

Curriculum Vitae

Jay P. Sah, Ph.D.

Research Associate Professor
Southeast Environmental Research Center (SERC)/
Institute of Water and Environment (InWE)
Florida International University
Modesto A. Maidique Campus, OE-148
11200 SW 8th ST, Miami, FL 33199, USA.
Tel: 305 348 1658 (W), 305 613 5044 (C); Fax: 305 348 4096
Email: sahj@fiu.edu

Affiliate Graduate Faculty – Department of Earth and Environment, FIU
Dissertation Advisory Status – Department of Earth and Environment, FIU
Project Collaborator – Florida Coastal Everglades (FCE) – LTER

1. Career Objective

Be an academician and keep on learning by studying, doing innovative researches, and sharing knowledge with students, fellow researchers and society, primarily in the field of ecology, and provide scientific feedbacks to the natural resource managers.

2. Education:

- 2002** **Ph. D. in Biology** (Ecology)-Florida International University, Miami, FL 33199, USA.
(Dissertation: *Vegetation Dynamics and their Implications for the Management of Wetlands in the Lowlands of Nepal*)
- 1993** **M. Sc. in Natural Resources Planning Management**-Asian Institute of Technology, Bangkok, Thailand. (Thesis: *Wetland Vegetation and Its Management: A Case Study in Koshi Tappu Region, Nepal*)
- 1983** **Degree (M. Sc.) in Botany** (Ecology)-Tribhuvan University, Kathmandu, Nepal.
(Thesis: *Nutrient Content in Leaf Litter of Major Tree Species at Phulchoki Hill, Kathmandu, Nepal*)

3. Areas of Professional Work:

Research and Teaching. Research Areas: Vegetation-environmental Relationships, Disturbance Ecology, Community Ecology, Wetland Ecology and Management, Biodiversity Conservation, Environmental Management, Environmental Impact Assessment, and Interdisciplinary Approach to Natural Resource Ecology and Management

Major research activities are:

- Study of plant community structure and function
- Analysis of abiotic and biotic responses to natural and anthropogenic disturbances to answer a wide range of ecological questions at various spatial and temporal scales by using multivariate statistical techniques and Geographic Information Systems (GIS)
- Strategic analysis of integrating ecological and socio-economic approaches in natural resource and environmental management

4. Scholarships and Awards:

- **Research Excellence Award:** College of Arts, Science and Education (CASE), Florida International University. Fall 2017.
- **10-Year Service Award:** Florida International University. Fall 2013
- **Tropical Biology Dissertation Fellowship:** Research fellowship and Tuition waiver. Spring 2001.
- **Teaching/Research Assistantship and Tuition Waiver:** At Florida International University. Aug.1995-April 1997; Jan. 2000 – Aug. 2002.
- **The James A. Linen III Memorial Prize:** For First position among students in Interdisciplinary Natural Resources Development and Management Program graduating on 19th August 1993 from Asian Institute of Technology, Bangkok, Thailand.
- **Canadian International Development Agency (CIDA) Scholarship:** For studying Master's Degree in Natural Resource Management at Asian Institute of Technology, Bangkok, Thailand (Through AIT).
- **Meritorious Scholarship:** For securing highest marks among students graduating from Central Department of Botany, T. U. Kirtipur, Kathmandu, during 1981/1982.

5. Work Experience:

A. Teaching and Research (Professional appointments):

2017 -	Research Associate Professor	Southeast Environmental Research Center, Florida International University (FIU), Miami, FL. Activities: – Lead scientist (PI or Co-PI) in several research projects, primarily related to ecosystem responses to changes in hydrologic and fire regimes, and windstorms in South Florida. Primary activities include research project conceptualization, proposal writings, research design and fieldwork coordination, data analysis and report writing, presentation at various meetings, manuscript preparation and publication, and supervising graduate student research.
2007 -2017	Research Associate/Faculty	Southeast Environmental Research Center, Florida International University (FIU), Miami, FL. Activities: (PI or Co-PI) - Proposal writings, research design, field observations, data analysis, report writing, presentation of results at various meetings, and manuscript preparation for several research projects (primarily related to vegetation responses to changes in hydrologic and fire regimes, and windstorms in South Florida)
2003 – 2007	Visiting Research Associate	Southeast Environmental Research Center, FIU, Miami, FL. (Research Design, Coordination of field works, data analysis, report writing, presentations at the meetings, manuscript preparation) . <u>Focus:</u> South Florida ecosystems, including an endangered species (Cape Sable seaside sparrow) habitat.
2002 – 2003	Postdoctoral Research Associate	Southeast Environmental Research Program, FIU, Miami, FL. (Research Design, Coordination of field works,

data analysis, report writing, presentations at the meetings, manuscript preparation -*analyzed Tree island and L-31 vegetation data, and wrote the vegetation part of the comprehensive reports*)

1992 – 2002 **Lecturer*** Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal (*Designed courses, taught plant ecology; conducted researches and supervised M. Sc. students' thesis*).

1984 – 1992 **Assistant Lecturer *** Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal. (*Taught plant ecology, anatomy, and embryology, and labs related to general botany, including plant physiology, plant genetics, and taxonomy: engaged in research, and supervised M. Sc. student's thesis*).

*(*Full time faculty position; on paid-study leave-Jan 1992 to Dec 1994; Aug 1995 to Aug 1998; On leave w/t pay - 2000 to 2002)*

B. Teaching & Research (Others):

2008 Spring **Adjunct Instructor** Taught EVR-4026: Biotic Resources at Florida International University, Miami, USA.

2002 – 2003 **Adjunct Instructor** Department of Biological Sciences, Florida International University, Miami, USA (*Taught undergrad Biology Lab.*)

2000 – 2002 **Research Assistant** Southeast Environmental Research Center, Florida International University, Miami, FL 33199. (Field observations, Data analysis – *Analyzed Shark Slough vegetation data; Big Pine Key fire monitoring data*)

2000 – 2001 **Teaching Assistant** Department of Biological Sciences, Florida International University, Miami, USA (*Taught undergrad Biology Lab*)

1996 – 1997 **Research Assistant** Southeast Environmental Research Program, Florida International University, Miami, FL 33199. (Worked as Data Analyst – *analyzed C111 vegetation data, Pit-Mound data; contributed in writing reports*)

1995 – 1997 **Teaching Assistant** Department of Biological Sciences, Florida International University, Miami, USA (*Taught undergrad Biology Lab.*)

1994 **Adjunct Instructor** Central Department of Geography, Tribhuvan University, Nepal. *Worked as a part-time instructor for giving training on GIS for Natural Resource Management. (Four weeks)*

1994 – 1995	Adjunct Teacher	Cornell-Nepal Study Program, Kirtipur, Kathmandu. (Worked as a part-time teacher for teaching Ecology and Environment and supervising students' research projects).
1990 – 1991	Science Teacher	Rhododendron International Boarding School, Kalanki, Kathmandu. (Part-time teacher for teaching Physics)
1985 – 1988	Science Teacher	Prabhat Secondary School, Tyagal, Lalitpur, Kathmandu. (Part-time teacher for teaching Physics, Chemistry and Biology)
1993	Research Associate	IUCN Southeast Asia Regional Program, Asian Institute of Technology, and Bangkok. (Manuscript preparation for the book, "Koshi Tappu Wetlands: Nepal's Ramsar Site)
1977	Assistant to Meteorologist	Meteorological Station, Tribhuvan International Airport, Nepal. (Recording & plotting meteorological data)

6. Postdoc/students supervised/member on research committee:

Post-doc (Active)

1. Dr. Lu Zhai – Southeast Environmental Research Center (SERC) Sept. 2017- (As supervisor).

MS Student (In progress)

1. James E. Dautel - Department of Earth and Environment. 2015 - . (As a member on his research committee; Major Professor – Dr. Kris Jayachandran).
2. Meghan Gonzalez – Department of Earth and Environment. 2012 - .

Ph.D. Students (Completed)

1. Suresh Subedi – Department of Biological Science/Department of Earth and Environment. 2017 - (As a member on his research committee; Major Professor – Dr. Michael Ross.).
2. Beytte Barrios – Department of Biological Science. Spring 2015: (As a member on her research committee; Major Professor – Dr. Suzanne Koptur.).

MS Student (Completed)

1. Kathryn Braddock - Department of Earth and Environment. 2017 - . (As a member on her research committee; Major Professor – Dr. Joel Heinen.).
2. Andrea Salas – Department of Earth and Environment. Summer 2016: (As a member on her research committee; Major Professor – Dr. Suzanne Koptur.).

M. Sc. Students (Completed)

I served as the Major Supervisor. The theses were submitted to Central Department of Botany, Tribhuvan University, Nepal. (In Tribhuvan University, the theses were supervised by only major professor (one-to-one), and graded by an external examiner)

1. Sharma, Indu. 2001. *Effect of brewery industry effluents on agricultural crops and soils in Kathmandu.*
2. Sharma, Bindu. 2000. *Above Ground Biomass and Primary Productivity in the Grassland of Royal Shuklaphanta Wildlife Reserve, Nepal.* (Working for an International NGO in Nepal)

3. Poudyal, Srijna. 2000. *Impact of Management Practices on Species Composition and Soil Characteristics in Grasslands of Royal Shuklaphanta Wildlife Reserve, Nepal*. (In UK)
4. Poudyal, Shishir. 2000. *Comparative Study of Vegetation Structure and Soil Characteristics in Community- and Government-managed Forests in the Udayapur District, Nepal*. (Completed Ph.D. from Southern Illinois University at Carbondale, IL, USA)
5. Ghimire, Kavita. 1999. *Impact of Air Pollution on Roadside Vegetation in Urban area of Kathmandu Valley*.
6. Acharya, Prashuram 1997. *Wetland Vegetation and its utilization in Ghodaghodi and Nakharodi Tal, Nepal*. (Working as a wetland ecologist in Seattle, WA, USA)
7. Shrestha, Krishna B. 1997. *Plant Diversity along Environmental and Disturbance gradients in the Oak Forest on Phulchoki Hill, Nepal*. (Completed Ph.D. at the University of Bergen, Norway)
8. Yadav, Ram K. 1994. *Quantitative Analysis of Vegetation (Trees and Shrubs) on Nagarjun Hills, Phulchoki Hills, Kathmandu*. (Obtained Ph.D. from Greece, and working as Associate Professor in Nepal)
9. Acharya, Sunil K. 1989. *Study of Family Fagaceae on Phulchoki Hill*. (Senior Botanist, Plant Research Center, Nepal Government)

Undergrad Student:

1. Javier, Jose. 2008. *The effects of wildfires on the magnetic properties of soils in the Everglades*. Funded under The FCE-LTER Research Experience for Undergraduates (REU) Program. (As a co-supervisor with Dr. Brad Clement, Department of Earth Sciences, FIU)

7. Professional Services

A. Editors/Associate Editor:

Advisory Editor (2015 – Present): *Journal of Wetlands Environmental Management*. Published by – Lambung Mangkurat University, Banjarmasin, Indonesia.

Editor (2011 – 2014): *Himalayan Journal of Sciences*. Published by – Himalayan Association for the Advancement of Science

Editor (2009 – 2012): *Journal of Wetlands Ecology*. Publisher - Wetland Friends of Nepal.

Associate Editor (1998 – 1999): *Ecoprint - An International Journal of Ecology*. Published by Ecological Society (ECOS), Kathmandu, Nepal. Volumes 5 and 6.

B. Reviewed manuscripts/Reports for the Journals/Organizations

Journals: *Wetlands, Tropical Ecology, Restoration Ecology, Plant and Soil, Journal of Hydrology, Fire Ecology, International Journal of Wildland Fire, Endangered Species Research, Energy and Fuels, Castanea, Complex Systems, Ecological Engineering, Forest Ecology and Management, Annals of Forest Science, Journal of Forest Research, Journal of Wetlands Environmental Management, Population and Environment, Environmental Conservation, Journal of Environmental Management, Environmental Management, Environmental Quality Management, Journal of Environmental Quality, Southeastern Naturalist, Himalayan Journal of Sciences, Ecoprint, Journal of Natural History Museum (Nepal), Botanica Orientalis (Nepal).*

Reports: US Geological Survey; IUCN-The World Conservation Union (Nepal).

8. Publications:

A. Book:

Sah, J. P. 1997. *Koshi Tappu Wetlands: Nepal's Ramsar Site*. IUCN-Nepal in collaboration with IUCN-Wetland Program, South and South-east Regional Office, Bangkok. pp. 254. ISBN 2-8317-0237-2.

B. Conference Proceedings:

1. Richard, C., **Sah, J. P.**, Basnet, K., Karki, J., Subba, B., and Raut, Y. (Eds.). 2000. *Grassland Ecology and Management in Protected Areas of Nepal*. Vol. I: *Action Summary*. 102 pp.
2. Richard, C., Basnet, K., **Sah, J. P.**, and Raut, Y. (Eds.) Vol. II: *Technical and Status Papers on Grasslands of Terai Protected Areas*. 137 pp.
3. Richard, C., Basnet, K., **Sah, J. P.**, and Raut, Y. (Eds.) Vol. III – *Technical and Status Papers on Grasslands of Mountain Protected Areas*. 104 pp.
Proceedings of the International Workshop on Grassland Ecology and Management in Protected Areas of Nepal, March 14-19, 1999, Nepal. Department of National Parks and Wildlife Reserve (DNPWC)/International Center for Integrated Mountain Development (ICIMOD)/WWF- Nepal, Kathmandu, Nepal ISBN # 92-9115-166.

C. Book Chapter:

1. **Sah, J. P.** and Sah, S. K. 1999. Wetlands of Nepal: Biodiversity and its Conservation. In *Nepal-Nature's Paradise*. Eds. Majupuria, T. C. and Kumar, R. M. Devi Publishers, Gwalior, India: 569-594.
2. Davis, S. E., Castaneda-Moya, E. Boucek, R., Chambers, R., Collado, L., Fitz, C., Fuentes, J., Gaiser, E., Heithaus, M., Rehage, J., Rivery-Monroy, V., **Sah, J. P.**, Sklar, F. and Troxler, T. 2017. Exogenous drivers – What has disturbance taught us? In: *The Coastal Everglades: The Dynamics of Social-Ecological Transformation in the South Florida Landscape*. Eds. Childers, D. L., Gaiser, E. and Oden, L. Oxford University Press. (In review).

D. Book Review:

1. Review of Ecology of Wetlands and Associated Systems. Edited by S. K. Majumdar, E. W. Moller and F. J. Brenner. The Pennsylvania Academy of Science, Easton, PA 18042, USA. *Ecoprint* 6 (1): 78.

