

## Ashish N. Nerlekar

Presidential Postdoc fellow  
Ecology, Evolution and Behavior program  
Michigan State University  
East Lansing, MI 48824 USA

nerleka1@msu.edu  
google scholar profile [here](#)  
ashishnerlekar.weebly.com  
(+1)9797399609

## Education

---

### **PhD program in Ecology and Conservation Biology** Fall 2018-Summer 2023

Texas A&M University, USA  
Dissertation: The roles of time and disturbance regimes in savanna plant communities  
Advisor: Dr. Joseph W. Veldman  
GPA: 4.00/4.00

### **Post-Secondary Science Teaching Certificate** Fall 2019-Spring 2023

Texas A&M University, USA  
Awarded for 12 Science Education credits  
GPA: 4.00/4.00

### **Master of Science in Biodiversity** Summer 2014-2016

Abasaheb Garware College, S. P. Pune University, Pune, India  
Advisors: Dr. D. K. Kulkarni and Dr. H. V. Ghate  
GPA: 4.85/6.00 (1st rank in University)

### **Bachelor of Science in Botany** Summer 2011-2014

Fergusson College, S. P. Pune University, Pune, India  
Score: 87.5% (Distinction)

## Academic Positions

---

**Presidential Postdoctoral fellow** Fall 2023-present  
Ecology, Evolution, and Behavior program, Michigan State University

**Dissertation Fellow** 2022-2023  
Office of Graduate & Professional Studies, Texas A&M University

**Tom Slick Graduate Research Fellow** 2021-2022  
College of Agriculture & Life Sciences, Texas A&M University

**McMillian-Ward Graduate Fellow** 2018-2021  
Department of Ecosystem Science & Management, Texas A&M University

**Student Worker** Summer 2021  
S. M. Tracy Herbarium, Texas A&M University

**Graduate Teaching Assistant** Fall 2019; Spring 2021  
Fundamentals of Ecology Laboratory course, Texas A&M University

**Project Assistant** 2018  
Behavioural and Evolutionary Ecology Lab,  
Indian Institute of Science Education and Research Trivandrum, India

**Research Technician** Fall 2017  
Tropical Plant Ecophysiology and Ecology Lab  
Indian Institute of Science Education and Research Pune, India

**Project Assistant** Winter 2016-Fall 2017  
Vanasiri Evolutionary Ecology Lab  
Indian Institute of Science Education and Research Trivandrum, India

**Research Assistant** Fall 2016  
Invasion Ecology group  
Ashoka Trust for Research in Ecology and the Environment, Bangalore, India

## Peer-Reviewed Journal Publications

---

**Nerlekar, A. N.**, Munje, A., Mhaisalkar, P., Hiremath, A. J. & Veldman, J. W. (2023). Tillage agriculture and afforestation threaten tropical savanna plant communities across a broad precipitation gradient. (In press, *Journal of Ecology*)

**Nerlekar, A. N.**, Chorghe, A. R., Dalavi, J. V., Kusom, R. K., Karuppusamy, S., Kamath, V., Pokar, R., Rengaiyan, G., Sardesai, M. M. & Kambale, S. S. (2022). Exponential rise in the discovery of endemic plants underscores the need to conserve the Indian savannas. *Biotropica* 54: 405-417. [Link](#) (**Peter Ashton Prize for 2022**)

**Nerlekar, A. N.**, Mehta, N., Pokar, R., Bhagwat, M., Mishra, C., Joshi, P. & Hiremath, A. J. (2021) Removal or utilisation? Testing alternative approaches to the management of an invasive woody legume in an arid Indian grassland. *Restoration Ecology* 30: rec.13477. [Link](#)

**Nerlekar, A. N.** & Veldman, J. W. (2020). High plant diversity and slow assembly of old-growth grasslands. *Proceedings of the National Academy of Sciences, USA* 117: 18550-18556. [Link](#)

