

The Recent Ostracoda of Npen Co, Tibetan Plateau

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The large freshwater lake Npen Co (142 km²) is situated 4674 m a.s.l. on the central Tibetan Plateau. Sixteen surface sediment samples covering water depths between 0.3 and 71.5 m were taken for ostracod analysis. We studied species distributions of living ostracods, fixed in ethanol, and empty valves. The low diversity association yields eleven species of which nine are endemic to the plateau. One of these endemic species is *Leucocytherella sinensis* dominating in Npen Co in general. As function of species distribution over samples, four characteristic assemblages could be determined: 1) The coarse grained sediment of the shallow water with less than 2 m water depth and close to the shore shows relatively high proportions of *Candona xizangensis*. 2) The other shallow water locations above the thermocline, which ranges between 20 and 30 m water depth, are characterized by phytal habitats where *Fabaeformiscandona gyirongensis*, *Eucypris gyirongensis*, and *Candona candida* are dwelling. 3) Within the thermocline level, specimens of *Cytherissa lacustris*, which lacks above the thermocline, and the highest proportion of *Ilyocypris* sp. were found. 4) The hypolimnion below the thermocline is clearly dominated by *C. lacustris*. Water turbulence, phytal cover, and food availability seem to be driving factors of ostracod distribution. The results are a base for ongoing investigations on sediment cores from Npen Co and other lakes of the Tibetan Plateau.

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