



# caprinae

SPECIALIST GROUP OF THE SPECIES SURVIVAL  
COMMISSION OF I.U.C.N.

# NEWS



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## Editors' Preface

The more I get involved in the conservation of wild caprins, the more surprised I am with the enormous gaps I discover in the information on the status of many Caprinae taxa, not to speak of data on their biology. David Shackleton and I are now despairing of getting enough information on the Snow sheep (Ovis nivicola) for the Action Plan. What to say about Argali (Ovis ammon) subspecies, which conservation biologists claim all should be protected whereas hunting lobbies maintain that some populations can be trophy-hunted? What about even an European animal such as the Pyrenean ibex (Capra pyrenaica pyrenaica) which has reached a status very close to extinction, unnoticed by the majority of conservationists? What about the Red goral (Nemorhaedus baileyi) status and numbers? Can takin (Budoreas taxicolor taxicolor) stand some hunting pressure,

or should it be fully protected? In many cases there are unsound reports, possibly biased; in other cases, political unrest and nationalistic "territoriality" bar the access to first hand (or even second hand) information. The whole picture is all the more confusing, as the taxonomy of Capra and Ovis species/subspecies is still so subjective. The message can be summarised as follows: the world "reserve" of wild caprins is being depleted; wild caprins are very important as (a)- game animals, (b)- meat producers, (c)- landscape features, (d)- valuable research subjects; either sound research to clarify their taxonomic and conservational status, as well as a great improvement in actual management (particularly of Asiatic taxa) are carried out, or we are likely to lose many wild sheep and goats in the next few decades.

The help, which sensible hunting organisations may provide, will prove crucial to warrant a future for Caprinae. Any collaboration with anybody has to be welcomed, if constructive. Of course, hunters - to survive as such - have to be even more strict and conservationist than the protectionists themselves (only fair-sized populations can stand a prolonged hunting regime!): to fake the results of a survey or to be too "liberal" in shooting will certainly not pay to anyone, in the long run. The question is: how many hunters have realised that? When emotions (and economics) get involved, to be rational is not that easy.

S.L.

## 1. Papers and Notes

SOME NOTES ON THE WILD UNGULATES OF THE SAGARMATHA NATIONAL PARK, KHUMBU HIMAL  
(NEPAL)

by Sandro Lovari  
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Over 200 Km were covered on foot in 22 days to search for wild ungulates in the Sagarmatha National Park (Mt. Everest), in September 15-October 7, 1989, from about 2000 m up to almost 6000 m a.s.l. The survey started from Lukla,

continuing through Namche Bazar, Thangboche, Pangboche, Pheriche, Lobuche, Gorak Shep, Kala Pattar, back to Pangboche, Phortse, Nhahla, and then back to Phortse, Khumjung, Namche Bazar, Benkar and Lukla.

The tahr, Hemitragus jemlahicus, was the most common caprin. Its altitudinal distribution, assessed from sightings and pellet presence, ranged from 2700 m to about 4500 m a.s.l. The most densely populated area (27 ind./Km<sup>2</sup>) was located between Pangboche and Phortse, at almost 4000 m, in the SE aspect. Group size (median: 5; range: 1-53; N=9) was larger there than in the neighbouring territories, between Phortse and Khumjung, where the tahr was also fairly common (median group size: 4; range: 1-7; N=7). The tahr population, the size of which has been conservatively estimated at no less than 300 individuals, showed a very poor reproductive rate: 0.18 (n. kids/n. mature females) in the former area; no kid was seen in the latter or in other areas of the park. Such a finding is all the more surprising as the survey was carried out at the end of the monsoon, i.e. when all kids are supposed to be born (cf. Schaller 1973). Some females looked in poor shape, in spite of the lush vegetation. The heavier snow falls of the previous winter (about 150 cm of snow depth; normal depth: 90-100 cm; S.N.P. Authorities ex verbis) may have negatively influenced the conditions and reproductive success of females.

Although no attempt was made to estimate the numbers of musk deer, Moschus chrysogaster, dung piles and footprints of this elusive ungulate were met very frequently, from Benkar to Pangboche and to Khumjung, over an area of at least 8-10 Km<sup>2</sup>, from 2700 m to about 4000 m a.s.l. Three individuals were sighted, respectively near Yaral, Phortse and Khumjung.