E. Research Papers (Peer-reviewed Journals):

1. Subedi, S. C., Ross, M. S., Vidales, R., **Sah, J. P.**, Sternberg, L. Variation in stomatal characteristics of *Bursera simaruba*, a dominant tree species of tropical hardwood hammock forest across a habitat gradient in the Florida Keys. *Trees*. (Submitted)
2. Subedi, S. C., Ross, M. S., **Sah, J. P.**, Redwine J. and Baraloto, C. Trait-based community assembly pattern along a forest succession gradient in seasonally dry sub-tropical forest, Florida Keys, USA. *Journal of Vegetation Science*. (Revised version submitted)
3. Davis, S. E., Boucek, R., Castañeda-Moya, E., Dessu, S., Gaiser, E., Kominoski, J., **Sah, J. P.**, Surratt, D. and Troxler, T. 2018. Episodic disturbances drive nutrient dynamics along freshwater-to-estuary gradients in a subtropical wetland. *Ecosphere* 9 (6):e02296. 10.1002/ecs2.2296.
4. **Sah, J. P.**, Ruiz, P. L. and Ross, M. S. 2018. Spatio-temporal pattern of plant communities along a hydrologic gradient in Everglades tree islands. *Forest Ecology and Management* 421:16-31.
5. Wetzels, P., **Sah, J. P.** and Ross, M. S. 2017. Tree Islands: The Bellwether of Everglades Ecosystem

- Function and Restoration Success. *Restoration Ecology* 25 (S1): S71-S85.
6. Barrios, B., Koptur, S. and **Sah, J. P.** 2017. The effects of habitat fragmentation on the reproduction and abundance of *Angadenia berteroi*. *Journal of Plant Ecology* 10 (2): 340-348.
 7. Sullivan, P. L., Price, R. M., Ross, M. S., Stoffella, S. L., **Sah, J. P.**, Scinto, L. J., Cline, E., Dreschel, T. W. and Sklar, F. H. 2016. Trees: a powerful geomorphic agent governing the landscape evolution of a subtropical wetland. *Biogeochemistry* 128: 369-384
 8. Ross, M. S., **Sah, J. P.**, Ruiz, P. L., Spitzig, A. and Subedi, S. 2016. Inferring implications of climate change in patchy tropical dry forests through analysis of metacommunity structure. *Diversity and Distributions* 22: 783-796.
 9. Paudel, S. and **Sah, J. P.** 2015. Effects of different management practices on stand composition and species diversity in sub-tropical forests in Nepal: Implications of community participation in biodiversity conservation. *Journal of Sustainable Forestry* 34: 738-760.
 10. **Sah, J. P.**, Ross, M. S., Saha, S., Minchin, P. and Sadle, J. 2014. Trajectories of vegetation response to water management in Taylor Slough, Everglades National Park, Florida. *Wetlands* 34 (Suppl 1): S65-S79.
 11. Ross, M. S., **Sah, J. P.**, Meeder, J. F., Ruiz, P. L. and Telesnicki, G. 2014. Compositional effects of sea-level rise in a patchy landscape: the dynamics of tree islands in the southern coastal Everglades. *Wetlands* 34 (Suppl 1): S91-S100.
 12. Ruiz, P. L., **Sah, J. P.**, Ross, M. S. and Spitzig, A. A. 2013. Tree island response to fire and flooding in the short-hydroperiod marl prairie grasslands of the Florida Everglades. *Fire Ecology* 9 (1): 38 – 54.
 13. Shrestha, K. B., Måren, I. E., Arneberg, E., **Sah, J. P.** and Vetaas, O.R. 2013. Plant diversity along an anthropogenic disturbance gradient in the oak forests of the Middle Hills, Nepal, Central Himalaya. *International Journal of Biodiversity Science, Ecosystem Services & Management* 9 (1): 21-29.
 14. Ross, M. S. and **Sah, J. P.** 2011. Forest resource islands in a sub-tropical marsh: soil-site relationships in Everglades hardwood hammocks. *Ecosystems* 14: 632-645.
 15. Espinar, J., Ross, M. S. and **Sah, J. P.** 2011. Pattern of nutrient availability and plant community assemblage in Everglades tree islands, Florida USA. *Hydrobiologia* 667: 89-99.
 16. D'Odorico, P., Engel, V., Carr, J., Oberbauer, S. F., Ross, M. S. and **Sah, J. P.** 2011. Tree-grass coexistence in the Everglades freshwater system. *Ecosystems* 14: 298-310.
 17. Clement, B. M., Javier, J., **Sah, J. P.** and Ross, M.S. 2010. The effects of wildfires on the magnetic properties of soils in the Everglades. *Earth Surface Processes and Landforms*. 36: 460-466.
 18. Stoffella, S. L., Ross, M.S., **Sah, J. P.**, Price, R., Sullivan, P. and Cline, E. A. 2010. Survival and growth responses of eight Everglades tree species along an experimental hydrologic gradient on two tree island types. *Applied Vegetation Science* 13: 439-449.
 19. Hanan, E. J., Ross, M.S., Ruiz, P. L., and **Sah, J. P.** 2010. Multi-scaled grassland-woody plant dynamics in the heterogeneous marl prairies of the southern Everglades. *Ecosystems* 13:1256-1274.
 20. **Sah, J. P.**, Ross, M.S., Snyder, J. R. and Ogurcak, D. E. 2010. Tree mortality following prescribed fire and a storm surge event in slash pine (*Pinus elliottii* var. *densa*) forests in the Florida Keys, USA. *International Journal of Forestry Research* (Volume 2010, Article ID 20495; 13 pp. doi: 101155/2010/204795.
 21. Ross, M. S., Ogurcak, D. E., **Sah, J. P.** and Ruiz, P. L. 2010. Using Florida Keys reference sites as a standard for restoration of forest structure in Everglades tree islands. *International Journal of Forestry Research*. Volume 2010, Article ID 176909; 8 pp. doi:10.1155/2010/176909.
 22. Ross, M. S., Ruiz, P. L., **Sah, J. P.** and Hanan, E. J. 2009. Chilling damage in a changing climate in coastal landscapes of the sub-tropical zone: a case study from south Florida. *Global Change Biology* 15 (7):1817-1832.
 23. Armentano, T. V., **Sah, J. P.**, Ross, M. S., Jones, D. T., Cooley, H. C. and Smith, C, S. 2006. Rapid responses of vegetation to hydrological changes in Taylor Slough, Everglades National Park, Florida, USA. *Hydrobiologia* 569: 293-309.

24. Ross, M. S., Mitchell-Bruker, S., **Sah, J. P.**, Stohoff, S., Ruiz, P. L., Reed, D. L., Jayachandran, K. and Coultas, C. L. 2006. Interaction of hydrology and nutrient limitation in the Ridge and Slough landscape of the southern Everglades. *Hydrobiologia* 569: 37-59.
25. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Koptur, S. and Cooley, H. 2006. Fuel loads, fire regimes and post-fire fuel dynamics in the Florida Keys pine forests. *International Journal of Wildland Fire* 15 (4): 463-478.
26. Jones, D. T., **Sah, J. P.**, Ross, M. S., Oberbauer, S. F., Hwang, B. and Jayachandran, K. 2006. Growth and physiological responses of twelve tree species common in Everglades tree islands to simulated hydrologic regimes. *Wetlands* 26 (3): 830-844.
27. Ross, M. S. Ruiz, P. L., **Sah, J. P.**, Reed, D. L., Walters, J. and Meeder, J. F. 2006. Early stand development in Fringe mangrove forests of contrasting productivity following hurricane. *Plant Ecology* 185: 283-297.
28. **Sah, J. P.**, Ross, M. S., Koptur, S. and Snyder, J. R. 2004. Estimating biomass of broadleaved woody plants in the understory of Florida Keys pine forests *Forest Ecology and Management* 203: 319-329.
29. Ross, M. S., Reed, D. L., **Sah, J. P.**, Ruiz, P. L. and Lewin, M. T. 2003. Vegetation:environment relationships and water management in Shark Slough, Everglades National Park. *Wetland Ecology and Management* 11 (5): 291-303.
30. **Sah, J. P.**, Singh, R. L. and Bhatta, N. 2003. Diversity, abundance and economic use of flowering plants in Royal Shuklaphanta Wildlife Reserve, Nepal. *Journal of Economic and Taxonomic Botany* 27 (2): 358-383.
31. Lockwood, J. L., Ross M. S. and **Sah, J. P.** 2003. Smoke on the water: The interplay of fire and water flow on Everglades restoration. *Frontiers in Ecology and the Environment* 1 (9): 462-468.
32. Paudel, S and **Sah, J. P.** 2003. Physiochemical characteristics of soil in tropical Sal (*Shorea robusta* Geartn.) forests in eastern Nepal. *Himalayan Journal of Sciences* 1 (2): 107-110.
33. **Sah, J. P.**, Singh, R. L. and Bhatta, N. 2002. Floristic diversity and use of plants in Ghodaghodi Lake area, Nepal. *Journal of Natural History Museum* (Nepal), 21: 243-266.
34. Chaudhary, R. P., **Sah, J. P.**, Singh, R. L. and Tiwari, R. D. 2002. The use of plant resources and its impact on conservation in Parsa Wildlife Reserve, Nepal. *Environmental Biology and Conservation* 7: 67-80.
35. **Sah, J. P.** and Heinen, J. T. 2001. Wetland resource use and conservation attitudes among indigenous and migrant peoples in Ghodaghodi Lake area, Nepal. *Environmental Conservation* 28 (4): 345-356.
36. **Sah, J. P.**, Sah S. K., Acharya P., Pant D. and Lance, V. A. 2000. Assessment of water pollution in the Narayani River, Nepal. *International Journal of Ecology and Environment* 26: 235-251.
37. Ross, M. S., Meeder, J. F., **Sah, J. P.**, Ruiz, P. L. and Telesnicki, G. J. 2000. The southeast saline Everglades re-visited: 50 years of coastal vegetation change. *Journal of Vegetation Science* 11: 101-112.
38. Ghimire, S. K., Shrestha, K. K., **Sah, J. P.** and Bajracharya, D. 1999. Ecological study of some high altitude medicinal and aromatic plants in the Gyasumdo Valley, Manang, Nepal. *Ecoprint* 6 (1): 17-25.
39. Yadav, R. K. P. and **Sah, J. P.** 1998. Quantitative study of vegetation on the Nagarjun Hills, Kathmandu. *Ecoprint* 5 (1): 61-72.
40. Jha P. K., **Sah, J. P.** and Chettri, M. K. 1992. Amaranth productivity under biological stresses. *Crop Research* 5 (2): 195-198.
41. Jha, P. K., **Sah, J. P.** and Chettri, M. K. 1991. Assessment of grain amaranth productivity in Nepal. In *Plant Science and Man: Problems and Prospects*, Eds. Islam A. K. M. N., Q. A. Fattah, I. A. Muttaqui and A. Aziz. *Journal of Bangladesh Botanical Society: Special Issue: Proceedings of International Botanical Conference* 10-12, January 1991. Bangladesh Botanical Society, Bangladesh: 99-106.

42. Acharya S. K., Shrestha, K. K. and **Sah, J. P.** 1991. Study of the members of Fagaceae on Phulchoki Hill, Nepal. In *Plant Science and Man: Problems and Prospects*, Eds. Islam A. K. M. N., Q. A. Fattah, I. A. Muttaqui and A. Aziz. *Journal of Bangladesh Botanical Society: Special Issue: Proceedings of International Botanical Conference* Jan. 10-12, 1991. Bangladesh Botanical Society, Bangladesh: 85-92.
43. **Sah, J. P.** and P. K. Jha. 1986. Seasonal variation of Nutrient content in Leaf Litter of major Tree species of Phulchoki Hill. *Journal of Natural History Museum (Nepal)* 10 (1-4): 93-112.
44. **Sah, J. P.** and Jha, P. K. 1983. Attitudinal variation of Nutrient Content in Leaf Litter of Major Tree species of Phulchoki Hill, Kathmandu. *Journal of Institute of Science & Technology (Nepal)* 6: 17-26.

F. Research Papers/Chapters (Conference Proceedings, Edited Reports, and others):

1. **Sah, J. P.**, Jirout, A., Stoffella, S., Ross, M. S. and Dreschel, T. W. 2018. Plant Ecology: Vegetation structure and composition within the habitat of the Cape Sable seaside sparrow subpopulation D. In: F. H. Sklar and T. Dreschel (Eds.) - *The South Florida Environmental Report (SFER) Volume 1: Chapter 6*. pp. 6-39 to 6-41. South Florida Water Management District (SFWMD), West Palm Beach, FL.
2. Chaudhary, R. P. and **Sah, J. P.** 2016. Plant diversity and environmental flows in the Koshi Basin. Chapter 6 in Doody, T. M., Cuddy, S. M. and Bhatta, L. D. (eds): *Connecting flows and ecology in Nepal: current state of knowledge for the Koshi Basin*. Sustainable Development Investment Portfolio (SDIP) project. CSIRO, Australia. pp 43-70.
3. Bhatta, L. D., Ranabhat, S., Chaudhary, R. P., **Sah, J. P.**, Doody, T. M., Chettri, N., Basnet, K., Manandhar, U., Baral, H. S., Thapa, I., Gurung, T. B., Shah, K. B., Paudel, S., Sharma, S. 2016. Introduction. Chapter 2 in Doody, T. M., Cuddy, S. M. and Bhatta, L. D. (eds): *Connecting flows and ecology in Nepal: current state of knowledge for the Koshi Basin*. Sustainable Development Investment Portfolio (SDIP) project. CSIRO, Australia. pp 5-18.
4. Ross, M. S., **Sah, J. P.**, Stoffella, S., Cline, E. and Dreschel, T. 2014. Plant Ecology: Ridge and Slough vegetation responses to hydrology at LILA, and Effect of hydrology and substrate type on tree survival and growth at LILA. In: F. H. Sklar and T. Dreschel (Eds.) - *The South Florida Environmental Report (SFER) Volume 1: Chapter 6*. pp. 6-35 to 6-41. South Florida Water Management District (SFWMD), West Palm Beach, FL.
5. Cline, E. Coronado-Molina, C. Madden, C., McDonald, A. Ross, M. S., **Sah, J. P.**, Koch, M., Stachelek. 2013. Plant Ecology. In: F. H. Sklar and T. Dreschel (Eds.) - *The South Florida Environmental Report (SFER) Volume 1: Chapter 6*. pp. 6-31 to 6-36. South Florida Water Management District (SFWMD), West Palm Beach, FL.
6. Newman, S., Rodgers, L., Manna, M., Cook, M., Coronado-Molina, C., Ross, M., Madden, C., Troxler, T., Kelly, S., Bennett, R., Black, D. and **Sah, J. P.** 2013. Ecosystem Ecology. In: F. H. Sklar and T. Dreschel (Eds.) - *The South Florida Environmental Report (SFER) Volume 1: Chapter 6*. pp. 6-31 to 6-36. South Florida Water Management District (SFWMD), West Palm Beach, FL.
7. **Sah, J. P.**, Ross, M. S. and Ruiz, P. L. 2011. Vegetation structure and composition within sparrow sub-population D. habitat. In Virzi et al. 'C-111 Project & Cape Sable seaside sparrow subpopulation D: Baseline data on sparrows, vegetation and hydrology – Annual Report 2011. pp: 39-60. Submitted to the South Florida Water Management District, West Palm Beach, FL.
8. Jones, D. T., **Sah, J. P.**, Ross, M. S., Oberbauer, S. F., Hwang, B. and Jayachandran, K. 2004. Responses of Tree Island Tree Species to Simulated Hydrologic Regimes: A Shade-house Study. In: Ross, M.S. and Jones, D.T. (Eds.) *Tree Islands in the Shark Slough Landscape: Interactions of Vegetation, Hydrology and Soils*. pp: 121-140. A final report submitted to Everglades National Park, National Park Service, U.S. Department of the Interior.
9. **Sah, J. P.** 2004. Vegetation Structure and Composition in Relation to the Hydrological and Soil Environments in Tree Islands of Shark Slough. In: Ross, M.S. and Jones, D.T. (Eds.) *Tree Islands*

