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CURRENT POSITION

Assistant Research Professor and Assistant Scientist, Kansas Applied Remote Sensing (KARS) Program, Kansas Biological Survey, University of Kansas.
Courtesy Assistant Professor, Department of Geography, University of Kansas.

PREVIOUS POSITIONS

1994-1998: Assistant Professor, Dept. of Geography, University of Oklahoma, Norman, OK.
1991-1994: NASA Global Change Research Fellow, KARS Program, University of Kansas.
1991-1993: Graduate Research Assistant, KARS Program.
1988-1991: Graduate Teaching Assistant, Department of Geography, University of Kansas.
1987-1988: Research Assistant, Indiana State University Remote Sensing Laboratory (ISURSL).

EDUCATION

1994 PhD (Honors), University of Kansas (Geography).
Dissertation: *Modeling Coniferous Forest Succession in Yellowstone National Park Through Integration of Landsat Thematic Mapper and GIS Data.*
1988 M.A. Indiana State University (Physical Geography).
Thesis: *Postfire Vegetation Change Detection Using Landsat TM and MSS Data.*
1986 B.A. State University of New York at Geneseo, Physical Geography (minor in geology).

SPECIALIZATION

Research interests are focused on modeling landscape-scale vegetation patterns and processes using remote sensing and geographic information systems. Areas of specialization include remote sensing; geographic information systems; vegetation/plant geography; landscape ecology; image processing; spatial modeling.

FUNDED GRANTS AND CONTRACTS

2002-2005 Watershed classification system for tiered diagnosis of biological impairments: A scalable, Central Plains focus with national applicability. PIs Martinko, Thorp, Jakubauskas, Huggins, Whistler, Dobson, deNoyelles, Liechti, and Price. US Environmental Protection Agency, STAR Program. $ 1,149,266.

2001-2004 Linking remote sensing, land use, and carbon sequestration: Insights from leaf to landscape scale. National Aeronautics and Space Administration (NASA). Co-investigator with nine other University of Kansas scientists (K.P. Price, Lead PI). Jakubauskas element: $ 79,528; Total award $1,000,000.

2001-2002 Remote sensing of invasive aquatic plant obstruction in navigable waterways. TerraMetrics, Inc., Lawrence, Kansas. $72,466. (Passthrough funds from US Department of Transportation, Research and Special Programs Administration (Full project amount: $257,390). Co-PI: Frank deNoyelles.

2001-2004	HYSPIRE: Hyper-resolution Remote Sensing of Kansas Rural Environments. NASA/Kansas EPSCoR. $392,892 (KU portion) PI's: D. G. Goodin, J. Aber, D. Downing, J.A. Harrington, Jr., S. Hutchinson, M. Jakubauskas, F. Pavri, K. P. Price.
2000-2001	KU Access to Space Initiative. University of Kansas Research Development Fund. $108,224. PI's: Ewing, Prescott, Gogineni, Sorensen, Rich, Rake, Jakubauskas.
2000	Montane meadow mapping using satellite imagery. Iowa State University (passthrough funds from The Nature Conservancy). $1000.
1999-2002	Remote sensing-based geostatistical modeling for coniferous forest inventory and characterization. National Aeronautics and Space Administration (NASA). $560,000. CoPI's K. Price, E. Martinko, University of Kansas.
1999-2002	The Great Plains Regional Earth Science Applications Center (GP-RESAC): A Consortium to transfer remote sensing products and technology to support the Great Plains agroecosystem. National Aeronautics and Space Administration (NASA). $2,173,055. PI: E. Martinko, Co-PIs K. Price, S. Egbert, M. Jakubauskas, J. Whistler, J. Stiles.
1998-2001	Using satellite-derived landuse data to improve meso- and storm-scale numerical weather models. National Science Foundation. $674,613. Co-PI: D. Stensrud, V. Wong, C. Hatlelid (University of Oklahoma, J. Merchant (University of Nebraska-Lincoln).
1997-2001	Interaction between land cover/land use dynamics and climatological variability in the western Oklahoma/Kansas/Texas indicator region. Department of Energy-National Institutes for Global Environmental Change (NIGEC) -South Central Region. $196,149. Co-PI: D. Legates, University of Delaware.
1996-2000	Modeling spatial and temporal dynamics of montane meadows and biodiversity in the Greater Yellowstone Ecosystem. US Environmental Protection Agency, Ecological Assessment Program. Total KU 3-year: $ 232,400. Co-Investigator with D. Debinski (Iowa State University) and K. Kindscher (University of Kansas). Total grant: $ 709,641.00.
1996-1997	Modeling regional-scale vegetation dynamics through integration of mesonet and remotely sensed data. $ 243,000 (3 year total); Subproposal within research cluster *Research on the Fluxes of Water and Energy at the Land Surface* National Aeronautics and Space Administration/ Oklahoma EPSCoR. Co-Investigator with nine other scientists at University of Oklahoma. $ 3.0 million (3 year total).
1994-1998	Remote sensing intern program at the EOSAT Norman Ground Station. Space Imaging/EOSAT Corporation. $ 196,403.
1996	Predicting biodiversity in montane meadow communities of the Greater Yellowstone Ecosystem. University of Wyoming/National Park Service Research Center, Laramie, Wyoming. $ 4500. Co-Investigator with D. Debinski (Iowa State University) and K. Kindscher (University of Kansas).
1995	National Aeronautics and Space Administration. Environmental Remote Sensing, GIS, and the Oklahoma Mesonet. Co-Investigator with M. Morrissey, C. Duchon, M. Yuan, S. Stadler, D. Waits, and R. Elliot, $ 125,000.
1995	Satellite remote sensing of coniferous forest succession in the Greater Yellowstone Ecosystem. University of Oklahoma Research Council, $ 5,000.

