The Mexikó-puszta Pro Silva Exemplary Forest (1999-2024)

Peter Csépányi

> An important story played a key role in the establishment of the exemplary forest — in fact, one could say that this is where it all began.
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> After graduating from university, I started my career at the Ózd Forestry Unit of the Mátra–Western Bükk State Forestry and Wood Processing Enterprise. There I met a silvicultural manager, who was approaching retirement. He gave me a piece of advice that has stayed with me ever since: "Have a forest of your own."
>
> By a "forest of your own," he did not, of course, mean ownership. Rather, he meant a forest stand for which I would take full professional responsibility, making all management decisions based on my own judgment—from planning the silvicultural interventions to supervising and evaluating their implementation.
>
> I have remained deeply grateful for this advice ever since.

When I joined the headquarters of Pilis Park Forestry Company (PPFC) in 1996, I spent the first few years becoming familiar with the company's forests. However, I missed being directly involved in practical forest management in the field. During a discussion with forest engineer Balázs Kiss, the Mexikó-puszta area near Dobogókő came up as a potential location. The area is characterized by beautiful submontane beech forests with a rich admixture of oak species.

We visited the site together, and I was immediately impressed by a mixed beech stand that was approaching 90 years of age. In addition to European beech (*Fagus sylvatica*), the stand contained sessile oak (*Quercus petraea*), pedunculate oak (*Quercus robur*), hornbeam (*Carpinus betulus*), wild cherry (*Prunus avium*), and European ash (*Fraxinus excelsior*). The topography was also highly suitable, and the site could be accessed year-round via an all-weather forest road. This stand was therefore selected, and during the subsequent forest planning process we added a neighbouring area with similar characteristics that naturally belonged to the same management unit.

The initiative also received strong support from István Gősi, then leader of the Pilisszentkereszt Forestry Unit. The timing was particularly favourable, as both society and forestry professionals were increasingly questioning the exclusive reliance on even-aged forestry and calling for alternative silvicultural approaches.

Study tours abroad had clearly demonstrated the importance of exemplary forests as powerful tools for professional education and knowledge transfer. I therefore envisioned this site as an ideal location where uneven-aged silviculture based on the principles of Pro Silva could be demonstrated to forestry professionals while simultaneously documenting its silvicultural, ecological, and economic performance over the long term.

To mark the selection of the site, we organized a small professional gathering attended by Professor Hans-Jürgen Otto, then President of Pro Silva, who happened to be visiting Hungary (Photo 1.). This meeting marked the beginning of the project. Since then, I have personally carried out the marking of all silvicultural interventions.

Already in 1999, approximately 3.6 hectares of the area were fenced to enable a long-term comparison between forest regeneration exposed to browsing by large game and regeneration protected from browsing.

From the outset, I also assumed many of the responsibilities that are normally carried out by the local forester or forest ranger. These include continuous monitoring of stand development, selecting future trees, marking trees for harvesting and habitat trees, identifying the locations of future canopy gaps, conducting self-controls, and preparing the professional and operational plans required for management—including the continuous cover forestry management plan, harvesting plan, assortment plan, and harvesting organization plan. I have also maintained close field supervision throughout every harvesting operation. In addition, I personally carry out, the maintenance of natural regeneration within the existing canopy gaps.

Figure 1. Colleagues attending the field event on 30 March 1999. Professor Hans-Jürgen Otto is seated on the right-hand side

