ROMANIA

Valeriu-Norocel Nicolescu, Cornelia Hernea

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National Forest Inventory (2008-2012):

- Total area of national forest land: 7,588,489 ha.
- Of which coppice forests: **433,490 ha** (**6%**); 57% state ownership, 43% others.

Low coppice

- 4-5 % of national forest land (about 270,000 ha).

- applied only to native poplars (i.e., black, white), in alluvial forests, willows, and black locust.

- the annual cutting (logging) areas in exploitable coppice stands (last 5 years) = between 3,400 ha and 4,600 ha.

High coppice (pollarding)

- Only in <u>floodplain white</u> <u>willow forests</u>, located along the sides of Danube River and in the Danube Delta.

- height of high stump: between (1) 2 and 3 m.



Coppice-withstandards (CWS)

- NO application of coppice-withstandards allowed after 1948, all CWS being converted towards high forests.



Old standard in a converted CWS stand (photo: M.F. Ostafi)

Short rotation coppice (SRC)

mostly using white willow cuttings (imported from Sweden, partially via Hungary).

- started after 2005.

over 800 ha of willow energy cultures (as well as about 1,000 ha of poplar energy cultures).



Rotation of coppice stands

a. Low coppice

- Black locust coppices: between 20 years (yield class V) and 35 years (yield class I).

b. High coppice (pollarding)

- White willow coppices designated to sawn timber production:
- 1. 15-30 years (production functions).
- 2. 20-35 years (protection functions).

Season of cutting

- **The optimum period** = end of winter-beginning of spring (mid-February-mid-March), after the last heavy frosts and some weeks before the onset of a new growing season.

- Currently (and legally): 15.09-31.03 (*** 2011).

Height of remaining stump

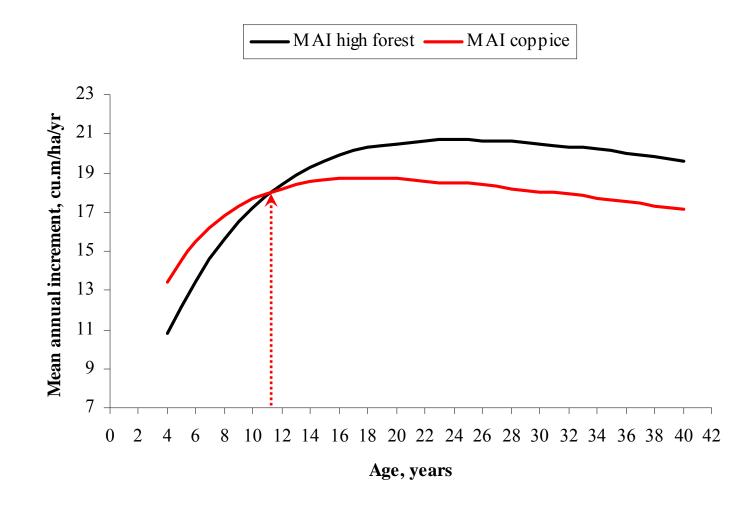
- as close to the ground as possible, with a smooth cut, without damaging or removing the bark below the cutting section.

- Cutting section: with either one (thin trees) or two (thicker trees) slopes, of about 20 degrees.

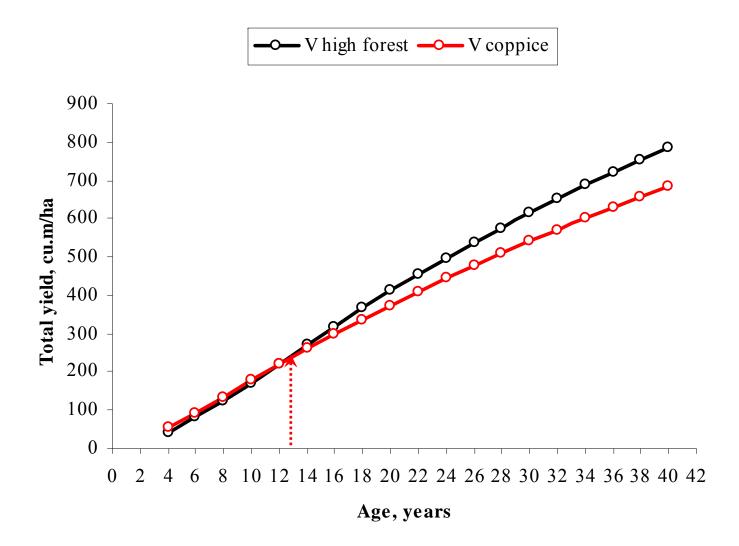
Growth and yield data/models

Evolution of mean height of black locust stands treated as high forest or low coppice in Romania (yield class III) (from Giurgiu and Draghiciu, 2004)



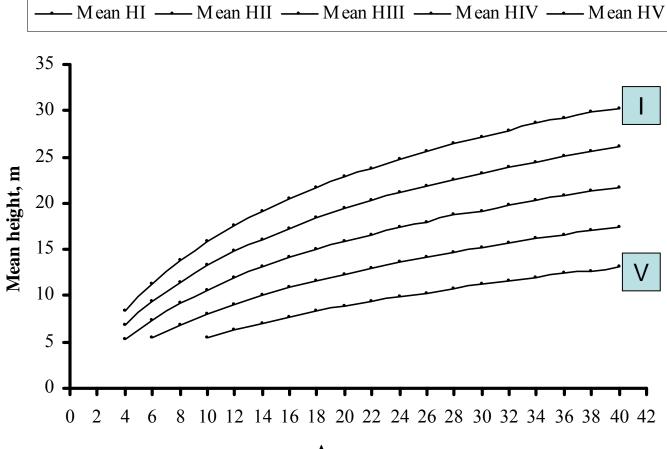


Evolution of mean annual increment of total yield in black locust stands of yield class I (coppice and high forest) (from Giurgiu and Draghiciu, 2004)



Comparison between total yield of black locust coppice stands and high forest stands (yield class I) (from Giurgiu and Drăghiciu, 2004)

Yield class curves for black locust coppices (from Giurgiu and Draghiciu, 2004)



Age, years