

Qomolangma National Nature Preserve in Tibet

Full Text:

The Qomolangma (pronounced Cho-mo-lang-ma) National Nature Preserve (QNNP) encompasses a large area along the northern slopes of the world's highest peak in Xizang, or Tibet, as it is more commonly referred to in the West. This internationally significant protected area was formally established on March 18, 1989 with the goal of conserving the unique natural and cultural heritage of the Mt. Everest ecosystem in environmentally sound, culturally viable, and economically feasible ways. The project resulted from close cooperation between the Working Commission (WC) of the Qomolangma National Nature Preserve of the Xizang (Tibet) Autonomous Region of China, the Chinese Academy of Sciences, and the Xizang Academy of Social Sciences. Partial long-term support is provided through The Mountain Institute (TMI), an international non-governmental organization, which is based in Franklin, West Virginia. These parties have agreed to an innovative 12-year program to protect this 33,819 km² area in southern Tibet and enhance the lives of people in that region by improving their mountain economies, while also protecting the fragile mountain environment. The Preserve extends over four counties in Shigatse (Xigaze) Prefecture, and is inhabited by approximately 80,000 people, of whom more than 95% are Tibetan.

The complex ecosystems of Qomolangma Nature Preserve stretch across the northern slopes of the Himalaya, an area which contains five of the world's highest peaks - Qomolangma (Mt. Everest), Lhotse, Makalu, Cho Oyu, and Shishapangma (Xixabangma) - along or near the international border with Nepal. Precipitous cliffs and rugged gorge terrain, inhabited by snow leopard (*Uncia uncia*) and blue sheep (*Pseudois nayaur*), lead down from these peaks to densely forested river valleys of exceptionally high temperate and sub-tropical biodiversity. Five valleys cut through the Himalayan chain, funneling warm air currents and monsoon rains northward from the Indian Ocean into the edge of the arid Tibetan Plateau. The pristine Kama Valley contains the highest known forests in the world, at elevations of some 4,300 meters. Here there are soaring virgin stands of oak, larch, fir, rhododendron, and birch which have amazed early explorers and modern-day botanists alike. To the north, the Tibetan plateau contains representative ecosystems of the high, cold, semi-arid Central Asian steppe as well as numerous lakes and wetlands of extraordinary beauty. The largest lake is Pegu Tso (Paiku Co), with a water area of 300 km² that mirrors the snow-clad peak of Shishapangma to the south. The seas of grass which blanket portions of the plateau sustain numerous rare species of wildlife, including the black-necked crane (*Grus nigricollis*), Tibetan wild ass (*Equus kiang*), wolf (*Canis lupus*), and Tibetan gazelle (*Procapra pitiacaudata*). Fertile grasslands line the Pung Chu (Peng Qu) and its tributaries, and it is in these river valleys that most of the agriculture and animal husbandry of the region are concentrated.

Two major bio-geographic zones - the Xizang plateau and the Himalayan highlands - meet in QNNP to create an exceptional variety of habitats supporting biodiversity of global importance, including a number of rare and endangered species. Eleven first-class protected wildlife species and 22 second-class protected wildlife species of China are known to exist within the Preserve. Preliminary botanical surveys indicate the presence of at least 17 protected plant species.

Geologic treasures also abound within QNNP. Marine sediments more than 10 kilometers thick trace the evolution of the Himalayan region over a time span of more than 500 million years. During the great uplift and mountain-building of the last 30 million years, the Tibetan plateau emerged from the sea, first as a warm coastal lowland, but eventually reaching its present-day elevation, which has earned it such nicknames as the "Roof of the World", or the earth's "Third Pole". This dramatic uplift and climate change is richly documented by such fossils as those of the three-toed horse *Hipparion* unearthed in Nieruxiong La, the alpine oak fossils from Shishapangma, and other plant fossils from Yalah.

Human activity in the region began at least four or five thousand years ago, as indicated by the recent discovery of tools from the Neolithic Period in an ancient site in Yalah. Contemporary Tibetan peoples maintain a traditional, unique, and colorful culture. Monasteries date back as far as the 7th century A.D. and include such renowned sites as Rongbuk (the highest monastery in the world), Paba monastery in Kyirong (Jilong), and the caves where Milarepa and other Tibetan high monks meditated or preached. The great tombs of the Turfan Dynasty from the eighth century lie in Chana township. Forts built between the ninth and eleventh centuries, the great wall of Riwu, the massive ruins of Shegar (one of several relics of the war with Nepal in the 18th century), are all part of the important cultural and historic heritage of QNNP.

Living amidst this dramatic setting are hardy Tibetan nomads and farmers whose rich cultural tradition and subsistence livelihood depends upon sustainable coexistence with nature. Their traditions are indeed a treasure as precious as any natural or historical riches of the Preserve; however, faced with poverty and a marginal subsistence livelihood, both their traditional way of life and the natural environment of the region are vulnerable. Therefore, socio-economic development including initiatives in health, education, agriculture, animal husbandry, and economic opportunities in the growing tourist industry are essential components of the conservation strategy for the Preserve. Through their participation in planning, conservation and sustainable development, the Tibetan people hold the key to the preservation of the area's unique natural and cultural heritage.

Qomolangma National Nature Preserve is contiguous with Nepal's Makalu-Barun National Park and Conservation Area, Sagarmatha (Mt. Everest National Park) and Langtang National Park, in effect offering protection to an even more vast ecosystem (in excess of 40,000 km²), by linking and allowing for genetic interchange between various sub-populations of thinly spaced and widely roaming carnivores like the snow leopard. From the beginning QNNP and Makalu-Barun were designed to build collaborative partnerships between local people and government, culture and nature, economy and environment, scientists and practitioners, and the people on both sides of the international border. A series of transboundary exchanges are proposed for the coming year, with support from TMI and the John D. and Catherine T. MacArthur Foundation. These will focus upon important transboundary issues like the promotion of ecotourism, as well as park management concerns that transcend boundaries such as wildlife migration, wild-fires and poaching.