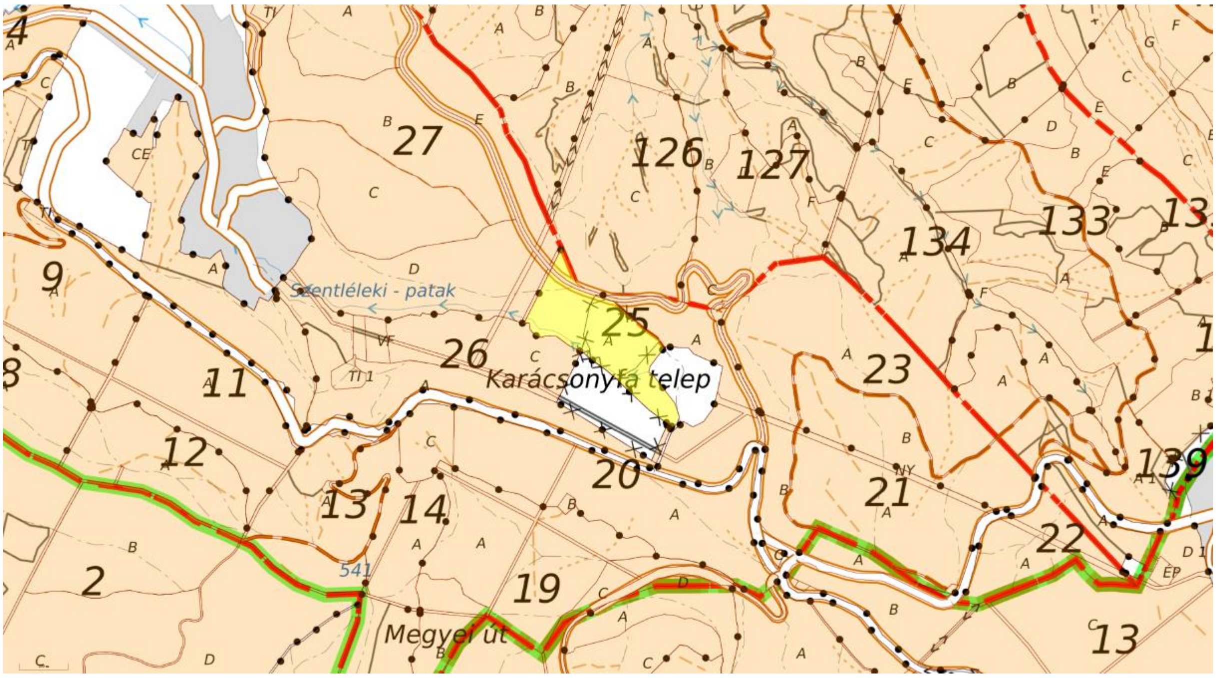

Figure 2. Location of the Exemplary Forest (outlined in yellow). The lines visible in the centre of the area indicate the fenced experimental plot.

The Pilisszentkereszt Forestry Unit is one of the mountain forestry districts of PPFC. According to the latest data, it manages a total forest area of 8,230 hectares. Of this, 72% lies within the Pilis–Buda Hills Forest Region, while the remaining 28% is situated in the Visegrád Mountains Forest Region. The composition of the forest stand types is as follows: beech forests account for 14%, Turkey oak forests for 20%, sessile oak forests for 17%, hornbeam–sessile oak forests for 19%, downy oak forests for 7%, black pine and Scots pine forests together for 5%, lime- and maple-dominated stands for 2%, ash-dominated stands for 11%, and black locust stands for 5%. The Pilisszentkereszt Forestry Unit was among the first forestry districts within PPFC—and indeed among the pioneers in Hungary—to begin the large-scale implementation of continuous cover forestry based on the principles of Pro Silva.

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Following these preparations, in 1999 we established the Pro Silva Exemplary Forest by combining the Pilisszentlélek 25A and 26B forest compartments. According to the current forest management records, the Exemplary Forest covers 9.73 hectares (hereafter referred to as the *Exemplary Forest*). It was officially recognized and registered by Pro Silva Hungaria in 2003. In the forest management plan that came into force in 2002, the area already appeared as a single forest compartment under its current designation: Esztergom–Pilisszentlélek 25A.

From the outset, the work carried out in this forest compartment has served not only as a demonstration of continuous cover forestry but also as an operational field experiment. Its primary objectives have been to develop planning, silvicultural, and harvesting methods suitable for the application of continuous cover forestry under Hungarian conditions, while at the same time evaluating the economic performance of the entire management system.

The experience gained here has made a substantial contribution to the expansion of the continuous cover forestry management system. Today, this management approach covers 3,182 hectares within the Pilisszentkereszt Forestry Unit and 13,190 hectares within PPFC, representing 22.3% of the company's total forest area.

The knowledge acquired in the Exemplary Forest has also provided the basis for designing further experiments and scientific research. Since 2014, the HUN-REN Centre for Ecological Research and PPFC. have jointly conducted a series of long-term experiments within the Pilisszentkereszt Forestry Unit to investigate the ecological effects of different forest management interventions (Kovács *et al.*, 2020; Tinya *et al.*, 2020; Horváth *et al.*, 2023; Tinya *et al.*, 2025). These studies have made an important contribution to the scientific foundation of continuous cover forestry in Hungary (https://piliskiserlet.ecolres.hu).

It would be difficult to present the events of the past 25 years in strict chronological order, as an enormous amount has taken place over this period. Therefore, I considered it more effective to organize the experiences and lessons learned by thematic topics rather than by timeline.

Professional and Economic Evaluation of the Forest Management Interventions Carried Out in the Exemplary Forest

Silvicultural Principles Applied

Silviculture is the "queen" of forestry disciplines, as it defines the strategic framework for forest management. In the Exemplary Forest, we have consistently applied the fundamental principles of the Pro Silva silvicultural philosophy. Without attempting to provide a comprehensive list, the most important principles are the following:

- Maintaining continuous forest cover by developing a structurally diverse, uneven-aged forest rich in tree species—that is, a close-to-nature forest management.
- Protecting natural habitats and integrating natural structural elements into forest management.
- Enhancing the forest's resilience and adaptive capacity to environmental change.
- Making use of natural forest dynamic processes, including natural regeneration, stand differentiation, self-thinning, and natural stem cleaning (biological self-regulating processes).
- Continuously improving stand quality from both ecological and economic perspectives.
- Applying single-tree and small-group harvesting to create fine-scale, spatially heterogeneous light conditions that promote natural regeneration and structural diversity.

Results of the Forest Management Interventions

Since the establishment of the Mexikó-puszta Pro Silva Exemplary Forest, a total of 13 interventions have been carried out between 1999 and 2024.

According to the summarized data from these interventions, a total of 2,616 gross m^3 of timber were harvested from the living growing stock over the 25-year period, corresponding to 269 m^3 per hectare. Despite this harvesting volume, the standing timber stock has not declined.

