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(iv)
KEY TO LOCATION

<table>
<thead>
<tr>
<th>No</th>
<th>BOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>KAME BOG</td>
</tr>
<tr>
<td>5</td>
<td>ISLAND OF YELL</td>
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VOLUME 4. LOCATION OF BOGS SURVEYED.
VOLUME 4 LOCATION OF BOGS SURVEYED.
INTRODUCTION

1. This volume contains the fourth and final series of reports on surveys of peat deposits in Scotland carried out by the Peat Section of the Department of Agriculture and Fisheries for Scotland, under the general direction of the Scottish Peat Committee, during the years 1949 to 1961. In their Report to the Secretary of State, published in February, 1954, the Committee recommended that peat surveys should be continued until all the major peat deposits in Scotland had been examined and classified. This recommendation was accepted and by the end of 1961 peat bogs extending to approximately 103,000 acres had been surveyed in detail. A general review of this progress is contained in the Committee's Second Report, which also includes a recommendation that the survey reports should be published in regional groupings. The three volumes of Scottish Peat Surveys already published dealt with deposits in the following areas: Volume 1, South-West Scotland; Volume 2, Western Highlands and Islands; Volume 3, Central Scotland. The current volume contains reports on detailed surveys of deposits in Caithness, Shetland and Orkney and reconnaissance reports on certain areas on Mainland, Orkney.

2. Scottish peat resources are extensive and largely undeveloped and full surveys are necessary before practical use can be made of a deposit for fuel, power or any other purpose. Such surveys have preceded large-scale peat developments in all other countries. Peat is of many different types and the use which can be made of any deposit will, in large measure, depend on the nature of the peat, its botanical origin, degree of humification, density, ash content, calorific value and other qualities. The choice of the method of exploitation will depend on the depth, the contours and other natural features of the bog, the presence or absence of wood remains, the feasibility of adequate drainage, accessibility and many other factors. The possibilities of agricultural development and afforestation on land which has been cleared of peat will also depend on the nature of the underlying mineral soil, the quality of the peat, of which a proportion is usually retained for admixture with the basal soil in any agricultural conversion schemes, and drainage. Careful investigation of all these points is, therefore, most important if fruitless expenditure and effort are to be avoided. In addition, the extent, the mode of origin and the physical structure of peat deposits are important subjects for general scientific inquiry, on which comparatively little work has hitherto been done in this country.

The surveys have, therefore, a double purpose; a general stock-taking of peat in Scotland together with the collection of scientific data. The information gathered together will it is hoped, enable future users of peat to assess the possibilities for practical exploitation of this vast natural resource and will provide a basis for further scientific enquiry.

References:

1. Following the discharge of the Scottish Peat Committee the work of this section was discontinued in March, 1963. All enquiries relating to the surveys in this Volume should be directed to the Macaulay Institute for Soil Research, Peat Section, Craigiebuckler, Aberdeen.


3. The investigations required in connection with peat survey include questions of geology, meteorology, chemistry, botany and agricultural use, as well as the task of topographical survey. A number of other organisations, therefore, have played their part in the surveys. The Macaulay Institute for Soil Research has made analyses of peat samples from nearly all the bogs surveyed and in selected cases they have provided information on the treatments necessary to bring the basal soil up to an acceptable level of fertility; in the past the Fuel Research Station of the Department of Scientific and Industrial Research undertook chemical analyses of the peat and peat ash and the burning qualities of the peat; the Geological Survey of Great Britain has contributed notes on the geology of the bog floor and the surrounding land and information has also been provided by the Scottish Meteorological Office and other organisations. Lastly, the Peat Section has necessarily depended, for the success of the surveys, on the co-operation of the owners of the peat deposits and the tenants and others having rights on the bogs. The Department gladly acknowledge the help and co-operation they have received from all those mentioned and many others whose advice on particular points has been sought and gladly given.
METHODS OF SURVEY

1. INTRODUCTION

(a) Object of the bog surveys

The object of the surveys is to make an inventory of all the major peat deposits in Scotland and to this end the following data are assembled:

(i) Location of the deposits with special reference to their accessibility and elevation.
(ii) Area, depth, volume of raw peat and tonnage of peat solids present.
(iii) Moisture, ash and fibre contents, bulk density, degree of humification, calorific value, chemical composition and botanical origin of the peat.
(iv) Possible methods of utilisation with, in special cases, detailed analyses of the economics of alternative schemes.

