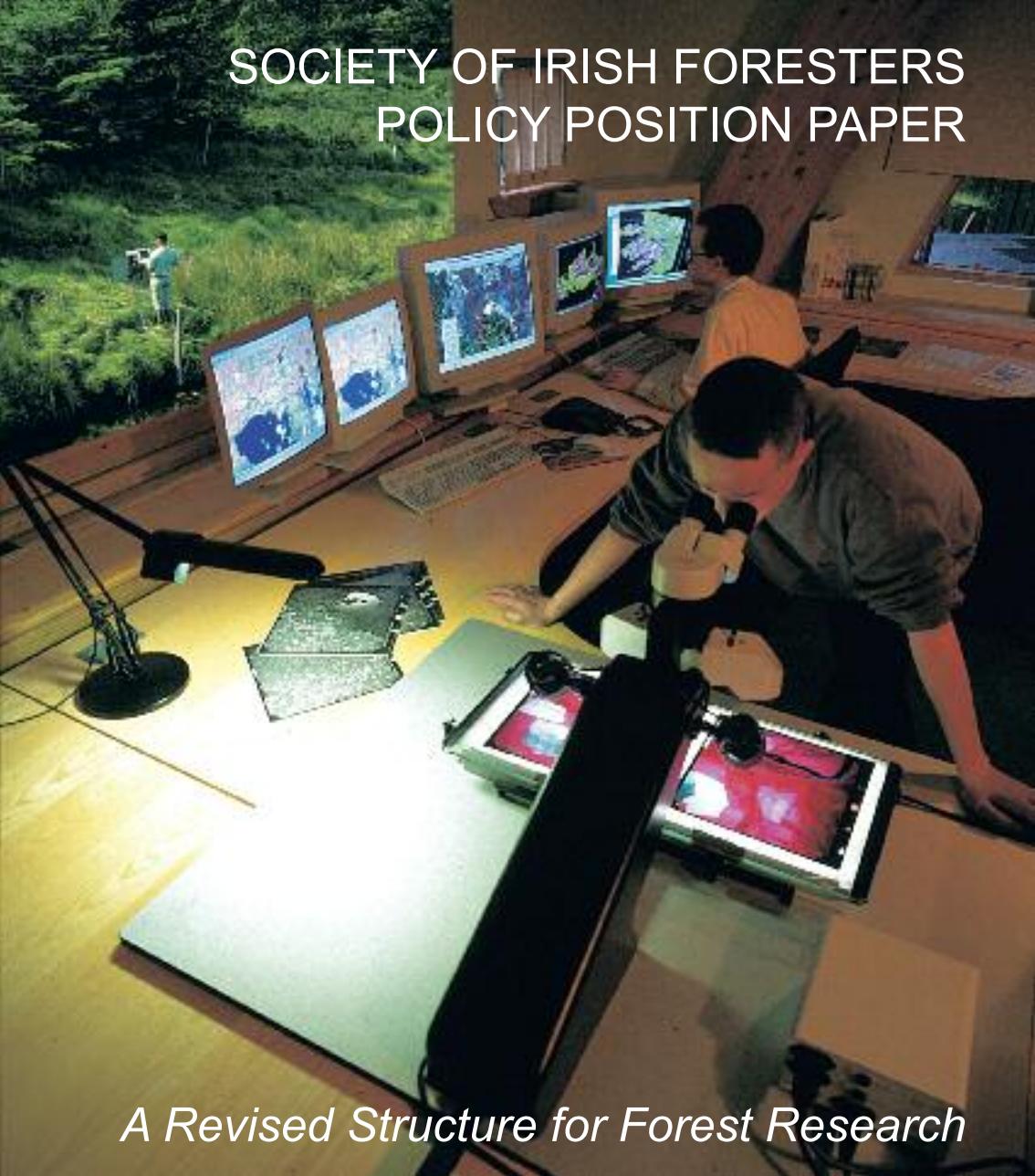
