James C. Rattling Leaf, Sr.

Research Associate

Cooperative Institute for Research in Environmental Sciences

University of Colorado-Boulder

216 UCB Boulder, CO 80309-0216

Phone: (605)787-8445

Email: james.rattlingleaf@colorado.edu

Professional Preparation

1989 B.A. General Studies, Sinte Gleska University

Appointments

2019-Present, Vice-Chair, Rosebud Sioux Tribe Climate Crises Working Group

2019-Present, Co-Principal Investigator, North Central Climate Adaptation Science Center

2019-Present, Research Associate, CIRES, University of Colorado-Boulder

2010-2019, Coordinator, Climate Partnership, Great Plains Tribal Water Alliance

2009-Present Principal, Rattling Leaf Consulting, LLC, Black Hawk, SD

2008-2009 Visiting Collaborator, South Dakota School of Mines and Technology

2001-2008 Director, Geo-Spatial Applications Center, Sinte Gleska University

1999-2001 Planner, Sicangu Policy Institute, Sinte Gleska University

1998- 1999 Community Developer, Dakota Interactive Academic Link (DIAL), Dakota State University

Professional Societies

Sequoyah Fellow, American Indian Science and Engineering Society (AISES) American Meteorological Society Board of Women and Minorities Inter-Tribal Geographical Information Society (GIS) Council

Professional Part-Time Experience

Co-Founder, GEO Indigenous Alliance

Chair, ESA, Traditional Ecological Knowledge Section

Fellow, International Indigenous Resource Management Institute, Denver, CO

Fellow, Center for Capacity Building, University of Colorado-Boulder

Cultural Advisory Board Member, Deep Underground Science and Engineering Lab

Board of Directors, South Dakota National Science Foundation EpSCOR

Member, NASA Space Grant Consortium EpSCOR Technical Advisory Committee

Kellogg Fellow, Salzburg Seminar Session 394-Community Leadership and Policy Change

Morris K. Udall Fellow, Senator Thomas Daschle Office, Washington, DC

Board Member, Education Committee, American Geophysical Union, Washington, DC

Committee of Visitors, National Science Foundation, Lower Atmosphere Facilities, NCAR

Committee Member, National Academy of Sciences, NASA Assessment of Applied Sciences

Products

Research interests include: use of Earth Observation scientific information in Tribal policy decisions; institutional factors affecting the use of scientific information; adaptation to climate change; Tribal, local and state government; climate services; use of Tribal Knowledge

Publications

- Stiles, C., Umphlett, N., Rattling Leaf, J., Shulski, M., Kluck, D., Hayes, M. and McNutt C., "Improving Climate Resiliency in Tribal Communities: Partnering for Change in Missouri River Basin," American Water Resources Association, Volume 17, Number 4, (2015).
- Kellar, J., Howard, S., West, M., Cross, W., Medlin, D. and Rattling Leaf, J., "The Samurai Sword Project and Opportunities for Metallurgical Programs," MS&T 2009 Proceedings, Pittsburgh, PA, September 2009.
- West, M., Medlin, D., Kellar, J., Mitchell, D., Kellogg S. and Rattling Leaf, J. "Back in Black: Innovative Curricular, Outreach, and Recruiting Activities at the South Dakota School of Mines and Technology," 2009 MS&T Proceedings: Status of Metals Engineering Education in the United States.
- Elizabeth Mack, Helen Augare, Linda Different Cloud-Jones, Dominique Davíd, Helene Quiver Gaddie, Rose E. Honey, Angayuqaq O. Kawagley, Melissa Little Plume- Weatherwax, Lisa Lone Fight and Gene Meier, James Rattling Leaf, Sr. "Effective Practices for Creating Transformative Informal Science Education Programs grounded in Native Ways of Knowing," CULTURAL STUDIES OF SCIENCE EDUCATION, Volume 7, Number 1 (2012), 49-70.
- Susan M. Marcus, Robert W. Ridky, Eugene C. Napier, James Rattling Leaf, *Working with Native Americans and Alaska Natives: Examples from the U.S. Geological Survey*, GeoSciEd IV conference, Aboriginal Communities session, 2003
- Soizik Laguette, David Clay, Rick Lawrence, Cathy Maynard, American Society for Photogammetry and Remote Sensing Symposium; *Rapid Integration of Remote Sensing Data into In-Field Management Decision: From Acquisition to Use of Data*, 2000,
- S. Houser, V. Tellar, B. Gough, P. Spears, J. Goes In Center, J. Rattling Leaf; *Climate Change Impacts on United States: Potential Consequences of Climate Variability and Change -* U.S. Global Change Research Program. Potential Consequences of Climate Variability and Change for Native Peoples and Homelands, 2001,
- Laguette, S., Seielstad, G., Seelan, S, Wivell, C., Olsen, D., Lawrence, R., Nielsen, G., Rattling Leaf, J., Clay, D., Dalsted, K., and Welling, L., 2001, *Precision Farming Management via Information Dissemination*, IGARSS, Sydney, Australia, Vol. II, pp 837-839.
- Seielstad, G., Laguette, S., Seelan, S., Lawrence, R., Henry, M., Maynard, C., Dalsted, K., and Rattling Leaf, J., 2001, *Remote Sensing to Address the Needs of Local Communities: Applications of Remote Sensing to Precision Agriculture*, AGU spring meeting, Boston, MA.
- Seielstad, G., Laguette, S., Seelan, S., Lawrence, R., Henry, M., Maynard, C., Dalsted, K., and Rattling Leaf, J., 2001, *Applications of Remote Sensing to Precision Agriculture*, AGU spring meeting, Boston, MA.

Welling, L., Seielstad, G., Clay, D., Gessler, P., McClurg, P., Nielsen, G., Rattling Leaf, J., and Zimmerman, P., 2001, Northern Great Plains Regional Earth Science Applications Centers: Providing an Interface Between Science and Human Needs and Values, ADPRS, St. Louis, MO.

Ojima, D.S., J. Steiner, S. McNeely, K. Cozetto, A.N. Childress, A. Cole, J. Brown, G. Collins, L Ferris, B. Gough, J. Gross, J. Hestbeck, D. Kluck, R. McMullen, J. Rattling Leaf, M. Shafer, M. Schulski, J. Yarbrough, M. Drummond, J. Morgan, T. Howell, S. Markstrom, H. Lazrus, K. Averyt, S. Skagens, K. Kunkel, L. Stevens, S. Stevens, L. Romolo, A. Akyuz, T. Pathak, T. Beragntino, E. Wood, K. Miller, B. Gascoigne, S. Tellinghouse, V. Tidwell, C. Aldridge, M. Rose, L. Wellings, T. Brown, J. Ramirez, 2015: Great Plains Regional Technical Input Report, Washington DC: Island Press.

Reports

NOAA NIDIS Tribal Drought Engagement Strategy, 2020

Climate, Drought and Early Warning on Western Native Lands: James Rattling Leaf, Gary Collins, Michael Hayes, Margaret Hiza Redsteer, Dough Kluck, Roger S. Pulwarty, Daniel Wildcat