## VI. MISCELLANEOUS INFORMATION (continued from p. 1906)

## a) Research and Publications:

International Bibliography of Vegetation Maps. Edited by A.W. K u c h l e r, University of Kansas Libraries. In 1970 the 4th and last volume was published. It covers Africa, South America, and World Maps. Supplements to the volumes are projected.

Enumeration of the Flowering Plants of Nepal. This is an Anglo-Japanese project. The preliminary MS is being compiled by Mr. L.H.J. Williams of the British Museum (Nat. Hist.). One copy of the MS is being sent to Japan to be elaborated by Dr. H. Kanai and Dr. H. Ohashi of the University of Tokyo. General Editors of the work are Prof. Dr. H. Hara and Dr. W.T. Stearn.

All specimens from Nepal and a copy of the relevant part of the draft will be made available to specialists on any group who are prepared to collaborate in this project. It is hoped that the work will be completed by the end of 1974. It will be published in 3 parts, the first of which to appear in 1973. The work will contain no keys or descriptions but critical notes will be added on taxonomy or nomenclature when desirable.

Tree Flora of Malaya. This manual for foresters, for which work started in 1965 at Kepong, is now appearing. The first volume was published May 1972 and as far as we can judge the second one is in press. I refer to the Book reviews in this Bulletin.

Noron(h)a's generic names. The early Spanish travellerbotanist Francisco Norona made large explorations in West Java which resulted in a very large MS (now at Paris) and over one hundred plates (a set at Paris and one in the British Museum. Nat. Hist.). No herbarium of his is known to exist. He proposed names for some 700 species and 101 new genera. Of these a mere list was published. By aid of the vernacular names attached to these names Hasskarl has tried to evaluate these names and thus they have entered botanical literature. Though all are nomina nuda and none of them is validly published, they curiously linger in literature and in botanical nomenclators. As evaluation from vernaculars was a most dangerous procedure I have checked the names with the MSS and the plates and definitely placed these names, in which it appeared that Hasskarl's evaluation was often wrong. The result was published in 'Essays in Biohistory' as Regnum Vegetabile vol. 71 (Dec. 1970) 353-380.

C.A. Backer's 'Onkruidflora der Javasche Suikerrietgronden' (Weedflora of the sugarcane fields in Java). In the years 1928-1934 the late C.A. Backer published this as vol. 7 of the 'Handboek t.d.v.d. Suikerriet-cultuur etc.'. To the text (in Dutch) belonged an Atlas intended to give of all of the 747 treated species a habit figure. Of this unfinished Atlas, which appeared in instalments, 480 plates were published.

It has now appeared possible to publish the rest, and thus to complete the work; unfortunately some 40 drawings seem to have disappeared. The Greshoff Fund (Amsterdam) has been found prepared to finance the publication.

Register of Photographs in the Collection of the Forest Department, Sarawak, Malaysia. A duplicated (stencilled) register of photographs in the collection of the Forest Department, Sarawak, has been prepared and distributed to enable all interested institutes and persons to know what photographs are available. The collection was started in 1963, but it is only since 1968 that a departmental photographer, Mr. Peter Sie Pui Kai, has been employed. Most of the earlier photographs were taken by forest officers who were keen photographers. The negatives of these photographs are mainly held by the individual officers.

Any institute wishing to have prints of photographs is requested to write to the Forest Research Officer, Forest Department, Kuching, Sarawak, East Malaysia, indicating the photographs required. The normal size of prints is 8 ins. x 6 ins., but larger or smaller sizes can be prepared. If the negatives are not available, or cannot be obtained, a photograph of the glossy print in the collection will be supplied. The photographs will be provided at cost price and postage.—J.A.R. Anderson. Forest Research Officer.

Tree Flora of Sabah. In Fox's preferred checklist of Sabah Trees it is mentioned in passing that a book 'Trees of Sabah' is in preparation scheduled to cover in detail about 250 of the more common and important non-Dipterocarp species, which it is hoped will be published before very long.

'Separacion' or 'Separation Point' where amongst others Merrill collected some plants in the Philippines, and which is not found on Atlases, is situated in East Palawan at about one third of its length; it is a small cape in Island Bay.

Preparations for the Flora of Australia. Plans towards this seem to be the creation of a Foundation by the Australian Academy of Sciences. Initial leadership may come from Dr. Nancy Burbidge, who reached the age of 60 in Aug. 1971.

