

## SCOTTISH MOUNTAIN TREES.

BY HUGH BOYD WATT.

THE appended list (an amplification of that in Vol. iv., p 114), is the outcome of observations made chiefly in the Braemar district, and may be of value as giving the species of forest trees found growing at an elevation of 1,100 feet and upwards above sea-level. This height is named, not because any scientific importance attaches to it, but because it covers the village of Braemar (alt. 1,100 feet), which is taken as a base-level, and also Tomintoul, Banffshire (alt. 1,160) where some observations were made for me by Miss J. G. Watt.

At about the height of 1,500 feet above sea-level, the Abernethy and Rothiemurchus Scots pines die out, but in some Deeside glens the pines run to a considerably greater height, as noted in my list. It may, however, be accurately said that the limit of forest growth is reached at from 1,500 to 1,700 feet, and the list shows that but few species attain even this height. In exceptional situations or circumstances individual trees of the mountain-ash, birch, Scots pine, spruce fir and larch, occur at higher levels, but the highest common levels are those noted underneath.

### LIST OF SPECIES OF FOREST TREES OCCURRING UPWARDS OF 1,100 FEET ABOVE SEA-LEVEL.

Lime	...	...	<i>Tilia europæa</i>	...	1,100—1,200 feet.
Great Maple	...	...	<i>Acer Pseudoplatanus</i>	...	" " "
Laburnum	...	...	<i>Cytisus Laburnum</i>	...	" " "
Scots Laburnum	...	...	<i>C. alpinum</i> ...	...	1,200 "
Horse Chestnut	...	...	<i>Æsculus Hippocastanum</i>	...	" "
Wild Cherry	...	...	<i>Prunus Avium</i>	...	1,100—1,200 "
Bird Cherry	...	...	<i>P. Padus</i>	...	1,300—1,400 "
Whitebeam	...	...	<i>Pyrus Aria</i>	...	1,200—1,300 "
Mountain Ash (Rowan)	...	...	<i>P. Aucuparia</i>	...	2,000 "
Hawthorn	...	...	<i>Crategus Oxyacantha</i>	...	— 1,100 "
Ash	...	...	<i>Fraxinus excelsior</i>	...	1,100—1,200 "
Elm	...	...	<i>Ulmus montana</i>	...	" " "

Birch	...	...	<i>Betula alba</i>	...	...	1,800—2,000	feet.	
Hazel	...	...	<i>Corylus Avellana</i>	...	...	1,100—1,200	„	
Alder	...	...	<i>Alnus glutinosa</i>	...	...	1,500	„	
Oak	...	...	<i>Quercus Robur</i>	...	...	1,200	„	
Beech	...	...	<i>Fagus sylvatica</i>	...	...	1,100	„	
Willows	...	...	<i>Salix</i> (two species at least)	...	...	1,100—1,200	„	
White Poplar	...	...	<i>Populus alba</i>	...	...	1,200	„	
Aspen	...	...	<i>P. tremula</i>	...	...	1,500	„	
Spruce Fir	...	...	<i>Picea excelsa</i>	...	...	2,000	„	
Larch	...	...	<i>Larix europæa</i>	...	...	2,000	„	
<i>Abies hookeriana</i>	(bearing many cones in July, 1903)					...	1,200	„
Scots Pine	...	...	<i>Pinus sylvestris</i>	...	...	2,000—2,100	„	

Of the twenty-five species named the birch and the Scots pine far exceed all the others put together, in number, and at the higher levels the last named species is the predominant one. Considerable numbers of fairly well-grown pines run up to over 2,000 feet in Glens Quoich and Derry (Braemar), and with them are some spruces and larches. The larch is numerous in other places. At and above the village of Braemar is a very lovely and typical birch wood, many of the houses being built in clearings in this wood. By the side of the River Dee the birches are tall, and many of them are above the average size; but when 1,500 feet up is reached they have become beautifully small and well-proportioned. There are thousands not over six feet in height. They ascend the slopes of Morrone in almost unbroken numbers to about 1,700 feet, sweeping over its northern side. It is a characteristic Highland native wood, with an undergrowth of heather, juniper and bracken. Among the birches are occasional aspens, bird-cherry, and Scots pine.

Of the other species in the list, solitary examples of the mountain-ash occur in more than one place at 2,000 feet, and at lower levels it abounds. The alder is by all the stream sides; but the hazel is scarce. Only one small oak was noted; it is not till the 700-800 feet level is reached that oaks become prominent. In the neighbourhood of man's dwellings specimens of the other trees named above may be found, flourishing and well-grown in many cases, but not in any considerable numbers. Right in the village of Braemar a dark copper beech is a conspicuous object.

Of the earlier woodlands of the Cairngorm mountains evidence may be seen in the tree remains found in peat-mosses and on the bare hill-sides at an elevation where trees do not now seem able to maintain existence. Burnt wood frequently occurs underneath moss and tree-roots, and bears witness to the primitive and wasteful methods by which the earlier inhabitants cleared the land. The course of time has brought about the present-day demands for re-afforestation, but "that is another story."

