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

CYTHNA LINDENBERG LETTY: It is a pleasure to convey our hearty congratulations to Cythna Letty who celebrated her 80th birthday on 1st January 1975.

Born in Standerton, Transvaal, on 1st January 1895, Cythna was the first of five children of the marriage between Walter Edward Letty of Greenwich, England, and Josina Christina Lindenberg of Worcester, Cape Province. She grew up on the Highveld and received her first lessons in painting wild flowers from her mother who, although largely self-taught, had the same delicate touch which was to develop in Cythna.

After completing her schooling in Pretoria in 1914 she held various positions until, in 1925, she was appointed as artist to the Veterinary Laboratories at Onderstepoort. In 1927 she was transferred to the then Division of Plant Industry, where she remained, except for a short break from 1938 to 1945 during her marriage to Oscar William Alric Forssman, until her retirement in 1967.

Probably her greatest contribution has been to the series "Flowering Plants of Africa", to which she has contributed about 730 plates, as well as illustrations in colour and black and white to other publications of the Botanical Research Institute. But no doubt she is best known for the floral designs which appeared on our decimal coins in 1961, and for her own book on "Transvaal Wild Flowers" in 1962.

International recognition followed and she was included among the world-famous botanical artists invited by the Hunt Botanical Library to exhibit their work in the United States in 1968. Shortly afterwards, in London, she was awarded a Silver Medal by the Royal Horticultural Society.

Over many years she gathered information towards a revision of the genus *Zantedeschia* and this finally appeared, with each taxon illustrated in colour, in *Bothalia* 10: 5-26 (1973). A fitting recognition of her contribution to botany in South Africa came in 1974 with the award of an honorary doctorate by the University of the Witwatersrand. (L.E. Codd).

PROF. BRIAN ROBERTS has relinquished his post as head of the Department of Pasture Science at the University of the Orange Free State and has been appointed as Chief Scientist in the post of Officer-in-Charge of the Pastoral Laboratory, Charleville, Queensland, Australia. He leaves for Australia this month and plans to make a permanent career in the Department of Primary Industries in Queensland. His address in Australia will be Box 282, Charleville, Queensland, 4470.

The University of the O.F.S. Department of Pasture Science will now be headed by Mr. Daan Opperman who has been promoted to Senior Lecturer. A new lecturer has been appointed as from February 1975.

PROF. H.A. MOONEY: Coming from Canberra, Australia, on his way home to Stanford, California, Prof. Mooney, plant ecologist on leave in Australia, will be visiting South Africa from the 7th of February until the beginning of March. He is the Director of the I.B.P.-programme that made a comparative study of the Californian chaparral and the equivalent vegetation in Chile. He may give a lecture about this Ecosystem project in Pretoria on the 10th of February. After a short stay in Pretoria and environs to study savannah vegetation, he will visit Port Elizabeth, Grahamstown and other parts of the Eastern Cape to study grasslands, Euphorbias and Karoo types of vegetation. He will then proceed to the South Western Cape to study the fynbos vegetation. The last part of his stay will be in South West Africa where he will travel from Windhoek to the coast at Swakopmund.

Prof. Mooney has done some work in the Atacama desert with Dr. Pablo Weizser, current staff member of the B.R.I. Recently he has been working on the photosynthetic characteristics of plants of diverse environments, particularly arid ones. Utilizing isotope ratio analysis, the characteristics of any given piece of plant material can be determined in terms of the photosynthetic pathway utilized to produce the carbon.

DR. CLIVE HOWARD-WILLIAMS, formerly at the University of Malawi, has joined the Institute for Freshwater Studies, Rhodes University, and is stationed at Swartvlei, Wilderness Lakes. He is to carry out studies on *Potamogeton pectinatus* and other aquatic plants in this saline lake, being based in a newly-erected laboratory there.

Dr. Howard-Williams and his wife have recently spent fifteen months, mainly at the Max Planck Institute at Plön, Germany, where he worked under Professor Sioli's direction on aquatic plant problems. This was a follow-up to Dr. Howard-Williams' work on Lake Chilwa, Malawi. After leaving Germany, he and his wife spent some months in South America studying aquatic plant problems there, much of the time in the Amazon River basin.

EKOSISTEEMPROJEK: (Mnr. O.J.H. Bosch, Opname Afdeling, Navorsingsinstituut vir Plantkunde).

