### SHAUNA B. BURNSILVER

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### **EDUCATION**

Colorado State University, Fort Collins, CO Colorado State University, Fort Collins, CO Scripps College, Claremont CA

Human Ecology	Ph.D.	2007
Resource Interpretation	M.S.	1997
International Relations	B.A.	1987

### ACADEMIC APPOINTMENTS Associate Professor, 2018 - Present Assistant Professor, 2011- 2018 School of Human Evolution and Social Change, Arizona State University Affiliations: Senior Sustainability Scientist, Julie Ann Wrigley Global Institute of Sustainability

Postdoctoral Research Scientist, 2008-2011 School of Natural Resources and Agricultural Sciences, University of Alaska Fairbanks

### **ACADEMIC DISTINCTIONS**

- 2019 Named as convener of Societal Structures Theme, Global Futures Laboratory, ASU
- 2019 Cross-Cutting Scholar Award, Knowledge Enterprise for Resilience, ASU
- 2017 SHESC Undergraduate Teaching Award
- 2012 Nominated for Zebulon Pearce Teaching Award, ASU.
- 2012 Ecological Society of America Sustainability Science Award. Annual award goes to a scholarly work making the greatest contribution to the emerging science of ecosystem and regional sustainability through the integration of ecological and social sciences. Awarded to team of collaborators on the Reid et. al. (2009) *PNAS* Paper.
- 2011 Department of the Interior, Partners in Conservation Award given to the "Subsistence Sharing Project" - University of Alaska. Annual award given in recognition of a collaborative social science effort on the North Slope of Alaska to advance scientific, institutional, and methodological progress in understanding and monitoring the sensitivity of Native subsistence activities to potential disruption by changing arctic conditions.
- 2008 Selected scholar for the Dissertations Initiative for the Advancement of Climate Change Research (DISCCRS IV). A National Science Foundation funded initiative. Saguaro Lake Ranch, AZ. September 2008.
- 2007 Recipient of the Lourdes Arizpe Award (Student Category). Award presented biennially through the Anthropology and Environment Section of the American Anthropological Association for outstanding achievement in the application of anthropology to environmental issues and discourse in international or domestic arenas across all ecological and policy applications.

### **RESEARCH GRANTS**

CO-PI S. BurnSilver, with PI A. York, CO-PIs M. Anderies and S. Pfirman. Track 1, NSF

External:

Navigating the New Arctic proposal "Arctic Robust Communities-Navigating Adaption to Variability (ARC-NAV)" [NSF Collaborative Proposal #1928235; funded amount: ~2.98 million + 750K logistics support].

- CO-PI. S. BurnSilver. Sivuqaq Sharing Project, Wildlife Conservation Society/Oak Foundation, \$250,000 grant. Consultant on research/Supervisory role of Post Doc, St. Lawrence Island, Alaska.
- PI. S. BurnSilver. University of Alaska Fairbanks Sub-Contract. National Science Foundation, Arctic Social Sciences: *Modeling harvesting behavior to understand adaptation*, *mitigation, and transformation in northern subsistence systems*. \$30,000. Collaboration with University of Alaska Fairbanks, University of Alaska Anchorage and Colorado State University. Project PIs: Branka Valcic and Gary Kofinas. Total Grant: \$316,779 [7/1/13-6/30/14].
- CO-PI. S. BurnSilver Hydrology, Ecology and Pastoralism, National Science Foundation, Coupled Natural and Human Systems Program, Mali, West Africa. \$121,973. Project PI: Niall Hanan. Total Grant: 1,300,000 [11/1/11-8/31/16 Extended due to coup d'etat in Mali].
- PI. S. BurnSilver. University of Alaska Fairbanks Sub-Contract. *The Study of Sharing Networks in Alaska*. \$50,583. Department of the Interior, Bureau of Ocean, Energy and Management (BOEM). Project PI: Gary Kofinas. Total Grant: \$783,000 [5/19/12-1/31/14].

## Internal ASU:

- CO-PI. S. BurnSilver. ASU Global Institute of Sustainability. Collaboration Laboratory (Co-Lab): A Solution Space for Development Thinking. Project PIs: Ed Hackett and Hallie Eakin. Internal Grant Walton Initiative NextGen Proposal, Internal Funding. Total Grant: \$348,00 [8/2013-7/2014].
- PI **S.B. BurnSilver**. Institute for Social Science Research Seed Grant. Workshop to support re-submission of Arctic Social Science proposal. \$4,500 [Applied and Secured 9/2016].

## PUBLICATIONS

### Books

Petrov, A.N., BurnSilver, S.B., Chapin F.S. III, Fondahl, G., Graybill, J., Keil, K., Nilsson, A.E., Riedlsperger, R. and P. Schweitzer (2018). "Arctic Sustainability Research: Past, Present and Future". Taylor and Francis.

