

# NATURE

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## CONTENTS

	Page
Land Utilization and Service Training in Great Britain	849
Gall Midges and Agriculture. By Dr. V. B. Wigglesworth, F.R.S.	852
Soil and Civilization. By Prof. L. Dudley Stamp, C.B.E.	853
Prehistoric Archaeology of Gujarat. By M. C. Burkitt	853
Chemistry and Nature. By Dr. D. J. Bell	854
Cellulose Chemistry for the Student. By Dr. Julius Grant	855
The Huxley Papers. By Dr. E. Hindle, F.R.S.	855
Tycho Brahe (1546-1601). By Sir H. Spencer Jones, F.R.S.	856
German Physical Society in the British Zone: Göttingen Meeting. By Prof. N. F. Mott, F.R.S.	861
Anti-Tubercular Compounds. By Dr. Vincent C. Barry	863
Obituaries:	
Prof. E. H. Lamb. By Prof. E. Giffen	865
Prof. A. E. Tchitchibabin. By Dr. M. A. Phillips	865
News and Views	866
Letters to the Editors:	
Structure of Terylene.—Prof. W. T. Astbury, F.R.S., and C. J. Brown	871
Determination of the Upper Limits of the Fission Cross-sections of Lead and Bismuth for Li-D Neutrons by a Chemical Method.—Dr. E. Broda and P. K. Wright	871
Determination of the Upper Limits of the Fission Cross-sections of Lead and Bismuth for Li-D Neutrons by a Track Count Method.—Dr. E. Broda	872
Use of Lead Sulphide Cells in Infra-red Spectroscopy.—Dr. G. B. M. Sutherland, D. E. Blackwell and P. B. Fellgett	873
Angular Momentum of the Solar System.—D. ter Haar	874
Physical Basis of a New Theory of Absorption of Ultrasonics in Liquids.—R. Parshad	874
Grain Boundaries in Metals.—P. J. E. Forsyth, G. J. Metcalfe, R. King and Dr. B. Chalmers	875
Fungistatic Activity of Ethylenic and Acetylenic Compounds.—Dr. P. W. Brian, J. F. Grove and J. C. McGowan	876
Antibacterial Activity in Members of the Native Australian Flora.—Nancy Atkinson	876
Action of Thionyl Chloride on Carboxylic Acids in Presence of Pyridine.—J. P. E. Human and John A. Mills	877
Measurement of the Photodynamic Effect of Cancerogenic Substances with Biological Indicators.—G. Matoltsy and Gy. Fábán	877
Action of Heparin on the Venom of <i>Echis carinatus</i> .—Lieut.-Colonel M. L. Ahuja, N. Veeraraghavan and I. G. K. Menon	878
Action of Mustard Gas on the Bone Marrow.—C. Auerbach and Dr. J. M. Robson	878
Specific Serological Characters of the Mucoids of Hog Gastric Mucin.—D. Aminoff, Dr. W. T. J. Morgan and W. M. Watkins	879
Effect of Cholera Filtrate on Red Cells as Demonstrated by Incomplete Rh Antibodies.—M. M. Pickles	880
Influence of Heteroauxin on the Cotyledons of <i>Phaseolus vulgaris</i> L.—A. Malabotti	880
Sphacelial Stage in the Life-history of <i>Claviceps purpurea</i> (Fr.) Tul.—Dr. J. C. Saha	881
Bud-rot of Areca Palms and 'Hidimundige' in Mysore.—S. V. Venkatarayan	882
Double Velocity Correlation Function in Turbulent Motion. By G. K. Batchelor	883
Recent Marine Biological Research. By Dr. N. B. Eales	884
Plant Viruses. By Dr. John Grainger	885
Banana Leaf Spot. By Prof. C. W. Wardlaw	886
Forestry in Uganda	886

