

Government of Sikkim Office of the PCCF-cum-Secretary Department of Forest, Environment and Wildlife Management Forest Secretariat, Deorali, Gangtok –737102, Sikkim

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Yongzokdrak Blue Sheep Conservation Zone

In exercise of the powers conferred by sub-section (8) of section 35 of the Wildlife (Protection) Act, 1972 (53 of 1972) the State Government hereby makes the following notification:-

1. Background and Need

It is essential to have zonation of protected areas for their effective management. Protected Areas should be zoned according to values in smaller pockets not necessarily as large cores, but a mosaic of smaller, manageable cores, spread in an area with tempered human use. Other zones for incentive programmes such as community based ecotourism need to be defined and set aside. The smaller cores should act as 'source' populations for sustaining wildlife populations of endangered species outside.

2. Aims and Objectives

Conservation of the globally endangered Blue Sheep (*Pseudois nayur*) population – the flag ship species of the high altitude alpine ecosystem, and its habitat along with other high altitude flora, fauna, glaciers and alpine ecosystems at Yongzokdrak in West and North Sikkim by declaring 56 square kilometers of the Khangchendzonga National Park (3.14% of the total area of KNP) as the Yongzokdrak Blue Sheep Conservation Zone (YBSCZ).

3. Conservation Importance and Values

Located at the northern tip of the Onglaktang valley, due north of Sungmoteng Tsho (Samiti Lake), beyond Jemathang, one has to cross the 4800m high Gochela pass to descend into the Yongzokdrak meadows. These meadows are hidden between glaciers and form amongst the last refuge for the globally endangered Blue Sheep in West Sikkim. Yongzokdrak is the sacred rock (Naydo) of Sikkim (notified by the Sikkim Government) and Guru Padmasambhava meditated here on the way to Tibet. These are amongst the best summer pastures in KBR with a high abundance of nutritious fodder like Sun buki (Kobresia capillifolia) and Harkat (Carex sp.). There is abundant supply of water too, in the form of a number of small lakes. This meadow is bounded by Talung glacier towards the North, Pandim mountain towards the east, Kabur Mountain towards the west and the Forked Peak towards the South.

The presence of abundant and nutritious fodder plants coupled with abundant water availability make them the most valuable summer pastures of KNP. No wonder these meadows are packed with horses, dzos and sheep during summer. These meadows are an ideal habitat of the globally threatened Blue Sheep and other high altitude flora and fauna.

This habitat is also critical for the apex predator of the Himalayas - the snow leopard (*Uncia uncia*), wolf (*Canis lupus*), Himalayan yellow throated marten (*Martes flavigula*), Himalayan golden eagle (*Aquila chrysaetos*), Lammergeier (*Gypaetus barbatus*), Snow partridge (*Lerwa lerwa*), Snow pigeon (*Columba leuconata*), Tibetan snowcock (*Tetragaolus tibetanus*) and others.

4. Baseline Habitat Survey during summer of 2005

Vegetation sampling was conducted during late July and August based on 10 (1 X 1 meter quadrate) sample plots with the sampling stations at Panchpokhri. This alpine landscape can be categorized as follows:

S. No.	Landscape Property	Value
1	Habitat Type	Sedge Meadow
2	Aspect	North east
2	Biotic Pressure	Traditionally grazed by sheep and over the last ten years by pack animals (horses and dzos)
3	% vegetation cover	95 %
4	% cover of palatable plants	75% dominated by Sun buki (Kobresia capillifolia)
5	Species richness (no of species per sample plot of 1m ²)	7
6	Valuable fodder plants	Sun buki (Kobresia capillifolia) and Harkat (Carex nivalis)
7	Evidence of key wildlife (direct and indirect evidence)	Blue Sheep, direct sighting
8	Valuable medicinal plants	Bhutkesh (Anemone sp.) and Sharmaguru (Lomatogonium sp.)

At Samiti Lake, (Sungmteng Tsho) there is a trekkers hut of the Tourism Department. Samiti Lake and its environs are prime habitat for the blue sheep. We found about ½ kg of pellets of blue sheep right inside this trekkers hut. During inclement weather the blue sheep have been using this hut specially during the trekking off season.

