THE MALKHAN GEM TOURMALINE DEPOSIT IN TRANSBAIKALIA, RUSSIA

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I.S. Peretyazhko (in the middle) and V.Ye. Zagorsky (right) at the Oreshnaya Vein in 2002

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In Russia, gem tourmaline has been first discovered 220 years ago on eastern slopes of the Ural Ridge, which makes a boundary between Europe and Asia. A cherry-red version of this mineral, which received the name of siberite, came to Europe from famous regions of Sarapulka and Murzinka. Although this name, in strict meaning, mismatched an initial place of occurrence of such tourmalines, it has appeared to be appropriate as soon afterwards similar stones have been discovered in Siberia, namely in Eastern Transbaikalia, known then as Nerchinsk territory. However, by the 1910s, tourmaline deposits of the Urals Mountains and Borshchovochny Ridge in Eastern Transbaikalia have been worked out or essentially exhausted, and for more than half a century, tourmaline in Russia was an extremely scarce gem. A new splash of interest to Transbaikalian region as to the source of tourmaline and accompanying gems is related to the 1980s discovery of the Malkhan field of miarolitic pegmatites in Krasnyi Chikoi district of the Chita oblast, in Central Transbaikalia, located approximately 400 km to the west of the Borshchovochny Ridge deposits and 200 km to the southeast from Ulan-Ude, capital of the Buryat Republic. The distance from the nearest large railway station of Petrovski Zavod on the Trans-Siberian railway to Malkhan is 220 km. It first takes 120 km to the south by a highway, crossing Zagan and Malkhan ridges, then 90 km to the east alongy a picturesque valley of the Chikoi River, and lastly 10 km to the north by a country road.

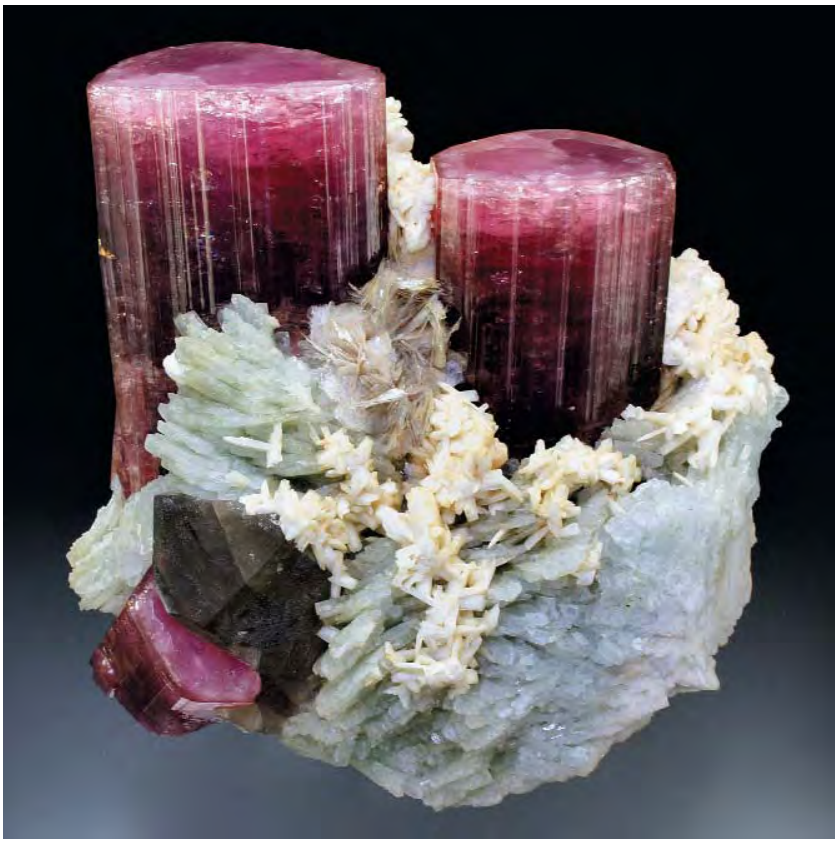
Location of the Malkhan Ridge

Tourmaline "cotton wool", 4 by 3 cm

→ **Tourmaline** crystal 2.5 by 2 cm, in albite.
Mikhail Anosov collection.
Michael Leybov photo

↓ **Tourmaline**, 2.5 by 3 cm.
Mikhail Anosov collection.
Michael Leybov photo

↘ **Tourmaline**, 8 by 1.5 cm, with albite and lepidolite.
Private collection. Michael Leybov photo



↖ **Tourmaline**, crystal intergrowth 4.5 cm high. Mikhail Anosov collection. Michael Leybov photo

↑ **Tourmaline** crystal group, 10 by 8 by 8 cm. Mokhovaya Vein. Jessy Fisher collection and photo

Tourmaline crystal, 12 by 2.5 cm, on albite. Private collection. Michael Leybov photo

Ball made of pink **beryl** (vorobyevite), 7.5 cm in diameter

Beryl (vorobyevite), 5.5 by 4.5 cm. Viktor Levitsky collection.
Michael Leybov photo

Beryl (vorobyevite), 6 by 5 cm.
Igor Pekov collection.
Michael Leybov photo

Index of Malkhan mineral species