Peer Reviewed Journal Articles:

\*Denotes Students

- 17. **BurnSilver, S.B.** and J. Magdanz (2019). Heterogeneity in mixed economies: Implications for sensitivity and adaptive capacity. *Journal of Hunter Gatherer Research*.
- 16. Baggio, J. A., BurnSilver, S. B., Arenas, A., Magdanz\*, J. S., Kofinas, G. P., & De Domenico, M. (2016). Multiplex social ecological network analysis reveals how social changes affect community robustness more than resource depletion. <u>Proceedings of the</u> <u>National Academy of Sciences</u>, 113(48), 13708-13713.

- Brinkman, T., W. Hansen\*, F.S. Chapin III, G. Kofinas, S. BurnSilver, and T.S. Rupp (2016). Arctic communities perceive climate impacts on access as a critical challenge to availability of subsistence resources. <u>Climatic Change</u> 139 (3):413-427.
- 14. Petrov, A., S.B. BurnSilver, F.S. Chapin III, G. Fondahl, J. Graybill, K. Keil, A. Nilsson, R. Riedlsperger\* and P. Schweitzer. Arctic sustainability research: toward a new agenda. <u>Polar Geography</u>. Aug:165-178. <u>http://www.tandfonline.com/doi/full/10.1080/1088937X.2016.1217095</u>

 BurnSilver, S. B., J. Magdanz\*, R. Stotts\*, M. Berman and G. Kofinas (2016). Are Mixed Economies Persistent or Transitional? Evidence using social networks from Arctic

- Alaska. <u>American Anthropologist. 118(1):121-129.</u>
  12. BurnSilver, S.B. (2016). Representing Wealth in a Changing Pastoral Economy: A comparison of traditional and new metrics in Maasailand, Kenya. Nomadic Peoples.
- 11. Galvin, K.A., Beeton, T.\*, Boone, R. and S. B. BurnSilver (2015). Health and Nutritional Status of Maasai Pastoralists under Change. <u>Human Ecology</u> (May) <u>http://link.springer.com/article/10.1007/s10745-015-9749-</u> x?wt\_mc=email.event.1.SEM.ArticleAuthorOnlineFirst
- 10. Risvoll, C.\*, G. Fedreheim, A. Sandberg and S. BurnSilver (2014). Does Pastoralists' Participation in the Management of National Parks in Northern Norway Contribute to Adaptive Governance?. <u>Ecology and Society</u> 19(2): 71. [online] URL: http://www.ecologyandsociety.org/vol19/iss2/art71/
- 9. Reinette Biggs, Maja Schlüter, Duan Biggs, Erin L. Bohensky, Shauna BurnSilver, Georgina Cundill, Vasilis Dakos, Tim M. Daw, Louisa S. Evans, Karen Kotschy, Anne Leitch, Chanda Meek, Allyson Quinlan, Ciara Raudsepp-Hearne, Martin D. Robards, Michael L. Schoon, Lisen Schultz, Paul C. West (2011). *Toward Principles for Enhancing the Resilience of Ecosystem Services*. <u>Annual Review of Environment and Resources</u>. <u>37:421-448.</u>
- Boone, R. B., K. A. Galvin, S. B. BurnSilver, P. K. Thornton, D. S. Ojima, and J.R. Jawson (2011). Using coupled simulation models to link pastoral decision making and ecosystem services. <u>Ecology and Society</u>, 16(2), 6.
- 7. Kofinas G.P., F.S. Chapin III, S.B. BurnSilver, K. Kielland, J. Schmidt and A. Springsteen (2010) Resilience in the face of Climate Change: Forests, Fire, Moose Hunting, and Subsistence in Interior Alaska. <u>Canadian Journal of Forest Research.</u>
- 6. Reid, R.S., D. Nkadienye, M. Y. Said, D. Kaelo, M. Neselle, O. Makui, L. Onetu, S. Kiruswa, N. Ole Kamuaro, P. Kristjanson, J. Ogutu, S.B. BurnSilver, M. J. Goldman, R. B. Boone, K. A. Galvin, N. M. Dickson, and W. C. Clark (2009). Knowledge Systems for Sustainable Development Special Feature Sackler Colloquium Evolution of models to support communities and policy action with science: Balancing pastoral livelihoods and wildlife conservation in Camsavannas of East Africa. <u>Proceedings of the National Academy of Sciences</u> (PNAS). November 3. www.pnas.org cgi doi 10.1073 pnas.0900313106
- Boone, R. B., S. B. BurnSilver, J. S. Worden, K. A. Galvin, and N.T. Hobbs (2008). Large-Scale Movements of Large Herbivores Livestock following changes in seasonal forage supply. <u>Resource Ecology</u>, 187-206.
- Thornton, P.K., R.B. Boone, K.A. Galvin, S.B. BurnSilver, M.M. Waithaka, J. Kuyiah, S. Karanja, E. González-Estrada and M. Herrero (2007). Coping strategies in livestock-

dependent households in East and southern Africa: a synthesis of four case studies. <u>Human Ecology</u>.

