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NEWS-LETTER OF THE SOUTH AFRICAN ASSOCIATION OF BOTANISTS
NUUSBRIEF VAN DIE SUID-AFRIKAANSE GENOOTSAP VAN PLANTKUNDIGES

PROF R.H. COMPTON'S FLORA OF SWAZILAND :- To celebrate a 90th birthday is indeed a notable event in any man's life but to celebrate on the same day the publication of one's magnum opus - in this case a substantial regional Flora, surely extends the celebration beyond the merely memorable to the momentous. On the 6th of August 1976, his 90th birthday, Prof R.H. Compton held a splendid luncheon party for his friends and old colleagues. On this same day he received a copy of his Flora of Swaziland which had just been delivered by the printers!

Born at Tewkesbury, Gloucestershire, on the 6th of August 1886, Robert Harold Compton commenced his botanical career when he entered Cambridge (Gonville and Caius College) in 1905. There he took the Natural Science Tripos (Part 1), obtaining a first class pass in 1907 and two years later in 1909 he took Part 2 of the Natural Science Tripos again obtaining a First Class pass, this time with distinction in Botany; - a remarkable achievement which led to the award of a Drosier Fellowship in his college. Anatomy and morphology were among his early interests as well as the genetics of right and left handedness and the problems of self sterility. These diverse aspects of botany were the subjects of his early papers.

After participating in a field expedition to New Caledonia in 1914, where he encountered a bizarre new flora, he developed an interest in systematics. Thereafter it was to be his main field of research.

Returning to Cambridge in 1915, he found the war in Europe to be the major preoccupation. As its contribution to the war effort, the University resolved that certain biology graduates be given a rudimentary course in field medicine so that they could serve as assistants to medical officers on the front. Thus, between 1915 and 1918 Compton served at Dunkirk in the Friends Ambulance Unit, a harrowing experience which had a profound effect on his philosophy of life.

He came to South Africa in 1919 on being appointed Director of the National Botanic Gardens of South Africa and at the same time becoming the first incumbent of Harold Pearson Chair of Botany in the University of Cape Town, two posts which he held with distinction for 34 years. Henceforth the South Africa Flora was to receive his undivided attention.

In 1947 Compton's interest in the vegetation of Swaziland was aroused when he visited that country with Dr G.W. Reynolds of Aloe fame. On his retirement in 1953, Prof and Mrs Compton settled in Swaziland on their farm Ukutula, near Mbabane. Soon after his arrival in that country, the Swaziland Government asked him to initiate a Botanical survey of the Protectorate and in 1955 the survey got underway, supported by the British Colonial Development and Welfare Fund. Unfortunately, the withdrawal of financial support in 1966 forced Compton to discontinue his field work in March of that year, although by this time he had already made over 11,000 collections in Swaziland.

Shortly after the publication of his preliminary results in 1966 as An annotated check list of the Flora of Swaziland, Prof Compton commenced work on the text of a full scale Flora of Swaziland, with keys and descriptions. In 1971 Prof. Compton returned to Cape Town. This enabled him to make regular visits to the Compton Herbarium (which he had founded in 1939), and so bring the manuscript of his Flora to finality.

Now after two years of wrestling with the printers, the Flora of Swaziland has at last appeared but it has not been without its moments of despair and high drama for those involved. The climax of these trials and tribulations came when the corrected page proofs, galley proofs and original manuscript were returned for the final printing to a printer's representative who locked them in his car while calling on another client. By a cruel stroke of fate, the representative's car was stolen! Years of toil seemed to have evaporated overnight. Fortunately the police traced the car a day later, only to find it stripped of its valuables, but, miraculously, all that the thieves had left was a "worthless" pile of manuscript and corrected page proofs! By this slender thread was the Flora of Swaziland retrieved from oblivion.

Presentation copies, each one distinctively bound in full leather, were specially produced for King Sobhuza of Swaziland whose government made a generous financial contribution towards meeting the printing costs, for Mr R.P. Stephens, the Swaziland Minister of Finance and for the author himself. (J.P.R.)