A sighting, north-east of Thengboche (3867 m a.s.l.), was the only record of the serow, Capricornis sumatraensis, during the whole survey. No dung piles nor marking signs on trees were met. Probably this goat-antelope is uncommon and localised in the scarce broad-leaf forest of the park. On the other hand, no gorals, Nemorhaedus goral, nor goral sign were seen.

A group of two sambar does, Cervus unicolor, with two fawns were sighted at 3740 m a.s.l., north of Thengboche, SE aspect. This sighting is apparently the first of sambar in the park (Fanindra Raj Kharel, ex verbis).

No sighting, footprint or scat of any larger mammalian predator was recorded. The snow leopard, Panthera uncia, occurred in the park till the 1960's and wolves, Canis lupus, are said still to visit the park territories (Fleming, undated), but I cannot confirm the presence of either species.

The expedition was funded by the Italian National Research Council and the Gruppo Efim, under the aegis of the Ev.-K2-CNR. B. Musi and R. Menardi helped at all stages of the survey.

#### References

- Fleming R.L., Jr. (undated) The natural history of the Everest area. A summary. Background Paper for Heart of Himalayas Conserv. Progr., pp. 1-30. Mimeo.
- Schaller G.B. 1973. Observations on Himalayan tahr, Hemitragus jemlahicus. J. Bombay Nat. Hist. Soc. 70: 1-24.

#### STATUS OF THE GORAL (Nemorhaedus goral) IN HIMACHAL PRADESH, INDIA

by Paolo Cavallini

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To determine distribution and status of Nemorhaedus goral in the state of Himachal Pradesh, India, a field survey was conducted during October-November 1989. Of the 29 Wildlife Sanctuaries and 2 National Parks of Himachal Pradesh, the following were visited and goral abundance was evaluated through indexes based on sightings and droppings:

-Gangul-Siya-Behi: very high grazing and poaching pressure; goral either absent or very scarce

-Kalatop-Kajiar: low disturbance; wildlife (including goral) abundant

-Nargu: very high grazing pressure and scarce suitable habitat; no goral signs recorded

-Great Himalayan National Park: disturbance generally low; goral common, also outside the Park



- Bandli: low disturbance; goral very common
- Shikari Devi: high disturbance; goral either absent or very scarce
- Majathal Harsang: low disturbance; goral extremely common on two very steep, grassy slopes (totaling about 25 Km<sup>2</sup>)
- Shimla Water Catchment Area: almost completely undisturbed; goral fairly common
- Chail: very high anthropic impact; goral present
- Renuka and Simbalbara: covered by thick tropical scrub; goral common in both areas, but limited to steep slopes.

No active goral was seen between 8:00 and 16:30, while the highest numbers were observed just after the sunrise. This pattern suggests a crepuscular (and possibly also nocturnal) activity. Moreover, most of the goral seen (61.4%) were moving and 11.4% were standing still, while only 4.5% were grazing or browsing. This tend to support the idea of a nocturnal feeding activity, preceded and followed by crepuscular movements from and to the resting grounds.

The mode group size of the observed goral is 1, but groups of 2 and 4 were also common; only one large group (9 goral) was observed. No goral was seen on slopes less than 60° (N=61). The lowest altitude at which gorals were observed during this survey was around 500 m a.s.l. (much lower than previously reported) with the highest densities under 2000 m, in areas little surveyed by other researchers. On the other hand, my results agreed with data in the literature in pointing out a preference of goral for very steep areas, possibly as an anti-predator strategy. In fact, in all the areas where goral was common (Kalatop, Great Himalayan National Park, Bandli, Majathal, Chail, Renuka, Simbalbara), I also found signs of leopard (Panthera pardus). My data therefore suggest that the main habitat requirement of goral is the presence of steep slopes, together with low snow depth and low human disturbance.