- Christensen L., S.B. BurnSilver and M. Coughenour. (2006). Integrated Assessment of the Dynamics, Stability and Resilience of Inner Mongolian Grazing Ecosystems. <u>Nomadic</u> <u>Peoples</u>. 9.1: 131-146.
- Thornton, P.K., S.B. BurnSilver, R.B. Boone, and K.A. Galvin. (2006). Modeling the impacts of group ranch subdivision on agro-pastoral households in Kajiado, Kenya. <u>Agricultural Systems</u>. 87:331-356.
- Boone, R.B., S.B. BurnSilver, P.K. Thornton, J.S. Worden, and K.A. Galvin. (2005). Quantifying declines in livestock due to land subdivision. <u>Rangeland Ecology & Management</u>. 58:523-532.

# Refereed Book Chapters:

- 11. Kofinas, G., S.B. BurnSilver and A. Petrov (*in Press*). Methodological Challenges and Innovations in Arctic Community Sustainability Research. *In*: Graybill, J. and A. Petrov. Arctic Sustainability, Key Methodologies and Knowledge Domains: A Synthesis of Knowledge. Routledge Press.
- BurnSilver, S.B., R. Boone, G. Kofinas, and T. Brinkman (2017). Tradeoffs in the mixed economies of village Alaska: Hunting, working and sharing in the context of change". M. Hegmon, ed. *In*: The Give and Take of Sustainability: Archaeological and Anthropological Perspectives. New Directions in Sustainability and Society Series. Cambridge University Press.
- 9. Berman, M., G. Kofinas and **BurnSilver, S.B.** (2016). Community scale Vulnerability In: Northern Sustainabilities. Editor: Fondahl, G. and G. Wilson. Springer Verlag.
- 8. Dakos, V., A. Quinlan, J. Baggio, E. Bennett, O. Bodin, and S.B. BurnSilver (2015). Connectivity. R. Biggs, M. Schlueter and M. Schoon *eds. In:* Principles for Enhancing the Resilience of Ecosystem Services. Cambridge: Cambridge University Press.
- 7. BurnSilver S.B. (2009). Pathways of Change and Continuity: Maasai Livelihoods in Amboseli, Kajiado District, Kenya. *In*: Changing Land use and Livelihoods in Tanzania and Kenya Maasailand. K. Homewood, P. Kristjanson, P. Trench and M. Radeny, eds. New York: Verlag Publishers. Pp 161-201.
- Serneels, S., M. Herrero, S.B. BurnSilver, P.C. Trench, K. Cochrane, K. Homewood, P. Kristjanson, F. Nelson, M. Radeny, M. Thompson, and M.Y. Said (2009). Methods in the Analysis of Maasai Livelihoods. *In*: Changing Land use and Livelihoods in Tanzania and Kenya Maasailand. K. Homewood, P. Kristjanson, P. Trench and M. Radeny, eds. New York: Verlag Publishers. Pp 43-62.
- 5. Galvin, K. A., R. B. Boone, S.B. BurnSilver, and P.K. Thornton (2008). Humans and wildlife as ecosystem components in integrated assessments. *In:* Wildlife and Society: The Science of Human Dimensions. Manfredo, M., Vaske, J., Brown, P., Decker, D. and E. Duke, eds. Washington, D.C.: Island Press. Pp 129-142.
- 4. BurnSilver, S.B. and J.S. Worden (2008). Processes of Fragmentation in the Amboseli Ecosystem. *In*: Fragmentation of Semi-Arid and Arid Landscapes: Consequences for Human and Natural Systems. K. Galvin, R. Reid, R. Behnke and T. Hobbs, eds. New York: Verlag Publishers. Pp 225-244.
- 3. Boone, R.B., **S.B. BurnSilver**, and R. Kruska. (2008). Comparing Landscape and Infrastructural Heterogeneity Within and Between Ecosystems. *In*: Fragmentation

of Semi-Arid and Arid Landscapes: Consequences for Human and Natural Systems. K. Galvin, R. Reid, R. Behnke and T. Hobbs, eds. New York: Verlag Publishers. Pp 341-368.

- Boone, R.B., S.B. BurnSilver, J.S. Worden, K.A. Galvin, and T. Hobbs. (2008). Large Scale Movements of Large Herbivores: Livestock Following Changes in food Supply. *In:* "Spatial Ecology of Large Herbivores and Pastoralists". H.H.T. Prins and F. van Langevelde, eds. New York: Kluwer Academic Publishers. Pp 187-206.
- BurnSilver, S.B., R.B. Boone, and K.A. Galvin. (2003). Linking pastoralists to a heterogeneous landscape: The case of four Maasai Group Ranches in Kajiado District, Kenya. Fox, J., V. Mishra, R. Rindfuss, and S. Walsh, eds. *In*: Linking household and remotely sensed data: Methodological and practical problems. New York: Kluwer Academic Publishers. Pp 173-199.