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## LAND UTILIZATION AND SERVICE TRAINING IN GREAT BRITAIN

WHEN "The Threat to the Peak" was published by the Council for the Preservation of Rural England in 1931, it was the disfigurement of the landscape by incongruous and ribbon building, by highway development and to a lesser extent by electricity, water, or industrial undertakings that the Council was chiefly concerned to avert. There can be no doubt as to the value of the work of the Council in educating public opinion in this matter in the Peak district and elsewhere. While it may be true, as Dr. C. M. Trevelyan has observed, that outrages cheerfully perpetrated twenty years ago would be impossible at the present time, the threat to the natural beauty of Britain is at present much more widespread and serious to-day. Observations on landscape preservation in the Dower Report indicate the wide range of threats to some of our areas of great natural beauty, and the urgent need for legislation. Although ribbon building is officially frowned upon, dilatoriness in dealing with the planning of land use and the problem of compensation and betterment are encouraging the further extension of suburban sprawl. Even the London County Council had to be restrained by the Minister of Town and Country Planning from violating the Abercrombie plan by breaking into the green belt at Chessington with a large housing estate, and the House of Lords rejected the Leicester Corporation's proposals for a reservoir in the Manifold valley.

The unilateral and unco-ordinated plans of local authorities, as in the Ennerdale proposals of the Whitehaven Corporation and the apparent intention of the Cumberland County Council to dam Mosedale, constitute a growing menace in the absence of any effective authority to implement the proposals of the Dower Report regarding national parks. Like those of the earlier reports of the Coastal Preservation Committee and of the Geological Sub-Committee of the Nature Reserves Investigation Committee, the recommendations of that Committee still await action in spite of the urgency which was attached to them even in 1942. In spite of the Chancellor of the Exchequer's allocation of fifty millions as a national land fund to enable and to encourage the acquisition by the State of land which would otherwise be sold for commercial development, the threat to our enjoyment of the hills, the moors, the woodlands, and the cliffs of which he spoke so eloquently has grown much more sinister since April.

The most serious feature of the present situation is that, in the main, it comes from the very Departments of State which might be expected to take a wide view of the public interest. The Board of Trade, for example, has also been concerned in the Ennerdale proposals, and the action of the Minister of Fuel and Power at Wentworth-Woodhouse is sadly at issue with the Chancellor's words, as well as an illustration of the absence of satisfactory arrangements for co-ordination among departments concerned with the use of land. The Standing Committee on National



Parks for England and Wales expressed last year its concern at some of the provisions of the Requisitioned Land and War Works Bill, and it now appears that there is an even graver threat in the proposals of the Service Departments to acquire fresh land for permanent training grounds.

There has already been justifiable concern in the secrecy with which the Service Departments have hitherto shrouded their plans for the disposal of land acquired in war-time for training purposes, and a request was made in the House of Lords on July 4 for a comprehensive statement showing all the areas from which it is proposed to exclude the public. That statement has never been made, and in the debate on the Address to the Throne in the House of Commons on November 15, Mr. Hollis pressed for a public inquiry in view of the new lands which it now appears the Army is proposing to acquire. Mr. Hollis asked for a statement as to the general principle of acquisition of land for Service Departments and the principle upon which the competing claims of the different Departments of State are being settled.

The Prime Minister, in reply, made a somewhat obscure statement which Mr. Hollis, with his assent, interpreted to mean that there will in future be a public inquiry whenever the Services give notice of their intention to acquire land (whether common land or not) under the Defence Act of 1842. That is reassuring so far as it goes, but it appears that the first seven cases—Dartmoor, Braunton Burrows, Ashdown Forest, Purbeck, Martindale, Castle Martin, and Harlech Morfa—are to be decided by the Cabinet after private hearings of objections before Mr. Silkin's Inter-Departmental Committee. On this question the subsequent debate in the House of Lords on November 21 was most disturbing; it did nothing to allay the anxiety aroused by the detailed statement of the Council for the Preservation of Rural England on questions arising out of the proposals for the retention by Service Departments of large areas of land for training purposes in Surrey, which are now being considered by that Inter-Departmental Committee.

These particular lands include commons long ago acquired by the War Department, to which the public has limited access, and others which of recent years have been acquired for war purposes or used under lease or licence, but which still remain in local ownership or in that of the National Trust. The main conclusion reached by the Council is that, although there is little prospect of the War Office relinquishing any of the main areas of common which it already possesses, the suggested acquisition of other commons of exceptional beauty and value to the civilian population represents a new invasion of unspoilt country which must arouse the strongest opposition. Their proximity to areas of dense population renders the Surrey commons unsuited for permanent military activity, and in view of their exceptional quality, their surface and environment should be protected.