In the first ten-year forest management plan valid from 2002 (Table 1), the compartment Pilisszentlélek 25A already appeared with its current area of 9.73 hectares. At that time, the overstorey had an average basal area of 22.9 m^2/ha and a standing volume of 367 m^3/ha.

Table 1. Stand description of the Exemplary Forest on 1 January 2002.

ÁLLOMÁNYLEÍRÁS:

Sorsz.	Jelző sz.	Fafaj jele	Ere-det	Elegy arány %	Elegy mód	Kor év	Mag m	Átm. cm	Fto.	Fat. kép. m³/év	Záró-dás %	Körlap m²/ha	Törzssz. db/0,1 ha	Fakész-let m³/ha	Fakészlet a részletben m³	F. növedék a részletben m³/év	Becs. mód
1	1	B	M	55	FF	92	30	44	2	11	80	13,6	9	220	2090	33,3	EK
2	1	KTT	M	23	SZ	92	28	38	1	15	80	5,4	5	92	874	14,3	EK
3	1	GY	M	22	SZ	92	23	25	2	7	80	3,9	8	49	466	2,9	EK
4	5	B	M	100	FF	7	1		4	8	35		290	6	57	17,1	FT
											Összesen	22,9	312	367	3487	67,6	

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According to the self-controll carried out immediately before the most recent intervention in the winter of 2023/2024, the basal area of the overstorey was 22.4 m^2/ha, while the recruitment layer I. (trees with 7 cm ≤ DBH < 12 cm) had a basal area of 0.9 m^2/ha. In addition, recruitment layer II. (DBH < 7 cm) showed a canopy closure of 74% (Table 2, Figure 3).

Table 2. Tree species composition of the regeneration layer by height class and estimated canopy cover

Height classes/Tree species	**Total %**	beech %	hornbeam %	sycamore %	cherry %	oak %
HC 3 (130 cm ≤h, DBH ≤ 6 cm)	**59**	51	5	2	1	
HC 2 (50 ≤ h < 130 cm)	**11**	8	2	1		
HC 1 (< 50 cm)	**4**	2	1			1
Total	**74**	**61**	**8**	**3**	**1**	**1**

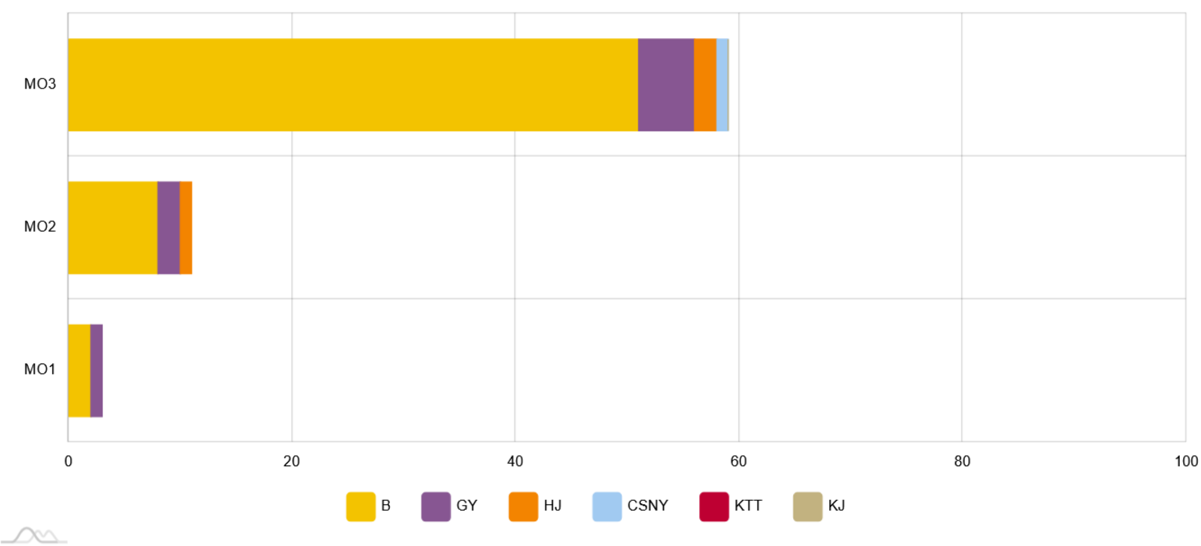

Figure 3. Tree species composition of Regeneration Layer II (DBH < 7 cm) by height class, based on the data presented in Table 5.

These regeneration data demonstrate that natural regeneration is continuously available throughout the stand. During the entire period no tending or cleaning operations were required in the regeneration layer, with management efforts being limited primarily to the maintenance of regeneration within canopy gaps containing oak.

Following the harvesting operation carried out during the winter of 2023/2024, the forest database in 2025 (Table 3) contained an overstorey basal area of 21.1 m^2/ha and a standing volume of 370 m^3/ha. The understorey layer had a basal area of 10.5 m^2/ha and a standing volume of 46 m^3/ha, resulting in a total standing volume of 416 m^3/ha, as recorded in the current forest management plan. Based on these figures, the periodic annual increment is estimated at 12–13 m^3/ha/year.