- in the Shark Slough Landscape: Interactions of Vegetation, Hydrology and Soils.* pp: 85-114. A final report submitted to Everglades National Park, National Park Service, U.S. Department of the Interior.
10. Jayachandran, K., Sah, S. K., **Sah, J. P.** and Ross, M. S. 2004. Characterization, Biogeochemistry, Pore Water Chemistry, and Other Aspects of Soils in Tree Islands of Shark Slough. In: Ross, M.S. and Jones, D.T. (Eds.) *Tree Islands in the Shark Slough Landscape: Interactions of Vegetation, Hydrology and Soils.* pp: 291-40. A final report submitted to Everglades National Park, National Park Service, U.S. Department of the Interior.
 11. **Sah, J. P.** 2000. Koshi Tappu's Treasure: Grasslands or Wetlands? In: Richard, C., Basnet, K., Sah, J. P. and Raut, Y. (Eds.). *Grassland Ecology and Management in Protected Areas of Nepal. Vol. II: Technical and Status Papers on Grasslands of Terai Protected Areas.* Proceedings of the International Workshop on Grassland Ecology and Management in Protected Areas of Nepal, March 14-19, 1999, Nepal. International Center for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal: 58 - 73.
 12. Yadav, R. P., Thaguna, S. S. and **Sah, J. P.** 2000. Status of grasslands in Terai protected areas (Royal Shuklaphanta Wildlife Reserve): Management Issues and Gaps. In: Richard, C., Basnet, K., Sah, J. P. and Raut, Y. *Grassland Ecology and Management in Protected Areas of Nepal. Vol. II: Technical and Status Papers on Grasslands of Terai Protected Areas.* Proceedings of the International Workshop on Grassland Ecology and Management in Protected Areas of Nepal, March 14-19, 1999, Nepal. International Center for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal: 128 -137.
 13. Sah, S. K., **Sah, J. P.** and Lance, V. 2000. Industrial Effluents and Their Use in Agriculture along the Narayani River in Nawalparasi District, Nepal. In: Jha, P. K. et al. (Eds.) *Proceedings of the International Conference on Environment and Agriculture.* Nov. 1-3, 1998. Kathmandu, Nepal: 456 - 466.
 14. **Sah, J. P.** 2000. System Dynamics Approach to Natural Resource Management: A Case Study in Koshi Tappu Region, Nepal. In *Proceedings of the National Young Scientists Congress.* Kathmandu, July 15, 1999. Research Center for Applied Science and Technology, Tribhuvan University, Nepal: 14-30.
 15. **Sah, J. P.** and Suselo, T. B. 1996. The shifting of the Koshi River and its Impact on land use change in Nepal. In *Environment and Biodiversity: In the context of South Asia: Proceedings of the Regional Conference on Environment and Biodiversity, March 7-9, 1994, Kathmandu.* Eds. P. K. Jha, G. P. S. Ghimire, S. B. Karmacharya, S. R. Baral, and P. Lacaual. Ecological Society (ECOS), Kathmandu, Nepal: 92-99.
 16. Jha, P. K., **Sah, J. P.** and Chettri, M. K. 1991. The *Amaranthus* in Nepal. *PRIMER CONGRESO INTERNACIONAL DEL AMARANTO, MEXICO:* 54.
 17. Jha, P. K., **Sah, J. P.** and Chettri, M. K. 1992. A Study on the Productivity of *Amaranthus hypochondriacus* L. *Role of Biotechnology of Agriculture.* Ed. Prasad B. N., Ghimire, G. P. S. and Agrawal, V. P. Proceedings of 1st regional Conference of APPSC on the Role of Plant Physiology and Biotechnology on Plant Productivity. Oct. 3-7, 1988: pp 177-182.
 18. Jha, P. K., **Sah, J. P.** and Chettri, M. K. 1987. Amaranth distribution in Nepal. *AMARANTH News Letter # 3:* 3-4.
 19. Jha, P. K., Sah, S. P., **Sah, J. P.** and Baral, S. R. 1986. *Rhododendron arboreum* Sm.: Seasonal and Attitudinal variation of Nutrients in its Wood, Leaf Litter and Soil under the Canopy. *Nepal MAB Bulletin. 7:* 20-26.

G. Semi-Technical Papers:

1. **Sah, J. P.** 2001. Rarity in Plant Species: Causes and Implications for Conservation. *Botanica Orientalis* 2, Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal: 73-81.
2. **Sah, J. P.** 1999. Habitat fragmentation and its impact on the Biodiversity of Nepal. *Scientific World* (Nepal) 1 (1): 121-126.
3. **Sah, J. P.** 1999. Nepal ma Simsar Kshetra ra Tyasko Mahatwa (Wetlands in Nepal and their Importance). *Vigyan Jagat (Science World, Nepal)*, 1 (1): 14-18. (In Nepali).
4. **Sah, J. P.** 1999. Role of Mutualism in Community Organization. *Botanica Orientalis* 1, Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal: 46-48.
5. **Sah, J. P.**, Singh, R. L., Tiwari, R. D. and Chaudhary, R. P. 1999. Biodiversity in Parsa Wildlife Reserve, Nepal: Status, significance and conservation. *Tigerpaper* (FAO, Bangkok) 26 (3): 5-12.
6. **Sah, J. P.** and Lekhak, H. D. 1998. Protected Areas in Nepal. *ECOS Souvenir*. International Conference on Environment and Agriculture. Organized by Ecological Society (ECOS), Nov. 1-3, 1998, Nepal: 22-27.
7. **Sah, J. P.** 1998. Rani Tal: A threatened Wetland. *The Kathmandu Post*, Sept. 6, 1998: 1.
8. **Sah, J. P.** 1998. Koshi Tappu Wetlands: The Area of Rich Biological Resources. *Welcome* (Nepal) 6 (2): 50-55.
9. **Sah, J. P.** and Suselo, T. B. 1996. Ecology and Management of Wild Water Buffalo (*Bubalus bubalis*) in Nepal. *Tiger paper* (FAO, Bangkok) 23 (4): 18-21.
10. **Sah, J. P.** 1993. Effect of the Koshi River in Koshi Tappu Region, Nepal. *IUCN Wetland News Letter* (Gland, Switzerland) 8: 12-13.
11. **Sah, J. P.** and Suselo, T. B. 1993. Wetland Vegetation and Its Management in Koshi Tappu, Nepal: An overview. *Natural Resources Program News Letter* (AIT, Bangkok) 5 (2): 11-12.
12. **Sah, J. P.** 1991. Biotechnology and Environment. *Science Souvenir* 2. BOTSA, Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal: 21-24.
13. **Sah, J. P.** 1989. Global Warming and Plant World. *Science Souvenir* 1. Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal: 49-51.

H. Abstracts (Published-online):

1. **Sah, J. P.**, Ross, M. S., Pearlstine, L. G. and Ruiz, P. L. 2017. Spatio-temporal pattern in plant communities along hydrology gradient in Everglades Tree Islands. 11th North American Forest Ecology Workshop (NAFEW) 2017. http://nafew.org/wp-content/uploads/2012/02/NAFWEAbstracts_June2_finalforweb.pdf
2. Ogurcak, D. E., Gann, D., **Sah, J. P.**, Olivas, P. and Jirout, A. 2017. Monitoring tree island condition in the southern Everglades using bi-seasonal WorldView2 data and G-LiHT LiDAR. Society of Wetland Scientists (SWS) Annual Meeting 2017. http://swsannualmeeting.org/images/pdfs/Final_Schedule_For_Web.pdf.
3. **Sah, J. P.**, Ross, M. S., Stoffella, S. and Ruiz, P. L. 2017. Vegetation dynamics along hydrologic gradient in marl- and peat- dominated wetlands in Everglades, Florida. Society of Wetland Scientists (SWS) Annual Meeting 2017. http://swsannualmeeting.org/images/pdfs/Final_Schedule_For_Web.pdf.
4. **Sah, J. P.**, Bernhardt, C. E., Ross, M. S., Sternberg, L., and Willard, D. A. 2016. Hydrologic conditions and vegetation dynamics inferred from carbon isotopic signature of soil organic matter in the marl prairie landscape, Everglades, Florida. The 101st ESA Annual Meeting– Abstracts. <https://eco.confex.com/eco/2016/webprogram/Paper60381.html>
5. Ross, M. S., Meeder, J. F., Scinto, L., Ogurcak, D. E., **Sah, J. P.** and Zhang, K. 2016. Does freshwater augmentation affect the productivity of P-limited dwarf mangrove forests? The 101st ESA Annual Meeting– Abstracts. <https://eco.confex.com/eco/2016/webprogram/Paper57917.html>

6. Stoffella, S., Ross, M.S. and **Sah, J.P.** 2016. An Experimental assessment of neighborhood interference on Everglades' tree species survival and growth along a flooding gradient in constructed tree islands. The 101st ESA Annual Meeting– Abstracts. <https://eco.confex.com/eco/2016/webprogram/Paper60325.html>
7. **Sah, J. P.**, Ross, M. S., Ruiz, P. L. and Heffernan, J. 2016. Recent Hydrologically-driven Vegetation Succession in Shark River Slough, the Southern Compartment of the Everglades Ridge and Slough Landscape. National Conference on Ecosystem Restoration (NCER-2016). Abstracts. (<http://conference.ifas.ufl.edu/NCER2016/>)
8. Ross, M. S., Snyder, J. R., O'Brien, J. J., Timilsina, N., **Sah, J. P.** 2015. Size structure and stand density in south Florida slash pine stands: Influence of recent disturbance history. The 100th ESA Annual Meeting– Abstracts. (<http://eco.confex.com/eco/2015/webprogram/Paper56389.html>)
9. **Sah, J. P.**, Ross, M.S. and Ruiz, P. L. 2015. Hydrologic driven short-term vegetation successional dynamics in Shark River Slough, Everglades National Park, Florida. GEER 2015 Conference: Science in Support of Everglades Restoration – Abstracts. Pg. 253. (http://www.conference.ifas.ufl.edu/GEER2015/Documents/GEER_2015_Abstract_Book.pdf)
10. Stoffella, S., Ross, M.S., **Sah, J.P.**, Blaclo, J., Freixa, J. and Cline, E. 2015. Did flooding kill the ghost tree islands? Evidence from healthy Everglades tree islands and the LILA experimental platform. GEER 2015 Conference: Science in Support of Everglades Restoration – Abstracts. Pg 287. (http://www.conference.ifas.ufl.edu/GEER2015/Documents/GEER_2015_Abstract_Book.pdf)
11. Sullivan, P.L., Price, R.M., Sternberg, L., Sah, J.P., Scinto, L. et al. 2015. Hydrogeochemical response of experimental Everglades tree islands (Florida, USA): identifying feedback mechanisms associated with early tree growth and differing geologic materials. GEER 2015 Conference: Science in Support of Everglades Restoration – Abstracts. Pg. 291. (http://www.conference.ifas.ufl.edu/GEER2015/Documents/GEER_2015_Abstract_Book.pdf)
12. Freixa, J., Ross, M.S., **Sah, J.P.**, Blanco, J. and Stoffella, S. 2015. Does fire have a role in the transition from a healthy tree island to a ghost island? A fire history analysis. GEER 2015 Conference: Science in Support of Everglades Restoration – Abstracts. Pg. 109. (http://www.conference.ifas.ufl.edu/GEER2015/Documents/GEER_2015_Abstract_Book.pdf)
13. Ogurcak D. E., **Sah, J.P.** and Ross, M.S. 2015. The interaction of pulse and press disturbances: discerning the effects of sea level rise from those of storm surge flooding in coastal forests of the lower Florida Keys, FL. GEER 2015 Conference: Science in Support of Everglades Restoration – Abstracts. Pg. 221. (http://www.conference.ifas.ufl.edu/GEER2015/Documents/GEER_2015_Abstract_Book.pdf)
14. Beerens, J., Barkhataria, R., Childers, D. L. Ross, M.S., **Sah, J.P.**, Trexler, J.C. Van Lent, T. et al. (19 co-authors) 2015. Restoration directions: science informing the process. GEER 2015 Conference: Science in Support of Everglades Restoration – Abstracts. Pg. 308. (http://www.conference.ifas.ufl.edu/GEER2015/Documents/GEER_2015_Abstract_Book.pdf)
15. **Sah, J. P.**, Ross, M. S., Richards, J. H., Stoffella, S., Cline, E. and Scinto, L. 2014. Assessing the effects of forest canopy cover on understory vegetation composition and biomass along an experimental hydrological gradient. The 99th ESA Annual Meeting– Abstracts. (<http://eco.confex.com/eco/2014/webprogram/Paper49466.html>)
16. Ross, M. S., **Sah, J. P.** and Subedi, S. 2014. Metacommunity structure of dry tropical forests at the distal end of the Florida peninsula. The 99th ESA Annual Meeting– Abstracts. (<http://eco.confex.com/eco/2014/webprogram/Paper48765.html>)
17. **Sah, J. P.**, Ross, M. S. and Ruiz, P. L. 2013. Spatio-temporal Pattern in Plant Communities along Hydrology Gradient in Shark Slough Tree Islands, Everglades National Park, Florida. Society of Wetland Scientists Annual Meeting-2013. Abstracts (<http://sws2013.conferencespot.org/sws-54007-1.1799/vegetation-dynamics-and-succession-ii-1.3341/1.3342/m49-1.3346?qr=1>)
18. Ross, M. S., **Sah, J. P.**, Sullivan, P., Ruiz, P. L., Subedi, S., Scinto, L. and Price, R. 2012. Integrating experimental approaches into tree island restoration in the Everglades. The 96th ESA Annual Meeting– Abstracts. <http://eco.confex.com/eco/2012/webprogram/Paper39147.html>

