

Awards of the Tropical Grassland Society of Australia Inc.

The Society awards Fellowships to those within its membership who have made significant contributions to the understanding, use and improvement of tropical and subtropical pastures.

Fellow of the Tropical Grassland Society of Australia Inc. 2001

IAN JUDSON PARTRIDGE

Ian has spent his working life promoting pasture science and development in tropical regions of the world. He graduated from the University of Reading, England in 1964 with an Honours Degree in Agricultural Science and then went on to complete a post-graduate Diploma in Tropical Agriculture at the University of West Indies, Trinidad, in 1965.

Ian's first posting through the British Government was to Kenya as a pasture research officer looking at high altitude subtropical pastures at Molo (3000 m asl) on the west side of the Rift Valley.

In 1969, he was contracted to the Department of Agriculture in Fiji as a pasture research officer based at Sigatoka in south-west Viti Levu. Over the next thirteen years, he specialised in the development of hill land for beef production but also worked with goats as well as a range of fruit and vegetable crops at times. He was General Manager of the Yaqara Pastoral Company for two years and was responsible for the import under quarantine of hair sheep.

As a sole operator, Ian was involved in all aspects of pasture research from plant evaluation and nutrition through to grazing trials. He ran a 7-year grazing trial on hill land to ascertain the effects of stocking rate on the naturalised mission grass (*Pennisetum polystachion*) when oversown with legumes. He published papers on the long-term changes in botanical composition and animal production from this trial and also results from grazing trials on Nadi bluegrass and on leucaena. This led to his early appreciation of the ability of creeping grasses and legumes, such as Nadi bluegrass (*Dichanthium caricosum*) and hetero (*Desmodium heterophyllum*), to persist productively under heavy grazing and low fertiliser inputs. He was one of the earlier scientists to recognise the shortcomings of twining legumes and the need for pasture species that would tolerate intensive utilisation under commercial grazing systems. One of his many quotable

quotes is "If you can cut it with an Allen auto-scythe, it is probably the wrong type of plant".

In 1983, Ian joined the Queensland Department of Primary Industries as an Extension Agronomist based in Bundaberg. Here he was responsible for extension on pastures for beef production, grass and legume seed production as well as grain crop development. While there, he was able to indulge his passion for pasture research, establishing the first long-term grazing trial in the world on the new legume—Wynn cassia. He also established the need for sulphur on the granodiorite soils of the coastal Burnett.

Ian has been a prolific writer. In 1989, he was transferred to Gayndah and, while there, began writing books on pasture development, the first being *Leucaena: the shrub legume for cattle feed* for the Tropical Grassland Society. In 1991, he was offered the chance to move to Toowoomba to write a series of grazier guides on Queensland's native pastures. Ian then became involved in producing books on other topics, starting in 1991 with *Will it rain?* editions about the El Niño phenomenon. He is currently the extension specialist for the Queensland Centre for Climate Applications and retains a strong continuing involvement in the production of books on pastures.

Ian's flair for communicating scientific findings by translating scientists' language to plain readable English has seen him edit, write and publish some twenty handbooks and other material for the Department of Primary Industries, the Tropical Grassland Society and Meat and Livestock Australia. These include: the highly successful series of seven grazier guides for native grasslands across northern Australia; *Better pastures for the tropics and subtropics* for Tocal College, NSW; editing and publishing *The Pasture Lands of northern Australia* for Tothill and Gillies; *Tropical Pasture and Fodder Seed Production*; and a number of other TGS Occasional Publications. His prowess with a camera is well known and he is always ready to exploit a

good photo opportunity. Many of the photos used to illustrate his books came from Ian's collection.

Ian's writing expertise expanded, developing interactive multimedia sections of the Australian Rainman software package in 1998. He then developed a multi-media version of *Better Pastures for the Tropics and Subtropics* which was put on the DPI Web site in 1998. This now includes the pasture grass and legume species data base *Pasture Picker*. He has been instrumental in the development and maintenance of the Tropical Grassland Society web site.

Ian's pasture and extension expertise continues to be utilised in overseas aid projects. He is much sought after for both his technical advice and the production of extension material. He has carried out consultancies in countries such as the Solomon Islands, Vanuatu, Thailand, Laos, Vietnam and Indonesia with FAO, the South Pacific Commission, the Crawford Foundation, AusAid and ACIAR. He is currently involved in producing books on grazing management and

climate variability for the University of Mataram in Indonesia.

Ian has been an active Member of the Tropical Grassland Society of Australia for over three decades. He joined while in Fiji and has always regarded the Society as a most important network and source of information for pasture researchers working in isolation in developing countries. He has been Newsletter Editor since 1989 and served as an executive member for a record 12 years. Under Ian's direction, the newsletter expanded from a small A5 leaflet to a professionally-produced offset printed publication covering a wide range of topics from throughout the world's tropical pasture regions. In fact, Ian has been the newsletter for most of the past 12 years as much of the material was generated by him.

Ian's significant contribution to the areas of research and development and extension, in particular in communicating pasture science makes him a worthy recipient of this Award.

