

Society Activities

ANNUAL STUDY TOUR 1973—

Saturday, 19th May

Arriving at Brussels the party was met by Professor van Migroet and his assistant Dr. Lust. Professor van Migroet welcomed the party with a short speech and having sorted out our luggage we boarded the tour bus for our hotels in Brussels. The party split into two hotels on the Minovesteenweg not too far from the Grand Plas. Some difficulty was encountered in the Hotel Prins van Huik due to double booking but this was sorted out amid much emptying of wardrobes etc.

A visit to Waterloo was arranged for the afternoon, though one got the impression that Waterloo is like Gaelic coffee, strictly a tourist taste. Dinner was on one's own account and the myriad of restaurants beside the Grand Plas were well equipped to cater for empty stomachs. Even the most modest Brussels restaurant will rise above chicken and chips.

Sunday, 20th May

To-day we met Mr. Jan van Schyter, Professor van Migroet's indefatigable assistant and we travelled to the Forêt de Soignes or Zonien Bos in Flemish. Here we were welcomed by Mr. F. Janssens and told something of the history of this forest. The forest, the 'Carbonaria Sylva' Julius Caesar referred to in his *De Bello Gallico* is now much reduced in size from 11,000 ha. it covered in 1815 to about 4,300 ha. In fact, most of the clear cutting was carried out between 1815 and 1843 when the Belgian State took possession of it.

The bare statistics are as follows:

- 3,442 ha. of broadleaved high forest, of which 85% is beech.
- 308 ha. of oak coppice with standards.
- 322 ha. of conifers mostly Scots pine.
- 261 ha. used for ancillary purposes.

The day was sunny and a pleasant walk through the forest was conducted by Mr. Janssens who explained the group regeneration system used and their ambition to achieve irregular, uneven aged mixed stands. To many of us it was a sharp contrast to the even rows of Sitka Spruce and *Pinus Contorta*, not to mention the scrubby hardwoods that pass for broadleaved forest in Ireland.

The average timber height of the beech is 15 to 20 metres and one noticed that there was quite a practical approach to natural regeneration. If it did not develop the group was planted from nursery stock. For the mercenary minded the beech was sold at £15 and the Scots Pine at £10 to £12 a cubic metre standing. Labour, when available, cost £30 per 40 hour week plus insurance. Geographically the Forêt de Soignes was on the outskirts of Brussels, now it is being surrounded by Brussels, so obviously the amenity value of the forest is important and will take precedence in its future management.

The State Forest Service picked up the bill for a pleasant lunch at a local inn. We gathered afterwards that this was the first time they had ever bought lunch for a visiting group. Obviously Professor van Migroet smilingly twisted an arm somewhere along the line.

After lunch the party visited the Geografisch Arboretum van Tervuren. This arboretum, administered by the Royal Fund covers 350 ha of which a 100 ha is devoted to groups of trees geographically located as standards and understorey. The arboretum was designed by Bouner and is about seventy years old. No straight lines here, the trees had the appearance of natural groups with wide grassy rides in between. However, some species, especially western North American ones were not too happy but the many groups of **Brusselois** (if that is the word) were cheerfully unconcerned by any botanical allergies to the local climate.

Dr. Jack, President, thanked our hosts for the day and we enbussed for Houthalen in the Province of Limburg where we were to stay for the next two nights.

Monday, 21st May

The province of Limburg has 36,170 ha of forest, about 15% of the land area, of this the ownership distribution is as follows:

State	1,866 ha
Province	269 ha
Township	12,532 ha
Public inst.	840 ha
Private	20,663 ha

To-day we visited the state forest of Pijnven. This forest was started in 1904 on poor sandy soil and now covers 774 ha. Professor van Migroet gave a brief history of forest in Limburg and dealt with the policy change from the original pure conifer stands, which led to many problems of disease and windblow, to the introduction of broad leaved trees whenever possible. We were introduced to the divisional and district officers, Ir.-hoofd van dienst J. Timmermans and Ir. F. Dufrane and the latter led the party to some of the more interesting stands. The main species were Scots and Corsican Pine—The Corsican producing better yields and quality up to the equivalent of our yield class 10. This may appear low to Irish readers but it must be emphasised that the very poor soil and skill needed to achieve these results made them quite impressive. Cultivation before planting was essential and heavy doses of urea and lime necessary.