19. **Sah, J. P.**, Ross, M. S., Ruiz, P. L. and Snyder, J. R. 2012. Fire and flooding interactions: Vegetation trajectories in the southern Everglades Marl Prairies, FL, USA. The 9th INTECOL International Wetlands Conference Abstracts. pp. 509.
(<http://www.conference.ifas.ufl.edu/intecol/Abstracts.pdf>)
20. Ross, M. S., **Sah, J. P.**, Ruiz, P. L., and Spitzig, A. A. 2012. Biogeography of tropical hardwood forests in South Florida: Evidence for self-organization? The 9th INTECOL International Wetlands Conference Abstracts. pp. 976.
(<http://www.conference.ifas.ufl.edu/intecol/Abstracts.pdf>)
21. Ruiz, P. L., Spitzig, A. A., **Sah, J. P.** and Ross, M. S. 2012. Mapping and assessing tree island fire damage and recovery within the short-hydroperiod marl prairie grasslands of the Everglades. The 9th INTECOL International Wetlands Conference Abstracts. pp. 508.
(<http://www.conference.ifas.ufl.edu/intecol/Abstracts.pdf>)
22. Stoffella, S. L., Ross, M. S., **Sah, J. P.**, Ruiz, P. L. and Cline, E. 2012. Hydrology, substrate type and density effects on species growth and survival in created everglades tree islands. The 9th INTECOL International Wetlands Conference Abstracts. pp. 451.
(<http://www.conference.ifas.ufl.edu/intecol/Abstracts.pdf>)
23. **Sah, J. P.**, Ross, M. S., Ruiz, P. L. and Snyder, J. R. 2011. Linking vegetation dynamics to hydrologic changes in the southern Everglades marl prairies. The 96th ESA Annual Meeting– Abstracts.
24. Ogurcak, D. E., **Sah, J. P.** and Ross, M. S. 2011. Effects of fire and storm surge on species heterogeneity and richness in the Pine Rockland community in the Big Pine Key, FL, USA. 54th Symposium of International Association for Vegetation Science (IAVS) Abstracts. pp. 164.
(<http://www.iavs.org/uploads/abstracts2011.pdf>)
25. Stoffella, S. L. Ross, M.S., **Sah, J. P.** and Ruiz, P. L. 2011. Hydrology, substrate type and density effects on species growth and survival in Everglades tree islands. 54th Symposium of International Association for Vegetation Science (IAVS) Abstracts. pp. 183.
(<http://www.iavs.org/uploads/abstracts2011.pdf>)
26. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Ruiz, P. L. and Stoffella, S. 2010. Changing Cape Sable seaside sparrow habitat conditions in marl prairie landscape and their implications for Everglades restoration. GEER 2010 Conference – Program and Abstracts. pp. 264.
(<http://conference.ifas.ufl.edu/GEER2010/pdf/Abstract%20BOOK.pdf>)
27. **Sah, J. P.**, Lopez, L N., Ross, M. S., Richards, J. Ruiz, P. L., Stoffella, S., Colbert, N., Heinrich, J., and Shamblin, B. 2010. Understory vegetation composition and biomass on the tree islands in the Loxahatchee impoundment landscape assessment (LILA) experimental site. GEER 2010 Conference – Program and Abstracts. pp. 265.
(<http://conference.ifas.ufl.edu/GEER2010/pdf/Abstract%20BOOK.pdf>)
28. D’Odorico, P., Engel, V., Carr, J., Oberbauer, S. F., Ross, M. S. and **Sah, J. P.** 2010. Tree island-grass coexistence in the Everglades freshwater system. GEER 2010 Conference – Program and Abstracts. pp. 93. (<http://conference.ifas.ufl.edu/GEER2010/pdf/Abstract%20BOOK.pdf>)
29. Ogurcak, D. E., **Sah, J. P.**, Ross, M. S. Zhang, K. 2010. Persisting effects of hurricane Wilma storm surge in pine rockland habitat on Big Pine Key, FL. GEER 2010 Conference – Program and Abstracts. pp. 223. (<http://conference.ifas.ufl.edu/GEER2010/pdf/Abstract%20BOOK.pdf>)
30. Ross, M. S., **Sah, J. P.** and Ruiz, P. L. 2010. Linking soils, hydrology, and forest structure in Everglades tree islands. GEER 2010 Conference – Program and Abstracts. pp. 256.
(<http://conference.ifas.ufl.edu/GEER2010/pdf/Abstract%20BOOK.pdf>)
31. **Sah, J. P.**, Snyder, J. R., Ross, M. S. and Ogurcak, D. E. 2010. Tree mortality following prescribed fire and a storm surge event in slash pine (*Pinus elliotii* var. *densa*) forests in the Florida Keys, USA. Pine Rockland Conference 2010 – Abstracts.
(http://fl.biology.usgs.gov/pineland/pdf/All_Presentation_Abstracts_2010.pdf)

32. **Sah, J. P.**, Ross, M. S., Snyder, J. R. and Ruiz, P. L. 2009. Effect of post-fire hydrology on vegetation dynamics in southern Everglades marl prairies. Abstracts - 4th International Fire Ecology and Management Congress: Fire as a Global Process – (<http://www.fireecology.net/Congress09/Abstracts/FireEco2009/pdfs/114.pdf>)
33. **Sah, J. P.**, Ross, M. S. and Snyder, J. R. 2009. Fuel loads, fire severity, and tree mortality in Florida Keys pine forests. In: 7th North American Forest Ecology Workshop 2009 – NAFEW Abstracts. Ed: P. Palacios. pp. 49. (<http://www.nafew2009.org/nafeW2009/PDF/Abstracts/NAFEW2009Abstracts.pdf>)
34. Ross, M. S., Ruiz, P. L., **Sah, J. P.**, Lopez, L. and Colbert, N. 2009. Stand density in South Florida tropical forests: implications for the function and management of Everglades tree islands. In: 7th North American Forest Ecology Workshop 2009 – NAFEW Abstracts. Ed: P. Palacios. pp. 40. (<http://www.nafew2009.org/nafeW2009/PDF/Abstracts/NAFEW2009Abstracts.pdf>)
35. Ogurcak, D. E., **Sah, J. P.**, Ross, M. S. and Mazzotti, F. J. 2008. Spatial distribution of wetland vegetation surrounding alligator holes in Everglades National Park, FL, USA. GEER 2008 Conference – Programs and Abstracts. pp. 327-328. (http://conference.ifas.ufl.edu/geer2008/pdf/Abstract_BOOK.pdf)
36. Dong, Q., Redwine, J., Ross, M., **Sah, J. P.**, Gottlieb, A., and Donalson, D. 2008. Predicting the impact of CERP on wet prairie vegetation communities located on marl soils. GEER 2008 Conference – Programs and Abstracts. pp. 355. (http://conference.ifas.ufl.edu/geer2008/pdf/Abstract_BOOK.pdf)
37. Ross, M. S., Gomez, D., Wang, X., Kline, M., Shamblin, B., **Sah, J. P.**, Ruiz, P. L., Oberbauer, S., Sternberg, L., and Engel, V. 2008. Assessing several vegetation indicators of Everglades water management. GEER 2008 Conference – Programs and Abstracts. pp. 369. (http://conference.ifas.ufl.edu/geer2008/pdf/Abstract_BOOK.pdf)
38. **Sah, J. P.**, Ross, M. S., Stoffella, S. and Atkinson, A. 2008. Developing a data-driven classification of South Florida plant communities. GEER 2008 Conference – Programs and Abstracts. pp. 373. (http://conference.ifas.ufl.edu/geer2008/pdf/Abstract_BOOK.pdf)
39. Stoffella, S., Ross, M. S., **Sah, J. P.**, Shamblin, B., Kline, M., Espinar, J. and Hanan, E. 2008. Tree growth, survival and biomass in LILA tree islands. GEER 2008 Conference – Programs and Abstracts. pp. 422. (http://conference.ifas.ufl.edu/geer2008/pdf/Abstract_BOOK.pdf)
40. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Ruiz, P. L. and Jones, D. T. 2007. Relationship between species richness and biomass along a hydrologic gradient in the marl prairie landscape in the southern Everglades, FL, USA. ESA/SER Joint Meeting – 2007. (<http://esameetings.allenpress.com/2007/P4827.HTM>)
41. Ross, M. S., Zhang, Q., **Sah, J. P.**, Glenn Ford, R., and O'Brien, J. O. 2007. Hurricanes, fire, and coastal pine forest in a rising sea: The Florida Keys. ESA/SER Joint Meeting – 2007. (<http://esameetings.allenpress.com/2007/P4827.HTM>)
42. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Ruiz, P. L. and Jones, D. T. 2006. Assessing the interactions of fire and hydrology on marl prairie vegetation in the southern Everglades, FL , USA. 3rd International Fire Ecology & Management Congress, Nov 13-17, 2006. Program & Abstracts. pp. 199. (<http://www.fireecology.net/Conferences/conferences.html>)
43. **Sah, J. P.** and Heinen, J. T. 2006. Issuing annual permits for harvesting thatch grass as compensation to local people in Nepal: does this policy have effects on conservation attitude? Himalayan Policy Research Conference – Abstracts. (http://nepalstudycenter.unm.edu/MissPdfFiles/PooledAbstract_PresentersOnly_Oct2_06ver6_pdf.pdf)
44. Heinen, J. T. and **Sah, J. P.** 2006. On the implementation of the Ramsar Convention in Nepal and its implications for regional waterfowl conservation. Himalayan Policy Research Conference – Abstracts. (http://nepalstudycenter.unm.edu/MissPdfFiles/PooledAbstract_PresentersOnly_Oct2_06ver6_pdf.pdf)

45. Ross, M. S., **Sah, J. P.**, Ruiz, P. L., Oberbauer, S. and Sternberg, L. 2006. Tree islands in Everglades landscapes: a study of inter-regional variation and forest moisture relations. GEER 2006 Conference – Programs and Abstracts. pp. 190. (<http://conference.ifas.ufl.edu/geer2006/Abstracts.pdf>)
46. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Ruiz, P. L. and Bas, O. L. Jr. 2006. Vegetation-environment relationships and their implications for Cape Sable seaside sparrow populations in Everglades marl prairies. GEER 2006 Conference – Programs and Abstracts. pp. 193. (<http://conference.ifas.ufl.edu/geer2006/Abstracts.pdf>)
47. Jayachandran, K., Sah, S., **Sah, J.** and Ross, M. 2003. Interactions of vegetation, hydrology, and soils in Everglades National Park tree islands: phosphorus biogeochemistry of soils. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystems – GEER Program and Abstracts. pp. 288-289. (<http://conference.ifas.ufl.edu/jc/>)
48. **Sah, J. P.**, Ross, M. S., Koptur, S., Borg, C., Liu, H., Snyder, J. 2003. Fuel loads in the understory of Florida Keys Pine forests along a chronosequence of time since last fire. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystems – GEER Program and Abstracts. pp. 457-458. (<http://conference.ifas.ufl.edu/jc/>)
49. Jayachandran, K., Sah, S., **Sah, J.** and Ross, M. 2003. Phosphorus biogeochemistry of the Everglades National Park tree island soils. 88th ESA Annual Meeting-2003. (<http://abstracts.co.allenpress.com/pweb/esa2003/document/27101>)
50. **Sah, J.**, Ross, M., Reed, D., Ruiz, P., Jones, D. 2003. Vegetation structure and composition along hydrologic gradients in Everglades tree islands. 88th ESA Annual Meeting-2003. (<http://abstracts.co.allenpress.com/pweb/esa2003/document/27239>)

Technical Reports:

1. Ross, M. S., Meeder, J., Scinto, L., **Sah, J. P.**, Stoffella, Biswas, H. and Charles, S. 2018. Ecosystem dynamics in the White Zone: history, drivers, and restoration implications. 2nd Annual Report submitted to South Florida Natural Resources Center, Everglades & Dry Tortugas National Parks. Homestead, FL. Cooperative Agreement # H5000-10-5040. April 2018. pp 102.
2. **Sah, J. P.**, Ross, M. S., Stoffella, S., Martinez-Held, A. and Jirout, A. 2017. Landscape Pattern – Marl Prairie/Slough Gradient: patterns and trends in Shark Slough marshes and associated marl prairies. Annual Report – Year 3 (2016-2017) submitted to US Army Engineer Research and Development Center. CA #: W912HZ-14-2-0023: Dec 30, 2017. 51 pp.
3. **Sah, J. P.**, Ross, M. S., Stoffella, S., Vidales, R. and Martinez-Held, A. 2017. Landscape Pattern – Marl Prairie/Slough Gradient: patterns and trends in Shark Slough marshes and associated marl prairies. Annual Report – Year 2 (2015-2016) submitted to US Army Engineer Research and Development Center. CA #: W912HZ-14-2-0023: Aug 2017. 40 pp.
4. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Stoffella, S., Jirout, A., Vidales, R. and Blanco, J. 2016. Re-sampling of vegetation survey sites within Cape Sable seaside sparrow habitat. Report submitted to South Florida Natural Resources Center, Everglades & Dry Tortugas National Parks. Homestead, FL. Cooperative Agreement # H5000-10-0104. Feb 2017. pp 40.
5. Ross, M. S., Meeder, J., Wachnicka, A., Scinto, L., **Sah, J. P.**, Stoffella, S., Ogurcak, D., Vidales, R. and Charles, S. 2016. Ecosystem dynamics in the White Zone: history, drivers, and restoration implications. Annual Report submitted to South Florida Natural Resources Center, Everglades & Dry Tortugas National Parks. Homestead, FL. Cooperative Agreement # H5000-10-5040. Jan 2017. pp 50.
6. **Sah, J. P.**, Jirout, A., Stoffella, S., Ross, M. S. 2016. Status of Vegetation structure and composition within the habitat of Cape Sable seaside sparrow Subpopulation D. Annual Report submitted to South Florida Water Management District (SFWMD), West Palm Beach, FL. PO # 4500091267. Sept 30, 2016. 27 pp.

7. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Stoffella, S., Blanco, J. and Freixa, J. 2015. Re-sampling of vegetation survey sites within Cape Sable seaside sparrow habitat. Report submitted to South Florida Natural Resources Center, Everglades & Dry Tortugas National Parks. Homestead, FL. Cooperative Agreement # H5000-06-0104. April 2016. pp 53.
8. Ross, M. S., Heffernan, J. B., **Sah, J. P.**, Ruiz, P. L., Spitzig, A. A., Isherwood, E. and Blanco, J. 2016. Everglades Ridge, Slough, and Tree Island Mosaics. Annual Report submitted to US Army Engineer Research and Development Center. Cooperative Agreement #: W912HZ-10-2-0030. Modification # P00004. Year 5 Report (2010-2015): Feb 2016. 98 pp.
9. **Sah, J. P.**, Ross, M. S., Blanco, J., and Freixa, J. 2015. Evaluation of WDAT vs EDEN Water Surface Elevation data for studying vegetation: hydrology relationship in the southern Everglades. Report submitted to US Army Corps of Engineers. (CA # W912HZ-14-2-0022-P00001 & W912HZ-14-2-0023-P00001). August 2015. Pp 31
10. Ross, M. S., Heffernan, J. B., **Sah, J. P.**, Ruiz, P. L., Spitzig, A. A., Isherwood, E. and Blanco, J. 2015. Everglades Ridge, Slough, and Tree Island Mosaics. Annual Report submitted to US Army Engineer Research and Development Center. Cooperative Agreement #: W912HZ-10-2-0030. Modification # P00003. Year 4 Report (2010-2014): July 2015. 89 pp.
11. **Sah, J. P.**, Ross, M. S. and Ruiz, P. L. 2015. Landscape Pattern – Marl Prairie/Slough Gradient: Decadal Vegetation Change in Shark River Slough and adjacent Marl Prairies. Report – 2014 (2005-2014) submitted to US Army Engineer Research and Development Center. CA #: W912HZ-09-2-0018: June 2015. 86 pp.
12. **Sah, J. P.**, Ross, M. S. and Ruiz, P. L. 2015. Landscape Pattern – Marl Prairie/Slough Gradient Annual Report – 2013 submitted to US Army Engineer Research and Development Center. CA #: W912HZ-09-2-0018: June 2015. 26 pp.
13. Ross, M. S., Heffernan, J. B., **Sah, J. P.**, Ruiz, P. L., Spitzig, A. A., Isherwood, E. and Blanco, J. 2015. Everglades Ridge, Slough, and Tree Island Mosaics. Annual Report submitted to US Army Engineer Research and Development Center. Cooperative Agreement #: W912HZ-10-2-0030. Modification # P00002. Year 3 Report (2010-2013): 92 pp.
14. **Sah, J. P.**, Ross, M. S., Ruiz, P., Freixa, J. and Stoffella. 2015. Monitoring of Tree Island Condition in the Southern Everglades. Annual Report submitted to US Army Engineer Research and Development Center. Cooperative Agreement #: W912HZ-09-2-0019. Report (2011-2014). April, 2015. 100 pp.
15. **Sah, J. P.** and Ross, M. S. 2014. Status of Vegetation Structure and Composition within the Habitat of Cape Sable seaside sparrow Subpopulation D. Annual Report submitted to South Florida Water Management District (SFWMD), West Palm Beach, FL. PO # 4500079149. Sept 26, 2014. 25 pp.
16. Ross, M. S., Heffernan, J. B., **Sah, J. P.**, Ruiz, P. L., Spitzig, A. A. and Isherwood, E. 2013. Year 2 Annual Report: Everglades Ridge, Slough, and Tree Island Mosaics. Annual Report submitted to US Army Engineer Research and Development Center. Cooperative Agreement #: W912HZ-10-2-0030. Modification # P00001. Year 2 Report. May, 2013. 118 pp.
17. **Sah, J. P.**, Ross, M. S. and Ruiz, P. L. 2013. Landscape Pattern – Marl Prairie/Slough Gradient: Vegetation Composition along the Gradient and Decadal Vegetation Change Pattern in Shark Slough. Annual Report-2012 submitted to US Army Engineer Research and Development Center. Cooperative Agreement #: W912HZ-09-2-0018. Modification # P00002. April 30, 2013. 51 pp.
18. Ruiz, P. L., Ross, M. S. and **Sah, J. P.** 2013. Monitoring of Tree Island Condition in the Southern Everglades: Hydrologic Driven Decadal Changes in Tree Island Woody Vegetation Structure and Composition. US Army Engineer Research and Development Center. Cooperative Agreement: W912HZ-09-2-0019. March 1, 2013. 41 pp.
19. Ruiz, P. L., **Sah, J. P.**, Snyder, J. R. and Ross, M. S. 2012. Mapping and assessing fire damage on broadleaved forest communities in Big Cypress National Preserve. Submitted to US Geological Survey. USGS Cooperative Agreement # G11AC20030. Sept 11, 2012. 16 pp.
20. **Sah, J. P.**, Ross, M. S., Ruiz, P. L. and Subedi, S. 2012. Monitoring of Tree Island Condition in the Southern Everglades. Annual Report-2011 submitted to US Army Engineer Research and

- Development Center. Cooperative Agreement #: W912HZ-09-2-0019. Modification # P00001. March 23, 2012. 72 pp.
21. King, R.T., Ross, M. S., Ruiz, P. L. and **Sah, J. P.** 2012. Marl Prairie/Slough Gradients: Pattern and trends in Shark Slough and adjacent marl prairies. Annual Report-2011 submitted to US Army Engineer Research and Development Center. Cooperative Agreement #: W912HZ-09-2-0018. March 23, 2012. 19 pp.
 22. Virzi, T., Davis, M. J., **Sah, J. P.**, Ross, M. S. and Ruiz, P. L. 2011. C-111 Project & Cape Sable seaside sparrow subpopulation D: Baseline data on sparrows, vegetation and hydrology – Annual Report-2011. Submitted to the South Florida Water Management District. 80 pp.
 23. **Sah, J. P.**, Ross, M. S., Ruiz, P. L., Snyder, J. R., Rodriguez, D. and Hilton, W. T. 2011. Cape Sable seaside sparrow habitat – Monitoring and Assessment - 2010. Final Report submitted to U. S. Army Corps of Engineers, Jacksonville, FL. (Cooperative Agreement # W912HZ-10-2-0025). April. 2011. 57 pp.
 24. Ruiz, P. L., **Sah, J. P.**, Ross, M. S., Rodriguez, D., and Lambert, A. 2011. Monitoring of Tree Island Conditions in the Southern Everglades: The Effects of Hurricanes and Hydrology on the Status and Population Dynamics of Sixteen Tropical Hardwood Hammock Tree Islands. US Army Engineer Research & Development Center. Cooperative Agreement: W912HZ-09-2-0019. 136 pp.
 25. King, R. T., **Sah, J. P.**, Ross, M. S. and Ruiz, P. L. 2010. Marl Prairie/Slough Gradients: Patterns and Trends in Shark Slough and Adjacent Marl Prairies. 2010 Annual Report. (CERP Monitoring Activity 3.1.3.5, Cooperative Agreement # W912HZ-09-2-0018). Oct 22, 2010. 27 pp.
 26. **Sah, J. P.**, Ross, M. S. and Stoffella, S. 2010. Developing a Data-driven Classification of South Florida Plant Communities. Final Report submitted to National Park Service: South Florida Caribbean Network (NPS/SFCN): Cooperative Agreement # H5000 06 0104. April 2010. 114 pp.
 27. Ruiz, P. L., Ross, M. S. and **Sah, J. P.** 2010. A Geospatial Database of Tree Islands within the Mustang Corner Fire Incident of 2008. Final Report submitted to Everglades National Park, Homestead, FL. Cooperative Agreement # H5297050027. March 2010. 15 pp.
 28. **Sah, J. P.**, Snyder, J. R., Ross, M. S. and Ogurcak, D. E. 2010. Re-sampling of Permanent Pine Rockland Vegetation Plots on Big Pine Key. Final Report submitted to U. S. Fish & Wildlife Service, Feb 2010. 110 pages (49 text & figures + 61 page appendices)
 29. **Sah, J. P.**, Ross, M. S. Snyder, J. R., Ruiz, P. L., Stoffella, S., Colbert, N., Hanan, E., Lopez, L., and Camp, M. 2010. Cape Sable seaside sparrow habitat – Vegetation Monitoring. FY 2009 Final Report submitted to U. S. Army Corps of Engineers, Jacksonville, FL. (Cooperative Agreement t # W912EP-09-C-0024). Jan. 2010. 50 pp.
 30. Kline, M., Ross, M. S., Ruiz, P. L., **Sah, J. P.**, Colbert, N., Lopez, L. and Heinrich, J. 2010. Marl Prairie/Slough Gradients: Patterns and Trends in Shark Slough and Adjacent Marl Prairies. 2009 Annual Report submitted to U. S. Army Corps of Engineers, Jacksonville. (Cooperative Agreement t # W912HZ-09-2-0018). Jan 2010. 15 pp.
 31. Heffernan, J. B., Ross, M. S., Cohen, M. J., Osborne, T.Z., **Sah, J. P.**, Ruiz, P. L. and Scinto, L. J. 2009. The Monitoring and Assessment Plan (MAP) Greater Everglades Wetlands Module – Landscape Pattern – Ridge, Slough, and Tree Island Mosaics. FY 2009 (Year-1) Annual Report submitted to South Florida Water Management District, West Palm Beach, FL. (Contract # 4600001726). Sept 2009. 51 pp.
 32. Stoffella, S., Ross, M. S., **Sah, J. P.**, Ruiz, P. L., et al. 2009. Estimating Biomass Production of Tree Species Growing along Hydrologic Gradient on LILA Tree Islands. Report submitted to South Florida Water Management District, West Palm Beach, FL. (PO # 4500031465). Aug 2009. 12 pp.
 33. Engel, V., Renshaw, A., Ross, M. S., **Sah, J. P.**, Coronado, C., Mellein, J. 2009. Tree Island Composition, Elevation, and Hydrologic Tolerances of the Dominant Species: Implications for the Decomposition Physical Model. Annex-2, Section 2 – Supporting document. In: Sklar F. et al. – The Decomposition Physical Model Science Plan. SFWMD, West Palm Beach, FL. 17 pp.

34. **Sah, J. P.**, Ross, M. S., Minchin, P., Saha, S., et al. 2009. Landscape pattern – Marl prairie/Slough gradients. A report submitted to Vic Engel, Everglades National Park, Homestead, FL. 17 pp. (The materials were included in 2009 MAP System Status Report).
35. Hanan, E., Ross, M. S., **Sah, J. P.**, Ruiz, P. L., Stoffella, S., et al. 2009. Woody Plant Invasion into the Freshwater Marl Prairie Habitat of the Cape Sable seaside sparrow. A final report submitted to US Fish and Wildlife Services. (Grant Agreement # 401815G163), Feb 19, 2009. 61 pp.
36. Kline, M. Ross, M. S., Ruiz, P. L., **Sah, J. P.**, Colbert, N., Lopez, L. and Heinrich, J. 2009. Marl Prairie/Slough Gradients; patterns and trends in Shark Slough and adjacent marl prairies. CERP monitoring activity 3.1.3.5. 2009 Annual Report, Jan, 2009. 14 pp.
37. **Sah, J. P.**, Ross, M. S., Snyder, J. R., Ruiz, P. L., Stoffella, S., et al. 2009. Cape Sable seaside sparrow habitat – Vegetation Monitoring. FY 2008 Final Report submitted to U. S. Army Corps of Engineers, Jacksonville, FL. (Cooperative Agreement t # W912EP-08-C-0018). Jan. 2009. 48 pp.
38. **Sah, J. P.**, Ross, M. S., Snyder, J. R. Ruiz, P. L., Stoffella, S., et al. 2008. Effect of Hydrologic Restoration on the Habitat of the Cape Sable seaside sparrow. 2006-2007. Year-5 Final Report submitted to U. S. Army Corps of Engineers, Jacksonville, FL. May 2008. 43 pp.
39. Kline, M. Ross, M. S., Ruiz, P. L., Shamblin, B., **Sah, J. P.**, Hanan, E., and Stoffella, S. 2007. Marl Prairie/Slough Gradients; patterns and trends in Shark Slough and adjacent marl prairies. CERP monitoring activity 3.1.3.5. Third Annual Report. Dec 31, 2007. 26 pp.
40. **Sah, J. P.**, Ross, M. S., Snyder, J. R. Ruiz, P. L., Jones, D. T. et al. 2007. Effect of Hydrologic Restoration on the Habitat of the Cape Sable seaside sparrow. 2005-2006. Year-4 Final Report submitted to U. S. Army Corps of Engineers, Jacksonville, FL. (Cooperative Agreement t # H5000 06 0104). March 2007. 45 pp.
41. Espinar, J., Ross, M., Oberbauer, S., Ruiz, P., Gomez, D., Wang, X., Sternberg, L., Saha, A., **Sah, J. P.** et al. 2007. Tree Islands in Everglades Landscapes: Current Status, Historical Changes, and Hydrologic Impacts on Population Dynamics and Moisture Relations. Second Annual Report. Jan 29, 2007. 52 pp.
42. Ruiz, P. L., Kline, M. **Sah, J. P.**, Jones, D. T., Hanan, E., Stoffella, S. and Ross, M. S., 2006. Marl Prairie/Slough Gradients; patterns and trends in Shark Slough and adjacent marl prairies. CERP monitoring activity 3.1.3.5. Second Annual Report. Dec 31, 2006. 23 pp.
43. Chaudhary, R. P., **Sah, J. P.**, Panthi, M. P. and Bhattarai, S. 2006. Effect of Grazing on an Invasive Species, *Mikania micrantha* H. B. Kunth, in Koshi Tappu Wildlife Reserve: A Case Study. Submitted to IUCN Asia Regional Office, Bangkok, Thailand. Dec 8, 2006. 44 pp.
44. Ross, M. S., **Sah, J. P.**, Snyder, J. R. Ruiz, P. L., Jones, D. T., Colley, H., et al. 2006. Effect of Hydrologic Restoration on the Habitat of the Cape Sable seaside sparrow. 2004-2005. Year-3. Final Report submitted to Everglades National Park, Homestead, FL and U. S. Army Corps of Engineers, Jacksonville, FL. March 2006. 46 pp.
45. Ross, M. S., Ruiz, P. L., **Sah, J. P.**, Stoffella, S. Timilsina, N., and Hanan, E. 2006. Marl Prairie/Slough Gradients; patterns and trends in Shark Slough and adjacent marl prairies. CERP monitoring activity 3.1.3.5. First Annual (2005) Report, Jan 16, 2006. 25 pp.
46. Ross, M., Oberbauer, S., Ruiz, P., Timilsina, N., Gomez, D., **Sah, J.**, Stoffella, S. and Sternberg, L. 2005. Tree Islands in Everglades Landscapes: Current Status, Historical Changes, and Hydrologic Impacts on Population Dynamics and Moisture Relations. First Annual Report. SERC, Florida International University, Miami, FL. December 30, 2005. 22 pp.
47. Snyder, J. R., Ross, M. S., Koptur, S., **Sah, J. P.** 2005. Developing Ecological Criteria for Prescribed Fire in South Florida Pine Rockland Ecosystems. Final Report. Interagency Agreement between USGS and Bureau of Land Management. BLM # 1422-R220A5-0012 Modification Number 2. USGS Open File Report OF: 2006-1062. July 2005. 109 pp.
48. Ross, M. S., **Sah, J. P.**, Snyder, J. R., Ruiz, P. L., Jones, D. T., Colley, H., et al. 2004. Effect of Hydrologic Restoration on the Habitat of the Cape Sable seaside sparrow. 2003-2004. Year-2. Final Report submitted to Everglades National Park, Homestead, FL and U. S. Army Corps of Engineers, Jacksonville, FL. November 2004. 36 pp.

