

Harvesting of traditional coppice stands

40 years of European research



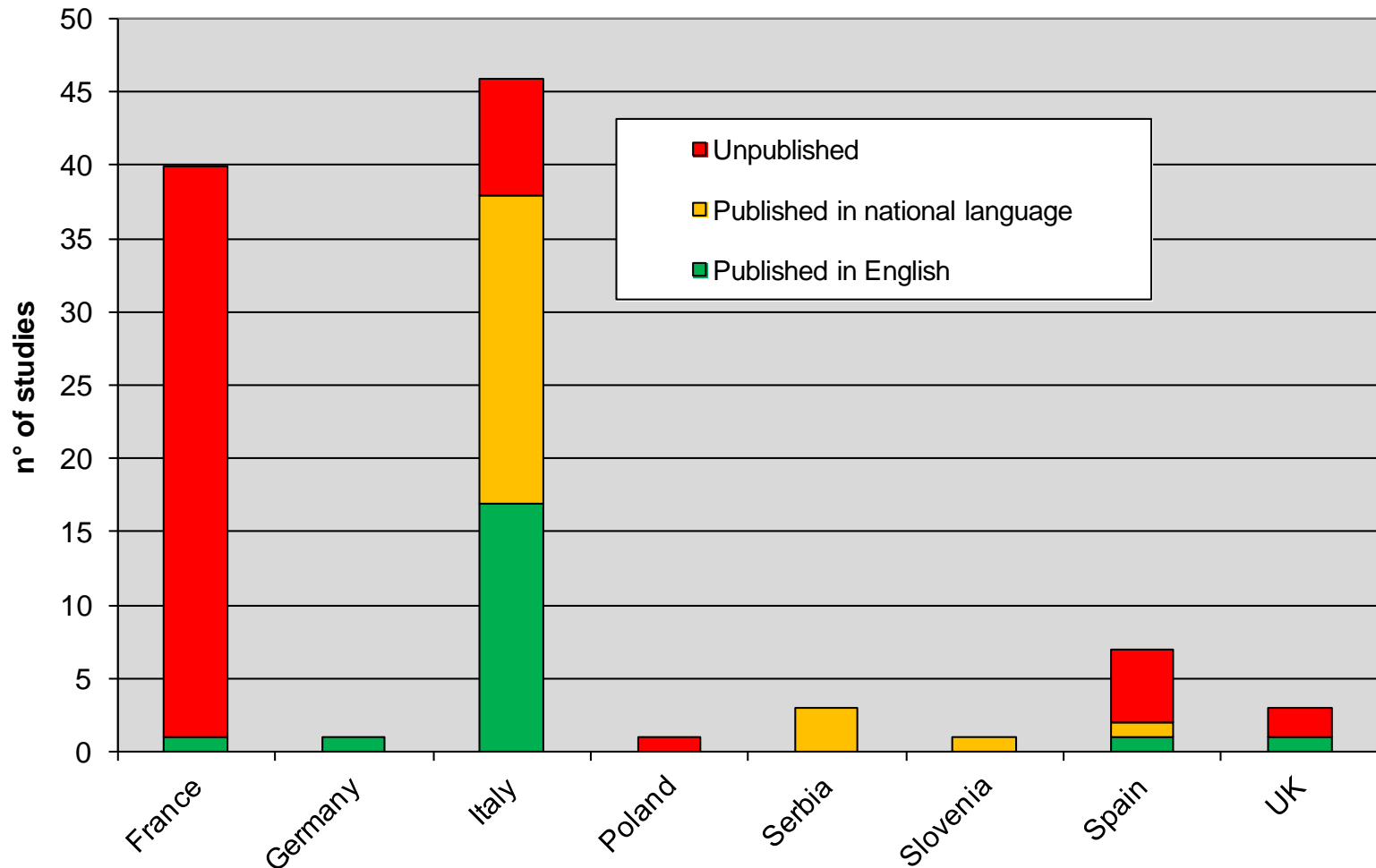
Spinelli R., Cacot E., Mihelic M., Nestorovski L., Mederski P., Tolosana E.

