FORUM BOTANICUM

Vol. 15, No. 12 December Desember 1977

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

PROF MIRIAM DE VOS : Op 25 November 1977 het die Departement van Plantkunde afskeid geneem van prof. Miriam de Vos by wyse van 'n dinee in De Volkskombuis aan de Wagenweg, Ou Strandweg, Stellen= bosch.

Prof. de Vos was oor 'n lang periode verbonde aan die departement - eers as student en vanaf 1941 as dosent. In 1939-1940 was sy as junior lektrise verbonde aan die Departement van Plantkunde by die Universiteit van Kaapstad.

Op grond van haar universitêre rekord is die Koningin Victoria-stipendium in 1935 aan haar toegeken. Sy kon toe rustig op Stellenbosch navorsing vir haar D.Sc.-graad doen. Die resultate van hierdie navorsing is in 1943 en 1947 gepubliseer en is vandag nog die klassieke publikasies oor die chromosoomgetalle van die Proteaceae en Aizoaceae.

As dosent het sy die geleenthede en fasiliteite vir navorsing ten volle benut en rustig voortegaan met navorsing - eers oor die embriologie van die Haemodoraceae en later oor die taksonomie van Romulea en ander genera van die Iridaceae. Veral op grond van haar navorsing is sy in 1972 tot Mede-professor bevorder en is in 1974 die Havengaprys vir Biologie aan haar toegeken.

Toe dr. De Vos as dosent in Stellenbosch aangestel is, was haar hoof opdrag om Sitologie te doseer. Destyds was daar weinige plantkunde-departemente in die wêreld met 'n pos vir sitologie en kon sy op Stellenbosch baanbrekerswerk doen. Later was Anatomie ook 'n deel van haar doseerverpligtinge. In verband met haar doseerwerk en navorsing het sy 'n goeie nagraadse kursus in Mikrotegniek opgebou.

Prof. De Vos het die plantkunde en die gemeenskap op 'n breë terrein gedien. Onder meer, was sy oor 'n baie lang periode 'n

medewerker van die Groot Afrikaanse Woordeboek; het sy all minstens 18 biografieë vir die S.A. Biografiese Woordeboek geskryf en was sy verant= woordelik vir die plantkundige inskrywings van die Kernensiklopedie.

Prof. De Vos sal in die eerste semester van 1978 nog die voorgraadse kursus in Sitologie en Sitogenetika waarneem. In die tweede helfte van 1978 gaan sy op 'n oorsese reis.

THE BOTANICAL ACTIVITIES AND RESEARCH OF THE NATAL PARKS BOARD : (In the list that follows, asterisks indicate long-term projects, which are often of a monitoring rather than research nature.)

UMFOLOZI - HLUHLUWE: (i) *Vegetation monitoring: In all conservation areas the vegetation should be monitored so that changes can be detected at an early stage, and the response of the vegetation to management practices can be assessed. This involved setting up fixed transects and photo-points in different vegetation types, and resampling at regular intervals.

(ii) *Erosion reclamation: Erosion, caused by overpopula= tion of animals leading to overgrazing, causes soil loss, impoverished vegetation, and lowered carrying capacity. The reclamation programme is carried out by management staff and scientific assistance is given with the choice of priority areas and recording of results.

(iii) *Bush encroachment: Methods of killing Euclea divinorum bushes are being investigated, as they otherwise merely coppice when stands are thinned out. Monitoring of all operations involving Euclea is being maintained in order to assess the effects of various treatments.

(iv) *Burning programme: Fire is an essential manage= ment tool for pasture maintenance and control of unwanted bush encroachment. The burning programme is carried out by management staff and scientific assistance is given regarding the choice of areas to be burnt and the recording of results.

(v) *Herbarium: The Hluhluwe herbarium contains plants from all parts of Zululand/Tongaland (within and without reserves). Its objects are:

(a) to provide a reference collection to facilitate the identification of plants collected by Board officers or members of the public;

(b) to build up knowledge of plant distribution and status.

MKUZI:

(i) Vegetation survey: Existing vegetation types are being defined and correlated with historic details available from the 1937 aerial photographs. The survey will include relationships between vegetation types, soil and water resources with the aim of predicting areas susceptible to bush encroachment and vegetation change.

(ii) *Vegetation transects: Vegetation transects are being established in selected sites to provide regular data on vegetation trends.

(iii) Bush control measures: Bush control priorities will be determined, and the effectiveness of the various techniques employed measured through a cost/benefit analysis.

(iv) *Monitoring of erosion reclamation: Motivation as for Umfolozi-Hluhluwe.

NDUMU:

(i) *Vegetation transects: Motivation as for Mkuzi.