(b) Personnel

The survey personnel has varied in numbers over the years but consists mainly of a botanist and two surveyors with local labour engaged to act as chain- and staff-men and to assist the botanist in the collection of samples of the peat.

The surveys are organised and supervised by the Peat Officer of the Department of Agriculture and Fisheries for Scotland.

(c) Proprietors

The permission of proprietors is always obtained before survey work commences.

2. PARTICIPATING ORGANISATIONS

Peat samples are analysed by the Peat Ecology Section, Department of Pedology, Macaulay Institute for Soil Research, Craigiebuckler, Aberdeen for moisture content, ash content, bulk density and fibre content. In certain cases the mineral soil beneath the peat is examined and reported upon by the Institute.

Chemical analyses of peat and peat ash and determination of the calorific value of the peat, in respect of certain bogs, are made by the Fuel Research Station of the Department of Scientific and Industrial Research.

Reports on the geology of the areas surveyed and on the rainfall of those areas are provided by H.M. Geological Survey of Great Britain, Edinburgh and the Scottish Meteorological Office, Edinburgh, respectively.

3. FIELD WORK

(a) Establishing the area and depth of the peat

(i) Preliminary work

Before a survey is begun all available data are collected from existing reports on the bog; the required maps are assembled (up to 25 inches to One Mile in scale) and the aerial photographs are studied.
A reconnaissance of the area follows and the location of Ordnance Survey bench marks and any other local information is checked before a plan of survey is made. The most useful scale of field maps for this operation and for the actual detailed survey has been found to be the Ordnance Survey Six Inches to One Mile series.

(ii) Method of detailed topographical survey (the metric system is employed throughout and conversions to British units are approximate)

One (occasionally more) baseline is set out, usually along the longest axis of the bog and is chained and levelled. Numbered pegs are inserted at fixed intervals, usually 328 ft (100 m) or 656 ft (200 m). One or both ends of the baseline are referred to Ordnance Survey bench marks.

A theodolite is used to set out secondary lines from these pegs, at right angles to the baseline and extending to the boundary of the area to be surveyed. The depth of peat is measured along the secondary lines at intervals of about 328 ft (100 m), sometimes closer, and the distances between soundings and the level of the surface above Ordnance Datum are measured accurately by tacheometry.

The theodolite is also used to record the positions of detail such as ditches, burns, lochans, fences, peat faces and any other features of interest on the bog.

Numbered pegs are left at predetermined intervals to assist the botanist in siting the bore holes chosen for sampling.

(b) Peat sampling

At the selected bore holes, which are usually sited to give an even coverage of the area and to provide an agreed minimum sampling density, the botanist takes peat samples at 20 in. (0.5 m) intervals of depth from the surface to the bottom. After examination for degree of humification, fibre and wood contents and for botanical origin, the samples are canned for despatch to the laboratory.

Bulk samples from selected bore holes are taken less frequently for chemical analysis, fibre content estimation and calorific value determination.

Since 1957, a new type of instrument for sampling peat, designed from a suggestion contained in a Russian report on sampling methods, has been used. This sampler is simpler, quicker and cleaner in use than the Hiller type which was used previously and has the further unique advantage of maintaining intact any stratification pattern in the peat, allowing more accurate measurements to be made on samples if required.

(c) Basal soil sampling

Whenever possible, samples of mineral soil from the floor of the bog are taken up with the sampling tool for examination. This is possible only when the bottom is reasonably soft; in firmer material it is necessary either to dig a pit through shallow peat or to find a profile exposed on the banks of a stream or quarry.

Small samples can usually be obtained with an auger fitted to the depth-sounding rods but such samples are not usually large enough for a full examination. If the floor is stony, even these small samples cannot be obtained.

---

1Byelokopitov, I. Ye. and Byernyevich, V.V. Giktorfls peat borers. Torf. Prom. 1955, 8, 9-10. (From: Bord na Mona, E.S. Translation No. 565.)
(d) Surface firmness estimation

It is necessary to make some estimate of the bearing capacity of the bog surface as this will influence the type of machines recommended for initial and subsequent exploitation. Modern bog tractors have a ground pressure of less than 2 lb. per square inch but the total pressure applied is also affected by the character and density of the vegetation and whether the tractor carries or pulls its loads. A miller or rotavator for instance imparts a forward push to a tractor.

