

Society of Irish Foresters Annual Study Tour – Finland, 5-12 September 1998

Introduction

On a bright sunny afternoon on 5 September 1998, 45 members of the Society of Irish Foresters set off on a Finnair flight to Helsinki, with a brief stop-over in Stockholm. We arrived in Helsinki late in the evening and were met by Hannu Yli-Kojola, who was to be our guide for the week. Hannu understands the 'Irish ways', having spent the summer of 1980 working at Glenealy Forest. In 1995, Hannu also addressed the Society Symposium in Athlone on Finland's National Inventory (see *Irish Forestry* 53(1&2):55-61). Hannu proved to be an ideal host and guide for the week, looking after all of the group's needs. He also managed to get three newspapers and two radio stations interested in the trip, illustrating the importance of forestry in the life of the Finns.

Finland is approximately five times larger than Ireland and surprisingly is the fifth largest country in Europe. The population is 5 million, with 15.1 persons/km². The country is mainly low, flat to rolling plains interspersed with lakes and low hills, with mountains in the north. The main natural resources are timber, copper, zinc, iron ore and silver. The main exports are paper, metal, machinery, ships, timber, chemicals, electronics and furniture. Finland exports more paper, paperboard and timber than the USA and Russia combined. Overall, 85% of Finland is covered with trees, and 65% would be classified as high forest.

The success of Finnish forestry, and indeed their entire industrial sector, is the emphasis on quality. When asked how they compete in the ship-building sector with Asia, a Finn replied "we do it right". This is a philosophy we saw in operation at all sites and plants we visited, and for this writer, was the lesson to be learnt from the tour.

I must record my gratitude to Hannu Yli-Kojola for his attention to detail on every aspect of the tour, and to Tom McDonald, who oversaw everything from the Dublin office.

John Mc Loughlin
Convenor

Sunday

Sunday morning brought blue skies and sunshine, ideal for our sightseeing tour around the city with its lovely harbour-side location. Around midday, we set off for Tampere 180 km north of Helsinki, giving us our first view of Finland's vast forest and lake scenery. Mr Hannu Johiluoma, Forest Officer, Senior Advisor, Ministry of Social Affairs and Health, met us on our arrival in Tampere, Finland's second city.

We had dinner in the revolving restaurant at the top of the 168 m high Nasinneula Tower, which offers spectacular views over the city and beyond across the forests and lakes. Following the meal, Mr Johiluoma brought us on a sightseeing tour around Tampere. With a population of 180,000, it is a major industrial city. James Finlayson, a Scotsman, set up a textile factory here. Early evening saw us arrive at Hyytiälä Forest Station, our base for the next two nights and a very pleasant and peaceful setting among the forests and beside a lake. These two nights proved very popular, and many agreed that we could have stayed longer.

Monday

Monday was the first 'official day' of the tour. It began in the classroom, where Dr Antti Uotila, Station Manager, welcomed the group before outlining the station's role. Hyytiälä is the Forestry Field Station of Helsinki University, and was established in 1910 to provide field education in forestry and forest research.

The oldest wooden buildings date from 1910, but further development took place in 1961 when a lecture hall, offices and laboratories were built. Wintertime accommodation and use of Hyytiälä was only made possible in 1977, with the construction of new student hostels and other buildings. Forest students begin their studies in Helsinki before coming to Hyytiälä to undertake practical learning in silviculture, insects, peatland, mensuration and wood technology.

Enough of the classroom! We went on a walkabout around the grounds of the station, where a variety of tree species are growing, and visited the memorial spruce stand. There was a general discussion of Finnish forestry, with the main species being Scots pine (*Pinus sylvestris* L.), Norway spruce (*Picea abies* (L.) Karst.) and birch (*Betula* spp.). The latter grows to spectacular proportions there. Average rotation for the Norway spruce is about 90 years, with Scots pine slightly less. Moose are the biggest problem with young plantations, and are controlled by culling.

