

Sahas Barve PhD

(+1) 650-669-0350 ◊ sahasbarve@gmail.com ◊ www.sahasbarve.com

PROFESSIONAL APPOINTMENTS

Peter Buck Fellow, Smithsonian National Museum of Natural History 2019-2022
Postdoctoral Associate, Old Dominion University 2017-2019

EDUCATION

Certificate: Teaching and Learning in a Diverse Classroom CornellX (TLDC101x) 2020
PhD (Ecology and Evolutionary Biology), Cornell University, 2017
Master of Science (Wildlife Sciences), Wildlife Institute of India 2009
Bachelor of Science (Zoology), Mumbai University 2007

PUBLICATIONS

Scientific Publications [Google Scholar](#)

33. Barve S., Salazar-Ortiz E., Dove C.J., (In review, *Ornithology*). Feather structure and elevation influence variation in down brightness of Himalayan birds.
32. Koenig W.D., Barve S., Haydock J., Dugdale H.L., Oli M.K., Walters E.L., (In review, *Science*). Inclusive fitness of cooperative polygamy in the acorn woodpecker.
31. Rutledge S.L., Barve S. (In revision, *Wilson Journal of Ornithology*) Birds of a feather caught together? The influence of flocking behavior on the representation of North American birds in collections.
30. Barve S., Menon T., Ramesh V. (In revision, *American Naturalist*), Thermal niche breadth and diet explain variation in elevational migration in Himalayan birds.
29. Barve S., Daniel Cadena, C. (Accepted, *Ecology and Evolution*) Hermits in a puffy jacket: Variation in insulative feather structure in songbirds along a tropical elevation gradient.
28. Thompson C.L., Alberti M., Barve S., Battistuzzi F.U., Drake J.L., Govaert L., Partridge C., Yang Y. (In press *Integrative and Comparative Biology*), Back to the future: Reintegrating biology to understand how past eco-evolutionary change can predict future outcomes.
27. Shizuka D., Barve S., Johnson A, Walters E. L. (2022) Constructing social networks from automated telemetry data: a worked example using within- and across-group associations in cooperatively breeding birds. *Methods in Ecology and Evolution* 13: 133-143
26. Barve S., Riehl C., Walters E.L., Haydock J., Dugdale H.L., Koenig W.D. (2021). Lifetime reproductive benefits of cooperative polygamy vary for males and females in the acorn woodpecker (*Melanerpes formicivorus*). *Proceedings of the Royal Society-B* 288: 20210579 * Chosen as cover article
25. Dalvi S., Dixit S., Dharwadkar O., Thackeray T., Barve S., Khot R. (2021). The Sakhalin Leaf Warbler *Phylloscopus borealoides*: A new species for the Indian Subcontinent, and its status in the Andaman Nicobar Islands. *Indian Birds* 17: 65-69 [Link](#)
24. Barve S., Ramesh V., Dotterer T.M., Dove C.D. 2021. Elevation, evolutionary origin, and body size drive variation in thermo-insulative feather structure of Himalayan birds. *Ecography* 44: 680-689 [Link](#)