An average man standing on one foot applies a pressure to the ground of between 5 and 6 lbs. p.s.i. and this fact is used to estimate the bearing capacity. The following symbols are used to denote the pressure the ground will stand.

Firmness of surface (P)
PO = Surface too soft to walk on
P1 = Surface just passable
P2 = Surface fairly firm
P3 = Surface firm

As an example, Table 1 shows data from White Moss, Mainland, Orkney.

Table 1 Surface firmness

<table>
<thead>
<tr>
<th>PO</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>Total number of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. per cent</td>
<td>No. per cent</td>
<td>No. per cent</td>
<td>No. per cent</td>
<td>observations</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>16.7</td>
<td>3</td>
<td>50.0</td>
</tr>
</tbody>
</table>

In practice these data mean that some 83 per cent of the bog could be developed with mechanical equipment without much difficulty. On 17 per cent of the area some care would be required but this softer part would be expected to become firmer as drainage began to have a consolidating effect.

Table 2 shows to some extent the relationship between the surface moisture content (for the stratum 0-20 in. (0-0.5 m)) and the estimated bearing capacity.

Table 2 Surface moisture and firmness for Annaboglish Moss, Wigtownshire

<table>
<thead>
<tr>
<th>Moisture content (per cent)</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average (Range)</td>
<td>93.8 (92.4-94.7)</td>
<td>92.2 (86.5-94.5)</td>
<td>89.0 (79.4-92.2)</td>
</tr>
</tbody>
</table>

(No data for areas rated PO)
Although the differences in terms of percentage water in the peat appear small, it is important to note that a 1 per cent increase in water content at or near the figure of 90 per cent which is common for peat, results in a decrease in solids content of 10 per cent and the peat becomes appreciably more fluid and less able to bear applied pressure without collapse.

(e) Observations on the vegetation

The plants growing within a radius of 49 to 66 ft (15-20 m) round each bore hole are recorded, as are the boundaries between well-defined plant communities which are noted during traverses across the bog.

(f) Observations on the peat

(i) Botanical origin

The range of vegetable remains easily identifiable in the field is strictly limited and laboratory analyses of the many hundreds of samples taken in any one season would be vastly time-consuming. However, it is usually possible to ascertain the main peat-forming species in the field and this is done for all samples examined.

The universal peat formers found in both Blanket and Raised Basin Bogs are species of Sphagnum. Also found in most bogs are the remains of Eriophorum vaginatum, the leaf-sheaths of which contain fine fibres which are extraordinarily resistant to the processes of decomposition, and small twigs of Calluna vulgaris which are generally found in the upper strata. The usual type of peat found in the lower horizons of Basin Bogs is a mixture of the remains of Carex species with smaller amounts of Phragmites, Typha, Equisetum and Menyanthes, all or some of which are usually present. Wood remains are frequent, even in areas which are now treeless such as Shetland. The commonest wood is Betula but Pinus is not uncommon and it is probable that Salix, Alnus and Corylus occur more often than they are recognised. Field identification of wood fragments is somewhat uncertain.

(ii) Degree of humification

The degree of humification of peat samples is estimated in the field according to the method devised by the Swedish botanist L. von Post.

A small amount of peat is squeezed in the hand and the water and/or peat exuded indicates, by its colour and consistency, the degree to which the peat has undergone humification or, more correctly, a type of decomposition which includes breakdown under anaerobic conditions. This is one of the most important observations to be made on the peat and, because it is entirely subjective, one of the most difficult to make with a minimum of error. As far as possible, the same person makes all such observations and experience counts for a great deal. It is necessary to make allowance for moisture content, oxidation of the surface horizons and for the botanical origin of the peat. Obviously for example, pieces of wood do not squeeze between the fingers and yet the matrix in which the wood fragments are embedded may be very highly humified. A very dry peat may appear to be less well humified than it actually is and vice versa. Attempts have been made by various workers to develop an objective method for the estimation of degree of humification but without conspicuous success.

The von Post scale ranges from 1 to 10, the higher the number the higher the degree of humification. The full scale is as follows:
DEGREE OF HUMIFICATION  
von POST SCALE

H1 Completely undecomposed peat free of amorphous material. On squeezing, clear colourless water is pressed out.

