

1.01 Izvirni znanstveni članek

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Zgodovina železarstva v Vzhodnih Alpah od propada rimske oblasti do 13. stoletja¹

IZVLEČEK

V članku je predstavljena zgodovina železarstva na območju Vzhodnih Alp v zgodnjem in visokem srednjem veku. V zgodnjem srednjem veku je imelo železo precej visoko vrednost, na kar kažejo zakladne najdbe železnih predmetov. Pisni viri železarstva neposredno skoraj ne omenjajo, vendar lahko kljub temu predpostavimo, da je obstajalo. Zanimiv pogled ponuja tudi primerjava z Veliko Moravsko. Pisni viri železarstvo in rudarstvo pogosteje omenjajo v 12. in 13. stoletju, predvsem na območju Koroške in Štajerske, medtem ko obstoj železarskih obratov na ozemlju današnje Slovenije neposredno ni izpričan, ga pa lahko ponekod domnevamo.

KLJUČNE BESEDE

železarstvo, rudarstvo, zgodnji srednji vek, visoki srednji vek, železni predmeti, rudarske pravice

ABSTRACT

HISTORY OF IRONMAKING IN THE EASTERN ALPS FROM THE END OF THE ROMAN RULE TO THE THIRTEENTH CENTURY

The article presents the history of ironmaking in the Eastern Alps during the Early and High Middle Ages. Hoard finds of iron objects attest to the rather high value that iron was assigned in the Early Middle Ages. Even though written sources contain hardly any direct mention of ironmaking, its existence can nevertheless reasonably be assumed. A comparison with Great Moravia provides an interesting insight as well. Ironmaking and mining start to appear in written sources more frequently during the twelfth and thirteenth centuries, especially in the areas of Carinthia and Styria; on the other hand, the existence of ironworks in the territory of present-day Slovenia is not directly recorded but can reasonably be assumed to have existed in some areas.

KEY WORDS

ironmaking, mining, Early Middle Ages, High Middle Ages, iron objects, mining rights

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S U M M A R Y

History of Ironmaking in the Eastern Alps from the End of the Roman Rule to the Thirteenth Century

The collapse of the Roman rule in the Eastern Alps most likely delivered a heavy blow to organized forms of mining and iron making. Although the hoard finds of iron objects testify to the rather high value of iron in the Early Middle Ages, the degree to which Slavic settlers exploited mineral resources is difficult to determine. Written sources contain no mention of mining up to the ninth century and archaeological sources point to the probable existence of at least limited excavations of iron ore and the production of iron objects to satisfy local demands. An interesting comparison is provided by extensive research that was conducted in Moravia and proved the existence of well-developed ironmaking and forging in Great Moravia (the ninth century).

The first records of ironmaking and mining rights appear no earlier than in the first half of the tenth century, making it difficult to determine whether the advent of feudalism also prompted changes in the conditions of iron making. An organization seems to have taken shape within a span of a few centuries which first appeared in written sources in the twelfth century, when mentions are also made of mining masters, mine guards, as well as numerous grants of mining rights, mostly to monasteries. The monasteries of Žiče and Jurklošter obtained a certain annual amount of iron from the Styrian dukes. In the twelfth century, charters contain the first – and still rare – mentions of blacksmiths as witnesses. Although the social status of iron and mining masters is not directly revealed in the sources, there is a revealing case of a town-dweller of Breže (Friesach), Konrad Schmelzer, who enjoyed a relatively high reputation among his fellow townsmen as a (probable) descendant of the iron master (smelter).

Metallurgical technology in that period was most probably poorly developed. The evidence points to the existence of shaft furnaces, which yielded lumps of iron weighing a few kilograms. The use of what were most likely still man-powered bellows in the iron smelting process is confirmed by a written source that dates to the beginning of the thirteenth century. A major technological breakthrough probably occurred in Upper Styria in the mid-thirteenth century.

During the High Middle Ages, ironmaking in the Eastern Alps was most widespread around Erzberg in Styria; in Carinthia, where mentions of silver ore extractions are more common, the evidence confirms the existence of mines in the wider area of Hüttenberg, in the vicinity of Breže, on the left bank of the Drava River south-east of Velikovec (Völkermarkt), and in the upper Lavant Valley. The first mention of ironmaking in the territory of present-day Slovenia dates back to no earlier than the end of the thirteenth century. In the area of the medieval market town Gutenwert, the archaeological evidence confirms the existence of ironmaking and forging in the high Middle Ages. The archaeological research has not led to a significant improvement in the knowledge about ironmaking in the period concerned, even though the finds of iron objects point to a highly probable existence of iron production for local purposes. Such production may have existed near major ore deposits, in areas which, according to archaeological evidence, were settled no later than the High Middle Ages and had a developed iron production by the Late Middle Ages. Local iron production centres in the territory of present-day Slovenia may be assumed above all to have existed in the areas of Jelovica (around Nomenj in Bohinj, the Selca Valley, and the Lipnica Valley, including Kropa).