

THERMOPHILOUS AND 'HEAT TOLERANT' PLANT SPECIES AT YELLOWSTONE – NATIONAL PARK IN THE VOLCANIC CRATER

Summary

Yellowstone is the oldest national park in the world. The geological phenomena and processes occurring in the park have been protected for nearly 140 years. Their number is estimated at 10 000 (e.g. geysers, hot springs, mud volcanoes, fumaroles and travertine terraces). The flora (about 1100 species including 200 aliens) and the vegetation of the Park, dominated by forest, are also interesting. Pyrophytes – plants tolerating fires (e.g. *Pinus contorta* and *Pseudotsuga menziesii*) play a special role among

forest species. The thermophilous plants as *Mimulus guttatus* and *Gentiana detonsa* give colourful aspect to the geothermally heated soils. 'Heat-tolerant species' adapted to chronic rhizosphere temperature above 40°C (e.g. *Dichanthelium lanuginosum*, *Juncus tweedyi* or *Rumex acetosella*) are especially noteworthy in the flora of Yellowstone Park.

The protection of nature in the Park is a priority. Conservation efforts are well organized, although some mistakes have not been avoided.