During our visit we saw a clearfell area. Before any cutting takes place, the owner must give a week's notice to cut, and once cut, the area has to be replanted. Adjacent to the site was a memorial stone to forestry students from a class in 1944, who were killed fighting in Russia during the second world war.

A so-called smear station was established in 1995 to record various meteorological measurements. Most of this information is gathered automatically from a 70 m high mast.

Following lunch (dinner!), we went off to visit a local farmer, Mikko Lindel, who warmly welcomed us to his forest with tunes on his accordion beside a fire sending out sweet-smelling woodsmoke. Mikko is a typical Finnish farmer, practising a mix of agriculture and forestry. The revenue from forestry supplements his farming. He availed of grants to assist in establishment, road construction and thinning. Mikko is a member of a local silvicultural society, which provides professional advice for a fee based on 3% of the value of the annual growth.

In the fine autumn sunshine, we went on a most pleasant and interesting forest walk, with stops *en route* to talk about clearfelling, reforestation, fertilisation and training. Like most of Finland, reforestation is carried out using containerised spruce and pine. Natural regeneration is prolific, filling in any gaps. This is very much a family-run business. Mikko and his family operate a healthy farm and forestry enterprise. They have diversified into a small tourism sideline, with several chalets attracting folk to enjoy endless forest- and farm-based leisure activities. At the end of our walk, Mikko's wife had coffee brewing for us over a fire beside a lake. The coffee and 'pulla' bread went down a treat with us all. Wonderful friendly hospitality.

We thoroughly enjoyed our visit to Mikko Lindel's forest, and were greatly impressed by his enthusiasm and love of his farm and forestry enterprise.

On a lovely sunny evening, it was back to the picturesque surroundings of Hyytiälä. The sauna and subsequent swim in the lake was a popular activity. To round off a good day and our stay in Hyytiälä, we all enjoyed an evening meal accompanied by lively musical entertainment provided by a local group. Tour Convenor, John Mc Loughlin, was an excellent MC throughout. A most enjoyable location!!

Richard Jack

Tuesday

On Tuesday, the group departed the Hyytiälä Forest Station and was taken to Lakka-suo, a peatlands area where forest crops have been and continue to be established.

Natural regeneration is a method of establishment practised in this area. Dr Antti Uotila from the Hyytiälä Forest Station directed us to a pine area which was being established using this method. The best trees, Dr Uotila explained, are retained and the seed is dispersed in May. In July, light ribbons are ploughed approximately 15 m apart, to break the surface cover and to aerate the soil. The seed trees, numbering 70-100/ha, are removed after 5 years. The new crop of naturally regenerated seedlings is allowed to grow for 3 years. They are then reduced to 2 m x 2 m spacing by thinning, with spacing increased to 4 m x 4 m after 10 years.

Close to the natural regeneration site, we visited an area of raised bog. The depth of peat was 9 m and the pH ranged from 4-4.5. The area had been drained in recent years, but is still very swampy. The changes in this extensive area resulting from the drainage are being closely monitored. To make this work possible and safe, an elaborate network of rafter paths has been laid down.

The long history of Finnish forestry was actually displayed to us when we were taken to the old growth forests of Susimäki. Here, areas of trees have been growing for over 1,000 years without the human operations of thinning and pruning. Some trees show evidence of fire damage which occurred over 300 years ago. There are areas of birch considered to be in excess of 150 years. Birch forest is thought to be the climax vegetation in Finland, but in the particular area we visited, spruce is thought to be taking over.

In the town of Visuvesi, we visited the Visuvesi Oy sawmill. There, the Managing Director, Mr Pasi Lahtinen, informed us that the mill was established in 1917 by a relation. Today it employs 300 people, and has a turnover of 170 million FIM (IR£22.4 million) and an annual intake of 85,000 m³. The output is mainly exported, with 85% going to Germany and Britain. The output comprises almost entirely of plywood, and the intake is approximately 50% spruce/pine and 50% birch. Local forests produce 70% of the timber purchased, with the remaining 30% grown by local farmers.