From the present survey, it appears that the goral in Himachal Pradesh is fairly common and widely distributed. Furthermore, its presence also outside the sanctuaries appeared likely and was often reliably reported. The three sanctuaries in which no goral sign was recorded (Gangul, Nargu and Shikari Devi) are characterized by high grazing and probably poaching pressure, higher than

average altitude and thus probably snow depth. More detailed research is clearly needed to assess the relative importance of these factors. Goral habitat, however, is fragmented, especially at the lower limits of the distribution. This might threaten in the long run the survival of some isolated population.

A full paper has been submitted to a scientific journal for publication.

#### THE GORAL OF BINSAR WILDLIFE SANCTUARY, NORTHERN INDIA

by Maurizio Locati

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In March 1987, I had the opportunity to visit Binsar Wildlife Sanctuary, Almora District, Uttar Pradesh, Northern India, to investigate the local population of goral (Nemorhaedus goral goral). The Sanctuary is approximately 70 sq Km in size and is between 1000 and 2500 m asl. The area is characterized by steep slopes, covered mainly by Rhododendron arboreum and Quercus leucytrichophora, with rock outcrops and very small grass meadows. It is one of the few, virtually untouched areas of the Himalayan foothills, with a marvellous view of the Nanda Devi massif.

Besides goral, the sanctuary contains leopard, jungle and fishing cats, yellow-throated marten, sloth bear, langur, rhesus macaque, muntjak (Muntiacus muntjac) and wild boar (Sus scrofa). There are also about 200 species of birds including kalij and chir pheasants, satir tragopan, and many species of raptors and vultures. Goral were previously common throughout the region, in fact the main estate, in what is now the sanctuary, is called Goralkot - the fort of the goral! Hunting and habitat loss through grass cutting and timber harvesting are probably responsible for the goral's decline outside the protected area. These two factors were probably responsible also for the local extinction of serow (Capricornis sumatraensis), Himalayan tahr (Hemitragus jemlahicus) and red panda.

The number of goral thought to inhabit the sanctuary is around 250 indivi-

duals, which is a very healthy population for present-day India. During my stay, I found not surprisingly that direct observations of goral were difficult because of the dense vegetation of the forest understorey and the natural shyness of the animals. However, in 12 days I managed to make 7 observations which included 2 single individuals, 4 different mother-young pairs, and a chase involving 2 adult goral. The relatively frequent sightings of females and young (born the previous year) is interesting, and hopefully indicates a healthy, possibly even an expanding population. I also recorded differences in habitat utilisation between goral and muntjak. Goral appeared to prefer "mountain" habitats - steeper slopes with patches of rock and grass, with good visibility, while muntjak were most often associated with wooded terrain - gentler, grass and shrub covered slopes, and less visibility.

The success of Binsar Wildlife Sanctuary is entirely due to the efforts of Miss Mukti Datta, the Honorary Warden who was its instigator. Not only did she propose that the sanctuary be formed, but she has ensured its success by mounting an education campaign for the local residents explaining the need to stop hunting and harassing the animals, and reducing exploitation of the area. Binsar needs more help than one person can give (e.g. park wardens, equipment and funds from the government) to ensure continued protection for its goral and the other important wildlife species it contains.

#### BIGHORN SHEEP OF MT. ALLAN AND THE 1988 WINTER OLYMPICS. A FOLLOW-UP

by Jon T. Jorgenson  
Alberta Fish & Wildlife Division  
Calgary, Alberta, Canada

Calgary's hosting of the Winter Olympics involved a decision to build a new ski area on Mt. Allan. Mt. Allan was also the winter range for a herd of approximately 150 bighorn sheep. In 1985, the Alberta Fish and Wildlife Division began a study of the bighorn population in preparation for the Olympics to be held 3 years later. The purpose was to initially gather baseline data on popula-

tion size, productivity, survival, and seasonal distribution one year prior to the opening of the area to public skiing and then continue the monitoring over the Olympics and 3 years hence.

Thirty four bighorns were captured with 21 being radio collared. Lambing areas were identified and seasonal closures put in effect on designated hiking trails traversing these sensitive areas. During winter, the majority of sheep range was located on the rearside of the mountain and mostly isolated from activities associated with skiing. We did, however, identify some areas of concern which involved direct harassment of sheep by people and helicopter overflights.

