

Pankaj Koparde

PhD STUDENT (MANIPAL UNIVERSITY)
SÁLIM ALI CENTRE FOR ORNITHOLOGY & NATURAL HISTORY
COIMBATORE 641108, INDIA
CONTACT: +91-9422251272
E-mail: pankajkoparde@gmail.com
Website: <http://www.pankajkoparde.weebly.com>

Profile

I am interested in science-driven conservation research, outreach, and understanding ecological and evolutionary processes that shape the species distribution. I am also involved in various citizen science projects concerning owls and dragonflies. I am looking forward to academic opportunities in research and teaching.

Teaching Experience

- **2017:** Conservation Biology (MSc course). Abasaheb Garware College, Pune.
- **2017:** Statistical software & packages (MSc practical course). Abasaheb Garware College, Pune.
- **2017:** Science communication (BSc course). Fergusson college, Pune.
- **2016:** Molecular Taxonomy (MSc course). Abasaheb Garware College, Pune.
- **2016:** Workshop on 'Phylogeny' held at Department of Biodiversity, Abasaheb Garware College, Pune. (served as resource person)
- **2016:** Odonata expert (served as resource person) at Amazing Arthropods course organized by Institute for Natural History Education and Research (INHER), Pune.
- **2016:** Odonata expert (served as resource person) at India Biodiversity Portal's community meet 2016, Bangalore.
- **2015:** National workshop on Odonatology. DragonflyIndia and Kottayam Nature Society. Thattakad Bird Sanctuary, Kerala. (served as resource person)
- **2014:** Workshop titled 'Leveraging citizen science beyond research' held at Student Conference on Conservation Science. Bangalore. (served as resource person)
- **2014:** National workshop on Odonatology. DragonflyIndia and Hislop College. Nagpur. (served as resource person)
- **2013:** Sampling and Experimental Design at Department of Biodiversity (MSc course), Abasaheb Garware College, Pune.
- **2012-2013:** Mathematics for Biologists and Biostatistics at Mahatma Fule Mahavidyalaya (BSc course), Pune.
- **2012:** Animal Taxonomy (Odonata and Aves) at Department of Biodiversity (MSc course), Abasaheb Garware College, Pune.
- **2012:** Introduction to Bioinformatics at Department of Biodiversity (MSc course), Abasaheb Garware College, Pune.
- **2012:** Introduction to Computer Sciences at Institute of Bioinformatics & Biotechnology (BSc course), University of Pune.

Education

- M.Sc. Biotechnology (2005 - 2010): 5 years integrated course after 10+2 at Institute of Bioinformatics and Biotechnology, University of Pune, Maharashtra, India (GPA = 7.1/10)

Professional Research Experience

- April 2015 – Present: Research Fellow at Indian Institute of Science Education & Research, Tirupati on a project titled ‘Population connectivity in two endemic birds of Central India and Western Ghats’.
- **January 2015 - Present:** PhD student working on ‘Molecular Phylogeny and Comparative Phylogeography of Owlets of India’ (PhD advisor: Dr Shomita Mukherjee)
- **August 2015 – July 2016:** Senior Research Fellow with Sálím Ali Centre for Ornithology & Natural History, Coimbatore on a project titled ‘Determining taxonomic and conservation status of critically endangered Forest Owlet (*Heteroglaux blewiti*)’
- **August 2013 – August 2015:** Programme Fellow with Sálím Ali Centre for Ornithology & Natural History, Coimbatore on a project titled ‘Determining taxonomic and conservation status of critically endangered Forest Owlet (*Heteroglaux blewiti*)’
- **August 2011 - July 2013:** Research Assistant with Department of Biodiversity, Abasaheb Garware College on a project titled ‘Identification of Critical Areas of Conservation Concern using RS-GIS Techniques from Northern Western Ghats of India’
- **December 2010 - March 2011:** Junior Research Fellow with Sálím Ali Centre for Ornithology and Natural History. Worked on a project titled ‘Saving Critically Endangered Species and Habitats – Edible Swiftlets of Andaman and Nicobar Islands, India’

Grants

- **2016:** International Dragonfly Fund, Germany
- **2015:** Travel bursary from Centre for International Co-operation in Science for attending 10th International Conference on behavior, physiology and genetics of wildlife, Berlin, Germany
- **2015:** Travel bursary to for participating in National Conference on Ethology and Evolution, Mohali, India 2015
- **2013 and 2014:** Full bursary for Students Conference in Conservation Science, Bangalore, India
- **2013:** Travel bursary for Young Ecologist’s Talk and Interact, Nagaland, India

