

# Curriculum Vitae

## Jay P. Sah

### 1. Status/ Address:

Research Associate/Affiliated Faculty  
Southeast Environmental Research Center  
Florida International University,  
University Park, OE-148  
Miami, FL 33199, USA.  
Tel: 305 348 1658 (W), Fax: 305 348 4096; Email: [sahj@fiu.edu](mailto:sahj@fiu.edu)

Affiliated Researcher – Department of Environmental Studies  
Research collaborator – Florida Coastal Everglades – Long Term Ecological Research (FCE-LTER)

### 2. Career Objective

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

### 3. Educational Degree:

- 2002**      **Ph. D. in Biology** (Ecology)-Florida International University, Miami, FL 33199, USA.  
(GPA: 3.86/4.0; 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.(GPA: 3.88/4.0, Stood First; 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.  
(Aggregate Score: 73.2%, Stood First) (Thesis: *Nutrient Content in Leaf Litter of Major Tree Species at Phulchoki Hill, Kathmandu, Nepal*)

### 4. Research/Professional Skills:

Engaged in research since 1982 in the fields of Vegetation Analysis, Wetland Ecology and Management, Bio-diversity Conservation, Environmental Impact Assessment, and Natural Resource Management

#### Major research activities are:

- Study of plant community structure and function
- Analysis of underlying vegetation-environment relationships and vegetation responses to disturbances to answer a wide range of ecological questions at various spatial and temporal scales by using multivariate statistical techniques and GIS
- Strategic analysis of integrating ecological and socio-economic approaches in natural resource management

### 5. Scholarships and Awards:

- **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 (Awarded through the institute).
- **Meritorious Scholarship:** For securing highest marks among students graduating from Central Department of Botany, T. U. Kiritipur, Kathmandu, during 1981/1982.

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

## 7. Work Experience:

### A. Teaching & Research (At University):

- 2007 Aug – Present- Research Associate/Affiliated Faculty** Southeast Environmental Research Center, Florida International University (FIU), Miami, FL.  
**Primary responsibility:** (Co-PI) Research design, Coordination of field works, Data analysis, Report writing, presentation of results at various meetings, and manuscript preparation for the research project, “*Effects of hydrologic restoration on habitat of the Cape Sable seaside sparrow*” – a DOI funded research project to FIU (PI-Dr. Michael Ross) and USGS (PI-Dr. James Snyder)  
**Other responsibilities:** (CO-PI) Field observations, data analysis, & participation in report writing for various other projects related to Ridge & Slough, Tree islands, Coastal mangroves & Pine Rocklands ecosystems in the Keys and Everglades)
- 2003 – 2007 Visiting Research Associate** Southeast Environmental Research Center, FIU, Miami, FL.  
(Research Design, Coordination of field work, data analysis, report writing, presentations at meetings, manuscript preparation)
- 2002 – 2003 Postdoctoral Research Associate** Southeast Environmental Research Center, FIU, Miami, FL.  
(Research Design, Coordination of field works, data analysis, report writing, presentations at meetings, manuscript preparation)
- 2002 – 2003 Adjunct Instructor** Department of Biological Sciences, Florida International University, Miami, USA (Part-time teaching Undergraduate Biology Lab.)
- 2000 – 2002 Research Assistant** Southeast Environmental Research Center, Florida International University, Miami, FL 33199. (Field observations, data analysis etc.)
- 2000 – 2001 Teaching Assistant** Department of Biological Sciences, Florida International University, Miami, USA (Taught undergraduate Biology Lab).
- 1998 – 1999 Lecturer\*** Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal (Designed courses, taught ecology, conducted research and supervised M. Sc. students).
- 1996 – 1997 Research Assistant** Southeast Environmental Research Program, Florida International University, Miami, FL 33199. (Worked as Data Analyst)
- 1995 – 1997 Teaching Assistant** Department of Biological Sciences, Florida International University, Miami, USA (Taught Undergraduate Biology Lab.)
- 1994 Instructor** Central Department of Geography, Tribhuvan University, Nepal. GIS Training for Natural Resource Management. (Four weeks)
- 1994 – 1995 Teacher** Cornell-Nepal Study Program, Kirtipur, Kathmandu. (Worked as a Part time teacher for teaching Ecology and Environment and supervising student research projects).
- 1992 – 1995 Lecturer \*** Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal (Designed courses, taught ecology, conducted research and supervised M. Sc. students).
- 1984 – 1992 Assistant Lecturer \*** Central Department of Botany, Tribhuvan University, Kirtipur, Kathmandu, Nepal (Taught Ecology, Anatomy, Embryology, engaged in research, and supervised M. Sc. students).  
*(\*Faculty position; on study leave – Jan 1992 to Dec 1994; Aug 1995 to Aug 1998)*

