

Izoru Ampoiului

There was a group of *Quercus* shreds including some that had just been cut, other trees cut last year and some the year before (How many years between cut?). The leaves had been clearly stacked and protected from grazing.



Shredded *Quercus* trees showing different ages of cutting (left)

The leaves piled up and fenced (below)



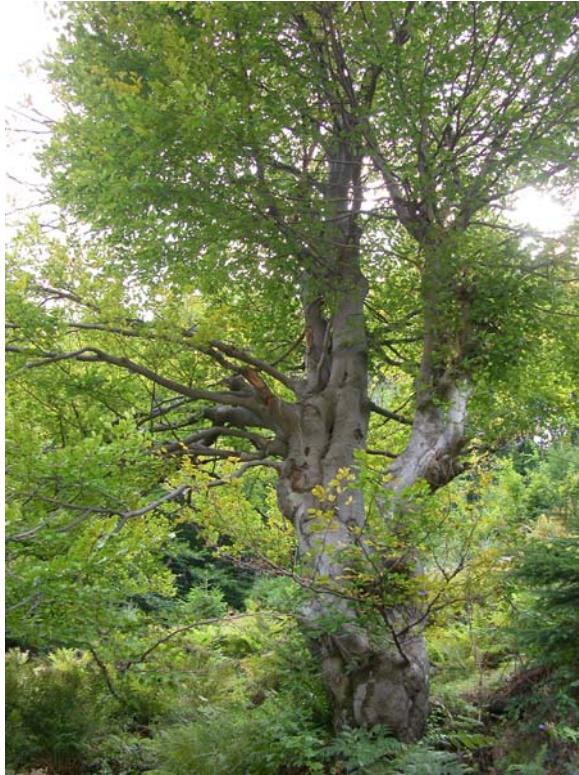
More shredded *Quercus* trees (below)



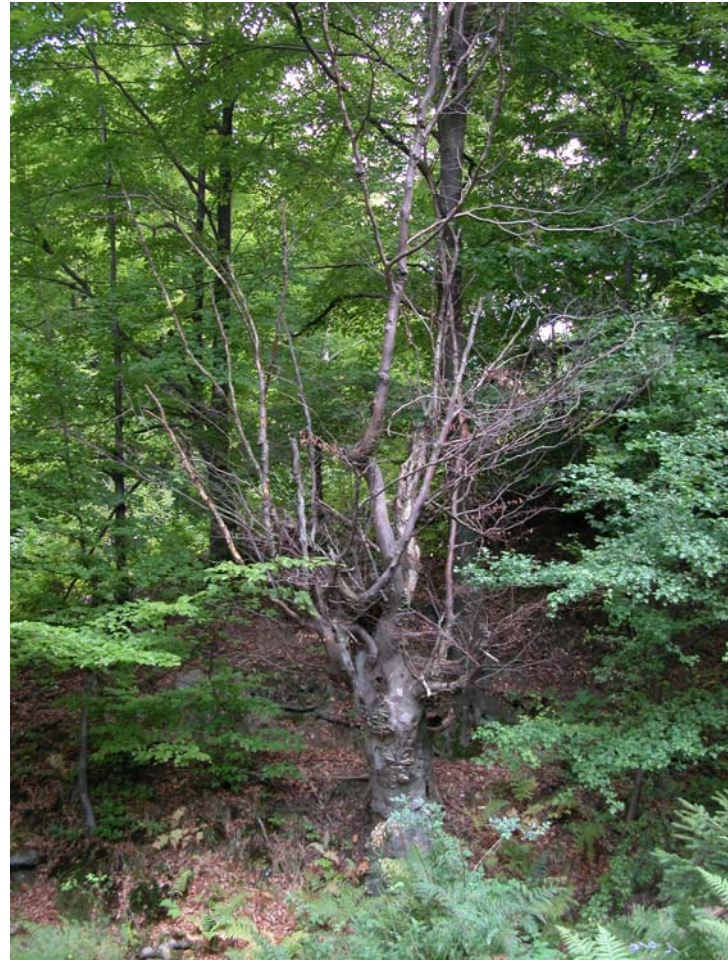
Towards the top of Izoru Ampoiului were some *Fagus* pollards. The trees looked similar to other *Fagus* pollards in Romania, i.e. they had been cut by removing different sized branches at different time. Most of the trees did not look very healthy. The last tree (further along road) looked as if it had slipped into the river but was still growing.



