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Coppice forests – a global overview

EuroCoppice Conference
Innovative management and multi-functional utilization of traditional coppice forests

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Agenda

1. History and traditional use
2. Modern use/climate change
3. The unknown ecosystem
4. Classification
5. Management challenges
6. Conclusions

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History and traditional use

timber, fuelwood, charcoal, pulpwood, stakes, poles

Oak bark for tanning leather

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Source of photos: http://www.ahlering.de/Hauberge/hauberge.html

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Modern use: environment and landscape

Coppice for slope and environmental protection in mixture with pasture land

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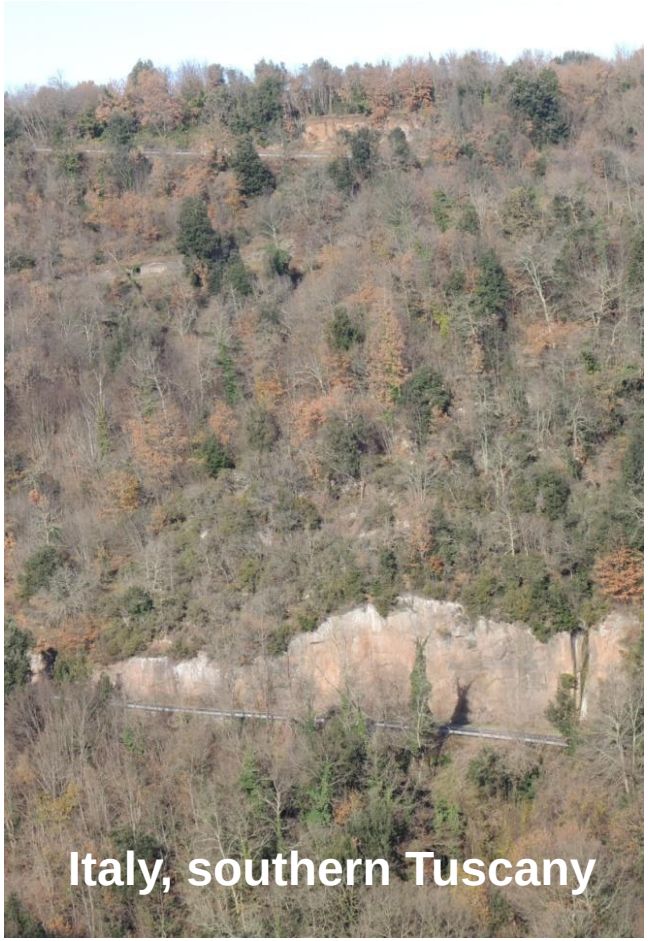
Coppice forests & climate change

- 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

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Modern use: biomass for bioenergy

Short-rotation willow coppice for biomass production

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Coppice forest : the unknown ecosystem

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

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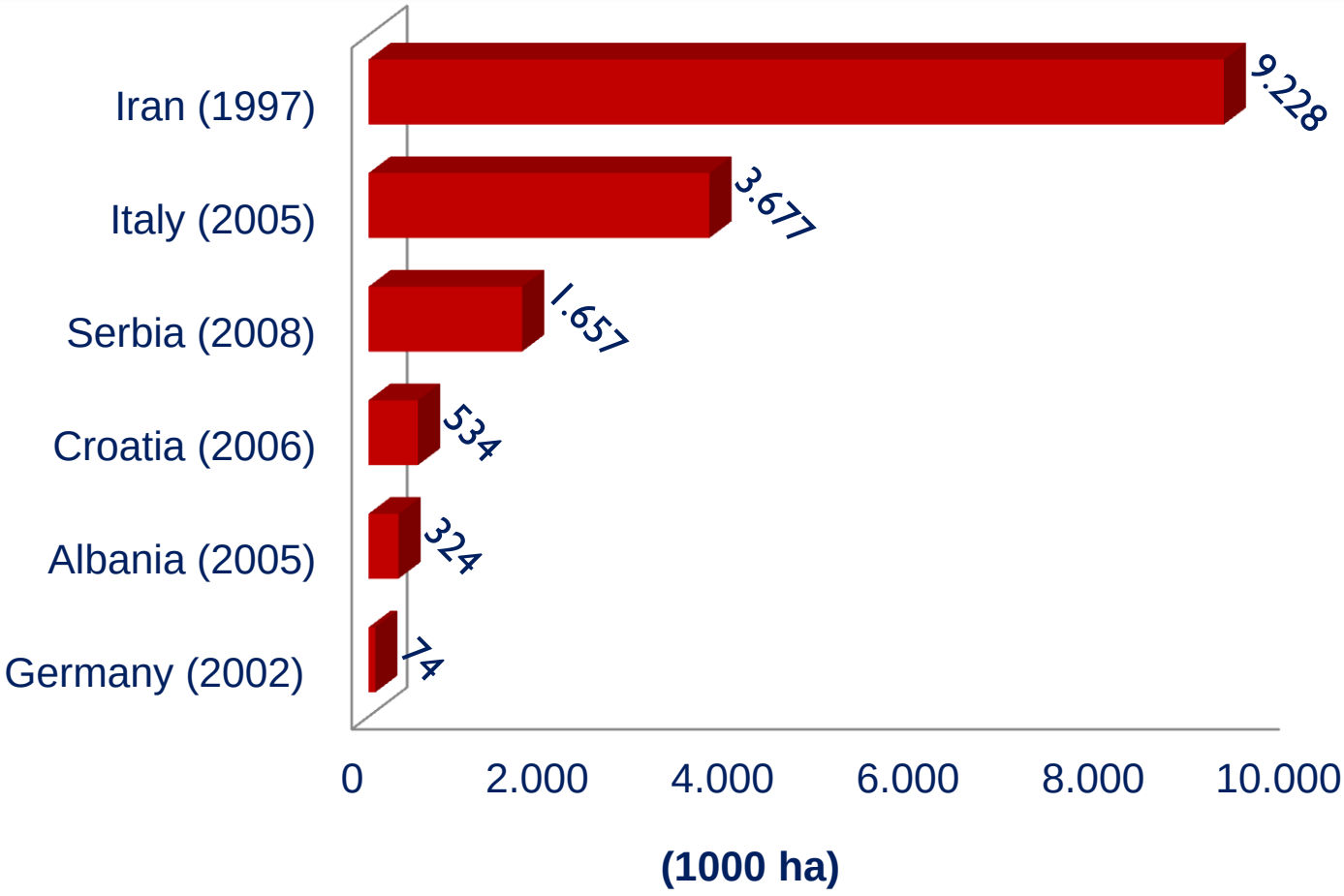
Reported areas of coppice forest



