## Gneiss tors of Ladek Zdrój area in the Eastern Sudetes

Gneiss tors of Lądek Zdrój area are representative for morphological features in the middle part of the Złote Mountains. They occur mainly in summit and spur position. There have been recognized 56 tors within four main hills: Trojak, Karpiak, Królówka and Dzielec. According to the height they were classified into 2 groups: small tors  $\leq$  6 m and high tors > 6 m. There are 36 small tors and 20 high within studied area. Their heights alternate from 3 to 30 meters and they occur between 480 and 784 m a.s.l. All outcrops may be divided into 3 different levels of appearance: 1) 480-540 m a.s.l.; lower level, 2) 600-675 m a.s.l.; middle level, 3) 725-784 m a.s.l.; upper level. Tors quantity is rather low in level 2 and much higher within levels 1 and 3. The distribution of tors connects with the tectonic elements of the relief. Therefore tors morphology in the area of study is conditioned by tectonic and structural factors, with grate influence of periglacial environent.

Morphological conditions and unique landscape of the Ladek Zdrój area should be preserved in its natural form. Tors are situated in the Snieżnik Lanscape Park, however it is proposed to protect the most effective of them to preserve an unique morphological environment. Protection strategy should concern all parts of the environment and not exclude tourism and climbing activity.