Certification is becoming a fact of sawmilling life all over the European Union. Certification will be swift and easy in Finland. Their long history of strict laws and forest practices will now prove to have been an inspired investment.

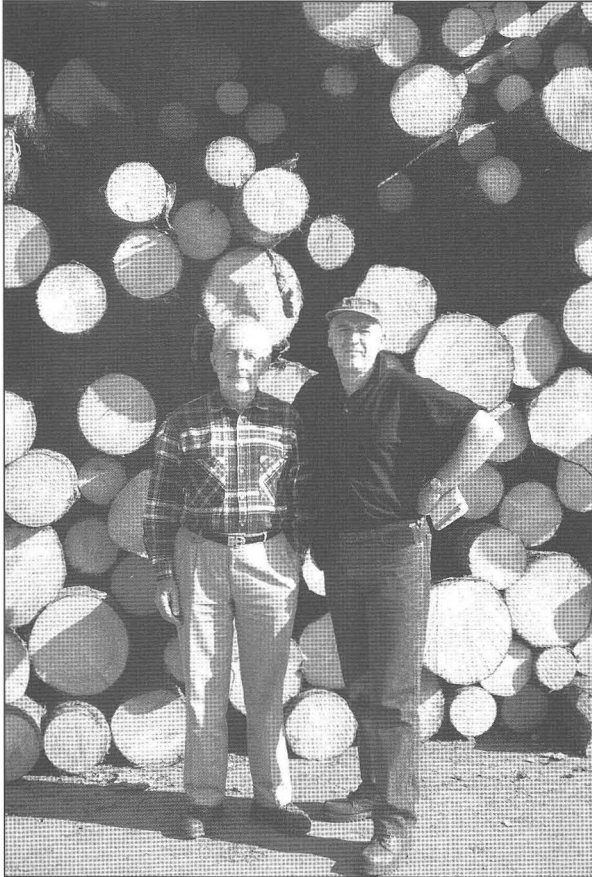
Frank Nugent

Wednesday

On the fifth day of the study tour, we departed Hankasalmi and journeyed 120 km eastwards to the Linnansaari National Park. On arrival at the National Parks Lakeland Visitor Centre, we were welcomed by our host for the day, Mr Tapani Pirinen, Senior Planning Officer, who introduced us to the background and role of the National Parks.

The Forest and Parks Service recognises that there are three major elements in Finnish nature: forest, peatland and water. In Finland, there are 56,012 lakes over 1.0 ha in size. The central lake along the Vuoksi waterway is called Lake Saimaa, and is Europe's fourth largest. Seventeen other lakes are connected to it, including Hankivesi, where for the first stop of the day we explored the visitor centre situated on its western shore.

Our guide led us on a tour of the permanent exhibitions. The first portrayed the lush herb-rich forests of the islands in Lake Saimaa. These stands are mainly small in size, covering only a few acres. Despite the small area they occupy, these stands represent one of



Derry O'Hegarty and
Donal Magner
at the Visuvesi Oy sawmill
(Photo: J. Mc Loughlin).

the most diversified living communities in Finland, and are of immense importance to forest biodiversity.

The second theme of the exhibition depicted postglacial life and habitation in the Saimaa area. It included the Saimaa ringed seal and various seagulls which inhabit rocky islets, and the numerous species of duck which thrive on the lakeshores.

The third and last exhibition gave us an insight into the life of early settlers and crofters, who practised slash-and-burn agriculture. This method of existence continued up until the turn of the century. Rye was usually grown first, followed by barley and turnips. A few years after the burn, the area was left to be reforested or, if located close to settlements, to be used as pasture.

Following a coffee break, the group were led to a very impressive auditorium and watched a slide show and audio video on Finland's National Parks. The Forest and Parks Service is responsible for nature conservation work in 32 National Parks, 19 strict Nature Reserves, 53 Herb-rich Reserves, and almost 300 other protected areas.

An important task is the protection of threatened animal and plant species. At the same time, National Parks and their visitor centres offer abundant opportunities for enjoying a wide variety of experiences for recreation.

