Conservation in Ladakh's Hemis National Park: Predator and Prey

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Recently I revisited some of the areas that we surveyed during the 1985-86 Indo-U.S. snow leopard project in northern India. ISLT had helped support this study along with the Wildlife Institute of India and the U.S. Fish and Wildlife Service. In Ladakh, lying to the north of the Himalaya Mountains and not far from India's northwestern border with China (Tibet). I discussed with local wildlife protection officials the progress of conservation in the region and visited parts of the recently established Hemis National Park. ISLT identified Hemis as a critical reserve for snow leopard conservation and will work to aid local conservation actions.

Recently several changes have affected wildlife management agencies in Ladakh and, indirectly, management of protected areas and snow leopard conservation. In separating from the Forest Department, the state's Department of Wildlife Protection has reorganized and created new staff positions that include Wildlife Wardens for each of Ladakh's two administrative districts. Leh and Kargil. Early in the summer of 1991. Mr. P. K. Singh of the Indian Forest Service was appointed Wildlife Warden for Leh. which includes jurisdiction over Hemis National Park and other protected areas. Mr. Singh and ISLT look forward to working together to promote snow leopard conservation and will work to aid local conservation actions.

Two wolves came over the 17,000 ft. ridge line and trotted easily down the wide expanse of open meadow high above the Zanskar river gorge. As if by magic the meadows suddenly came alive for hundreds of yards around the wolves as marmots scrambled out of their burrows. stood high on their hind legs and sent out high-pitched whistles warning each other of the wolves' presence. Thus found out. the wolves made no overt attempts at trying to catch any marmots and wended their way slowly down past grazing yaks. which looked seemingly unconcerned about these well-announced predators.

These two wolves stayed around the high meadows for two days. perhaps more successful at catching marmots at other times than when we saw them. We found no sign of kills made of either wild animals or the domestic yak. sheep. or goat herds in the vicinity. In many areas of Ladakh wolves are considered a greater menace to domestic animals than are snow leopards and special traps are constructed in the attempt to catch them.

Elsewhere along our route. especially at the edges of cliff bottoms in the steep canyons and rock outcrops on the ridges. we found characteristic scrape marks of snow leopards in the dirt. During our four days in the high country we saw a total of about 65 blue sheep. the main wild prey of snow leopard and wolf in this region. On our journey over the 16,000 ft. pass and down to Rumchung village the following day. we surprised at close range an allmale group of24 blue sheep. some with large horns indicating relatively old age of close to 15 years. Farther down we passed the Rumchung people's summer grazing camps and then. about 4 km above the main village. came to the highest fields of barley.
and hay (approx. 14,200 ft.) where various "scarecrows" had been set up to try to discourage the blue sheep from eating the crops.

Although used for only part of the year, small stone huts near the barley fields and grazing camps are very important in protecting domestic sheep and goats from nighttime predator attacks. The Jammu and Kashmir Department of Wildlife Protection recently instituted a pilot program to aid villagers in constructing wire and metal bar protected windows on their indoor livestock pens to prevent access by snow leopards. Because these efforts are proving successful, National Park authorities hope to expand these efforts to other villages within the park; and several conservation organizations, including ISLT, are looking at this project as an effective avenue of support. Thus, along with other efforts, such as a proposed conservation education display room in the main town of Leh and the continued monitoring of wildlife populations. ISLT hopes to contribute toward helping local agencies promote snow leopard conservation. Another aim is to create conditions whereby livestock herders can continue to share the rugged mountains with snow leopards.

Hemis Park: Eastern Parts

Areas in the eastern portion of Hemis range from the extremely rugged mountains of the central Zanskar range to the rolling high plains and mountains of the Tibetan plateau. It is spectacular country of high mountains and wide valleys, very different from the gorges of the western park and, although 10,000 ft. higher, will remind Americans of the dry mountains in parts of Wyoming, Utah or western Colorado. The residents of the area, known as the Khurnak region, are semi-nomadic pastoralists with permanent stone winter houses in some of the lower valleys, at about 14,500 feet (see cover photo). These Khurnak people and the nomads of the Rupshu region farther east maintain a number of seasonal camping areas where most still live in traditional black yak-hair tents and graze their livestock during summer in the surrounding mountains which rise to a snowline of about 19,000 ft. and peaks of over 20,000 feet.