## **B. Teaching (High School):**

- 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)

## **C. Other Work Experience:**

- 1999 Editor** *Grassland Ecology and Management in Protected Areas of Nepal*  
Publisher - International Center for Integrated Mountain Development  
(ICIMOD), Nepal. ISBN # 92 9115 166 1.
- 1998 – 1999 Associate Editor** *Ecoprint - An International Journal of Ecology*. Published by  
Ecological Society (ECOS), Kathmandu, Nepal. Volumes 5 and 6.
- 1993 Research Associate** IUCN Southeast Asia Regional Program, Asian Institute of  
Technology, and Bangkok.
- 1977 Assistant to Meteorologist** Meteorological Station, Tribhuvan International Airport, Kathmandu,  
Nepal. (Recording and plotting meteorological data)

## **8. Research Experience/Projects:**

### **A. Research Funding (PI or Co-PI)**

1. Cape Sable seaside sparrow habitat monitoring and assessment. FY 2007. US\$ 180,278. (Co-PI, with PIs - Dr. Mike Ross, FIU and Dr. Jim Snyder, USGS).
2. Developing allometric biomass equation for saplings of tree species common in Everglades tree islands. June 1, 2007-Sept 30, 2008. US\$ 48,750 (Co-PI with PI-Dr. Mike Ross, FIU)
3. Developing a plan for a data-driven classification of south Florida plant communities. Funded by National Park Service. Aug 31, 2006 - July 31, 2007. US\$ 55,318. (Co-PI with PI-Dr. Mike Ross)
4. Effect of grazing on *Mikania micrantha* in Koshi Tappu Wildlife Reserve, Nepal: A case study. Funded by IUCN. Sept 1 – Dec 31, 2006. US\$ 5,000 (Co-PI with PI-Prof R. P. Chaudhary)
5. 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. (PI with Dr. Mike Ross)
6. 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)
7. 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 Shrestha)
8. Wetland Vegetation and Management in Ghodaghodi Tal, Nepal. Funded by IUCN, South-east Asia Regional Office, Bangkok. Sept. 1994 - Aug. 1995. US\$ 500 (PI)
9. 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)

### **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 – Present. (Working as a Post-doctoral 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 & woody plant invasion in Everglades prairies. Funded by US Fish & Wildlife Service June 1, 2005 – Dec 31, 2007 (Working as Data analyst 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)

## 9. M. Sc. Students supervised:

(Theses were submitted to Central Department of Botany, Tribhuvan University, Kathmandu, Nepal)

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 Suklaphanta 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.* (Doing Ph.D. in 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.* (In Canada)
7. Shrestha, Krishna B. 1997. *Plant Diversity along Environmental and Disturbance gradients in the Oak Forest on Phulchoki Hill, Nepal.* (Doing 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 Asst. Professor in Nepal)
9. Acharya, Sunil K. 1989. *Study of Family Fagaceae on Phulchoki Hill.* (Botanist, Nepal Government)

## 10 Publications:

### A. Books:

1. 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.
2. 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. 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. 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. 4Proceedings 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.