1991-1994 Spectral-ecological modeling of forest successional dynamics using Landsat Thematic Mapper Data and geographic information systems. NASA Graduate Fellowship in Global Climate Change Research. $ 66,000.

1992 Spectral-ecological characterization and mapping of forest cover types in Yellowstone National Park, Wyoming. University of Wyoming-National Park Service Research Center. $ 4,000. Co-investigator with K. Price, University of Kansas.

PUBLICATIONS - Refereed:

Jakubauskas, M.E., D.R. Legates, and J. Kastens. 2002. Crop identification using harmonic analysis of time-series AVHRR NDVI data. *Computers and Electronics in Agriculture* 37(1-3):127-139.

Jakubauskas, M.E., Peterson, D.L., Kastens, J., and Legates, D.R. 2002. Time-series remote sensing of landscape-vegetation interactions in the Southern Great Plains. *Photogrammetric Engineering and Remote Sensing* 68(10:1021-1030.

Jakubauskas, M.E., Peterson, D.L., and D.R. Legates. 2002. Fourier decomposition of an AVHRR NDVI time series for seasonal and interannual land cover change detection. Pp. 387-394 in Bruzzone, L. and Smits, P. (eds). *Analysis of Multitemporal Remote Sensing Images*, Series in Remote Sensing Vol. 2. World Scientific Publishing, River Edge, N.J. 440 p.

Debinski, D.M., M.E. Jakubauskas, and K. Kindscher. 2002. Predicting habitat distribution and species occurrences in Grand Teton National Park. Pp 499-506 *in* Scott, J. M., P. J. Heglund, M. Morrison, M. Raphael, J. Haufler, B. Wall (eds). *Predicting Species Occurrences: Issues of Scale and Accuracy*. Island Press, Covello, CA. 840 p.

Jakubauskas, M.E., D.R. Legates, and J. Kastens. 2001. Harmonic analysis of time-series AVHRR NDVI data. *Photogrammetric Engineering and Remote Sensing* 67(4):461-470. **2002 Boeing Autometric Award for Best Paper in Image Analysis and Interpretation, American Society for Photogrammetry and Remote Sensing.**

Saveraid, E.H., D.M. Debinski, K. Kindscher, and M.E. Jakubauskas. 2001. A comparison of satellite data and landscape variables in predicting bird species occurrences in the Greater Yellowstone Ecosystem. *Landscape Ecology* 16(1):71-83.

Jakubauskas, M.E., Kindscher, K., and Debinski, D.M. 2001. Spectral and biophysical relationships of montane sagebrush communities in multitemporal SPOT XS data. *International Journal of Remote Sensing* 22(9):1767-1778.

Debinski, D.M., M.E. Jakubauskas, and K. Kindscher. 2000. Montane meadows as indicators of environmental change. *Environmental Monitoring and Assessment,* 64:213-225.

Jakubauskas, M.E., Kindscher, K., Fraser, A., Debinski, D.M, and Price, K.P. 2000. Close-range remote sensing of aquatic macrophyte vegetation cover. *International Journal of Remote Sensing,* 21(18):3533-3538.

Jakubauskas, M.E. and Price, K.P. 2000. Regression-based estimation of lodgepole pine forest age from Landsat Thematic Mapper Data. *Geocarto International* 15(1):1-6.

Debinski, D.M., Kindscher, K. and Jakubauskas, M.E. 1999. A remote sensing and GIS-based model of habitats and biodiversity in the Greater Yellowstone Ecosystem. *International Journal of Remote Sensing* 20(17):3281-3292.

Jakubauskas, M.E., Kindscher, K., and Debinski, D.M. 1998. Multitemporal characterization and mapping of montane sagebrush communities using Indian IRS LISS-II imagery. *Geocarto International* 13(4):65-74.

Kindscher, K., Fraser, A., Jakubauskas, M.E., and Debinski, D.M. 1998. Identifying wetland meadows in Grand Teton National Park using remote sensing and average wetland values. *Wetlands Ecology and Management* 5:265-273.

Price, K.P., and Jakubauskas, M.E. 1998. Spectral retrogression and insect damage in lodgepole pine forests. *International Journal of Remote Sensing* 19(8):1627-1632.

