

## 1.1. Consumption of wood, energy transitions and woodland management from a historical perspective. Part I

Panel organiser: Infante-Amate, Juan, Pablo de Olavide University, Spain; Iriarte-Goñi, Iñaki, University of Zaragoza, Spain



The use of wood as fuel has been essential throughout the course of history. Heat, food and the development of numerous activities such as mining largely depended on the supplies of wood available in preindustrial societies. This dependence gradually diminished as industrialising countries increasingly used fossil fuels. However, today, according to the FAO, 47% of wood production in the world is still used as fuel and this percentage is considerably higher in less developed countries in Africa, Asia and Latin America, where it reaches 90%. The aim of this session is to analyse the consumption of wood in different historical and geographical contexts, linking it with energy needs and its effect on the management of forests, woodlands and areas where the wood was obtained. The chief interest here is to detect different transitions which affected the consumption of wood (either increasing or decreasing it) in a bid to find the causes associated with these changes and trace the environmental effects that changes in consumption can generate. Which factors have historically had the greatest influence on changes in the consumption of wood? What were the effects of increasing or decreasing consumption in environmental terms? How were the approaches to woodland and territorial management adapted in accordance with changes in demand for organic fuels? The session is open to re-

searchers of any historical period or geographical area. There are new lines of research looking at the industrial energy transition process which are providing new details about the spatial and historical peculiarities of change, noting that it did not consistently occur as a process of energy transition which radically changed the consumption of wood for coal. Note, for example, the consumption of woody crops in the Mediterranean or hedgerows in central Europe. The very nature of forest and woodland in the world means that supply differs greatly (scrubland, forest, savannah usage). This session aims to shed light on the nature of a phenomenon which is still occurring in much of the world and which brought about major changes in the management of woodland and rural life in industrialised countries.

Chair: Schwarz, Ulrich, Institute of Rural History, St. Pölten, Austria

Monday 19.8.2013 // 1100 – 1300 // Session 1 – Room A-126

### 1.1.1. The exploitation of wood resources from the wood-pasture commons of Shropshire between the sixteenth and nineteenth centuries

Bowen, James, Lancaster University, UK

Common land has significance historically as a valued agrarian resource, its communal nature making it a focus for study of the interaction between past human societies and their evolving environment. Globally there is a substantial literature stressing the enduring and sustainable management of common land as a property regime. The CORN (Comparative Rural History of the North Sea Area) study of common land management in Western Europe between the sixteenth and nineteenth centuries proposed a nuanced empirical and comparative methodology in order to incorporate understanding and economic and social explanations. This paper explores the wood resources which common wasteland provided, namely timber, wood and underwood. In contrast to champion countryside and upland environments, the wood-pasture commons of Shropshire included areas of lowland fen, marsh and moor; lowland scrub heathland and lightly wooded wood-pasture commons; forest and woodland countryside; and upland wood-pasture.

Comparative links will be made with other wood-pasture environments in England and Wales, which provided a range of resources widely exploited by rural communities on a formal legal and/or informal customary basis. This included wood for domestic fuel consumption or increasingly for industrial purposes, but also a wide variety of other uses.

### 1.1.2. Effects on vegetation of historical charcoal making in Central Spain: The „Montes de Toledo“ Case

González y González de Linares, Víctor, Technical University of Madrid, Spain

García-Viñas, Juan Ignacio, Technical University of Madrid, Spain

Carrero Díez, Leticia, School of Forestry, Technical University, Madrid, Spain

Cuevas Moreno, Jorge, School of Forestry, Technical University, Madrid, Spain

González-Doncel, Inés, School of Forestry, Technical University, Madrid, Spain

Gil Sánchez, Luis, Technical University of Madrid, Spain

A compared analysis of the vegetation from 1830 to date in 5000 ha of Montes de Toledo region (Central Spain) is made based on historical documents and GIS applications. The changes are bounded up to charcoal making in the area, as this region was a key provider of charcoal to Toledo and Madrid towns from the XIIIth century onwards, decreasing the harvesting of fuel wood gradually along the XXth century. After establishing the level of degradation in the existing plant stands in 1830, different historical maps and handwritten documents from 1859, 1862, 1870, 1884 and 1951 are analyzed to obtain a sequence of the evolution of tree and bush species in the area and their coverage of the terrain. This information is compared to existing aerial photographs from 1956 and data from the latest National Forest Map (1997-2006). The methodology provides a good description of the landscape and a proper estimation of the plant stand evolution, as well as its link to the intensity of fuel wood harvesting. A very intense degradation in the woods in 1830 is detected as a consequence of the previous charcoal making. The property changes that have occurred in the last two centuries have not affected significantly the land uses or the dominant tree species composition during the studied period, being *Quercus ilex*, *Quercus faginea* and *Quercus pireaica* the most common ones. But the area covered by coppice forest or bushes has increased regularly until 1956.

