

In this sweeping view—with Prem Kumar, a park game scout shown resting on the trail—one can see Sagarmatha (Everest) at the extreme left, Lhotse, and Ama Dablam. Photo: D.L. Golobitsh

NEPAL'S PARK FOR THE HIGHEST MOUNTAIN

by P.H.C. Lucas

The highest mountain in the world is Nepal's incomparable Sagarmatha, "Mother of the Universe," an overpowering presence in a region of major natural and cultural significance.

Since it was first seen by western eyes in 1852, and no doubt for centuries before that, Sagarmatha, or Mount Everest as it is also known, has been accorded a special status. Gautama Buddha himself was born almost in its shadow, and over the years the great peak has inspired and fascinated millions.

It has also been an unconquered challenge to many a keen mountaineer, rebuffing all attempts until its massive 29,028 feet (8848 m) succumbed to Sir Edmund Hilary and Sherpa Tensing on May 29, 1953. But, in the words of Author Tukehida Kazami, 'you do not have to climb a mountain in Nepal to experience the beauty of the country. There is something indescribably delightful in just wandering around the countryside, the great mountains towering

above you.' Ranging from the sub-tropical forests of the Terai to the great peaks of the Himalayas in the north, Nepal, with a land area of only 54,300 square miles (140,637 km²) and a population of 11.5 million can boast some of the most spectacular natural areas in Southern Asia, with a variety of flora and fauna almost unparalleled elsewhere in the region.

Throughout the world, national parks have served for over a century to preserve and protect for the benefit and enjoyment of mankind examples of the world's most outstanding natural areas and wildlife. Many of these areas are, of course, major attractions to both local and international tourism. The concept of national parks has been adopted with enthusiasm by His Majesty, King Birendra Bir Bikram Shah Deva of Nepal, while their establishment as a conservation policy and as a means of stimulating tourism, an industry of growing economic importance to Nepal, was facilitated by the passing of Nepal's

'National Parks and Wildlife Conservation Act, 2029'.

First National Park

Several years ago the FAO and UNDP in co-operation with the Government of Nepal set up the National Parks and Wildlife Conservation Office (NPWCO) in the country's capital of Kathmandu. This Office was responsible for drafting the legislation and also the identification of several park projects.

Royal Chitawan National Park in the lowlands of the Terai, essentially a park established to conserve indigenous wildlife—including the dwindling populations of tiger and rhinoceros—was the first park officially constituted in Nepal. Development commenced about 1973.

Proposals in the NPWCO for a national park and other conservation measures in the Khumbu region, including Mount Everest, had been developing for some time. Arguments advanced in justifying the establishment of a national park in this area were (Blower 1972):

"1. As the highest point of Earth's surface, Mt. Everest and its surroundings are of major significance not only to Nepal but to the whole world, and its status as a National Park would bring international prestige and support to the country.

"2. Khumbu is already an important tourist area and its importance does not show any signs of decline. The scenic and wilderness values which are its major attractions must be protected from further exploitation and ill-judged commercial development. This can only be safeguarded through positive management based on sound conservation principles.

"3. The depleting forests of Khumbu are not only of aesthetic value but are vital for the people of Khumbu as a source of fuel and building material. They also play an important role in conservation of soil and water, and harbour much of the wildlife.

"4. As an ecological unit in the highest region of the world, the Dudh Kosi drainage is of much scientific value and offers unique research fields to scientists throughout the world.

"5. The area is of major religious and cultural significance in Nepal since it abounds in holy places like the Thyangboche monastery and also is the homeland of the Sherpas whose way of life is unique compared to other high altitude dwellers."

The region of the park

The Khumbu lies in the lap of the Himalayas. It is situated in the North Eastern region of Nepal in the Solu-Khumbu District of the Sagarmatha Zone.

Essentially, the Khumbu encompasses the upper

catchment of the Dudh Kosi river system and is bounded on the north by the international border with the Tibetan region of the People's Republic of China. The Dudh Kosi catchment, which is roughly fan-shaped, is enclosed to the north by the massifs of Everest and Cho Oyu with their subsidiary peaks and glaciers and to the east and west by lesser ranges rising to 6,000 or 7,000 m and extending roughly at right angles to the main divide. It thus forms a distinct geographical unit enclosed on all sides by high mountain ranges. The Park covers an area of approximately 1243 km² (500 sq. miles).