Jakubauskas, M.E. 1997. Effects of forest regeneration on texture in Landsat Thematic Mapper imagery. *Canadian Journal of Remote Sensing* 23(3):251-257

Jakubauskas, M.E. and Price, K.P. 1997. Empirical relationships between biotic and spectral factors of Yellowstone lodgepole pine forests. *Photogrammetric Engineering and Remote Sensing* 63(12):1375-1381

Jakubauskas, M.E. 1996. Thematic Mapper characterization of lodgepole pine seral stages in Yellowstone National Park, USA. *Remote Sensing of Environment*, 56:118-132.

Jakubauskas, M.E. 1996. Canonical correlation analysis of coniferous forest spectral and biotic relationships. *International Journal of Remote Sensing*, 17(12):2323-2332.

Jakubauskas, M.E., Whistler, J.W., Dillworth, M.E., and Martinko, E.A. 1992. Classifying remotely sensed data for use in an agricultural nonpoint source pollution model. *Journal of Soil and Water Conservation* 47(2):179-183.

Jakubauskas, M.E., Lulla, K., and Mausel, P.W. 1990. Assessment of vegetation change in a fire-altered forest landscape. *Photogrammetric Engineering and Remote Sensing* 56(3):371-377.

PUBLICATIONS - Refereed (In review or in preparation):

Kastens, J.H., Jakubauskas, M.E., and Lerner, D.E. Using harmonic analysis to decouple annual and non-annual information in AVHRR NDVI time series. In review, *IEEE Transactions on Geoscience and Remote Sensing.*

Shaughnessy, M.J., Jakubauskas, M.E., and Cifelli, R.L. Using remotely sensed data to model patterns in carnivore occurrence in the Oklahoma Panhandle. *Journal of Mammalogy.*

Moskal, L.M., Jakubauskas, M.E., McCulley, H, Price, K., and Martinko, E.A. Remote sensing-based geostatistical estimation of leaf area index (LAI) in the Yellowstone coniferous forest. In preparation for the *Canadian Journal of Remote Sensing*.

PUBLICATIONS - Proceedings:

M.D. Dunbar, L.M. Moskal, M.E. Jakubauskas, J.E. Dobson, E.A. Martinko Computer visualization of forest cover change: Human impacts in northeastern Kansas and natural disturbance in Yellowstone National Park. Submitted to the 2003 ASPRS Annual Meeting, Anchorage, AK.

L. M. Moskal, M. J. Jakubauskas, K. P. Price and E. A. Martinko. Remote sensing-based geostatistical estimation of leaf area index (LAI) in the Yellowstone coniferous forest. Submitted to the 2003 ASPRS Annual Meeting, Anchorage, AK.

Jakubauskas, Peterson, D., Campbell, S.W., Campbell, S.D., Penny, D., and deNoyelles, F. 2002. Remote sensing of invasive aquatic plant obstruction in navigable waterways. *2002 ASPRS-ACSM Annual Conference*, April 22-26, 2002.

Moskal, L.M., Jakubauskas, M. E., Price, K. P., and E. A. Martinko, 2002. High-resolution digital photography for forest characterization in the Central Plateau of the Yellowstone National Park. *ASPRS 2002 Annual Conference*, Washington, D.C., April 22-26, 2002.

Peterson, D. L., Jakubauskas, M.E., Kindscher, K., and Debinski, D. 2001. Hyperspectral remote sensing of nonforested montane vegetation communities. *The 3rd International Forestry and Agriculture Remote Sensing Conference and Exhibition*, Denver, November 2001.

Moskal, L.M. , K. Price, M. E. Jakubauskas and E. Martinko. 2001. Comparison of hyperspectral AVIRIS and Landsat TM imagery for estimating burn site pine seedling regeneration densities in the Central Plateau of Yellowstone National Park. *The 3rd International Forestry and Agriculture Remote Sensing Conference and Exhibition*, Denver, November 2001.

Moskal, L. M. and M. E. Jakubauskas. 2001. Discriminating forest stand age classes using 2nd order image texture in the Central Plateau of Yellowstone National Park. *The 3rd International Forestry and Agriculture Remote Sensing Conference and Exhibition*, Denver, November 2001.

Jakubauskas, M.E., Peterson, D.L., and D.R. Legates. 2001. Fourier decomposition of an AVHRR NDVI time series for seasonal and interannual land cover change detection. Proceedings of the *First International Workshop on the Analysis of Multitemporal Remotely Sensed Data*, University of Trento, Trento, Italy, September 14-15, 2001.

Moskal, L.M., M.E. Houts, M.E. Jakubauskas, K. Price and E. Martinko. 2001. Multispectral high-resolution digital photography for forest characterization in the Central Plateau of the Yellowstone National Park. *The 3rd International Forestry and Agriculture Remote Sensing Conference and Exhibition*, Denver, November 2001.