23. **Barve S.**, Lahey A.S., Brunner R.M., Koenig W.D., Walters E.L. 2020. Woodpecker wars: Tracking soldiers and spectators with telemetry. *Current Biology* 30: R982-R983 * Chosen as cover article
22. **Barve S.**, Shankar Raman T. R., Jathar G., Datta A. 2020. Guidelines for conducting research on nesting biology of Indian birds. *Indian Birds* 16: 10-11 # *Invited manuscript*
21. **Barve S.**, Shankar Raman T. R., Jathar G., Datta A. 2020. When and how to study nesting biology of Indian birds: research needs, ethical considerations, and best practices. *Indian Birds* 16:1-9 # *Invited manuscript*
20. **Barve S.**, Hagemeyer N., Winter R., Chamberlain S., Koenig W., Winkler D., Walters E. 2020. Wandering woodpeckers: foray behavior in a social bird. *Ecology* 101: e02943
19. Koenig W., Walters E., **Barve S.** 2019. Does helping-at-the-nest help? The case of the acorn woodpecker. *Frontiers of Ecology and Evolution* 7:272
18. **Barve S.**, Koenig W., Haydock J., Walters E. 2019. Habitat saturation results in joint-nesting female coalitions in a social bird. *American Naturalist* 193:830-840
17. Ishtiaq, F., **Barve S.** 2018. Do avian blood parasites influence hypoxia physiology in a high elevation environment? *BMC Ecology* 18:15
16. **Barve S.**, Dixit S., Dhondt A., Ishtiaq F. 2017. Sexual dimorphism in breast stripe width and beak eco-morphology in Himalayan green-backed tits (*Parus monticolus*). *Avian Biology Research* 10:259-263
15. **Barve S.**, Dhondt A. 2017. Elevational replacement of two Himalayan titmice: interspecific competition or habitat preference? *Journal of Avian Biology* 48:1189-1194 * Chosen as cover article
14. Ramesh V., Gopalkrishna T., **Barve S.**, Melnick D. 2017. Finer spatial resolution improves accuracy of species distribution models in heterogeneous landscapes - a response to Praveen J. *Biological Conservation* 213:247-248 # *Student mentee lead-author*
13. Heaton-Crisologo T., Joshi V., **Barve S.** 2017. Jack of all calls and master of few: vocal mimicry in the tawny lark (*Galerida deva*). *Avian Biology Research* 10:174-180 # *Student mentee lead-author*
12. Ramesh V., Gopalkrishna T., **Barve S.**, Melnick D. 2017. IUCN greatly underestimates threat levels of endemic birds in the Western Ghats. *Biological Conservation* 210:205-221 # *Student mentee lead-author*
11. **Barve S.**, Mathur V., Dhondt A., Ishtiaq F., Cheviron Z. 2016. Life-history characteristics influence physiological strategies to cope with hypoxia in Himalayan birds. *Proceedings of the Royal Society-B* 283:2016.2201
10. **Barve S.**, La Sorte F. 2016. Fruiting season length drives the global distribution of female-only parental care in frugivorous passerines. *PLoS ONE* 11:e0154871
9. Dixit S., Joshi V., **Barve S.** 2016. Bird diversity of the Amrutganga valley, Kedarnath, Uttarakhand, India with an emphasis on the elevational distribution of species. *Checklist* 12:1874 # *Student mentee lead-author*
8. **Barve S.**, Dhondt A. 2015. A yellow-browed tit (*Sylviparus modestus*) nest from Kedarnath Wildlife Sanctuary, Uttarakhand, India. *Indian Birds* (3&4):110-111
7. **Barve S.***, Mason N.* 2015. Interspecific competition affects evolutionary links between cavity nesting, migration and clutch size in Old World flycatchers (*Muscicapidae*). *Ibis* 157:299-311 (* Denotes equal contributions)

6. Fry B., Hendrikx I., Rowley P., Jackson T., van der Ploeg H., Johnson R., Sasa M., Dunstan N., **Barve S.**, Lock B., Phillip T., Zivkovic M., Wiley K., Harrison J., Carmichael R., Morris C., Brandl D., Shankar G., McCarthy S., Sunagar K., Pittman J., Cochran C. 2015. Maintaining venomous animal collections: protocols and occupational safety. *Venomous Reptiles And Their Toxins: Evolution, Pathophysiology And Biodiscovery* pp 89-133. Oxford University Press.
5. **Barve S.**, Bhaisare D., Giri A., Gowrishankar P., Whitaker R., Goode M. 2013. A preliminary study on translocation of rescued king cobras (*Ophiophagus hannah*). *Hamadryad*, 36:80-86
4. **Barve S.**, Warriar R. 2013. Birds of the Sharavathy landscape. *Indian Birds* 8:57-61
3. Muralidhar A., **Barve S.** 2013. Peculiar choice of nesting site in Red wattled lapwing (*Vanellus indicus*) in an urban site. *Indian Birds* 8:6-9 # Student mentee lead-author
2. **Barve S.** 2010. Sri Lanka Frogmouths of Kogar, filling in the gaps. *Indian Birds* 5:179
1. **Barve S.**, Mohan D., Qureshi Q. 2009. Responses shown by bird communities to teak plantations and surrounding natural forests in Sagar Forest Division, Karnataka, India. *Masters thesis* submitted to the Wildlife Institute of India.

