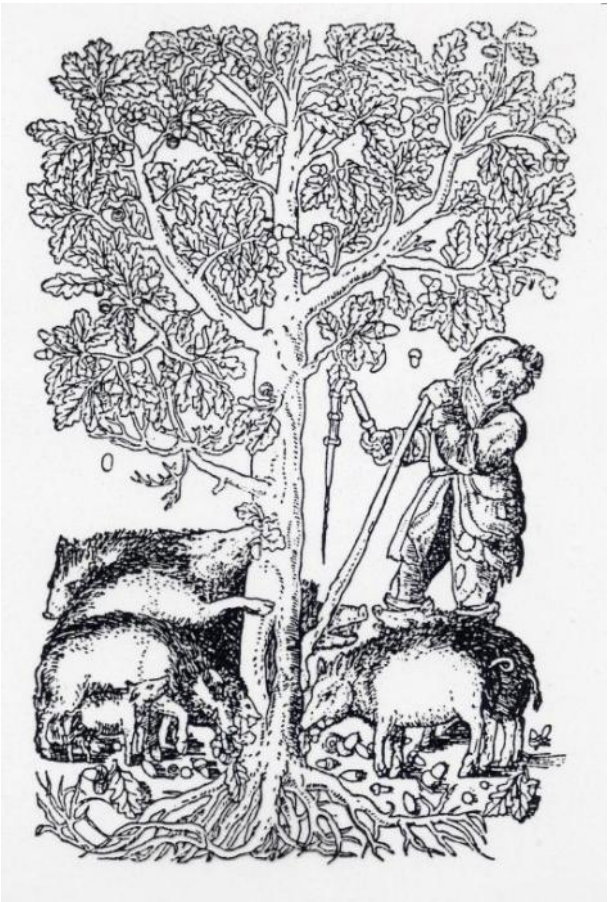
EuroCoppice
Innovative management and multifunctional utilization of traditional coppice forests

Gero Becker, Janine Schweier
University of Freiburg, Chair of forest utilization (Fobawi)

Salt Lake City, October 6th, 2014

History

- Sustainable forest management regime developed since more than 1,000 years
- Widespread throughout Europe and worldwide
- Based on ecological mechanisms
- To fulfill a broad range of societal needs



Coppice forest : the unknown ecosystem

- extent and classification of coppice forests ?
- modern silvicultural and management techniques ?
- forest policy goals ?
- individual goals of forest owners ?

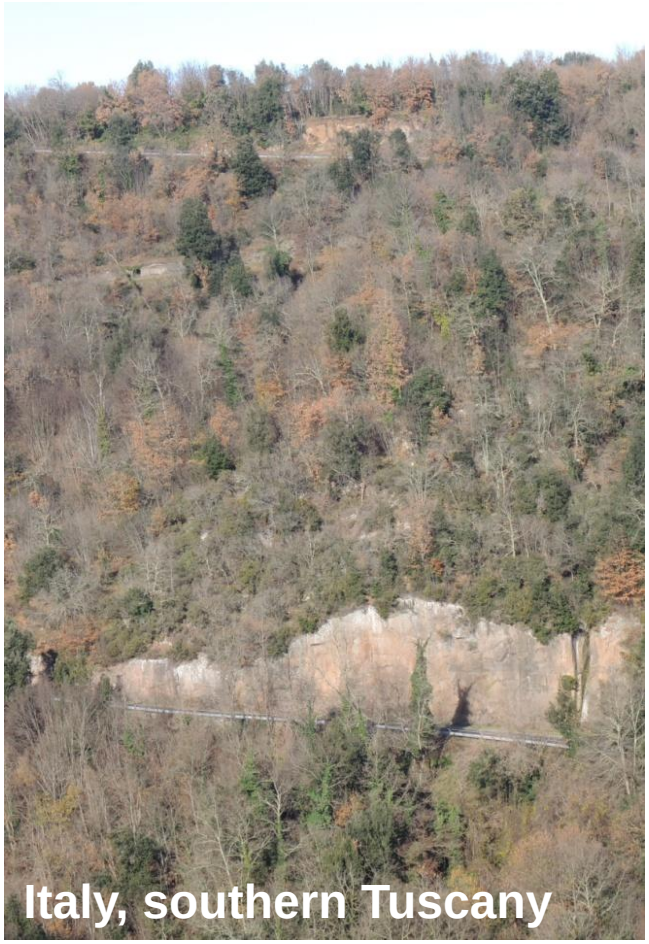
Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Ecology