Jakubauskas, M. E., E. Martinko, K. Price and L. M. Moskal. 2001. Regional forest inventory by geostatistical integration of satellite imagery and field sampled data. *American Society of Remote Sensing and Photogrammetry, Annual Conference*, St. Louis, April 2001.

Jaros-Su, J. C., D.M. Debinski, M.E., Jakubauskas, and K. Kindscher. 2000. Vegetation map class as a surrogate for community position: A test at three scales. S*ociety for Conservation Meeting*, Missoula, MT, June 9-12.

Jakubauskas, M.E., and D.R. Legates. 2000. Harmonic analysis of time-series AVHRR NDVI data for characterizing US Great Plains land use/land cover. *Proceedings of the XIXth International Society for Photogrammetry and Remote Sensing Congress*, Amsterdam, The Netherlands, July 18-23, 2000, p. 384-389.

Blodgett, C.F., Jakubauskas, M.E., Price, K.P., and Martinko, E.A. 2000. Remote sensing-based geostatistical modeling of forest canopy structure. *2000 American Society for Photogrammetry and Remote Sensing (ASPRS) Annual Meeting Proceedings*.

Peterson, D., Jakubauskas, M.E., and D.R. Legates. 2000. Time series remote sensing of landscape variability in the Southern Great Plains indicator region. *2000 American Society for Photogrammetry and Remote Sensing (ASPRS) Annual Meeting Proceedings*

Jakubauskas, M.E., D.R. Legates, and J. Kastens. 2000. Crop identification using harmonic analysis of time-series AVHRR NDVI data. *ERIM Second International Conference on Geospatial Information in Agriculture and Forestry*, January 10-12, 2000, Lake Buena Vista, FL, Vol. II, pp. 9-16.

Legates, D.R., M.E. Jakubauskas, and R. Ayala. 1999. Interactions Between Climate Variability and Land Cover/Land Use Dynamics in Western Oklahoma/Kansas/Texas. *Proceedings, Conference on Potential Consequences of Climate Variability and Change to Water Resources of the United States*, American Water Resources Association, Atlanta, GA, 297–300.

Jakubauskas, M.E. 1997. Phenological dynamics of sagebrush communities in multitemporal IRS satellite imagery. *1997 American Society for Photogrammetry and Remote Sensing (ASPRS) Annual Meeting Proceedings*, Seattle, WA, Volume III, pp. 400-404.

Jakubauskas, M.E., Debinski, D., and Kindscher, K. 1996. Integration of multispectral and ecological data for characterizing montane meadow communities in the Greater Yellowstone Ecosystem. *Proceedings of the International Geoscience and Remote Sensing Symposium (IGARSS) 1996*, Lincoln, NE.

Kuhnert, N., and Jakubauskas, M.E. 1996. Evaluation of least tern habitat using Landsat-derived data. *1996 American Society for Photogrammetry and Remote Sensing (ASPRS) Annual Meeting Proceedings*, Baltimore, Maryland, Volume II, pp. 272-278.

Mahlke, J., and Jakubauskas, M.E. 1996. A multitemporal approach to characterizing Oklahoma reservoir wetlands. *1996 American Society for Photogrammetry and Remote Sensing (ASPRS) Annual Meeting Proceedings*, Baltimore, Maryland, Volume I, pp. 238-249.

Jakubauskas, M.E., and Price, K.P. 1995. The Successional Tasseled Cap: A graphic description of the spectral-temporal development of a coniferous forest. *Proceedings of the 17th Canadian Symposium on Remote Sensing*, Saskatoon, Saskachewan, Canada. Canadian Remote Sensing Society, Ottawa, Canada. Pp. 602-608.

Jakubauskas, M.E., 1995. Image texture analysis of coniferous forest successional stages. *Proceedings of the 1995 ASPRS-ACSM Annual Meeting*, Charlotte, NC, pp. 272-280.

Whistler, J.L., Egbert, S.L., Jakubauskas, M.E., Baumgartner, D.W., Lee, R. 1995. The Kansas State Land Cover Mapping Project: Regional scale land use/land cover mapping using Landsat Thematic Mapper data. *Proceedings of the 1995 ASPRS-ACSM Annual Meeting*, Charlotte, North Carolina, pp. 773-785.

Jakubauskas, M.E., and Price, K.P. 1994. Landsat Thematic Mapper characterization of coniferous forest succession. *Proceedings of the 1994 ASPRS-ACSM Annual Meeting*, Reno, Nevada, pp. 256-267.

Jakubauskas, M. E. 1992. Modeling endangered bird species habitat using remote sensing and geographic informations systems. *Proceedings of the 1992 ASPRS-ACSM Annual Meeting*, Albuquerque, New Mexico, pp. 157-166.

Jakubauskas, M.E., Whistler, J.W., and Dillworth, M.E. 1990. Derivation of nonpoint source pollution model inputs from remotely sensed data. *Proceedings of the 1990 ASPRS/ACSM Annual Meeting*, Denver, Colorado, pp. 44-53.