Lunch was served in a very pleasant reception area in the middle of the forest, after which, amid showers, we visited the recreation areas of Kattenbos which covers 80 ha and is situated near the Lommel-Lepoldsborg state road.

The most attractive points were, and I quote from the very wide ranging tour guide, which was prepared by Professor van Migroet and his staff.

1. The camping ground 'Blauwe Meer' (blue lake) 25 ha.
2. The youth camping ground: 9 ha; place for 1500 campers.
3. The German military cemetery with its 40,000 graves.
4. The promenade forest, consisting of 55 year old *Pinus Silvestris* and variegated by dunes, small lakes, picnic sites, couches and four walks of respectively 1100, 1100, 2000 and 4000 metres."

A very fine forest museum was attached to the recreation area and showed examples of birds, animals, reptiles and plant communities found in the locality, though some of the exhibits must be quite rare at present. Outside

a forest worker showed a horse complete with harness and trappings used to haul logs. The breed was, I think, a Brabant, somewhat similar in build to the Percheron, though heavier, with a docked tail.

The centre for Forest Research of Bokrijk was next on our itinerary. There we were met by the Director Ir. Huygh who explained that the Institute was founded in 1949 and had twenty staff members at present. The research programme covered.

1. Soil science — mainly root formation
2. Chemistry
3. Silviculture
4. Genetics
5. Entomology.

The party split up into groups which each toured different sections.

The forest portion of this day's tour now finished we went back to Houthalen where a quick change prepared us for dinner at the restaurant in the Domein Bokrijk as guests of the Governor of Limburg.

The Domein Bokrijk is a folk village, showing how the Flemish lived several centuries ago. The different village houses are set around a green and little imagination was required to visualize Brueghel's merry peasants carousing after a wedding.

A traditional meal was laid on for us in the restaurant attached to the village end, as it had been a long day, full justice was done to the smoked meats, back puddings etc. The Governor of Limburg was, unfortunately, unable to be present due to illness, never the less, we drank his health and Dr. Jack thanked him, through Professor van Migroet, for his hospitality.

Tuesday, 22nd May

Leaving Houthalen the party headed south, through mainly flat agricultural countryside, until we reached Liège and the heavily forested hills of the Ardennes, where we were to visit **Le Grand Bois** of Vielsalm.

Ing. J. F. Offergeld, the officer in charge of the area met us and told us the history of **Le Grand Bois**. During the French revolution this ancient forest was divided among a large number of different owners but from 1897 to 1937 the Belgian state, through various purchases, acquired 1606 ha. Originally a beech forest the area was converted to Norway spruce and Scots Pine, 66% and 34% respectively, by 1897. Conversion of the pure pine stands to beech and Silver fir started in 1908 and in 1930 the divisional officer of the time, Mr. M. J. Turner, began to consider the pure spruce stands a definite problem and decided to convert them to mixed beech and spruce by the group method. Our first surprise was to be brought to a group of beech, growing at rather odd angles and be told that we were looking at an Anderson plot.

However, the Belgians considered the Anderson group system to be not as good in practice as in theory. In fact, they had evolved their own rather complex group regeneration system based on circular groups, 36 metres in diameter. The canopy of the pure spruce stands is opened when the trees are 50-65 years old at a rate of two groups per ha and beech introduced by planting.

Mr Offergeld showed us some of his better stands of Douglas, Norway, Scots, Silver Fir and beech which were compared in discussion to Irish production under similar conditions, which, of course, was better if one forgot that we were 475 metres above sea level.

