Species Huperzia selago and Lycopodium annotinum occur in cold and humid habitats with acid substrate. These are mainly mountain areas in the Czech Republic, but also sand gorges, where the temperature inversion is common. The temperature inversion causes the fact, that temperature conditions in ravines are different from the climatic conditions of surroundings, which causes high rate of species variety among the habitats. In these places, Montane and Boreal species grow in low altitudes and in the proximity of thermophile species. The presence of montane and boreal species in sand ravines is largely influenced by inherence of temperature inversion, which is determined by features of ravine (depth, breadth, orientation) and by weather conditions. Other important agents (excepting microclimatic conditions), which influence the prevalence of these kinds, are microelement availability and the rate of competition. In Czech Republic, both species Huperzia selago and Lycopodium annotinum fall into C3 category, which means that they indicate permanent regression in our nature. In the case of my field survey in the area of the Bohemian Switzerland National Park I confirmed this tendency for species Huperzia selago.