The House of Lords debate shows how heavy is the task which falls on the individuals and private

societies on whom Great Britain relies to preserve what is left of its scenic heritage, its natural playgrounds, potential nature reserves, and ancient monuments from sequestration and irreparable damage. It was never the nation's intention that the land yielded to the Services in the emergency should be theirs for evermore; and apart from the ease with which it was acquired during war-time, even when, as at Purbeck, definite pledges were given for its return, these, as Lord Cranborne pointed out, are now being evaded. Moreover, if the land was in future acquired under the Requisitioned Land and War Works Act, 1945, instead of under the Defence Act of 1842, it would be easier to bring the matter under the control of Parliament. The 1945 Act gives the right of hearing before the War Works Commission to anyone interested in the land, to voluntary societies concerned with preserving the countryside, scientific societies, or local planning authorities; if the Commission reports adversely on the Minister's proposal, he must either drop the proposal or report on it to Parliament, either House of which can pass a resolution objecting to his wish to over-ride the Commission. If such a resolution is passed the Minister's proposal lapses, and Lord Cranborne contended that this procedure is preferable; though it has been suggested that, for the time being, sufficient safeguard in the alternative procedure might be secured by a circular to lords-lieutenants directing them to consult the county council, the agricultural executive committee, the Council for the Preservation of Rural England (Scotland or Wales) and the National Trust before they give the certificate required under the 1842 Act.

Lord Cranborne spoke with justifiable force and indignation of the inclusion of Maiden Castle in a new area in Dorset scheduled by the War Office; and the growing list including the 15,000 acres at Torver, near Coniston, the Prescelly Hills in Pembrokeshire, Coquetdale, the Eppynt district of Brecon, the firing ranges on the Northumberland coast near Lindisfarne, Cader Idris, and the continued occupation of the estuary of the Taw and Torridge for amphibious operations, should suffice to warn any scientific worker interested in the proposals for nature reserves of any type of the need for concerted action. It was recognized in the report on National Parks in England and Wales that, in spite of the valuable prolegomena provided by the reports of the Nature Reserves Investigation Committee, the British Ecological Society and other bodies, we have made as yet little progress towards determining a national policy for the conservation of wild life. It would be rash indeed to attempt to force a premature decision on the proper scope and technique of protective and controlling action; but in the meantime it is imperative that men of science should join forces with other bodies in the attempt to stem the present demand for land of the Services.

One such area which has been recognized for more than a generation as of the highest importance among those requiring protection because of its scientific interest is Braunton Burrows. The value of this locality is indicated in a note in *Nature* of November



30, and it is one which last year was recommended by the Nature Reserves Investigation Committee to the Ministry of Town and Country Planning among the twenty-six sites of highest priority. It can confidently be predicted that the area will be included in any list drawn up by the Ministry's Special Committee which is now sitting. The Council of the Zoological Society has already expressed anxiety at the proposal to use this area as a training ground for combined operations, and the Wild Plant Conservation Board is also concerned that adequate precautions should be taken to safeguard the rare species of plants found there. Moreover, like many other threatened areas, Braunton Burrows is marginal land, and as has been pointed out by Mr. W. G. V. Balchin, of King's College, University of London, would rapidly suffer under intensive training conditions with destruction of the vegetative cover, disturbance or destruction of the biological balance and little chance of recovery.

Geologists will note how many of the forty-seven areas recommended as geological reserves fall within the areas at present threatened, and naturalists will equally note that while the Dower Report scheduled only four coastal areas as pre-eminently worthy of being reserved for enjoyment as national parks, claims on every one of these areas have been advanced by the War Office. Criticism of such proposals and of the way in which the projected sites for national parks are being permanently earmarked for military purposes was very vigorous in the House of Lords but was virtually ignored or brushed aside by Lord Pakenham, who admitted that the War Office had already submitted a detailed schedule of its requirements of land for training purposes comprising 225 areas. There can be little hope that the areas desirable for nature reserves will be secured for that purpose unless scientific men primarily concerned join forces with fellow citizens who, from the point of view of amenities, national parks, or other considerations are concerned to resist an outbreak of land 'grabbing' on a scale not seen since the time of the Enclosure Acts.

