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**OBSERVATIONS IN THE MIDU
AND PO TSANGPO VALLEYS,
SOUTHEASTERN TIBET**

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**Unnamed peaks on the north side of the Po Tsangpo Valley,
Southeast Tibet.**

OBSERVATIONS ON THE MIDÜ AND PO TSANGPO VALLEYS, SOUTHEASTERN TIBET

On the seventh of May, 2006, we made our way up the short Midü Valley¹ in Southeast Tibet, working through an old growth poplar stand, the thick trunks of many trees twisted and knobbed, and then clambering over rocks, some decorated with bright orange lichens, to reach the crest of a small terminal moraine at 3780m/12400ft elevation. Here we were totally surprised to find the snout of the local glacier only a kilometer or so to the south of us.



Poplars amid birches and conifers at 3350m/11,000ft in the Po Tsangpo Valley.

That morning we had risen early in the Pomi (Bomi) in the Po (Parlung) Tsangpo Valley intent on seeing the topography and vegetation patterns of the region. Initially, after poking around the fringes of town, we started east, passing fields and valley-floor forest, the latter composed of oaks and two species of pines along with a scattering of poplars and willows. Dark spruces grew at lower levels on adjoining north-facing slopes with firs higher up and, in contrast, oaks covered lower south-facing slopes but these changed to conifers as altitudes increased. Farther east, and thus farther up the valley, the floor narrowed and forest colors on terraces or alluvial fans came in the light bronze of newly emerged poplar leaves amid swaths of light green birches, the lot punctuated by slim, dark spruces or firs. Throughout the day the magnificent scenery stunned us.



An unnamed peak on the south side of the Po Tsangpo Valley.

After driving east along the Po Tsangpo River for about 80 kilometers, we turned south and parked our vehicles near Midü, a village that occupies a terrace at 3660m/12,000ft. On foot beyond Midü, we passed some fields on our left and then walked up a rock-filled streambed edged with numerous Sea-buckthorn (*Hippophae*) bushes. Rocks included flat slates, deep red sandstones, multicolored meta-conglomerates, banded gneisses and white granites. Besides *Hippophae*, a few barberry and rose bushes as well as isolated poplars clung to slope edges just off the valley floor.



A meta-conglomerate near Midu village.

Sea-buckthorn berries and rose hips doubtlessly form part of the winter diet for birds resident in this valley. Around the village we saw several Prince Henri's Laughing-Thrushes (*Garrulax henrici*) as well as one White-



A Gray-backed Shrike (*Lanius tephronotus*) in a willow near Pomi.

throated Redstart (*Phoenicurus schisticeps*). There was also a Gray-backed Shrike (*Lanius tephronotus*), a non berry eater that had already

arrived from its winter quarters. Above the village we noted no bird activity, not even the call of a Red-billed Cough (*Pyrrhocorax pyrrhocorax*), a sound that often echoes from cliffs at these elevations. The beginning of May was perhaps a little too early in the year for bird activity and, besides, our mid-day visit was hardly in prime bird activity time.

Beyond the stony flats of the open valley, we entered the remarkable stand of poplars (likely *Populus ciliata*), the trees blanketing the head of the valley and edging up the adjoining south-facing mountain slope and lower reaches of the moraine and a scattered layer of low junipers grew amid the poplars. Single, very old poplars, or small clumps of poplars are a fairly



Lance Craighead in the Midu poplar stand.

common sight in the Himalayas, especially near temples or at the edge of villages. And, at suitable elevations, stands of youngish to medium age poplars are seen on outwash fans or along stream edges. But a stand of obviously old trees filling most of an upper valley at 3660m/12000' is unusual. It could well be that at one time, forests of this type were common within a narrow altitude belt and ecological niche but as valleys filled with people, the poplars, which are easy to cut, could have been felled for firewood and other purposes. Thus this Midü Valley stand might represent a rather rare condition, this state to be confirmed or disproved after collecting and collating further data.