In Finland, the public has free access to all forests under 'everyman's right'. This is a concept which has evolved in all Nordic countries over the centuries, and is based on an unwritten code of practice born out of the customs and experiences of a sparse population living in a vast, densely forested country.

After the presentation in the auditorium, it was time to head outdoors. Following a short journey from the visitor centre, we boarded the M.V. *Linnansaari* and for the next 45 minutes sailed through an archipelago of islands on Lake Hankivesi (Pike Lake).

Our destination was a crofter holding on an island off the east shore. With a cloudless sky, no wind, temperatures at 20°C and excellent visibility, it was indeed a most enjoyable cruise in the National Parks Lakeland. From an ornithological perspective, it was easy to appreciate how this living lake and its numerous wooded islands hold the highest breeding density of osprey in Europe (14 pairs). Although departed on migration to the south in the last few weeks, one could easily visualise this eagle-like bird of prey hovering above the surface and plunging feet-first for fish in these rich waters.

The group got excellent views of black-throated divers still in their summer breeding plumage, looking much more handsome than when they visit Galway Bay or Strangford Lough to winter on our warmer ice-free shores.

On landing on the crofters island, the group was met by Ms Tiina Linsen, field guide and biologist with the National Park. At our first stop on the island, our host outlined why the area is so important to Finland's natural heritage.

The Saimaa lakeland system is home to Finland's only endemic mammal, the Saimaa ringed seal. Ms Linsen said that this freshwater seal is the most endangered seal in the world, and is on the verge of extinction. The last breeding grounds are located on remote and peaceful islands and islets nearby. The population is threatened by deaths caused mainly by seals getting entangled in fishing nets. She informed the group that, through consultation between the Forest and Parks Service and the local fishing association, net fishing is now prohibited from 15 April to 30 June.

Research has shown that the Saimaa seal can reach an age of 35 years. Approximately 200 individuals survive today, with only 35-40 pups born every year. The Saimaa lake district could, however, provide a home for as many as 2,000 seals without any threat to the fish or fishing. Our guide provided us with a fascinating insight into this rare and endemic mammal, and finished positively by stating that the population is slowly growing. The Forest and Parks Service aims to increase the population to 400-500, through protection and scientific research.

Our next stop was a barbecue lunch beside one of the island's log cabins. A local dish of vendace, one of 38 fish species found in Finland's inland waters, was served up.

During the course of the afternoon, we discovered how Finland's settlers or crofters utilised the forests for food production up to the 18th century. Mr Pirinen was our host for this session. Slash-and-burn cultivation, or swidden cultivation, was the most forest-consuming activity. It involved burning a part of the forest, with the trees ring-barked or cut down, followed by sowing with rye, turnips or oats, or use as pasture. All told, nearly 20% of Finland's forest area has been treated in this manner over the centuries.

During our excursions through the forest, we saw many areas currently managed under this system by National Park staff. These areas preserve the traditions of crofters and the wildlife associated with slash-and-burn cultivation. Mr Pirinen informed us that this particular area holds a species of woodpecker, the white backed woodpecker. They thrived during Finland's slash-and-burn era, but numbers are now falling despite conservation measures.

We arrived at an old crofter dwelling for the final stop of the day. This single-room dwelling was occupied up to the late 1950s by the island's tenants. Access to the residence was difficult, involving a 10 km boat journey in the summer and a journey by horse over the frozen lake in winter. As slash-and-burn agriculture became over-exploited due to a population increase, yields started to decrease. This forest practice gradually became unattractive, and was replaced by timber harvesting and transportation on farms.

After much discussion, it was time for our chairperson for the day, Michael O'Brien, to wind up proceedings. He thanked our hosts and excellent guides Mr Pirinen and Ms Linsen, and presented them with gifts from the Society. This last stop ended a very enjoyable outing to the National Park. We experienced how the people of Finland have lived in, used, changed and protected the forest. We again boarded the M.V. *Linnansaari*, setting off in the warm evening sun for our overnight destination in the town of Savanlinna.

