



Pushpinder Singh Jamwal

WORK EXPERIENCE

2021 to 2021	Researcher , “Sampling of waterways in Lazio for environmental DNA studies” University of Molise, Italy
2012 to 2017	Project Officer , Western Himalayas Landscape, Field Office Leh, Ladakh, World Wide Fund for Nature (WWF-India)
2011 to 2012	Junior Research Fellow , High Altitude Wetland Programme, Dehradun, World Wide Fund for Nature (WWF-India)

EDUCATION AND TRAINING

2017 to 2021	Ph.D Department of Bioscience and Territory “Niche Modelling, Current Distribution and Future Scenarios for the otters in Himalayas” supervised by Prof Anna Loy University of Molise, Italy
2011 to 2012	Advance Post graduation Diploma in Environmental Economics Hemwati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand, India
2008 to 2010	Master of Science Hemwati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand, India
2004 to 2008	Bachelor of Science University of Jammu, J&K (India)

MEMBERSHIPS

IUCN Otter Specialist Group
Italian Mammal Society
Himalayan Otter Network

ACHIEVEMENTS

First-ever sighting of collared Bar-headed Goose that drew linkages between Tsokar wetland, Gharana wetland and the Pong Dam highlighting their importance in the annual migration patterns of these birds.

<https://www.wfindia.org/?9780/migratory-route-for-bar-headed-goose-charted-through-rare-sighting-at-tsokar-in-ladakh>

Collected first ever tangible evidence of Eurasian Otter (*Lutra lutra*) from Ladakh in the Indian trans-Himalayas establishing its habitat along the Indus river.

https://www.iucnosgbull.org/Volume33/Jamwal_et_al_2016.html

Reported rediscovery of Long-tailed Duck (*Clangula hyemalis*) after 73 years from the Gharana wetland conservation reserve in Jammu, J&K.

<https://threatenedtaxa.org/index.php/JoTT/article/view/3084/4136>

MEDIA ARTICLES AND INTERVIEWS

The Times of India: "Snow leopards falling prey to human rage in mountain habitat" <https://timesofindia.indiatimes.com/city/dehradun/Snow-leopards-falling-prey-to-human-rage-in-mountain-habitat/articleshow/54369692.cms>

Down to Earth: "How J&K reduced snow leopard attacks on livestock" <https://www.downtoearth.org.in/news/wildlife-biodiversity/how-j-k-reduced-snow-leopard-attacks-on-livestock-61034>

The Indian Express: "A King in Hiding: The barren, cold desert of Ladakh sees signs of a new life — the otter" <https://indianexpress.com/article/lifestyle/life-style/the-barren-cold-desert-of-ladakh-sees-signs-of-a-new-life-the-otter-4784184/>

Shub-Yatra.in: "The ghost mustn't vanish" <http://shubh-yatra.in/ghost-mustnt-vanish/>

BOOK CHAPTERS

Sanjeev, S., Rohit, R., Jamwal, P. S., Kumar, R. and Sudeep, S. (2014) 'Wetlands: Strategy for Natural Resource Management through Wetlands Conservation in India. BHARTI PUBLICATIONS. New Delhi-110 002 (India), pp. 42–54. ISBN: 978- 93-81212-85-1

REPORTS

Jamwal, P. S., Tariyal, P., Theophilus, E., Kaur, J., Panchaksharam, Y., Kumar, H., Chandan, P., Khatri, D. V.S., Areendran, G. and Raj, K. (2012). Wetlands of Uttarakhand: A Documentation (Report)pp. 1-191): WWF—India.
https://forest.uk.gov.in/files/publication/Wetlands_of_Uttarakhand_report.pdf

PUBLICATIONS

Jamwal, P. S., Di Febbraro, M., Carranza, M. L., Savage, M., & Loy, A. (2021). Global change on the roof of the world: Vulnerability of Himalayan otter species to land use and climate alterations. *Diversity and Distributions*.

Jamwal, P. S., Shrotriya, S., & Takpa, J. (2020). The pattern of waterbird diversity of the trans-Himalayan wetlands in Changthang Wildlife Sanctuary, Ladakh, India. *Journal of Threatened Taxa*, 12(1), 15129-15139.

Jamwal, P. S., Takpa, J., & Parsons, M. H. (2019). Factors contributing to a striking shift in human–wildlife dynamics in Hemis National Park, India: 22 years of reported snow leopard depredation. *Oryx*, 53(1), 58-62.

Jamwal, P. S., Chandan, P., & Rattan, R. (2017). A rare sighting of the Long-tailed Duck *Clangula hyemalis* (Linnaeus, 1758) (Aves: Anseriformes: Anatidae) over a four-week period in northwestern India: first detailed scientific documentation in 73 years. *Journal of Threatened Taxa*, 9(8), 10631–10632.

Jamwal, P. S., Chandan, P., Rattan, R., Anand, A., Kannan, P. M. and Parsons, M. H. (2017) 'Survey of avifauna of the Gharana wetland reserve: implications for conservation in a semi-arid agricultural setting on the Indo-Pakistan border', *BMC Zoology*. *BMC Zoology*, 2(1), p. 7. doi: 10.1186/s40850-017-0016-z

Jamwal, P. S., Takpa, J., Chandan, P., & Savage, M. (2016). First systematic survey for otter (*Lutra lutra*) in Ladakh. *Indian Trans Himalayas. IUCN Otter Spec. Group Bull*, 33(1), 79-85.

Kannan, P. M., Parsons, M. H., Jamwal, P. S., Chandan, P., Parsons, F. E. and Takpa, J. (2017) 'The discovery of the "transient" male Tibetan wild ass: alternative "sneaky" mating tactics in a wild equid?', *Behaviour*, 154(1), pp. 1–18. doi: 10.1163/1568539X-00003407.

