

FOURTEENTH ANNUAL GENERAL MEETING

THE fourteenth Annual General Meeting of the Society was held in the Shelbourne Hotel, Dublin on Saturday, 24th March, 1956, up to sixty persons being present.

The retiring President, Mr. T. McEvoy, opened the meeting. The minutes of the previous Annual General Meeting, having appeared in *Irish Forestry*, were taken as read, confirmed and signed.

Mr. McEvoy then called on the Secretary to read the Council's Report for 1955.

COUNCIL'S REPORT FOR 1955

THE new Council met on Monday, 24th January, 12 members were present. This meeting made arrangements for the Annual General Meeting, elected committees to deal with the Journal, Excursions and Finance. A programme of local excursions was arranged and proposals for a General Excursion to the West of Ireland outlined.

The Council met again on the 18th March. Arrangements for the reception of Mr. Hiley were made and included a visit to plantations in Co. Wicklow. A special Committee was set up to enquire into the membership position with special reference to grading and rates of subscriptions. Dates were fixed for day visits to Baunreagh, Ballycurry, Castlepollard, Inistioge.

The Council met again on May 2nd. The main business was concerned with arrangements for the Annual Excursion to Galway and the summer programme.

The Council met on November 24th. Arrangements were made for the Election of New Council and also for the Annual General Meeting for 1956. Also considered was the venue for the Annual Study Tour.

A Council Meeting was held on December 12th. The main business was the Report of The Membership Committee. A lengthy discussion on this report took place and the meeting adjourned at a late hour. The adjourned meeting was resumed on December 19th. The meeting appointed scrutineers to open and count the Voting Papers for the New Council and make provision for the publishing of Vol. XII, No. 2 of the Journal. Recommendations were made dealing with membership, the publication of the Journal and the holding of Excursions.

MEMBERSHIP.

At the end of 1955, paid up members numbered, 45 Grade I, 55 Grade II and 93 Associate members. Income from subscriptions amounted to £172 5s. 0d. as compared to £178 5s. 0d. in 1954, a

decrease of £6. The Council devoted a very considerable portion of its time to a discussion on the membership position which cannot be said to be satisfactory.

JOURNAL.

Two issues of the Journal appeared during the year under review. The difficulty of securing adequate suitable material from home sources has been discussed at various meetings of the Council.

EXCURSIONS.

The full programme of Excursions in 1955 is recorded in Vol. XII, No. 2 of *Irish Forestry*.

The adoption of the Report and Financial Statement was moved by Mr. J. C. Kearney, seconded by Mr. B. Maloney and carried unanimously.

The retiring President then delivered his valedictory address.

DISCUSSION ON Mr. McNEILL'S PAPER

Mr. F. G. Burgess, Deputy Chief Technical Officer, Ministry of Agriculture, Northern Ireland, in proposing the vote of thanks said: I do not think that I can use a better preface to my talk to-night than to quote the words used by Mr. W. E. Hiley in his Presidential Address to the Society of Foresters of Great Britain on 18th May, 1955. He said "Present day forestry is likely to prove much less productive than it should be because we, in our generation, are neglecting some of the major problems of forest management, and are taking insufficient care to ensure that the techniques which we employ are appropriate to the country's needs. We spend large sums of money establishing forests but are neglecting many of the measures which ensure that the forest wealth we create shall be as large and as useful as we can make it."

We, as members of the Society of Irish Foresters, pride ourselves on being trained foresters and we must lead in constructing a well-informed opinion on technical matters. If any change is required in the orientation of our ideas, this Society is the body through which such a change should be inspired. The question of management, as laid down in working plans—if they exist—or otherwise, as laid down in various short term plans covering such items as planting, thinning, road making, fire protection, etc., etc., is often neglected as being a matter for the future, the attitude being "Let us first grow our trees, and then see how the timber from those trees can best be used"—an attitude which is opposed to all the principles of good management. Surely it is better to find out first the use to which the timber is to be put and then grow timber which will meet the consumers' needs in the most economical way, by means of carefully prepared working plans. Mr. McNeill in his excellent paper read to us to-night has given us the principles of Forest Management based on working plans, and I hope now to show how those principles are applied in the actual compilation of working plans both in the past and in the present.