Volume 2 of the <u>Handbook to Plants in Victoria</u> was in press end 1970 and would appear mid-1971, but we have not yet seen it. It would appear prior to Mr. J.H. Willis's retirement in Jan. 1972. We hope that Mr. Willis will continue his critical studies on the Australian flora and that he will be prepared for participating in the composition of the new Flora of Australia, if favourable conditions could be offered. Australia cannot afford to lose such most experienced persons whose high-grade work have gained admiration.

Flora of New South Wales. This new flora was embodied in a Flora series of the Contr. N.S.W. Herbarium. Numbers of this are now coming out separately by families; the first being that of Viscaceae by B.A. Barlow, as fam. 58A (1971) 8 pp.

The Land Survey Division of C.S.I.R.O., Canberra, has stopped with planning major regional expeditions to Papua and New Guinea, except for some neglected parts. The staff is now charged to collate the experience of the preceding years into a Handbook of Natural Resources of New Guinea, for which they are allotted 5 years of work. The organization of the volume on botany and vegetation is in the hands of Dr. Paymans.

b) Herbaria, Gardens, and Organisations (see also p. 2046):

Missouri Botanical Gardens Herbarium. A new large building, the John S. Lehmann Herbarium-Library Building, has become available to which the herbarium of over 2 million specimens and 70.000 library books were supposed to have been transferred by mid-1972. As a result of the successful Missouri Botanical Gardens Fund Drive and a grant from the National Science Foundation work on building began in Dec. 1970. The building will also serve for primary education programs and has a 300-seat auditorium.

Herbarium at Firenze. We hear with pleasure that the personal situation is improved. Dr. Guido Moggi has been appointed professor of botany and directs the Herbarium and Museum. A new post of Curator has been created and is filled by Prof. C. Steinberg who will deal with loans and other information.

The Rapinat Herbarium, St. Joseph's College, Tiruchira-palli-2, Tamilnadu, India. The Rapinat Herbarium is a local (university) herbarium, at Tiruchirapalli in southern India, organized in 1967 and named after Alfred Rapinat, S.J. (1892-1959) who initiated botanical studies in the College (now including postgraduate course in botany) and made extensive collections of plants. By May 1971, the herbarium had incorporated 18528 specimens comprising 4340 species. Angiosperms account for 3531 species; algae, fungi, lichens, mosses. ferns and gymnosperms also are included.

The bulk of the collections are from the surrounding district of Tiruchirapalli made by A. Rapinat and K.M. Matthew and carefully named at the Madras Herbarium, Coimbatore. The Botanical Survey of India has officially assigned the Tiruchirapalli district to be worked by the Rapinat Herbarium; it is expected that there will be further cooperation in the

future.

The Palni (Pulney) Hills (Madurai district) are another adequately represented area. There is a special collection of the alien plants at the hill station of Kodaikanal. The Exotic Flora of Kodaikanal (1969) has been published from a detailed study of about 350 species of woody or naturalized temperate plants at this hill station. Another important collection from the same area are of over 400 species of mosses made by G. Foreau, S.J. (1882-1967), of which over 100 species were described as new to science. Several of the 'types' are in the Rapinat Herbarium.

The Eastern Himalayas (Kurseong, Darjeeling Dt, West Bengal), too, are represented by a collection of flowering plants and ferns. The former were studied at Calcutta and at

Kew, and a comprehensive account is in preparation.

A botanical museum of the economically important plant products of the region and a modest collection of timber

samples complement the herbarium.

A reference library comprising Indian and foreign floras, taxonomic monographs and bibliographies, the techniques of botanical nomenclature and illustrations and herbarium methodology, is attached to the herbarium. There is also a section on taxonomic journals.

The herbarium is intended to develop as a centre of modern taxonomic research, floristic and monographic. The teaching of modern methods in plant taxonomy and competent

training of workers in its methodology will be undertaken here. The Rapinat Herbarium, therefore, is not so much an accomplished work as the initiation of an important one.—
K.M. Matthew.

Hong Kong Herbarium. This has been transferred from the Urban Council Services Department to the Forestry Division of the Agriculture and Fisheries Department, in April 1971.

Herbarium Bogoriense. With great pleasure we have heard that the third storey of Herbarium Bogoriense has been finished and that this additional space is most welcome for better storing of the herbarium collections and for more working facilities to staff and visitors.

Wau Ecology Institute. This is a biological station organized as a local non-profit corporation in the Territory of Papua & New Guinea. It was formerly called 'Bernice Bishop Museum New Guinea Station'. It will now operate with its own Board, as an affiliate of the Bishop Museum. It was established on a modest basis, in 1961, with the renting of 5 acres with a residence. It extended gradually and covers now 127 acres including a coffee plantation and a small farm for partial support of the operation, as well as 7 houses, a small laboratory, some cages, and a good start on an arboretum (200 tree spp.). There are an artificial stream and a few ponds. The 100 acres, acquired March 1971, include a good stream, 20 acres of virgin forest, 55 acres of coffee. More trees will be planted on the steeper slopes and a zoo will be developed in the more level land, to which it is expected 30 acres can be added.