The time is indeed short, for the Prime Minister is understood to have requested the Inter-Departmental Committee to submit its report to him by December 15. Meanwhile, the fact that on November 27 the Secretary of State for War disclosed that the Services are at present occupying 1,100,000 acres and that they have now rights over a further 1,500,000 acres under Defence Regulation No. 52, of which 750,000 acres are at present being cleared of unexploded missiles for release, may indicate that the Government has at last seen the 'red light', and that the whole matter will be reconsidered at something approaching Cabinet level if not in public. It is the manner in which the proceedings have been taken, as much as the tracts of land themselves, which has been responsible for the general indignation, and there have been good reasons for doubting whether the Minister of Town and Country Planning, nominally in control of all land use, had anything like the standing required to uphold the public's case against pressure from the senior Service ministers.

Public protest has never been blind to the fact that it is necessary for the Services to find training areas much more considerable in scale than before the War, or that to a considerable extent such training areas may have to be found in Great Britain. Admittedly it will not be easy to find, in the limited area of Britain, tracts of land the seizure of which would not call forth angry protests. What is challenged is rather whether the demands now presented represent a reasonably economical use of land, and whether any real attempt has been or is being made to adjudicate between conflicting claims in accordance with clearly defined and generally accepted principles.

The belief that the Services are being allowed to be judges in their own cause is encouraged by the secrecy in which their claims to land are advanced. It is understood that the 225 areas mentioned by Lord Pakenham represent more than half a million acres, as against a quarter of a million held in 1938. Much of this, to judge from the areas so far disclosed, is common land, not normally suitable for cultivation, and its acquisition is unlikely to disturb food production; but criticism in the House of Lords regarding the siting of aerodromes does not suggest that the Services are likely to show much regard for agricultural considerations. Moreover, Mr. Bellenger's statement in the House of Commons on November 27 was not the comprehensive statement demanded in July, and he did not indicate whether figures he gave represent the full demands of the Services, or whether a series of fresh demands is to be presented in a manner which makes it difficult or impossible for either Parliament or the public to judge the validity of the claims.

Other questions besides that of how much land the Services need in all are evaded. Has the possibility of using Salisbury Plain, for example, as a training ground, and moving the artillery ranges to moorland areas in the remoter parts of Scotland, been considered? How much training of recruits and regulars could be carried out in the Dominions overseas? What would be the extra cost of using less-convenient but adequate sites outside the national park areas?

Such questions as these, demanding facts and figures and not the assertions with which Lord Pakenham evaded the issue in the House of Lords, might well be addressed to a Select Committee if not to a Royal Commission, and the fate of any particular area should not be sealed before informed and unbiased answers are given. It should indeed be a duty of the Minister of Defence to see that the claims on land of Service Departments are rigorously scrutinized and co-ordinated before they are presented to an inter-departmental committee at all, and that when presented they are supported not by assertions but by reasoned statement and evidence that all reasonable alternatives have been examined. "Government," wrote Burke, "is a contrivance of human wisdom to provide for human wants," and it is necessary to balance differing needs against one another when all cannot be met. But there can be no acceptable decision which does not involve the recognition by all concerned—by the Services no less



than by other interests, whether scientific, agricultural or amenity—that Great Britain is a small island, and land is a precious commodity, second only to man-power in its scarcity, and demanding equally the utmost judgment and economy in its use.

It is probably still too early to assess how great and irreparable is the damage already caused to flora and fauna, apart from amenities, in those 750,000 acres which the Services are preparing to release. That some of the damage was avoidable and some even wanton is undeniable. Too much has been lost already for the danger to some of our first potential nature reserves—breeding places of rare birds, migrants and insects—involved in some of the latest proposals to be disregarded lightly, and on that ground alone scientific men should seek every opportunity of making their protest heard in company with those made on other grounds. It is, however, on the ground of spiritual values, on which the present Master of Trinity based his appeal for national parks, that the final objection must rest. If, as Dr. Trevelyan said, natural beauty stands by the side of religion, of science, of poetry and art, not as a rival but as the common inspirer and nourisher of them all, and with a secret of her own, a nation which fails fairly to take account of such values in determining its national policy will assuredly find that neither guns nor butter can repair the atrophy of the spiritual power of the people.

