Sborník Severočeského Muzea, Přírodní Vědy. Acta Musei Bohemiae Borealis, Scientiae Naturales. Ročník / Volume 30 (2012)

OBSAH / CONTENTS

Richard VIŠŇÁK Přirozená lesní vegetace Chráněné krajinné oblasti Jizerské hory Natural forest vegetation of the Jizerské hory Mts Protected Landscape Area

1 – 141

Abstract. This study deals with natural forests in the northernmost mountains of the Czech Republic. Norway spruce forests of the Jizerské hory Mountains were heavily damaged by the industrial air pollution and insect outbreaks in the 1970s and 80s. As a result, an area of about 100 km2 was temporarily deforested. The study has two main aims. Firstly, it is an inventory of all near-natural forests in the area. Around 2500 various forest stands (so-called "valuable areas ") were mapped with a total area of 7838 ha, i.e. 28.6% of all forests in the area of interest. These localities are further categorized by "physiognomic type " of the forest stand and by nature conservation value. Generally, the "valuable areas " relatively well correspond with specially protected areas. Secondly, best-developed forest communities are documented with 464 phytosociological relevés. These relevés cover mostly acidophilous beech forests, but also various types of natural spruce forests. Using the TWINSPAN classification, the set of relevés is divided into 20 groups, ten for spruce forests (including dwarf pine stands on raised bogs) and ten for deciduous forests. Some questions of the development of mountain forests in critical environmental conditions under air pollution impact are also discussed.