Bibliography review

- COST – compile/coordinate existing research
- European (14 Countries, valid studies from 8)
- 1970 to present



Database (102 studies)



Data analysis

- Extract main productivity and stand data

- Divide by task type

Felling, processing and harvesting = 155 data points

Extraction = 222 data points

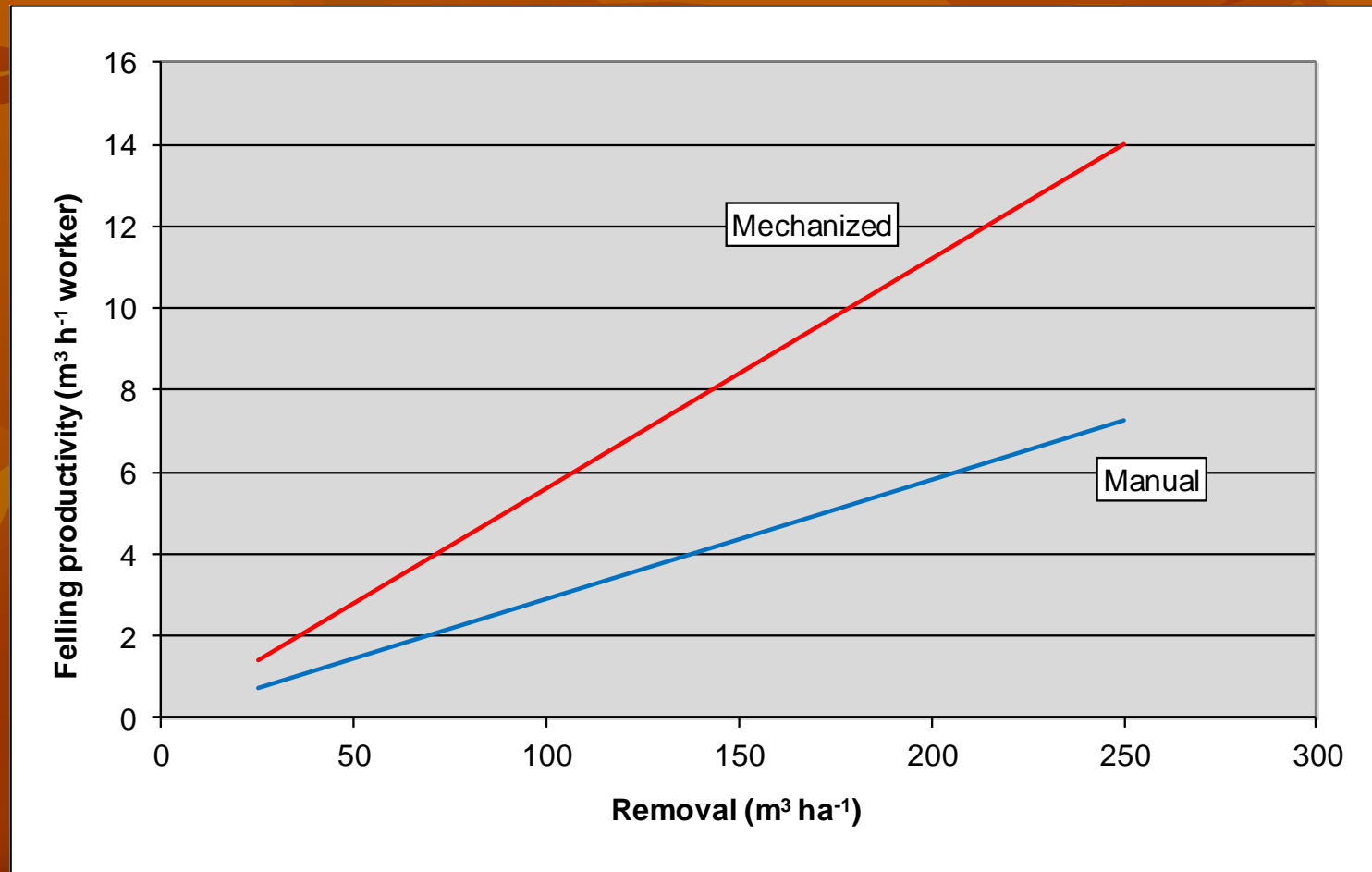
- Statistical analysis

Differences (e.g. species, mech vs. manual etc.)