H2 Nearly undecomposed peat, free of amorphous material, yielding only yellowish brown water on pressing.

H3 Very slightly decomposed peat, containing a little amorphous material. On squeezing, muddy brown water but no peat passes between the fingers. Residue is not pasty.

H4 Slightly decomposed peat containing some amorphous material. Strongly muddy brown water but no peat passes between the fingers. Residue is somewhat pasty.

H5 Moderately decomposed peat containing a fair amount of amorphous material. Plant structure recognisable though somewhat vague. On squeezing, some peat but mainly muddy water issues. Residue is strongly pasty.

H6 Moderately decomposed peat with a fair amount of amorphous material and indistinct plant structure. On pressing, about one third of the peat passes between the fingers. Residue is strongly pasty, but shows the plant structure more distinctly than in unsqueezed peat.

H7 Strongly decomposed peat with much amorphous material and faintly recognisable plant structure. On squeezing, about one half of the peat is extruded. The water is very dark in colour.

H8 Strongly decomposed peat with much amorphous material and very indistinct plant structure. On squeezing, two thirds of the peat and some water passes between the fingers. Residue consists of plant tissues capable of resisting decomposition (roots, fibres, wood, etc.).

H9 Practically fully decomposed peat with almost no recognisable plant structure. On squeezing, nearly all the peat squeezed between the fingers as a uniform paste.

H10 Completely decomposed peat with no discernible plant structure. On squeezing, all the peat, without water, passes between the fingers.

Mean H-values are calculated for each bog and its sub-areas if required and also for each 20 in. (0.5 m.) layer from the surface to the bottom. The variation with depth is shown graphically in the Bog Reports. The usual pattern is for the H-value to increase more or less steadily with increasing depth unless the origin of the peat changes drastically. When Carex peat occurs near the bottom of a deposit, the degree of humification generally falls to a value similar to that found in the upper layers of the bog.

Peats of low degrees of humification are those commonly described as "light" or "brown" and are used as moss litter and in horticulture. The highly humified "black" or "blue" peats comprise good fuel types. In recent years horticulturists have been less insistent on having the very light peats since rather darker qualities have been found equally useful for many purposes.

Inspection of humification data from the surveys shows that the extremes of the von Post scale are rarely encountered (i.e. H1 and H10). The majority of samples lie about the centre of the scale with small shifts of the average towards the lower or higher values depending upon whether the peat in the bog is of a fuel or a moss litter type.
(iii) Fibre

The fibre content of each peat sample is estimated visually and the amounts of the two types (classified 'fine' or 'coarse') are noted on a scale ranging from 0 to 3 as shown below. Accurate quantitative determinations are made later on bulk samples in the laboratory as described in section 4(f).

Fine fibres, mainly derived from Eriophorum spp. (F)

\[
\begin{align*}
F0 & = \text{Nil} \\
F1 & = \text{Low content} \\
F2 & = \text{Moderate content} \\
F3 & = \text{High content}
\end{align*}
\]

Coarse fibres, mainly rootlets (R)

\[
\begin{align*}
R0 & = \text{Nil} \\
R1 & = \text{Low content} \\
R2 & = \text{Moderate content} \\
R3 & = \text{High content}
\end{align*}
\]

(iv) Wood

Wood remains, especially if they are large and resistant, may conceivably cause a certain amount of difficulty during the exploitation of a bog. An attempt is therefore made when sampling to assess the extent of wood.

It is estimated on a scale ranging from 0 to 3 as detailed below.

Wood remains (W)

\[
\begin{align*}
W0 & = \text{Nil} \\
W1 & = \text{Low content} \\
W2 & = \text{Moderate content} \\
W3 & = \text{High content}
\end{align*}
\]

Extensive wood remains of a type that might prove a serious obstacle to exploitation are not frequent but bogs with this feature have been surveyed in Sutherland and Aberdeenshire.

In Blanket Bogs, impenetrable wood is found mainly in sheltered valleys; in Raised Basin Bogs it tends to occur at the margins of the deposits.

(v) Other observations

When peat is freshly sampled and before it darkens by oxidation, note is taken of its colour, stratification, the presence of visible mineral matter and any other features of interest.

4. OFFICE AND LABORATORY WORK

(a) Area Calculations

The area of the bog is either calculated as a whole or is divided into sub-areas, the boundaries of which often follow natural features on the ground. Usually an artificial subdivision is also made delineating the area containing peat of a depth exceeding 20 in. (0.5 m.).