- Broadleaved trees with high vegetative potential and long lasting root system
- Vigorous growth in the first years
- Resistant or favorable to (small) clearcuts
- Low vulnerability, high resilience
- Co-existence with farming
- Broad range of management and utilization options

Coppice forests & climate change

- located in warmer and drier landscapes
- increasing risk of extreme weather events: summer heat, drought, forest fire
- diverse forest types with high potential to adapt to climate change
- coppice forests are a significant element in sustainable landscapes


Italy, southern Tuscany

Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Classification of coppice forest

Frequent types

1. Oak/hornbeam
   (Q. petraea, C. betulus, Sorbus spp.)
2. Chestnut (Castanea sativa)
3. Beech (Fagus silvatica)

4. Poplar and willow
   (Populus & Salix clones)

Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Classification of coppice forest

Special types

5. Alder (Alnus glutinosa) on riverine sites

6. Maple/ash/elm/linden (Acer/Fraxinus/ Ulmus/Tilia) at fertile/high altitude sites

7. Hazle nut (Coryllus avellana) as commercial plantations

Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Types of coppice forests

Oak coppice

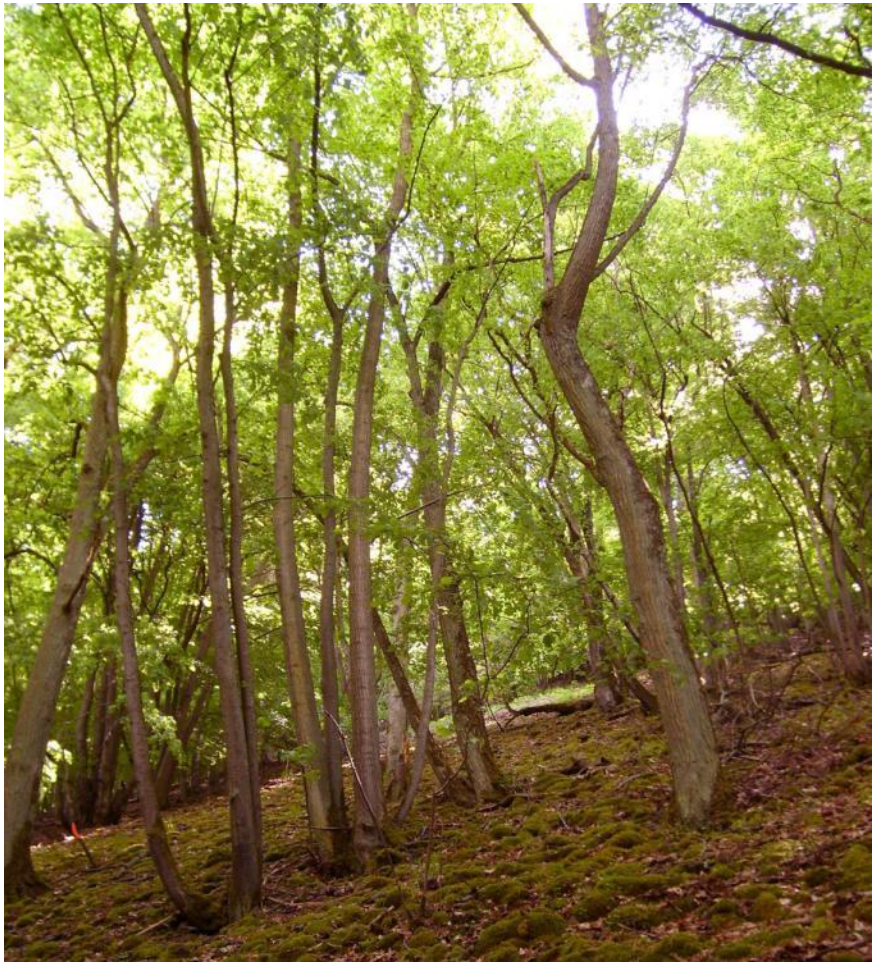
Picture: Fobawi

Types of coppice forests

Very poor oak coppice

Picture: Fobawi

Types of coppice forests



Picture: Fobawi

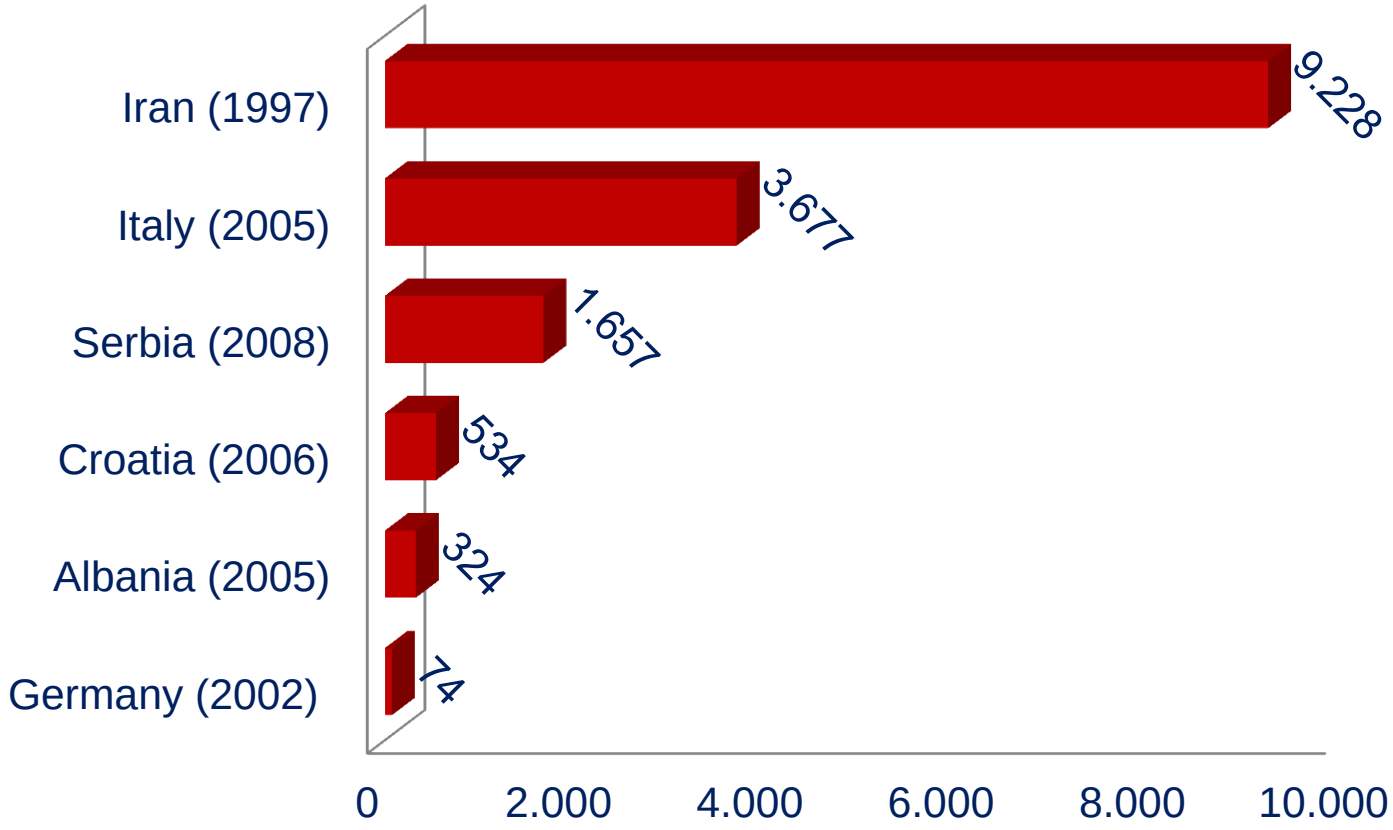
Lime tree coppice

Types of coppice forests

Chestnut coppice

Pictures: Fobawi