Jakubauskas, M.E. 1989. Utilizing a geographic information system for vegetation change detection. *Proceedings of the 1989 ASPRS/ACSM Annual Meeting*, Baltimore, Maryland.

PUBLICATIONS - Magazine Articles, Book Chapters, and Other Non-Refereed:

Jakubauskas, Peterson, D., Campbell, S.W., Campbell, S.D., Penny, D., and deNoyelles, F. 2002. Assessing aquatic plant infestations in navigable waterways in Rio Grande River, Texas. Pp. 62-63 in *Achievements of the DOT-NASA Joint Program on Remote Sensing and Spatial Information Technologies*. US Department of Transportation, Washington, DC. 80 p.

Martinko, E.A., Price, K.P., Egbert, S.L., Whistler, J.L., Jakubauskas, M.E., and Crooks, T.J. 2000. Building on three decades of remote sensing and decision support: The NASA Great Plains RESAC and the Kansas Applied Remote Sensing (KARS) Program. *Photogrammetric Engineering and Remote Sensing* 66(10).

Debinski, D., Jakubauskas, M., and Kindscher, K. 1997. Assessing biodiversity in the Greater Yellowstone Ecosystem. *GeoInfoSystems*, July 1997, pp. 42-45.

Whistler, J.L., Jakubauskas, M.E., Egbert, S.E., Martinko, E.A., Baumgartner, D., Lee, R-Y. 1996. Development of the Kansas digital land use/land cover map from satellite multispectral imagery,

in *Raster Imagery in Geographic Information Systems*, edited by S. Morain and Shirley Lopez Baros, pp. 328-334. Onward Press.

PUBLICATIONS - Technical Reports

Blodgett, C.F., and Jakubauskas, M.E. 1997. *Remote sensing of coniferous forest structure in Grand Teton National Park.* Feature report in University of Wyoming/National Park Service Research Center 19th Annual Report, University of Wyoming, Laramie, WY. Pp. 3-8.

Blodgett, C.F., and Jakubauskas, M.E. 1996. *A preliminary assessment of forest canopy structure in Grand Teton National Park.* University of Wyoming/National Park Service Research Center 18th Annual Report, University of Wyoming, Laramie, WY. Pp. 37-41.

Jakubauskas, M.E. 1994. *Modeling Coniferous Forest Succession in Yellowstone National Park Through Integration of Landsat Thematic Mapper and GIS Data*. Final Report to the National Aeronautics and Space Administration (NASA), Grant NGT-30062. 225 p.

Jakubauskas, M.E., and Price, K.P. 1993. *Spectral-ecological characterization and mapping of forest cover types in Yellowstone National Park, Wyoming*. University of Wyoming-National Park Service Research Center 1992 Annual Report, pp. 184-187

Whistler, J.W., Jakubauskas, M., Dillworth, M.E., and Martinko, E.A. 1989. *Utilization of remote sensing data for input to the Agricultural Nonpoint Source Pollution (AGNPS) Model*. Final Report to the United States Environmental Protection Agency, Office of Integrated Environmental Analysis, Region VII, Kansas City, MO.

PUBLICATIONS - Abstracts

M.D. Dunbar, M.E. Jakubauskas, J.E. Dobson, E.A. Martinko. Quantifying, assessing and visualizing 60 years of forest cover change in northeastern Kansas. 2003 Association of American Geographers Annual Meeting, New Orleans, LA.

Moskal, L.M., M. D. Dunbar, M. E. Jakubauskas. 2002. Application of geostatistical models in the visualization of coniferous forest structure. *Eighth Yellowstone Interagency Science Conference*, Mammoth, Wyoming, September 11, 2002.

Moskal, L.M., M. D. Dunbar, M. E. Jakubauskas, J. E. Dobson, K. P. Price and E. A. Martinko, 2002. Visualizing the forest: a forest inventory characterization in the Yellowstone National Park based on geostatistical models. *EnviroMount Conference on Geographic Information Systems and Remote Sensing in Mountain Environment Research*, Zakopane, Poland, September 2002.

Moskal, L.M., M. D. Dunbar, M. E. Jakubauskas, J. E. Dobson, K. P. Price and E. A. Martinko, 2002. Geostatistical forest inventory characterization in Yellowstone National Park based on remotely sensed imagery. *EnviroMount Conference on Geographic Information Systems and Remote Sensing in Mountain Environment Research*, Zakopane, Poland, September 2002.

Dunbar, M. D., L. M. Moskal, M. E. Jakubauskas, J. E. Dobson, K. P. Price and E. A. Martinko, 2002. Forest inventory visualization in Yellowstone National Park based on remotely sensed imagery. *EnviroMount Conference on Geographic Information Systems and Remote Sensing in Mountain Environment Research*, Zakopane, Poland, September 2002.

Jakubauskas, Peterson, D., Campbell, S.W., Campbell, S.D., and Penny, D. 2002. Invasive aquatic plant mapping using airborne and satellite remotely sensed imagery: An evaluation and comparison of methods. *42nd Annual Meeting, Aquatic Plant Management Society,*, July 20-23, Keystone, Colorado.