Table 3. *Stand description of the Exemplary Forest on 17 May 2025*

ÁLLOMÁNYLEÍRÁS

▲	Szintek	Fafaj neve	Eredet	Elegy arány (%)	Elegy. módja	Átlag kor (év)	Átlag mag. (m)	Átlag átm. (cm)	Fto	Záró -dás (%)	Körlap (m^2/ha)	Folyó növedék (m^3/ha/év)	Fakészlet (m^3/ha)	Felvétel módja
1	FELSZ	Bükk	M	52	FF	114	32	59	2	48	11,5	2,7	208	EK
2	FELSZ	Kocsánytalan tölgy	M	26	SZ	114	31	51	1	48	5,9	1,4	108	EK
3	FELSZ	Gyertyán	M	13	SZ	64	18	26	3	48	1,7	0,2	17	EK
4	FELSZ	Magas kőris	M	9	SZ	64	32	37	1	48	2,0	0,8	37	EK
5	ALSSZ	Bükk	M	75	SZ	21	6	6	2	56	8,8	3,2	38	FT
6	ALSSZ	Gyertyán	M	10	SZ	21	4	5	4	56	0,4	0,2	2	FT
7	ALSSZ	Hegyi juhar	M	15	SZ	21	6	5	4	56	1,2	0,7	6	FT
		Összesen									31,5	9,2	416	

The assortment structure of the harvested timber has also been favourable. Of the total 2,616 m^3 gross harvested volume, 1,889 m^3 was marketable timber (net volume), while the harvesting residues—primarily crowns and branches—were largely retained on site, enriching the deadwood resource of the forest. The industrial roundwood rate reached 45% (Table 4).

Table 4. Assortment composition of the marketed timber

The economic results have also been highly favourable. As shown in Figure 4, every management intervention generated a positive financial return. Over the 25-year study period, the periodic net income—calculated as the revenue from timber sales (at the roadside, all-weather road landing) minus harvesting and regeneration costs—amounted to EUR 108 939 (expressed at 2024 prices and cost levels). This corresponds to an annual annuity of EUR 459 per hectare, based on the actual financial records.

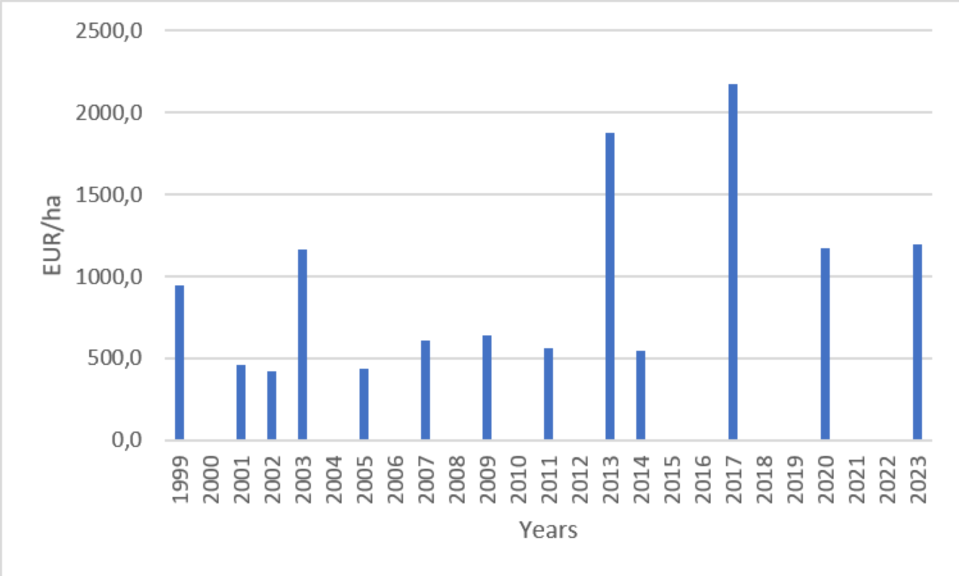

Figure 4. Cash Flows at 2024 prices (EUR/hectare)

Cooperation Between Forestry Practice, Forestry Research, and Forest Ecology

The practical experience accumulated in the Exemplary Forest has made a significant contribution to the development of the legal framework governing continuous cover forestry in Hungary. Using the biological and financial data collected on the site, it was possible to develop a comprehensive economic model of continuous cover forestry in beech forests, demonstrating that this management system is not economically inferior to even-aged forestry. The long-term operational results have subsequently confirmed the validity of this model (Csépányi 2013; Csépányi & Csór 2017; Csépányi 2017).

The work carried out in the Exemplary Forest has also demonstrated that sessile oak can be successfully regenerated in relatively small canopy gaps. The professional advantages of initially creating elongated, north–south-oriented elliptical gaps (Csépányi 2008) were later confirmed by the results of the Pilis Gap Experiment (Tinya *et al.*, 2025).

Figure 5. Establishment of a new canopy gap in autumn 2025 (10 × 14 m) (Photo: P. Csépányi).

Another important finding is that canopy gaps should remain relatively small, and their gradual enlargement should be synchronized with the height growth of the oak regeneration (Figure 5, Figure 6). As long as viable oak regeneration can be maintained within an area approximately equal to the crown projection of a single mature tree, the principles of continuous forest cover can be fully respected.

