as the headwater regions of both the Sainj and Tirthan valleys. However it is known that the mid-Jiwa contains very dense koklas and monal pheasant populations (Garson & Gaston 1989), as well as cheer, western tragopan, Himalayan tahr and serow (S. Pandey pers. comm.). The Kanawar Wildlife Sanctuary, which lies within the park in the upper Parbati valley, harbours a population of over 100 Himalayan tahr (S. Pandey pers. comm.), making it one of the three most important localities known for this species in India.

Despite still other areas being left unexplored, there is an urgent need to survey some of the areas covered during our previous work either 11 or 8 years ago, in order to re-assess the general status of wildlife in the park. We anticipate that a continuing ban on all hunting, instigated in 1982, should have had a positive effect on the pheasant and ungulate populations in particular.

There have been frequent and reliable reports of bharal herds in the alpine meadows of the upper Sainj and Tirthan, implying that the snow leopard should still inhabit these remotest tracts, which adjoin the Pin Valley National Park in Spiti. There is substantial herb collecting and pastoral activity in these areas during the summer months, the precise extent and impacts of which are unknown. The timing of the fieldwork

proposed below will allow a quantitative study of these activities, as well as a first survey of alpine wildlife populations.

OBJECTIVES

In collaboration with Wildlife Officers in the Himachal Pradesh Department of Forest Farming and Conservation, we expect to undertake the following tasks when in India:

- (i) A review of the present boundaries of both the core area and buffer zone of the Great Himalayan National Park.
- (ii) A review of the objectives and extent of implementation of management policies for both zones of the National Park, including an assessment of its tourism potential.
- (iii) A study of the numbers, origins, permitted status and areas of activity of herb collectors and pastoralists in alpine areas of the Sainj, Tirthan, and adjacent valleys.
- (iv) A survey of birds, mammals and their habitats in areas well covered by previous work (e.g. certain forests in Parbati, Jiwa, Sainj and Tirthan valleys), and in areas not previously visited but suspected of being important (upper Hurla, Jiwa, Sainj and Tirthan valleys).

STUDY AREAS

We have selected 4 main routes across the National Park that will take us through forests and alpine areas visited previously as well as into substantial new tracts of both types of habitat.

- (i) Sainj village - west bank of Jiwa - Jiwa headwaters - Phangchi Pass (4,600m) - Pulga village in Parbati (40km map distance; 8 days**).
- (ii) Garsah village in Hurla - south bank of Hurla - Hurla headwaters - Khauli Pass (3,700m) - Kasol in Parbati (45km; 9 days).
- (iii) Gushaini village in Tirthan - north bank of Tirthan - Tirthan headwaters - return (40km; 8 days).
- (iv) Sainj village - south bank of Sainj - Sainj headwaters - return (60km; 15 days).

** At an average rate of 5km per day, to allow for surveys, interviews, detours and climbs.

METHODS

The present extent of the core and buffer zones of the National Park, and the management policies currently being exercised within them, will be determined through discussions with the Chief Wildlife Warden in Shimla, and with the Director at the National Park Headquarters in Kullu.

During the period of this survey, which follows the monsoon and preceeds winter snowfall, herb collecting in alpine areas is at its peak. Shepherds are moving their flocks down from high pastures to their winter quarters over the same period. Thus, with the assistance of Forest Officers, it should be possible to determine the origins and rights of these people, and to make some independent assessments of harvesting rates and flock sizes. Extrapolations should then allow some estimates of impact to be made.

Wildlife surveys will be carried out using the well-tried methods we and others have employed over the past decade in the Himalayas (Gaston 1980, Gaston et al. 1983). Numbers of male koklas pheasants calling at dawn will be estimated for specific areas of forest, some of which were surveyed in the same way in 1980 and/or 1983. Survey time spent by parties moving along trails will be recorded by date and locality as party.hours within 300m-wide altitude zones from 1,200m upwards. To enable valid comarisons to be made between areas and years, all contacts with large ground-based wildlife species (e.g. ungulates, carnivores and pheasants) will be standardised to an encounter rate per 100 party.hours per altitude zone.

At the site of each contact (observation, call, dropping, scrape, feeding sign, etc.) we will record habitat details in terms of altitude, slope, aspect, dominant canopy tree species, and canopy, shrub and ground vegetation cover, as we have in the past. Other sites will be assessed in the same way every 15 minutes along the routes being taken, to provide an indication of how survey effort is distributed across habitat types. Again this will allow the standardisation of the raw data to correct for unintentional biases. We already have a substantial knowledge of animal tracks and signs from our previous work, but will consult the literature (e.g. Green 1987, Mallon 1991) and its authors when necessary.

All records of all bird species identified will be logged according to date, altitude zone and locality, for comparison with our previous records.

Natural vantage points along trails will be used to describe large areas in terms of dominant forest tree species, grassland and cliff distribution. Photographs will be taken for comparison with near identical views taken by us on earlier visits, or by Professor H.G. Champion, whose meticulous

photographic diaries from the 1920-47 period are available at the India Office Library and Records in London.