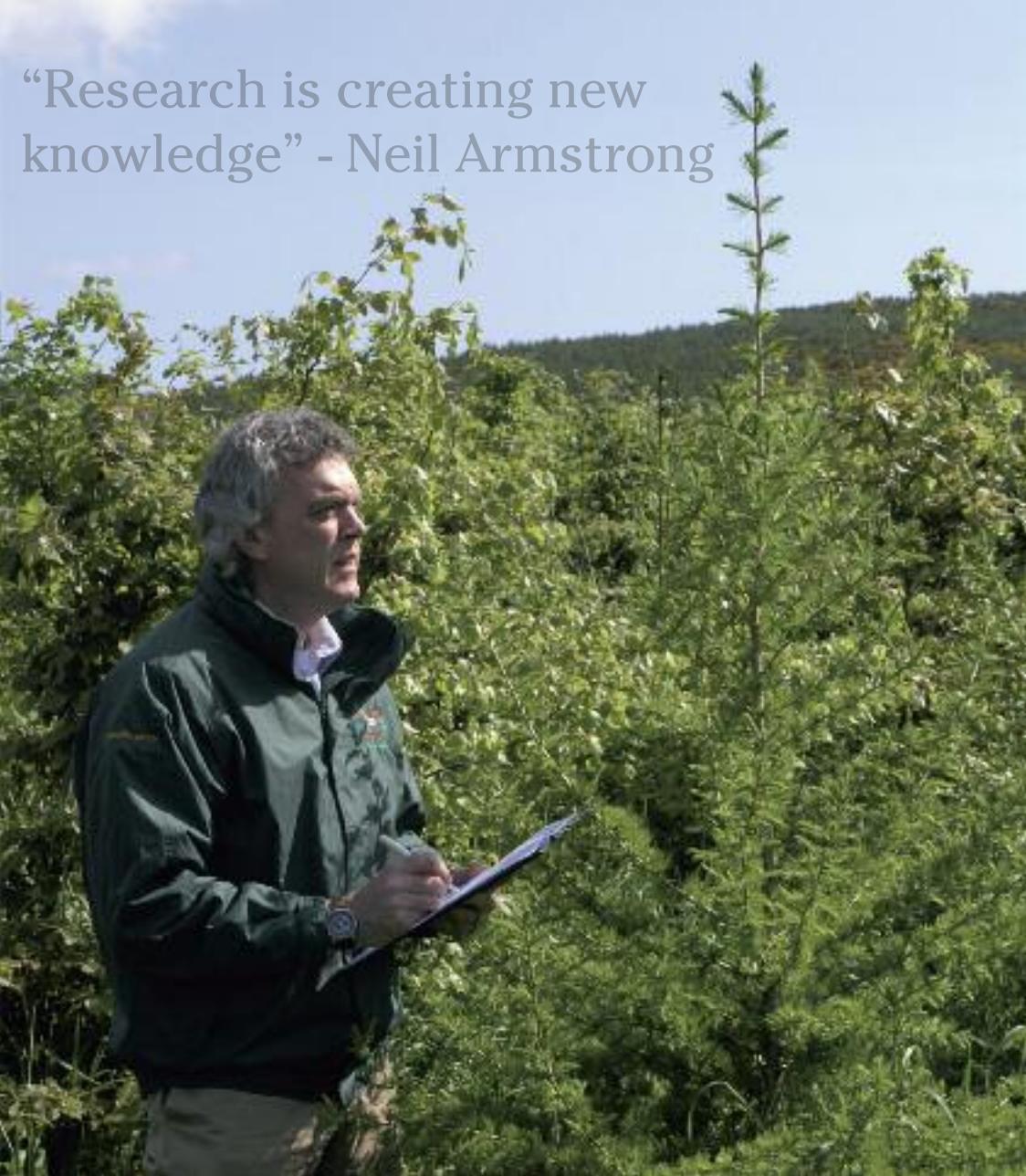