Popular Publications

- Barve S.** 2022. The unique physiologies of elevational niche shifters. *Current Conservation* 15.4. [Link](#)
- Barve S.** 2020. Himalayan birds: Balancing elevation and weather. Sanctuary Asia (October). [Link](#)
- Barve S.** and other contributors. 2020. Fifty things we have learnt about the Earth since the first Earth day. Smithsonian Magazine. [Link](#)
- Barve S.**, Hagemeyer N., Winter R., Chamberlain S., Koenig W., Winkler D., Walters E. 2020. Wandering woodpeckers: foray behavior in a social bird. Bulletin of Ecological Society of America [Link](#)
- Barve S.** 2017. Immortal flatulence. www.scienceoutside.com [Link](#)
- Barve S.** 2015. A drop of blood, a sea of information. Deccan Herald Spectrum. [Link](#)
- Barve S.** 2015. Banded Tickells Thrush, Uttarakhand. www.conservationindia.org [Link](#)
- Barve S.** 2014. The Eurasian Woodcock, Kedarnath, Uttarakhand. www.conservationindia.org [Link](#)
- Barve S.** 2014. The Shola Sky-lands. *Saevus* 37:22-27
- Barve S.** 2014. Snake Translocation: New information, new insights. Nature Kaleidoscope, Bulletin of the Wildlife Institute of India. [Link](#)
- Barve S.** 2013. Translocation tragedies: are we really rescuing snakes? www.conservationindia.org [Link](#)
- Barve S.** 2009. The Fox, Outfoxed. Hornbill, July-September:4-8

FELLOWSHIPS AND AWARDS

Fellowships Total fellowship support awarded: **\$201000**

Peter Buck Postdoctoral Fellowship, Smithsonian Institution	2019-2022
Linda and Samuel Kramer Graduate Student Fellowship, Cornell University	2016
Johnson Graduate Fellowship for Teaching and Research, Cornell University	2015
Halberstad and Mary Hartshorne Endowment Fellowship, Cornell University	2015

Cornell Lab of Ornithology Research Fellowship, Cornell University	2014-2015
Cornell University Fellowship, Cornell University	2011-2012
Graduate Fellowship, Wildlife Institute of India	2007-2009

Awards

Ned. K. Johnson Early Investigator Award, American Ornithological Society	2021
Natural History Section Student Award, Ecological Society of America Conference	2016
Alexander Wilson Prize for Best Paper, North American Ornithological Conference	2016
Overall First Prize, Harry W. Greene Grilled Cheese Contest, Cornell University	2016
Finalist, Cornell University 3 Minute Thesis Competition	2016
James F. Slevin Assignment Sequence Prize, Knight Institute, Cornell University	2016
Early Career Ecologist Mentorship Award, Ecological Society of America	2016

RESEARCH GRANTS

Smithsonian Institution Scholarly Studies Award (2022)	\$44,181
National Geographic Society Early Career Grant (2020)	\$9,101
National Science Foundation Collaborative Research Grant (2019) Evolution of cooperation in social woodpeckers (supplement)	\$82,077
American Ornithological Society Conference Travel Grant (2017)	\$250
Cornell University Conference Travel Grant (2016)	\$350
American Ornithologists Union Conference Travel Award (2016)	\$100
Explorer's Club Exploration Fund (2015)	\$1,000
Athena Fund (2015)	\$5,000
Cornell Graduate School Conference Travel Grant (2014)	\$360
Athena Fund (2013)	\$5,000
Cornell Graduate School Research Travel Grant (2013)	\$1,930
Sigma-Xi Grants-in-Aid-of-Research Award (2013)	\$700
Sigma-Xi (Cornell Chapter) Research Award (2013)	\$600
Athena Fund (2012)	\$6,000
Atkinson Centre Sustainable Biodiversity Fund (2012)	\$5,000
Paul Feeny Fund (2012)	\$810
Athena Fund (2011)	\$1,800

TEACHING EXPERIENCE

Guest Faculty

Smithsonian Natural History Research Experiences (National Museum of Natural History)	2021
George Mason University, Introduction to Animal Behavior (BIOL 472)	2020
Ithaca College, Introduction to Avian Biology	2020
SPROUTS (India), Online Ornithology Course Link	2020

SPROUTS, Mumbai Lecture Series
Wildlife Institute of India

2015
2013, 2014

Instructor

Skype a Scientist-

Interactive classrooms for grade school students on evolutionary biology 2020-present

Cornell University-

Ecology and Evolution on Islands, Freshman Writing Seminar (BIOEE 1640) Fall 2015

Teaching Assistant

2012-2016

Cornell University Courses: Ecology and the Environment (Head TA, BIOEE 1610), Introduction to Conservation Biology (Head TA, BIOEE 2670), Introduction to Evolutionary Biology and Diversity (Head TA, BIOEE 1780) and Tropical Field Ornithology (BIOEE 2460)

Academic Mentoring I have mentored 18 undergraduate and 7 graduate students from five countries. Selected students and mentoring experience below 2010-present