Relationships (e.g. m^3/h vs. tree size, distance etc.)

Felling, processing & harvesting

- Expected: $\text{m}^3/\text{h} = f(\text{tree size, m}^3/\text{ha})$

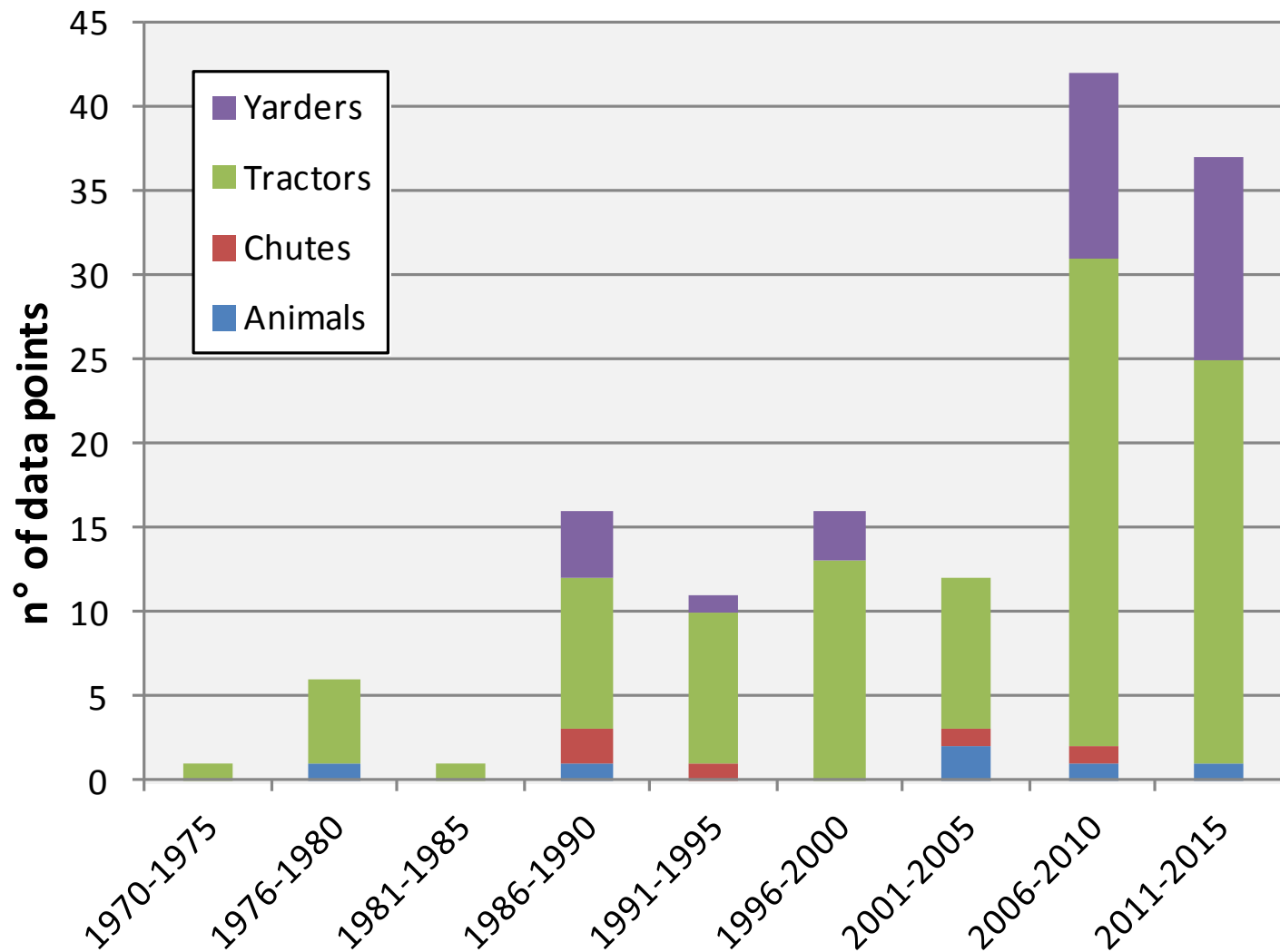


Felling, processing & harvesting

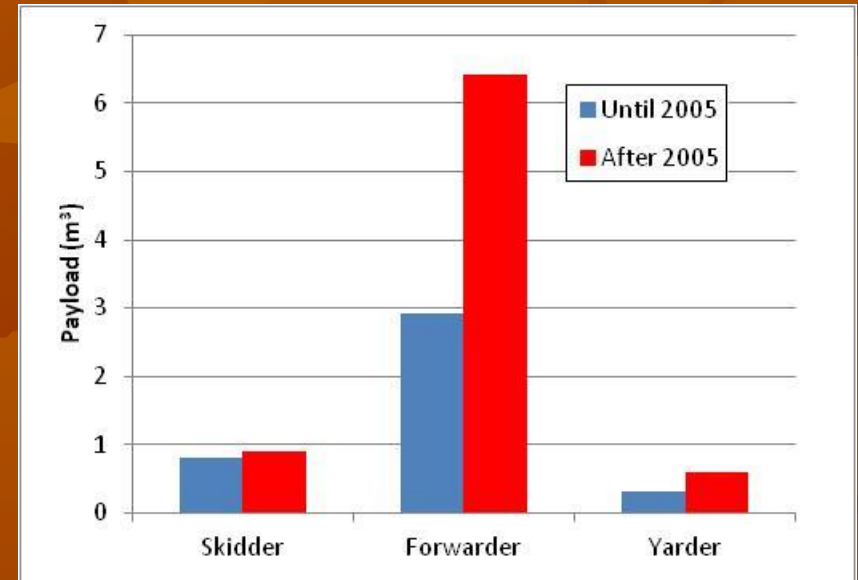
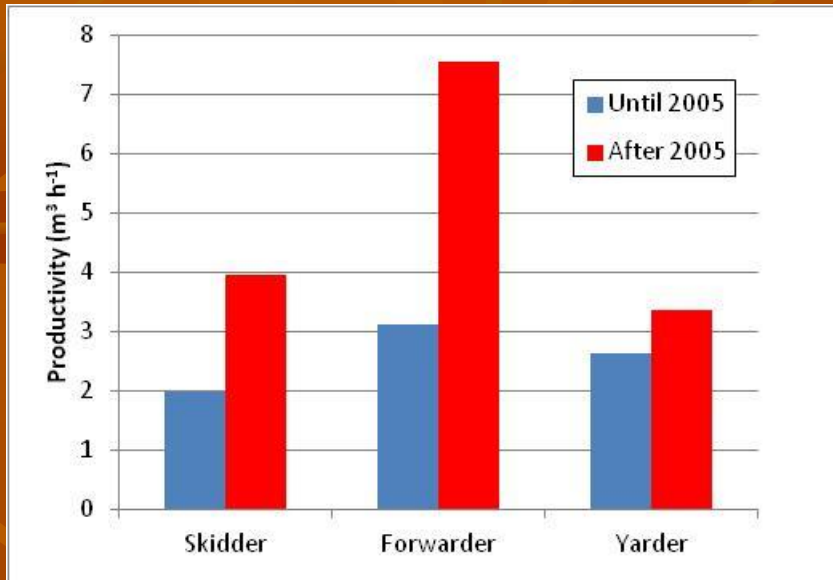
- Mechanization ups worker prod. by factor 2 – 7
- Mech. x larger tree size, not larger removals
- Mech. x more sorts
- Mech. esp. chestnut



Extraction



Progress in extraction techniques



- Payload skidder nsd
- Larger removals skidder, not others
- Distance increase for yarder

Study limitations

- Country and technology unbalance
- Different study methods
- Popularity in research may not reflect practice
- Old technology in new studies = control



Conclusions

- Check this before the next regional replicate!
- Mechanization is advancing in coppice, too
- Biomass the new market w/huge potential



COST Action FP1301 EuroCoppice

Innovative management and multifunctional utilisation of traditional coppice forests – an answer to future ecological, economic and social challenges in the European forestry sector

... Thank you!

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