To mitigate these concerns, access to areas where sheep-human conflicts were likely to occur, were closed to all but essential personnel. In addition, strict rules were put into effect regulating aircraft activity in the immediate vicinity of Mt. Allan. A feeding program was also initiated whereby hay was slung by helicopter and provided as required. The objective here was to provide the sheep with a higher than normal source of protein during the period of Olympic events and also to act as an incentive for sheep to remain on the rearside of the mountain.

Despite the large crowds and media coverage during the downhill portions of the Olympics, few problems were encountered regarding harassment of the bighorns. Olympic related activities were restricted to the venue and the bighorns had the relative solitude of their winter range as a retreat. Some harassment inevitably occurred (mostly by the media) but it was not felt to have any negative consequences. The population size, productivity, seasonal distribution, and survival of animals have remained much the same now (2 years post Olympics) as they were prior to the games.

The key factor, more responsible than any other for the survival of this herd, has been the geographical locations relative to one another of the ski area and the winter range. As long as they remain separate and skiing activities are not allowed to encroach on the winter range, the bighorn herd and ski area should be able to co-exist on the same mountain.

## 2. Miscellaneous

### IBEX TAXONOMY AND CONSERVATION

I (Sandro Lovari) have received a letter from Roland Wirth (IUCN Mustelid and Viverrid Specialist Group - Chairman) upon my sending copies of Caprinae News to him. I think he raises a very interesting point. I quote the following from his letter, as I would appreciate comments from readers (also in view of the preparation of our Action Plan).

"In various papers in the newsletter Nubian ibex C. ibex nubiana and Siberian ibex C. ibex sibirica were mentioned. I very strongly feel that both these forms -Nubian ibex and Siberian ibex- each consists of more than one subspecies.

For example, Nubian ibexes from Israel (and I have seen many of them, both in various zoos as well as in the wild) are usually a sandy colour, old males occasionally are only slightly darker. Ibexes from Sudan, on the other hand, are always a very dark brown - there are many animals of this subspecies in Munich zoo, deriving from two different shipments at different intervals. Likewise an occasional "Sudanese Nubian" ibex still exists in US zoos.

Zoo personnel in the USA (as well as in Munich) recognize that the two look quite different in colour (and possibly also horn shape), but in the USA interbreeding has occurred on the basis "that even though they look different and come from different geographic regions, they have the same subspecies name and hence must be the same". This, of course becomes problematic when reintroduction projects are considered, and - as you may know, San Diego zoo has recently sent Nubian ibexes to Saudi Arabia for reintroduction. As far as I know, the animals sent from San Diego were pure Israeli stock, but the question remains whether the original Saudi stock is the same as the Israel stock and whether there is any remnant population left in the reintroduction site.

Turning to the Siberian ibex, you may know the captive stock in various zoos, which usually is a dark grey-brown colour. In Shanghai zoo, however, I saw a wild caught male which was a very light sandy yellow colour with whitish face markings and also a somewhat different horn shape. I clearly feel that over this vast area from the Himalayas to Inner Asia there must be more than one subspecies and the modern lumping them all together is wrong or based on too

little material.

As I notice with satisfaction that you share my concern over extinction through hybridisation I feel you should split taxonomically as much as possible as a basis for the Action Plan. Better to preserve two populations that later may turn out not very distinctive, rather than miss the opportunity because of lack of full understanding of the real genetic diversity.

With best wishes,

Yours,

Roland Wirth"

#### WWF Calls for Doubling of Tropical Forest Protected Areas

A new policy from WWF call for at least 10% of the world's tropical forest to be protected within national parks and nature reserves by the year 2000. Currently, less than 5% of tropical moist forest is protected in this way.

Other WWF targets for tropical forest conservation include:

- The entire international tropical timber trade should be based on biologically sustainable management techniques by 1995.
- Recognition of the land rights of indigenous forest-dwellers.
- Rapid action by the International Tropical Timber Organization (ITTO) to establish a network of modal forest sustainability of logging concessions, set targets for implementation of sustainable timber production practices, and to develop plans for reducing wasteful consumption of tropical timber.
- Adoption of measures by the European Community, Japan and the US - the world's largest consumers of internationally traded tropical timber - to regulate tropical timber imports in favour of sustainably produced products.
- A fundamental revision of the Tropical Forest Action Plan (TFAP) to take fully into account the need for conservation of tropical forests.