SOCIETY OF IRISH FORESTERS POLICY POSITION PAPER



A Revised Structure for Forest Research

“Research is creating new knowledge” - Neil Armstrong



The Society of Irish Foresters

The Society of Irish Foresters was founded in 1942 'to advance and spread the knowledge of forestry in all its aspects'. It fulfils this role by organising field days, international study tours, workshops, lectures and symposia.

The Society also publishes *Irish Forestry*, the sole technical publication on forestry in Ireland, a bi-annual newsletter *The Irish Forester*, Policy Position Papers, and other books of both historical and technical interest.

The Society of Irish Foresters represents the interests of more than 700 members, predominantly professional foresters, but including, through its associate and student membership, a wide cross-section of people involved, or with an interest in, the forest and timber industry.

The Society of Irish Foresters places great emphasis on promoting professional standards in forestry among the public, and the regulation of the forestry profession. To this end, members of the Society of Irish Foresters are bound by its Code of Ethics and Professional Conduct. The Society of Irish Foresters is also involved in forestry education in Ireland. It participates with third level colleges in updating forestry courses and operates a CPD programme with a view to maintaining the highest professional standards.

Since its foundation, the Society has played a major role in influencing Irish forestry policy. This policy position paper *A Revised Structure for Forest Research* is the eighth published by the Society of Irish Foresters.

Previous policy position papers addressed forestry research, sustainable forest management, semi-natural woodland, investment in forestry, diversification of species, professional standards in forestry and public forestry in Ireland.



SOCIETY OF IRISH FORESTERS

POLICY POSITION PAPER

A Revised Structure for Forest Research

1. INTRODUCTION

The Society of Irish Foresters is deeply concerned about the diminishing role of research in Irish Forestry.

In contrast to the other natural resource industries of agriculture, food and fisheries and indeed to forestry in most of the developed countries, no permanent centre for forest research currently exists in the Republic. This situation has deteriorated further with the downgrading of COFORD (The National Council for Forest Research and Development), which has funded and coordinated forest research projects since the early 1990s, to a departmental committee. The term 'research' appears only once in the new Forestry Bill, another discouraging signal.

The ability of this country to respond to environmental crises related to climate change and international disease spread or to capitalize on the material, financial and social benefits generated by forests, is compromised by the lack of a centre where archive information can be assessed, quick and informed action can be taken and where projects can be initiated and coordinated.

The Society presents below, a reasoned and practical approach to regenerating forest research and urges its implementation.

2. BACKGROUND

Government investment in forestry over many decades has resulted in a forest estate of some 744,000ha. Today, returns from this investment are generating €2.2 billion in output annually, giving rural employment (12,000 jobs), producing a sustainable supply of timber (3 million tonnes annually) and providing public goods and services, all of which are contributing to the welfare of the nation. Underpinning this success has been a commitment to research and development, but organisational changes in recent years have reduced the scientific and technical support necessary to protect and further develop the resource.

At a time where climate change is predicted to have unprecedented impacts on forests and other land uses, there is a need to ensure that we have the capability and capacity to adapt to a changing environment. Indications are that threats to forests are likely to increase. Already the spread of insect pests and diseases beyond their previous ranges is becoming evident e.g. *Chalara*, *Phytophthora spp*; also predicted shifts in moisture regimes and a greater frequency and severity of storms pose a real threat to the health and productivity of the forest estate.

Wood is an environmentally friendly material and has many advantages for a low carbon economy. New technologies are emerging which are providing opportunities for the use of wood in more efficient and innovative ways - in construction, energy, life style products etc. There has never been a greater demand for wood than at present and this is likely to increase in the future. Our ability to meet this demand from a finite land resource on which there are many competing demands e.g. food production, urban developments, transport links, nature conservation etc., requires that wood production from our forests is optimised. Research and development can provide the necessary solutions. It is therefore vital that the forestry sector has the necessary scientific, technical and communications infrastructure that can ensure the continued success of the forestry enterprise.