### B. 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.

### 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.

### D. Research Papers (Peer-reviewed Journals):

1. Sah, J. P., Ross, M. S. et al. Relationship between species richness and biomass along a hydrologic gradient in the marl prairie landscape in the southern Everglades, Florida, USA. (Manuscript in preparation)
2. Sah, J. P., Ross, M. S. et al. Carbon isotopic signature in the plants and soil organic matter along the hydrologic gradients in the Everglades. (Manuscript in preparation)
3. Sah, J. P. Forest structure and growth on the Mahakali River floodplains. (Manuscript in preparation; will be submitted to *Forest Ecology and Management*)
4. Sah, J. P. and Heinen, J. T. Park-people conflicts in wetland resource use and conservation in Royal Shuklaphanta Wildlife Reserve, Nepal. (Manuscript in preparation; will be submitted to *International Journal of Environmental Management*.)
5. Espinar, J. L., Ross, M. S. and Sah, J. P. Pattern of nutrient availability and plant community assemblage in Everglades tree islands, Florida USA. *Global Ecology and Biogeography* (Submitted)
6. Sah, J. P., Chaudhary, R. P., Singh, R. L. and Tiwari, R. D. Vegetation analysis in Parsa Wildlife Reserve, Nepal. *Tropical Ecology*. (Under revision)
7. Ross, M. S., Ruiz, P. L., Sah, J. P. and Hanan, E. J. Chilling damage in a changing climate in coastal landscapes of the sub-tropical zone: a case study from south Florida. *Global Change Biology* (Re-submitted after revision)
8. 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.
9. Ross, M. S., Mitehell-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.
10. 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.
11. 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.

12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. Yadav, R. K. P. and Sah, J. P. 1998. Quantitative study of vegetation on the Nagarjun Hills, Kathmandu. *Ecoprint* **5** (1): 61-72.
25. Jha P. K., Sah, J. P. and Chettri, M. K. 1992. Amaranth productivity under biological stresses. *Crop Research* **5** (2): 195-198.
26. 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.
27. 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.
28. 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.
29. 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.

#### E. Research Papers (Conference Proceedings and others):

1. Jones, D. T., Sah, J. P., Ross, M. S., Oberbauer, S. F., Hwang, B. and Janyachandran, 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.
2. 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.
3. 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.
4. 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.
  5. 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.
  6. 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.
  7. 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.
  8. 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.
  9. Jha, P. K., Sah, J. P. and Chettri, M. K. 1991. The *Amaranthus* in Nepal. *PRIMER CONGRESO INTERNACIONAL DEL AMARANTO, MEXICO*: 54.
  10. 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 1<sup>st</sup> regional Conference of APPSC on the Role of Plant Physiology and Biotechnology on Plant Productivity. Oct. 3-7, 1988: pp 177-182.
  11. Jha, P. K., Sah, J. P. and Chettri, M. K. 1987. Amaranth distribution in Nepal. *AMARANTH News Letter # 3*: 3-4.
  12. 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.