View of the area from the slope with the *Fagus* pollards (left)



Fagus pollard in woodland (left)

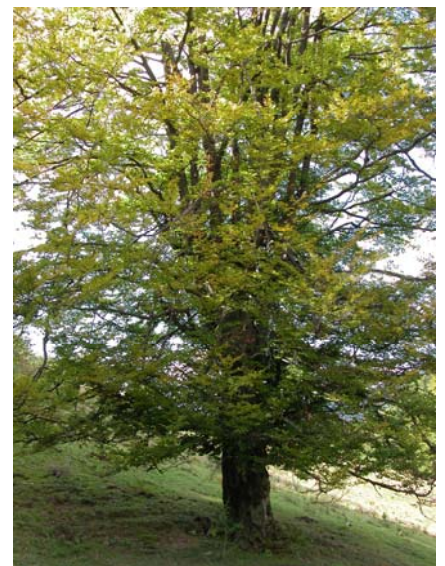


Dead Fagus pollard (right)

Fagus that had slipped into the river (below)



Fagus pollard in more open grazed area (right)



Summary and additional comments

Pollarding clearly was part of Romanian land management although denied by some of the people we met. Pollarded trees were regularly seen in gardens and towns as well as in wood-pasture/wooded meadows. Szabó (2001) mentions the presence of pollards in parts of Romania that were formerly Hungarian. For example he mentions Seclar, an area of Transylvania near Farkaslaka (Lupeni) as having wood pasture with dozens of ancient beech. He also mentions that there are hundreds of place names across the Carpathian basin that preserve the memory of pollards (of course there may not be pollards there today). Based on living trees, pollarding in the Carpathian basin can be traced back to the Middle ages and pollards were clearly part of the medieval and post medieval landscape.

Pollarding seems to have been a widespread management technique for *Salix* trees along water courses and in wetter areas, in *Fraxinus* in gardens and in *Fagus* in wood-pastures in the higher areas at the edges of the villages. *Fagus* pollards were probably widespread, perhaps small numbers found in many different places. However, many trees with a pollard-like appearance from a distance were not on closer look, so it is very difficult to know total numbers.

Pollarding is still widespread but is much more obvious in *Salix* and street trees than in the wood-pasture situations. It seems likely that many of the wood-pasture pollards have lapsed or are almost lapsed.

Salix were still pollarded regularly. Some clumps of *Salix* appeared to be coppiced but many trees showed a browse line and/or tightly packed leaves on the lower stems and branches. Perhaps animals are tethered there overnight?

Pollarding has been adapted in Romania as a street tree management form. In towns and more urban areas pollarded *Tilia* and *Ulmus*, as well as other trees, were seen, seemingly regularly cut but probably not mainly for the products of cutting. In the Prahova valley there were large numbers of street pollards. Many were *Aesculus hippocastunum*, *Tilia*, *Populus* and *Fraxinus*. Some of the trees looked reasonably well maintained, others look hacked! Some had been cut unevenly so that they avoided power lines or similar obstacles. Being cut on one side is clearly a common feature of Romanian trees! While most were clearly mainly cut to keep the trees short or to prevent excessive shade along the edge of gardens, it is possible that the leaves of some of those cut in gardens were used along with the hay although no drying leaves were seen except for those from the shredded trees.



Pollarded *Aesculus hippocastunum* in Campina

Probably none of the wood-pasture, wooded meadows with pollards are protected but consideration should be given to doing so when Romania joins the EU. Probably none of the sites are directly under threat and there may be many of them so the loss of a few

many not be a problem. However, Romania must be one of the few places in Europe where shredding is still commonly carried out and it would be a shame to lose the knowledge of how this is done. The protection and value of cultural landscapes is likely to be overlooked and it is likely that many of the areas where there are old trees as a result of pollarding, especially the *Fagus* trees, may go into decline due to lack of tree cutting. In these places there is likely to be a loss of continuity of old trees.

Comments from other people about Romanian pollarding

Dénes Dobrosi (Hungary – Kiskunság National Park)

The *Fagus* pollards usually occur about 1-2km from the villages on land belonging to the villages and they are cut for firewood. They tend to occur in the poorer areas. Dénes also thought that shredding would probably be done for fire wood and could not think why the leaves would be kept. The bigger forests are state owned whereas the smaller ones belong to the villages. The King forest, west of Cluj and north of the Albac road is a good area.

