

slightly from one country to another, it has been proved that academic interchange can be organized centrally without undue threats to university autonomy and with economy in the administrative organization necessary. It is also clear that the short-period interchange visit meets a real need: no fewer than two hundred nominations are now received each year from United Kingdom universities for the incoming visits, and the number of invitations extended to British scholars by foreign universities leaves no doubt that the value of such visits is recognized just as fully by the other participating countries. Although some universities have independent schemes of their own which contribute to the total of interchange visits, it can be said that the Foreign University Interchange Scheme plays a substantial part in the renewal and furthering of academic contacts, with all that such contacts imply for international understanding and the advancement of knowledge.

Limited experiments have also been made in the provision of longer teaching visits. There are now four travelling lecturers attached to the French Institute in London who give regular courses at universities in the United Kingdom, and the British Council has to some extent met requests from abroad for similar teaching visits by British lecturers. Eight teaching visits for a month or more have been paid by British university teachers to universities in Austria, Finland and France. While the value of the longer teaching visit has been amply demonstrated, the reduction of the British Council's grant-in-aid has necessitated the termination of such visits for the time being.

On a different level, the interchange of students for postgraduate study has also become well established as a two-way traffic. For a number of years the British Council has offered scholarships tenable in the United Kingdom to students from other countries throughout the world. During the five academic sessions under review, 410 awards have been made, mostly for postgraduate study at a university for one year, to students from European countries with which reciprocal scholarship schemes are in operation. In reciprocation, foreign governments and universities are now offering annually for postgraduate study in fifteen European countries more than a hundred such awards to British students, mostly for one year; and the British Council has been asked by these governments and universities to assist in the administration of the scholarships, and usually to arrange with the Universities Advisory Committee for convening selection boards to recommend suitable candidates. The large number of applications received indicates that the facilities are fully appreciated on both sides.

There are also certain direct exchange arrangements between universities in the United Kingdom and in other European countries, and scholarships and fellowships offered by individual universities add to the total volume of student interchange. While the immediate results of interchange at this level may be less apparent than with interchange at the teaching level, the first-hand experience gained provides a valuable cultural link between the United Kingdom and other countries. On the evidence of this report alone, reductions in the British Council's grant-in-aid, which compel the interruption of such interchange at all levels, are scarcely sound economy.

There is a further reason why the Government should take care to ensure that the British Council

has sufficient financial resources to further interchange schemes on a reasonable scale. In December 1953, the Committee of Ministers of the Council of Europe signed in Paris five conventions, the most important of which will materially help young people from any of the sixteen member States in seeking admission to the universities of any of the others. The Convention commits the governments to the acceptance of international standards, but gives no guarantee of admission to a university, although the foreign student may be spared some troublesome examination when making application for admission.

The treaty powers are required to report progress in a year's time. No British Government either could or would attempt to dictate to the universities regarding the conditions or qualifications which the universities accept for admission, though British universities have been very unwilling to promise acceptance of equivalent qualifications of studies from outside the Commonwealth and the United States. Exceptions are in practice frequently granted, but both foreign students and officials are often perplexed by the apparent anarchy of regulations and variations from one university to another through which the wandering scholar has seldom shown much skill in finding his way. While the Government may well, particularly in view of the discussions at the Universities' Congress in July, expect the universities to give proof that they can really unite to make things easier for the individual student or scholar—who after all is nearer the wandering scholar or student of the Middle Ages than those whose movements are formally organized in interchange schemes—the Government must at least set the example of seeing that no short-sighted parsimony curtails what is already being done so admirably by the British Council and other bodies.