During the period 1925-27 and again in 1936, I was fortunate enough to be on special duty for the purpose of preparing working plans for two large districts in Burma where the objects of management were fairly simple and straightforward, namely, to convert large tracts of almost virgin forests into what is known as normal forests, in order to ensure a sustained yield of the major species which it was economical to exploit. The working plan was, therefore, comparatively simple, and not complicated by planting, thinning, road, fire protection and various other plans. It consisted of the usually accepted two parts, Part I, being a summary of facts on which the proposals were based, or, in other words, past history, and Part II, the actual proposals for management over a period of at least 10 years.

The conditions, however, which exist in a country where the forests, as it were, are ready made, are not the same in a country such as ours

where forests, in most cases, have to be created, or where forests do exist have not yet reached the stage of full production. Working plans under such conditions are of necessity much more complicated and, in my opinion, are essential if we are to ensure, as Mr. Hiley has said, that the forest wealth we create shall be as large and as useful as we can make it. I am very happy to say that the Forestry Division to which I have the honour to belong has now made a start in the preparation of working plans for all forests it controls, and one plan has already been completed. The organisation for the preparation of working plans is controlled by a team consisting of a Scotsman, an Englishman and another Englishman trained at a Welsh University, who have pooled their experience and training, and the field work is carried out by an Irishman from a University in your own fair city of Dublin and trained by the Secretary and Treasurer of this Society, Mr. Clear.

Owing to the complicated nature of working plans which are so necessary for the type of forests with which we have to deal, and to the rapidly changing conditions of the times in which we live, it has been found necessary to depart somewhat from the usually accepted type of plan and to introduce a type of plan more in line with modern ideas. Our working plan consists of three parts, Part I, as in older plans, being a Summary of Facts on which the proposals are based and consisting of 5 chapters; Part II, consisting of 19 chapters, contains all the Long Term Management Proposals in general terms, whilst Part III, with the same chapter headings as in Part II, is the Five Year Plan in detail and not ten years as in most of the older plans. Part I, of course, remains unchanged throughout the life of the forest, and Part II will also remain unchanged for a considerable time, although it is liable to revision if and when conditions arise involving a change of policy. Part III will need a revision every 5 years, or even sooner, according to the progress made, or to meet unforeseen circumstances.

Each plan will also have eight control forms as an appendix, and six maps.

Mr. McNeill has said, and rightly so, that, in theory, planning is indispensable, but in practice it is virtually non-existent. I quite agree, but I have tried to show that we foresters do realise the necessity and urgency of planned management, and although it has taken some years to make a start, I can assure you that it has not been through lack of enthusiasm, but simply a lack of trained staff. Mr. McNeill has presented to you the formidable nature of the work involved, and has stated that the absence of working plans is often due to doubt and uncertainty of the future. Doubt and uncertainty there will always be, but this must not be allowed to delay the planned management which is so essential, if we are to be worthy of our profession, and pass on to our successors the benefits of our training and experience.

I would now like to mention one of the most important factors affecting management, which has given rise to quite a lot of controversy,

and that is, the thinning of plantations. As you know, the present authoritative guide is the 1951 edition of the Forestry Commission's pamphlet entitled "The Thinning of Plantations". The grades recommended in that pamphlet are used as a basis for the revised yield tables, but if we follow those grades, the trees of most species will grow in diameter very slowly during their later years, and will take an unnecessarily long time to reach saw timber size. On the other hand, if we thin heavily, trees will reach any desired size much more quickly, and I do not see how any one can know how to thin plantations until it is known what kind of timber is wanted. Fortunately, in my service, we have sufficient knowledge of the kind of timber required to enable us to fix a rotation for spruce—which comprises about 80% of our forests—of 45 years, and other conifers, of 60 years. It is proposed to carry out a first thinning at 15 years, followed by two more thinnings at three year intervals, and three more at intervals of 6 years, the final one being at the age of 39 years. The final crop will be approximately 150 trees per acre. Obviously, every different forest area will require some modifications, but the general principles are as described, and will only vary in detail. A few sample plots to ascertain rates of growth have been in operation since 1940 and during the last few years about 100 have been established, and we consider that we have sufficient evidence to justify the introduction of a 45 year rotation for spruce, bearing in mind the type of timber which is in the greatest demand.