Research Papers

- **Koparde, P.** and N. Raote. 2016. Bird Species-rich Areas thriving across an Urban-Rural Gradient: A Case Study of selected Water-bodies from Pune, Maharashtra, India. *Indian BIRDS* 12(2 & 3): 50-55.
- **Koparde, P.** 2016. Damsels in distress – Seasons, habitat and pollution changes damselfly diversity and assemblages in urban wetlands of Pune City, India. *Animal Biology*. DOI - <http://dx.doi.org/10.1163/15707563-00002506>
- **Koparde, P., M. Mhaskar, P. Mhaske and A. Patwardhan.** 2015. Spatial distribution and habitat correlates of Nilgiri Wood-Pigeon (*Columba elphinstonii*) in North Western Ghats, India. *Taprobanica* 7(1):20-28.
- Tiple, A. and **P. Koparde.** 2015. Odonata of Maharashtra with notes on species distribution. *Journal of Insect Science* 15(1): 47-57.
- **Koparde, P., P. Mhaske and A. Patwardhan.** 2015. Habitat correlates of Odonata species diversity in north Western Ghats, India. *Odonatologica* 44(1/2):21-43.
- Mukherjee, A. and **P. Koparde.** 2014. Sighting of Rusty-spotted Cat in Anaikatty Reserve Forest, Tamil Nadu, India. *CAT NEWS* 60: 32.
- **Koparde, P., M. Mhaske and A. Patwardhan.** 2014. New records of dragonflies & damselflies (Insecta: Odonata) from the Western Ghats of Maharashtra, India. *Journal of Threatened Taxa* 6(5): 5744-5754.

- **Koparde, P.** and S. Manchi. 2013. Avifaunal Records from *Chalis Ek* area, North Andaman Island: Insights into distribution of some Andaman Island birds. *Checklist* 9(1):34-41.
- Padhye, A., A. Patwardhan, A. Jadhav, S. Shelke, N. Modak, N., Mujumdar, K. Chhaya, P. Mhaske, K. Patil, **P. Koparde**, R. Patil, R. Deulkar, A. Sahastrabuddhe, P. Bangal, A. Narvekar, S. Chikane, R. Dhamale, S. Gaikwad, S. Pande, R. Patil, S. Khatavkar, V. Viswasrao, A. Pendharkar, R. Malkar, H. Oagle, H. Naik., Z. Mirza, R. Sanap, S. Jagdale and A. Patwardhan. 2013. Butterflies of northern Western Ghats: a compilation of checklists. *Ela Journal* 2(1): 3-22.
- **Koparde, P.** and P. Patil. 2013. Occurrence records of few wetland birds and birds of prey from Nashik, Maharashtra, India. *Sarovar Saurabh* 9(2): 1-2.
- **Koparde, P.**, P. Patil, P. Sawarkar and M. Shindikar. 2012. Birds from ashes: birdlife at flyash ponds of NTPS, Nashik, Maharashtra, India. *Sarovar Saurabh* 8(1): 2-5.
- **Koparde, P.** and S. Singh. 2011. Avian Influenza and microRNAs: Role of bioinformatics. *Journal of Bioinformatics & Sequence Analysis* 3(2):11-22.
- **Koparde, P.** and S. Singh. 2010. Prediction of micro RNAs against H5N1 and H1N1 NS1 protein: a window to sequence specific therapeutic development. *Journal of Data Mining in Genomics & Proteomics* 1(2): 1-8.

Manuscripts under Preparation

- **Koparde, P.**, V.V. Robin, S. Mukherjee, P. Mehta, S. Reddy and U. Ramakrishnan. 2016. The Critically Endangered Forest Owlet *Heteroglaux blewitti* is most likely an *Athene*: a century-old debate addressed. (*In prep*).
- **Koparde, P.**, V.V. Robin, P. Mehta and S. Mukherjee. 2016. Present and past climate distribution of Indian Owlets. (*In prep*).
- **Koparde, P.** and Y. Pierre. 2016. The Dark Morph Returns: Documentation of a probable dark morph *Egretta garzetta* at Pune, India, with a review of previous records in India and Sri Lanka. (*In prep*).
- Mujumdar, N., D. Thakuria and **P. Koparde**. 2016. Observation on reproductive behavior of Western Ghats endemic *Pseudagrion indicum* from Thattekad Bird Sanctuary, Kerala, India. *Notulae Odontologicae* (*In review*).
- Halali, S., **P. Koparde** and P. Dawn. 2016. Damsels lost in time: Re-description of two *Elatoneura* species from India. (*In prep*).