BELA (BERT) GROF

Bela, who describes himself as a Hungarian-born Australian, is known as "Bert" to his Australian friends and admirers. It is fitting that in this, the year of his 80th birthday, we recognise the enormous contribution Bert has made to pasture science. He graduated in Agricultural Science from the Royal Hungarian University of Polytechnic, going on to obtain his Doctorate in Economic Botany at the same institution. In 1949, he migrated to Australia, and thus began a particularly illustrious career.

In 1950, he joined the Department of Agriculture and Stock (now Primary Industries) working at Biloela Research Station on the evaluation and selection of forages for subhumid regions in central Queensland. These endeavours gave rise to Biloela buffel grass, Callide rhodes grass and Capricorn elephant grass. In 1961, he was transferred to the Tropical Agriculture Research Station at South Johnstone in north Queensland, selecting forages for the different soils of the lowland wet tropics. Once again, the cultivar list emanating from his work is impressive: Basilisk signal grass, Cook and Endeavour stylos, Johnstone hetero, Belalto centro, Kennedy ruzi grass

and Makueni guinea grass. Basilisk signal grass became a commercial success in Brazil where some 25–30 M hectares have been established. Seed production of this species alone brought valuable export dollars to Australia, some 2 Mkg of seed valued at \$8M being sent to Brazil in the early 1970s. During this period, Bert was involved in forage species collecting missions in Africa, S.E. Asia, and South and Central America.

The next phase of his career took him to Colombia, where, in 1971, he commenced work with CIAT in Cali, allowing him to further indulge his passion for plant evaluation. This time his target was forages adapted to acid-soil savannas and to cleared tropical forest regions of South and Central America. He tested a wide range of stylos for resistance to anthracnose, leading to the release of *Stylosanthes capitata* cv. Capica. *S. guianensis* CIAT 184 was selected for degraded forest regions and subsequently released as cv. Pucallpa in Peru. CIAT 184 has since found wide acceptance in southern China, Thailand, Vietnam, Philippines and Indonesia. An inter-specific centro hybrid from Bert's early

evaluation in Colombia was released in Honduras, and has also showed promise under grazing in Peru, Mexico, Guyana and Paraguay. In 1978, Bert moved to Carimagua in the Eastern Plains of Colombia where he focused more intensely on identifying forage species for the savannas. Carimagua 1 gamba grass was developed for infertile acid soils at Carimagua, but found application in the tropical lowlands of other South as well as Central American countries in subsequent years. Some 3 M hectares of this variety have been planted in Brazil alone. *Arachis pintoii*, *Centrosema acutifolium*, *Brachiaria dictyoneura* and *Brachiaria humidicola* have all been brought through to cultivar status as a result of Bert's work in Carimagua.

With his penchant for acid soils and still with CIAT, in 1985 he linked up with EMBRAPA/CPAC at Planaltina in Brazil working on selection of forages adapted to the seasonally flooded acid-soil savannas. Promising accessions were selected from *Paspalum*, *Brachiaria*, *Arachis*, *Centrosema*, *Desmodium*, *Pueraria* and *Stylosanthes* leading to the subsequent release of cultivars of *Paspalum atratum*, *Brachiaria brizantha*, *Arachis pintoii*, *Desmodium ovalifolium* and *Stylosanthes*. In 1989, he moved south to Campo Grande in Brazil in the quest for forage species for Cerrados conditions. Following evaluation of a number of *Stylosanthes* species, Mineirao, the large cultivar of *S. guianensis*, was released for commercial use.

Always in need of a challenge, Bert carried his considerable bag of skills across the Pacific Ocean to Los Baños in the Philippines in 1992, to

work with CIAT on the S.E. Asian Forage Seed Production Project. Here he established a forage species germplasm bank and seed production facility, supplying selected materials for regional trials in the Philippines, Malaysia, Thailand and Indonesia. This activity led into the highly successful Forages for Smallholders Project which is still operating in the region.

In 1994, Bert severed his ties with CIAT and responded to the call of Latin America, returning to Campo Grande in Brazil, this time to work with the National Research Foundation. His faith in, and predilection for, stylos came to the fore, as he sought anthracnose resistance and adaptation to Cerrados conditions in the genus. This led to development of a composite cultivar based on *S. capitata* and *S. macrocephala*, released by EMBRAPA as cv. Campo Grande.

Bert returned to Australia in 1997, but not to retire. In the current phase of his long career, he has been instrumental in introducing into Australia some of the more promising material of *Stylosanthes* and *Brachiaria* he worked with in Campo Grande. He is now collaborating with DPI and the seed industry to assess the potential of these lines in Australia.

In the field of tropical pasture species evaluation, Bert is a global treasure whose work has contributed greatly to our understanding of exotic species ecology, and improved the incomes and lifestyles of innumerable families around the world. His enviable reputation for "having an eye for a good plant" is well known among his colleagues and peers. He is a truly worthy recipient of this Award and the recognition it brings.