Péter Szabó (Hungary)

Péter took one look at the front of the Burnham Beeches guide book and said that there were lots of trees like that in Romania. He had seen plenty in Transylvania but had not been to Maramureş himself. He said that shredding is clearly done for leaf fodder, although he had no suggestions for why oak might have been shredded (he, and Håkan Slotte were the only people I spoke to who were in no doubt that shredding is done in Romania for fodder! – see also below).

In Transylvania he had seen charcoal makers working in a plateau woodland where there were *Fagus* trees but there was no evidence of the trees being cut as pollards for charcoal. Some of the charcoal makers have come to Hungary in recent years as they can get a better living making it for barbecues.

Why shred trees

Despite most people we asked denying that shredding was done for the fodder this clearly must be the reason. Shredding is not an easy task so there must be a good reason to do it. We were told that shredding was done to let light to the ground but the result in the long term for most species seems to be more shading as *Fraxinus*, *Alnus* and *Populus* all to produce profuse leaf growth. In Spain I was told that shredding is preferred to pollarding when cutting the trees for fodder as more leaves are produced. This is probably the reason for this type of cutting in Romania too. I was also told that *Quercus* leaves are suitable for fodder if mixed with other tree leaves so this explains the shredded *Quercus* seen. The method of stacking cut leaves in the trees to dry while keeping them out of reach of the grazing animals (as seen in the *Salix* in Romania) was also spoken of in Spain.

We were repeatedly told that *Fagus* is only cut for firewood. However several shredded trees were seen in different places; shredding would not produce good firewood. In Scandinavia I was told that *Fagus* twigs are good early spring fodder, as they are coming into leaf and before the grass is growing, which may be an explanation for shredded trees in Romania. None were seen with abundant leaves on the stems like other shreds but this may just be because all those we saw had been

quite freshly cut. *Picea abies* was also seen shredded, probably for the timber but it is possible the branches were used for animal bedding as in Austria?

Shredded *Picea abies*



It was noticeable that all the shredding looked relatively neatly done, in contrast to the *Fagus* pollards that looked generally ‘hacked’. Although on close inspection the one group of *Fagus* shreds we could get to were not so neat so perhaps it was just that we couldn’t get so close to most shreds!

There were plenty of examples of trees shredded this year or last year, however, no pollards looked this recent except *Salix* and some street trees.

Shredded *Alnus* in the Viseu valley (right)



Romanian words

Fag	Beech
Salcie	Willow
Otava	Second hay cut
Fasonare	Trees cut for ‘fashion!’
Nuc	Walnut
Frunzo Capacului	Small boy’s writing of name of tree

Take home messages from Romania

Romanian pollarding of *Fagus* seems to be more about taking odd branches when needed than any more systematic pollarding, although in the past this might have been different. The trees seem able to cope with this (though they are not always especially beautiful). Presumably it was discovered that removing all the branches kills the trees so this is the Romanian compromise.

Regrowth following pollarding does seem to take place when single branches are removed, contrary to what might be expected in light of experiences on other trees elsewhere. Regrowth following pollarding did, in several cases, look rather different to the Burnham Beeches situation where little or no growth occurs close to the cut. Is this because the trees are genetically different, climatic factors or something else? Some trees did look more ‘hairy’ with adventitious growth.

We would have struggled to find the *Fagus* pollards if it was not for Håkan's maps. Clearly *Fagus* pollards are well known to interested people (Håkan, Péter etc.) Both Håkan and Péter implied that they were much more abundant than we found them to be. Was this because we could not easily spot them as the leaves were on the trees? We tried in several places using binoculars to try and spot them and rarely succeeded. Our impression was that they were not common in the areas currently open but were largely subsumed within the woodland that is often at the edges of the villages, higher up on the slopes. If this is so then very few of the trees are likely to be under any active management. We certainly did not see large numbers of trees that had been pollarded in the generally accepted sense, in recent years. Our feeling then is that pollarding of *Fagus* might have been a widespread activity at some point in the past as trees showing signs of pollarding were found in Transylvania, Maramureş and Prahova county. However, despite the persistence of a largely rural life style, and the importance of the land for the people, for some reason these trees are no longer needed to provide the resources that they once did. If this is true the future for the old *Fagus* trees in Romania is not ensured.

Questions we couldn't answer!

Has the pollarding 'changed' with the advent of the chain saw? I.e. are larger branches removed now than in the past?