Book Chapter

- Ahiwale, S., **P. Koparde**, P. Deore, V. Gunale and B. P. Kapadnis. 2012. Bacteriophage technology for disinfection of different water systems. *In: Microorganisms in Environmental Management: Microbes and Environment*. Satyanarayana *et al.* (eds.). 289-313 pp. Springer Links publications, India.

Popular Articles

- **Koparde, P.** 2017. Forest jewels – the abundant, uncommon and rare. *Planet Untamed* April: 40-46.
- **Koparde, P.** and P. Choudhary. 2016. A road to kill. *SACON NEWS* 13(2): 4-6.
- Barve, V., **P. Koparde**, A.B. Roy and P. Dawn. 2016. DragonflyIndia: A vibrant community of odonata lovers from the Indian subcontinent. *Parthenos* (APRIL 2016): 34-35.
- **Koparde, P.** 2016. God's own ruby lost in the mud-lands. *HORNBILL* (*In press*).
- **Koparde, P.** 2015. Sharing and conserving – species and spaces. *Sarovar Saurabh* 11(1): 1-2.
- **Koparde, P.** 2015. Let the owlet hoot. *SACON NEWS* 12(1):3-4.

- Andrew, R., **P. Koparde** and K.A. Subramanian. 2015. The 8th Indian symposium of odonatology and tropical biodiversity. *Agrion* 19(2): 32-35.
- **Koparde, P.**, P. Bangal and H. Grouw. 2014. Brown Kites and White Crows: Understanding color aberrations in birds. *HORNBILL* (July-September):10-13.
- **Koparde, P.** 2013. Butterflies ringing yellow bells. *SACON NEWS* 10(3): 3-4.
- **Koparde, P.** 2013. From doodling to modeling: changing research trends detected through SCCS. *SACON NEWS* 10(3): 6.

Conference Presentations

Talks

- **Koparde, P.** 2016. Phylogenetic affinities and past climate distribution of the critically endangered Forest Owlet from India. *Annual Research Seminar – SACON*. Coimbatore, India. **(Best talk award)**.
- **Koparde, P.**, V.V. Robin, P. Mehta, S. Mukherjee and U. Ramakrishnan. 2015. Genetic affinities and past climate distribution of a critically endangered owl from India. *National Conference on Ethology and Evolution*. IISER-Mohali, India.
- **Koparde, P.**, P. Mhaske and A. Patwardhan. 2014. Habitat correlates of species diversity and assemblage of Odonata of north Western Ghats, India. *8th Indian Symposium on Odonatology & Tropical Biodiversity*. Nagpur, India.
- **Koparde, P.**, P. Bangal and H. van Grouw. 2013. On color aberrations in Indian birds and how Indian birdwatchers understand them. *Young Ecologists Talk & Interact*. Nagaland University, India.
- **Koparde, P.**, M. Mhaskar, P. Mhaske and A. Patwardhan. 2013. Spread and Habitat Correlates of Nilgiri Wood-Pigeon *Columba elphinstonii* Sykes, 1833, a Globally Threatened Species: a Case study from Sahyadri Tiger Reserve, Maharashtra, India. *International Conference on Indian Ornithology*. Coimbatore, India.

Posters

- **Koparde, P.**, V.V. Robin, P. Mehta, S. Mukherjee and U. Ramakrishnan. 2015. Genetic affinities and past climate distribution of a Critically Endangered owl from India. *10th International Conference on Behavior, Physiology and Genetics of Wildlife*. Berlin, Germany.
- **Koparde, P.** and P. Patil. 2014. Water quality changes Odonata assemblages: habitat associations and seasonal changes in Odonata assemblages across land-use types. *Student Conference on Conservation Science*. Bangalore, India.
- Mhaske, P., **P. Koparde**, M. Mhaskar and A. Patwardhan. 2013. Biodiversity profile of Pophali-Sonapatra villages located at the periphery of STR, Maharashtra, India. *Student Conference on Conservation Science*. Bangalore, India.
- **Koparde, P.**, P. Mhaske, M. Mhaskar and A. Patwardhan. 2013. Habitat correlates of diversity and distribution of odonates: a case study from Sahyadri Tiger Reserve, MH, India. *Student Conference on Conservation Science*. Bangalore, India.
- Patil, P., A. Bhillade and **P. Koparde**. 2012. Birds from ashes: The story of a fly ash pond. *National Conference on Biodiversity Assessment, Conservation and Utilization*. Pune, India. **(Best Poster award)**.
- **Koparde, P.** and S. Manchi. 2012. Avifaunal survey of Chalis Ek area on North Andaman Island: Distribution and migratory routes of some Andamanese birds. *National Conference on Biodiversity Assessment, Conservation and Utilization*. Pune, India.
- **Koparde, P.** and P. Patil. 2011. Understanding Fly ash and Struggling Ashietes. *Student Conference on Conservation Science*. Bangalore, India.
- **Koparde, P.**, S. Singh and B.A. Chopade. 2010. Sequence specific therapeutics against NS1 of Avian Influenza (H5N1) virus: insights from bioinformatics. *International Conference on Biology beyond Borders*. University of Pune, India.