49. Ross, M. S., Jones, D.T., Chmura, G.L., Cooley, H.C., Hwang, B., Jayachandran, K., Oberbauer, S. F., Reed, D. L., Ruiz, P. L., **Sah, J. P.**, Sah, S., Stockman, D., Stone, P.A., and Walters. J. 2004. Tree islands in the Shark Slough landscape: interactions of vegetation, hydrology and soils. Final Report to Everglades National Park, EVER 00075. Sept 2004. 196 pp.
50. Ross, M. S., **Sah, J. P.**, Armentano, T. V., Jones, D. T., Cooley H. C. and Smith, C. S. 2003. Vegetation Dynamics in ENP Marshes, with Emphasis on Taylor Slough. IOP Report to Everglades National Park. October 2, 2003. 31 pp.
51. Ross, M. S., **Sah, J. P.**, Snyder, J. R. Ruiz, P. L., Jones, D. T., Colley, H., et al. 2003. Effect of hydrologic restoration on the habitat of the Cape Sable seaside sparrow. 2002-2003. Year-1. Final Report submitted to Everglades National Park, Homestead, FL and U. S. Army Corps of Engineers, Jacksonville, FL. June 2003. 35 pp.
52. Ross, M. S. Meeder, J. F., Gaiser, E. E., Ruiz, P. L., **Sah, J. P.**, Reed, D. L. et al. 2003. The L-31E Surface Water Re-diversion Pilot Project Final Report: Implementation, Results, and Recommendations. Report to South Florida Water Management District (SFWMD Contract C-12409). May 1, 2003. 114 pp.
53. Ross, M. S., Ruiz, P. L., Reed, D. L., Jayachandran, K., Coultas, C. L., **Sah, J. P.** and Lewin, M. T. 2001. Assessment of Marsh Vegetation Responses to Hydrological Restoration in Shark Slough, Everglades National Park. Final Report, (Cooperative Agreement 5280-9021). June 27, 2001. 102 pp.
54. **Sah, J. P.** 2000. Environmental Impact Assessment of Bheri-Babai Hydroelectric Project on Wetlands and Riverine Plant Communities. Report submitted to NEW ERA (Bheri-Babai HEP). Feb 2000. 81 pp.
55. **Sah, J. P.** 1998. Ghodaghodi Lake Area: A Unique Ecosystem. Report submitted to IUCN-Nepal. May 1998. 67 pp.
56. Ross, M. S., Meeder, J. F., **Sah, J. P.**, Herndon, A. Ruiz, P. L. and Telesnicki, G. J. 1997. Windthrow in South Florida Pine Rocklands: Pit-and-Mound Features and Plant Microhabitat Associations Following Hurricane Andrew - Report to Everglades National Park. July 15, 1997.
57. Meeder, J. F., Ross, M. S., Telesnicki, G., Ruiz, P. L. and **Sah, J. P.** 1996. Vegetation Analysis in the C-111/Taylor Slough Basin. November, 1996. 103 pp.

9. Presentations

A. Conferences, Workshops, Meetings etc.:

1. 11th North American Forest Ecology Workshop (NAFEW 2017), Edmonton, AB, Canada. June 18-22, 2017. (Presented the paper, “*Spatio-temporal pattern in plant communities along hydrology gradient in Everglades Tree Islands*”).
2. Society of Wetland Scientists (SWS) Annual Meeting-2017. San Juan, Puerto Rico, USA. June 5-8, 2017. (Presented the paper, “*Vegetation dynamics along hydrologic gradient in marl- and peat-dominated wetlands in Everglades, Florida*”).
3. GEER (Greater Everglades Ecosystem Restoration) 2017 Conference Advancing Science, Restoring the Everglades. Coral Springs, FL. April 17-20, 2017. (Presented the Paper, “*Marl Prairie landscape as the Cape Sable seaside sparrow habitat: the pivot of hydrologic restoration in southern Everglades.*” - Organized and presided a Session, “*Marl prairie landscape: its ecology and importance in Everglades restoration*”).
4. 3rd International Conference on ‘Emerging Trends in Academic Research’ (ETAR-2016). Organized by Global Illuminators sponsored by Lambung Mangkurat University. Banjarmasin, Indonesia. Sept. 26-17, 2016. (Gave a Keynote Speech, and presentation on ‘*Shifting paradigm of*

- Ecosystem Management: Vegetation dynamics and ecosystem management along hydrologic gradient in marl- and peat- dominated wetlands in Everglades, Florida.*)
5. The Ecological Society of America (ESA) 101st Annual Meeting – Novel Ecosystems in the Anthropocene. Fort Lauderdale, FL, USA. August 7-12, 2016 (Presented the paper, “*Hydrologic conditions and vegetation dynamics inferred from carbon isotopic signature of soil organic matter in the marl prairie landscape, Everglades, Florida.*”; Presided one session, and Judged 2 oral and 3 poster presentations).
 6. National Conference on Ecosystem Restoration: Ecosystem Restoration in Action (NCER 2016). Coral Springs, FL. April 18-22, 2016. (Presented the Paper, “*Recent Hydrologically-driven Vegetation Succession in Shark River Slough, the Southern Compartment of the Everglades Ridge and Slough Landscape.*”)
 7. GEER (Greater Everglades Ecosystem Restoration) 2015 Conference: Science in Support of Everglades Restoration. Coral Springs, FL. April 21-23, 2015. (Presented the Poster, “*Hydrologic driven short-term vegetation successional dynamics in Shark River Slough, Everglades National Park, Florida.*”)
 8. RECOVER (Everglades: Restoration Coordination & Verification) Science Meeting. West Palm Beach, FL, USA. Jan 21-23, 2015. (Presented the paper, “*Monitoring of Everglades marl prairie and ridge-slough-tree island landscapes.*”)
 9. The Ecological Society of America (ESA) 99th Annual Meeting – From Oceans to Mountains. Sacramento, CA, USA. August 10-15, 2014. (Presented the paper, “*Assessing the effects of forest canopy cover on understory vegetation composition and biomass along an experimental hydrological gradient.*”).
 10. Society of Wetland Scientists (SWS) Annual Meeting-2013. Duluth, MN, USA. June 2-6, 2013. (Presented the paper, “*Spatio-temporal Pattern in Plant Communities along Hydrology Gradient in Shark Slough Tree Islands, Everglades National Park, Florida*”)
 11. 2012 Cape Sable seaside sparrow Symposium. Dec 11, 2012. Everglades National Park, Homestead, FL. (Presented paper, “*Marl Prairie Vegetation: What do we know? What’s next?*”)
 12. 9th INTECOL: International Wetlands Conference – Wetlands in a Complex World. Orlando, FL, USA. June 3-8, 2012. (Presented paper: *Fire and flooding interactions: Vegetation trajectories in the southern Everglades Marl Prairies, FL, USA*)
 13. 2011 Cape Sable seaside sparrow Symposium. Dec 6, 2011. Everglades National Park, Homestead, FL. (Presented paper, “*C111 Spreader Canal Project and CSSS sub-population D habitat: interplay of hydrology and fire.*”)
 14. The Ecological Society of America (ESA) 96th Annual Meeting – Earth Stewardship: Preserving and enhancing earth’s life-support systems. Austin, TX, USA. August 7-12, 2011. (Presented the paper, “*Linking vegetation dynamics to hydrologic changes in the southern Everglades marl prairies*”).
 15. 8th North American Forest Ecology Workshop, Roanoke, VA. June 19-23, 2011. (Presented the paper, “*Assessing understory vegetation composition along an experimental hydrological gradient in the developing forests on tree islands*”).
 16. 2010 Cape Sable seaside sparrow Symposium. Dec 7, 2010. Everglades National Park, Homestead, FL. (Presented paper, “*Cape Sable seaside sparrow habitat: incipient effects of retention areas on vegetation with and without fire.*”)
 17. GEER (Greater Everglades Ecosystem Restoration) 2010 Conference: The Everglades- A Living Laboratory of Change. Naples, FL. July 12-16, 2010. (Presented the papers, “*Changing Cape Sable seaside sparrow habitat conditions in marl prairie landscape and their implications for Everglades restoration*” and *Understory vegetation composition and biomass on the tree islands in the Loxahatchee impoundment landscape assessment (LILA) experimental site*”)
 18. Pine Rockland Conference 2010 (An international – South Florida and Caribbean - meeting organized by Pine Rockland Working Group), Miami, FL. Feb 10-12, 2010. (Presented the paper - *Tree mortality following prescribed fire and a storm surge event in the Florida Keys pine forests*)

19. 2009 Cape Sable seaside sparrow Symposium. Dec 8, 2009. Everglades National Park, Homestead, FL. (Presented paper, “*Cape Sable seaside sparrow habitat: hydrology, fire and vegetation change (2005-2009).*”)
20. 4th International Fire Ecology and Management Congress (An International meeting organized by Association of Fire Ecology), Savannah, GA, USA. Nov 30 – Dec, 5, 2009. (Paper presented - *Effect of post-fire hydrology on vegetation dynamics in southern Everglades marl prairie.*)
21. 7th North American Forest Ecology Workshop, Logan, UT. June 22-26, 2009. (Presented the paper “*Fuel loads, fire severity, and tree mortality in Florida Keys pine forests.*”)
22. Plant Biologists of South Florida Meeting-2009. April 5, 2009. Corkscrew Swamp Sanctuary, Naples, FL. (Presented paper “*Developing a Data-driven Classification of South Florida Plant Communities – Data Acquisition, and classification of herbaceous vegetation.*”)
23. 2008 Cape Sable seaside sparrow Symposium. Dec 2-3, 2008. Everglades National Park, Homestead, FL. (Presented paper, “*Cape Sable seaside sparrow habitat: hydrology, fire and vegetation change.*”)
24. 2008 Greater Everglades Ecosystem Restoration Conference, Naples, FL. July 28-August 1, 2008. (Presented the paper “*Developing a Data-driven Classification of South Florida Plant Communities – Data Acquisition and Management, and classification of herbaceous vegetation.*”)
25. Pine Rockland Conference 2008: Rockland Forests in a Changing World. Miami, FL, USA & Andros, Bahamas. February 28-March 1, 2008. (Presented the paper “*Results of 7 years (1999-2005) of prescribed fire in Everglades National Park pinelands*”).
26. 2007 Cape Sable seaside sparrow Symposium. Dec 4-5, 2007. Everglades National Park, Homestead, FL. (Presented paper, “*Cape Sable seaside sparrow habitat: hydrology, fire and vegetation change (2004-2007).*”)
27. Everglades Avian Ecology Workshop-2007. Sanctioned by South Florida Ecosystem Restoration Task Force and organized by Sustainable Ecosystems Institute. Florida International University, Miami, FL. August 13-14, 2007. (Presented the paper “*Vegetation dynamics in Southern Everglades Marl Prairies and their implications on Cape Sable seaside sparrow*”)
28. The Ecological Society of America (ESA) 92nd Annual Meeting – Ecology-based restoration in a changing world. San Jose, CA, USA. August 5-10, 2007. (Presented the paper “*Relationship between species richness and biomass along a hydrologic gradient in the marl prairie landscape in the southern Everglades, Florida, USA*”).
29. Ecosystem, Protected Areas and People Workshop. Organized by IUCN – The World Conservation Union, Asia Regional Office. Bangkok, Thailand. June 12-15, 2007. (Presented the paper, “*Lesson learned in protected areas: A case study in Koshi Tappu Wildlife Reserve, Nepal – grazing and invasive species Mikania micrantha HBK*”)
30. Workshop on the Regime Shift in Southern Prairie Ecosystems. Everglades National Park, Homestead. April 30 – May 1, 2007. (Presented the paper, “*Vegetation Dynamics in Southern Everglades Prairies in Recent Years: Causes and Implications*”)
31. 2006 Cape Sable seaside sparrow Symposium. Dec 5-6, 2006. Everglades National Park, Homestead, FL. (Presented paper, “*Cape Sable seaside sparrow census sites revisited: assessment of vegetation change in three years.*”)
32. 3rd International Fire Ecology and Management Congress, San Diego, CA, USA. November 13-17, 2006. (Presented the paper, “*Assessing the interactions between fire and hydrology on marl prairie vegetation in the southern Everglades, Florida, USA*”)
33. First Himalayan Policy Research Conference, University of Wisconsin’s South Asian Pre-Conference Venue, Madison, WI, USA. October 19, 2006. (Presented the paper, “*Issuing annual permits for harvesting thatch grass as compensation to local people in Nepal: does this policy have effects on conservation attitude?*”)
34. 2006 Greater Everglades Ecosystem Restoration Conference, Buena Vista Palace, Orlando, FL. June 5-9, 2006. (Presented the paper “*Vegetation-environment relationships and their implications*”)