#### F. 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.

## **11. Presentations (Since 1991 - Conferences, Workshops, Meetings etc.):**

1. 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*").
2. 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*")
3. 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*").
4. 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*")
5. 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*")
6. Workshop on 'Developing a data-driven classification of South Florida plant communities'. Florida International University, Miami, Florida, USA. December 12-13, 2006. (Worked as an Organizer and a Moderator)
7. 3<sup>rd</sup> International Fire Ecology and Management Congress, San Diego, CA, USA. November 13-17, 2006. (Presented the paper, "*Assessing the interactions fire and hydrology on marl prairie vegetation in the southern Everglades, Florida, USA*")
8. 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?*")
9. 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*")
10. 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*")
11. Society of Wetland Scientists' 26<sup>th</sup> 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*", and worked as "a member of the Judge Committee to evaluate student's posters").
12. 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.*)
13. 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*" and worked as "a member of the Judge Committee to evaluate student's posters").
14. Southeast Environmental Research Center (SERC) Seminar, Florida International University, Miami, FL. April 14, 2004. (Presented the paper "*The habitat of the Cape Sable seaside sparrow: vegetation-environment relationships*").
  15. Pineland Workshop, Miami, FL. Feb 2-3, 2004. (Presented the paper "*Fuel loads and their implications for fire management in Florida Keys pine forests*").
  16. Department of Environmental Studies Seminar, Florida International University, Miami, FL. Nov. 5, 2003, (Presented the paper "*Vegetation dynamics in ENP marshes with emphasis on Taylor Slough*").
  17. 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*").
  18. 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.*"
  19. 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*").
  20. 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*").
  21. 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*").
  22. 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*").
  23. Intensive Teaching Workshop. Organized by The Academy for the Art of Teaching at Florida International University, Miami, FL, USA. Aug. 24-25, 2000. (As a Participant)
  24. 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").
  25. 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 Rapporteur").
  26. 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*", and worked as "an Editor for Proceedings").
  27. 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*").
  28. 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*").
  29. 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*").

30. Geographic Information System (GIS) Seminar. FIU GIS group at Florida International University, Miami, USA. Aug. 16, 1996. (Presented the paper “*GIS approach to the natural resource management in Nepal: a case study in Koshi Tappu Region*”).
31. International System Dynamics Conference. Massachusetts Institute of Technology, Cambridge, Massachusetts, USA. 21-25 July, 1996. (As a participant and worked as “an Organizing Volunteer”).
32. 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”)
33. 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*”).
34. 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*” and was a co-author of the poster “*Vegetation Ecology of Herbs in Nagarjun Hill, Nepal*”).
35. 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”).
36. 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)
37. 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*”).

## 12 Reviewed manuscripts/Reports for the journals/Organizations

Journal of Environmental Management, Environmental Management, Journal of Environmental Quality, Journal of Forest Research, Complex Systems, Energy and Fuels, Ecoprint, Himalayan Journal of Sciences, IUCN – The World Conservation Union – Nepal

## 13. Affiliated Professional Organizations:

### Current memberships

1. American Association for the Advancement of Science (AAAS) - **Member** (2006- )
2. Association of Fire Ecology (AFE) - **Member** (2006- )
3. The International Association for Ecology (INTECOL) - **Member** (2004- )
4. The Ecological Society of America (ESA) - **Member** (2004- )
5. Society of Wetland Scientists (SWS) - **Member** (2004- )
6. National Geographic Society (NGS) - **Member** (2001- )
7. Wetlands Nepal (WetNepal) - **Life Member and Founder President** (1999-2001)
8. National Institute of Ecology, India (NIE) - **Life Member** (Since 1998)
9. Natural History Society of Nepal (NAHSON) - **Life Member** (Since 1998)
10. Nepal Botanical Society (NBS) - **Life Member** (Since 1994)
11. Ecological Society, Nepal (ECOS) – **Life Member** (Since 1994)

### Professional Services

12. Nepal Botanical Society - **Treasurer** (1994-1996)
13. Nepal GIS Society (NEGISS) - **Executive member** (1995-1996)
14. Ecological Society, Nepal (ECOS) - **Executive member** (1994-1996)
15. Nepal University Teacher's Association, Kirtipur - **Executive Member** (1994-1996)
16. Nepal Biotechnology Association - **Executive Member** (1989-1992)
17. Natural Areas Association (NAA) - **Member** (2001-2007)

18. International Society for Tropical Ecology (ISTE)- **Member** (1984-2000)
19. Indian Ecological Society - **Member** (1985-1989)
20. Nepal Environmental Conservation Group - **Member** (1983-1989)
21. Tribhuvan University Botanical Society - **Graduate student representative** (1980-1982)

Date: March 31, 2008