Area measurements are made using a planimeter and include:

(i) Total area.

(ii) Area with peat deeper than 20 in. (0.5 m).
(iii) Area with peat less than 20 in. (0.5 m.), including any mineral soil and rock exposures within the survey boundary.

(iv) Other areas of special interest such as cut-over and cut-away peat ground that have been worked for fuel or other purposes.

(b) Calculation of the volume of raw peat

This calculation is based on the area of deep peat and the average depth in that area. If the bog is divided into sub-areas, the volume of peat in each sub-area is calculated separately. The accuracy of the calculation depends largely upon the accuracy of the calculation depends largely upon the accuracy of the calculated average depth. In this connection the Scottish Statistical Office has carried out Standard Error calculations on the depth measurements for some bogs and, for example, in the Moss of Cree, Wigtownshire survey, found the S.E. to be ± 0.0971. There is a high degree of probability that the true average depth lies within the limits: calculated average depth plus or minus twice the S.E. In this case therefore the true average depth is probably within the range 10.64-11.92 ft.(3.246-3.634 m.) and the true volume of peat will lie between 17.8 and 19.9 million cu. yd. (13.6-15.2 million cu. m.). (Survey results indicate an average depth of 11.3 ft. (3.44 m.) and a volume of 18.8 million cu. yd. (14.4 million cu. m.).)

The calculation of the exact volume of peat is not the most important task in a bog survey. It must be established which part or parts of a deposit may be most economically developed and for what purposes. The data should also indicate which of the several possible methods would be the choice in particular circumstances.

It should also be noted that, although the total amount of peat present in a bog may be fairly accurately estimated, it is usually the case that not all this material could be exploited because of various factors, the most important of which is the variation in depth due to changes in level of the bog floor. In practice not more than approximately 70 per cent of the total volume could be utilised in the majority of deposits.

An example of data from one of the surveys is given in Table 3.

<table>
<thead>
<tr>
<th>Sub-area</th>
<th>Area of deep peat (over 20 in. (0.5 m.))</th>
<th>Average depth</th>
<th>Volume of raw peat</th>
<th>Solids</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>acres hectares feet metres millions of cubic metres per cent millions of tons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>2,342 948 13.5 4.1 37.38 8.1 3.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>215 87 9.8 3.0 5.13 7.2 0.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>917 371 9.2 2.8 10.21 9.3 0.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>1,275 516 7.5 2.3 14.69 8.7 1.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>1,883 762 8.2 2.5 16.45 9.6 1.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,632 2,684 - - 81.86 - 7.07</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1 cu. m = 1.308 cu. yd)

(c) Moisture and solids contents

Earlier surveys of many Scottish bogs by the International Survey Company, a British Company which worked in conjunction with Peco Ltd., were not sufficiently
detailed to allow an accurate estimation of the moisture content to be made. The current series of surveys has shown that these early estimates of moisture content tended to be rather low.

The estimation of moisture content entails considerable work which must be done within a short time of the samples being collected in order to avoid error by evaporation and mechanical loss. The number of samples to be taken is a matter of judgment, bearing in mind the degree of accuracy required, the time available for field work and the capacity of the laboratory. No rigid routine is followed.

(d) Bulk density

The bulk density of the peat solids, including ash, is determined in the laboratory as follows:

(i) the sample is completely dried and ground to pass a 1 mm. screen.
(ii) the ground sample is put into a graduated container and exposed to a standard number of controlled taps on a tapping machine.
(iii) the volume after compaction is noted and, related to the weight, gives the bulk density in g. per cc.

A certain degree of correlation can sometimes be demonstrated between the degree of humification, the bulk density and the calorific value but comparisons are subject to the probable error introduced by the subjective estimation of the degree of humification.

(e) Ash content

The content of ash in peat is an extremely variable factor and is in no sense diagnostic.

It is useful to know the ash content of any particular peat in that it may have some bearing on the suggested utilisation of the bog but it can be so greatly affected by numerous outside agencies that its value as a factor in classification is virtually nil. For example, coastal bogs exposed to on-shore winds tend to be high in ash due to the long-continued deposition of wind-borne sand and spray; valley bogs also tend to have high ash contents because of the continual inflow of run-off from the surrounding slopes carrying mineral particles eroded from these slopes. Peat areas subject to flooding are frequently grossly contaminated with mineral matter deposited by flood water, often in distinct strata visible to the eye.