"These measures represent an emergency programme aimed at saving at least a fragment of the tropical forests that now remain on earth." Adam Markham, WWF's Campaigns Officer.

For further information:

"Tropical Forest Conservation: A WWF International Position Paper" available free from Judy Gentis, WWF International, CH-1196 Gland, Switzerland.

Also, you can contact: Adam Markham/Soh-Koon Chang, WWF International, CH-1196 Gland, Switzerland.

WWF - World Wide Fund for Nature

Press Release:

23 October 1989

The World Conservation Monitoring Centre, Cambridge, UK

During the process of compiling data for the Caprinae Action Plan, we have used the facilities generously made available by the World Conservation Monitoring Centre (WCMC). We felt that C.S.G. members might be interested in learning more about this organization - you may find it a valuable source of information, or you may wish to contribute information to the Centre's database. What follows is a brief introduction to WCMC taken mainly from information supplied by the Centre.

According to Dr. R. Pellew, Director of WCMC, the role of the World Conservation Monitoring Centre is to form "the central repository of data on the world's biological diversity". It was formed under an agreement among IUCN, WWF and UNEP - the three partners in the World Conservation Strategy. Its mission is to support international programs for conservation and sustainable development by providing reliable scientific data on the biological diversity throughout the world.

WCMC is currently developing an integrated relational database on plant and animal species of conservation value, habitats of conservation concern and sites of high biological diversity, the world's protected areas, utilization and international trade in wild species, and a conservation bibliography.

Users of the WCMC's data files range from journalists to government agencies, non-government-conservation organizations, and industry. Users who can afford to



pay are charged, though much WCMC obtains much of its data in two-way exchanges of information.

The WCMC's database and personnel were of invaluable help when I was compiling sections of the Caprinae Action Plan. In particular, Jane Thornback's mammal data files and the Protected Areas Data Unit (PADU), were especially valuable sources. One of the purposes of the Action Plan is to try to provide a catalogue of all protected areas where wild Caprinae are found.

Unfortunately, data are simply not available, even from the countries concerned because adequate wildlife surveys have not always been made.

Because most conservation decisions are made at national or local levels, one of WCMC priorities is establishment of National Conservation Data Centres in developing countries to support national conservation and development projects.

It is in these last two areas that C.S.G. members may be able to play a role by contributing data to WCMC. Biological and conservation information is always required to develop, maintain and update the WCMC's database. If you wish to contribute information, act as a resource contact in your country, or receive more information about WCMC, write to:

Dr. Robin Pellew  
Director  
World Conservation Monitoring Centre  
219c Huntingdon Road  
Cambridge CB3 0DL  
United Kingdom

CONSLINK: a BITNET Based Electronic Conference and Bulletin Board on all Topics of Biological Conservation

Organizations world-wide are attempting to address the urgent conservation challenges of the coming decade, particularly in the humid tropics where the global forecast is so alarming. Time consuming communication between conservation agencies, field workers, and innumerable other individuals and institutions is a major encumbrance to the rapid response to crisis situations.

We have established a bulletin board that will feature data files with "hot"

news items, conference and workshop listings, grants and fellowships, position vacancies, current bibliographies, and other topics, all related to the general field of biological conservation. Up-to-date information for the bulletin board will be generated by a permanent electronic conference based on the international computer network BITNET. Conservation messages, queries, and remarks of any participant will be electronically routed to every other participant, who can then reply individually or to the whole conference. Items of general interest will be taken from the ongoing discussion, edited, and posted on the bulletin board.

CONSLINK can be reached through electronic mail from international academic and commercial computer networks that have a link to BITNET. Participating in CONSLINK is free of charge. If you are interested, please get in touch with us at the address below, preferably via electronic mail. Ask your e-mail consultant how you can send a message to our BITNET address.