Reported areas of coppice forest

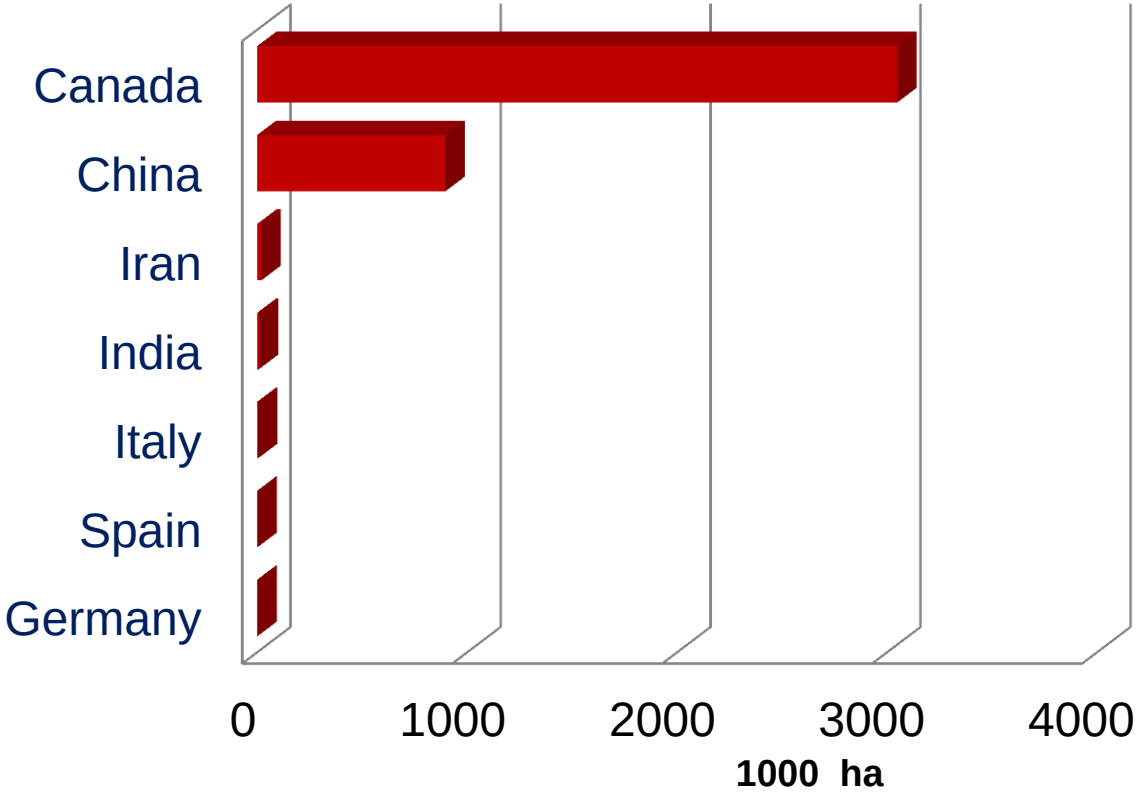


Source: Country reports for FRA 2010; Germany: Bundeswaldinventur 2, incl. coppice and coppice-with-standards forest

Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Poplar for fuelwood/biomass in short rotation coppice (SRC)

Pictures: Fobawi



Source: International Poplar Commission 2012
http://www.fao.org/forestry/ipc/69946@186073/en/

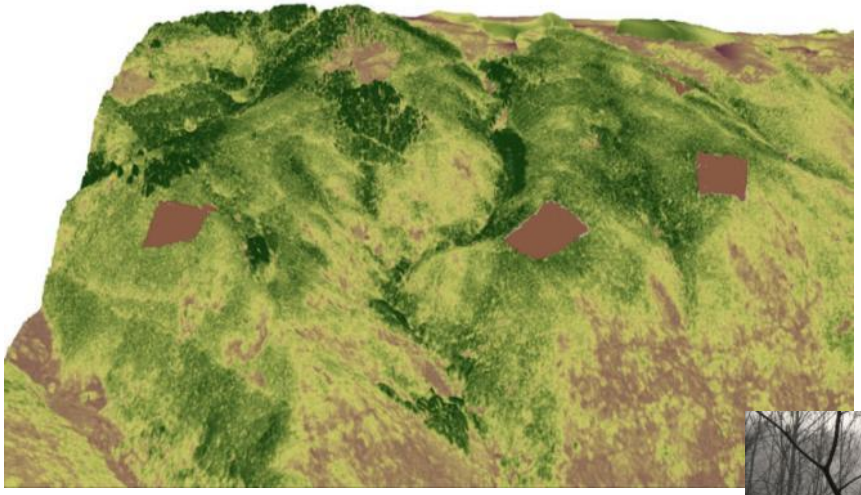
Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Coppice in the landscape

Coppice for slope and environmental protection in mixture with pasture land

Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Coppice in the landscape



Small clearcut simulation
GIS/LIDAR based

Pictures: Becker et al. (2013)