Extraction was completely by horse but this system was given only another ten years. Norway Spruce fetched 900-1000 frs (£9-£10) per cubic metre standing, felling about 200 frs, extraction 70 frs and trans-

portation 100 frs, all per cubic metre. For the economists land could be bought for about 50,000 frs a ha and production at 8m³ per ha.

Lunch, as guests of Ghent university, was held *al fresco* in the amenity area where sausages, potatoes and bread were cooked over barbecues by rather fetching students from a nearby domestic science college and washed down with beer.

A pleasant drive eastwards to Monschau, a very pretty German village, with narrow twisting streets and steeply pitched slated roofs of the houses, passed the afternoon, and a substantial dinner and steins of German beer, the evening.

Wednesday, 23rd May

Our short stay in Germany over we crossed the border to the State Forest Hertogenwald where we were welcomed by Chef de Service Terwagne and Ing. F. Cronlin. Here we were shown Norway Spruce regeneration techniques at altitudes of up to 675 metres. Physical condition at 675 metres were akin to 350 metres in Ireland except that Norway spruce would not be the species. Mound planting techniques were used and a lively discussion on the merits and practicality of these sites ensued. At this level windblow accounts for 50% of the production, though this usually happens at the mature stage. There was no question of introducing broadleaved trees here as they just would not grow but the Norway did surprisingly well yielding a M.A.I. of 11m³/ha.

La chasse was important here and rents of 300 frs per ha per annum were obtainable. Regulations were strict, fines of up to 50,000 frs if a deer not in the right category is shot. We saw no deer or boar but a black cock did oblige us, certainly worth considering for introduction or re-introduction in Ireland. At lower elevations we were shown mixed beech and spruce forests and here the *Chef de Service* was obviously in his element explaining his coup system of natural regeneration. Inventories were deemed unnecessary as an aid to annual cut regulation as all foresters here were trained in ocular volume estimation and annual cut was thus regulated.

Our hosts were thanked and we repaired to our bus and lunch at a cafeteria at Eupen before the journey northwards to Louvain, where the Flemish Forestry Society represented by Prof. M. Geebelen, were our hosts at dinner.

Thursday, 24th May

We were welcomed to the State Forest of Meercaal by Prof. M. Geebelen, whom we had met the previous night. Professor Geebelen gave us a short history of the forest, explaining how it had come into state hands as a result of being sequestered after World War I from the d'Arenberg family who were of German stock.

Prof. van Migroet, who had now rejoined the tour, explained the concept of the forest as a source of social stability. In a very civilized exposition he showed that mere timber production was not in itself important—more important is the healthy forest as a recreational outlet for the urban masses. There is a clash at present between the capitalistic elite and the cultural elite (biologists): one in making money and causing industrial pollution, the other in preserving untouched nature reserves. The forester stands between as a pragmatic influence who can open his forests for all to use and enjoy. Van Migroet envisaged this as the most important function of the forester, otherwise an industrial urban society could become frustrated and violent. On a practical note he pointed out that four to ten veneer oak per ha can be as valuable as mass production of conifers.

Meercaal Forest covers about 1,300 ha of which 800 ha consists of oak

and beech stands with about 500 ha of conifers, mainly Scots pine. Professor Geebelen showed us good Corsican pine stands which were better producers than Scots pine on this site. Of interest in passing were a small number of *Pinus contorta* of poor quality but then they appeared to be of inland provenance. Flemish foresters held that the climate was not suitable for *contorta* though one wonders how the coastal variety would perform. A stand of *Thuja plicata* about yield class 14 was visited but the emphasis of the day was on hardwoods, preference is given to oak and beech and the swing is to natural regeneration in the classical group system. Red oak has been successfully introduced here and found very useful for conversion of stands. It yields 8 to 9 m³/ha, about twice the increment of the indigenous oak.

In the afternoon we drove to Ghent where we were free to tour the city until evening when the well endowed Flemish Forestry Society were again our hosts at a very pleasant dinner in an out-of-town restaurant.

