

FELLOWS OF THE TROPICAL GRASSLAND SOCIETY OF AUSTRALIA

The Society has much pleasure in announcing for 1987 the enrolment of four of its distinguished members as "Fellows of the Tropical Grassland Society of Australia". The Fellowship award of the Society was initiated in 1985. None were enrolled in 1986, and the Society has seen fit to elect four fellows in 1987.



KENNETH BERTRAM ADDISON

Ken Addison was born in what was then Salisbury, Southern Rhodesia (now Harare, Zimbabwe) in 1923 and after schooling there and in Bulawayo worked in a copper mine in Zambia pending military service from 1941 to 1945 in East Africa and South East Asia. He took part in the climactic battles in the Kohima-Imphal area of eastern Assam and in the reoccupation of Burma. Post-war he took his B.Sc. (Soil Conservation) degree at the University of The Witwatersrand, Johannesburg, South Africa. From November 1948 he worked for the then Southern Rhodesian Department of Agriculture initially at Nyamandhlovu Pasture Station and later at Henderson Research Station, Mazoe as a Pasture Research Officer/Senior Pasture Research Officer.

He joined the Queensland Department of Primary Industries in mid-February 1964 as an Agrostologist, serving for eleven months at Rockhampton before being appointed Officer-in-Charge, "Brian Pastures" Pasture Research Station, in which position he served until his retirement in September 1983. He now lives quietly at Bargara, on the coast near Bundaberg, but is active in local affairs and is believed to do the odd bit of consulting.

Ken's interest in pastures were always ecologically based, as suited one trained in South Africa by Professor J. P. Phillips.

He was more interested in fully utilizing the bulk of native spear grass pasture, usually burnt at the end of the dry season, than in large areas of fully-sown, legume-based pasture. He saw the legume simply as a protein supplement to dry grass, and actively promoted this view both publicly and in his research programs. He was one of the early "systems" men, strongly believing that individual components had to be studied in active interaction with all the other components of the whole farm system. To this end he spent a year in 1971/72 at Colorado State University, Fort Collins, U.S.A. with the late Professor George Van Dyne, working within the Grassland Biome of the U.S. International Biological Programme.

Ken was also an early advocate of the use of leucaena and saw this as the only legume adapted to the basaltic clay soils, where it could be used as a summer-saved

protein bank for feeding, in conjunction with spear grass roughage, in winter. For the lighter soils of the inland Burnett regions he was happy to use fine stem stylo as a widely planted legume. Leucaena he saw as a plantation protein source.

Ken was active in Tropical Grassland Society affairs and was instrumental in 1966 in forming, and was initial President of, the Burnett sub-Branch, the Society's first sub-Branch. This thrived in early years while Ken was actively in control, but languished while he was overseas in 1971/72 and collapsed, under the impact of the beef slump of the mid-seventies, soon after his return.

His major impact on pasture research in Queensland was in focusing attention on the utilization of the low quality roughage of the native pastures and the integration of this into the whole pasture system.



JOHAN PFAFF EBERSOHN

Joe Ebersohn was born and educated in South Africa. After service in the Mediterranean in the Second World War, he graduated B.Sc. with honours in Soil Conservation, from the University of Witwatersrand. He later obtained his M.Sc. (1956) and Ph.D. (1962) in ecology from the same institution. From 1949 to 1961 he was employed as Research, Senior and Chief Pasture Research Officer respectively with the Department of Agriculture, Pretoria, South Africa.

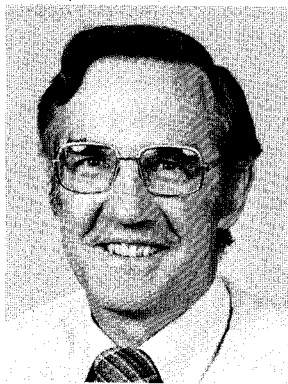
Joe joined the Queensland Department of Primary Industries in 1962 and was appointed as Research Agrostologist at Charleville. However, his talents were soon recognised and from 1965 to 1972 he was Chief Agrostologist and Assistant Director of Agriculture Branch within the Queensland Department of Primary Industries.

In one of his many imaginative moves Joe stunned his colleagues by moving from Administration to resume active research work at Coolum Research Station from 1972 to 1981. After this very productive period he again surprised fellow workers by assuming the role of Regional Extension Leader for south-east Queensland from 1981 until his retirement in 1986.