Societal aspects

- Closely linked to villages and farmland
- Small-scale or common ownership
- “Democratic” user regimes
- “The Forest of ordinary people”
- Misperceived by
  - Big land holders
  - Modern forest industry
  - Forest science

Coppice utilization

Typical coppice small clearcut

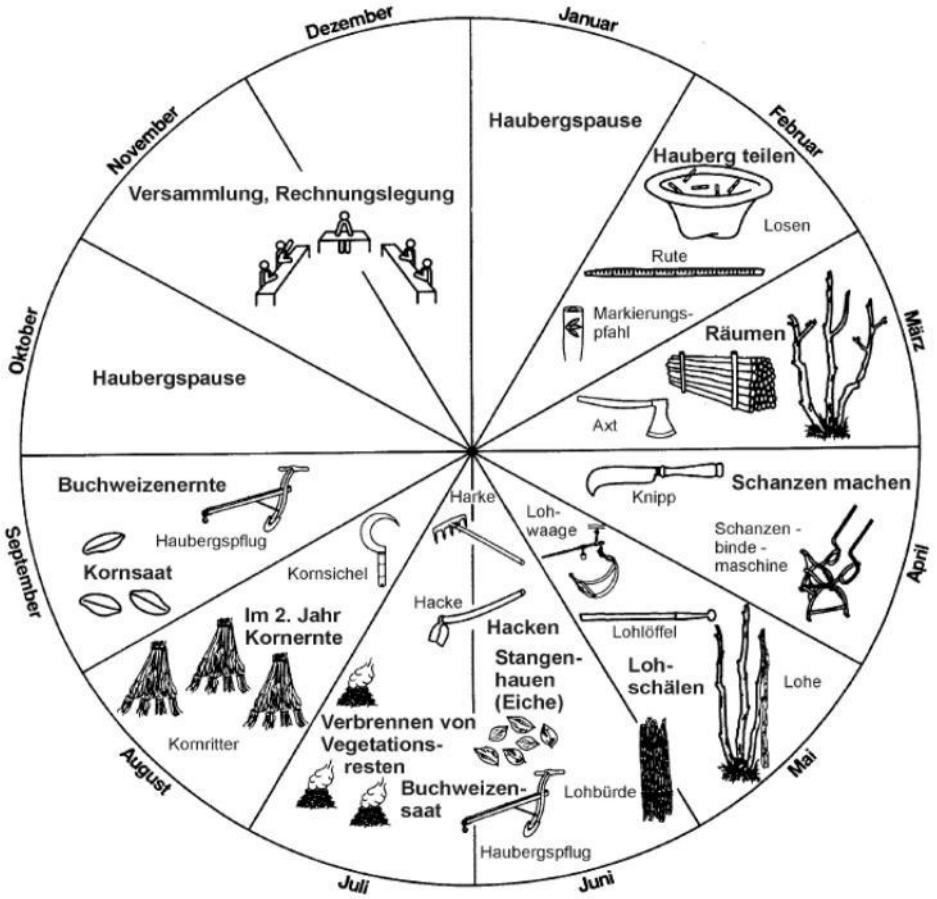
Picture: Becker et al. (2013)

Coppice utilization

Traditional harvest

Picture: chair of forest history, ALUFR

Coppice utilization



Traditional coppice activities during the year

Becker et al. (2013: 29)

Coppice utilization

Bark harvest in Luxembourg

Picture: Becker et al. (2013)

Coppice harvesting

Pictures: Fobawi

Motormanual felling

Coppice harvesting

Picture: Fobawi

Tractor skidding

Coppice harvesting

Pictures: Fobawi

Fully mechanized harvest

SRC for bioenergy harvesting

Short-rotation willow coppice for biomass production

Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Status and perception of coppice forests

In the last decades:

- Neglected
- Over-aged
- Abandoned
- Converted
- Undervalued
- „Old fashioned“

„New appreciation“:

- Biodiversity
- Protection of landscape, water and soil
- Energy wood
- Recreation
- Climate change

Management challenges

- Coppicing = harvesting & regeneration
- Small, isolated areas; steep slopes or riverine zones with difficult access
- Protective status, restricted management input
- Low DBH, small unit volumes, harvest loss-making
- Damage by browsing
- Sustainability on sites with poor nutrient supply ?