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CRITERIA FOR SUCCESS

It is our intention:

- (i) To establish the present boundaries, legal status and management policies in both the core area and buffer zone of the National Park, and to review its tourism potential.
- (ii) To assess the numbers, rights and probable impacts of herb collectors and pastoralists in alpine zones in the core area.
- (iii) To carry out a sufficient set of wildlife and habitat surveys, both in areas visited previously and in new localities, to allow an assessment of the overall value of the National Park in relation to its status a decade ago.
- (iv) To present a report of our findings, together with any agreed suggestions concerning management policies, research priorities and wildlife tourism potential, to the Department of Forest Farming and Conservation of Himachal, the International Trust for Nature Conservation and other interested parties, by 31 March 1992. (An interim report will be produced by 10 November 1991 in India.)
- (v) To publish the results of our work more widely thereafter, in both scientific journals and the international conservation press.

PRINCIPAL INVESTIGATORS

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Qualifications: B.Sc. (Zoology), Edinburgh University 1974
D.Phil. (Zoology), Oxford University 1978

Current employment:

Lecturer in ecology and animal behaviour (since 1980)

Relevant experience:

Joint coordinator of Himachal Wildlife Project (1979-80, 1983).

Director of Uttar Pradesh Cheer Pheasant Project (1985-87).

Ph.D. supervisor for 3 Indian wildlife students (1985-).

Joint coordinator of British Council sponsored link between
U.K. universities and the Centre of Wildlife &
Ornithology, Aligarh Muslim University, Uttar Pradesh
(1990-).

Member of Council and Scientific Advisory Committee of the
World Pheasant Association (IUCN/ICBP Galliform
Specialist Group).

Corresponding member of the IUCN Captive Breeding,
Reintroduction and Caprinae Specialist Groups.

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Qualifications:

B.A. (Physical Anthropology), Cambridge University 1967

D.Phil. (Zoology), Oxford University 1976

Current employment:

Research Scientist, Canadian Wildlife Service (since 1979)

Relevant experience:

D.Phil. research on the ecology and behaviour of babblers
(Turdoides) in India, Pakistan and Nepal (1970-74).

Commonwealth Fellow, University of Calicut, Kerala (1977).

Wildlife surveys in Kashmir, Himachal and Uttar Pradesh
(1978-79).

Joint coordinator of Himachal Wildlife Project (1979-80)

Advisor for research on rare birds of the Western Ghats in
Kerala (1983-).

Leader of wildlife surveys in Himachal Pradesh (1985).

INDIAN PARTICIPATION AND SUPPORT

The opportunity to carry out this follow-up study has arisen because of our 13 year association with the Wildlife Wing of the Department of Forest Farming and Conservation (formerly Forest Department) of Himachal Pradesh. The present Chief Wildlife Warden, Mr B.S. Chauhan IFS, and the present Director of the National Park, Mr S. Pandey IFS, have known us personally for several years, and have pledged their support for this project (see attached letter). They and/or their staff will be members of all survey parties in this project. We anticipate receiving considerable logistic support from the Wildlife Wing, in forms such as jeep transport to remote roadheads, accommodation in rest houses, and the provision of support staff (guards, porters, muleteers, guides and cooks).

Several staff and research students from the Centre of Wildlife and Ornithology, Aligarh Muslim University will be joining the field team for periods of up to a month each. A number of other people, several of whom have worked with us before on similar field projects, have expressed an interest in participating, subject to the necessary permission and granting of leave from their jobs in universities and research institutes in Himachal and elsewhere. For most of the time in the field we expect to have 6-10 people in the team.

TIMETABLE

- 1 Sept PJG arrives at Delhi; liaise with other team members; travel to Shimla
- 3- 4 Sept Liaise with Chief Wildlife Warden, Shimla; move to Kullu.
- 5- 6 Sept Liaise with Director, National Park; move to Sainj
- 7-21 Sept Trek to/from Sainj headwaters (15 days)
- 22 Sept Resupply
- 23-30 Sept Trek from Sainj to Pulga in Parbati (8 days)
 - 1 Oct Move to Kullu; liaise with Director, N.P.
 - 2 Oct PJG moves to Shimla; AJG arrives in Delhi & moves to Shimla.
- 3- 4 Oct PJG, AJG and Chief Wildlife Warden liaise; PJG moves to Delhi.
- 5 Oct PJG leaves Delhi for U.K.; AJG moves to Kullu.
- 6- 7 Oct AJG liaises with Director, N.P.; move to Tirthan (Gushaini).
- 8-15 Oct Trek to/from Tirthan headwaters (8 days).
- 16-17 Oct Resupply
- 18-26 Oct Trek from Garsah in Hurla to Kasol in Parbati (9 days).
- 27-28 Oct Liaise with Director, N.P. in Kullu; move to Shimla.
- 29-31 Oct Liaise with Chief Wildlife Warden over interim report.
- 1- 9 Nov Move to Delhi, prepare interim report.
- 10 Nov Leave Delhi for Canada.