Gerry Murphy
Limerick



Michael O'Brien presenting copies of *Forest Images – Father Browne's Woodland Photographs* to Tiina Linsen and Tapani Pirinen, Linnansaari National Park (Photo: J. Fennessy).

Thursday

The schedule for Thursday was extremely busy and diverse, beginning with an early morning visit to a nursery in Kerimäki, due east of Savonlinna, followed by a visit to the largest wooden church in the world and a drive through some of the beautiful scenery for which this area of Finland - Savo, or Lakelands - is famous. By mid-morning, the tour had reached Punkaharju, home of the Finnish Forest Research Institute and Montell Arboretum. The relentless pace of the morning schedule was maintained throughout the afternoon. This included a visit to Lusto, the Finnish Forestry Museum, also in Punka-

harju. Finally, to restore balance amid the strong cultural and research elements of Thursday's itinerary, tour participants visited a harvesting site in Säkilahti before reaching the Päivaranta Centre, Huhtasenkylä, where the group stayed overnight. The chairperson for the day was Liam O'Flanagan.

Kerimäki

The first stop of the day was at a nursery in Kerimäki. The nursery, established in 1992, is one of five in the Itä-Suomen Taimi Group. The Director, Esko Ikaheimonen, told the group that emphasis was on quality production. The nursery has received Certification AAA, which is one of the highest credit rating classifications in Sweden. By the year 2000, it is hoped that the nursery will have both ISO 9002 and ISO 14001. The group has over 200 ha of nurseries. In Syrjälä, there are 35 ha of bare-rooted seedlings, 4 ha of containerised plants and 7,200 m² of polythene greenhouses, seven of which are heated. Approximately 45% of the nursery output is bare-rooted plants, with the remaining 55% as containerised stock. According to Esko Ikaheimonen, Nursery Director, the trend is to produce mainly containerised plants within a few years. This gives more control over quality production, and provides customers with an opportunity to extend the planting season. In addition, due to the short growing season and cold climate, vegetation competition is not a problem in most of Finland's forests, again prompting the increased emphasis on containerised stock. The trend towards containerised plants has already been established, as virtually all plants now used in State forest establishment and most private forests are containerised. Syrjälä Nursery, which is small by Finnish standards, produces the following species:

- 350,000 Scots pine (80% containerised);
- 1,100,000 birch (45% containerised);
- 2,100,000 Norway spruce (52% containerised);
- 110,000 larch (*Larix* spp.) and others (100% bare-rooted).

Total turnover is 5.4 million FIM (IR£0.7 million). Most of the plants (86%) are purchased by management associations who act as agents for private landowners. Eleven full-time staff and up to 40 seasonal workers are employed in the nursery.

A trip to Kerimäki would not be complete without a visit to its famous wooden church, Kerimäen Seurakunta. It is the largest wooden church in the world, and has a seating capacity of 3,300. It seems that the church was never intended to be designed on such a large scale by the architect, A.F. Gransdelt. However, the local builder master, Axel Topola, took advantage of flexible planning laws and, urged on by megalomaniac parishioners, changed feet to metres on the plan, creating an impressive edifice which dominates Kerimäki.

Punkaharju Research Station and the Montell Arboretum

At Punkaharju Research Station, a tour was organised by Dr Juhani Häggman, Finnish Forest Research Institute, Metla. The institute was founded in 1918 and is proudly celebrating 80 years of research. Dr Häggman provided the group with a fascinating history of the region's forests, which owe a debt of gratitude to Czar Alexandra. During one of his sojourns from St. Petersburg, the czar noticed that the area - then part of Russia - had poor forest cover. This had resulted from over-exploitation by farmers. In 1803, he ordered the protection of the forests. Some 40 years later, the Imperial Senate decided to establish a Crown Forest Park in Punkaharju.



Society group at the Syrjälä Nursery, Kerimäki (Photo: J. Mc Loughlin).