I journeyed for about a week in this new eastern extension of Hemis National Park. When on 27 August, I traveled over the 16,300 ft. Yar La pass into the Chang Chu drainage (and into the national park), I happened to cross paths with most of the Khurnak people making their seasonal move in the same direction back to the Chang Chu after spending the summer grazing their yaks, sheep, and goats in the higher, more open country farther east.

Looking into Hemis National Park from its eastern boundary at the Yar La pass at an elevation of 16,300 ft. (photo by J. L. Fox)

You may imagine my surprise and appreciation of these people's hardy way of life on my being awakened by the sound and sight of hundreds and hundreds of yaks and horses loaded with families and their possessions crossing this pass at dawn, having left their camp hours earlier in darkness. Some were returning to autumn grazing areas directly above their winter villages, whereas others would later cross this pass again before the winter snows to return to other winter villages.

In the upper Chang Chu drainage I saw 9 kiang (Tibetan wild ass) in small groups on the open slopes, representing the westernmost extension of this species' range in Ladakh. There was also some evidence of the presence of blue sheep and the endangered Tibetan argali, another true wild sheep. Wolves are probably the most common large predator in the open valleys of the upper Chang Chu; whereas snow leopard sign became much more common as the Chang Chu valley narrowed to the west and entered a steep canyon. Blue sheep were sighted within the lower, very rugged part of this canyon which forms part of the core area of the park.
The Khurnak people continue some hunting of the wild sheep, primarily with old matchlock muskets and dogs, as was apparent from interviews with local travelers and from evidence of animal remains in hunting camps. Apparently the wild sheep here are somewhat more wary of humans than in other parts of the park where they are less hunted or harassed; although the hunting is probably minimal and good populations of the wild sheep may still be present. Proper surveys of the status of these prey species of the snow leopard need to be conducted by Ladakh's Wildlife Department staff. This work is most effectively performed during winter when the animals are at relatively low elevations and easier to count. Because temperatures typically fall below 0°F (-18°C), proper field clothing and equipment for park staff is an absolute necessity. ISLT hopes to be able to help provide such equipment.

Tourism

Although part of the state of Jammu and Kashmir, Ladakh is not currently directly affected by the political unrest occurring in the Kashmir valley near Srinagar. Still, tensions remain high between Buddhists and Muslims in Ladakh following outbreaks of civil disturbance in 1989. As a result, tourism in Ladakh has fallen off dramatically in the past few years, from over 20,000 foreign tourists in 1988 to about 6,000 in 1991. A relatively high proportion of the tourists that do come now are trekkers who maintain a steady stream through Hemis National Park. Although a few travelers still
come to Ladakh via Srinagar and the disturbed Kashmir valley. A significant change in overland transportation has occurred in the past two years with the opening of the previously closed (for military reasons) Leh-Manali road which goes east and south from Leh over the Himalayas via several passes of 16,000-17,500 ft. to the state of Himachal Pradesh, far from the disturbances in Kashmir. The opening of this road has created the opportunity for new tourist trekking routes, with an increasingly popular one being between the northeastern corner of Hemis through its newly expanded eastern portions to meet the Leh-Manali road along the Tsarap river.

I traveled along part of this trekking route, passing small groups of tourists almost daily. Clearly the number of visitors to the park should be monitored, along with the assessment of other land uses throughout the area. The new Wildlife Warden for the Hemis Park, Mr. P. K. Singh, will work extensively to arrange the staffing and infrastructure of the newly reorganized Wildlife Department in Leh district, including positions related specifically to the park and the above needs. We wish him the best of luck and look forward to cooperating with him wherever possible in the conservation of snow leopard in this unique national park of India’s far north.

In densely forested valley bottom within the core area of Hemis National Park, blue sheep were seen on the slopes and abundant snow leopard sign was found in the valley. (Photo by H. L. Fox)