In all his professional pursuits Joe Ebersohn has been outstandingly successful. His abundant enthusiasm for pasture science and genuine affection for his fellow man radically changed the attitudes of a generation of pasture workers in Queensland. He continually challenged and stimulated research staff of all ages and his visits to a centre were always awaited with great anticipation.

Within the DPI, Joe had many achievements but his success in attracting external funds and the active encouragement of his staff to obtain higher research degrees were seminal in transforming the Department's pasture research profile. Especially notable were the foundations he laid in shifting attention back to the value and importance of native pastures to the State's pastoral industry.

Joe was President of the Tropical Grasslands Society in 1968 and has maintained a keen interest in Society affairs to the present time.

**EDWARD FREDRICK HENZELL**

A.O., B.Agr.Sc., D.Phil., F.A.I.A.S., F.T.S.

Ted Henzell graduated with First Class Honours in agriculture from the University of Queensland. He was awarded a Rhodes Scholarship in 1952 and at Oxford studied the 'Physiological Action of Phytotoxic Compounds' for which he was awarded the degree of D.Phil. in 1955.

On his return to Australia, he joined the CSIRO Plant and Soils Laboratory, Brisbane where he studied nitrogen fertilization of tropical grasses for beef production. The work was subsequently extended to measure the losses of fertilizer nitrogen. The Cunningham Laboratory, Brisbane, was one of the first in the world to exploit ¹⁵N isotope techniques in tropical agriculture using a mass spectrometer purchased with a grant given by the Rockefeller Foundation in 1959.

In March 1962 Ted Henzell circulated to pasture workers a proposal for the formation of a "Queensland Grassland Society" with the objective "to promote the science of grassland farming". Following a favourable response the inaugural meeting of the Society was held at the CSIRO Cunningham Laboratory on Tuesday 13th November 1962. At this meeting J. Griffith Davies suggested that the new organisation should be called the "Tropical Grassland Society" and on 12th February 1963 the name "The Tropical Grassland Society of Australia" was adopted together with a constitution and an Executive Committee elected with Ted Henzell as the first secretary. In 1967 he was elected President of the Society and in the following years has taken a keen interest in the Society.

He was a member of the Organizing Committee and Chairman of the Local Arrangements Committee for the XI International Grassland Congress held at Surfers Paradise in 1970. He presented plenary papers to that Congress and to the XIV Congress held in Kentucky in 1981 and is scheduled to present a plenary paper to the 6th World Conference on Animal Production at Helsinki in June 1988.

In 1977 Ted Henzell was appointed Chief of the CSIRO Division of Tropical Crops and Pastures, a position he held until his appointment to the position of Director, Institute of Plant Production and Processing in January 1988. He served on the Consultative Committee on Research and Development of which he was a member from 1977 to 1983. This Committee chaired by Sir John Crawford, was appointed by the Australian Minister for Foreign Affairs to advise Mr J. Ingram, then Director, of the Australian Development Assistance Bureau. He was a member of the Policy Advisory Council of the Australian Centre for International Agricultural Research (ACIAR) from 1982 to 1987. In 1976 he was awarded the Australian Medal of Agricultural Science and in 1983 was made an Officer of the Order of Australia (AO).

For his contribution to pasture research and development in Australia and overseas and for his special services to the Society, the Tropical Grassland Society of Australia is pleased to enroll him as a Fellow of the Society.



LEONARD ROSS HUMPHREYS

Dr. Leonard Ross Humphreys obtained his B.Sc.Agr. and M.Sc.Agr. at the University of Sydney, a Ph.D. at the University of Queensland in 1966 and an Hon.D.Sc. at Khon Kaen University, Thailand, in 1983.

Dr. Humphreys began his career with the Soil Conservation Service in New South Wales. In 1956 he joined what is now the Queensland Department of Primary Industries, after a brief appointment as research officer at the University of Queensland. While in the Queensland Government Department, he became Chief Agrostologist and eventually Assistant Director of Agriculture. Dr. Humphreys rejoined the Department of Agriculture at the University of Queensland in 1966 where he now holds the positions of Reader and Head of the Department.

Dr. Humphreys, since coming to Queensland, has been involved in tropical grasslands in four types of activity; research, teaching, administration and as a professional consultant. This has involved work in the tropics and near tropics of Australia and also in South East Asia, Africa and the Americas.