The complex is situated at Wau, some three hours drive from Lae and at one hour flight from Port Moresby, at some 1200 m altitude. A substation on the top of Mt Kaindi (2350

m) can be reached in less than an hour by car.

It is hoped to develop classes in ecology for student and teacher tours, also from abroad, and it is hoped that the Institute may become a centre of research. Objectives include promotion of ecological research and conservation; it is at the moment largely concerned with animal life, amongst other in connection with Nothofagus and Araucaria.

Change of prefix to collection numbers of Lae. It is advised for general information that the prefix for institutional collections from the Papua New Guinea Herbarium has been changed from NGF to LAE for all collections numbered 50,001 and beyond. The prefix NGF should be used when citing collection number 50,000 and below.

University of Papua and New Guinea. Dr. Frodin communicated that he could arrange at Boroko (P.O. Box 1144) for new premises to be fitted out for the teaching and reference

herbarium; the new room of 250 sq.ft will be air-conditioned. Apart from courses and lectures he makes trips with students. Mrs. Andree Millar is pushing ahead with the University Botanic Garden, in the middle of which is a small piece of natural riverine bush; she is concentrating especially on native plants.

Canberra's Botanical Garden. Officially opened Oct. 20, 1970. Covering a little over 100 ha (266 acres), situated on the lower slopes of Black Mountain; planting began 1949 without disturbing native plants already established. Only native Australian plants are grown, amongst them some 200 Acacias and 200 eucalypts, including Acacia pycnantha, the Golden Wattle, regarded as Australia's national flower emblem. Contains some 3000 spp. at present. Though precipitation is low, the bottom of the gully has an intermittent and controlled misting system enabling to grow a sort of rainforest with tree ferns and epiphytes.

Plans for a new Herbarium building are ready. March 1971 the plan was let out in contract and it is expected that the building is finished by mid-1972. It is air-conditioned.

Pacific Tropical Botanical Garden in Kauai, Hawaii, Jan. 1970 a garden was started on 200 acres in the Lawai Valley. The entrance to the Garden is a hill-top above the valley. Surrounded by sugarcane fields, the garden will be developed on the floor and both sides of the long narrow valley and in a branching side-area known as 4-House canyon. Both the valley and the canyon have live, year-round freshwater streams of much beauty. The south boundary is essentially at sealevel while some of the land at the northern boundary is at some 600 ft elevation. Rainfall averages at c. 750 mm up to 1800 mm at the higher sites, temperature is (52-)74(-90) Staffing will consist of a scientific director (Dr. William S. Stewart), a secretary, a botanist, a horticulturist, a foreman, a nursery man and three gardeners. It is believed that in five years time the efforts will bear fruit and can contribute to new knowledge in a wide variety of ways.

## c) Symposia, Congresses, Societies, and Meetings:

12th Pacific Science Congress, Canberra, 18 Aug. - 3 Sept. 1971. Sponsored by the Australian Academy of Sciences which acted as the host organization for this Congress which was of limited registration (c. 1000, among which 400 from Australia, 100 from the U.S.A., 100 from Europe). Still there were plenty of papers, 240 in sect. A, Productivity and Conservation in the Pacific, 80 in sect. B, Man in the Pacific, 20 in sect. C, Environmental quality and resource management, and 110 in sect. D, Geological structure and Mineral Resour-

ces. The meeting marked also the fiftieth Anniversary of the Pacific Science Association. Prof.Dr. Sarwono Prawirohardjo, President of the Indonesian Council of the Sciences, Djakarta, was selected by the Pacific Council for the award of Honorary Life Fellow of the Association and Dr. F.R. Fosberg was awarded the Herbert E. Gregory Medal at the Opening Ceremony. To both our warm congratulations. Insiders know the great merit of Dr. Fosberg for the Botany Section of the Congress which he presided for more than a decade in a most energetic way.

The Information Bulletin 23 (3-5) Oct. 1971 gives a brief

survey of organization, resolutions, etc.

Taxonomy and Phytogeography of higher Plants in Relation to Evolution. This Conference was held at the University of Manchester 9-11 Sept. 1971, followed by a field excursion on 12 Sept. It was organized under auspices of the Botanical Society of the British Isles, the Linnean Society of London and the Int. Org. Plant Biosyst. by a Committee presided by Prof. D.H. Valentine. There were 25 papers read; topics were vicarious species, mountain floras, disjunct floras, endemism and relict elements, biosystematical studies with chromosome backgrounds, history of development in certain genera and of certain floral areas. Prof. Valentine hoped to publish the volume in Sept. 1972.