THE NATURE CONSERVANCY

AN article surveying the first two reports of the Nature Conservancy*, covering the work of the Conservancy for the period up to September 30, 1952, and for the year ended September 30, 1953, appears on p. 516 of this issue of *Nature*. Apart from their special scientific interest, they are of general interest as contributing to that wide understanding of the nature and importance of the work of the Conservancy which the Huxley Committee recognized as essential to the success of any system of nature reserves. Although the Nature Conservancy was constituted by Royal Charter "to provide scientific advice on the conservation and control of the natural flora and fauna of Great Britain; to establish, maintain and manage nature reserves in Great Britain, including the maintenance of physical features of scientific interest; and to organize and develop the scientific services related thereto", the management (and still more the designation) of nature reserves demands a large amount of local co-operation and support. Even on the scientific side, the Conservancy recognizes that the full achievement of some of its essential tasks, such as a continuing thorough biological survey of the British Isles, requires a good deal of co-operation

* The Nature Conservancy. Report of the Nature Conservancy for the period up to 30th September 1952. Pp. iii+33. 1s. 3d. net. Report of the Nature Conservancy for the year ended 30th September, 1953. Pp. iii+31. 1s. 3d. net. (London: H.M. Stationery Office, 1953.)

from individual naturalists and various specialized societies, and it is the Conservancy's duty to encourage and, where possible, extend this voluntary effort.

In the establishment of reserves in Great Britain, the Conservancy has obviously encountered some of the same difficulties as the National Parks Commission, and in its present judgment a considerable acceleration of the acquisition and declaration of new national nature reserves is essential in order to prevent the loss of sites of irreparable importance. This has proved a far more complex and difficult undertaking than was at one time supposed. Increasing pressure and mobility of population, and changing economic, technical and defence requirements are simultaneously reducing the available choice of surviving semi-natural habitats and are greatly increasing the difficulty of safeguarding them against competing claims, disturbance or deterioration. At September 30, 1952, nine nature reserves had been declared—two in Scotland and seven in England: a year later the total was only eleven, some of which represented parts only of the proposed eventual reserve areas, though the Kingley Vale and Ham Street reserves were substantially increased during the year. Negotiations over a number of other reserves had, however, led to agreement, although for some reason or other formal declaration during the year was not possible, and a much larger total of declarations during the coming year is anticipated. Special reference is made to Roudsea Wood, Westmorland, which, under a nature reserve agreement, will be used as a study and experimental area for the neighbouring Merlewood Research Station and to the Cairngorms. Approaches from the Scottish Committee of the Conservancy to landowners concerned regarding the establishment of a national nature reserve in the Cairngorms without prejudice to the climbing public and to the ultimate formation of a national park, in accordance with a resolution passed at a meeting in Inverness in January 1953, met with sympathetic response. By the end of September there was reasonable ground for hoping that any remaining points of difference might be cleared away and this group of mountains permanently safeguarded as a nature reserve.

The National Parks Act also empowers local authorities, in consultation with the Conservancy, to set up reserves, and although there are difficulties, particularly financial and in the provision of skilled biological management, the progress made indicates the existence of an encouraging amount of local understanding and support for the Conservancy's work. The first local authority to establish a nature reserve in its area was the Lincoln (Parts of Lindsey) County Council, which on August 1, 1952, made the requisite declaration of an area of some 300 acres of sand dune and salt marsh facing the Wash at Gibraltar Point. The East Lothian County Council has proceeded similarly with the declaration of Aberlady Bay, while in June 1953 a declaration by the Skegness Urban District Council in respect of that part of the Gibraltar Point range of dunes within its ownership and its boundaries brought the original area to 500 acres, all to be managed by the Lincolnshire Naturalists' Trust, Ltd. The Conservancy has also been consulted by the Cumberland County Council about the sand-dunes opposite Ravenglass, where there is an important gullery and ternery. Not only was great local interest shown in the complex relation between the bird colonies and the neighbouring human communities, but also all parties were agreed on the

importance of preserving the bird colony as an inheritance to be handed down to future generations.