#### Non-Refereed Publications and Research Reports:

- Kofinas G., BurnSilver S., Magdanz J., Stotts R.\*, Okada M. (2016). Subsistence Sharing Networks and Cooperation: Kaktovik, Wainwright and Venetie, Alaska. (BOEM Report, University of Alaska, Fairbanks) Vol. 2015-023. Pp. 560. . https://www.boem.gov/Alaska-Region/.
- Andrey N. Petrov, ARCTICenter, University of Northern Iowa, USA (lead); Shauna
  BurnSilver, Arizona State University, USA; Terry Chapin, University of Alaska,
  Fairbanks, USA; Gail Fondahl, University of Northern British Columbia, Canada; Jessica
  Graybill, Colgate University, USA; Kathrin Keil, Institute for Advanced Sustainability
  Studies, Germany; Annika Nillson, Stockholm Environment Institute, Sweden; Rudolf
  Riedlsperger, Memorial University of Newfoundland, Canada, and Peter Schweitzer,
  University of Vienna, Austria. (2015) Arctic Sustainability Research: Agenda 2025. A
  White Paper for the International Conference for Arctic Research Planning ICARP III.
  International Arctic Social Science Committee, Social and Human Sciences Committee.
- **BurnSilver, S.B.** (2013). Sharing Project Community Reports: Wainwright, Venetie and Kaktovik. Results disseminated to Village Councils, City Councils and Village Corporations.
- Brinkman, T., BurnSilver, S., Hansen, T., Chapin, T., Kofinas, G., Springsteen, A., and Wainwright Hunters and Fishers. (2011) Documenting Local Knowledge on the Impacts of Environmental Change on the Availability of Subsistence Resources. Subsistence Resource Availability Project. University of Alaska Fairbanks.
- **BurnSilver, S.B.** (2008). The Role of Pastoral Mobility. Contribution to the Global Handbook on Pastoralism, The Ford Foundation.
- **BurnSilver, S. B.** and E. Mwangi. (2007). Beyond Group Ranch Subdivision: Collective Action for Livestock Mobility, Ecological Viability and Livelihoods. Working Paper. International Food Policy Research Institute (IFPRI). Washington D.C.
- Boone, R.B. and S.B. BurnSilver (2007). Optimizing Aspects of Land Use Intensification in Southern Kajiado District, Kenya. Final Technical Report: Reto-o-Reto Pastoralist Project: International Livestock Research Institute, Nairobi. Pp. 50.
- Boone, R.B., **S.B. BurnSilver**, and P.K. Thornton (2006). Optimizing aspects of land use intensification in southern Kajiado District, Kenya. Report to the International Livestock Research Institute, Nairobi, Kenya.

**BurnSilver, S.B.** (2005) Results of Focus Groups in the Amboseli Ecosystem: Reto-o-Reto Pastoralist Project. Field Report. International Livestock Research Institute. Pp. 30.

- Herrero, M., P. Kristjanson, P., M. Radeny, S.B. Burnsilver, D. Nkedyanye, O Kamuaro, R.S. Reid, and P.K. Thornton. (2003). Identifying the information needs of decision-makers in Maasai pastoralist systems in Kenya. A collaborative study between ILRI, Edinburgh University and the communities of Narok and Kajiado. DFID LPP Report Project ZC0196. Pp.57 Nairobi (Kenya): ILRI
- Boone, R.B. and **S.B. BurnSilver** (2002). Integrated assessment results to support policy decisions in Ngorongoro Conservation Area, Tanzania. Report from the POLEYC Project to the Global Livestock Collaborative Research Support Program, University of California, Davis, California, USA.