Student	Academic Institution	Degree	Year
Martin Burmeister	University of Applied Sciences, Germany.	Undergraduate thesis	2010-2011
Vijay Ramesh	Columbia University, United States	PhD thesis	2014-Present
Soham Dixit	University of Bonn, Germany	Master's thesis	2015-Present
Taylor Crisologo	Cornell University, United States	Undergraduate thesis	2015-2016
Anisha Jayadevan	National Centre for Biological Sciences, India	Master's internship	2015
Manon Munoz	University of Tours, France	Undergraduate thesis	2015
Toni Dotterer	National Museum of Natural History, United states	Internship	2017-Present
Tarun Menon	Indian Institute of Science, India	PhD thesis	2020-Present
Samantha Rutledge	National Museum of Natural History, United states	Virtual internship	2020-2021
Efrain Salazar-Ortiz	National Museum of Natural History, United states	Virtual Intern	2021-Present

SELECTED INVITED TALKS AND SEMINARS

Archbold Biological Station (FL) Invited Research Seminar	2022
University of Maryland (MD) Invited Research Seminar	2022
Cal Poly Humboldt (CA) Invited Research Seminar	2022
Ithaca College (NY) Biology Seminar Series	2022
Zumbro Valley Audubon Society (MN) Virtual Seminar	2022
Florida Museum of Natural History , Gainesville, Florida, Virtual Seminar	2022
Smithsonian Associates , Valentine's Day Special Program Smithsonian at 8 Virtual Seminar	2022
Patuxent Bird Club and Prince George's County Audubon Society Monthly Seminar Series Virtual Seminar	2022
Southern Maryland Audubon Society Monthly Seminar Series Virtual Seminar	2021
Natural History Museum, Los Angeles Research and Collections Virtual Seminar	2021
Duke University Long-term Animal Research Seminar Series Virtual Seminar	2021
USGS Eastern Ecological Science Centre's Lunch and Learn Virtual Seminar	2021
Early Career Award Plenary American Ornithological Society Conference Virtual Seminar	2021
Pondicherry University School of Life Sciences Pondicherry, India Virtual Seminar	2021
Maricopa Audubon Society Arizona, United States Virtual Seminar	2021

University of Louisville Louisville, KY Virtual Seminar	2021
Ram Narain Ruia College Mumbai, India Virtual Seminar	2021
Center for Macroecology, Evolution and Climate Copenhagen, Denmark Virtual Seminar	2021
Northern Virginia Bird Club Monthly Speaker Series Virtual Seminar	2021
Smithsonian National Museum of Natural History, Science Cafe Virtual Seminar	2021
Santa Clara Valley Audubon Society Monthly Speaker Series Virtual Seminar	2021
Audubon Society of Northern Virginia Audubon Afternoon Virtual Seminar	2021
Washington D.C. Audubon Society Monthly Seminar Series Virtual Seminar	2020
Nature Conservation Foundation Weekly Seminar Series, Mysuru, India	2020
Smithsonian Senate of Scientists Invited Lightning Talk, Washington, DC	2020
SPROUTS (NGO) Earth Day Lecture, Link , Mumbai, India	2020
Princeton University Integrative Research in Behavior Group, Princeton, NJ	2020
Cape Henry Audubon Society Monthly Seminar Series, Norfolk, VA	2019
Old Dominion University Biological Sciences Seminar, Norfolk, VA	2019
National Museum of Natural History Vertebrate Zoology Seminar, Washington, DC	2018
Smithsonian Conservation Biology Institute Rock Creek Seminar Series, Washington, DC	2018
Cal Poly Biological Sciences Seminar, San Louis Obispo, CA	2017
University of Chicago Darwins Weekly Natural History Seminar Series, Chicago, IL	2016
Cornell Lab of Ornithology Monday Night Seminar Series, Ithaca, NY	2016
University of Cape Town , Biosciences Seminar, Cape Town, South Africa	2015
Centre for Ecological Sciences Invited seminar, Indian Institute of Science, Bengaluru, India	2014

SELECTED CONFERENCE PRESENTATIONS

North American Ornithology Conference Virtual <i>Invited symposium seminar</i>	2021
American Society of Naturalists Meeting , Virtual	2021
North American Ornithology Conference , Virtual <i>Invited symposium seminar</i>	2020
American Ornithological Society Conference , Anchorage, AL <i>Invited symposium seminar</i>	2019
American Ornithological Society Conference , Tuscon, AZ	2018
American Society of Naturalists Meeting , Asilomar, CA	2018
American Ornithological Society , East Lansing, MI	2017
North American Ornithological Conference , Washington, DC <i>*Alexander Wilson Best Student Paper Award</i>	2016
Ecological Society of America Conference , Fort Lauderdale, FL <i>* Best paper in Natural History Section Award</i>	2016

