Vitae

Name: Clenton E. Owensby

POSITION: Professor of Range Management
Department of Agronomy
Kansas State University
Manhattan, KS 66506

BIRTH DATE: March 17, 1940

PLACE OF BIRTH: Clovis, New Mexico

EDUCATION: B.S. - New Mexico State University - 1964
Ph.D. - Kansas State University - 1969

POSITIONS:

Research Asst.	K.S.U.	1964-66
Instructor	K.S.U.	1967-69
Asst. Professor	K.S.U.	1970-73
Assoc. Professor	K.S.U.	1974-78
Professor	K.S.U.	1979-

RESEARCH EMPHASIS:

Range Plant Physiology - carbon allocation, photosynthesis, and root exudation in range grasses, nitrogen cycling associated with fire in tallgrass prairie; effect of atmospheric CO_2 enrichment on the tallgrass prairie ecosystem and carbon, water vapor, and energy fluxes of tallgrass prairie; impact of grazing on carbon allocation strategies including photosynthetic pathway effects. *Grazing Systems* - development of economically and ecologically efficient grazing systems for stocker and cow/calf enterprises. *Range Burning* - effects of range burning on plant and animal components of range ecosystems. *Other* - development of GPG/GIS databases and tools for research and management of prairie.

HONOR SOCIETIES:

Gamma Sigma Delta
Sigma XI
Alpha Zeta
Phi Kappa Phi

HONORS:

KSU Outstanding Agriculture Faculty Member, 1971
Gamma Sigma Delta Teaching Award of Merit, 1971
Gamma Sigma Delta Faculty Award of Merit, 1984
AMOCO All University Outstanding Teaching Award 1985
NACTA Fellow Award 1985
Society for Range Management Outstanding Achievement Award 1989
Higuchi -Irvin Youngberg Award for Applied Research U of Kansas $10,000 1993
Gamma Sigma Delta Research Award of Merit, 1994
KSU College of Agriculture Faculty of the Semester 2000
Society for Range Management Chapline Research Award -2004
KRES Team Builders Award - 2011

RELEVANT RECENT PUBLICATIONS:

Hickman K.R., D.C. Hartnett, R.C. Cochran, and C.E. Owensby. 2004. Grazing management effects on plant species diversity in tallgrass prairie. J. Range Manage. 57: 58-65

Lai, Chun-Ta, Andrew J. Schauer, Clenton Owensby, Jay M. Ham and James R. Ehleringer. 2003. Isotopic air sampling in a tallgrass Prairie to partition net ecosystem CO2 exchange. J. Geophys. Res.,108(D18), 4566.

Williams, M.A., C.W. Rice, A. Omay, and C.E. Owensby. 2004. Carbon pools in a Tallgrass prairie soil under elevated carbon dioxide. Soil Sci. Soc. Amer. 68:148-153.

Gilmanov, T.G., Demment, M.W., Wylie, B.K., Laca, E.A., Akshalov, K., Baldocchi, D.D., Belelli, L., Bradford, J.A., Coulter, R.L., Dugas, W.A., Emmerich, W.E., Flanagan, L.B., Frank, A.B., Haferkamp, M.R., Johnson, D.A., Meyers, T.P., Morgan, J.A., Nasyrov, M., Owensby, C.E., Pekour, M.S., Pilegaard, K., Saliendra, N.Z., Sanz, M.J., Sims, P.L., Soussana, J.F., Tieszen, L.L., Verma, S.B. 2005. Quantification of CO_2 exchange in grassland ecosystems of the world using tower measurements, modeling and remote sensing. In: Proceedings of the 20th International Grassland Congress. June 26 - July 1, 2005, University College, Dublin Ireland. p. 78.

Lai, C., W. Riley, C. Owensby, J. Ham, A. Schauer, and J. R. Ehleringer (2006), Seasonal and interannual variations of carbon and oxygen isotopes of respired CO_2 in a tallgrass prairie: Measurements and modeling results from 3 years with contrasting water availability, J. Geophys. Res., 111, D08S06, doi:10.1029/2005JD006436.

Owensby, Clenton E., Jay M. Ham, and Lisa M. Auen. 2006. Fluxes of CO_2 from grazed and ungrazed tallgrass prairie. Rangeland Ecology and Management 59:111-127.

Jastrow, Julie D., R. Michael Miller, Roser Matamala, Richard J. Norby, Thomas W. Boutton, Charles W. Rice, Clenton E. Owensby. 2005. Elevated atmospheric CO_2 increases soil carbon. Global Change Biology 11:2057-2064.

Williams, M.A., C. W. Rice, and C. Owensby. 2006. Natural 15N abundances in a tallgrass prairie ecosystem exposed to 8-y of elevated atmospheric CO2. Soil Biology and Biochemistry 38:409-412.

Lai, Chun-Ta, Andrew J. Schauer, Clenton Owensby, Jay M. Ham, Brent Helliker, Pieter P. Tans, Ken Masarie, James R. Ehleringer 2006. Regional CO_2 fluxes inferred from mixing ratio measurements: estimates from flasked air samples in central Kansas, USA. Tellus 58B:523-536.

Owensby, C.E., L.M. Auen, H.F. Berns, and K.C. Dhuyvetter. 2007. Grazing systems for yearling cattle on tallgrass prairie. Rangeland Ecology and Management 61:204-210.

Gilmanov,Tagir G. L. Aires, Z. Barcza, V. S. Baron, L. Belelli, J. Beringer, D. Billesbach, D. Bonal, J. Bradford, E. Ceschia, D. Cook, C. Corradi, A. Frank, D. Gianelle, C. Gimeno, T. Gruenwald, Haiqiang Guo, N. Hanan, L. Haszpra, J. Heilman, A. Jacobs, M. B. Jones, D. A. Johnson, G. Kiely,2 Shenggong Li, V. Magliulo, E. Moors, Z. Nagy, M. Nasyrov, C. Owensby, K. Pinter, C. Pio, M. Reichstein, M. J. Sanz, R. Scott, J. F. Soussana, P. C. Stoy, T. Svejcar, Z. Tuba, and Guangsheng Zhou. 2010. Productivity, respiration, and light-response parameters of world grassland and agroecosystems Derived From Flux-Tower Measurements 2010. Rangeland Ecol Manage 63:16–39

Brunsell, N.A., J.M. Ham, and C.E. Owensby. 2008. Assessing the multi-resolution information content of remotely sensed variables and elevation for evapotranspiration in a tallgrass prairie environment. Remote Sensing and the Environment 112:2977-2987.

Xuerui Dang, Chun-Ta Lai, David Y. Hollinger, Andrew J. Schauer, Jingfeng Xiao, J. William Munger, Clenton Owensby, and James R. Ehleringer. 2011. Combining tower mixing ratio and community model data to estimate regional scale net ecosystem carbon exchange by boundary layer inversion over four flux towers in the United States. JOURNAL OF GEOPHYSICAL RESEARCH, VOL. 116, G03036, doi:10.1029/2010JG001554.

Owensby, Clenton E. and Lisa M. Auen. 2013. Two-Year Rotation of Intensive Early Stocking plus Late-Season Grazing and Season-Long Grazing. Rangeland Ecology & Management 66:700-705.