# **INVITED SYMPOSIA**

- **BurnSilver, S.B.** and J. Magdanz, "Subsistence is Persistent", Alaska Eskimo Whaling Commission annual meeting, Barrow, AK, February 2016.
- **BurnSilver, S.B.** "Crafting Collaboration for an Evolving GCSO Network", Global Consortium for Sustainability Outcomes Workshop, Julie Ann Wrigley GIOS, October, 2016.
- **BurnSilver, S. B.**, Invited Plenary Speaker, "From East Africa to the Arctic: Comparative Livelihood Analyses to Explore Arctic Sustainabilities", Sustainability and Sustainable Development in the Arctic: Meetings and Means, Arctic FROST Annual Meeting, NSF-RNC, University of Alaska Anchorage, Sept. 18-20, 2014.
- BurnSilver, S. B., J. Magdanz, G. Kofinas, "The Sharing Project Whaling Relationships in Kaktovik and Wainwright". Annual Meeting Alaska Eskimo Whaling Commission, Barrow, AK (February, 2015).
- BurnSilver, S. B., G. Kofinas, J. Magdanz, "The Sharing Project Whaling Relationships in Kaktovik and Wainwright", Alaska Eskimo Whaling Commission, Fairbanks, AK. July 11, 2014. Data subsequently presented by the AEWC at the 2014 International Whaling Commission Meetings, Slovenia, Sept. 11-18, 2014.
- **BurnSilver, S.B.**, "Role of Sharing and Cooperation in Offsetting Household Vulnerability". Institute for Social and Economic Research (ISER), University of Alaska Anchorage. June 2013.
- **BurnSilver, S.B.**, Baggio, J. and R. Stotts. "Hunting, Sharing and Cooperation under evolving social-ecological conditions in the Far North"..Seminar Series: Center for the Study of Institutional Diversity, ASU. April 2013.
- **BurnSilver S. B.**, "Sharing and Cooperation in the Far North: Old social mechanisms under evolving economic and climatic conditions in village Alaska". Stanford University Ecology and the Environment - Winter Colloquium Series. Palo Alto, CA. March 2013.
- **BurnSilver, S. B.**, "Thinking about Household Vulnerability in Pastoral and Arctic Social-Ecological Systems." Resilience and Adaptation Seminar Series, University of Alaska Fairbanks. Fairbanks, AK. May 2012.
- **BurnSilver, S.B.,** and D. Nkadienye (2009). One Challenge Among Many: Projected Climate Change, Livelihoods and Resilience in Pastoral East Africa. "Climate Change and Livelihoods in Sub-Saharan Africa". Conference sponsored by the Center for African Studies, the Mershon Center for International Security Studies,

and the John Glenn School of Public Policy. The Ohio State University, May 15, 2009.

Reid, R.S., and S. B. BurnSilver (2002). "Linking Communities and Households to Climate Variability and Land cover/land-use Change at Different Scales in Farming and Pastoral Systems of East Africa." Workshop: Approaches for Linking Household and Community level data to Remote Sensing and GIS," January 2002, East-West Center, Honolulu, Hawaii.

## **COLLOQUIA LEADERSHIP** (Upcoming and Previous)

- Workshop Organizer. Pastoralism and Conflict in West Africa; University of Bamako, Mali, West Africa. July 2016.
- Co-Organizer (with T. McCabe). *Operationalizing Resilience Theory within Anthropology*. Upcoming session organized for the American Anthropological Association 113<sup>th</sup> Annual Meeting, Washington DC. November 2014.
- Co-Organizer (with J. Baggio and O. Bodin), *Networks and Cooperation: Are social network characteristics generalizable in thinking about Resilience?* Session organized for the Third International Science and policy Conference on the resilience of social & ecological systems, Montpellier, France. May 2014.
- Co-Organizer (with J. Ziker and D. Gerkey), *Using Social Network Analysis to Understand Arctic Sustainability*. Session organized for the 4th International Congress of Arctic Social Sciences (ICASS IV). May 2014.
- Organizer, How do social relationships offset household vulnerability in the context of rapid change? Session organized for American Anthropological Association 112<sup>th</sup> Annual Meeting, Chicago, IL. November 2013.
- Workshop Organizer, *Agent-based modeling of social and ecological systems*. Organized through the Institute for Society, Landscape and Ecosystem Change, Colorado State University. April 2008.

## **CONFERENCE AND WORKSHOP PRESENTATIONS**

- **S.B. BurnSilver, "**Mixed Economies, Adaptation and Vulnerability in Alaska: A view through networks", Conference on Regional Problems of Development of the Russian Far East and the Arctic, Petrapavlovsk, Kamchatka, Russia, December 2019
- **S.B. BurnSilver,** J. Magdanz and J. Baggio. "Structure, Process and Dynamics: Using Social Network Analysis to Make Linkages in SES." Paper presented at, Society for Applied Anthropology 2019, Portland OR, March.
- **S.B. BurnSilver** and J. Magdanz. "Structures Matter: Cooperation, Sharing and Equity in Alaska Mixed Economies." Paper Presented at, American Anthropological Association 117<sup>th</sup> Annual Meeting, San Jose, November 2018.
- S.B. BurnSilver and M. Shresta. Cultural models of Green Growth versus Traditional Economic Development. Presented at the Workshop "Innovative Green Development Model in Less Developed Regions in China and its Global Implications", Shishou, China. August, 2016.
- **S.B. BurnSilver** and N. Hanan. Pastoralism and Conflict in Northern Mali. University of Bamako, July 2016.