(ii) Hippo range utilization: Fears have been expressed that hippo in Ndumu are responsible for overgrazing in certain parts of the reserve. A study of the hippo is being undertaken to investigate the extent of this suspected overgrazing, to determine the relationship with the other species of grazers, and to determine home range, movement and the rate of increase of the population.

LAKE ST. LUCIA SYSTEM: (i) *Aquatic vegetation monitoring - macrophytes: Since aquatic plants form an important part of the Lake's food chains it is important to know how they are reacting to varying conditions and management operations.

(ii) Hippo population and utilization of Eastern Shores: The numbers and distribution of the hippo population are being monitored. The status of the eastern shores pastures, which are important hippo grazing grounds, are being investigated, together with the possibility of achieving overall usage of these pastures by means of a suitable burning policy.

(iii) *Eastern shores land use study: This study is being conducted in cooperation with the Natal Town and Regional Planning Commission and the primary objective is to plan rational land use for the area in terms of conservation, recreation and afforestation. In addition, the study will provide a data base to be used for management purposes and as a foundation for further research. Refinement of the data will continue indefinitely

DRAKENSBERG: (i) *Fire ecology in the Natal Drakensberg: A team approach to this project is planned and preliminary work has begun. A detailed study of the effects of summer and spring burning regimes on the species composition of both grass and forb components, plant vigour and plant biomass is required, as well as the effect of fire on scrub patches, and Protea woodland. Research is also required to investigate the relationship between mammal habitat preference, population density and trend according to the seasonality, frequency and extent of burns.

(ii) Land capability analysis for eland: It is generally accepted that the eland population in Giant's Castle Game Reserve has remained static for a number of years. Associated with this apparently

stabilized population is the heavy browsing by these animals in the poorly represented woody vegetation types, the eland's poor condition at the end of winter the limited breeding success and the disappearance of a large number of calves by the end of their first year. A study is therefore in progress to establish the reasons for the poor condition of the eland, the degree to which these animals are responsible for any damage to the woody vegetation and the carrying capacity of the reserve.

GENERAL: (i) *Conservation of plants: Information is being built up on the status of species in Natal, with particular reference to keeping the Schedules to the Ordinance up-to-date.

(ii) Preparation of Reserve Management Plans: The botanists in the Natal Parks Board collect basic data for the compilation of the Management Plans for each Game and Nature Reserve, and give advice on the botanical aspects of the future conservation management programme.

INDIGENOUS FORESTS : The Wildlife Society is undertaking a Survey of the Conservation Status of Indigenous Forests on Non-State Lands in South Africa. This will be done to establish the conservation status of indigenous forests on non-state owned lands as a basis for the identifi= cation of key areas representing threatened forest types in need of protection.

They will mainly be looking at areas of 50 hectares or more, however where smaller isolated patches occur these will also be of interest, but all must be areas on non-state land. Anyone interested, please contact Mike Landman at Johannesburg 46-5461 or write to P.O. Box 44344, Linden 2104.

HUNT BOTANICAL INSTITUTE, PITTSBURGH, U.S.A. (VISIT BY MRS. E F HENNESSY OF UNIVERSITY OF DURBAN-WESTVILLE) : It was my great good fortune to be invited to attend the official opening of the Hunt Institue's Fourth quadrennial exhibition of Botanical Art and Illustration in the dual rôles of exhibitor and lecturer. I hope I also had some measure of success as an ambassador for South Africa.

I was most impressed by the exhibition. Naturally, in an international

exhibition one expects to find works of very high standard and this was indeed the case. The diversity of media, techniques and styles was most interesting. The most widely used medium was water-colour. Most water-colourists painted on paper the surface texture of which varied from rough to very smooth; some painted on paper laminated to board (which the Art Curator of the Institute informs me is unsatisfactory in the long term because the chemistry of the laminate causes deterioration of pigments - please note if you are a botanical illustrator); and two painted in water-colour on vellum. Many artists used gouache on paper, a few used acrylic paint on paper, and one used oil paint on paper, with great success. Some very effective drawings made with coloured pencils were shown, also pencil drawings and ink drawings, the latter on paper or on acetate film. Two silverpoint drawings were included in the exhibition. I had not previously seen any examples of this technique and found them very beautiful. Examples of works employing the graphic arts such as etching, lithography, linocut, woodcut, serigraphy, and engraving were numerous.

Fifty-nine percent of the exhibitors were from the distaff side, which naturally pleased me!

Subject matter ran the length of the botanical scale - algae, fungi, lichens, bryophytes, pteridophytes and spermatophytes - the latter not unexpectedly predominating and represented whole, or by their leaves, inflorescenes, infructescences, organs of perennation and storage, (I think the best exhibit was a water colour by the Italian, Marilena Pistoia, of onions), and their anatomy.