Figure 6. A successfully developing canopy gap in 2020, where sessile oak comprises 90% of the regeneration (Photo: P. Csépányi)

The first canopy gap was created during the harvesting operation in 2003, at a location where natural regeneration of sessile oak was already present. Today, the oldest oaks established in that gap are 22–23 years old and have reached a height of approximately 9 metres.

Since then, I have inspected these gaps every growing season, between May and the end of June, carrying out any necessary maintenance. This mainly involves bending back or cutting the leading shoots of faster-growing competing species so that they remain below the height of the developing oaks.

Since the establishment of the first gap, I have created several additional canopy gaps within the forest compartment using different protection methods. Some have been protected by small, low fences, while others remain unfenced. In the latter cases, a "living fence" is created by repeatedly bending back the shoots of the faster-growing hornbeam and beech, thereby reducing competition and providing favourable growing conditions for the young oaks.

During a smaller research project in which the Exemplary Forest was included, we measured the annual shoot length increment of young sessile oaks between 0.5 and 7 metres in height growing under different light conditions within canopy gaps (*Figure 7*). Maximum annual growth was observed at 30–50% relative light availability, a light regime that was available in appropriately positioned parts of the gaps (Csépányi *et al.* 2021).

Figure 7. Light availability measurement using hemispherical (fisheye) photography at one of the tallest young sessile oak trees within the canopy gap, summer 2021 (Photo: P. Csépányi)

As a result of the management interventions, the diameter distribution of the stand gradually approached "*Model I*" described in the *Guidelines for Preparing Continuous Cover Forest Management Plans* (*Figure 8*). This is of particular importance because it reflects an increase in stand stability, the development of a more diverse vertical and horizontal stand structure, and the successful transformation of the formerly even-aged stand into a multi-aged forest.

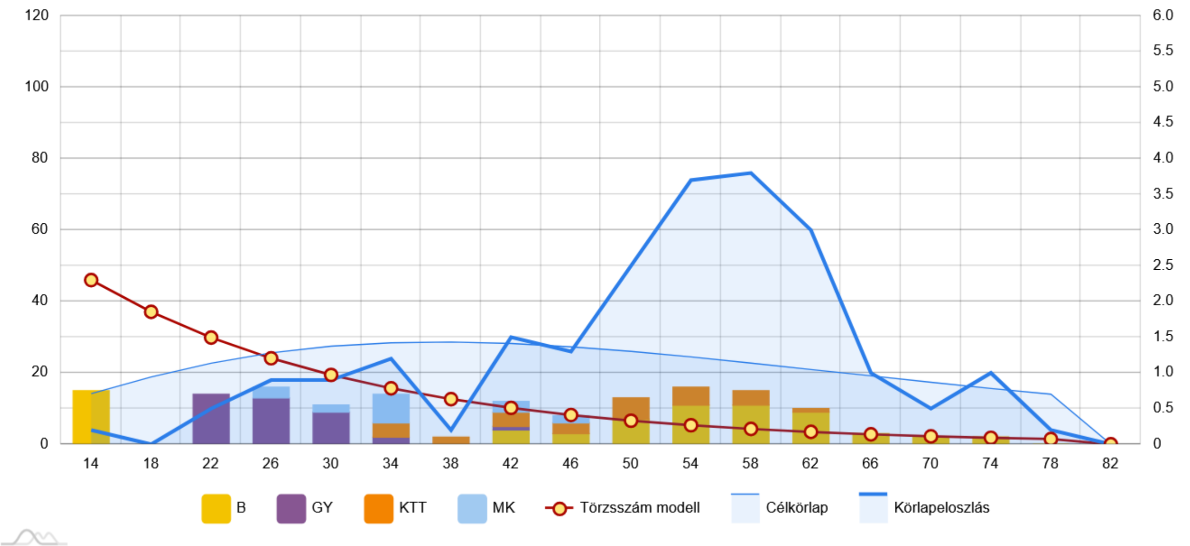

Figure 8. Diameter distribution and basal area distribution of the Exemplary Forest based on the autumn 2023 self-contol (left axis: number of trees (trees/ha); right axis: basal area (m²/ha); source: ESZR Continuous Cover Forestry Module).

Before each harvesting operation, I carefully planned and marked the skid trails to ensure the long-term protection of both the forest soil and the remaining stand. Wherever possible, I kept these trails as narrow as practical, generally limiting their width to 3–4 metres.

Our experience has demonstrated that the selective application of specialized harvesting techniques (Figure 9), such as crown dismantling and directional felling using pulley-assisted winching, provides an effective and forest-friendly solution in situations where conventional felling would result in excessive damage. Crown dismantling, which minimizes both timber quality losses in high-value, large-crowned trees and damage to the residual stand during felling, has proven to be a rational intervention that can also be applied under operational forestry conditions (Csépányi 2004), provided it is restricted to cases where it is genuinely necessary.

Figure 9. Prior to felling, small-diameter trees located in the path of the falling stem are cut back to minimize damage to the remaining stand and natural regeneration (Photo: P. Csépányi)

Despite the justified use of these specialized techniques, the average direct harvesting cost over the past 25 years amounted to only EUR 20,54 per cubic metre at 2024 price levels.