An annotated checklist of the Flora of Swaziland: Suppl. Vol. 6 of Journ. of S.A. Bot.

Flora of Swaziland: Suppl. Vol. 11 of Journ. of S.A. Bot.

EXCHANGE OF ECOLOGISTS BETWEEN FRANCE AND SOUTH AFRICA :- Several South African plant ecologists have visited the well-known Centre d'Etudes Phytosociologiques et Ecologiques Louis Emberger at Montpellier during study tours in Europe. They include D. Edwards, E.J. Moll, J.W. Morris and H.C. Taylor. The C.E.P.E. Louis Emberger was represented at the official opening of the Botanical Research Institute's new building in Pretoria in 1973 by M. Godron, the present Director of the C.E.P.E.

Following the sojourn of the French ecologist J.E. Guillermin in South Africa as the guest of the Botanical Research Institute of the Department of Agricultural Technical Services, in the first few months of 1975, a stage in a proposed exchange programme was reached, when I had the privilege of spending some four and a half months as a guest of the C.E.P.E. Louis Emberger at Montpellier.

The first month after arrival in Europe was devoted to a series of visits to various important research centres. The first visit was to Prof M. Lamotte and J.C. Menaut of the Ecole Normale Supérieure in Paris, to obtain some information and literature on the Lamto Savanna Ecosystem Project on the Ivory Coast. This was on behalf of the Co-ordinator of the South African Savanna Ecosystem Project at Nylsvley. I also met Prof M. Guy and J.C. Rivereau of the Institut Francais du Pétrole, at Rueil Malmaison on the outskirts of Paris, where I obtained useful information and literature and the names and addresses of various other sources of information and literature on aspects of site classification and remote sensing.

The next occasion was a colloquium of the Working Group on Data Processing of the International Society for Plant Geography and Ecology, which took place at the Centre d'Etudes Phytosociologiques et Ecologiques Louis Emberger at Montpellier, from 16 to 20 September 1975. Participants included: F. Romane and others of C.E.P.E.; Prof S. and Mrs Pignatti, Prof Lausi, E. Feoli and Mrs Feoli of Trieste; Prof L. Orłóci and Mrs Orłóci of London, Ontario; and others, including a fairly strong contingent from Holland. Numerous papers were presented and discussed. As always, the main value of such a meeting was making the contact with people who were previously just names (albeit well-known ones) in the literature.

From Montpellier, we travelled through Switzerland to Austria to attend the convention of the Gesellschaft für Ökologie in Vienna from 22nd to 24th September. Numerous interesting papers were presented including one on assimilation in Welwitschia mirabilis. We wished that we could have stayed longer in fascinating old Vienna but we had to push on to Germany.

The period 28th to 30th September was spent at the Systematisch-Geobotanischen Institut of the University of Göttingen in Germany, where I had very informative talks with Prof Ellenberg, H. Haeupler and H. Heller over a wide range of topics

and obtained useful literature. The time that I was privileged to spend with Prof Ellenberg was particularly valuable. He is certainly one of the world leaders in the field of ecology.

The remainder of the tour was mostly spent in Holland. This included the period 3rd to 4th October at the Biologisch Laboratorium of the Vrije Universiteit van Amsterdam with Prof W.H.O. Ernst. The set-up of the Biologisch Laboratorium and the technical backing of the Science Faculty was especially impressive. Prof Ernst also very kindly gave up part of his weekend and showed us over the polders and the countryside near Amsterdam.

Finally we spent the 6th and 7th October in Nijmegen, Holland, where I visited the Afdeling Geobotanie of the Botanisch Laboratorium of the Katholieke Universiteit van Nijmegen. It was good to see Dr Marinus Werger, formerly of the Botanical Research Institute in Pretoria and his wife Elke. We also enjoyed the hospitality of their home. I also met Prof V. Westhoff, E. van der Maard and J. Louppen with whom I had useful talks and from whom I also obtained valuable literature. Marinus was so kind as to show us something of the vegetation and countryside of the Nijmegen-Arnhem area. On the 8th we returned via Belgium to Paris.