Chandan, P., Mundkur, T., Takpa, J., Jamwal, P. S., Suhail, I., Rigzin, T. and Rattan, R. (2015) 'First Breeding Record of Saker Falcon (*Falco cherrug milvipes*) in India', *Journal of the Bombay Natural History Society (JBNHS)*, 112(2), p. 93. doi: 10.17087/jbnhs/2015/v112i2/104935.

Chandan, P., Khan, A., Takpa, J., Hussain, S. A., Mehdi, K., Jamwal, P. S., Rattan, R., Khatoon, N., Rigzin, T., Anand, A., Dutta, P. K., Ahmad, T., Ghose, P. S., Shrestha, P. and Theengh, L. T. (2014) 'Status and distribution of Black-necked Crane (*Grus nigricollis*) in India', *Zoological Research*, 35(S1), pp. 39–50. doi: 10.13918/j.issn.2095-8137.2014.s1.0039.

Khan, A., Chandan, P., Takpa, J., Hussain, S.A., Rattan, R., Jamwal, P. S. and Ahmad, T. (2014) 'Diurnal time budget of breeding Black-necked Crane (*Grus nigricollis*)', *Zoological Research*, 35(S1), pp. 158–166. doi: 10.13918/j.issn.2095-8137.2014.s1.0158.

Jamwal, P. S., A., Bruno., A., Galimberti., D, Magnani., M, Casiraghi., A, Loy (2021) First assessment of eDNA-based detection approach to monitor Eurasian otter in Southern Italy. Paper status: Submitted to *Hystrix — The Italian Journal of Mammalogy* 24/11/2020 Resubmission on 28/8/2021 — minor revisions.

COMMUNICATIONS

Jamwal P. S. 2020. " Monitoring otters using water samples from water bodies: A practical guide for eDNA sample collection".

FIRST EURASSIAN OTTER WORKSHOP- 26TH TO 28TH February 2021. [Oral presentation] [Invited speaker]

Jamwal P. S. 2020. " Environmental DNA as a promising tool to survey elusive species in harsh environments ". 3rd HIMALAYAN

OTTER NETWORK MEETING - Kathmandu, Nepal, February 2020. [Oral presentation] [Invited speaker]

Jamwal P. S. 2019. " Potential Distribution and Niche Overlap Analysis In Three Otter Species: *Lutra Lutra*, *Aonyx Cinereus* and *Lutrogale Perspicillata* ". SCIENTIFIC RESEARCH DAY — Isernia, Italy, March 2020. [Poster presentation]

Jamwal P. S. 2019. " Potential Distribution and Niche Overlap Analysis In Three Otter Species: *Lutra Lutra*, *Aonyx Cinereus* And *Lutrogale Perspicillata*". CONFERENCE OF RESEARCH DOCTORATES — Compobasso , Italy , Deceber 2018. [Poster presentation]

Jamwal P. S. 2019. “ Predicting current and future potential distribution of *Aonyx cinereus*, *Lutra lutra* and *Lutrogale perspicillata* in Himalaya under different climate change scenarios “. 14TH INTERNATIONAL OTTER CONGRESS – Tangjiahe National Nature Reserve, China, March 2019. [Oral presentation]

Jamwal P. S. 2018. “ An overview of Western Himalaya’s biodiversity and trends in human- wildlife conflict in trans-Himalayas with special reference to Snow leopard “. Giornate della Ricerca Scien-tifica Dipartimento di Bioscienze e Territorio – Isernia Italy March 2019. [Oral presentation]

INTERPERSONAL SKILLS AND COMPETENCES

As a member of IUCN, Italian Mammal Society and Himalayan Otter Network, I have been working with an eclectic mix of academics and professionals hailing from different cultures and countries. As a project manager with WWF, I have worked closely with communities practicing their rich and unique culture in Trans-Himalaya.

ORGANIZATIONAL SKILLS AND COMPETENCES

I have worked closely with government and beauraucratic channels to run programmes at the grass root level. I collaborated with the Department of Wildlife Protection to conduct snow leopard surveys in Hemis National Park.

I have also conducted several training programmes including that of the frontline staff of the Department of Wildlife Protection with regard to basic techniques in wildlife census.. I supervised the implementation of environment education programme in Leh and Kargil districts, and coordinated conservation work-shop with armed forces in Ladakh.

TECHNICAL SKILLS AND COMPETENCES

Post Processing (Photoshop, Final Cut Pro)
Programming Languages (R, Python)
Freshwater sampling using eDNA and field collection for Non-invasive Genetic Detection

ARTISTIC SKILLS AND COMPETENCES

Photography

The Indian Quarterly: “Night in the Trans-Himalaya”
<http://indianquarterly.com/nights-in-the-trans-himalaya>

The Indian Quarterly: “The Face of the Earth”

Canon first prize

OTHER SKILLS AND COMPETENCES

Sports

Gold medal, (Boxing) Jammu University championship,
(2008)

Gold medal, Marital Arts (Kick Boxing) — National Level
(1999)

Gold medal, Marital Arts (Kick Boxing) — North Zone
(1988)

MOTHER TONGUE OTHER LANGUAGES

Hindi
English, Urdu

READING SKILLS

English, Hindi: excellent, Urdu: elementary

WRITING SKILLS

English, Hindi: excellent, Urdu: elementary

ORAL EXPRESSION

English, Hindi, Urdu: excellent

DRIVING LICENCE

Indian Driving License (valid in Europe)
Number: JK-11-20110003387