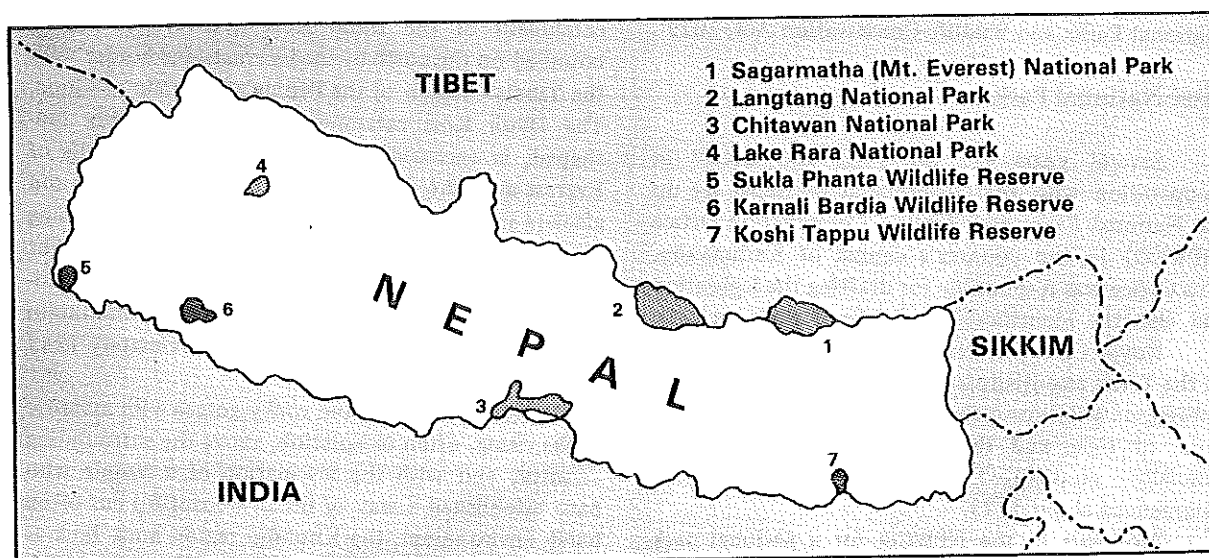
Broken by deep and rocky gorges with majestic peaks rising, often in isolation, above the surrounding country, and with the fascination of a people who have established a way of life in a beautiful but often harsh environment, the Khumbu region must rank as one of the most attractive and interesting anywhere to visit, especially as its complete absence of roads is in marked contrast with more developed areas of the world.

Apart from the scenic values of the area, the Khumbu supports vegetation and animal life which add to the justification for establishing a national park. The blue pine (*Pinus excelsa*), fir (*Abies spectabilis*) and fir-juniper (*Juniperus recurva*) forests between 2,800 m and 3,900 m give way to birch-rhododendron woods (*Betula utilis*, *Rhododendron campanulatum* and *R. campylocarpum*) which are found mostly between 3,600 m and 4,200 m. Between 4,000 m and 4,700 m the dominant vegetation is juniper-rhododendron scrub (*Juniperus wallichiana*, *Rhododendron anthopogon* and *R. lepidotum*). The highest limit reached by a rhododendron (*Rhododendron nivale*) is about 5,200 m. Above this, small scrubby plant communities are found to an altitude of about 6,000 m.

The mammal population of the Khumbu is very low and this is attributed directly to the activities of man in changing the forest habitat. However, wild mammals known to be present are the snow leopard, black bear, red panda, wolf, weasels and martens, Himalayan mouse hare, Himalayan tahr, blue sheep, goral, serow, musk deer and langur.

In contrast, the Khumbu is relatively rich in bird life including the blood pheasant, ruddy sheldrake, white-capped redstart, Himalayan dipper, Himalayan ruby-throat, snow pigeon, tufted pochard, jungle crow, red and yellow-billed choughs, and lammergeier.

Nepal envisaged potential economic benefits in establishing Sagarmatha (Mt. Everest) National Park and there is no doubt that this status rightly identified the region as one of the great scenic areas of the world and further enhanced its attraction as a tourist destination. The decision, in principle, in 1973 to establish the park was announced by the King's brother, His



Royal Highness Prince Gyanendra, at the World Congress of the World Wildlife Fund in Bonn in October 1973. The Park was officially gazetted in July 1976.

Bilateral aid

Over recent years there has been growing interest among other countries in the national parks and reserves system developed in New Zealand, as well as in the country's potential to provide experts to assist in park projects, including training of park personnel. This is in line with the New Zealand Government's external aid policy.