Debinski, D., Saveraid, E., Jakubauskas, M.E., and Kindscher, K. 2002. How many habitats does a landscape contain? A cross-taxonomic perspective. *Abstracts, 2002 International Association of Landscape Ecologists* Annual Meeting, Lincoln, NE.

Dunbar, M., Moskal, L.M., Ramspott, M., Houts, M., Price, K., Jakubauskas, M., Martinko, E.A. 2002. High resolution digital multispectral data acquisition system for rangeland and forestry applications. *Abstracts, 2002 Kansas Academy of Science Annual Meeting, Hays, KS.*

Moskal, L.M. and M.E. Jakubauskas, 2001, Discriminating forest stand age classes using 2nd order image texture in the Central Plateau of Yellowstone National Park. *Kansas Academy of Science Annual Meeting*, Lawrence, April 2001.

Moskal, L.M., M. E. Jakubauskas, K. Price and E. Martinko. 2001. Comparing kriging to co-kriging geostatistical methods for estimating forest inventory attributes in the Central Plateau of Yellowstone National Park. *Kansas Academy of Science Annual Meeting*, Lawrence, April 2001.

Jakubauskas, M.E. The Dormant Dust Bowl: Satellite time series analysis of landscape vulnerability in the Southern Great Plains. *Kansas Academy of Science Annual Meeting*, Lawrence, April 2001.

Martinko, E.A., Price, K.P., Egbert, S.L., Whistler, J.L., Jakubauskas, M.E., and Crooks, T.J. 2001. The NASA Great Plains RESAC: Developing remote sensing applications on a foundation of fundamental research. *2001 ASPRS Annual Meeting, St. Louis, MO.*

Jakubauskas, M.E., Martinko, E.A., Price, K.P., and Moskal, L.M. 2001. Regional forest inventory by geostatistical integration of satellite imagery and field-sampled data. *2001 ASPRS Annual Meeting, St. Louis, MO.*

Jakubauskas, M.E., Price, K.P., Martinko, E.A., and Moskal, L.M. 2001. Geospatial and aspatial approaches to modeling and mapping coniferous forest parameters from Landsat data. Abstracts, *2001 Association of American Geographers Annual Meeting*, New York, New York.

Moskal, L.M., Jakubauskas, M.E., Price, K.P., and Martinko, E.A. 2001. Applying image texture to geostatistically estimate forest inventory attributes in the Greater Yellowstone Area. Abstracts, *2001 Association of American Geographers Annual Meeting,* New York, NY.

Jaros-Su, J.C., D. M. Debinski, M. E. Jakubauskas, and K. Kindscher. 2000. Vegetation map class as a surrogate for community composition: A test at 3 scales. *Society for Conservation Biology Annual Meeting*, Missoula, Montana, June 9-12, 2000.

Jakubauskas, M.E., D.R. Legates, and J. Kastens. 2000. Harmonic analysis of time-series AVHRR NDVI data. *Association of American Geographers Annual Meeting,* Pittsburgh, PA.

Blodgett, C.F., Lauver, C., Price, K.P., Jakubauskas, M.E., and Martinko, E.A. Spatially-explicit geostatistical modeling of forest canopy structure using satellite imagery. *Association of American Geographers Annual Meeting,* Pittsburgh, PA.

Blodgett, C.F., M.E. Jakubauskas, K.P. Price, and E.A. Martinko. 2000. Remote sensing-based geostatistical modeling of Yellowstone's forests. *Kansas Academy of Sciences Annual Meeting, April 1, 2000, Hutchinson, KS.*

Martinko, E.A., K.P. Price, S.L. Egbert, M.E. Jakubauskas, and J.L. Whistler. Development of the NASA Great Plains Regional Earth Science Applications Center (GP-RESAC). *Kansas Academy of Sciences Annual Meeting, April 1, 2000, Hutchinson, KS.*

Jakubauskas, M.E. 2000. Periodicity, chaos, and landscape stability: New directions in the analysis of time-series remotely sensed data. *Kansas Academy of Sciences Annual Meeting, April 1, 2000, Hutchinson, KS.*

Price, K.P., E.A. Martinko, S.L Egbert, M.E. Jakubauskas, J.L. Whistler, J.M. Stiles, and D.L.A. Kastens. 2000. Multitemporal imagery to assess vegetation condition and trend throughout the

Great Plains. *53rd Annual Meeting*, Society of Range Management , Boise, Idaho. February 13-18, 2000, p. 14.

Jakubauskas, M.E., C.F. Blodgett, K.P. Price, and E.A. Martinko. 1999. Remote sensing-based geostatistical modeling for coniferous forest inventory and characterization. *National Remote Sensing Applications Conference And Workshop*, November 15-17, 1999 Auburn University Hotel and Conference Center Auburn, Alabama.

