

*Agrarian Technology in the Medieval Landscape. Ruralia X. 9th–15th September 2013, Smolenice, Slovakia.* Edited by Jan Klápště. 21 × 30 cm. xviii + 448 pp, 212 b&w pls and figs, 20 tables. Turnhout: Brepols, 2016. ISBN 978-2-503-55137-1. Price: €90.00 pb.

This volume features a collection of papers deriving from the 10th Ruralia conference held in Slovakia. This was a very interesting event, with a wide range of topics discussed around the theme of agrarian technology in the medieval landscape. Svensson and Gardiner bring out some of this discussion in their Introduction, in particular noting two themes to the studies – those interdisciplinary in their approach, and those focusing on regional specialities. There is also a Foreword by the president, Claudia Theune, and an introduction to the history of Ruralia over the past 20 years, written by honorary president Alan Aberg. A total of 27 papers are presented, organised loosely by geography, moving across Europe from west to east, and grouping together papers by theme, whether focused on landscape or material culture. As ever, geographical coverage is strong, ranging from Ireland and Greenland to Hungary and the Carpathian Basin.

Various of the expert contributors explore aspects of field systems and cultivation, such as Dixon on Scottish fields, Brady on ploughing in Ireland, and Henriksen on cultivation in Greenland. The latter exploits plant macrofossils to investigate whether the Vikings imported their foodstuffs or actively cultivated their own crops. Such an approach valuably emphasises the archaeology of what was actually grown. Myrdal and Sappoznik's contribution on spade cultivation is particularly interesting, as it considers the agriculture of the poorest peasants rather than seigniorial farming; it also makes use of iconographic and written evidence alongside the archaeology and contains a detailed appendix of the images of Adam and Eve at work.

There are considerations of the tools used in agriculture and their impact on the landscape: e.g. Karlsson on iron production; Larsen on mouldboard ploughs; and Bajkai on quernstones. Very thought-provoking was Karlsson's study of iron usage in ploughs and other tools. Through experimentation, she has shown that ploughs required regular repair and replacement of the iron ploughshare. She reveals that cultivation of harder lands was possible with the development of harder metal; however, this depended on the exploitation of iron resources and mining. Měchurová more broadly examines the tools used for agriculture and organises them in order of when they were used during the agricultural year; this paper is well illustrated with images of artefacts and medieval depictions of the tools in use.

Many authors discuss open fields and the wider landscape. Among these, Nießen looks at landscape and settlement from a place-name perspective in Southern Germany, using toponyms to study the uses of the land around settlements; interesting is the term *Wolfsgrube/ Wolfsgarten/ Wolfsgraben* to identify sites where wolves were trapped, since a number of these have been excavated to seek to reveal the structures.

Overall, *Agrarian Technology in the Medieval Landscape* makes an important contribution to medieval rural studies. Moorhouse and Bond's paper quotes Hilton: 'It is almost impossible to study medieval agriculture without studying the whole of medieval life'. But it is also true that we cannot study medieval life, and particularly settlement, without considering medieval agriculture. Therefore, this collection of papers provides many insights into how the landscape was farmed during the Middle Ages, some of the hardware involved and the use and maintenance of these tools. The Ruralia volumes and their conferences continue to reveal the wide range of research being carried out into medieval rural society across Europe; this particular volume greatly advances our understanding of how tools were used in medieval agriculture, and the impact they had on the medieval landscape.