Source: Walter Kollert, FAO: Presentation at Conference of the COST Action FP 1301; Innovative management and multifunctional utilization of traditional coppice forests. 26.02.2014, Florence.

Why a COST action?

- Interesting and relevant for many COST and Non-COST countries (Near Neighbour Countries, International Partner Countries)
- Broad and diverse knowledge exists, but scattered and not compiled yet
- EuroCoppice opens a holistic/interdisciplinary view on forests and people
  - History
  - Ecology
  - Utilization
  - Nature conservation and protection
  - Governance
  - Forest policy

  which is attractive for young generation researchers
- Information and networking will increase awareness and stimulate further coppice related R&D activities, capacity building and scientific exchange
- Contribute to a European Coppice Forest Policy

COST: Creating the network

After 1 year COST Action:

- Participation of 30 COST countries and non-COST country (Albania)
- Participation of international partners: South Africa
- International collaborations, e.g. with University of the Sunshine Coast, Australia
- Collaboration with other projects (Mendel University, Brno, CZ)
- Collaboration with other COST activities
  (continuation and further development of a glossary of terms)

COST Formats: Conferences

- February 2014 in Florence, Italy
  "Status of coppice in the European context" with more than 150 participants
- November 2014 in Greenwich, UK
  "People and coppice"
- 2015: collaboration with the international conference "coppice forests" which will be held in Brno (back-to-back meeting)
- 2015 in Romania
  Conference on silviculture



Pictures: CNR Ivalsa, University of Greenwich

COST Formats: Training schools

- 6 Training schools in total until 10/2017
- 1st TS was in July 2014 in Sarajevo, BA

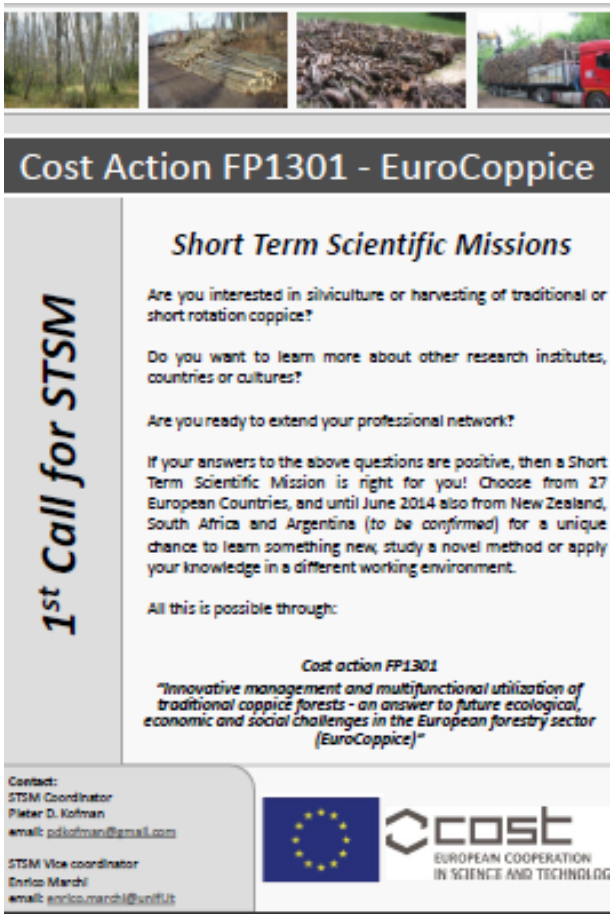
Topic: Silviculture of coppice beech forests - from traditional forest management to conversion in high forest

Pictures: Cemal Visnic, University of Sarajevo

COST Formats: Short Term Scientific Missions

- Up to now 11 STSMs are approved
- the call is open!

Pictures:
Schweier, Mallinis



find the Call for STSM at:
www.eurocoppice.uni-freiburg.de

Thank you and please get involved with EuroCoppice!

Gero BECKER
Chair of Forest Utilization,
E-mail: gero.becker@fobawi.uni-freiburg.de

EuroCoppice COST Action FP1301
E-mail: eurocoppice@fobawi.uni-freiburg.de
Website: www.eurocoppice.uni-freiburg.de

Organization of the Action
Janine SCHWEIER
Albert-Ludwigs-University Freiburg
Chair of forest utilization (fobawi)
E-mail: janine.schweier@fobawi.uni-freiburg.de

Picture: Nicolescu Valeriu Norocel, RO

UNI FREIBURG