From the top of the terminal moraine, we could see dark, conical conifers growing well up the mountain slopes but had a hard time judging the altitude of the tree line. By using distant yaks as a measure and utilizing notoriously inaccurate line-of-sight guessing it appeared to us that the highest-growing trees, on the west facing slope we were examining, might be at an elevation of about 4420m/14,500ft.

Villagers told us that Blue Sheep occur on some of the open slopes on the valley's flanks but we did not see any. However, we did find a small, bleached skull, possible of a young Blue Sheep, and saw large, round, ungulate droppings. Curiously, down in the main Po Tsangpo Valley, we saw no signs of mammals - either alive or as road kills. Considering the extensive vegetation that occupies that area, we had expected to note more activity.



Orange lichens at 3750m/12,300ft growing on a moraine rock already coated with an orange chemical [?] wash.

Here, on the crest of the moraine, we were in the unnamed mini-range of the Kangri Garpo² that rises south of the Po Tsangpo Valley. The small stream that drains the Midü glacier cuts through the moraine and passes the poplar forest and Midü village to empty into the Po Tsangpo River just west of the Ranwu Lakes. The latter lie due north of the Zayu district near the India-Burma border and north north-west of extensive Putao Valley, a

well-known landmark of Burma (Myanmar). Coordinates for the western end of the lakes are approximately $29^{\circ} 28.50'$ N and $96^{\circ} 38.36'$ E. Looking



The view of the Midü Glacier from 3780m/12400ft the last terminal moraine.

south and towards the peaks that rose to over 6000m/19685ft, we were surprised to see how little, and apparently how recently, the local glacier had moved back. From the time of first recorded observations in the Himalayas and adjoining areas, most glaciers have been in considerable retreat. For example, large terminal moraines of many Nepalese glaciers (likely dating from the last glacial maximum) often lie hidden under forests at elevations as low as 2900m/9514ft, while their ice snouts currently cling to steep slopes as high as 4900m/16,076ft. The Langtang Valley to the north of Kathmandu, for instance, was once filled with ice but now the main glacier has melted back to about 4900m, leaving a forest-covered terminal moraine below Ghore Tabela at an altitude of below 3050m/10,000ft.

A few Himalayan glaciers, especially in Hunza in the Karakoram, have shown minor advances in recent times (see Miller, page 101-103) and traffic on the Karakoram Highway, a roadway completed in 1975, has been

affected by activity of the Gulkin and Batura glaciers. In addition, the glaciers on this northern side of the Kangri Garpo mini-range also appear to be exceptions to the general rule. These glaciers, including the Midü and the Lhagu, one of the longest in Southeast Tibet, appear to be responding to a weather regime that is wet enough to replenish snow in the glacier catchments and cold enough to slow melt. This is not surprising given the nearly continuous cloud cover and the copious precipitation of the region. While we were not involved in a glacial survey, we do hope that others are watching these rivers of ice and will issue reports in due course.



Houses of Midü village are constructed largely from wood, 3660m/12,000ft.

The primary livelihood of Midü villagers is farming and yak herding. But one can foresee the region could become a fine base for hosting visitors for day-trips to the glacier, especially as villagers are trained and trails developed. The main Po Tsangpo Valley is flanked by spectacular mountain scenery and fine forest but it does not offer a close look at a glacier, while the Midü Valley does. Moreover, the village is located just a short drive south of the surfaced Lhasa to Sichuan road. Developing an infrastructure and charging fees could considerably benefit the community as long as the income goes towards projects selected by the community

and is not siphoned off to businesses located outside the region.

Indeed, the overall Po Tsangpo Valley, with the river flowing mainly north north-west and collecting water from much of the main Kangri Garpo uplift, has considerable ecotourism appeal. At its lowest point, where the river joins the Yarlung Tsangpo near Namcha Barwa, the vegetation is warm temperate with many subtropical elements and then, as one ascends the Valley, the biomes shift to fully warm temperate, cold temperate, and mountain tundra.