Finally, a word about maps. The importance of aerial survey cannot be too strongly emphasised in the preparation of accurate stock maps. The study of such maps, combined with inspections by the field staff, produce accurate stock maps on which all other maps depend. From our experience, it has been found that a number of maps traced from Ordnance Survey sheets and copied by the *dye-line* method are much to be preferred to one or two Ordnance Survey maps, on which is usually entered too much detail. This enables all the maps, which are so necessary to a working plan, to be easily read and understood, and is a more economical method than using the large Ordnance Survey maps in their entirety.

In conclusion, I would like to stress the importance of maintaining complete and accurate records of all matters affecting forestry operations, from the moment of acquisition, until the time when such information can be embodied in Part I of a working plan, and that every forest unit should have a working plan even before work at the unit starts.

Major F. W. Doyne, agent to the Coolattin Estate Co. in seconding said :

When I was asked to talk to you about the problems of afforestation on the private estate it was easy for me to agree as I knew I would not lack material. I am, however, going to confine myself mainly to the financial aspect, which is to my mind the whole crux of the matter.

For our purpose, private estates may be divided into three—those which are solely managed by the owner, those which are managed for the owner by a land agent, and the larger estates which have both an agent and a qualified forester. The first two have special difficulties as they are not large enough to afford a permanent forestry staff, and the employees that are available are responsible for a large amount of unproductive work such as maintaining estate roads, pleasure grounds, etc. The Coolattin Estate, for which I am agent, can be considered in the second class, consisting of some 5,000 acres, 2,500 of which are devoted to forestry. We also have a modern sawmill equipped with two $4\frac{1}{2}$ " bandsaws, which converts all our matured timber, none being sold in the round. The usual estate nursery has been dispensed with, chiefly because of labour difficulties, and it is found that it pays us to purchase seedlings and line them out in clean ground.

I would explain here that a land agent is a jack-of-all-trades, and one of the subjects he has to undertake is forestry, but naturally he has not got the knowledge of a trained forester, and of course on some estates the owner knows little or nothing about forestry. Where both the owner and the agent are keen and realise the financial advantages of good afforestation, the industry flourishes. I am happy to say that on the estate that I manage the owner is extremely keen, and I obtain all the assistance and encouragement required. I can tell you that but for the foresight of the previous owners in carrying out an extensive planting programme, it would have been almost impossible to keep the estate intact, for things were extremely difficult after the last war. However, the pitprop trade at that time was good, and thinnings produced a very good return, something over £5 per ton loaded on lorries being obtained.

I quite agree with Mr. McNeill that it is essential to have a working plan, and we have commenced to collect the necessary information and prepare stock maps. To assist us in this matter we have had aerial photographs taken which have been of great assistance. It will of course take a considerable time before our plan is complete, but we have at least made a start. It is, however, difficult to plan without freedom of action, and in this connection I would urge the Government to relieve private woodlands from all restrictions. After all, the trees which we are now harvesting were planted without any assistance whatsoever from previous Governments, and it seems most unfair that we should be directed as to what we can and cannot do.

I would now turn to various outlets for home grown timber, and so far as we are concerned the main items are pitwood and pitprops, thinnings for wallboard factories, and sawn timber. As I previously mentioned, the pitwood trade, that is unpeeled poles, was encouraging after the war, when sizes of up to 12" diameter were permitted to be exported, but when the exportable size was reduced to 8" trade completely collapsed. This resulted in the woods being unthinned and

suffering in consequence. The pitprop trade, that is peeled poles, appears to be taking the place of pitwood, but so far as I can see the price compared to the latter is not encouraging. The price offered by the agents in Cardiff for pitwood is £5 17s. 6d. per ton loaded on truck, and it is reckoned that after deducting expenses the net return amounts to £1 18s. 0d. The price for pitprops per Gothenburg Scale Standard of 180 cu. ft. is 490/- or approximately £10 5s. 0d. a ton, but in comparing this price with that obtained for pitwood it must be realised that in peeling the props there is a loss in weight of 50%. It must be further realised that the same tonnage cannot be carried either by lorry or by ship and the rates for freight are accordingly increased. There is also the cost of peeling to be taken into account. I reckon that the net return on peeled pitprops is £1 16s. 0d. Before leaving the subject of pitwood, I would like to tell you that I paid a visit to Cardiff at the end of last year and met one of the agents who negotiates the price for this timber with the National Coal Board, and he told me quite frankly that the supply from this country was far from satisfactory both in quality and completion of contracts. It appears to me that this has largely come about by timber being purchased by inexperienced exporters. I would therefore suggest that it would be to everybody's advantage if firstly, a price was negotiated at Government level with the National Coal Board, and secondly that only approved exporters be permitted to ship timber abroad.