Research

Dr. Humphreys has won world wide recognition for his work in tropical grasslands. He is author of four books, titles of which are:

A Guide to Better Pastures for the Tropics and Sub-Tropics. 1967 Spanish edition and 1980 4th English edition. Wright Stephenson.

Tropical Pasture Seed Production. Editions in English, Spanish and French. 1986 Third English edition with F. Riveros, FAO, Rome.

Tropical Pastures and Fodder Crops. 1978, Longman.

Environment Adaptation of Tropical Pasture Plants. 1981, Macmillan.

Dr. Humphreys is author or co-author of 70 research papers in scientific journals, some 18 reviews or chapters in books and some 16 papers presented to conferences in Australia and overseas. The research of Dr. Humphreys and his group has made a major contribution to the field of tropical pastures and forages, particularly in respect to seed production.

Teaching

Dr. Humphreys has also been active in teaching both at the undergraduate and postgraduate level. Some 28 students have been awarded research Master's degrees and 16 Ph.D.'s with Dr. Humphreys as sole or joint supervisor.

Administration

Dr. Humphreys has had wide experience in administration in the field of tropical grasslands. While in the Queensland Department of Primary Industries, Dr.

Humphreys became Chief Agrostologist and later Assistant Director of Agriculture. After joining the Department of Agriculture at the University of Queensland, he was responsible for much of the development of that section of the Department concerned with pasture research. Since 1978, Dr. Humphreys has been Head of the Department of Agriculture and has served also on different committees of the University.

Dr. Humphreys was Chairman from 1981 to 1985 of the International Grassland Continuing Committee. He has also been active in International Grassland Congresses, the Tropical Grassland Society of Australia, the Australian Conference in Tropical Pastures, and the Queensland Herbage Plant Liaison Committee.

Dr. Humphreys was Federal President of the Australian Institute of Agricultural Science in 1985. He had been made a Fellow of that Society in 1981 and was President of the Queensland Branch in 1966-1967.

Professional Consultancy

The esteem in which Dr. Humphreys is held has led organizations such as ADAB and FAO to appoint him as consultant in the area of tropical grasslands where he has served in many parts of the tropical world.

THE EFFECT OF STOCKING RATE ON THE POPULATION DYNAMICS OF SIRATRO IN SIRATRO (*MACROPTILIUM ATROPURPUREUM*)/ SETARIA (*SETARIA SPHACELATA*) PASTURES IN SOUTH EAST QUEENSLAND. III. EFFECTS OF SPELLING ON RESTORATION OF SIRATRO IN OVERGRAZED PASTURES

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ABSTRACT

*Two experiments in coastal south-east Queensland examined the effect of spelling on Siratro (*Macroptilium atropurpureum*) in Siratro/setaria (*Setaria sphacelata*) pastures where yield and density of Siratro were declining. Both experiments involved the use of small exclosures in established, continuously-grazed and set-stocked pastures. In an overgrazed pasture where Siratro and setaria were still the dominant species, both the legume and grass regained full productivity with 1 year's spelling. As overgrazing continued and the pasture degraded further, a longer rest period was required to restore productivity. In the final set of exclosures, the pasture did not fully recover even after 4 years of spelling.*

The second study compared the effects of spelling (a) over the full growing season, (b) the second half of the growing season and (c) the first half of the growing season on a continuously grazed pasture that still had adequate but declining Siratro density. Spelling for the whole growing season increased seed set of Siratro by factors of 14, 5 and 79 in 3 successive years, while spelling for the second half of the growing season increased it by factors of 8, 4 and 25. Spelling also increased the presentation yield of Siratro. The implications of such increases are considered and it is suggested that spelling may be a practical method of maintaining Siratro in pastures.

INTRODUCTION

In previous papers, Jones and Bunch (1988 a,b) described the persistence mechanisms of the tropical legume Siratro (*Macroptilium atropurpureum*) in Siratro/setaria (*Setaria sphacelata*) pastures in coastal south-east Queensland. These studies showed that Siratro can be eliminated from pastures by sustained heavy grazing and that a continued input of new plants to replace dying plants is essential for long-term persistence of the legume. At commercially acceptable stocking rates, this depends on seed being set under grazing and on the successful regeneration of Siratro from reserves of seed in the soil.