Friday, 25th May

Much of the Belgian coast has a dune belt of variable breadth. At both ends, De Panne and Het Zoute, it is two to three km in breadth while the central part between Ostend and Wenduine is 500 to 900 metres wide. Total dune area is about 4000 ha and the forests were cleared about 200 years ago. This naturally led to breakdown of the dunes and parts were reafforested in the 19th century, mainly unsuccessfully. To-day we drove to the Forest of Klemskerke where we were shown the present method of dune afforestation. Ir. S. de Groote welcomed us and during a tour of the forest showed us how pines were first established and hardwoods, mainly sycamore, introduced into the pole stage conifers. The quality or yield of timber was of little importance—this was protection forestry, and all that mattered was having a healthy tree cover. The minimum cost of dune afforestation was 60,000 frs a ha as against an average for Belgium of 20,000 to 30,000 frs. The problems of dune areas in a highly populated country hinge around people pollution, it is happening nearer home in Brittas Bay, and this is why dune afforestation is essential. The forest protects the dune sands from wind erosion and the undergrowth discourages trampling, paths were provided here, many of them concrete, allowing people the dual advantage of forest walks and proximity to the seashore.

Lunch was by courtesy of the City council of Bruges at the Beernem recreation area where we were joined by some members of the council.

The afternoon was spent in Bruges, perhaps the finest of the Flemish cities, the art galleries, especially, being worth visiting. Leaving Bruges the party visited the provincial *domein* of Lippensgoed Bulskampveld. This is an estate run by the provincial Government and we were met here by Mr. Mares and Mr. Rommel who showed us over the estate where we saw a number of fine stands before leaving for our hotels in Ghent.

Saturday, 26th May

Professor van Migroet led the party to poplar plantations in Flanders. Here we were in one of the three great poplar regions of Europe—the others being the Po valley in Italy and the Loire valley in France. Poplars are a farm crop, production is controlled by the end use—the match factory. Two match factories remain as a result of mergers and rationalization and these factories supply the plants, advice etc. free to the farmer who contracts to sell the produce at the prevailing market price when harvested.

The poplar used are mainly crosses between *P. Nigra* and American eastern poplars though new ones are continually being introduced. There is an annual cut of up to 500,000 m³ of poplar in Belgium, 20% of total forest production. Increment runs at 20-30 m³ per ha. as against 12-15 m³ for pines on the best sites. A philosophical lecture by Professor van Migroet on consumption, democracy and control rounded off the morning. We drove to Antwerp where we were guests of the Irish Consul, Mr. de Roeck at a reception at the Zoological Gardens, where caviare and Irish whiskey were liberally dispensed. We returned to Ghent in a festive mood.

Sunday, 27th May

Our tour over we returned to Dublin. Our thanks are due to Professor van Migroet and his staff, who prepared the itinerary, and to our convener Dr. Jack Durand and Miss Lily Furlong who coped with all financial and other problems, and not least to our president Dr. Bill Jack, who was ever ready with a suitable summing up speech.

PILOGUE

I should conclude by giving my own impressions of the current outlook of foresters in Belgium, especially in the Flemish region.

1. Production is no longer of particular importance. The important thing is a healthy forest with the emphasis on uneven aged mixed high forest—a return to the 'natural forest'.

2. No particular emphasis on mechanization. Foresters are quite content to use horse extraction and manual methods as long as the horses and men are available.

3. The realization that the Forester has a completely new role to play in providing recreational facilities for an increasingly mobile urban population and the importance of that role.

4. The relative unimportance of the cost factor in policy decisions. This can be seen in the replacement of conifer crops by broadleaved and the emphasis on protection forestry.

5. The hazards of industrial pollution in a small country. The drive from Ghent to Antwerp makes one realize that any advantage of petro-chemical complexes, in terms of investment or work content, is very short lived. Large areas of countryside are polluted and workers have to be imported from Southern Europe and North Africa to run the industries, thus creating new long-term problems.

6. The expansion of private forestry due to marginal upland farm-land being converted to forest, as the farming families move to industrial employment. The state is generally outbid by private interests for such land.

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