Forest research in Ireland has undergone significant change since 1989. At that time the Research Branch of the Forest Service was the national forest research unit covering all aspects of forestry from establishment through to wood quality. Outputs from the unit provided scientific data to develop guidelines on best practice, inform policy and underpin the afforestation programme and the sustainable management of the forest estate.

The decision to move the Research Branch into Coillte resulted in a change of direction and priorities from national R&D requirements towards meeting the needs of the company. Research staff and facilities were downsized and re-focused mostly towards providing technical support to the company, thus creating a gap in the national forest research infrastructure. This gap, however, was filled by the formation of COFORD, a semi-autonomous body which commissioned and administered project-led research, funded by the Department of Agriculture, Food and the Marine (DAFM) and which was highly regarded both nationally and internationally as a model of research coordination. The COFORD R&D Programme was very successful and resulted in the emergence of a new group of diverse research providers comprising universities, Teagasc and private sector experts which brought increased expertise and capacity to the sector especially in the area of project-driven research. In addition, the dissemination activities of COFORD through publications, website, seminars, workshops, field days etc were an important part of the research architecture and contributed greatly to the communication of new information, ideas and technologies to the forestry sector and its stakeholders.

The absorption of COFORD into the DAFM in 2010, however, resulted in a break up of the unit. While a research programme continues under the DAFM Research Division the loss of staff has resulted in a significant reduction in activity, particularly with regard to the coordination of communications, publications etc.

The purpose of this submission is to propose an easily achievable improved structure for the management of the national forest research programme that will enhance its output and effectiveness.

3. ISSUES RE CURRENT R&D STRUCTURE

3.1 Advice to the National R&D Programme

3.1.1 COFORD Council

On the absorption of COFORD into DAFM the former COFORD Council was retained but merely as a stakeholder representative group advising the Minister on the R&D needs of the forestry sector. While the members give a broad representation of the sector they tend to be associated with the commercial aspects of forestry. There is no representation from social, professional and environmental organisations that can advise on research into the environmental and public goods aspects of forestry.

Recommendation 1 – That the composition of the COFORD Advisory Group be changed over time to include some representatives from social, professional and environmental organisations.

3.1.2 Scientific Advice

While external advice is sought as required by DAFM on specific issues e.g. evaluation of projects etc. there is no scientific group that advises on the overall structure and management of the R&D programme. Stakeholder groups tend to focus on R&D to meet their immediate practical needs while the longer term trends and understanding of natural processes are generally of lesser concern. A balance is therefore required to ensure that the science that underpins the R&D process is not neglected; similarly, that the structures (expertise, capacity etc) required to deliver the necessary outputs from the national R&D Programme are adequate and fit for purpose and that the most appropriate research group undertakes this research. Advice on these issues is best provided by experienced scientists that have a wider view, not only of forest research, but also of national and international R&D developments.

Recommendation 2 – That a Scientific Advisory Group be formed, containing both national and international members, to complement stakeholder input into guiding the direction and content of the national forestry R&D programme.

3.2 Expertise

Due to retirements and a lack of succession planning there are gaps appearing in capacity and expertise within the national forest research community, particularly in areas such as site productivity, species suitability, genetics and tree improvement, forest protection and silviculture. These are key disciplines that the sector requires in order to develop new products and technologies and provide support and advice in addressing problems that face forest managers and owners.

Recommendation 3 – That research personnel be maintained in key disciplines to ensure continuity of expertise and experience within the sector.