Another important conclusion is that, in continuous cover forests dominated by broadleaved species—where exceptionally valuable trees with diameters of 70–80 cm and stem volumes of 10–15 m^3 are common—the widespread use of current-generation harvesters cannot generally be recommended. This highlights the strategic importance of highly skilled professional chainsaw operators (Figure 10) in uneven-aged, close-to-nature forestry. It also underlines the need, from both stand and soil protection perspectives, to combine winch skidders (LKT) with forwarders wherever appropriate.

Figure 10. Preparing to fell a beech tree that has reached the target diameter (Photo: P. Csépányi)

Harvesting was generally carried out using a long-log harvesting system. During the marking process, I indicated the optimal felling direction at the base of each tree, considering the protection of the remaining crop trees and regeneration, as well as the location of the designated skid trails.

Logs were usually converted into assortments immediately after felling and debranching, directly at the stump (Figure 11). Shorter logs and firewood were, wherever possible, pre-cut into 6–8 m sections and transported in these lengths, with final cross-cutting to commercial dimensions being completed at the landing. Directional felling with chainsaws was employed throughout, supplemented with pulley-assisted winching whenever necessary.

Figure 11. A high-value tree felled without damage after partial crown dismantling, causing no injury to the residual stand. The butt log shown here is 9.5 m long, with a mid-diameter under bark of 61 cm, corresponding to a volume of 2.75 m^3. This single log generated a net revenue of HUF 951,835 (EUR 2505), while the total net revenue from the entire tree was approximately HUF 1.3 million (~ EUR 3420). The timber was subsequently used to manufacture structural beams for a historic listed building, where the carbon stored in the wood is expected to remain sequestered for many centuries.

For exceptionally valuable trees, or for trees that were likely to cause significant damage to the regeneration or the residual stand during felling, complete or partial crown dismantling was applied where necessary. Naturally, I always ensured that this technique was used only to the extent justified by the situation. It was required for no more than 5–10% of the harvested trees and therefore had only a minor effect on the average harvesting cost per cubic metre. In return, however, both the residual stand and the natural regeneration remained almost completely undamaged. Within approximately six months after harvesting, the traces of the intervention had largely disappeared.

The relatively low harvesting volume per hectare was more than compensated for by the large average size of the harvested trees. Figure 12 also confirms a well-known observation of foresters with long-term experience in uneven-aged forestry: both the average diameter and the average stem volume of harvested trees increase substantially over time. Under site conditions like those of the Exemplary Forest, approximately two-thirds of the harvested trees are expected, after a sufficient transition period, to reach or exceed a diameter at breast height (DBH) of 50 cm. This trend became clearly apparent in the Exemplary Forest from the 2013/2014 winter harvesting season onwards (ice break).

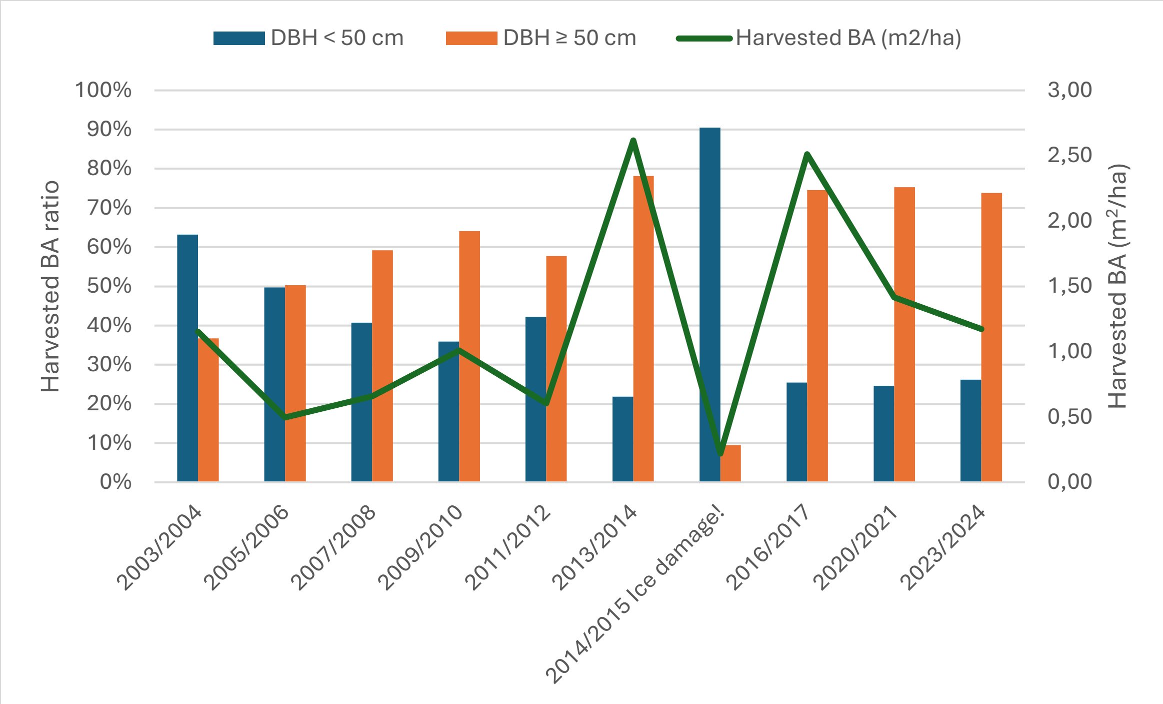

Figure 12. Proportion of harvested trees with a DBH < 50 cm and DBH ≥ 50 cm, based on harvesting operations from the winter of 2003/2004 onwards. The only observation that deviates from the overall trend is the 2014/2015 winter harvesting season. This is explained by the salvage operation following the severe ice storm of December 2014. Ice damage predominantly affected smaller-diameter trees, which were more susceptible to stem breakage and windthrow.