During the past year, the National Trust has arranged for the Nature Conservancy to manage five properties of natural history interest. These are Llyn Idwal, on the Penrhyn estate; Blelham Bog and North Fen, Esthwaite, in the Lake District; Scolt Head Island; and the Ruskin Reserve near Abingdon. There will be public access. The Conservancy has made temporary grants to the Royal Society for the Protection of Birds Reserve at Dungeness and to the Norfolk Naturalists' Trust Reserve at Hickling Broad for the employment of watchers or maintenance staff with the view of bringing back these reserves into first-class condition. While the most satisfactory division of responsibility and of labour between the various interested bodies has still to be worked out, the Conservancy has been much encouraged by the constructive and co-operative attitude which is so evident.

One reason for welcoming these reports and for giving them wide publicity is that they should help to remove the misunderstandings as to public access which have impeded negotiations, though probably to a lesser extent than in those leading to designation of national parks. Neither the designation of a park nor the declaration of a reserve confers any rights of public access, and the Act excludes declared nature reserves from its provisions for making access agreements in respect of what is defined in the Act as 'open country'. This does not mean that access to reserves will be generally denied. The Conservancy's policy is to allow as much access as is compatible with the proper scientific management of particular reserves. In those being used for experimental work, access must be carefully controlled; in some places access by permit, subject to compliance with stated conditions and to reasonable limitations of numbers, will be available to those generally interested. In other reserves the Conservancy hopes that the public will, by their behaviour, enable a policy of unrestricted access to be maintained.

A clear statement of the Conservancy's policy and the reasons governing the issue of permits to visit nature reserves which cannot be generally open to public access is appended to the report for the year ended September 30, 1953, and its wide circulation should both remove misunderstandings and encourage the local and general co-operation so helpful to the success of the Conservancy's work. Moreover, there is much material in these reports which demonstrates the importance of the scientific work of the Conservancy to the national economy. Now that its research stations at Merlewood, Morecambe Bay and at Furzebrook, Poole Harbour and its field stations (Anancaun on Loch Maree and Moor House, Westmorland) are equipped and at work, and the initial reconnaissance and listing of sites of scientific importance is virtually finished in England (although much remains to be done in Scotland and Wales), it is to be hoped that the Conservancy will not be too pre-occupied with its research programme to neglect this important task of education and interpretation. Exposition at the appropriate moment of the significance of the results obtained in some of its scientific work, such as that on coastal erosion or the effects of spraying hedgerows and road-side verges with herbicides, or its studies on the ecology of the rabbit or of the introduction of reindeer in Scotland, could foster public understanding and goodwill, and thus help to ensure both that the modest sums required by

the Conservancy are provided by Parliament and that public access to the reserves causes neither abuse nor friction. It is satisfactory to note that in the latest report due stress is laid upon the development of the educational, information and intelligence aspects of the Conservancy's work and the preparation of suitable publications.

SICKNESS IN ENGLAND AND WALES

A RECENTLY published report from the Registrar General* describes three attempts to obtain statistics of morbidity, as distinct from mortality, in England and Wales. The study of mortality statistics was one of the main instruments of preventive medicine during the past hundred years. The statistics are extensive, detailed and complete. In their present form they represent the result of attempts to obtain information about human populations and not merely a by-product of administrative activity. By contrast, most existing statistics of morbidity are fragmentary and unsatisfactory, though they are of even greater potential interest than the mortality statistics. Most of the existing morbidity statistics, such as those derived from the records of Friendly Societies or hospitals, are incomplete in their coverage of the population; and most of them illustrate the limited value, for studies of general problems, of statistics originally collected for highly specialized purposes.