Weens die groot aantal probleme wat ondervind word met die beplanning, uitvoering en koördinerings van 'n multi-dissiplinêre ekosisteemprojek is 'n besoek vanaf 6 Julie tot 14 September 1974 aan verskeie Ekosisteemprojekte in die Verenigde State van Amerika, Kanada, Verenigde Koninkryk en die Vasteland van Europa gebring. Die besoek het ook saamgeval met die eerste internasionale ekologieskongres (INTECOL) in Den Haag vanaf 8-14 September.

Ekosisteemnavorsing gaan gepaard met groot finansiële onkoste en die hoofdoelstellings van die studietoer was om die probleme wat andere in ekosisteemnavorsing ondervind het, te bepaal; te leer hoe hierdie probleme voorkom of opgelos kan word en op datum te kom met die meeste resente benaderings en tegnieke in ekosisteemnavorsing. Daar is ook veral aandag gegee aan die organisatoriese of administratiewe aspekte van so 'n multi-dissiplinêre projek.

Die volgende plekke en instansies is besoek met vermelding van die belangrikste aspekte bestudeer:-

- (1) Oak Ridge National Laboratory, Tennessee - Bladwisselende woud-ekosisteem.
 1. Indirekte metodes vir die bepaling van boom-biomassa.
 2. Ontbinding van afvalmateriaal en grondmikrobe-aktiwiteit.
 3. Databank.
- (2) Natural Resource Ecology Laboratory, Fort Collins, Colorado - Pawnee-projek - Grasland-ekosisteem.
 1. Indirekte metodes om die biomassa van die kruidlaag te bepaal - veral i.v.m. die "Capacitance Meter".
 2. Modelling.
 3. Voedselvoorkeur en -inname by groot en klein soogdiere.
 4. Radiotelesmetrie (migrasiestudies).
- (3) Utah State University, Logan, Utah - Curlew Valley-projek - Woestyn-ekosisteem.
 1. Databank.
 2. Modelling.
 3. Algemene organisasie en administratiewe probleme.
 4. Prosesstudies van bogrondse en ondergrondse invertebrata en klein soogdiere.
 5. Grondwater en soute.
- (4) University of Saskatchewan, Saskatoon, Kanada - Matador-projek - Grasland-ekosisteem.
 1. Primêre produksie-tegnieke.
 2. CO₂-uitruiling - apparaatvereistes en tegniek.

3. Populasiestudies van bo- en ondergrondse invertebrata.
 4. Administrasie en laboratoriumfasiliteite.
 5. Meteorologiese aspekte.
 6. Afbreking, ontbinding en stikstof-fiksasie.
- (5) Brookhaven National Laboratory, Upton, New York - Bladwisselende Woud-ekosisteem.
1. Boombiomassa-bepaling m.b.v. CO₂-uitruilingstudies.
 2. Invloed van bestraling op ekosisteme.
 3. Hergebruik van rioolwater (besproeiing van woudekosisteme).
 4. Voedingstofsiklusse.
 5. Apparaat.
 6. Meteorologiese aspekte in 'n gety-moeras.
- (6) Monk's Wood Experimental Station, Huntingdon, Engeland.
1. Biologiese data-versamelingstelsel.
 2. Invloed van menslike aktiwiteite op kusplantegroei.
 3. Grasveldsuksessie.
- (7) London- Dieretuin - Navorsing op groot soogdiere in Afrika.
- (8) Royal Botanic Gardens, Kew.
- (9) Koninklike Belgiese Instituut vir Plantkunde - Brussel, België.
- (10) Ryksinstituut vir Natuurbewaring, Arnhem, Nederland.
1. Indirekte metodes vir boombiomassabepaling (nie gas-uitruilingsmetodes).
 2. Populasiedinamika - Invertebrata.
 3. Datacerwerking - nie modellering.
 4. Ontbinding.
 5. Voedselinname en energieverbruik by Invertebrata.
- (11) Katolieke Universiteit, Nijmegen, Nederland.
1. Plantegroei-klassifikasie.
 2. Stabiliteit en diversiteit in plantegroei.
- (12) Geobotaniese Instituut, Universiteit van Göttingen, Wes-Duitsland - Solling-projek.
1. Wortelbiomassa en verspreidingspatrone.
 2. Watersiklus (Intersepsie van reënval deur bome; waterpotensiaal in plante, ens.).
 3. Tegnieke vir die bestudering van die N-siklus.
 4. Primêre produksie van bome.
 5. Outomatiese weerstasie.
 6. Koördinasie en administrasie.
 7. Publikasies en vorderingsverslae - vorm van aanbieding.