Veldman, J. W., Aleman, J. C., Alvarado, S. T., ....**Nerlekar, A. N.**.... (+ 42 co-authors) (2019) Comment on “The global tree restoration potential”. *Science* 366: eaay7976. [Link](#)

**Nerlekar, A. N.**, Das, S., Onkar, A. A., Bhagwat, M., Mhaisalkar, P., Lapalikal, S. A., Chavan, V. D., & Mahajan, M. C. (2019). India needs long-term biodiversity monitoring in urban landscapes. *Current Science* 117: 181-182. [Link](#)

**Nerlekar, A. N.**, Kamath, V., Saravanan, A. & R. Ganesan (2019). Successional dynamics of a regenerated forest in a plantation landscape in Southern India. *Journal of Tropical Ecology* 35: 57-67. [Link](#)

**Nerlekar, A. N.** (2018). Seasonally dependent relationship between insect herbivores and host plant density in *Jatropha nana* — a tropical perennial herb. *Biology Open* 7: 1-7. [Link](#)

Mane, R. N., **Nerlekar, A. N.**, Lapalikal, S. A., Kambale, S. S. & S. R. Yadav (2017). The taxonomic status of two geophytic *Euphorbia* species (Euphorbiaceae) from Maharashtra, India. *Phytotaxa* 307: 141-146. [Link](#)

**Nerlekar, A. N.,** Lapalika, S. A., Onkar, A. A., Laware, S. L. & M. C. Mahajan (2016). Flora of Fergusson College campus, Pune, India: monitoring changes over half a century. *Journal of Threatened Taxa* 8: 8452-8487. [Link](#)

Page, N. V. & **A. N. Nerlekar** (2016). A new species of *Miliusa* (Annonaceae) from the Western Ghats of Karnataka, India. *Phytotaxa* 245: 079-083. [Link](#)

**Nerlekar, A. N.** (2016). Herbarium collections of the Botany Department, Fergusson College, Pune, India. *Taprobanica* 8: 24-32. [Link](#)

**Nerlekar, A. N.** (2015). Lectotypification of *Jatropha nana* (Euphorbiaceae) with notes on its threats, and the status of *Jatropha nana* var. *bengalensis*. *Phytotaxa* 213: 155-158. [Link](#)

**Nerlekar, A. N.** & D. K. Kulkarni (2015). The Vetal hills: an urban wildscape in peril. *Taprobanica*. 7: 72-78. [Link](#)

Lapalika, S. A., **A. N. Nerlekar** & U. S. Yadav (2015). Harvested paddy fields: an understudied ecosystem from the Northern-Western Ghats, India. *Taprobanica*. 7: 79-86. [Link](#)

**Nerlekar, A. N.,** G. G. Gowande & P. S. Joshi (2014). Diet of the Spotted Owlet *Athene brama* in an urban landscape. *Indian Birds*. 9: 45–48. [Link](#)

**Nerlekar, A. N.,** Gowande, G. G. & P. S. Joshi (2014). Behavioural ethogram of Spotted Owlet *Athene brama* (Temminck, 1821). *Journal of the Bombay Natural History Society* 11: 172-179. [Link](#)

## Other Scholarly Publications

---

### Policy Report:

Raghurama, M., Dutta, S., Nair, T., Sankaran, M., Shankar Raman, T. R., Mudappa, D., Osuri. A.M., Krishnaswamy, J., Ramakrishnan, U, Pandit, N., Krishen, P., **Nerlekar, A.,** Agrawal, I., Albert, J., Blanchflower, P., Borawake, N., Bosco, G.V., Das, A., Datar, M., Datta, A., Dixit, A.M., Ghate, K., Hiremath, A., Joshi, P., Joshi, A., Joshua, J., Khan, D., Kumar, V., Nandikar, M., Naniwadekar, R., Narayan, G., Negi, V.S., Rao, S., Rehel, S.M., Saberwal, V., Saxena, V., Seshan, S., Varghese, A., Virmani, S., Watve, A., Yadav, S.R., Chellam, R. & Bawa, K. (2023). *Restoring India's Terrestrial Ecosystems: Needs, Challenges and Policy recommendations*. Report, National Mission on Biodiversity & Human well-being. Biodiversity Collaborative, Bengaluru, India. [Link](#)