Thinnings for wallboard factories are of course inferior to that sold for pitprops; the price is consequently lower. There is another difficulty here for the estate in so much as it is far from easy to obtain orders for small lots. I can quite see that it is essential for the factories to have regular supplies, and that they must buy in big quantities, possibly through contractors, but it would be helpful if they could arrange to take small quantities direct from the private grower.

So far as sawn timber is concerned, it is interesting to note that since wallboard and paper mills are producing cardboard containers the sale for boxwood has deteriorated. Cardboard containers are of course cheaper and preferred by the manufacturers to boxes.

There is of course a good outlet for all classes of building timber, but it must naturally be well sawn and clean. Where it is kiln dried it is as good as, and in lots of cases superior to, the foreign timber now imported. We use home grown timber exclusively for all our house repairs, and find that it can be air dried most satisfactorily. We also have a good trade in posts and rails, which are used extensively by stud farms, but it seems to me that unless further outlets are found it is going to be difficult in the not too distant future to keep the sawmills fully employed.

The President (Mr. O. V. Mooney) in supporting the vote of thanks said :

Mr. McNeill has given us a paper the subject matter of which is of vital importance to foresters engaged in new afforestation in these islands. In a short time, all too short, he has drawn attention to the reasons for planning, the important points in planning and the traditional form of plan in almost all forest services in the world—the *working plan*. He has argued his case in a very positive manner and has shown his mastery of the subject by anticipating and parrying any possible counter argument that could be launched. Given the means to formulate and implement working plans, I wonder, having listened to Mr. McNeill could there be any possible sound argument against the adoption of the idea. We certainly must accept the idea of planning, the question is what way to plan.

If Mr. McNeill's basic idea is unacceptable to any of us then we must turn our back on organised planning for the future and accept in respect of ourselves his description of "jobbers" or *ad hoc* planners; making day-to-day decisions, giving rise probably to different techniques being applied to the same problems in different places without any common aim. While foresters in the new afforestation countries may not be too ready to have themselves dubbed jobbers it may not be evident to them how the ideal of the operative working plan may be achieved.

There should be planning but how can it be achieved? The spirit is willing but what is weak?

When I first learnt of the line that Mr. McNeill's paper was to take, my mind went back to the times when I was learning forestry, some twenty three years ago or thereabouts, and to the fact that the working plan was then perhaps the most important subject in the degree course in almost all forestry teaching Universities. In fact an undergraduate could not pass his degree exam. unless he furnished an acceptable working plan. Such may still be the case; it certainly was then.

This was not to be wondered at because the completed working plan was a documented reflection of field work in all that a student had been taught from surveying and road making to botany and soil science; from geology and meteorology to mensuration, thinning, costings, selection of species, and practical methods of dealing with forest problems.

It was, therefore, a source of some bewilderment to me on being launched into the world to find that this beginning and end of all things—the working plan—played little part in practice in any of the forestry services in these islands.

Why was this the case? Was it that the pattern of the working plan then taught was, as has been suggested, based too much on the European

classical lines and completely inapplicable to new afforestation conditions which presents untouched problems with new species? Was it that the pioneers, and foresters were very much pioneers in those days, felt too uncertain of the future, and were too preoccupied with the urgent work of completing their current planting programmes?

Was it perhaps that some working plans were made in the early days which cast the whole idea into disrepute and the awful limbo labelled "impractical theory." It is not difficult to imagine the picture of a detailed working plan drawn up on the first year of establishment of a big area of scots pine plantation on, say, exposed Old Red Sandstone mountain; a bright picture drawn of future crops, yields, roads and industry destined however to be completely obliterated in the course of two decades.

Such conjectures if founded in fact, taken individually, or joined together would suffice to cast the blighting eye of prejudice on the working plan.

Perhaps those men who knew about working plans then, grew up in their services and forgot the plan and its significance and application.

Times have changed, however, or they should have changed, and it would be difficult now to ignore the thousands of acres of forests laid down fifteen, twenty-five, thirty-five, and even fifty years ago which are yearly more pressingly commanding attention and demanding planned management. There are, too, the lessons learned from failure.