(13) Universiteit van Innsbruck, Oostenryk - Tundra-projek.

1. Probleme i.v.m. distribusie heterogeniteit ("Spatial heterogeneity").
2. Outomatiese weerstasie: Instraling, temperatuurprofiele, grondhitte-verspreiding.
3. Primêre produksie - dwergstuike.
4. CO₂-uitruiling.
5. Klimaatsbeperkings en die invloed daarvan op Alpyse ekosisteme.

(14) Eerste Internasionale Ekologiekongres, (INTECOL), Den Haag, Nederland.

Ongeveer 70 lande van dwarsoor die wêreld was op hierdie kongres verteenwoordig. Die belangrikste aspekte wat behandel is, was die volgende:

1. "Energievloei" tussen trofiese vlakke.
2. Evaluasie van sisteem-analises en modellering in Ekosisteemnavorsing.
3. Dataversameling en verwerking.
4. Aspekte van menslike ekologie.
5. Produktiwiteit in ekosisteme.
6. Diversiteit en stabiliteit in natuurlike ekosisteme.

SOME RECENT VISITORS TO THE B.R.I.:

1. Dr. P.J. Mott, lecturer in Ecology at the Botswana Campus of the University of Lesotho, Botswana and Swaziland, spent some time in Swaziland recently. He is starting a herbarium on the Botswana Campus and collected a number of plants in Swaziland which were identified in the National Herbarium in Pretoria, when he visited the Institute on his way back to Botswana.
2. Dr. B.A. Barlow, who spent some time in the Cape in connection with his studies of African Viscums, paid a visit to the Institute during December. He worked in the National Herbarium for a few days and was accompanied by Mr. P. Vorster on a collecting trip in the Northern Transvaal. He also gave a lecture to the Northern Transvaal branch of S.A.A.B. Dr. Barlow hopes to visit South Africa again in July next year.
3. Mr. Peter Bally, wellknown botanical artist from Nairobi, paid a visit to the Institute, accompanied by Mr. J. Lavranos from Johannesburg. Mr. Bally was on a private visit to South Africa.
4. Dr. Beatrice Pendleton, 'n argeoloog van die Namib Navorsingstasie, het die Instituut besoek vanaf 13 tot 26 November 1974.

Die doel van haar besoek was om plantmateriaal te identifiseer wat opgegrawe is by die Mirabib-rante in die Namib. Verder wou dr. Pendleton ook die basiese beginsels van mikrotegniek met die hulp van mnr. R. Ellis bemeester om met behulp van anatomie verdere identifikasie van die plantmateriaal te kan doen.

Dr. Pendleton is besig met navorsing i.v.m. klimaatsveranderinge wat moontlik in die

Namib kon plaasgevind het. Sy het 'n baie interessante lesing met 'n skuifie- en filmvertoning oor die onderwerp gegee.

BOLUS HERBARIUM, U.C.T.: Professor E.A. Schelpe's taxonomic treatment of the Pteridophyta (ferns and fern allies) in the 'Hydrobiological Survey of the Lake Bangweulu and Luapula River Basin' series, covering south eastern Zaire and northern Zambia has recently been published in Brussels. This monograph deals with 112 species in 25 families.

"SURVIVAL" : The Northern Transvaal Branch of SAAB learnt how to survive in the veld after a most successful and enjoyable dinner during November. All that Hans Vahrmeijer forgot to mention in his excellent talk, was how to cure hangovers with veld remedies - many of the attending botanists would have been glad to know, judging by the many bleak faces and dark glasses seen in places of botanical learning (Tukkies), and knowledge (BRI) in Pretoria the following morning.

The dinner provided by the Palms Hotel was outstanding value and the supply of wine was so plentiful that few tables had to resort to buying a large additional supply.

Surprisingly few nodding heads were noticed during Hans' talk, which can only be accounted for by the interesting content, careful preparation and very good delivery of his talk.

(P.S. We have an urgent appeal from more than one source to N. Transvaal members to read and take note of the contents of notices for future dinners!) ... from a correspondent.

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