3.3 Long-Term Studies

The current threat from the pathogen *Chalara fraxinea* has the ability to devastate native ash populations, to such an extent that this valuable broadleaf species may no longer be viable for afforestation. The spread of *Chalara* from Eastern Europe is considered to be one of the effects of climate change. Other effects may follow that pose a serious threat to the health and vitality of the entire forest estate. A similar disease of Sitka spruce could destroy the forest industry in this country. It is therefore important that measures are taken to increase the resilience of the forestry programme, through adequate research of the range of tree species, stand structures, mixtures and silvicultural systems applied to forest management in Ireland. This is long-term research that requires commitment over many years. The benefits of long-term trials are to be seen from Trench 14, Avondale, JFK Park, BogFor, spacing and thinning trials and the IUFRO provenance collections. These trials have provided valuable silvicultural information which has informed the national afforestation programme. However, they need to be supplemented by further trials to address new key issues that are facing the forestry sector.

Recommendation 4 – That key long-term trials be retained in State ownership and that further trials are established to address the impacts of the changing environment facing the forest sector.

3.3.1 Surveys

Monitoring of growth and yield, forest condition, biodiversity etc require that observations/assessments are made over a prolonged period to detect changes and trends. Commitment to maintain these studies over time is difficult and sometimes compromised when current priorities compete for scarce resources. Long-term studies, especially in an era of climate change, are a feature of forest research and provision should be made where necessary to resource these over time. Selected studies should therefore be ring-fenced (but with periodic reviews) to ensure that continuity is maintained and investments made over time are not lost.

Recommendation 5 – That a commitment be made to ensure the sustainability of selected long-term studies.

3.3.2 Field Trials

The long-term nature of forest crops requires that experimental treatments must be observed over many years before reliable effects can be determined. Field trials testing various experimental silvicultural treatments or genetic material can run over 1-2 decades and longer before reliable data are obtained. The current short-term nature of research projects and programmes (3-5 years) does not allow for the maintenance and assessment of field trials beyond the duration of the project. To overcome this problem a project titled NATFOREX was funded by COFORD and undertaken by UCD in association with Coillte whereby all field trials are being evaluated and assessed and data collected and archived for future analysis. Basic maintenance and further data collection is being carried out on trials worthy of retention; and completed, damaged or defective trials closed and returned to timber production. However the contract for NATFOREX is nearing completion and there is a need to ensure that there is continuity of this project for the future management of field trials.

Recommendation 6 – That NATFOREX be maintained to ensure the maintenance and security of long-term field trials.

3.3.3 Wood Quality

Changes in silvicultural practice can have a considerable influence on wood properties, particularly in respect of parameters such as density, knottiness; stem form (straightness of grain etc). Any such influence on these wood properties could have significant knock-on effects, for example on the suitability of future forest output for the manufacture of board products and on the yield of structural grades of timber and/or their acceptability in the growing export markets. Increasing volumes of hardwood species will also be coming on the market in the future. There is presently very little information on the properties of Irish grown hardwoods.

Recommendation 7 – That the wood properties of both hardwood and softwood species be monitored on an on-going basis to provide baseline information and to track any changes.

3.4 Extension Activities

The active extension programme run by the former COFORD was highly valued and appreciated by both the forestry sector and a wider audience. Activities included the regular publication of books, reports, information notes, newsletters and a website as well as organising conferences, seminars, workshops and field days and facilitating the production of TV programmes on forestry related topics. The reputation of COFORD internationally was such that it was regarded as an ideal model to which many forest research organisations aspired. This was built on its extension activities that reflected well on the national forest research programme as well as the researchers and administrators involved. Activities, however, have been reduced to the point where they have ceased to be effective, leaving the sector with much weakened R&D dissemination and communication facilities and networks.

Recommendation 8 – That an active programme of extension activities be re-instated to disseminate R&D findings and provide technical support for the forestry sector.