### 1.1.3. Are rural women to blame for misusing wood for livelihood and household use in Burnt Forest Area, Kenya

Chabeda-Barthe, Jemaiyo, Graduate Institute of Geneva, Switzerland

This paper will analyse the consumption of woodfuel by women in rural Kenya, specifically in the Rift Valley. I choose to concentrate on the Burnt Forest area in Rift Valley because it is the study area for my PhD research. The Burnt Forest area is situated in Ol'Leinguse location, Uasin Gishu district which is in the Rift Valley province of Kenya. This was an area that in pre-colonial times was inhabited by the Maasai tribe. However, when Kenya became a Crown Colony of Britain in 1920, the colonial government settled here due to the agreeable climatic conditions that were suitable for rearing livestock and growing maize and wheat. The paper will demonstrate linkages between woodfuel consumption and energy needs by the rural women in this area. Approximately 90 percent of the women use woodfuel and charcoal, for household uses like cooking. Women use woodfuel to brew Changaa – an illicit alcohol that is very lucrative. The paper will elaborate on the different transitions which affect the consumption of woodfuel in Burnt Forest, how the area got its name and how the area has attracted settlement schemes thus leading to clearance of vast forest land. Historically, the trees were used for traditional beekeeping and as a source for indigenous medicine. UNDP and UNEP are encouraging establishment of woodlots. In addition, UNEP has started a project to realize Carbon Credits for farmers who plant eucalyptus trees. These 'Carbon credit' projects have a monetary value attached to motivate the rural communities to seek an alternative way of livelihood.

#### Participants

##### Bowen, James

Research interests include the rural agrarian history of the British Isles, landscape studies and local and regional history. James' doctoral thesis, supervised by Professor A.J.L. Winchester, examined the governance and management of common land in Shropshire from the sixteenth to the nineteenth century. He is currently the Economic History Society's Tawney Junior Research Fellow at the Institute of Historical Research, University of London.

##### Chabeda-Barthe, Jemaiyo

Ms Jemaiyo Chabeda-Barthe is a PhD Candidate whose research interest is on Gender, ethnic conflict and Land Reform in Kenya. She holds a Masters in Development studies from University of Witwatersrand in Johannesburg, South Africa. She has worked for United Nations Development Programme in Kenya from 2004 to June 2010. She conceptualized and initiated the Communication for Development project to raise awareness on Gender empowerment and Rural Agriculture. In 2012, she worked as lead researcher for a Community Based Child Protection Mechanism project for the Columbia Group for Children in Adversity.

##### González y González de Linares, Víctor

M. Sc (Forestry). Senior Lecturer in Forest Harvesting. School of Forestry, Technical University, Madrid. Mr. González's research has focused on different aspects of forest harvesting, particularly forest products market, the impact of wood consumption on forest sustainability and the historical evolution of forests in Central Spain. Prior to his docent position, Mr. González has worked in different forest transnational companies for more than 20 years.

##### Infante-Amate, Juan

Juan Infante-Amate is Lecturer in Contemporary History at University Pablo de Olavide and researcher in the Agroecosystems History Laboratory. His research is focused on the history of the Mediterranean agriculture from an environmental perspective. His recent work has been focused on the history of soil erosion, energy and material analysis, olive orchards history and wood production. Some of his recent papers have been published in *Environmental History*, *Rural History*, *Historia Agraria* and *Historia Social*. He has taken up visiting positions in University of East Anglia, University of Saskatchewan and IFF Social Ecology Institute.

##### Iriarte-Goñi, Iñaki

Iñaki Iriarte-Goñi is Senior Lecturer in Economic History in the University of Zaragoza. Interested in forests history, property rights and the commons, environmental history. Recent works on forests uses: "Forests, Fuelwood, Pulpwood and Lumber in Spain, 1860-2000. A non Declensionist History", *Environmental History*, 18, 2 (2013) 333-359; "Not only subterranean forests: Wood consumption and economic development in Britain (1850-1938)", *Ecological Economics*, 77 (2012) 176-184 (with M.I. Ayuda); "Wood and industrialization Evidence and hypotheses from the case of Spain, 1860-1935" *Ecological Economics*, 65 (2008) 177-186 (with M.I. Ayuda).

##### Schwarz, Ulrich

Ulrich Schwarz is PhD-Student in history at the University of Vienna, member of the Institute of Rural History in St. Pölten, and executive editor of the *Rural History Newsletter (RHN)*. Currently he is Junior Fellow at the IFK Internationales Forschungszentrum Kulturwissenschaften in Vienna.