In 2005 there were about 80 pack animals (Dzos and horses) and 200 sheep grazing in these rich meadows during summer. Also the survey team came across two herds of blue sheep at Chetruke and Panch Pokhri having a total population of 52, including 8 lambs in this conservation zone.

During the winter habitat survey in January 2006 the survey team came across two herds of blue sheep at Lamune and Zemathang having a total population of 50 in this conservation zone.

5. Existing legal status, threats and gaps

The Yongzokdrak Blue Sheep Conservation Zone (YBSCZ) falls within the Khangchendzonga National Park which is notified under the Wildlife Protection Act -1972 and the globally endangered Blue Sheep (*Pseudois nayur*) is the flagship species, which is protected under schedule I of Wildlife Protection Act-1972. But just assigning high legal protection status is not sufficient unless the existing threats are reduced and gaps plugged.

Many mountain ungulate populations, important prey of carnivores, are being depleted and lost due to competition with livestock, as well as hunting for meat. Overgrazing by dzo, horses and domestic sheep and presence of sheep herders during summer are the current threats from pastoralism. Overstocking rangelands with livestock is causing vegetation degradation, which threatens the sustainability of pastoral production as well as the survival of wildlife populations. There are increasing linkages between local persecution of wildlife and the larger illegal wildlife

trade. Seasonally migrating livestock herds, as well as livestock imported into the region for the tourism enterprise pose a serious risk of spreading exotic diseases to wildlife. Also unplanned tourism threatens sensitive and biologically important high altitude wetlands.

During the Winter Habitat Survey conducted in January 2006, the survey team came across a trap laid for snaring blue sheep using salt as bait at Yangzee.



Yongzokdrak meadows packed with Dzos

The impacts of these threats can be seen by observing the behaviour of Blue Sheep which have become very shy and the whole herd bolts at the slightest hint of human presence.

There are a number of glaciers originating from the Gochela, Kabur, Pandim, Narsing and Tingchen Khang. The affects of global climate change can be detected in the retreat of these glaciers, and now there are huge boulders, stones and chunks of ice along the glaciated valleys.



Receding Onglaktang Glacier

The glaciers have receded not only up the valley but also almost half way up the mountain face.

6. Boundaries

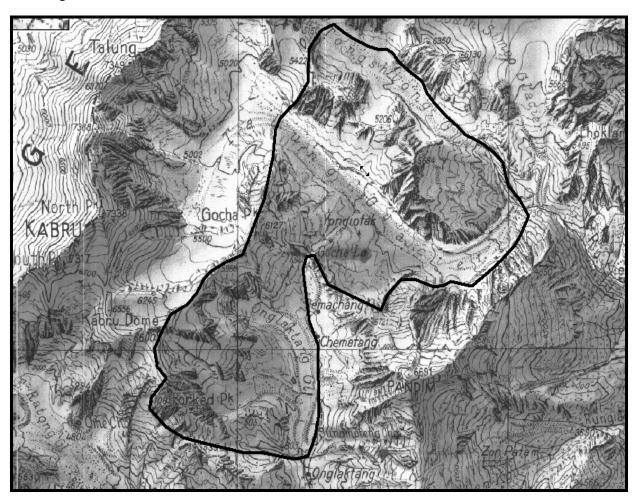
Declaring this area within the KNP, with the following borders as a Yongzokdrak Blue Sheep Conservation Zone

North	Starts from the ridge on the northern flank of Talung glacier and	
	continues due east along the north eastern flank of Talung glacier	

East	Starts from the north eastern flank of Talung glacier and continues along the ridge westwards till it reaches the Gochela pass from where it proceeds due south along the ridge trekking trail above Gochela pokhri, Jemathang, Teen kune Pokhri till it reaches Sungmoteng Tsho (Samiti Lake)
South	From Sungmoteng Tsho it follows the outlet of the lake till it meets the Prek chu river and then moves due west along the ridge till it scales the Forked Peak.
West	From Forked Peak it follows the ridge due north till it reaches Kabur Dome peak, from where it moves due west and descends behind Kabur dome into the Talung glacial valley and follows it till it reaches the base of Gochela peak. From here it follows the 5200 m contour and joins the northern flank of the Talung glacier.
Total Area	56 square kilometers (3.14% of the total area of KNP)

This conservation zone includes the areas around Samiti lake, Jemathang, Onglaktang glacier, Teen Kune Pokhri, Gochela Mountain, Pandim Mountain, Kabur Dome Mountain, Forked Peak Mountain, Chetruke, Panch Pokhri, Yongzokdrak and Talung glacier.