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#### Update on the Caprinae Action Plan

The Caprinae Action Plan will be more than a series of recommendations for Caprinae conservation. Like the African Antelope Plans, it will attempt to provide a global survey of Caprinae. We have had to do this just to find what species, subspecies or populations are at risk, because unlike for some species,

this information was simply not available. This has added to the time that the plan will take to produce, and deadlines for information and Country (i.e. National) Reports have been pushed back. However, we are optimistic about meeting the deadline for the final draft discussed in Camerino last September (see Caprinae News No. 4, October 1989), though perhaps mid to late 1991 will be more realistic.

To date, the count of the number of countries to be covered in the Action Plan stands at 59, possibly even 63.

As compiler, I have been writing as much of each Country Report as I possibly can to minimize work for authors.

Information on conservation and protected areas was obtained during 2 weeks at the World Conservation Monitoring Centre, Cambridge (see article, this newsletter), while the rest of the time is spent writing enumerable letters in the hope that someone will reply AND be willing to provide information. An unfortunate fact of life is that many Caprinae live in areas where armed conflicts occur which only adds to the overall problems for biologists working in these countries.

Forty-five Country Report drafts have been compiled, 28 of which have been sent out as of 20/4/90. We have agreed authors for 19 of these. Progress - but still a long way to go! The response of people providing information so far has been excellent and much appreciated.

Although I have written to at least one potential contact in each country, we are having great difficulty obtaining ANY information on wild Caprinae from the following:

Albania	Burma	Chad
Iraq	Kampuchea	North Korea
South Korea	Lebanon	Libya
Mali	Mauritania	Sudan
Syria	Tunisia	North Yemen
South Yemen		

If you have any recent, reliable information on wild Caprinae in any of these countries, OR if you know of people who could supply this information, please,

let me (David Shackleton) know IMMEDIATELY. Besides the above countries, reliable information from both China and the U.S.S.R. is also proving difficult to obtain - and not only for the forest dwelling species.

Your response to our request in the last Caprinae News for photographs for the Action Plan has been overwhelming - we have received NONE - please, if you have good photographs of wild Caprins, even if in a zoo, PLEASE send them to me as soon as possible!

Val Geist and I are in the process of applying to WWF-Canada on behalf of the C.S.G., for financial support to produce the Plan. We are specifically seeking funds to help cover costs of printing the photographs, as we hope to make the Plan well illustrated. If any other C.S.G. members wish to do the same, either with their own country's branch of WWF or other funding bodies, please do so. All we request is that that you keep Sandro and Dr. Simon Stuart informed (Species Programme Officer, Species Survival Commission, IUCN Headquarters, Avenue du Mont-Blanc, CH-1196 Gland, Switzerland). Dr. Stuart can also provide you with information on costs which you may need for your budget proposals.

One last, but most important point for C.S.G. members to bear in mind, is that our task does not stop when the Action Plan is published. Instead, our work BEGINS with the Plan's publication - we must do our utmost to ensure that as many of our recommendations as possible are actually carried out. If not, this whole exercise will have been wasted, and the function of the C.S.G. must be questioned.

David M. Shackleton  
Compiler, Caprinae Action Plan

#### Donation from Japan

Some 200 US \$ have been kindly donated to the Caprinae Specialist Group by the Conservation of Japanese Serow, Agency of Cultural Affairs, and by the staff of the Department of Environmental Science & Conservation, Tokyo Noko University. This donation will be used to cover mail costs. We thank the donor very much.

A conference on species/subspecies taxonomy and C.I.T.E.S.?

Val Geist has written to me (S.L.) to suggest that a conference on species/subspecies taxonomy in relation to C.I.T.E.S. listing ought to be organised. He rightly points out that correct labeling is so critical, so are correct methodologies to assess relationships in systematics. I shall appreciate if other SSC-Specialist Group chairmen will let me have their opinion (and possibly volunteer to set up the meeting!).

3. CORRECTIONS TO C.S.G. MEMBERSHIP LIST

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ALSO

The existence of this newsletter depends upon the potential contributors' answer to the call for material!

Contributing material may be sent to either of the Editors.

(S.L. & D.M.S.)