Various people told us that *Fagus* was cut for firewood and not for fodder. We were also told it was not used for building. If this is the case then why cut the pollards at all when there appears to be plenty of beech woodland. Why not just fell the trees? Why were the branches left on the ground near to the trees? (Additional summer feed as seen in Picos de Europa?)

Was *Fagus* cut for fodder in years of need? - Although no one has hinted at this at all. Håkan said that the trees were cut in winter but is this actually the situation? - All other trees we saw cut were being done in the early autumn.

When do you leave the top branches on a shred and when remove them?

What is the real Romanian name for a pollard! (and a shred)



Fagus pollard at Botiza

General comments on the agricultural system

In all areas we visited a varying proportion of the transportation was by animals. Carts were pulled by (in order of most common) horses, oxen, buffalo and donkeys. Probably the highest proportion of animal transportation was in Maramureş where perhaps 1/8 to 1/4 was not motor powered.



Ox cart in Maramureş



Horses and cart

The horses

Horse colours were many and varied but it was noticeable that there were lots of roans and also fleabitten greys, two colours not particularly common in Britain currently. There were few (if any) coloured horses. Most of the animals were light in

stature with only a few heavier ones in the more hilly parts of Maramureş. In Maramureş many of the horses had very simple harnesses consisting of a cloth breast

collar and a strap across the withers, which were jointly attached to the traces. In more hilly areas and closer to the bigger towns the harnesses were fuller and had breeching. Some carts had breaks, usually a break on each wheel but many clearly did not. We saw two heavily laden carts going down a long hill dragging tyres full of stones behind them presumably to act as breaks.

Most carts in the Maramureş had a central pole and were pulled by two horses. If there was only one horse then one side was used. Close to Bucharest we saw more carts with two shafts and one horse. Foals and young horses were tied to the back of the cart (sometimes as many as 4!). Sometimes they were left free to follow on. If a pole shaft was being used with only one horse the foal was often tied into the position of the second horse but only by its head collar so it was not pulling.



Horses following a cart

Work in the fields

The main work while we were travelling in Romania was hay cutting, potato picking and firewood collection. Both young and old, male and female people were seen working in the fields.

Hay was cut almost invariably with a scythe and these were seen

carried around by various people over their shoulders. The hay when cut and dried was stacked and then some stacks were brought to the houses and stacked up outside or stored inside in barns. Other stacks clearly stay outside in the fields during the winter until they are needed. Most stacks had a few leaves on top but most did not appear to have any form of water proofing. A few had small sheets of polythene but mostly these looked quite ineffectual. Two cuts of hay are taken from each hay meadow so there is no aftermath grazing.



Hay making

Firewood is obviously important to see people through the winter. Many carts full of wood were seen travelling about. Most of the wood was fairly small in diameter and people were visibly chopping up wood and stacking it. Some people had clearly bought loads of off cuts from the sawmills to cut up and use as firewood with the result that great heaps were seen

outside some gateways! The wood is clearly also used for building work, fencing and peasticks amongst other things!

Towards the end of the time we were there people were out collecting the pumpkins (apparently for animals feed not human consumption) and also cutting maize cutting and stacking the stems to dry.

The animals are herded in communal herds, with a shepherd or cattleherd looking after animals owned by many different people. The cattle come back to their own homes each night. We met a farmer in Brebu who was probably quite typical. He has 1 cow and 6 sheep and cuts 2 tons of hay per year (1ha cut twice). Horses and cattle were regularly seen tethered.



Herds of sheep, goats and cattle



Pigs were seen but many probably live in sheds most of the time and are not so visible. A variety of shapes and colours were seen. Some white, some saddlebacked colours and some clearly imported commercial type breeds.



Saddleback type pig in orchard

The chickens were also variable with some marran looking types seeming popular. The farmer we met had a German breed with marran colouring and feathered topknots.

Mostly the villages were fairly discrete and consisted of small fenced gardens or orchards associated with the houses. The grass under the fruit trees was usually cut or grazed. Outside the villages were extensive areas of hay meadow, pasture, fruit trees, small fields and woodland all closely intertwined and with few if any fences. Along the road from Rasnov heading north west the land was rather flatter and the cultivated areas were cleared fenced from the surrounding meadow/pasture and the animals were grazing in between the fenced areas.

Cultivated land fenced from the pasture north of Rasnov



General views of the Maramures area – carrying hay making tools (right) and stacks of maize (below)