New Zealand's experience in mountain land management and His Majesty's Government's past favorable experience with New Zealand aid no doubt were among the factors which led to an approach to the Government of New Zealand for bilateral aid to establish Sagarmatha National Park. The New Zealand Government responded initially by sending to Nepal in May 1974 a three-man appraisal mission led by the author, then Director of National Parks and Reserves for New Zealand and a member of IUCN's International Commission on National Parks. N. D. Hardie, a leading mountaineer with considerable Himalayan experience and a member of the Arthur's Pass National Park Board and R. A. C. Hodder, Environment Forester with the New Zealand Forest Service, were the other members of the New Zealand Mission. They were assisted greatly by Hemanta R. Mishra of Nepal and Melvin Boulton of the NPWCO. Together they inspected all the major areas proposed for inclusion in the park and available to the public, covering some 193 km on foot and visiting Thame, Gokyo, the

Everest Base Camp (approx 5400 m) and Chukhung. The outcome was a series of recommendations to the two Governments, one of which related to the sending of a New Zealand expert to serve as project manager to help plan Sagarmatha National Park and associated conservation programmes inside and outside the park and also to supervise the establishment of prototype facilities in an attempt to solve the developing conservation problems.

Environmental deterioration

The aesthetic and scientific reasons for using the national park concept to protect scenery and natural plant and animal life hold good in the Khumbu. But perhaps the greatest justification for the park was the vital social and economic need to call a halt to the environmental deterioration that was occurring.

Tourism is a major industry and an important foreign exchange earner for Nepal as well as one of the main sources of Sherpa income. Since a policy of facilitating tourism was adopted by His Majesty's Government, the number of foreign tourists visiting the Khumbu has increased from 20 in 1964 to about 4000 a year at present. Although relatively small, this number is significant because the park is a 12-day walk from a road.

Traditionally the Sherpa people (population about 3000), who live along the valley of the Dudh Kosi and its tributaries in the Khumbu have practised forest conservation but this unfortunately has lapsed in the face of growing pressures from an increased flow of immigrants and refugees with their yaks and sheep, and an increased demand for structural timber and

fuel-wood because of tourism, trekking and mountaineering expeditions. The result has been overgrazing of pine scrub and the forest floor as well as of grassland and also serious inroads into the limited timber resources in an area of high altitude and low productivity.

Overgrazing has led to heavy depletion of the vegetation in many areas leaving a remnant cover less capable of holding the soil. Early stages of erosion are much in evidence, the result not only of overgrazing but also of forest depletion.

Increasing numbers of visitors of all kinds were certainly bringing economic benefit to the people of the Khumbu but their impact on the natural resources and the tourist routes, where there were virtually no sanitation and rubbish disposal facilities, was also sowing the seeds of environmental and economic disaster. However, the establishment of the Khumbu area of Nepal as a national park meeting international criteria, with environmental safeguards established in the park and the adjoining environmental buffer zone, is expected to save the area from further modification of the vegetation and the various pollution and erosion problems.

New Zealand project manager

Co-operation between New Zealand and His Majesty's Government of Nepal in the field of nature conservation and preservation was agreed to with an overall aid program of \$ NZ 300,000 for a five year period being established. Gordon Nicholls, formerly Supervisor of National Parks with the New Zealand National Parks Authority, was appointed Project Manager and left New Zealand in May 1975 on a two-year assignment to work with the Nepalese Government on the establishment of the park.

One of Gordon Nicholls' early involvements was to commence building a park centre on a knoll above Namche Bazaar, the last 'big' town before Everest Base Camp. Construction is in the natural stone of the region and the site has commanding views of the valley below the Khumbu region, Everest and other peaks. Bruce Jefferies has succeeded Gordon Nicholls, and with his Nepali counterpart is concentrating on establishing an effective park administration.

For visitors to the park, an accommodation and camping complex has been built. Located at Thyangboche, the complex comprises an accommodation lodge, camping facilities, kitchen water supply, toilets and rubbish disposal amenities.

As the complex is in intimate contact with the park environment, landscaping will ensure that the visual impact blends pleasantly with the Himalayan background.

In many ways very encouraging support is being received from the Sherpa community. The tree replanting program is under way in and around the villages in the park buffer zone. Young trees planted during the last two years have survived well. The result of these conservation efforts will, it is hoped, go a long way towards ensuring that the approach to the park is as inviting as possible.

Significant progress has been made on the legislative and administrative aspects of the park's establishment. Boundary definitions have been decided while a draft management plan is being prepared and park regulations (by-laws) which will apply to all Nepalese mountain national parks have practically reached finality and will be published shortly.

Associated with New Zealand's park project efforts in Nepal itself is the training in New Zealand of young Sherpa men from the Khumbu. Training in both the practical and administrative aspects of park-management is given. These trainees on return will become the administrators and wardens of the park that preserves and protects the natural environment of the highest mountain in the world - to the Nepali, Sagarmatha, 'Mother of the Universe'.

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