- **S.B. BurnSilver**. Divide and Conquer vs. Networks of Cohesion: The Trilateral Governance Strategy in Northern Alaska. Paper presented at, Society for Applied Anthropology 2016, Vancouver BC, March.
- **S. B. BurnSilver**, J. Magdanz, A. VanSteelandt, D. Cebuhar (Sept 2015). The role of money within the mixed economies of Northern Alaska. 11<sup>th</sup> Conference on Hunter Gatherer Societies, Vienna Austria.
- S. B. BurnSilver, J. Magdanz and R. Boone. "Operationalizing Resilience within Alaskan Mixed Economies: Patterns, Processes and Dynamics" Paper Presented at, American Anthropological Association 113<sup>th</sup> Annual Meeting, Washington DC December 2014.
- **S. B. BurnSilver, J.** Baggio, J. Magdanz, A. Arenas, M. De Domenico, and G. Kofinas (May 2014). "Ties that bind us together: Sharing, Cooperation and Vulnerability in the Alaskan North". The 4th International Congress of Arctic Social Sciences (ICASS IV).
- S. B. BurnSilver, J. Magdanz, G. Kofinas (May 2014). "Sharing and Cooperation within Mixed Northern Economies: Social Network Data and Thinking about Sustainability". The 4th International Congress of Arctic Social Sciences (ICASS IV).
- **S.B. BurnSilver** (May 2014). "Proposition: Social Institutions Contribute to Resilience within SESs at the Margins. Third International Science and policy Conference on the resilience of social & ecological systems, Montpellier, France.
- S.B. BurnSilver (April 2014) Tradeoffs in the mixed economies of village Alaska: "How do we Hunt and Work at the Same Time?" Paper presented in: The Give and Take of Sustainability: Anthropological Perspectives, Workshop sponsored by, Amerind Museum and Research Center and ASU School of Sustainability. April 10-14, 2014, Amerind Museum and Research Center.
- S.B. BurnSilver, J. Baggio and J. Magdanz (2013). What does observed multiplexity in food sharing and cooperative networks suggest for household vulnerability in the Alaskan North? American Anthropological Association 112<sup>th</sup> Annual Meeting, Philadelphia, PA Chicago, IL. November 2013.
- **S.B. BurnSilver** (2013). Household Resilience in the Far North. Resilience Alliance Science Meeting. Drakensburg, South Africa. April 2013
- **S. B. BurnSilver**, Kofinas, G. and J. Magdanz (2013). Superhunters, Superhouseholds and Superproviders. Society for Applied Anthropology Meeting. March. Denver, CO.
- **S.B. BurnSilver** (2012) Research Roundtable with representatives of North Slope Borough Wildlife Department and University of Alaska Fairbanks. Barrow, AK. July 2012.
- S.B. BurnSilver, G. Kofinas, J. Magdanz and P. Fix (2011). The role of social relationships within the mixed economy of Wainwright, AK: How might sharing contribute to resilient livelihoods? Paper presented at the Conference, Resilience 2011: Resilience, Innovation and Sustainability, Arizona State University, Tempe AZ. March 2011.
- Galvin, K and S.B. BurnSilver (2009). Linking Pastoral Household Decision-Making to the Environment using Integrated Modeling. Paper presented at the American Anthropological Association 108<sup>th</sup> Annual Meeting, Philadelphia, PA. November 2009.

- Nkadienye, D. and **S.B. BurnSilver** (2009). "We are pastoralists": Resilience in Maasailand in the midst of dramatic change. Paper presented at the conference "Indigenous Societies and Social-Ecological Resilience", Sponsored by the Resilience Alliance, Cairns Australia, March 8-14, 2009.
- S.B. BurnSilver (2008). Using Social Networks to Assess the Vulnerabilities of Communities to Climate Change & Oil and Gas Development in Arctic Alaska. Poster presented at the Dissertations Initiative for the Advancement of Climate Change Research (DISCCRS IV). Saguaro Lake Ranch, Phoenix, AZ. September 2008.
- Kofinas, G. and S.B. BurnSilver (2008). The Study of Ecosystem Services & Social Networks to Assess the Vulnerabilities of Communities to Oil and Gas Development & Climate Change in Arctic Alaska. Paper presented at the 6<sup>th</sup> International Congress of Arctic Social Sciences, the International Arctic Social Sciences Association. Nuuk, Greenland. August 22-26, 2008.
- BurnSilver, S. B. and E. Mwangi. (2006). Beyond Group Ranch Subdivision: Collective Action for Livestock Mobility, Ecological Viability and Livelihoods. Paper presented at: Pastoralism and Poverty Reduction in East Africa: A Policy Research Conference. International Livestock Research Institute. Safari Park Hotel, Nairobi, Kenya. June 27-28, 2006.
- BurnSilver, S. B. and K.A. Galvin (2005). "Walking the Walk" in Interdisciplinary Science: Ecological Anthropologists and Question-driven Collaboration to Address Natural Resource Management and Conservation Problems." Paper presented at: American Anthropological Association 112<sup>th</sup> Annual Meeting, Washington D.C., November 2005.
- BurnSilver, S. B. and R.B. Boone (2003). Current Land Use and Potential Effects of Ongoing Fragmentation of a Pastoral Landscape: An Example from Four Group Ranches, Kajiado District, Kenya. Poster Presented at; VII International Rangelands Congress, Durban, South Africa, July 2003.