Since the 1920s, research at the centre has been specialising on genetic studies and, in recent years, the effects of greenhouse gasses. In Punkaharju, 34 permanent staff are employed along with 50 seasonal and visiting temporary staff. Studies currently being carried out include adaptation of forest trees to climatic change, cultivation research on introduced species, micropropagation and resistance breeding.

The nearby Montell Arboretum, established by Robert Montell in 1877, has an impressive array of native and introduced species. While it is only possible to mention a fraction of the species grown here, a number make an impact. Siberian spruce (*P. obovata* Ledeb.) is extremely impressive and seems to be capable of adapting to a wide range of soil types and climates. It is one of the few non-native species in which Finnish foresters see some potential, although it is likely that the trend of planting indigenous species will continue. A stand of European larch (*L. decidua* Mill.) established in the 1880s has a top height of 44 m. Other larches performing well are Dahurian larch (*L. gmelinii* (Rupr.) Kuzeneva) and Siberian larch (*L. sibirica* Ledeb.). The arboretum has a comprehensive range of pines, including Arolla pine (*P. cembra* L.), lodgepole pine (*P. contorta* var. *latifolia* Wats.), Macedonian pine (*P. peuce* Griseb.) and of course, Scots pine. The group was surprised to hear that the less than impressive curly birch stand was the most valuable in the arboretum. These poorly-formed and slow growing trees are capable of achieving prices of 35,000 FIM (IR£4,600)/m³, due to their highly prized distinctive grain.

Lusto – the Finnish Forestry Museum and Forest Information Centre Punkaharju

Lusto, which means ‘annual ring’, is an ideal way to educate the public about forestry and to illustrate the silvicultural, productive, economic, social, cultural and historical layers of this multifaceted industry. While we do not possess the same range of material and

memorabilia to construct a museum of this scale in Ireland, this writer believes that we do have the venue (Avondale) and the expertise to recreate much of our forestry heritage in exhibition form. Perhaps we should aim to establish early in the millennium a museum in Avondale, to celebrate its 100-year anniversary as a forestry training centre.

The museum illustrates the commercial life of the forestry industry in Finland alongside the rich heritage of the forest. There are art and educational exhibitions aimed at school children, and displays of forest tools and equipment along with traditional forest industries and crafts. During our visit, there was a fascinating exhibition of woodcuts by the Finnish artist, Tapio Kelo-Puomia, who began life as a forester.

Harvesting in Säkilähti

The final stop of the day was at the forest of Säkilähti, where the group saw Finnish technology at its best in a harvesting site. The forest, owned by the multinational timber and pulp production company, Enso, was being harvested at a rate of 250 m³/8-hour shift and removed to roadside at a cost of 60 FIM (IR£8)/m³. Enso has over 600,000 ha of forests. There is very little manual harvesting in their forests. This is reflected in employment figures throughout the industry. The forestry and forest products sectors currently employ 97,000 people, compared with 183,000 in 1980. After the Soviet collapse, the Finns developed highly automated industries which did wonders for their economy, but little for employment. Since 1980, despite almost halving the number employed in forestry, production has increased by 30%.

After a week of unexpected warmth and sunshine (like Ireland, Finland experiences a very wet summer), it began to rain as we made our way to the Päiväranta Centre, Huh-tasenkylä. Despite this, the group availed of the barbecue facilities and the lakeside sauna only a few miles from the Russian border. Late in the evening, the barbecue revellers gazed across the lake at the silhouettes of the massive funnels belching out smoke from the pulpmills of Imatra. In a few short hours, they would say *näkemiin* to the beautiful region of Savo and *hei* to polluted Imatra and despondent Russia.

Donal Magner

Friday

Following a pleasant overnight stop at the Päiväranta Centre, we departed to visit the Enso pulp and paper factory at Kaukopaa, Imatra.

Enso has two plants at Kaukopaa and Tainionkaski, both of which are located in Imatra (population 32,000) on the shore of Lake Saimaa. The Imatra mills belong to one of Europe's largest forest industry groups, Enso Oy. Enso is a leading manufacturer of fine papers, publication and packaging boards. The product range also includes pulp, sawn goods, coreboards and laminated papers.