## GALL MIDGES AND AGRICULTURE

### Gall Midges of Economic Importance

By Dr. H. F. Barnes. (Agricultural and Horticultural Handbooks. Vol. 1: Gall Midges of Root and Vegetable Crops. Pp. 104+10 plates. 12s. 6d. net. Vol. 2: Gall Midges of Fodder Crops. Pp. 160+4 plates. 15s. net. (London: Crosby Lockwood and Son, Ltd., 1946.)

THE gall midges or Cecidomyidæ are a family of rather primitive, structurally degenerate Diptera, of very small or minute size. They derive their name from the fact that the majority of species during their larval stages are plant-feeders which induce in their hosts the malformations termed galls or cecidia. But the family contains many more generalized species which live on fungi or in decaying plant material; and a few are carnivorous, preying upon scale insects, mites, white-flies, other gall midges and the like, letting the blood of their victims so neatly that an aphid may be bled to death without perceiving the attack.

Among the gall midges are many that attack cultivated crops, often causing serious losses. Perhaps the best known of these is the Hessian fly which, according to tradition, was introduced into America in straw bedding used by the Hessian troops during the Revolutionary War. Though not a common cause of serious trouble in Great Britain, the Hessian fly is often responsible for much damage to wheat crops in the United States and elsewhere, and attempts are being made to produce varieties of wheat that are resistant to it. In the British Isles perhaps the swede midge, the pear midge, the clover seed midge and the chrysanthemum midge are the most harmful representatives.

In spite of their biological interest and economic importance, the gall midges as a group have scarcely received from entomologists the attention they deserve—although a few of the injurious species have been intensively studied. Much of the literature about them is difficult of access, and although there are monographs describing and classifying the species of gall midges, a reference book containing the biological and economic information available about them has been lacking.

Dr. H. F. Barnes has set himself the task of writing a comprehensive account of all those species of gall midges, throughout the world, that are of economic interest either as pests of crops or as beneficial insects. He is well qualified for this task; for not only is he a taxonomist of international repute on this group of insects, but also his researches during the past twenty years have added greatly to our knowledge of their biology, their economic importance and the factors which determine the fluctuations in their numbers, the host-plant range of phytophagous species, the choice of prey among the predators—all problems of general biological interest.

The entire work will comprise an unspecified number of volumes, each complete in itself, dealing in turn with the gall midges of the various groups of crops. The first two volumes, dealing respectively with the midges of root and vegetable crops and the midges of fodder crops, clovers and grasses, have now been published. The midges are dealt with under the plants they attack, arranged alphabetically. The author is acutely aware of the pitfalls and difficulties that beset the path of the taxonomist of this group of little flies. He deprecates any attempt by the amateur to identify the species independently of their host plant and of the type of damage they produce, for "experience has shown that it is frequently more or less useless, and usually most unwise, to attempt to identify a species from keys unless biological data are available in addition". To emphasize this, the briefest possible description of each species is given, though reference to the original description is always included. Throughout the work it is the bionomics of the insect that is stressed; the information on the biology and habits of the species of economic importance should enable entomologists to identify them.

The injurious species of gall midges present particularly difficult problems to the economic entomologist, for direct methods of control are seldom practicable, and cultural methods of prevention have to be found. Detailed knowledge of its biology and life-history is a prime need in seeking means of control for any insect pest; but this applies with special force to pests that must be dealt with by cultural methods. To devise modifications in farming or gardening practice that will enable the crop to resist attack demands an intimate understanding of the relation between the insect and its plant host.

The author has brought together in a compact form all that is at present known along these lines about the gall midges that are pests in all parts of the world, and has directed attention to the many gaps that still exist in our knowledge. His books make no pretence to literary form: they are concentrated, fully documented accounts of known facts. But they are welcome both in providing entomologists with a ready means of reference to the information already acquired and as a stimulus to the further study of an important but somewhat neglected group of insects.

V. B. WIGGLESWORTH