Consequently, harvesting productivity remained consistently satisfactory, even though the harvested gross volume during individual interventions ranged between only 10 and 50 m^3/ha.

A fundamental principle of continuous cover forestry is that, although profitability must always be pursued, the primary objective is not to maximize the financial return of the current intervention. Rather, it is to optimize the future ecological and economic value increment of the forest. In the long term, this determines the profitability of forest management through maintaining a healthy, resilient forest ecosystem and reducing future management risks. The harvesting technologies applied in the Exemplary Forest were therefore always selected in accordance with this principle.

The Exemplary Forest also contributed to the development of the Continuous Cover Forestry Module of the professional IT system (ESZR). Based on the practical experience gained here, we defined the functional requirements for the applications supporting self-control and canopy gap registration and tested their integration into the module. This module now provides practical support for the self-control and management plan preparation required in uneven-aged stands.

Integration of Nature Conservation Principles

Nature protection considerations are integrated into the management of the Exemplary Forest in the following ways:

- Approximately 5% of the managed area is designated as retention areas, primarily in ecologically sensitive parts of the stand, such as wet microhabitats, erosion gullies, and along stream channels.

- A larger proportion of the tree crowns and harvesting residues is retained on the site after harvesting operations.
- Individual trees that die naturally or are windthrown are also left in the forest to contribute to the deadwood resource.
- Forest edges and streamside zones are maintained as closed retention areas, where no management interventions are carried out.
- Hollow trees and trees providing numerous microhabitats are designated as habitat trees, with the objective of maintaining at least three overstorey habitat trees per hectare.

Figure 13. The Alpine longhorn beetle (Rosalia alpina), a protected saproxylic species, occurs frequently in the Exemplary Forest (Photo: P. Csépányi)

As a result, the conservation and ecological values of the forest continue to increase. Deadwood is accumulating slowly but steadily, and I currently estimate its volume at approximately 25–30 m^3 per hectare. The structural diversity, age distribution, and tree species mixture of the stand have also improved considerably. The forest, which was originally a predominantly single-layered, even-aged stand, has now developed into a multi-layered, uneven-aged forest, and its structural complexity is expected to continue increasing in the future.

Preparing for Climate Change

The potential natural forest community of the site is a submontane beech forest. Over the past 25 years, however, the management interventions have gradually modified the stand in ways that are expected to improve its resilience and adaptive capacity under a changing climate.

Compared with the initial stand conditions recorded in 2002 (*Table 5*), the proportion of admixed tree species has not decreased but has increased slightly by 2025, including the proportion of sessile oak. This is particularly noteworthy because, in even-aged beech stands of Yield Class II managed under the traditional rotation system, beech would normally continue to increase its dominance over time.

Table 5. Stand layers and tree species composition as specified in the forest management plan

Tree species/layer	Tree species composition (%) – 2002 forest inventory	Tree species composition (%) - 2025 forest inventory
beech/overstorey	55	52
oak/overstorey	23	26
hornbeam/overstorey	22	13
common ash/overstorey	-	9
beech/understorey	100	75
hornbeam/ understorey	-	10
sycamore/understorey	-	15

During harvesting operations, we therefore concentrated primarily on removing mature beech trees that had reached the desired target diameter (beech representing 78,2% of the harvested volume, Table 4), while retaining sessile oak and other admixed native tree species wherever possible.

As a result, tree species diversity has increased. Instead of the former situation, where beech dominated both the overstorey and almost exclusively the regeneration layer, a growing number of native tree species are now represented, a change that is particularly evident in the regeneration layer (*Table 2, Figure 3*).

The originally even-aged stand has gradually developed into a multi-aged, multi-layered forest with continuous natural regeneration. This creates favourable conditions for the establishment and gradual selection of individual trees that may possess a higher genetic capacity to adapt to future climatic conditions.

Although the proportion of sessile oak in the regeneration layer appears relatively low, the long-term replacement of mature oak trees in the upper canopy is nevertheless ensured. This is because oak regeneration is deliberately encouraged only within canopy gaps where environmental conditions are favourable and its successful development can be actively supported. We therefore establish oak regeneration gaps only when and where site conditions are optimal.

This management strategy helps ensure that, if beech declines on increasingly dry sites because of climate change, the stand will continue to contain a long-lived tree species of high ecological and economic value, thereby maintaining both the resilience and the multifunctionality of the forest ecosystem.