One would feel now, though foresters should never allow themselves to become over confident, that we may know enough to plan from the first days of planting. On certain types I think we have less reason to be sure of ourselves in handling our more advanced crops, but nevertheless any operations involving thinning, road making regulation of yield and fixing of rotation inherently demand the working plan. If our trees are worth their salt at all we must acknowledge the need for laying down plans for their future. It occurs to me though, that what is really of the first importance from the beginning is a simple but comprehensive *management record* from the first day of acquisition of any area of ground. This, in my opinion, vital record would give a complete history of the crop, would show every penny spent directly on that plantation, and every operation carried out, every failure and setback experienced—but we all know what a management record is. Here is something vital yet easy of achievement, a safe bank of facts and experience, a fertile field for the research worker, should he ever come, and a solid foundation for the planner of the future. Such a record might indeed suffice for a time until the fully established crop could be considered, at an age when its form, stocking and vigour had taken on a definite trend; at, say, the thicket stage, or after the first weeding and brashing, when the planner could assess the future with more confidence. Such a line of action might appeal in any service where it

might not be possible to achieve constructive effort with great speed. It would at any rate seem to me a short cut to getting started. So many things can go awry from the first year a plantation is laid down—damage by frost, weevil, fire, etc.—that, for a start at any rate, a young service might be wise to move forward the time for drawing up the working plan to the day when there is an established crop on the ground. Even after that, as all foresters know, the future must always be in doubt. I would prefer to see the plan applied after the first weeding and brashing for, to take an example, many foresters here remember the disappointing appearance of the earlier Douglas plantations when in the thicket stage as compared with the appearance of those plantations to-day. Such thoughts are chastening.

Planning is, I concede, desirable from the start, but vital and more practically appropriate at first thinning in a service set-up. I think too that the working plan would be welcome to foresters at that stage as something that would give them clear direction in their work and the objectives at which they should aim in that work.

Mr. McNeill rightly recognises the need for a working plan which is capable of change to fit changing circumstances and suggests a five year revision period as being most suitable. Such would be an essential for a working plan for new afforestation.

That the working plan should be made by the officers in charge of the forest or district I doubt.

In the realm of practice in every day forest-service work I very much doubt that such general practitioners would be able to devote sufficient time to the undertaking, and full knowledge of the method of drawing up a working plan might often be lacking. It would seem to me that out of the practice of each man drawing up his own working plan would arise too many varied techniques and I would prefer the idea of a central organisation—specialists who would defer to and consult with the local man but who would in fact document the plan.

In any service which aims at eventual normality of crop and forest, or sustained yield controlled by periodic or annual cuts, it seems to me that working plans formulated by a central group of specialists would be the more feasible.

With fine and valuable timber crops already under hands many may think it is only a question of where to begin.

Mr. McNeill has made his suggestions for the formula of the working plan and properly emphasised the great importance of the stock map when the project is under way but he stresses above all that whatever be devised it must be something absolutely applicable to the problem in hand. In new afforestation countries and with new outlooks the plan evolved might well prove to have very little resemblance to the classical formulae used in building up the great forests of Europe. But this would not matter so long as we counted our blessings and realised that

the wealth of our crops deserved planning and that most of the best forests in the world are a result of planning.

In a final reply to the three previous speakers **Mr. McNeill** supported, from personal experience, Mr. Burgess' remarks regarding the value of aerial photographs as an aid to stock mapping.

He sympathised with Major Doyne in his uphill task of managing a private forest under the present legislation and congratulated him on his wisdom and presight in working to a plan. He referred Major Doyne to the "Survey of Private Forestry Costs" being carried out by the universities of Oxford and Aberdeen and suggested that the results of the survey might assist him in assessing his costs.

He answered specific questions by stating that he regarded the unit for a separate written working plan to be the single local forest administrative unit and the officer to be entrusted with the compilation of the plan the equivalent of the District Officer in the British Forestry Commission.

Mr. McNeill was unable to support Mr. Mooney's suggestion that the writing of a working plan could with advantage in present circumstances be delayed until the woods had reached the thicket stage and pointed out that the initial selection of species was so important as to be regarded as the foundation of the management of any forest.

In conclusion, Mr. McNeill stressed the vital importance of avoiding failures by over elaboration and emphasized the necessity, at all costs, of devising a working plan that would in fact work.