The second stage of the sojourn in Europe, we spent in the South of France. During this period I worked at the C.E.P.E. Louis Emberger in Montpellier, where the main project undertaken was the devising of a system of coding environmental and vegetational data for the setting up of an ecological data bank. It is somewhat premature to provide a detailed account of the code proposals which is rather to be seen as a provisional draft at this stage. What is now needed is to elicit the comments and criticisms of a variety of South African experts in various fields before the code can be finalized. Predictably, the most difficult problems have been encountered in providing an acceptable and feasible framework for encoding pedological and vegetational data. Many problems in these fields remain only partially solved or unsolved at this stage and further consultation with South African experts in these fields is required before further progress can be made towards finalising the code envisaged.

While working in Montpellier, we lived in a flat at Palavas, a little fishing village-cum-holiday resort on the Mediterranean. We have happy memories of the friendship and hospitality that we enjoyed in France, - also the French wines and cuisine. We fondly recall the foods and delicacies of the Midi, like bouillabaisse and Roquefort cheese. (Dr J.C. Scheepers, Bot. Res. Institute)

UNIVERSITY OF CAPE TOWN; THE SCHOOL OF ENVIRONMENTAL STUDIES:- The School of Environmental Studies at the University of Cape Town was established in 1973 as a multi-disciplinary activity to stimulate and co-ordinate teaching and research on environmental issues in the various departments of the University concerned with such issues.

At present 23 departments are associated with the School.

The School promotes the study of man's physical and social environment and the effect of human activities on the natural world. It accepts that while some environmental problems are due to ignorance of ecological processes, others have their roots in cultural values, social conventions and economic pressures.

It recognizes that training in environmental science must be based on ecological principles, and that understanding of the management of natural resources and the control of pollution must be based on these principles.

As elsewhere in the developed nations of the world, South Africa has in recent years become aware of the urgency of the need to ensure that development does not bring destruction of man's natural environment to the extent that it can no longer support him in harmony and health.

Many efforts are already being made to this end - by government, industry, educational institutions, research organisations and public groups, but care must be taken that these efforts do not become so diffuse that they lose impact. This is as true for single institutions as it is for the country as a whole and is the basic reason for the establishment of the School of Environmental Studies at the University of Cape Town.

The School provides: A comprehensive course of environmental study at the postgraduate level, based on the many separate lectures given by individual departments of the University; A series of courses of specialist lectures given by the staff of the School itself.

The degrees that can be taken through the School are: Master of Arts; Master of Science.

Under the direction of the School of Environmental Studies and within the constraints of resources available to the University, individual programmes of study are tailored to meet the needs and interests of each student.

Programmes are organised within the context of two general attitudes: Environmental Management - in terms of guiding and controlling aspects of human activities related to the environment; Environmental sciences - in terms of scientific investigation and understanding of the environment and man's impact on it. A degree of overlap between these attitudes is permissible in a programme.

Environmental Studies Courses: Courses are available as options to students registered in departments associated with the School. The School also provides courses on environmental topics in the following faculties:

Education: Course in environmental science and field techniques for science teachers. Engineering: Air pollution; Water pollution; The fundamentals of ecology. Fine Art and Architecture: The fundamentals of ecology.

Medicine: Course on pollution and its control for graduate students for the Diploma in Community Medicine. Science: The fundamentals of environmental science; Introduction to meteorology; Principles of environmental analysis.

Research: The School promotes environmental research throughout the University. Many departments are already engaged in separate projects which have a bearing on environmental problems.

The School fosters collaboration between project leaders, pinpoints gaps in the research effort and provides facilities for joint projects. Current environmentally orientated research projects are in 21 different major subjects. The botanical projects are:

Forest ecology and distribution of forests on the Cape Peninsula; Ecology of the vegetation at Bain's Kloof near Wellington; Vegetation and ecological relationships on Table Mountain (part of an extended I.B.P. programme); Survey of vegetation in the Saldanha Bay area; Survey of intrusive trees and shrubs in natural vegetation in the northern part of the Cape Peninsula; - changes in sites over 15-year periods; Study of rare and endangered plant species in the Western Cape Province, south of the Orange River (a project of the National Programme of Environmental Science).

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