International Symposium on the Oceanography of the South Pacific, held in Febr. 1972 in Wellington, New Zealand. There were three divisions, viz. on Physical Oceanography, Marine Biology and Marine Geosciences. The 78 papers will be published by the New Zealand Nat. Commission for Unesco.

Phylogeny and Classification of Filicopsida. An important symposium was held in London, April 1972, organized by the British Pteridological Society and the Linnean Society. The contributions will be published as a Supplement to the Botanical Journal of the Linnean Society for the Linnean Society by the Academic Press.

Biological Resources and National Development. Symposium in the Faculty of Agriculture, University of Malaya, Kuala Lumpur, 5-7 May 1972. This was an event organized by the Malayan Nature Society involving: Films of biological and environmental change, Forum on the blueprint for survival, Symposium on resources and development, Exhibition of the Malaysian scene. On 6-7 May a special program was organized for school students.

Symposium in the History of Oceanography: Centenary in honour of the sailing of H.M.S. Challenger expeditions 1872-76. This will be held from Sept. 12-20, 1972, organized by the Royal Societies of Edinburgh and London.

Second inter-Congress of Pacific Science Association 1973 is supposed to take place in Guam, 1973, to be organized by the University of Guam, probably in May. The program includes pollution problems in the Pacific basin, coral reefs and their ecology, marine phytogeography, and urbanization. The address: P.O. Box EK, Agana, Guam, 96910, U.S.A.

1st International Congress of Systematic and Evolutionary Biology, University of Colorado, Boulder, Col., 4-11 Aug. 1973. A first announcement of this large Congress was published in Taxon, Dec. 1970. The Society of Systematic Zoology and I.A.P.T. are sponsoring it. Secretary is Dr. James L. Reveal, University of Maryland, Department of Botany, College Park, Maryland MD 20742. There is a scientific advisory committee and a steering committee; the latter will be largely responsible for the organization.

## d) Conservation:

Two important books on Conservation in Malaysia.
The first is written by Dr. P. Wycherley and was already rather fully alluded to in the former Bulletin (pp. 1904-1905). It is now published as a book (stencilled) by I.U.C.N. as Supplementary Paper No. 22 under the title: 'Conservation in Malaysia'. It is a basic volume with the Master Plan and suggestions.

The Malayan Nature Society issued an important illustrated volume (as a special double issue of the Malayan Nature Journal vol. 24, parts 3/4, pp. 111-262) under the title: 'National Parks of Malaysia'. The book contains essential data on the large park Taman Negara (Mt Tahan c.s.) and Templer Park in Malaya, Bako National Park and Kinabalu National Park in western Borneo. The accounts are followed by comments on the grounds and needs for conservation. Finally some notes for visitors. It was composed under redaction of Dr. T.C. Whitmore. Dr. E. Soepadmo and Dr. Ho Thian Hua.

Nature Conservation in Papua. Mr. J. Natera, Director and Conservator of Fauna of the New Guinea Department of Agriculture, Stock and Fisheries at Port Moresby communicated that two bodies are associated with conservation, viz. the Wild Life Section of the Department and the National Parks & Gardens Board, which are both involved in the establishment of 'conservation areas', a general term to include Wildlife Reserves, Wildlife Sanctuaries, National Parks, etc. They maintain close contact with each other and with other land users.

Axis deer tragedy in Hawaii. The Hawaiian Botanical Society is very much worried with the prospect of experimental introduction of axis deer to a large enclosure on Mauna Kea with the long-term objective of releasing these creatures for sport hunting. For permitting this the State is responsible.

An other question is the management of the feral goats in the Hawaii Volcanoes National Park. This should be settled by the federal agency of the National Park Service.

The Hawaii Board of Agriculture issued a permit to the Molokai Ranch Company, March 24, 1972, to introduce experimentally, breeding stock of nine kinds of African big game animals for sport hunting.

In their Newsletter the Hawaiian Botanical Society is protesting and also showing what damage axis deer (and goats) already have done to Hawaiian native vegetation which is so susceptible to animals which do not fit in the islands' ecosystem. Dr. Degener compared situations before and after and shows that Hawaiian forests are entirely destroyed by hoofed animals.

It would be a shame if for the fancy of a few hunters unique ecosystems have to disappear. And this in the United States which is so proud of having the largest and best managed National Parks of the World!