7. Map of the conservation Zone



8. 3-D Satellite Image of the Conservation Zone



9. Key Issues in the Conservation Management Plan

(A) Conservation Initiatives

- (1) Publicity of these regulations by installing adequate signages at Yuksam, and near the trekker's huts, camping sites and the conservation zone.
- (2) Informing the travel agents, tour operators, trekking service providers, herders, panchayats, JFMC/EDC, Himal Rakshaks and NGOs about these regulations.
- (3) Capacity building of field staff of forest department, travel agents, herders, pack animal operators, Himal Rakshsaks, Panchayats, JFMC/EDC and local NGOs.
- (4) Annual census / survey of the population, distribution and status of blue sheep and other indicator flora and fauna in this conservation zone shall be conducted.
- (5) Encourage focused conservation and recovery programs for endangered species
- (6) Regular patrolling jointly with the local community, JFMC/EDC and Himal Rakshaks especially during monsoons and winters should be conducted to ascertain instances of poaching, status of other threats and controlling them.
- (7) Setting up of a wildlife intelligence network
- (8) Involvement of reputed NGOs in wildlife research, conservation and monitoring

(9) These conservation initiatives should be incorporated into the existing schemes and programmes of the Khangchendzonga National Park and Khangchendzonga Biosphere Reserve in order to provide adequate funds for implementation of this zonation and conservation management plan.

(B) Conservation Regulations

- (1) The conservation regulations shall be enforced by the forest officers in coordination with the Ecodevelopment Committees (EDC), Joint Forest Management Committees (JFMC) and Himal Rakshaks.
- (2) Other than forest officers, the Ecodevelopment Committees (EDC), Joint Forest Management Committees (JFMC), registered Non Governmental Organizations (NGO), Himal Rakshaks and the trekking service providers shall be authorized to detect offences under these rules and arrest the offender if there is reason to believe that he will abscond. Any person so arrested shall be handed over forthwith to the nearest forest/wildlife office.
- (3) Movement of pack animal (horses, dzos and yaks) beyond Lamune [towards Samiti Lake (Sungmoteng Tsho)] is prohibited.
- (4) The trek from Samiti Jemathang Teen Kune Pokhri Gochela Pass is permitted only upto Teen Kune Pokhri. Movement of tourists and support staff is permitted only up to Teen Kune Pokhri.
- (5) No camping by tourists is permitted within this conservation zone.

(C) Legal provisions and penalty

- (1) Owners of pack animals (horses, dzos and yaks) who enter into this conservation zone shall be punishable with a fine which shall not be less than five thousand rupees but may extend to ten thousand rupees apart from the compensation for the damage caused. Provided that in case of a subsequent offence the fine shall not be less than ten thousand rupees and may extend to twenty five thousand rupees apart from the compensation for the damage caused and the concerned pack animal operator shall be banned from entering in the forest areas of the state for a period of five years.
- (2) If tourists or their support staff trek beyond Teen Kune Pokhri or camp within the conservation zone then the concerned travel company organizing the trek or in its absence the group leader of the trekking party (hereinafter referred to as "trek manager") shall be punishable with a fine which shall not be less than five thousand rupees but may extend to ten thousand rupees apart from the compensation for the damage caused. Provided that in case of a subsequent offence the fine shall not be less than ten thousand rupees and may extend to twenty five thousand rupees apart from the compensation for the damage caused and the concerned "trek manager" shall be banned from trekking or organizing trekking in the forest areas of the state for a period of five years.

- (3) The compounding officer shall include all forest officers not below the rank of a block officer. The compounding officer may order reward to be paid to a person who renders assistance in the detection of the offence or apprehending the offender out of the sum of money accepted as fine not exceeding twenty percent of such money. The compounding officer may meet up the expenditure incurred for detecting the offence and apprehending the offender out of the sum of money accepted as fine not exceeding twenty percent of such money.
- (4) These provisions shall apply in addition to the laws relating to forests, environment, wildlife and biodiversity.

Sd/-

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