- for Cape Sable seaside sparrow populations in Everglades Marl Prairies*", and Worked as a member on the Discussion Panel on "Defining Success – Everglades Tree Islands")
35. Pine Rockland Conference 2006: Bridging the Gaps between Florida and the Bahamas. Miami, FL, USA & Abaco, Bahamas. February 8-12, 2006. (Presented the paper "*Fuel loads, fire regimes and post-fire fuel dynamics in Florida Keys pine forests*")
 36. 2005 Cape Sable seaside sparrow Symposium: Fire management strategies of occupied CSSS habitat. Dec 6-7, 2005. Everglades National Park, Homestead, FL. (Presented paper, "*The habitat of Cape Sable seaside sparrow: vegetation-environment relationships.*")
 37. Society of Wetland Scientists' 26th Annual Meeting – Ecological, Landscape, and Regulatory Interactions: Coastal Plain Wetlands as Models for a Changing World. Charleston, SC, USA. June 5-10, 2005. (Presented the paper "*Vegetation dynamics and its implications for Cape Sable seaside sparrow populations in Everglades marl prairies*").
 38. 2005 Florida Coastal Everglades (FCE)-LTER All Scientists Meeting. March 25-26, 2005. Fairchild Tropical Botanic Garden, Coral Gables, FL, USA. (Presented the poster: *Vegetation dynamics and Cape Sable seaside sparrow populations in the marl prairie landscape.*)
 39. 47th Annual Meeting of the International Association of Vegetation Science - Landscape Change and Ecosystem Disturbance: Islands and Continents. Kailua-Kona, Hawai'i, USA. July 18-23, 2004. (Presented the paper "*Vegetation-environment relationships in the habitat of Cape Sable seaside sparrow in the Everglades, USA*").
 40. Pineland Workshop, Miami, FL. Feb 2-3, 2004. (Presented the paper "*Fuel loads and their implications for fire management in Florida Keys pine forests*").
 41. The Ecological Society of America (ESA) 88th Annual Meeting - Uplands to Lowlands: Coastal Process in Time of Global Change. Savannah, GA, USA. August 3-8, 2003. (Presented the paper "*Vegetation structure and composition along hydrologic gradients in Everglades Tree Islands*").
 42. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystem: From Kissimmee to the Keys. Palm Harbor, FL, USA. April 13-18, 2003. (Presented the paper "*Fuel loads in the understory of Florida Keys pine forests along a chronosequence of time since last fire.*")
 43. 29th Natural Areas Association (NAA) Conference: The Power of Nature- The Empowerment of Natural Areas. Asheville, NC, USA. Oct. 2-5, 2002. (Presented a poster "*Biomass and fuel loads associated with hardwoods in the understory of Florida Keys pine forests*").
 44. Biology Research Symposium. Organized by Tropical Biology Program at Fairchild Botanical Garden, Miami, FL, USA. Jan 18, 2002. (Presented the paper "*Vegetation-environment relationships on the floodplains of the Mahakali River, Nepal*").
 45. Natural Areas Association (NAA) Conference 2001: A Spatial Odyssey Searching for a Natural Balance at Cape Canaveral, FL, USA. Oct 3-6, 2001. (Presented the paper "*Effects of burning and grazing on floral composition, plant diversity and biomass production in Imperata-Vetiveria dominated grasslands in Nepal*").
 46. Biology Research Symposium. Organized by Tropical Biology Program at Florida International University, Miami, FL, USA. Feb. 2, 2001. (Presented the paper "*Effects of anthropogenic disturbances on community structure and biomass production in seasonally flooded grasslands in Nepal*").
 47. Quebec 2000: Millennium Wetland Event/INTECOL VI International Wetland Symposium. Jointly organized by International Peat Society, Society of Wetland Scientists/International Association of Ecology/International Mire Conservation Group at Quebec City, Canada. Aug. 6-12, 2000. (Presented the paper "*Participatory approach to wetland management in Nepal: A case study in Ghodaghodi Lake Area*" and worked as "a Volunteer").
 48. International Conference on Tropical Aquatic Ecosystems: Health, Management and Conservation. Jointly organized by Aquatic Ecosystems Health and Management Society, Canada, National Institute of Ecology, India and International Limnological Society, Netherlands at Nainital, India.

- Oct. 25-30, 1999. (Presented the paper “*Assessment of Water pollution in the Narayani River, Nepal* and worked as “a Reporter”).
49. Workshop on Grassland Ecology and Management in the Protected Areas of Nepal. Jointly organized by Department of National Parks and Wildlife Reserve (DNPWC), WWF-Nepal and ICIMOD at Royal Bardia National Park, March 15-18, 1999. (Presented papers “*Koshi Tappu's treasure: wetlands or grasslands?*” and “*Wetlands in Royal Shuklaphanta Wildlife Reserve and their importance in grassland management*”).
 50. International Conference on Environment and Agriculture. Organized by Ecological Society at Kathmandu, Nepal. Nov. 1-3, 1998. (Worked as a Member of the Organizing Committee, the Coordinator of the Poster Session, and Co-author of the paper: “*Industrial effluents and their use in agriculture along the Narayani River in Nawalparasi District, Nepal*” and the poster “*Vegetation study in the abandoned agricultural fields of Shuklaphanta Wildlife Reserve*”).
 51. International Conference on Asian Wetlands. Organized by Indian Environmental Society at New Delhi, India. Jan 29-31, 1998. (Presented the paper “*Wetlands in Shuklaphanta Wildlife Reserve, Nepal: present status and management issues*”).
 52. Workshop on Wetland Conservation and Management (Ghodaghodi Tal). Jointly Organized by Natural History Society of Nepal and IUCN-Nepal at Kathmandu. Dec 15-17, 1997. (Presented the paper “*Ghodaghodi Lake system: a unique ecosystem in the lowlands of Nepal*”).
 53. Second International Seminar cum Workshop on the Design and Establishment of Computerized Database of Legumes of South Asia. Jointly Organized by NBRI, Lucknow, India and Central Department of Botany, T. U., Kathmandu, Nepal. April May 1-3, 1995. (Presented the poster “*Study on Ecology and Ethnobotany of Legumes in Parsa, Nepal*” and worked as “a Member of Organizing Sub-committee”)
 54. International Conference on System Dynamics. University of Stirling, Scotland, UK. July 11-15, 1994. (Presented the paper “*Wetland vegetation and its management in Koshi Tappu, Nepal: a system dynamic approach*”).
 55. Second National Conference on Science and Technology held in Kathmandu, Nepal. Organized by Royal Nepal Academy of Science and Technology (RONAST). June 8-11, 1994. (Presented the paper “*A Study on Vegetation Dynamics in Koshi Tappu, Nepal*”).
 56. Regional Conference on Environment and Biodiversity, Organized by Ecological Society (ECOS), Kathmandu. March 7-9, 1994. (Presented the paper “*The shifting of the Koshi river and its Impact on land use change in Nepal*”. and worked as “a Coordinator of Organizing Sub-committee for General Management”).
 57. International Workshop on Sustainable Agriculture, held in Bangkok. Organized by Natural Resources Program, AIT, Bangkok. Dec 14-17, 1993. (Presented the paper “*Role of Wetlands in Sustainable Agriculture in Nepal with Reference to Koshi Tappu Region*” and worked as a Volunteer)
 58. International Botanical Conference held in Dhaka. Organized by Bangladesh Botanical Society, Dhaka. Jan. 10-12, 1991. (Presented the papers “*Assessment of Grain Amaranth Productivity in Nepal*” and a poster on “*Study of the members of Fagaceae on Phulchoki Hill, Nepal*”).
 59. First Regional Conference of the Association of Plant Physiologists of SAARC Countries (APPSC) on the Role of Plant Physiology and Biotechnology on Plant Productivity. Oct. 2-7, 1988. Kathmandu, Nepal. (Presented the paper “*A Study on the productivity of *Amaranthus hypochondriacus L.**” and worked as a Member of Organizing Sub-committee)
 60. First Asian School on Conservation Biology, held in Bangalore, India. Dec. 16-31, 1987. Bangalore, India (Presented the paper “*Lyonia ovalifolia: A threatened species of Nepal*”)

B. Invited Seminars, Guest Lectures:

1. Sah, J. P. et al. 2017. Marl Prairie Landscape as Cape Sable seaside sparrow habitat – the pivot of water management activities in southern Everglades. Biology Department, University of Miami, Miami, FL. Oct 09, 2017.
2. Sah, J. P. 2015. Marl Prairies: Cape Sable seaside sparrow habitat - Ecology & Management. Department of Earth & Environment - Professional Science Masters - Environmental Policy and Management (PSM-EPM), Florida International University, Miami, FL. Sept 12, 2015.
3. Sah, J. P. et al. 2015. Fire and Flooding Interactions: Vegetation Trajectories in the Southern Everglades Marl Prairies, Florida. South Florida Natural Resources Center, Everglades National Park, Homestead, FL. March 4, 2015.
4. Sah, J. P. et al. 2014. Cape Sable seaside sparrow sub-population D habitat: vegetation dynamics – an overview. Brown Bag Seminar - South Florida Water Management District, West Palm Beach, FL. October 22, 2014.
5. Sah, J. P. 2014. Southern Everglades marl prairies: ecology and management. In EVR-4594: Analysis of South Florida Ecosystems- 2014 Spring Semester (Instructor – Mike Ross), Florida International University, Miami, FL. Feb 20, 2014.
6. Sah, J. P. 2013. The changing face of plant communities in floodplains of the Himalayan foothills and the Everglades. Department of Earth & Environment - Environmental Studies Seminar, Florida International University, Miami, FL. Feb 27, 2013.
7. Sah J. P. 2013. South Florida Pine Forests: Ecology and Management. In EVR-4594: Analysis of South Florida Ecosystems- 2013 Spring Semester (Instructor – Mike Ross), Florida International University, Miami, FL. Feb 12, 2013.
8. Sah J. P. 2012. Southern Everglades marl prairies: ecology and management. In EVR-4594: Analysis of South Florida Ecosystems- 2012 Spring Semester (Instructor – Mike Ross), Florida International University, Miami, FL. Feb 21, 2012.
9. Sah, J.P. et al. 2011. Vegetation dynamics in marl prairies and interplay of hydrology and fire and its implications on Everglades Restoration. Southeast Environmental Research Center (SERC) Seminar, FIU. March 9, 2011.
10. Sah, J. P. et al. 2010. The changing face of endangered species habitat management challenges in Himalayan foothill floodplains and the Everglades wetlands. Presented at: Water, Wetlands and Watershed Seminar, University of Florida, Gainesville, FL. Nov 10, 2010.
11. Sah, J. P. et al. 2010. Developing a Data-driven Classification of South Florida Plant communities – Data Acquisition and Management, and classification of herbaceous vegetation. Plant Talk. Department of Biological Sciences, Florida International University, Miami, FL. Feb 17, 2010.
12. Sah, J. P. 2010. Fire: a disturbance? In EVR-4594: Analysis of South Florida Ecosystems- 2010 Spring Semester (Instructor – Mike Ross), Florida International University, Miami, FL. Feb 10, 2010.
13. Sah, J. P. 2007. Floodplain ecology and management. In EVR-5320: Environmental Resource Management-2007Spring Semester (Instructor – Mike Ross), Florida International University, Miami, FL. Feb 27, 2007.
14. Sah, J. P. 2007. Resource use pattern and people’s attitude: do they really matter in participatory approach to protected area management? In EVR-5360: Protected Area Management -2007 Spring Semester (Instructor – Joel Heinen). Florida International Management, FL. Feb 6, 2007.
15. Sah, J. P. 2006. Issuing annual permits for harvesting thatch grass as compensation to local people in Nepal: does this policy have effects on conservation attitude? Department of Environmental Studies Seminar, Florida International University, Miami, FL. Fall 2006.
16. Sah, J. P. et al.2004. The habitat of the Cape Sable seaside sparrow: vegetation-environment relationships Southeast Environmental Research Center (SERC) Brown Bag Seminar, Florida International University, Miami, FL. April 14, 2004.

17. Sah, J. P. et al. 2003. Vegetation dynamics in ENP marshes with emphasis on Taylor Slough. Department of Environmental Studies Seminar, Florida International University, Miami, FL. Nov. 5, 2003.
18. Sah, J. P. 1996. GIS approach to the natural resource management in Nepal: a case study in Koshi Tappu Region Geographic Information System (GIS) Seminar. FIU GIS group at Florida International University, Miami, USA. Aug. 16, 1996.

10. Research Experience/Projects:

A. Research Funding (PI or Co-PI) (Total funding \$5.16 M of which \$2.05 M as PI)

1. Post-storm habitat assessment of pine rocklands at National Key Deer Refuge. Funded by US Fish and Wildlife Service, Atlanta, GA. Project Period: Oct 1, 2017 – Dec 31, 2019. CA Award # F18AC00088. Funding amount: \$75,788. **Co-PI** with Michael Ross (PI), Danielle Ogurcak (Co-PI), Rene Price (Co-PI), Dean Whitman (Co-PI) and Keqi Chang (Co-PI).
2. Evaluation of Vegetation Response to Changes in Hydrologic Parameters within Cape Sable Seaside Sparrow Habitat, Everglades National Park, Florida. Funded by U.S. Army Corps of Engineers (USACE), U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Project period. Feb 21, 2017 to Jan 31, 2019 (Potentially for 5 years). Award # W912HZ-17-2-0003. Funding amount: \$250,000 (Total to date): (\$125,000 (FY2017) + \$125,000 (FY2018)). **PI** with Michael Ross (Co-PI).
3. Status of vegetation structure and composition within the habitat of Cape Sable seaside sparrow subpopulation D. Funded by South Florida Water Management District (SFWMD). Jan 10, 2018 – Sept 30, 2018. PO # 4500104597. Funding amount \$38,000. **PI** with Mike Ross (Co-PI).
4. LILA Tree Island, Ridge, and Slough Studies. Funded by South Florida Water Management District (SFWMD), West Palm Beach, FL. Oct 1, 2017 – Sept 30, 2020. Funding amount: \$324,903 (for three years). PO # 9500007401. **Co-PI** with Len Scinto (PI), Rene Price (Co-PI) and Michael Ross (Co-PI).
5. Landscape Pattern: Marl Prairie/Slough Gradients. Funded by U.S. Army Corps of Engineers (USACE), U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Project period: Sept 18, 2014 – Sept 30 2018. Award # W912HZ-14-2-0023. Funding amount: \$409,373 (Total to date) – (\$96,000 (FY14) + \$116,281 (FY15) + \$96,280 (FY16) + \$96,280 (FY17)). **PI** with Mike Ross (Co-PI).
6. Monitoring of Tree Island Condition in the Southern Everglades. Funded by U.S. Army Corps of Engineers (USACE), U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Project period: Sept 18, 2014 – Sept 30 2018. Award # W912HZ-14-2-0022. Funding amount: \$374,440 (Total to date) – (\$92,000 (FY14) + \$92,667 (FY15) + \$92,667 (FY16) + \$92,468 (FY17)). **PI** with Mike Ross (Co-PI) & Daniel Gann (Co-PI).
7. Landscape Pattern – Ridge, Slough, and Tree Island Mosaics. Funded by U.S. Army Corps of Engineers (USACE), U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Project period: Sept 23, 2015 – Sept 15, 2018. Award # W912HZ-15-2-0027. Funding amount: \$ 274,380 (Total to date): (\$91,000 (FY2015) + \$91,690 (FY2016) + \$91,690 (FY2017)), **PI** with Mike Ross (Co-PI).
8. Vegetation study within the current and adjoining potential habitat of Cape Sable seaside sparrow in the southern Everglades. Funded by Everglades National Park (ENP), Homestead, FL. Project period: Sept 1, 2016 – Aug 31, 2018. Award # P16AC01534. Funding amount: \$200,000 (Total to date): (\$100,000 (FY2016) + \$100,000 (FY2017)). **PI** with Mike Ross (Co PI).
9. Ecosystem dynamics in the White Zone: history, drivers, and restoration implications. Funded by Everglades National Park (ENP), Homestead, FL. Project period: Oct 5, 2016 – Oct 4, 2018. Award