The splendidly sited town of Pomi, the former capital of the region, lies on a terraced bank at 2743m/9000ft and today is the main administrative center for the county. Residents look out at slopes covered with oaks and pines that indicate the neighboring mini-range blocks some moisture from the south to create a partial rain shadow from which Pomi benefits.



Downtown Pomi, 2740m/9000ft, near daybreak on the morning of 07 May 2006.

Until recently Pomi was a timber center but with changed perceptions and activities in the Tibet Autonomous Region, tree felling in the area is now restricted to local use. However, the developing Four Great Rivers

Environmental Protection Plan foresees regulated and supervised logging in designated multi-use zones and thus Pomi is likely to again become, in part, a wood products town.

In addition, the Environmental Plan also envisions promoting mountain tourism and ecotourism in suitable areas of Southeast Tibet. Pomi is well placed to take advantage of these activities. On our short visit to the area we found a delightful yellow-flowered ground orchid and saw yellow *Pipanthus* blooming along the edges of fields. Birds were active and we noted several Prince Henri's Laughing-Thrushes, Spotted Laughing-Thrushes (*Garrulax ocellatus*), and White-collared Blackbirds (*Turdus albocinctus*) near the town.

One can envision ecotourism outfitters in Pomi, connected to the outside world via the internet, supplying equipment and guides for day trips as well as for strenuous multi-day camping excursions into the valleys that drain from the north. After specialized training, local folks would be capable of helping visitors locate and identify wild flowers, birds, and other natural history features. Rafting on selected portions of the river is another potential.

The weather of the Valley could be a major challenge for outdoor enthusiasts. However, precipitation levels are moderated by the rain-shadow effect and careful preparation and planning should help avoid most difficulties. We experienced splendid weather so that birds, wild flowers, and dramatic peaks were easily seen and tracking these weather windows to understand how often, and exactly when, they occur will be important.

To be at the moderate elevations of the Po Tsango Valley on a clear day is a mountain experience with few parallels and worth a very special effort to use the natural resources of the Valley while preserving the beauty of the region for generations yet to come.

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Footnote 1. The valley, peak, and glacier are named after Midü, the one village in the valley.

Footnote² The mountain jumble that rises immediately northeast of the Great Himalayan and Trans-Himalayan ranges does not seem to have a widely recognized name. This uplift rests on the Eocene or Lhasa Block between approximately 93 to 98 degrees east longitude and 28 and 31 degrees north latitude. The northern and eastern edges of this high terrain drain into the Salween River (Nu Jiang) while waters from the southern sections flow into the Po Tsangpo and the Zayul rivers [the latter reaches Assam as the Lohit]. In the extreme southeast, streams fall into the upper Irrawaddy (Ayeryarwady) watershed.

In his excellent book on the geography and mountain history of SE Tibet, T. Nakamura divides this uplift into three parts: Nyainqentanglha West, Nyainqentanglha East, and Kangri Garpo. The latter is a spur that projects to the southeast while Nyainqentanglha West is reserved for the rather isolated mini-range NW of Lhasa that features Nyangchen Thanglha Feng, a peak that rises to 7162m/23497.

As Nyainqentanglha West appears to be a distinct unit with a shear zone running along its southeastern edge [see Pan and Kidd, p. 775] separating it from the Yangbajian Valley and peaks farther east, it might be useful to reserve the Nyangchentanglha [Nyainqentanglha] name for this uplift. In addition, there appears to be little geological distinction between Nyainqentanglha East and the Kangri Garpo spur, so it would seem useful to drop the truly cumbersome name of Nyainqentanglha East and expand the use of Kangri Garpo to include the whole uplift that stretches between approximately 93 to 98 degrees east longitude and 28 and 31 degrees north latitude.

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