- Singh, S., **P. Koparde** and B.A. Chopade. 2010. RNAi as a new therapeutic strategy against Avian Influenza Virus: A bioinformatics approach. *Asia-Pacific Bioinformatics Conference*. NCBS, Bangalore, India.

Trainings/Conferences Attended

- UG Teachers' workshop organized by India Bioscience. 2017. Abasaheb Garware College, Pune.
- Workshop on 'Niche Modeling' organized by Colorado State University in collaboration with National Centre for Biological Science and Centre for Ecological Science. 2016. Bangalore, India. (21st Century Indo-US collaborative).
- Workshop on 'Basic and Advanced Statistics' organized by Sálím Ali Centre for Ornithology & Natural History. 2016. Coimbatore, India.
- Workshop on 'Conservation Genetics' organized by Leibniz Institute for Wildlife Research at 10th International Conference on behavior, physiology and genetics of Wildlife. 2015. Berlin, Germany.
- Workshop on 'Molecular Phylogenetics' organized by Praveen Karanth Lab, Centre for Ecological Sciences. 2015. IISc, Bangalore, India.
- Workshop on 'NextGen Genomics and Bioinformatics Technologies' organized by SciGenom. 2014. NIMHANS, Bangalore, India.
- 'School and Discussion Meeting on Population Genetics and Evolution' organized by International Centre for Theoretical Sciences, TIFR, India. 2014. IISc, Bangalore, India.
- 'School in Avian Biology' organized by Department of Science & Technology, Government of India. 2013-2014. Sálím Ali Centre for Ornithology & Natural History. Coimbatore, India.
- Workshop on 'Sampling for Occupancy Analysis' and 'Landscape Genetics' organized at Student Conference on Conservation Science. 2013. Bangalore, India.
- Workshops on 'An Introduction to Spatial Statistics using R' and 'An Introduction to Landscape Ecology using QGIS/GRASS and R' organized by Foundation for Ecological Research, Advocacy and Learning. 2013. Pondicherry, India.
- Workshop on 'Scientific Writing and Communication Skills' organized by Vijnana Bharati, Pune and Department of Chemistry, University of Pune. 2010. University of Pune, India.
- Certificate Course in Basic Ornithology organized by ELA foundation. 2008. Pune, India.

Skill Set

- **Field skills:** Systematic surveys, mist-netting, bird and Odonata morphometry, blood collection from live bird, call recording and analysis, GPS navigation
- **Laboratory skills:** DNA extraction, PCR, gel electrophoresis, Sanger sequencing, library prep for Next Generation Sequencing, insect preservation techniques, stereoscopy
- **Analytical skills:** Univariate and multivariate statistics (R, PAST, SPSS, SAM, Estimate S, Biodiversity Pro), call recording and analysis (Raven Pro, Audacity), RS and GIS analysis (Arc GIS, QGIS, DIVA GIS, Map-info, Google Earth), occupancy analysis (PRESENCE), ecological niche modeling (MaxEnt, SPACES, BioClim), phylogenetic (MEGA, RaxML, PAUP, Geneious, MrBayes, BEAST, RASP, S-DIVA) and population genetics analysis (STRUCTURE, Skyland), image editing (Photoshop, Corel Draw), MS-Office
- **System platforms:** Windows (all versions), Linux, Mac OS
- **Languages known:** English, Hindi, Marathi

Other Interests and Contributions

- Freelance Marathi writer and blogger with major interest in short-stories and literary essays (www.paras-daar.blogspot.com; <https://www.facebook.com/parasdaar/>).
- Writer of *Lalit* (a compilation of Marathi literary essays on experiences with life) available at <http://ow.ly/a9a5302LT0m>
- Writer, director and lead actor for a short-film on science and wisdom – *Ghubadesh: The Owl God* (<http://ow.ly/SZja303z7sQ>).
- Columnist on natural history for Rangdeep, New York (January 2017 - Present)
- Columnist (column named '8X40') for Namaskar e-magazine (January – June 2014)
- Worked as a Script-writer and Lead Actor in the prestigious Firodiya Karandak 2009, an intercollegiate drama competition which includes composition build-up using multiple art forms.
- Represented Institute for Bioinformatics & Biotechnology in University Interdepartmental Badminton competition for Male Singles category.