### Natural History notes and IUCN Red list assessments:

**Nerlekar, A.N.,** Kumar, A. & P. Venu (2016). *Jatropha nana*. *The IUCN Red List of Threatened Species* 2016: e.T88425992A88425995

**Nerlekar, A. N.** & R. S. Kumar (2016). Occurrence of *Trissolcus jatrophae* Rajmohana, Narendran Manoharan (Hymenoptera: Platygasteridae) in Pune city, India. *Journal of Threatened Taxa* 8: 8736-8738.

**Nerlekar, A. N.**, Warudkar, A. M., Gowande, G. G., Salve, S. S., Raut, A. & S. B. Nalavade (2016). A review of the faunal diversity of the Fergusson College campus, Pune, India. *Zoo's Print* 31: 4-25

Onkar, A. A. & **A. N. Nerlekar** (2015). *Buchanania cochinchinensis* (Lour.) M.R. Almeida: A new host plant for *Scutellera Perplexa* (Westwood) (Hemiptera: Scutelleridae) *Journal of the Bombay Natural History Society*. 112: 179-180.

Thite, V. K. & **A. N. Nerlekar** (2012). Checkered keelback water snake *Xenochropis piscator* (Schneider, 1799) in the diet of Garden Calotes *Calotes versicolor* (Daudin, 1802). *Herpetology Notes* 5: 518.

**Nerlekar, A. N.** (2012). An instance of inter species interaction between Hanuman Langur *Semnopithecus entellus* and Rhesus macaque *Macaca mulatta*. *Zoo's Print*. 27: 27-28.

### **Books:**

Thorat, O. H, **Nerlekar, A. N.** & Joshi, P. N. (2019). *Grasses of Banni* (bilingual). BAIF Development Research Foundation, Pune, 168 pp. Access [here](#)

### **Contributed datasets:**

The Ecological Fractal Network (EcoFracNet); Global Restore Project (GRP); Nerlekar, A. N. et al. (2021), Endemic plants of the Indian peninsular savannas, Dryad, Dataset, <https://doi.org/10.5061/dryad.vmcvdcnv5>

### **Popular articles:**

**Nerlekar, A. N.** (2023). Only marginalized people seem to value grasses in de Souza, K. (eds.) *Shipping Roots: plant journeys through Empire*. Royal Botanical Garden, Edinburgh.

**Nerlekar, A. N.** and A. J. Hiremath (2022). Restoring Indian grasslands does not require disturbing soil and planting grasses, but more science. *Mongabay*. [Link](#)

**Nerlekar, A. N.** (2020). How can science education research be used for improving college teaching? *IndiaBioscience*. [Link](#)

Runwal, P. & **Nerlekar, A. N.** (2018). Open Savannahs Versus Wooded Thickets – What's the Future for Pune's Hills?. *The Wire*. [Link](#)

### **Presentations**

---

**Nerlekar, A. N.**, Munje, A., Mhaisalkar, P., Hiremath, A. J. & Veldman, J. W. (2022). Land use exerts stronger control over plant diversity than climate or soils in a tropical savanna of India. *Annual meeting of the Ecological Society of America, Montreal, Canada*

**Nerlekar, A. N.**, & Veldman, J. W. (2020). Global meta-analysis confirms the high species richness and slow assembly of old-growth grasslands. *Annual Meeting of the Ecological Society of America, Salt Lake City, Utah, USA*

**Nerlekar, A. N.** (2020). Ancient savannas in a modern tropical city: missing the grass for the trees. *Ecological Integration Symposium* (EIS) Texas A&M University. See talk [here](#).

