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## Colloquium

Monday, 8th March, at 2:15 p.m. in the department's conference room will be the time and place of the next meeting of the colloquium. Prof. Kullervo Kuusela, of the Institute's Department of Inventory and Yield, will be discussing the results of the Lapland section of the Fifth National Forest Inventory. He plans to concentrate on those aspects pertaining to the proposed expansion of the system of national parks, nature reserves and recreation areas in Lapland. This will be a follow-up to the talk he recently gave in Rovaniemi. It is hoped that someone from the Institute's Nature Conservation Office will be on hand to discuss the conservationists' point of view.

## Kullervo Kuusela: Cutting possibilities and nature conservation in Lapland

In the latest discussion about a desirable environment, it has been stated that there is an urgent need to establish new national parks covering an area of 800 000 ha in Lapland and to exempt some forest areas from commercial cutting in order to protect the Arctic tree limit and high hill forests. In the Fifth National Forest Inventory, the forest resources and cutting possibilities were estimated for different zones with regard to the aims of nature conservation. This information and data on the current wood uses, removal and needs of the wood-processing industries are the raw material for determining alternative timber balances for forestry and the wood-processing industries. The main result of the analysis is that the mature timber in those areas to be reserved under the nature conservation plans play a decisive role in the provincial economy of Lapland.

# Rolf Cinonen: The Saariselkä-Itäkaira research project - winter wilderness phase

(Summary of the colloquium of 15th February, 1971)

In the summer of 1969, a research project was begun to study the use of the Saariselkä wilderness area in eastern Lapland. The research group consists of Prof. Päiviö Riihinen, Matti Keltikangas. Olli Saastamoinen; Rolf Cinonen has assisted in the collecting and analyzing of information on the winter use of the wilderness.

The area is extensive, covering about 500 000 ha. The landscape is varied, with many rivers, streams, hills and valleys. The highest fell in the area is 650 m; there are many good skiing slopes above the tree line. Scattered throughout the area are about 30 cabins and huts. The winter phase of the project dealt with visitors to only 4 of these cabins.

From the diaries which are kept in each cabin, it was possible to determine that about 530 people used the 4 cabins in 1968, with winter use (mainly over Easter) accounting for 25 %. This is part of a rapidly developing trend which should see wilderness use of the area double by the 1990s.

During the skiing season in the spring of 1970, interviews were solicited from 150 wilderness visitors to the 4 cabins. These were followed up with a questionnaire. The purpose was to discover what sort of people visit the area, why they come and some facts concerning their stay. A few of the preliminary results are presented below.

The majority of the visitors interviewed were middle class. Using a 9-point scale to determine social level, it was found that 49 % belonged to group 5. It was also discovered that travelling to Lapland and skiing in the wilderness is not a very expensive affair; time seems to be the most important factor. The number of days spent in the area depends mostly on the length of the vacation, with 12-14 days being the maximum time spent in the wilderness. People most often travelled in pairs or groups of 3. Only 6 % went alone; large groups comprised 10 %.

Southern Finland was by far the most common home area of the visitors. Only 15 % of the people came from Lapland. Helsinki and its surroundings accounted for 40 %. The cities of Helsinki, Tampere and Turku together accounted for 35 %.

The mean age was found to be 30, with the age groups 20-24 and 25-27 comprising 41 % of the visitors. The distribution by sex was 67 % men and 33 % women. This is a change from the 1950s when 45 % of the visitors were women.

As for the question of why people go to Saariselkä, it was learned that most people wanted to have a change from their everyday life. The second most common reason given was the desire to experience wilderness. In third place was the longing for open space and fresh air. Few of those interviewed expressed the desire to be with family or friends, the most common reason cited by wilderness users in the United States.

(The Saariselkä-Itäkaira project is being carried out by the Forest Economics Department of Helsinki University. The work is supported by the Natural Resources Research Council.)

## Report of the Committee on Forest Regeneration Costs

The Committee on Forest Regeneration Costs, set up by the Ministry of Agriculture, has presented the report of its investigation into the costs of, revenues from and profitability of forest regeneration on barren sites.

The regeneration of forest on previously treeless areas (arable land, pasture and wasteland) and on areas of worthless tree species shows marked differences between different regions of Finland. If southern Finland is given on index of 100 for the profitability of regeneration, then central Finland has an index of 80-90, northern Estrobothnia and Kainuu 55-60 and Lapland 20-30. Pine regeneration on moist sites was found to be twice as profitable as on dry sites, although the costs of regeneration in the latter are smaller. In southern Finland, the planting of pine on moist sites was found to be more profitable than spruce. On sub-dry sites, sowing and planting pine were equally profitable. In southern Finland but sowing was more profitable than planting in northern Finland. When the profitability of artificial and natural regeneration were compared in a given woodlot using the same species and site type, natural regeneration tended to be 10-20% more profitable. Taxation and state subsidies, however, reduce the difference when taken into account.