## FILM

"The UAF Sharing Project in Kaktovik, Alaska". S. BurnSilver, A. Butler and B. Burns.

# OUTREACH

**BurnSilver, S.B.** and K. Knudson, Anthropology. Presentation to 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> grade science class, Montessori Academy, Paradise Valley, Phoenix. (9/2016).

# TEACHING

Courses Developed and Taught at ASU:

ASB394 (now ASB375): Humans in the Environment (5x)

ASM300: Anthropological Sciences Seminar (1x)

- ASB530: Ecological Anthropology (3x); now "Changing Human Nature Relationships"
- ESS502: Political Ecology in Theory and Practice (1x)
- ASB300: Food and Culture (4x)
- ASB102: Cultural Anthropology, Contributed 2 Modules to ASU Online Course

Courses Developed and Taught at CSU:

100 level: Cultural Anthropology (2x)
400 level: Human Ecology (1x)
300 level: Cultures and the Global System (2x)
300 level: Cultural Change (1x)

### MENTORING

Post-Doctoral Associate - Jesse Coleman, SHESC Visiting Researcher, Sivuqaq Sharing Project.

Graduated Students: As PhD Advisor: Margaret du Bray - Emotional Geographies in 4 Island Nations. Co-Advisor with A. Wutich.

Masters Advisor

Joshua Raymond (Terminal Masters) – 100 years of climate variability in 2 Colorado Ski Towns Neda Movehed (School of Sustainability). Living in Balance: Exploring multi-dimensional wellbeing and gender with underrepresented health and education communities.

Committee member: Rhian Stotts: *Water Sustainability: Risks, Solutions, and Reuse.* Miran Božičević Anita Hagy Ferguson: *The Jaguar, the Wolf and the Wall: Human-Animal Placemaking in the U.S. –Mexico Borderlands.* 

Current Advisees At ASU: PhD Advisor: Ryan Bleam - Volunteer trail stewards and the experience of 'place' in the Phoenix metropolitan area PhD Advisor: Charlotte Till - Climate Change Migration Terrabone Parish, LA

PhD Co-Advisor with A. Wutich: Ruben D. Nunez Gonzales PhD Co-Advisor with M. Anderies: Tashi Garung -

PhD committee member: 4 Students (SHESC) Arizona State University. Mahir Yazar – ESS, SHESC April Kamp-Whittaker – Archaeology, SHESC Katie Thompson: Sense of Place and Well being, Inuit, Alaska Elizabeth Kurtz: Emergency Professional Resilience John Takamura: Mazahua Entrepreneurship and Identity

Mentor: Camilla Risvoll Godø, Norwegian Visiting Scholar, ASU Center for the Study of Institutional Diversity (2012-2013): *Does pastoralists' participation in the management of national parks in Northern Norway contribute to adaptive governance?* 

Supervisor: 4 undergraduate interns Melissa Ihly – SHESC, Anthropology BA Destiny Cebuhar – SHESC, AMLSS. Additionally funded through CLAS undergraduate summer research experience (Summer 2015).
Danelle Cooper - SHESC, Global Health BA Aaron Caine - SHESC, Anthropology BA Errold Elad - SHESC, Anthropology BS

Advisor: 2 Barrett Honors Contracts

Reader: 3 Barrett Honors College Theses (1 Global Health, 2 BA – Sustainability)

Supervisor: Reading and Conferences - 11 Graduate, 1 Undergraduate

At University of Letters and Human Sciences of Bamako (ULSHB), Republic of Mali, West Africa:

MA Committee Member, Boureima Kanambaye *Effet des Changements Pratique* d'Elevage sur la Mare Perennisation de la Mare d'Agoufou, Veterinary Sciences.

MA Committee Member, Socio-Cultural Anthropology

Doro Bah: La longue histoire de l'utilisation des terres par les personnes et par les animaux (pâturage) dans le bassin d'Agoufou

Advisor on 1 Honors Undergraduate Thesis

Aliou Saloum: *Etude Socio-anthropoligique de la Mare D'Agoufou: Identification des principaux acteurs et leurs différentes interrelations.* 

Mentor for 4 Masters Students (2 Socio-cultural, 1 Education, 1 Ecology)

- Dominique Coulibaly: Influence du systeme d'elevage sur las mortalite du betail, cas de la zone d'Agoufou dans le Gourma Malien
- Hawa Dembele: Etude Foncière du Bassin de la Mare D'Agoufou: Détermination de la tenure foncière
- Fankele Diarra: L'Etude de L'Occupation et de L'Utilisation des Terres de Parcours D'Agoufou dans las Commune Rurale de Hombori
- Fatoumata Traore: Characterisation de la Végétation ligneuse du bassin de la mare d'Agoufou

### At University of Alaska Fairbanks:

Committee member for 1 Masters Student (2009-2010). Resilience and Adaptation IGERT program.