4. PROPOSED CHANGES TO THE R&D STRUCTURE

The establishment of an Irish Forest Research Institute along the lines of the Marine Institute would be the ideal organisation to carry out forestry R&D. Such an organisation staffed with scientists, technologists and extension staff and equipped with laboratories would be a centre of excellence for forest science, innovation and technological development. However, it is recognised that such a facility is unlikely to be possible for the foreseeable future; therefore, the approach adopted in developing this proposal is to improve the current structure using, as far as possible, existing facilities and arrangements and taking into consideration the issues and recommendations mentioned above.

Forest Research Centre

- It is proposed that a Forest Research Centre be established to undertake long-term forest research in key areas that require commitment over time, such as forest performance under changing climates, tree improvement, silviculture, forest protection etc.
- The centre would be a collaborative initiative drawing on the resources of research providers, industry and DAFM alike. A similar model to Food for Health Ireland (FHI), it would be a multi-location, multi-partnered, multi-disciplinary virtual research centre that addresses some of today's most pressing issues requiring long-term forest research.
- The centre would have a Research Manager and a core of 3-4 permanent expert scientific staff, located in participating organisations. Staff would be assigned or seconded from these organisations thereby incurring little extra cost; and supplemented by contract staff as required.
- Staff members would cover broad thematic areas and acting as project leaders they would initiate, manage and participate in projects in conjunction with other research providers and practitioners. They would also act as specialist advisors to the sector. The Research Manager would be responsible for coordination of the research programme, liaison with other organisations, sourcing funding etc.



- As part of the long-term research programme, the Centre would also be responsible for establishing, maintaining and monitoring field trials and would maintain NATFOREX and other databases.
- In addition to undertaking long-term research, the centre would facilitate technology transfer by developing and implementing communications and dissemination programmes in conjunction with other researchers and practitioners – e.g. seminars, workshops, publications, website, field days, etc.
- The Centre would also encourage collaboration and linkages between research institutions (both national and international), liaise with industry and stakeholders to facilitate and encourage the implementation of research results and monitor their uptake.
- The work programme of the Centre would be guided by DAFM and its Forest Research Stakeholder Group and the proposed Scientific Advisory Group.
- Core funding (ring-fenced) for the centre would be provided from the National Forestry R&D Programme supplemented by contributions from industry and EU Framework Programmes. DAFM's Advanced Project/Virtual Centre is a funding mechanism that already exists.
- The work of the centre would complement the current short-term project-led research by providing the much needed continuity of projects and expertise that are necessary requirements for an effective and efficient national forest research programme. It would also re-instate the extension and communications programme of the former COFORD.

Recommendation 9 – That a Forest Research Centre be established with core permanent scientific staff, securely funded from the National Forestry R&D Programme in order to undertake long-term research, communicate research findings and facilitate their transfer into practice.

5. SUMMARY

This proposal is based on views of the Society of Irish Foresters on the urgent need to address a number of shortcomings with the current structure and operation of the national forestry R&D programme.

The five main issues that have been raised are:

- The need for sound scientific input into advising on the programme;
- The necessity to maintain expertise in key disciplines;
- The ability to manage and secure long-term research projects and trials;
- The need to respond scientifically to unexpected protection and environmental issues; and
- The importance of communicating and transferring research findings into practice across the sector.

These are structural aspects that are fundamental to the successful management of the R&D process. The proposed Forest Research Centre will address most of these issues and the services provided will greatly assist researchers, practitioners and policy makers alike.



SOCIETY OF IRISH FORESTERS

MISSION STATEMENT

To lead and represent the forestry profession, which meets, in a sustainable manner, society's needs from Irish forests, through excellence in forestry practice.

OBJECTIVES

- To promote a greater knowledge and understanding of forestry in all its aspects, and to advance the economic, social and public benefit values arising from forests.
- To support professionalism in forestry practice and help members achieve their career goals.
- To establish, secure and monitor standards in forestry education and professional practice.
- To foster a greater unity and sense of cohesion among members and provide an appropriate range of services to members.



Society of Irish Foresters
Glenealy
Co. Wicklow

e: sif@eircom.net
w: www.societyofirishforesters.ie