Artificial and natural regeneration were compared in southern Finland in pine stands on sub-dry sites and spruce stands on moist sites which were nearing final cutting age and were therefore ready for regeneration. A 4% rate of interest was used in discounting. In 65-year-old pine and spruce stands, cuttings for natural regeneration were more profitable than for artificial. In stands 75 years old or more, artificial regeneration was more profitable. Different cutting methods are used for natural and artificial regeneration. If the same method is used, natural regeneration is more profitable in stands of both age groups. Where clear cutting followed by artificial regeneration takes place, the higher stumpage prices resulting give artificial regeneration a higher profitability.

If artificial regeneration, keeping in mind the need for sustained yield, allows faster regeneration of underproductive or over-mature stands and higher yields in cubic metres than on average in natural forests, the extra regeneration investment in the case of large forest areas gives an internal rate of interest which is 3-4 percentage points higher than in the case of individual stands.

The profitability of regeneration is in general greater in the national economy than for individual enterprises, since in the former the whole chain of production from the forest to the export harbour is considered, i.e. the total benefit in the form of the long-term security of raw-material supplies for industry, better use of the factors of production (land, labour and capital), and the increase in industrial processing and exports.

(Members of the committee were: Professor Lauri Heikinheimo (chairman), Tapio Korpela, Professor Kullervo Kuusela, T.A. Ranta, Esa Timonen, Pekka Witikkala, Tatu Möttölä and Sampsa Sivonen).

# New publications

Metsänviljelykustannusten toimikunnan mietintö (Report of the Committee on Forest Regeneration Costs). Komiteanmietintö, 1970: B 91. Helsinki, 1970.

Numminen, Juhani. Short-term forecasting of the total drain from Finland's forests.

Tiivistelmä: Suomen metsien kokonaispoistuman lyhytjaksoinen ennustaminen,
Folia Forestalia, 97. Helsinki, 1970.

Osara, N.A. Metsähallinnon uudistaminen (The reorganization of forest administration). Metsäylioppilas, no. 1. Helsinki, 1971.

### Personnel

Reorganization at the top. Professor Lorenzo Runeberg became acting professor of business economics, a new post in the department, on 1st February. On the same day, Dr. Matti Palo was appointed acting research specialist. Professor N.A. Osara will continue to have an office in the department as professor emeritus.

Forestry assistant at Viikki. Antero Liimatainen left the department at the end of January to take up a position as assistant in the forestry department at the agricultural faculty of Helsinki University at Viikki.

Mew researcher. Heikki Juslin joined the department as a researcher on 1st March. He was previously an assistant in the Department of Forest Products Marketing at Helsinki University, and is undertaking research into consumer behaviour in the choice of building materials for owner-occupied houses.

## Forthcoming lectures

Michael Jones will be delivering a lecture in Swedish to the Nordenskiöld - Samfundet on March 16th at 19:30 in the Small Festival Hall of the University. The topic will be: "Emergent land, ownership disputes and recreational pressures in the Vasa archipelago".

#### German course

The German Institute in Helsinki has informed the department that they are willing to provide a special course in German for members of the department or the institute, beginning at the end of April, if a group of 10-16 people are interested. If the group is smaller, it is possible to join the German Institute's regular course starting at the same time. The cost is only 50 marks for 24 lessons, which will be held 3 times a week for 1 1/2 hours. The editors of the newsletter will be pleased to hear from anyone else who is interested as soon as possible, so that the German Institute can be informed before the end of March.

## International visits

Professor Osara will be leaving on 11th March for Migeria, where he will be assisting in the identification and formulation of an international aid project by Finland in the field of forest industries. He will be away until the end of the month.

Currently in Finland for a council meeting of the International Ski Federation being held in Lahti is H. Rae Grinell, senior economist at the Forest Economics Research Institute of the Department of Environment, Ottawa, Canada, and a member of the Canadian Amateur Ski Association. He has taken to opportunity to visit the Finnish Forest Research Institute and the department.

## Departmental and associated news

Nursery economics. Pentti Kuokkanen, who is doing research into nursery economics, became a father on 8th February, when his wife gave birth to a baby daughter.

Indian Forestry Service. Buddhi Jha celebrated last month his reappointment to the reconstituted indian Forestry Service. The old Service was abolished at the end of last year after it had been declared illegal by the Supreme Court.

15th IURO Congress. Professor Heikinheimo will be in Gainesville, Florida, from 14th March to the end of the month for the 15th IUFRO Congress, where he will be presenting a bottle of vodka.

New telephone number. The telephone company informed Metsätalo last August that the institute is to have a new telephone number. It took six months for the information to filter through the official channels to the department, which has just been informed that from 1st April the new number will be: 661 401.

Doctoral dispuration. The Mathematician of the Institute, Risto Seppälä, defended his doctoral thesis on Saturday, 27th February. Professor Heikinheimo was his opponent. The celebratic is afterwards, which four members of the Forest Economics Department participated in, lasted until 7 a.m.

