Clair Kucera Honored As 
MU Sesquicentennial Emeritus Professor

In this Sesquicentennial year, Clair Kucera was uniquely honored when he was selected as one of only ten MU Sesquicentennial Emeritus Professors. Clair is an internationally recognized authority on the ecology of tallgrass prairies, particularly with respect to primary biomass productivity and the effect of fire on the tallgrass ecosystem. He has published more than 60 articles in the most prestigious journals of the fields of plant ecology and plant systematics, including Ecology, the Torrey Botanical Bulletin, the American Journal of Botany, and the American Midland Naturalist. Of his four books, The Grasses of Missouri has become a standard taxonomic treatise and The Challenge of Ecology has had two editions that were widely adopted; the second edition was translated into Spanish. Clair and Professor John Faaborg are currently writing a new ecology text for Prentice-Hall.

Clair’s research topics include primary productivity; carbon and total organic material cycles; effects of burning, grazing, and other environmental factors on the ecosystem; arthropod and mammalian food chains; the function of microorganisms in the ecosystem; and geographic selection and photoperiod adaptations as well as hybridization and speciation in tallgrasses. As an Emeritus Professor, he is continuing his research on the decay processes of native prairie materials leading to the formation of soil humus.

Clair’s international reputation has led to invitations to speak and serve as a consultant across the globe, including: the Botanical Institute and Academy of Science, Brno, Czechoslovakia; Carolina Institute, University Karovy, Prague; botanical and ecological institutes in England, Wales and Austria; tropical and botanical institutes in Costa Rica; the Seringetti Research Institute in Tanzania, Africa; and the Charles Darwin Research Institute of the Galapagos Islands. In 1978 Clair received the National Academy of Sciences East European Exchange Award. From 1971 to 1974 he served as Scientific Advisor in the Grassland Biome of the International Biological Programme.

Nationally, Clair has served on the editorial board of Ecology, the premiere scientific journal in his field, and on the National Science Foundation Ecology Panel. He is currently Technical Advisor to the Missouri chapter of the Nature Conservancy; has served as chairman of the Central States Section of the Botanical Society of America; edited The Proceedings of the 7th Annual North American Prairie Conference; regularly reviews grants for the National Science Foundation and the Department of Energy; and reviews journal manuscripts for Ecology, American Journal of Botany, and the Torrey Botanical Bulletin. Clair has been used as an expert reviewer by the Department of the Interior in the evaluation of proposals to establish National Landmarks and National Parks. He is a consultant to the Missouri Conservation Department, Missouri Department of Natural Resources and the Missouri Prairie Foundation.

Clair joined the MU faculty in 1950 and has remained in Columbia since he retired in 1987. The national recognition that the Division of Biological Sciences enjoys is due in large part to his varied contributions. In order to carry out a research program in tallgrass ecosystems, one needs a native tallgrass prairie. Clair identified a tract of native virgin prairie just east of Kingdom City, known as Tucker Prairie since 1852, when it was originally acquired by the Tucker family. This was the only large tract of native prairie remaining in Missouri north of the Missouri River. Recognizing the unique value of this prairie tract, not only to his own research but also to future generations, he single-handedly raised the money for its purchase by the University, and for the development of the research facilities housed there. The bulk of the funds for purchase and development of the research facilities came from a National Science Foundation grant written by and awarded to him in 1958. This was the first time that the National Science Foundation had ever awarded a grant for the purchase of land. Clair secured donations of the remainder of the funds necessary to purchase the prairie and construct the research station from the MU Alumni Achievement Fund, the Missouri Chapter of the Nature Conservancy and members of the Tucker family. Once the land was acquired, he designed the research station and has conducted research there ever since.

More research on grassland ecology has been conducted on this native Missouri prairie than any other in the Midwest. The prairie has provided an experimental background and presetlement model simulation for studies of diversity-stability relationships of population and community ecology carried out by Clair and colleagues inside and outside the University. A long-range
The prairie program was initiated in 1958. Over 60 research papers on prairie ecology and soil formation at Tucker Prairie have appeared since 1958, written by Clair, his students and his colleagues. The prairie was an important research site for litter decomposition studies as part of the International Biological Programme of the 1970s and in 1978 the prairie was dedicated as a National Natural Landmark in the National Registry with the U.S. Department of Interior. Clair was Director of the research station until he retired from MU. Professor John Faaborg was appointed Director in 1987.

In addition to maintaining an internationally recognized research program, Clair taught a wide variety of courses including Ecology, Plant Geography, Plant Taxonomy and Basic Environmental Studies. Students from freshmen to graduates always enjoyed his classes and commented on his broad knowledge of plants, his enthusiasm for teaching and his genuine interest in his students. Although he maintained one of the heaviest teaching loads among biology faculty, he was always willing to devote as much time to a course as the students desired. He frequently led field excursions and easily conveyed his enthusiasm and knowledge of plants to his students.

Clair has served as mentor for 30 graduate students, 12 of them PhD candidates. Most of these graduates are active professional ecologists. From 1980-83 he was Chairman of the Department of Botany.

Always an active citizen of the University, Clair guided innumerable student, alumni, and Missouri citizen groups around Tucker Prairie, interpreting his studies for them. This public relations effort was not a part of his official University duties, but he did it, frequently on weekends, to spread his knowledge and love of the natural prairie system.

Clair is an individual who helped to establish an entire field of study on the international level and provided the University with tremendous leadership in his area of scholarship. It is because of people like him, dedicated to excellence in scholarship and teaching, that this University is a unique and outstanding institution. Surely no one was more deserving of recognition as a Sesquicentennial Professor.

An aerial view of Tucker Prairie, above, after a controlled burn, right.