The three studies in the report under notice illustrate these general points, the first study being an account of the Survey of Sickness for the years 1948 and 1949. This Survey, using a designed sample, attempted to obtain information about sickness, duration of incapacity and frequency of medical consultation among the whole population. In principle, its results (here tabulated by age, sex and income of the persons interviewed) are of great importance in connexion with the operation of the National Health Service. In practice, the information obtained lacks precision, particularly as to the nature of the diseases causing incapacity. At best, the Survey provided information about what people thought was the matter with them. There is internal evidence, also, of the operation of memory effects. Nevertheless, the results of the Survey are interesting in themselves and will be even more interesting when they can be correlated with relevant statistics from other sources. Among these may be mentioned the results of an inquiry into hospital in-patient records conducted by the Registrar General, and the results of an analysis of claims to sickness benefit under the National Insurance Acts conducted by the Ministry of National Insurance. These results are apparently to be published in due course. In the meantime, it seems unfortunate that the Sickness Survey was abandoned in the interests of financial economy in 1952. Whatever the faults of this particular Survey may have been, investigations on similar lines offer the only means of obtaining morbidity statistics covering the whole population.

The second of the three studies illustrates another source of morbidity statistics, namely, records of admissions to hospital. The study is devoted to

statistics of mental disorders derived from the records of mental hospitals under the National Health Service. The results are interesting in themselves, but also serve to show the limitations of this source of information. The form designed for this inquiry proved too complicated to be satisfactorily completed by the hospitals. This is the converse of the usual situation in which the hospital administration produces records insufficiently detailed and standardized for the purposes of social medicine. The third study describes some of the results of the Cancer Registration Scheme relating to 1947 and 1948. Statistics for 1945 and 1946 have already been published elsewhere. This is an interim study describing an early phase of the construction of a complete statistical picture of this group of diseases. At present it covers only part of the population (that served by the hospitals taking part in the Scheme), but it achieves a high degree of diagnostic accuracy. It will in the end, no doubt, combine both accuracy and completeness. At present the tables give information about numbers of cases by age and sex and about the delay between first symptoms and starting of treatment for cancer of various sites.

EARTHQUAKES DURING 1953

THE five earthquakes which did most damage during 1953 occurred on February 12 (magnitude 7) in Persia; on March 18 (magnitude $7\frac{3}{4}$) in Turkey; during August a swarm (greatest on August 12, of magnitude $7\frac{1}{2}$) near Cephalonia; on September 10 (magnitude $6\frac{1}{2}$) near Cyprus; and on December 12 (magnitude $7\frac{3}{4}$) in Peru. In addition, nineteen other earthquakes were of magnitude 7 or more, the greatest being on November 25 (magnitude $8\frac{1}{2}$) near Japan.

Fourteen earthquakes had foci at depths of 200 km. or greater, the deepest occurring on April 14 (magnitude 7) in western Brazil and on November 4 off Korea, both having a depth of focus of 650 km.

The Persian earthquake in February occurred in the Province of Khorasan and devastated Shahrood, Torroud and neighbouring villages, killing hundreds of the inhabitants when their houses collapsed on them.

The Turkish earthquake of March 18 occurred south-east of the Dardanelles in the region of Chanak, Balikeser, Yenice and Gonen, where more than a quarter of a million pounds sterling damage was done and hundreds of people were killed by falling debris and the fires which followed the earthquake.

The swarm of earthquakes in the Greek Ionian islands of Cephalonia, Ithaca and Zante culminated in the shock of magnitude $7\frac{1}{2}$ on August 12 and caused great damage, there being 394 deaths and a further 941 casualties (see *Nature*, August 22, p. 332). Argostoli, Lixouri and Zakynthos were particularly affected, and just after the earthquakes more than seventy-five thousand people were homeless. The International Seismological Association at Strasbourg reports that some 338 individual shocks occurred in the swarm of August 9-31.

The earthquake which did damage in the Paphos district of Cyprus on September 10 had a smaller magnitude than the others mentioned; but in the town of Ktima and the surrounding villages, including Stroumbi, Kithasi and Ayios Nikolaos, and even as

* The Registrar General's Statistical Review of England and Wales for the year 1949: Supplement on General Morbidity, Cancer and Mental Health. Pp. ix + 186. (London: H.M.S.O., 1953.) 7s. 6d. net.