March to 15th June, where he will be engaged on a project concerned with the optimization of timber sales for industry. The work provides him with practical experience in connection with his studies at the Helsinki School of Economics, and will be useful preliminary experience for his planned studies in the U.S.A. at a later date. Matti Polo is a ployed by the same firm as a consultant.

Forestry in the developing countries. Professor Osara gave a lecture on 19th February at the Royal College of Forestry in Stockholm in connection with a course on forestry in the developing countries. The lecture topic was the work of UN and FAO for the developing countries.

Committee report. The report of the Committee on Forest Regeneration Costs was publish I on 17th February, bringing an end to the work of the committee, the chairman of which was Professor Heikinheimo. The main work of writing the report, which took four year to prepare, was undertaken by Sampsa Sivonen, the committee's research sectedary. After presenting the report to the Ministry of Agriculture, the members of the committee were interviewed for a radio report. The results of the committee's work were also discussed at a meeting of the Central Forestry Board Tapio on 22nd February.

Ministry of Agriculture and Forestry. The Ministry of Agriculture became the Ministry of Agriculture and Forestry on 1st March. The new ministry includes a separate Forestry Office under which the Forest Research Institute comes.

Reorganization of rooms. If you're looking for Marja II, she's in Maija-Liisa's room; if you're looking for Maija-Liisa, she's sitting in Buddhi's place; if you're looking for Buddhi, he's in with Pentti. Heikki can be found in Marja II's room. Watch out, they'll be switching the professors around next.

Russian labour front. Professor Heikinheimo is currently attending with Professor Kuusela a language course in Russian, with a 2 1/2 - hour lesson each week.

Sporting news. The ski-ing contest between forestry organizations in Helsinki was held on 24th February. The institute's first team (Matti Heikinheimo, Pertti Mikkola, Leila Lindberg, Viljo Holopainen) won the team contest, and the second team (Matti Palo, Aarne Reunala, Raija Öhman, Lauri Vuorisalo) came fifth. Matti Heikinheimo had the best individual time, and Matti Palo came fourth.

## Acquisitions to the library

Salo, Maija-Liisa, Ulla Peltola & Kaija Kotilainen. Diurnal and daily variations in the composition of cow faeces (Finnish summary, no illustrations and full bibliography).

Journal of the Scientific Agricultural Society of Finland, 42, pp. 238-49. Helsinki, 1970.

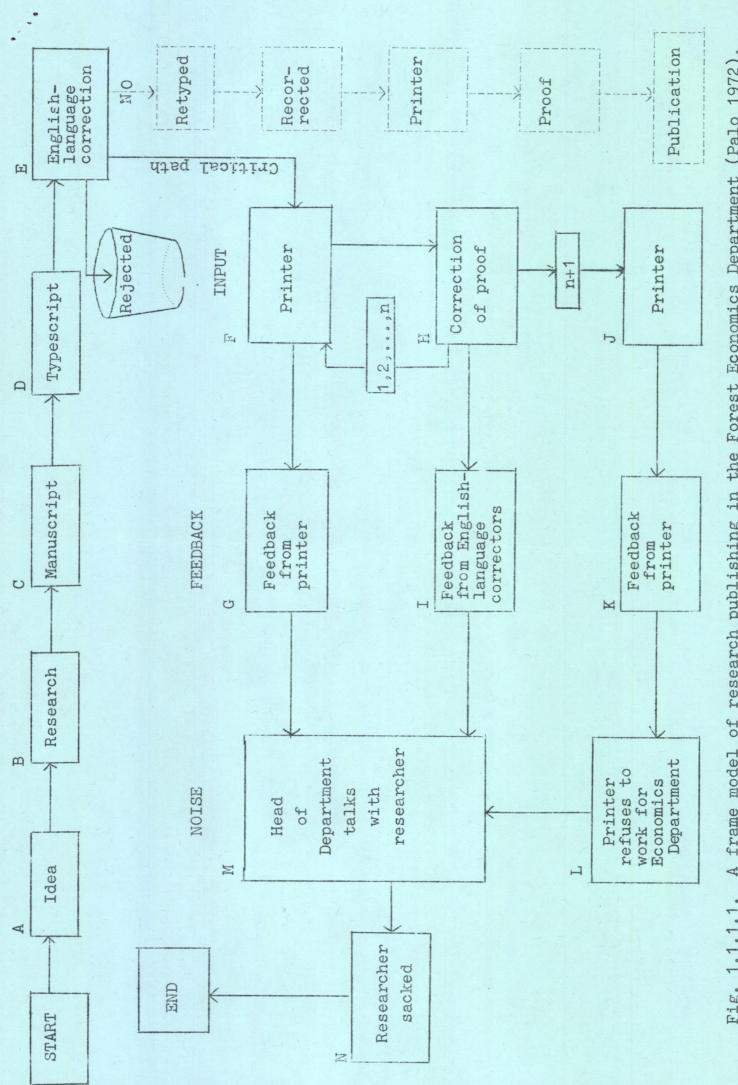


Fig. 1.1.1. A frame model of research publishing in the Forest Economics Department (Palo 1972).