The group boasts an impressive array of statistics: it produces 6.7 million tonnes of paper and board annually; sawmilling capacity is 2 million m³; wood raw material consumption is 25 million m³; sales in 1997 were 29.3 billion FIM (IR£3.9 billion), 85% of which is accounted for by exports and foreign operations; 20,000 personnel are employed world-wide. Shortly, they are to amalgamate with Stora, the Swedish forestry company.

Enso's Imatra mills employ 2,500 people, and production capacity is 1.1 million tonnes/year of paper and paperboard. Wood raw material consumption is 3.5 million m³/year.

Upon arrival, we were afforded a cordial welcome by our guide, Mr Martii Savolainen,



Pat O'Sullivan and Patricia Flanagan (Photo: J. Mc Loughlin).

a forester by profession and now PR Manager for the Imatra mills. The visit commenced with a tour of the active sludge treatment plants installed at a cost of 200 million FIM (IR£26.3 million). Advanced technology is employed to treat discharges from the production processes. Pulp mill water is treated biologically, and boardmill water chemically. Approximately 200,000 m³ of water is treated every day, with a treatment cycle of 30 hours. The resulting sludges are burned along with the bark to produce energy.

About 50% of the wood arrives at the yard by rail, 45% by road and the rest by water. Overhead cranes with 8-10 m³ grab capacity can unload 450 m³/hour, or approximately 10 truck loads/hour. A total of 7,000 m³ of logs are unloaded daily over two shifts, and a 2-week supply (135,000 m³) is stored in the yard at all times. Following unloading and storage, the logs are fed into debarking drums and the wood is then converted into chips. The wood chips are fed into digesters and heated to remove the lignin. The resulting fibre is washed, bleached and pumped to the paper and board machines for conversion.

To achieve the desired characteristics for the paper and board, the pulp fibres are beaten in refiners, and the necessary chemicals are added. The pulp slurry is fed to the head boxes of the paper and board machines. The dilute pulp slurry is forced out of the head boxes and onto the wire, where web formation and dewatering take place. Dewatering continues in the press section, and the web is finally dried in the dryers. Overall production capacities are 800,000 tonnes of board/year and 400,000 tonnes of paper/year.

Imatra's paper and board machines were developed and installed by Valmet. Board machines employ multilayer technologies. Liquid and food packaging boards are coated with polythene. Graphic and packaging boards are mineral-coated before being cut into rolls or sheets, depending on customer requirements. The main converted paper product is A4 size copier paper.

The ISO 9000 standard has been in force in all production units since 1992, and ISO 14001 has been integrated into the quality system to meet the target of Enso's environmental policy of living in harmony with nature.

The awesome size of the various plants and equipment, the scale of production capacities and the level of advanced technologies employed to ensure both process and quality control, were most impressive. The Imatra mills bear testimony that the Enso Group will indeed have no difficulty in achieving its ultimate aim to rank permanently among the world's top three suppliers of paper and board.

In his concluding remarks, the Chairperson paid tribute to Enso for facilitating the Society's visit, and for the quality and array of information literature provided to the members. He paid special tribute to Mr Savolainen for his time and hospitality afforded to the group, in particular, his ability to bring us through the entire paper and paperboard manufacturing processes in an easy, informative manner.

Following the waterways linking Lake Saimaa to the Baltic seaport of Vyborg, formerly Viipuri, we travelled south to cross the Russian border at Nuijamaa. Entering the Russian Federation involved a tiresome process of checkpoints before finally reaching the Passport and Customs Control Centre. At this centre, staff and facilities were not customer-orientated. Neither are they adequate to cater for the large volume of tourist and commercial traffic. Long delays associated with the various levels of officialdom are normal. We eventually managed to get through the checkpoints without a hitch, boarded our bus and diverted our attentions again to forestry issues.