(f) Fibre content

Large samples are taken for laboratory estimation of fibre content, each being a mixture of peat from all levels of one bore hole. Each sample is washed through sieves to remove the finely divided material and the fibrous residues are dried and weighed. The results are expressed as a percentage of the total solids content which is separately estimated on another similar sample.

The data shown in Table 4 are collected from a number of bog reports.
It should be mentioned that the fibre content varies considerably from place to place even within one bog area. The data obtained are, therefore, only a guide to the amount of fibre present.

5. ASSESSMENT OF DATA

(a) Drainage

All data relevant to the drainage possibilities of a bog are collected during the survey and include information on water levels, outfalls, catchment areas and any deep basins or "pockets" in the floor of the bog which might pose special problems in the drainage of the bottom should the peat be removed.

Existing ditches are examined and are mapped if in reasonable condition and capable of future use. Non-functioning ditches are noted but not recorded in detail.

Tentative drainage schemes suggested for a particular bog usually include a layout of at least the main ditches for the bog itself and an assessment of the work that would be required to carry run-off to the nearest convenient outlet.

(b) Classification

The problem of bog classification is one upon which a considerable amount of research is still required as no known scheme is entirely satisfactory in all aspects. The Peat Section has based its classification on the system proposed by the late Dr. G.K. Fraser of The Macaulay Institute for Soil Research and has attempted to allocate the deposits surveyed either to the Blanket (Zonal) or Basin (Azonal) groups. The question of high-level Blanket Bog or hill peat has hardly ever arisen, as these, for several practical reasons have not usually been included in the survey programmes.

It is rarely possible, with absolute certainty, to assign any particular bog definitely to one or other of the main groups but a satisfactory compromise can usually be made on the basis of an overall consideration of the deposit and the locality in which it lies.

(c) Utilisation prospects

Possibly the most difficult part of a survey report to write is the section on Utilisation which deals with all possible methods of exploitation that seem to offer promise in each deposit. There are few rules, if any, for assessing the complex mass of data which must be taken into account in this overall assessment; experience and a "feeling" for the bog are all-important. Topography, elevation, geographical location, quality, quantity, type,
meteorology, hydrology, access and numerous other factors have to be considered in the process of deciding and recommending the course that utilisation might most profitably take.

In spite of the difficulties, recommendations are made for each bog studied and may include reclamation for forestry or agriculture, removal in part or whole for fuel or for agricultural or horticultural use. In some few cases it has had to be concluded that no profitable use can be made of a particular deposit, although this is rare.

6. PRESENTATION OF SURVEY RESULTS

The data obtained are presented in a Report which includes profiles, sections and diagrams and generally the following maps:

(a) General map; scale: 1: 25,000 or approximately Two and a half Inches to One Mile, showing the bog and its immediate environs.

(b) Surface map; scale (usually): 1:5,280 or approximately 12 Inches to One Mile; contoured at 1 metre vertical intervals.

(c) Bottom map; scale and contours as for (b), showing the floor of the bog as it would appear if all the peat was removed.

(d) Vegetation map; scale (usually); 1:10,560 or approximately Six Inches to One Mile; made when sufficient data are available, to show the broad distribution of different types of vegetation.

(e) Aerial photograph mosaic, scale approximately Six Inches to One Mile. In recent years it has been found more useful to employ aerial photographs singly or as stereo-pairs for the establishment of detail rather than as a complete mounted mosaic.

On one or more of these maps are shown the location of bore holes from which peat and/or basal soil samples have been collected; the locations of the depth soundings; the dividing line, if any, between deep and shallow peat; sub-area boundaries if these have been established for purposes of description or because of differences in utilisation prospects; drainage plans, existing or proposed; other data of special interest.

Note on terminology

The terms "bog" and "moss" are commonly employed synonymously but, to avoid confusion between "moss" meaning peat bog and "moss" referring to the vegetation, as in "Sphagnum moss", the use of this word has been restricted in the reports to its botanical sense and the term "bog" has been used to describe peat deposits. An exception arises when the established geographical name of a peat deposit includes the word "moss" as in "White Moss". In these cases the word will be used with a capital initial letter as shown.