- # P15AC01625. Funding amount: \$254,623 (Year1 \$132,653 + Year 2 \$121,970). **Co-PI** with Mike Ross (PI), Anna Wachnicka (Co-PI), Len Scinto (Co-PI) and John F. Meeder (Co-PI).
10. Simulation of vegetation dynamics in the Marl prairie landscape using the Everglades Vegetation Succession Model (ELVeS). Funded by Everglades National Park (ENP), Homestead, FL. Project period: Beginning date Feb 15, 2017 to Dec 31, 2018. Award # P16AC00032. Funding amount: \$162,750. **PI** with Mike Ross (Co PI).
 11. From Arboreal to Benthic Communities: the ABCs of Land to Ocean Biodiversity Observations. Funded under NASA solicitation NNH15ZDA001N-BIO (ROSES-2015) to Dr. Erin Hestir (PI), North Carolina State University. A sub-contract to Florida International University. Project period: 08/11/ 2016 – 8/10/2018. Funding amount: \$23,479. **Co-PI** with Evelyn Gaiser (PI).
 12. Status of vegetation structure and composition within the habitat of Cape Sable seaside sparrow subpopulation D. Funded by South Florida Water Management District (SFWMD). Dec 15, 2015 – Sept 30, 2016. PO # 4500091267. Funding amount \$38,000. **PI** with Mike Ross (Co-PI).
 13. Vegetation study within the current and adjoining potential habitat of Cape Sable seaside sparrow in the southern Everglades. Funded by Everglades National Park (ENP), Homestead, FL. Project period: Sept 1, 2015 – Aug 31, 2016. Award # P15AC01254. Funding amount: \$100,000. **PI** with Mike Ross (Co PI).
 14. Ecosystem dynamics in the White Zone: history, drivers, and restoration implications. Funded by Everglades National Park (ENP), Homestead, FL. Project period: Oct 5, 2015 – Oct 4, 2016. Award # P15AC01625. Funding amount: \$102,575. **Co-PI** with Mike Ross (PI), Anna Wachnicka (Co-PI), Len Scinto (Co-PI) and John F. Meeder (Co-PI).
 15. Status of vegetation structure and composition within the habitat of Cape Sable seaside sparrow subpopulation D. Funded by South Florida Water Management District (SFWMD). Jan 2014 – Sept 30, 2014. PO # 4500079149 Funding amount \$38,000. **PI** with Mike Ross (Co-PI).
 16. Re-sampling of vegetation within the habitat of Cape Sable seaside sparrow. Funded by Everglades National Park. Aug 28, 2013 – July 31, 2014. Award # P13AC01271. Funding amount: \$66,087. **PI** with Mike Ross (Co-PI).
 17. Landscape Pattern – Ridge, Slough, and Tree Island Mosaics. Funded by U.S. Army Corps of Engineers, U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Project period: Aug 1, 2012 – August 30, 2015. Co-operative Agreement # W912HZ-10-2-0030. Funding amount: Total \$275,073 (\$91,691 + \$91,691 + \$91,691) in 3 years (FY 2012 to FY 2014). **Co-PI** with Mike Ross (PI).
 18. Monitoring of Tree Island Condition in the Southern Everglades. Funded by U.S. Army Corps of Engineers, U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Funding period: June 1, 2009 – Aug 30, 2014. Co-operative Agreement # W912HZ-09-2-0019. Funding amount: Total \$625,359 (\$132,250 + \$150,660 + \$157,115 + \$92,667 + \$92,667) in 5 years (FY 2009 to FY 2013). **Co-PI** with Mike Ross (PI) and Steve Oberbauer (Co-PI).
 19. Landscape Pattern: Marl Prairie/Slough Gradients. Funded by U.S. Army Corps of Engineers, U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Funding period: June 1, 2009 – Sept 30, 2014. Co-operative Agreement # W912HZ-09-2-0018. Funding amount: Total \$ 549,241 (\$114,957+ \$118,910 + \$122,812 + \$96,281 + \$96,281) in 5 years (FY 2009 to FY 2013). **Co-PI** with Mike Ross (PI).
 20. Carbon Isotopic Signature in the Soil Organic Matter in Marl Prairie Soil Cores in the Everglades. Funded by U. S. Geological Survey (USGS), Reston, VA 20192. Funding period: April 1, 2011 – March 31, 2013. Award # G11AS20026. Funding amount: \$28,000. Principal Investigator (**PI**) with Mike Ross.
 21. Landscape Pattern – Ridge, Slough, and Tree Island Mosaics. Funded by U.S. Army Corps of Engineers, U. S. Army Engineer Research and Development Center (ERDC), Vicksburg, MS. Project period: Aug 1, 2010 – July 31, 2012. **Co-PI** with Jim Heffernan (PI), Mike Ross (Co-PI), and Len Scinto (Co-PI).

22. Assessing the Impact of Deep Fire on Hardwood Hammocks in Big Cypress National Preserve. Funded by US Geological Survey. March 1, 2011 to Feb 29, 2012. Award # G11AC20030. Funding amount \$18,000. **PI** with Mike Ross (Co-PI).
23. Vascular Plant Community Composition and Distribution in Cape Sable seaside sparrow Subpopulation D. Funded by South Florida Water Management District (SFWMD), West Palm Beach, FL. April 1, 2011 to Sept 30, 2011. Award # 4500058454. Funding amount \$38,531+ (22,575 in form of helicopter support). **Co-PI** with Mike Ross (PI).
24. Carbon Isotopic Signature in the Soil Organic Matter in Marl Prairie Soil Cores in the Everglades. Funded by U. S. Geological Survey (USGS), Reston, VA 20192. Funding period: April 1, 2010 – March 31, 2011. Award # G10AC00234. Funding amount: \$16,445. Principal Investigator (**PI**) with Mike Ross.
25. Cape Sable seaside sparrow habitat monitoring and assessment. Funded by USACE, Jacksonville, FL Total \$663,019 (US\$ 157,707 + \$192,162 + \$132,872 + \$180,278). in 4 years (FY 2007 to FY 2010). (**Co-PI** with Dr. Mike Ross (PI), FIU and Dr. Jim Snyder (Co-PI), USGS).
26. Landscape pattern - ridge, slough and tree island mosaic. June 1, 2009 to Sep 30, 2009. Funded MAP-RECOVER, SFWMD (**Co-PI** with Dr. Jim Heffernan (PI), FIU, Dr. Mike Ross (Co-PI), and Len Scinto (Co-PI) from FIU, and Dr. Matt Cohen (Co-PI) and Todd Osborne (Co-PI) from UF.
27. Estimating biomass production and nutrient concentrations of tree species growing along hydrologic gradient on LILA tree islands. Funded by South Florida Water Management District (SFWMD), Dec 15, 2008–Mar 15, 2010. US\$ 49,305 (**Co-PI**, with Mike Ross (PI)
28. Developing allometric biomass equation for saplings of tree species common in Everglades tree islands. Funded by South Florida Water Management District (SFWMD), June 1, 2007-Sept 30, 2008. US\$ 48,750, (**Co-PI** with PI-Dr. Mike Ross, FIU)
29. Developing a data-driven classification of south Florida plant communities. Funded by National Park Service-South Florida Caribbean Network (NPS/SFCN). 2006-2008. US\$ 55,318. **Co-PI** with Mike Ross (PI)
30. Effect of grazing on *Mikania micrantha* in Koshi Tappu Wildlife Reserve, Nepal: A case study. Funded by IUCN. Funded by IUCN-Bangkok, Sept 1 – Dec 31, 2006. US\$ 5,000 (**Co-PI** with Prof R. P. Chaudhary (PI), TU, Nepal)
31. Everglades fire effects monitoring in Cape Sable seaside sparrow habitat and adjacent plant communities. Funded by Everglades National Park. Nov 1, 2005 – Dec 31, 2006. US\$ 16,000. **Co-PI** with Mike Ross (PI)
32. Implications of Vegetation Dynamics for managing wetlands in lowland Nepal. May, 1997-Dec 2000. Funded by National Geographic Society, USA. Grant # 5809-96. US\$ 10,000 (**PI** as a Ph.D. Candidate)
33. Diversity and Conservation Strategy of some potential Medicinal Plants in Manang, Nepal. Funded by Annapurna Conservation Area Project (ACAP), Nepal. June-August, 1995. US\$ 2,000 (**Co-PI** with Dr. Krishna K. Shrestha (PI), TU, Nepal)
34. Wetland Vegetation and Management in Ghodaghodi Tal, Nepal. Funded by IUCN, South-east Asia Regional Office, Bangkok. Sept. 1994 - Aug. 1995. US\$ 500 (**PI**)
35. Study of some Medicinal Plants around Pokhara Valley. Funded by Royal Nepal Academy of Science and Technology (RONAST), Nepal Dec 1987 to Dec 1989. US\$ 2500 (**Co-PI** with Dr. Radheshyam Kayastha (PI), Pokhara Campus, TU, Nepal)

B. Research Works (others):

1. Effects of hydrologic restoration on habitat of the Cape Sable Seaside Sparrow. A DOI-funded Southeast Environmental Research Center (SERC) Project. Aug. 2002 – 2006. (Worked as a Post-doctoral/Visiting Research Associate with Dr. Mike Ross, Principal Investigator - coordinating field works, compiling and analyzing data, and writing reports and peer-reviewed papers)

2. Fuel development and woody plant invasion in the Everglades prairies. Funded by US Fish & Wildlife Service June 1, 2005 – Dec 31, 2007 (Worked as an investigator with PI: Dr. Mike Ross).
3. Tree Islands in the Shark Slough Landscape: Interactions of Vegetation, Hydrology and Soils. (Aug 2003 – Sept 2004) (Worked as an Investigator and Data Analyst – PI: Dr. Mike Ross)
4. Vegetation Dynamics in ENP Marshes, with Emphasis on Taylor Slough (Jan 2003-Aug 2003) (Worked as an investigator and data analyst – PI: Dr. Mike Ross).
5. The L-31E Surface Water Re-diversion Pilot Project. (Aug 2002 – May 2003) (Data analysis, report writing,, PI - Dr. Mike Ross)
6. Developing Ecological Criteria for Prescribed Fire in South Florida Pine Rockland Ecosystems. (Sept 2001-Aug. 2002) (Data analysis, report writing, PI - Dr. Mike Ross).
7. Assessment of marsh vegetation responses to hydrological restoration in Shark Slough, Everglades National Park. A Southeast Environmental Research Program Project. Jan. 2000 – Dec 2000) (Data analysis, report writing, PI: Dr. Mike Ross).
8. Environmental Impact Assessment of Bheri-Babai Hydroelectricity Project, Nepal, Conducted by NEW ERA-Nepal and funded by JICA. Sept. 1999 - Dec. 1999. (Worked as a Wetland Ecologist)
9. Ghodaghodi Tal Conservation Project. An IUCN-Nepal Project funded by Canadian Cooperation Mission. Nov. 1997-April 1998. (Worked as an Ecological Expert for IUCN)
10. Windthrow in South Florida Pine rock lands: Pit and Mound features and Plant Micro-habitat Associations following Hurricane Andrew. A Southeast Environmental Research Program Project from Everglades National Park. Contract # CA 5280-4-9013. Dec 1996-Jan 1997. (Data analysis, report writing, PI: Dr. Mike Ross & Dr. Jack Meeder)
11. Vegetation Analysis in the C-111/Taylor Slough Basin. A Southeast Environmental Research Program Project, Contract # C-4244. May 1996 - Aug. 1996. (Data analysis, report writing, PI - Dr. Mike Ross & Jack Meeder)
12. Biological and Cultural Diversity in Parsa Wildlife Reserve, Parsa, Nepal. Funded by National Geographical Society, USA. August 1994 - July 1995. (Worked as a Research Associate, PI - Dr. R. P. Chaudhary)
13. Environmental Impact Assessment of Arun III Transmission Line. NEW ERA-Nepal, for Joint Venture (JV), Nepal. June - July 1991. (Worked as an Expert for Ecological Survey)
14. Exploitation of Grain Amaranth in Nepal. International Foundation for Science, Sweden funded Project # C/0865- I & II, Nov. 1985 - Aug. 1989. (Worked as a Research Associate, PI - Dr. P. K. Jha)
15. Analysis of Structure and Function of Kulekhani Watershed. Funded by Nepal National Committee for Man and Biosphere (MAB). 1988. (Worked as a Research Associate for 1 year, PI - Dr. P. K. Jha)
16. Ecological Problems and Impact of Agriculture in Shuganikas Village. Funded by National Development Service, Tribhuvan University, Kirtipur, Kathmandu, Nepal. 1983. (Worked as an Investigator)

11. Languages (Fluent in reading and writing): English, Nepali, Hindi, Maithili

12. Affiliated Professional Organizations:

Current memberships

1. International Association of Vegetation Science (IAVS) – **Member** (1994-1995; 2009-)
2. The International Association for Ecology (INTECOL) - **Member** (2004-)
3. The Ecological Society of America (ESA) - **Member** (2004-)
4. Society of Wetland Scientists (SWS) - **Member** (2004-)

5. National Geographic Society (NGS) - **Member** (2001-)
6. Natural History Society of Nepal (NAHSON) - **Life Member** (Since 1998)
7. Nepal Botanical Society (NBS) - **Life Member** (Since 1994)
8. Ecological Society, Nepal (ECOS) – **Life Member** (Since 1994)

Professional Services/Past memberships

9. Association of Fire Ecology (AFE) - **Member** (2006-2013)
10. American Association for the Advancement of Science (AAAS) - **Member** (2006- 2009)
11. Natural Areas Association (NAA) - **Member** (2001- 2007)
12. National Institute of Ecology, India (NIE) - **Member** (Since 1998-2002)
13. Wetlands Nepal (WetNepal) - **Founder President** (1999-2001)
14. Nepal Botanical Society - **Treasurer** (1994-1996)
15. Nepal GIS Society (NEGISS) - **Executive member** (1995-1996)
16. Ecological Society, Nepal (ECOS) - **Executive member** (1994-1996)
17. Nepal University Teacher's Association, Kirtipur - **Executive Member** (1994-1996)
18. Nepal Biotechnology Association - **Executive Member** (1989-1992)
19. International Society for Tropical Ecology (ISTE)- **Member** (1984-2000)
20. Indian Ecological Society - **Member** (1985-1989)
21. Nepal Environmental Conservation Group - **Member** (1983-1989)
22. Tribhuvan University Botanical Society - **Graduate student representative** (1980-1982)

Date: June 1st, 2018