The extensive forests viewed were very similar in terms of species content and age structure to those visited in Finland. The notable difference was that birch was the dominant species. Also, forests had not been managed since the lands were ceded to Russia in 1944. As a result, log sizes were significantly reduced.

We heard so much about the presence of moose in the forests throughout the tour, and despite the continuous stream of warning and hazard signs along the roadways, we failed to make any sightings. Much to the delight of all, we finally sighted a moose crossing the roadway near the Nuijamaa border post.

On reaching Viipuri, our first stop was at the market square for lunch in the medieval banquet rooms located in a roundtower built during the Swedish occupation. Following a pleasant lunch, we proceeded on a tour of this once prosperous and cosmopolitan city, when its population was a mixture of Finns, Swedes, Russians and Germans. With many of its architecturally acclaimed buildings, squares and parks still in existence, Viipuri has a strange time-locked quality. Sadly, both the old neo-classical structures and the newer apartment blocks constructed during Soviet era have reached advanced states of dilapidation. It appears that old Viipuri and its elegance reminiscent of pre-war Finland could well be razed to the ground, with post-Soviet entrepreneurs appearing on the scene.

The plight of the city's inhabitants was equally distressing. The current period of economic and political unrest has increased the levels of petty crime and muggings. Many people were reduced to begging and selling trinkets in the markets. Mindful of our money, passports and possessions, group shopping in the markets was strongly advised. With safety in numbers, shopping was an experience as the vendors were friendly and eager to exchange items, such as Soviet memorabilia and crystal and wooden products, for hard currencies, particularly US dollars. Our shopping sojourn was brisk and hurried. Our driver, mindful of the delays expected at the border, was anxious to commence our long return journey to Helsinki.

Leaving the market *via* the prominent Swedish castle overlooking the port, we travelled

along the major commercial highway (E 18) connecting Russia to the west. We departed Russia at the border checkpoint of Valinia, with a delay of 45 minutes. Here, staff and facilities were adequately geared to handle the flow of commercial and tourist traffic. On leaving Valinia, we journeyed for 190 km to Helsinki, passing through a mixed landscape of forest and open farmland, reaching our destination, Hotel Helka, at 9 pm.

The tour concluded with an informal dinner at our hotel. Our special guests included members of the Finnish Society of Foresters. In welcoming the guests, our President, John Fennessy, paid tribute to the tradition and level of forestry professionalism in Finland, wherein their astute environmental and commercial management practices have ranked Finland among the world's leading suppliers of wood and paper products. He commented on how successful the tour had been and paid compliments to all involved in its organisation, with specific thanks to John Mc Loughlin, Tom McDonald and our driver, Jakli. Finally, he made special reference to Hannu Yli-Kojola. Hannu, as our guide for the week, worked tremendously hard to organise the itinerary and to ensure that the programme ran smoothly and most efficiently. In conclusion, Joe Treacy, speaking on behalf of the tour participants, paid tribute to the organisers for the success of the tour.

Eamon Larkin

Tour participants

Collins, T.
Crowley, J.
Dooley, J.
Doyle, J.
Drea, P.
Ellis, K.
Farmer, C.
Fennessy, J., President
Flanagan, P.
Fleming, J.
Flynn, B.
Gallinagh, T.
Gault, J.
Griffin, R.
Hipwell, G.
Howe, L.
Hunt, T.
Jack, R.
Jones, S.
Lacey, B.
Larkin, E.
Magner, D.
Mannion, T.

McCloskey, P.
McDonald, T.
McDonald, K.
McEwen, J.
Mc Loughlin, J., Convenor
Monaghan, B.
Murphy, L.
Murphy, G.
Neilan, J.
Nugent, F.
O'Brien, M.
O'Flanagan, L.
O'Hegarty, D.
O'Neachtain, M.
O'Neill, B.
O'Regan, T.
O'Sullivan, P.
Patterson, G.
Purcell, T.
Treacy, J.
Whelan, R.
Wilson, T.



(Photo: J. McEwen)