Uttarakhand State Birding Festival, Pawalgarh, Uttrakhand, India	<i>2015</i>
Society for the Study of Evolution Conference, Raleigh, NC	<i>2014</i>

OTHER PROFESSIONAL EXPERIENCE

	<i>Research taxon</i>
Junior Research Fellow , National Centre for Biological Sciences, India 2011	<i>birds</i>
Project Leader , Draco Trust, India 2010-2011	<i>snakes</i>
Researcher , Aaranyak, India 2010	<i>large mammals</i>
Researcher , Tiger Watch, India 2007	<i>small carnivores</i>

SELECTED OUTREACH ACTIVITIES

Outreach at the Smithsonian National Museum of Natural History

Smithsonian YEAH Virtual Internship for High-school Students, Webinar *2021*

Smithsonian Science How, Live Webinar [Link](#) *2021*

Participation by more than 650 students

#NatureNerding101 Outreach Series *2020*

Developed the Birding 101 and #SpeakBird mini-series for Twitter, Facebook and Instagram. The campaign generated 52,504 likes/comments/shares and reached over 0.7 million users.

Smithsonian Science How, Live Webinar [Link](#) *2020*

Participation by more than 500 students

Smithsonian Science How, Educational Webcast [Link](#) *2020*

Participation by more than 2800 elementary school students

The Expert Is In, and Volunteer Enrichment Programs *2020*

Instagram Take-over *2020*

Content viewed by over 129000 unique users and generated 8900 likes

Other outreach activities

Story-telling, NAOC 2020 story-telling event. I told a story about my experiences speaking English as an immigrant in the USA [Link](#) *2020*

Expert Interview, Afternoons on BBC Radio Berkshire *2021*

Expert Interview, The County, Naturally, Radio Talk Show 93.9 County FM *2019*

Founder, moderator and editor, www.scienceoutside.com [Link](#) *2017-Present*

Consultant, BBC Wonders of India series *2016*

Expert, Career with Birds, video interview, Cornell Lab of Ornithology [Link](#) *2014*

Nature Guide, for over 10 not-for-profit-organizations in Mumbai, India *2004-2007*

SELECTED PROFESSIONAL ACTIVITIES AND COMMUNITY SERVICE

Reviewer, over 30 manuscripts reviewed (selected journals) American Naturalist, Auk, Avian Conservation and Ecology, Biotropica, Current Zoology, Diversity and Distribution, Ecology, Ecology and Evolution, EMU-Austral Ornithology, Evolutionary Applications, Frontiers in Ecology and Evolution, Global Ecology and Biogeography, Ibis, Journal of Avian Biology, Journal of Biogeography,

Journal of Field Ornithology, Proceedings of the Royal Society B, Proceedings of the National Academy of Sciences-USA, Wilson Journal of Ornithology

Elective Member, American Ornithological Society *2021-present*

Member and Co-lead, Science Structure Task Force (internal review sub-group) *2021-Present*

National Museum of Natural History

Member, Science Culture Task Force (external review sub-group) *2021-Present*

National Museum of Natural History

Member, Science Creative Communications Council (external review sub-group) *2022*

National Museum of Natural History

Committee Lead Diversity Equity, Inclusion, and Accessibility Committee
American Ornithological Society Annual Conferences *2021, 2022*

Founder, Mountain Ecology and Evolution Journal Club (Virtual) *2020-Present*
Bi-weekly, attended by graduate students from 6 research institutes in India

Editorial Board Member, *Indian BIRDS*, New Ornis Foundation *2020-Present*

Member, Diversity and Inclusion Committee, American Ornithological Society *2019-Present*

Member, Early Professionals Committee, American Ornithological Society *2019-Present*

Research Affiliate, Wildlife Institute of India *2013-present*

SKILLS AND RESEARCH TECHNIQUES

Wilderness First Aid, (including CPR/AED and epinephrine treatment),
Cornell Outdoor Education, Cornell University *2016*

Building Academic Mentorship Skills Certificate Program, Cornell University *2016*

Colman Leadership Program, Cornell University *2016*

PROFESSIONAL SOCIETY MEMBERSHIPS

American Ornithological Society, American Society of Naturalists, Ecological Society of America, Society for Integrative & Comparative Biology, Society for the Study of Evolution, Sigma Xi