Martinko, E.A., K.P. Price, S.L. Egbert, M.E. Jakubauskas, and J.L. Whistler. 1999. Development of the NASA Great Plains Regional Earth Science Applications Center. *National Remote Sensing Applications Conference And Workshop*, November 15-17, 1999 Auburn University Hotel and Conference Center Auburn, Alabama.

Borgognone, M.G., D.M. Debinski, M.E. Jakubauskas, and K. Kindscher. 1999. Use of CART and canonical discriminant analysis to select variables and classify cases with few observations and many variables. *Proceedings of the Fourth Conference of Latin-American Statistical Societies*, Mendoza, Argentina, July 26-30, 1999.

Price, K.P., E.A. Martinko, S.L. Egbert, M.E. Jakubauskas, J.L. Whistler, and M.T. Seastead. 1999. Great Plains Regional Earth Science Application Center (GP RESAC): A consortium to transfer remote sensing products and technology to support the Great Plains agroecosystem. NASA EOS Investigator Working Group, Vail, Colorado. June 15-17, 1999.

Debinski, D.M., M. E. Jakubauskas, and K. Kindscher. 1999. Modeling spatial and temporal dynamics of montane meadows and biodiversity in the Greater Yellowstone Ecosystem. US EPA Ecological Indicators Meeting, San Francisco, CA, April 6-9.

Jakubauskas, M.E., Debinski, D.M., and K. Kindscher. 1999. Montane meadows as indicators of environmental change. US EPA Ecological Indicators Meeting, San Francisco, CA, April 6-9, 1999.

Blodgett, C.F., Jakubauskas, M.E., Debinski, D. and Kindscher, K. 1999. Relationships between montane meadow species diversity and spatial variability in multitemporal SPOT data. *Association of American Geographers Annual Meeting 1999,* Honolulu, HI.

Jakubauskas, M.E. and Legates, D.R. 1999. Time series remote sensing of landscape variability in the Southern Great Plains indicator region. *Association of American Geographers Annual Meeting 1999,* Honolulu, HI.

Jakubauskas, M., Kindscher, K., Fraser, A., Debinski, D., and Price, K. 1998. Hyperspectral remote sensing of spatterdock (*Nuphar polysepalum*) cover in Grand Teton National Park, Wyoming. *Abstracts, 1998 Great Plains -Rocky Mountain Regional Meeting, Association of American Geographers, September 25-26, 1998,* Lawrence, Kansas.

Debinski, D., Saveraid, E., Jakubauskas, M.E., and Kindscher, K. 1998. Spillover effects in butterfly communities relative to landscape structure. *Abstracts, 1998 Ecological Society of America Annual Meeting,* Baltimore, MD.

Jakubauskas, M.E., Kindscher, K., and Debinski, D. 1998. Relationships between biophysical factors and spectral reflectance patterns of Greater Yellowstone montane meadows. *Association of American Geographers Annual Meeting*, Boston, MA.

Blodgett, C.B., Jakubauskas, M.E., Lauver, C.L., Price, K.P., and Bian, L. 1998. Geostatistical modeling of forest canopy structure, Grand Teton National Park. *Association of American Geographers Annual Meeting*, Boston, MA.

Kindscher, K., Fraser, A., Jakubauskas, M., and Debinski, D. 1997. Vegetation differences in remotely sensed wetlands of Grand Teton National Park. *Society of Wetlands Scientists*, 1997 Conference, Bozeman, MT.

Jakubauskas, M.E. 1997. Phenological dynamics of sagebrush communities in multitemporal IRS satellite imagery. *Association of American Geographers Annual Meeting*, Ft. Worth, TX.

Jakubauskas, M.E. and Price, K.P. 1996. Mapping lodgepole pine successional stages in Yellowstone National Park using Landsat Thematic Mapper Data. *19th Applied Geography Conference*, Kansas City, MO.

Jakubauskas, M.E., and Weed, R. 1996. The IRS Tasseled Cap: Derivation and Comparison with the MSS and TM Tassled Caps. *Association of American Geographers Annual Meeting*, Charlotte, N.C.

Jakubauskas, M.E., and Debinski, D. 1995. An integrated spectral and ecological approach to mapping forest and meadow communities of the Greater Yellowstone Ecosystem. *Association of American Geographers Annual Meeting*, Chicago, Illinois.

Egbert, S.E., Whistler, J.W., Jakubauskas, M.E., Lee, R.Y., and Baumgartner, D.W. 1992. Perspectives on developing a statewide land cover database for Kansas. *Association of American Geographers Annual Meeting*, Chicago, Illinois.

Jakubauskas, M.E., and Price, K.P. 1994. Landsat Thematic Mapper characterization of coniferous forest succession. *Association of American Geographers Annual Meeting*, San Francisco, California.

Jakubauskas, M.E., and Price, K.P. 1993. Spectral-ecological characterization and mapping of forest cover types in Yellowstone National Park, Wyoming. *Proceedings of the Second Biennial Scientific Conference on the Greater Yellowstone Ecosystem*, Mammoth, Wyoming.

