

Notes and News

COVER PHOTOGRAPH

The cover shows a plane tree (*X Platanus acerifolia*) in the grounds of the Natural History Museum, Merion Street, Dublin, photographed on 24th November 1971. It can be seen that nearly all of the leaves have fallen, with the exception of a large number in that portion of the crown subject to the influence of the nearby street lamp.

AERIAL FERTILIZATION

Two trials of aerial fertilization by helicopter were carried out by the Forest and Wildlife Service, Dublin, recently. Both trials were in Co. Wicklow. In Blessington forest 88 ha (217 acres) were treated in November 1971, and at Ballinagee forest an area of 215 ha (532 acres) was covered in March 1972. With the increased appreciation of the importance of fertilization in timber production this



is a practice which will develop rapidly in future, as it already has done in some countries, notably Finland and Sweden. In those countries, with their relatively flat topography and large blocks of forest, fixed wing aircraft can be used. Conditions in Ireland are such that helicopters will normally be more economic. These conditions are: relatively rugged topography, lack of suitable air-

strips, scattered blocks of forest but with intensive road networks allowing a good distribution of fertilizer dumps.

In carrying out the operation two hoppers are used. One is refilled while the contents of the other are being distributed. The quality of aerial fertilization is reflected primarily in the uniformity with which the fertilizer is spread over the target area. Non-uniform distribution can lead to inefficient utilization of the fertilizer by the crop and to management difficulties later on as a result of uneven growth of the trees. The problem of rapidly assessing the degree of uniformity actually achieved in large-scale operations is being examined by the Research Branch of the Forest and Wildlife Service.

PINE SAWFLIES AT FORTH

Mr. G. deBrit, Research Branch, Forest and Wildlife Service, Dublin, has supplied the following note:—

In 1971, and probably in 1970 as well, there was a massive attack of the sawfly *Diprion pini* at Forth forest, Co. Wexford. The outbreak collapsed this year probably due to predators and parasites of the sawflies. The crop attacked was of good coastal contorta pine about 12m. high, in the thinning stage. This is, I think, the first serious outbreak in the country of this insect on contorta pine of this age and height. It normally confines its attacks to trees from five to twelve years planted. The stands attacked were planted in 1933. Severe attack by *D. pini* over two or three years can kill the trees and this has happened to some extent at Forth. This is in contrast with attacks by *Neodiprion sertifer* where trees are rarely killed, if ever. *D. pini* eats all the foliage including that of the current year, while *N. sertifer* confines its feeding to needles older than the current year's.

At present *N. sertifer* is by far the more abundant of the two in this country. However, the fact that *D. pini* has demonstrated its ability to build up to damaging proportions is worrying. One hopes that this is due to the dry warm weather experienced over the last few years, and not to a permanent ecological adaptation by the insect.

CASTLEWELLAN ARBORETUM

The following note has been supplied by Mr. R. T. Sherwood, District Forest Officer, Castlewellan, Co. Down.

In 1967 the Forestry Division of the Ministry of Agriculture purchased Castlewellan Estate and included in that purchase was the already world famous "Castlewellan Gardens". The main work

of starting and building up the collection was originally carried out by the 5th Earl of Annesley in the late 1800s and it is thanks to the interest and the sheer hard work of the Annesley family that the collection survived and was in the excellent state it was when the Forestry Division took over.

From the outset it was the Ministry's intention, not only to preserve the superb collection of trees and shrubs but, in fact to extend it.

At the time of acquisition the main Arboretum comprised approximately 20 acres. Following various planning meetings it was decided to extend the area to just over 80 acres. This was done, in the sense that the area has been delineated, some parts are highly developed, some recently cleared of dense scrub and some under mature hardwoods.

At present Castlewellan comprises an extremely comprehensive collection of conifers, hardwoods, woody shrubs. Of the latter rhododendrons are well represented. In addition there is a fair sized glass area in three sections, a water lily house, what is known as the 'long house', which itself is sub-divided into indoor tender rhododendrons, an alpine section, and a general section. The last house of the three is given over entirely to camelias.

At the present time work is well advanced in catalogueing and recording, not only by name but also by actual ground position, each specimen present.

The final aim is to build up an international arboretum of outstanding trees with emphasis on selection rather than collection.

The "walled garden" section of the Arboretum is extremely well patronised by the visiting public and it is possible by prior arrangement only, to take a limited number of parties on guided tours.

COMING OF AGE

The well-known forestry and timber concern, Irish Forest Products Ltd., has been in existence for 21 years. To mark the occasion a Garden and Leisure Display Centre at Glen o' Downs was opened by the Minister for Agriculture, Mr. J. Gibbons, on 30th September, 1972.

PEAT—THE NEW RAW MATERIAL

Until recently the very large Canadian peat deposits have been used mainly as a soil conditioners. But now scientists, financed by the National Research Council of Canada, have been investigating other possible use for this material. Three such applications are: (1) effluent treatment, (2) industrial filtrations, (3) construction

material. Laboratory tests show that peat can absorb ten times as much protein as carbon and that in a relatively short time more than 95% of the effluent surfactants present are absorbed. The use of peat to absorb oil spread over large water areas is also being examined as it is known that peat can absorb 8 to 12 times its weight in oil. Industrial filtration tests are being carried out at a paper and pulp works, where a small pilot plant has been built to study the use of peat moss in the treatment of the plant's waste waters by a filtration process. Peat, when heated under pressure, is transformed to a hard plastic. Thus, 'peat boards' having mechanical properties similar to other laminates could be a possible use in the construction industry. Other uses are still under investigation. (From *Technology Ireland*, February 1972).

New Members

New Members

The following new members have been enrolled in the Society since 1st January 1972.

Technical:—Messrs. M. Barry (Dunmanway), G. Beirne (Ballybofey), J. Brennan (Bantry), M. Bulfin (Dublin), S. Carney (Castlebar), S. Casey (Watergrasshill), J. Cronin (Letterkenny), D. Dinneen (Co. Clare), M. Donnelly (Boyle), M. Duggan (Rathdrum), D. Egan (Co. Kerry), J. Fanning (Graigenamanagh), C. Farmer (Co. Fermanagh), G. Farragher (Crossmolina), A. Finnerty (Bailieborough), B. Friel (Boyle), J. Gardiner (Dublin), S. Glynn (Co. Leitrim), J. Hanley (Dundrum, Co. Tipp.), P. Hanrahan (Mount Bellew), J. Kelleher (Port Laoise), J. Kelly (Claremorris), E. Kingston (Rathdrum), E. Larkin (Dublin), S. MacCarthaigh (Cork), G. McCarthy (Kilkenny), J. McCarthy (Doneraile), J. McCarthy (Kinnitty), R. McConnell (Dublin), P. MacOsgair (Dublin), P. Maguire (Mullingar), F. Moran (Co. Dublin), M. Moroney (Mitchellstown), Mrs. J. Neff (Dublin), Messrs. C. Nyhan (Kenmare), D. O'Connor (Bantry), B. O'Neill (Arklow), T. Purcell (Dublin), D. Robinson (Dublin), J. Wilson (Dublin).

Associate:—Messrs. P. Callinan (Dublin), J. Cashman (Cork), Mrs. B. Connelly (Bray), Lord Digby (Co. Offaly), Messrs. S. Franklin (Limerick), Dr. R. Hayes (Cavan), Mrs. E. Tottenham (Co. Wicklow), Messrs. G. Tottenham (Co. Clare), H. Sullivan (Dublin).