Professional outreach, development and dissemination of best practices

I have kept records of the professional field demonstrations organised in the Exemplary Forest since 2003. By the end of 2024, a total of 133 professional events had been held (*Figure 14*). During these events, 2,711 participants (*Figure 15*) - including forestry professionals, students, and university students from a wide range of backgrounds - visited the Exemplary Forest under my professional guidance. They received practical training in continuous cover forestry based on the principles of Pro Silva, covering silviculture, harvesting techniques, forest planning, nature conservation, economics, and related topics. The work carried out in the Exemplary Forest has also been featured in several educational and documentary films.

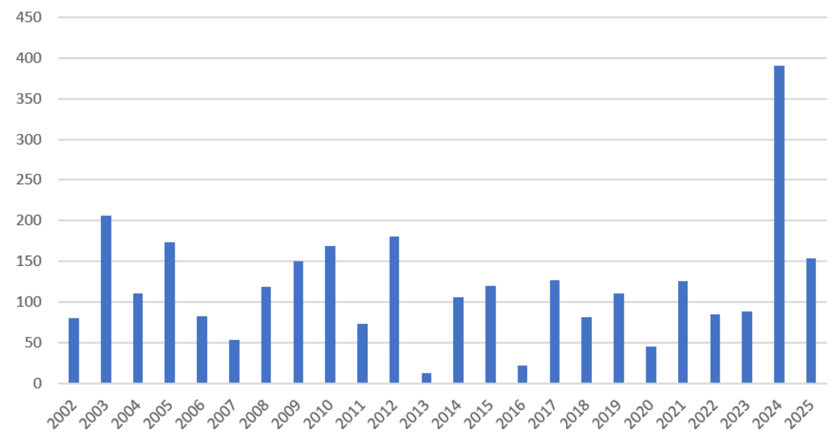

Figure 14. Annual number of participants attending the professional field demonstrations

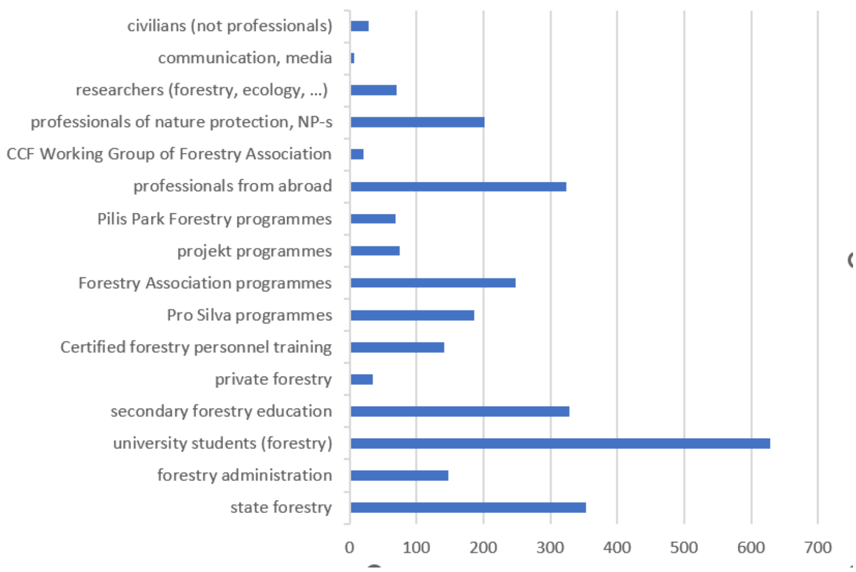

Figure 15. Participants in the professional field demonstrations by category

Perhaps the most important outcome for me personally is the profound influence that this forest has had on strengthening my professional commitment to forestry and to forests over the past twenty-five years.

A forest is not merely a means of production; as Möller emphasized, it is a living organism that must be treated with care and respect. *Continuous cover forests cannot be managed effectively within a rigid, sector-based organisational hierarchy, because silviculture, harvesting, forest protection, and game management are inseparably interconnected. These activities interact continuously, much like the strands of a spider's web, and every management decision requires the consistent judgement of a professional who understands and takes responsibility for all these disciplines simultaneously. For this reason, forestry organisations built around strictly separated technical departments often find it difficult to adopt continuous cover forestry successfully.*

Beyond demonstrating silvicultural principles, the Exemplary Forest has also served as a testing ground for several innovative and specialized forestry technologies, many of which have inspired further research into uneven-aged close-to-nature forest management. The experience gained here has made a tangible contribution to the advancement of forestry practice in Hungary.

Figure 16. Selected oak future-tree

Both Pilis Park Forestry Company and the HUN-REN Centre for Ecological Research are partners in the Slovak - Hungarian Interreg project OakAdapt (HUSK/2302/1.2/168), which aims to integrate cross-border research and practical forest management in order to develop ecologically more sustainable uneven-aged forest management approaches for oak forests (https://oakadapt.hu/hu).

Looking back over the years, the accumulated experience, the professional effort invested, and the opportunity to compare this forest with many other forest stands have demonstrated—both professionally and personally—the clear advantages of continuous cover forestry as a silvicultural system.

Finally, I would like to express my sincere gratitude to my family, my colleagues, my friends, and the entire community of Pilis Park Forestry Company for their continuous encouragement and support throughout the work carried out in this Exemplary Forest.

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