Whistler, J.W., Jakubauskas, M.E., Egbert, S.E., Baumgartner, D.W, and Lee, R.Y. 1992. All of Kansas: Perspectives on developing a statewide land cover database from satellite imagery. *1992 MidAmerica GIS Symposium*, Overland Park, Kansas.

Jakubauskas, M.E. 1992. Automated mapping of avian habitat in a heterogeneous landscape: A remote sensing/GIS approach. *Kansas Academy of Science Annual Meeting*, Hutchinson, Kansas.

Jakubauskas, M.E. 1992. Catastrophic disturbance and landscape pattern: The influence of fire intensity on forest pattern. Special Session on Remote Sensing and Landscape Ecology, *Association of American Geographers Annual Meeting*, San Diego, California.

Jakubauskas, M.E. 1990. Thematic Mapper assessment of Kirtland Warbler habitat. *Association of American Geographers Annual Meeting*, Toronto, Canada.

Jakubauskas, M.E. 1988. Monitoring postfire vegetation change using Landsat MSS and TM data. *Association of American Geographers Annual Meeting*, Phoenix, Arizona.

HONORS AND AWARDS

2002 Boeing Autometric Award for Best Paper in Image Analysis and Interpretation, American Society for Photogrammetry and Remote Sensing (For Jakubauskas, M.E., D.R. Legates, and J. Kastens. 2001. Harmonic analysis of time-series AVHRR NDVI data. *Photogrammetric Engineering and Remote Sensing* 67(4):461-470).

Junior Faculty Research Award, OU Research Council, 1995

NASA Global Climate Change Research Fellowship, 1991-1994

Research Assistantship, Kansas Applied Remote Sensing Program, University of Kansas

Teaching Assistantship, Department of Geography, University of Kansas

Teaching Assistantship, Department of Geography, Indiana State University.
Eugene Dehner Award, 1992 Kansas Academy of Science.
New York State Regents Scholarship, 1982-1986

COURSES TAUGHT

University of Kansas, 2000-2002: Geog. 358, Intro. to Geographic Information Systems
Geog. 758, Advanced Geographic Information Systems
Geog. 536, Landscape Ecology
Geog. 980, Seminar in Professional Development
Geog. 980, Seminar in Hypertemporal Image Analysis

University of Oklahoma, 1994-1998: Geog. 4933, Remote Sensing I.
Geog. 5253, Remote Sensing II, Digital Image Analysis.
Geog. 4453/5453, Geographic Information Systems.
Geog. 4283/5283, Biogeography.
Geog. 6210, Advanced Field Techniques
Geog. 5990, Seminar in Landscape Ecology
Geog. 6272, Introduction to Graduate Studies

University of Kansas, 1988-1991: Geog. 758, Geographic Information Systems Lab.
Geog. 726, Remote Sensing II, Image Processing Lab.
Geog. 105, Introductory Physical Geography Lab.

INVITED PRESENTATIONS

Department of Geography, Mansfield University, PA; Department of Geography and Geology, Bloomsburg University, Bloomsburg, PA; Department of Geography, University of Delaware; University of Wyoming/National Park Service Research Station; Los Alamos National Laboratories, Environmental Sciences Division; New York Zoological Society, New York, New York; Kansas Association of Mappers; Department of Geography, University of Nebraska-Lincoln; Department of Geography, State University of New York at Geneseo; Department of Geography, University of Tennessee-Knoxville; Department of Geography, Pennsylvania State University; GIS Policy Board, State of Kansas.

PROFESSIONAL ORGANIZATIONS

American Society for Photogrammetry and Remote Sensing
International Association of Landscape Ecologists
Association of American Geographers
St. George Geographical Society

SERVICE - Professional:

Guest Editor, Special Issue on Geographic Remote Sensing, *Geocarto International*; Vice-Chair (2000-2002), Director (1998-2000), Program Chair (1997), Assistant Program Chair (1996) and Southwest Regional Councillor, Remote Sensing Specialty Group, Association of American Geographers; MidAmerica GIS Consortium Executive Council, 1995- ; SPOT Image Corporation Academic Advisory Council, 1994 - present; Remote Sensing Task Force, National Council for Geographic Education,

1994-1999; Manuscript reviewer for *Photogrammetric Engineering and Remote Sensing, Geocarto International, Ecological Applications, Arctic and Alpine Research, Vegetatio; Plant Ecology; Canadian Journal of Remote Sensing, International Journal of Remote Sensing, Remote Sensing of Environment ;* Organizer, Special Session on "Remote Sensing and Landscape Ecology", 1992 Association of American Geographers Annual Meeting, San Diego; Session Chair, Pecora 12 Symposium, August 1993, Sioux Falls, South Dakota; Planning Committee, 1992 and 1994 MidAmerica GIS Symposia (1991-1994).

GRADUATE STUDENTS:

University of Kansas: L. Monika Moskal (PhD), Dana Peterson (PhD), Matthew Dunbar (MA), Willem Helms (MA), David Guinotte (MA).

University of Oklahoma: Jessie Robinson (MA, 2002).