The catalogue lists 132 exhibitors representing 26 countries. Four people who are domiciled in South Africa were among the exhibitors, Ellaphia Ward-Hilhorst and myself who are South African by birth, Lois Povall who is English and Herrat March who is German. Miss March's name does not appear in the catalogue as her two paintings arrived in Pittsburgh too late for inclusion, although they are included in the exhibition. Altogether there were 325 exhibits, the largest of which measured $30\frac{3}{8}$ x 21½ inches and the smallest, $3\frac{1}{8}$ x 2¾ inches, exclusive of sunk mount and narrow walnut frame. All exhibits were mounted, glazed and framed in similar manner by the staff of the Institute.

The official opening was held in the afternoon of Sunday, 6th November, and was attended by about 25 of the artists and probably about 200 invited guests (I did not count heads). Each artist was presented with a flower. The men received white carnations for their buttonholes, the women golden orchids for their corsage. Liquid refreshments of botanical origin were freely available, and a warm glow of good fellowship was quickly engendered and preserved by the absence of speeches.

In the evening the artists, their spouces if present and members of the Institute staff attended a dinner at the home of Mr Alfred Hunt, Chair= man of the Board of Trustees of the Institute. Mr Hunt's home is of great interest and beauty. Its nucleus, the only old part of the house, is a library of Victorian vintage which boasts not only a magni= ficent mural commissioned by Mr Hunt's mother and elegant panelling and furnishing but two pairs of magnificant aluminium doors depicting scenes from classical history in high relief. These doors and the Italian marble which has been used in the modern part of the house came from the Hunt family's old office building which was demolished to make way for a larger more modern building. The melding of the old and the modern in Mr Hunt's home is an architectural triumph.

It was a surprise to find that I was Guest of Honour at the dinner. In a brief after dinner speech Mr Hunt welcomed us all and thanked the staff of the Institute for organising the exhibition.

On Monday 7th November I was taken out to an early dinner by the Acting Director of the Institute, Dr Robert Kiger, in company with other members of the Institute staff and their spouces. After dinner we repaired to the Institute where I was scheduled to begin a lecture at 8 o'clock. I spoke on our flora and used 120 slides to illustrate my talk. The talk was introduced by Dr Kiger and by the Art Curator, Mr John Brindle. I spoke for 90 minutes without there being any signs of restiveness in the audience, so conclude that our plants really do interest people. This impression was strengthened by the number of questions I was asked after the lecture while people relaxed over their sherry. Nearly all the questions related to our plants but a few were about my clothes, for I had elected to wear a Swazi skirt which was made for me in Mbabane, and the fabric design and jewel-bright colours fascinated the Americans. The conclusion of my lecture marked the end of the opening ceremonies of the Exhibition.

The great kindness and courtesy of all the people I met in Pittsburgh has left an indelible impression. I am most sincerely grateful to the Hunt Institute, to the CSIR and to the University of Durban-Westville all of whom contributed to the cost of my trip, for making it possible for me to contribute to the proceedings at the opening of the Hunt Institute's Fourth International Exhibition. It was a privilege to be able to introduce so many people to our flora and a pleasure to make so many new friends.

BOTANY DEPARTMENT : UNIVERSITY OF PORT ELIZABETH : RESEARCH ASSISTANT : An assistant is required to help with research on, primarily, seed metabolism and germination. The post is a temporary one, for 1978.

Minimum qualification : B.Sc with Botany as a major. Experience and/or qualification in Biochemistry will be a recommendation. Salary will be in accordance with qualifications and experience. Contact Professor J G C Small, Botany Department, University of Port Elizabeth, P O Box 1600, Port Elizabeth. Telephone 27961 (office), 532642 (home).

FOR SALE : A note has been received offering Dyer's Genera of Southern Africa Plants, Vol 2, Gymnosperms and Monocots, for sale to S.A.A.B. members at R3 a copy. Contact address Kidson's Pharmacy, 44 Voortrekker Road, Bellville, 7530.

NEW MEMBERS OF SAAB : Mr D S Grierson, Botany Department, University of Fort Hare, Alice.
Mrs L F Hosten, Botany Department, University of Port Elizabeth.
Prof Margaret E Marker, University of Fort Hare, Alice.
Miss S J Milton, 16 Ascot Road, Kenilworth, 7700.
Prod E Ramstad, School of Pharmaceutical Sciences, Rhodes University, Grahamstown.

AETFAT CONGRESS : There is still an opportunity for botanists to join the group which will attend the AETFAT-Congress in Las Palmas from 18-23 March. The group will depart from Jan Smuts airport on 10th March and will return on 29th March. The tour will include a one week stay in London and 4 days leisure on Las Palmas. Please contact the Secretary (Miss M Welman) at the Botanical Research Institute, Private Bag X101, Pretoria

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