

Mr Dennis Victor Matthews

The degree of Master of Science in Agriculture (honoris causa) was conferred upon Dennis Victor Matthews at the ceremony held on 17 December 1999.

Citation

Chancellor

I have the honour to present Dennis Victor Matthews for admission to the degree of Master of Science in Agriculture, honoris causa.

Dennis Matthews joined the Parks and Wildlife Commission of the Northern Territory in 1976. In 1990 he was appointed Senior Ranger at Finke Gorge National Park (FGNP) in the rugged James Ranges 175km southwest of Alice Springs. Although he has no formal training in science, he has acquired a remarkable depth of knowledge of the plants, animals and soils of the region and their conservation through interaction with scientists and extensive reading. He has a personal library most biologists would envy. Furthermore, he has applied his knowledge to a critical evaluation of land management practices in FGNP and brought scientific rigour to the development of new practices designed to better conserve the flora and fauna of the Park.

Following his appointment to the Park, he used his skills as a negotiator to obtain support from a wide range of parties for the removal of all feral horses from the park, an achievement which led to an immediate improvement in plant and soil conditions. Mr Matthews then acquired the computer skills needed to implement a sophisticated geographic information system (GIS) for the Park and worked with an experienced botanist to survey and quantify the distribution of plants across the park in relation to soil type, topography and fire history. The GIS database also includes information on fauna as well as feral animals and exotic weeds.

He developed the concept of strategic control burns to minimise the risk of loss of endangered species from high intensity fires. The control burns are designed to provide effective barriers to fire spread by linking large natural barriers to fire with relatively small burns. This strategy draws heavily on the information in the Park GIS and replaces the common practice of relatively frequent 'patch burns' over much larger areas.

Mr Matthews has supported our research on the biology of arid zone soils and fire ecology and applied the results of our studies in the strategic burning program. Two PhD theses have been produced through this collaboration. He has also been crucial to the success of the Faculty's Field Studies Program in Central Australia. This Program is an intellectually and physically demanding learning experience in which students are introduced to the plants, soils and topography of this region and the complex issues of land management and conservation. They also undertake major conservation projects in FGNP under the supervision of Mr Matthews. Projects have included studies on relict palms, mapping and eradicating exotic weeds and rabbit warrens and the conservation of bettong burrow complexes.

He is a highly motivated teacher who enthuses the students through his presentations on the use of GIS, land management practices and fire management and ecology. The collaboration with Mr Matthews has provided a unique learning experience for staff and students and contributed to our commitment to introduce the new Land and Water Sciences degree in 2000.

One of his personal research projects is the development of an electronic library of the calls of bat species in the arid region. He contributed to the development of software, which enables the identification of bats in flight and their activity to be monitored remotely without the need for trapping.

Chancellor on the basis of this remarkable record of achievement, I have pleasure in presenting Dennis Victor Matthews for admission to the degree of Master of Science in Agriculture, honoris causa.