

ZINC-LEAD MINE SPOILS NEAR OLKUSZ – PAST, PRESENT AND FUTURE

S u m m a r y

Distribution of zinc – lead resources in Olkusz region (southern Poland), the history of mining activities in this area (XIII–XX century), generation of mine spoils with high concentration of zinc, lead and other heavy metals, as well as the history of botanical studies on mine spoils in Olkusz region are described. The authors present detailed ecological studies on mine spoils of different age near Bolesław (Olkusz region). The species composition of resident vegetation, the concentration of heavy metals in

spoils and in plants, seed rain and seed bank were studied in „old” (100 yrs) and „young” (recent) spoils, their results were compared and forms of reclamation on mine spoils are discussed. The authors suggest that the abundance of seeds in the soil and seed rain is sufficient to establish local vegetation in long succession processes. They propose to introduce seeds of the dominating plant species or fragments of grasslands from older mine spoils to accelerate the spontaneous succession on recent spoils.