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

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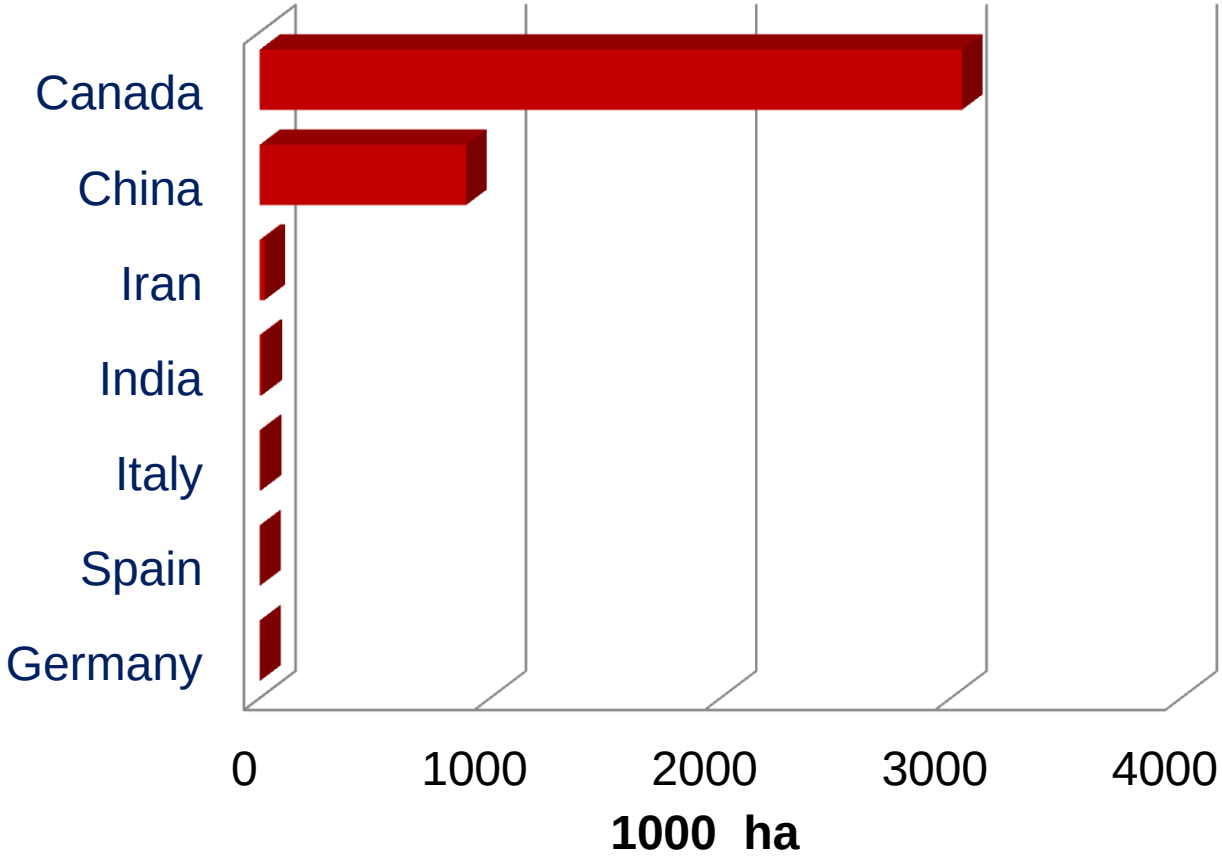
Poplar for fuelwood/biomass in short rotation coppice (SRC)



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

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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)

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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

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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 ?

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Conclusions – coppice forests

- First community owned forests
- Environmental and economic products
- Significant, enriching element of multifunctional forest management
- In times of climate change they contribute to risk diversification and sustainable landscape functions
- Positive attributes are good arguments for high public acceptance
- Knowledge on areas, forest types, management and forest policy insufficient

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Thank you for your attention !

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