### PROFESSIONAL AND UNIVERSITY SERVICE

- Invited Reviewer: National Science Foundation, Science and Technology Research Program (2019)
- Invited Reviewer: North Pacific Research Board's Arctic Integrated Ecosystem Research Program competition (2016 and 2017)
- Journal Reviewer for PNAS, Ecological Applications, Journal of the American Ecological Society, Global Environmental Change, Ecology and Society, Environmental Management, South African Journal of Wildlife Research, Journal of Arid Environments, International Journal of the Commons and Arctic.

ASU representative: Arctic Research Consortium of the United States (ARCUS)

SHESC: SHESC Executive Committee, member (8/17 – Current)

Committee Chair – SHESC Graduate Research Committee (8/14 – 5/17) Committee Member – SHESC Graduate Research Committee (8/13 – 8/13) Member - Professional Conduct Committee (8/2011 - 5/2013) Alternate - University Faculty Senate Representative (2012)

### **PROFESSIONAL ACTIVITIES**

Co-Editor, with Joni Adamson (ASU), Cambridge University Press Facilitator/Presenter for research results dissemination meetings in Kaktovik, Venetie and Wainwright. July 2012 and July 2013.

Member of Resilience Alliance Young Researchers (RAYS). Actively engaged in scholarship and publishing with RAYS members.

 Team Leader/Facilitator for Community Dissemination meetings presented to 3500+ pastoralists in Ngorongoro Conservation Area, Tanzania and Maasailand, Kajiado District, Kenya; Results of Integrated Assessment for people, livestock and wildlife
 on land use change, population dynamics and landscape fragmentation scenarios (GL-CRSP Integrated Assessment IMAS and POLEYC Projects, Reto-o-Reto pastoralist project, International Livestock Research Institute), September, 2002; July, 2004; June 2005; January and July 2006.

### **PROFESSIONAL AFFILIATIONS**

American Anthropological Association: Anthropology and the Environment Section Society for Applied Anthropology

RA – Resilience Alliance

### ADDITIONAL WORK EXPERIENCE

Jan 2008 - June 2008	Founding Fellow – Institute for Society, Landscape and Ecosystem
	Change; Department of Anthropology, Colorado State University
Jan 2008 - June 2008	Founding Fellow – Center for Collaborative Conservation:
	Warner College of Natural Resources, Colorado State
	University
Jan 2005 - Dec 2006	Researcher and Consultant - Community Outreach of
	Research Results, Reto-o-Reto Pastoralist Project; People
	Livestock and the Environment Program, International
	Livestock Research Institute, Nairobi, Kenya.
Jan 2003 - May 2008	Adjunct Faculty; Department of Anthropology, Colorado
	State University, Fort Collins, CO.
Sep 2001 - Nov 2002	Research Associate and Project Manager; Policy Options for
	Livestock-based Livelihoods and Ecosystem Conservation
	(POLEYC) Project. USAID Global Livestock CRSP, Natural
	Resource Ecology Laboratory, CSU, Fort Collins, CO
Nov 1999 - Mar 2001	Graduate Research Fellow; International Livestock Research
	Institute, Nairobi, Kenya
Sep 1998 - Oct 1999	Research Assistant; National Science Foundation Grant –
	Land Use across the North East China Transect, Natural
	Resource Ecology Laboratory, CSU, Fort Collins, CO.

Jun 1993 - Sep 1993	Training Program Coordinator, Non-formal Education-
-	Benin and Mauritania Volunteers; U.S. Peace Corps and
	CHP International, Perryville Arkansas, U.S.A.
July 1990 - May 1991	Agricultural Training Program Coordinator; U.S. Peace
	Corps, Mali, West Africa.
July 1987 - Nov 1989	Peace Corps Volunteer in Agricultural Extension; U.S. Peace
	Corps, Mali, West Africa.

#### **THESIS/DISSERTATION**

- Ph.D. "Pathways of Continuity and Change: Diversification, Intensification and Mobility in Maasailand, Kenya". Defended October 10, 2007
- M.S. "Basic Beliefs about Traditional Agroforestry Strategies: Koula Arrondissment, Mali, West Africa". Defended May 1997.

#### **RESEARCH EXPERIENCE**

Social networks and livelihoods in the communities of Wainwright, Kaktovik and Venetie, Alaska, USA. *Current (and Postdoctoral) fieldwork* 

- Fieldwork with Tuareg and Fulani Pastoralists, N. Mali, West Africa. Changing land use and livelihoods in response to lake hydrology.
- PhD field research project, Kajiado District, Kenya Nov 1999-Mar 2001, Jan-Feb 2005.
- National Science Foundation project Land Use Change and Socio-Economic Condition across the Northeast China Transect. Inner Mongolia Autonomous Region, China. Research undertaken in vollaboration with the Chinese Academy of Sciences, Institute of Botany. *July-August 1998 and July-Aug 1999*.
- Masters Thesis Research Project; in collaboration with US Peace Corps, Mali, Koula Arrondissement. Jan- May 1996.