**Nerlekar, A. N., & Veldman, J. W.** (2019). Old-growth savannas and grasslands worldwide are more species-rich than their secondary counterparts. *Ecological Integration Symposium* (EIS) Texas A&M University, USA (poster)

**Nerlekar, A. N.** (2016). Factors governing insect- herbivore diversity of *Jatropha nana*, an endemic threatened species. *Students Conference on Conservation Science* (SCCS) Bangalore, India (poster)

## Scholarships, Awards and Grants

---

- **Peter Ashton Prize** awarded by the Association for Tropical Biology and Conservation (ATBC) for Nerlekar et al. (2022), *Biotropica*.
- **Presidential postdoctoral fellowship**, Michigan State University (\$136,000 + benefits) (2023-2025)
- **Doctoral Dissertation Fellowship**, Office of Graduate and Professional Studies, Texas A&M University (\$44,680) (2022-23)
- **Travel grant**, Department of Ecology & Conservation Biology, Travel to the Annual Meeting of the Ecological Society of America (\$500) (2022)
- **CIRTL Teaching-As-Research fellowship**, Texas A&M University (\$1000) (2021)
- **Ann Miller Gonzalez Research Grant**, Native Plant Society of Texas. *Adaptations of Texas's native savanna grasses to fire and grazing*. (\$2500) (2021-2022)
- **Tom B. Slick graduate fellowship**, College of Agriculture and Life Sciences, Texas A&M University (\$40,065) (2021-2022)
- **Tom B. Slick professional development grant**, College of Agriculture and Life Sciences, Texas A&M University (\$1000) (2022)
- **High-Impact Research Mini-Grant**, Department of Ecology and Conservation Biology, Texas A&M University (\$2000) (2020)
- **Travel grant**, Department of Ecosystem Science & Management, Travel to the Annual Meeting of the Ecological Society of America (\$500) (2020)
- **First prize** for contributed oral presentation, Ecological Integration Symposium (EIS), Texas A&M University (\$50) (2020)
- **Graduate Excellence Fellowship**, College of Agriculture and Life Science, Texas A&M University (\$33,463) (2018-19)
- **McMillan-Ward Memorial Graduate Fellowship**, Department of Ecosystem Science and Management, Texas A&M University (\$50,000) (2018-21)
- Provisionally selected for the **DST-INSPIRE Fellowship** for pursuing a PhD in India (approximately INR 2,116,000 in total for five years, declined) (2017)
- **IDEA WILD (USA)** Field equipment grant (\$292) (2015)
- **Darwin Scholarship**, Annual Biodiversity Monitoring Program, Field Studies Council, Shrewsbury, UK (GBP 650) (2013)
- **Travel grant**, Sir Ratan Tata Trust, Travel to Annual Biodiversity Monitoring Program, Shrewsbury, UK (INR 35,000) (2013)

- **Project Oriented Biological Education (POBE) Fellowship**, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore. (2011-12)

## Teaching and Mentoring Experience

---

### Graduate Teaching Assistant

Fall 2019; Spring 2021

#### **REN215: Fundamentals of Ecology- Laboratory**

- Responsibilities: Lecturing, conducting field and lab-based classes, grading
- Implemented a research-based framework for teaching (see here)

#### **Student mentoring**

- Akshay Onkar, BSc Botany, Fergusson College, Pune (2014-2016)
- Sae Ghule, BSc Environmental Science, Fergusson College, Pune (2019-2020)
- Anjali Bhadule, MSc Biodiversity, Pune University (2020-2021)

## Service and Professional Memberships

---

**Journal Reviewer:** *Ecology Letters, Biotropica, Conservation Letters, Global Change Biology, Journal of Biogeography, Applied Vegetation Science, Restoration Ecology, BMC Ecology and Evolution, Ecology and Evolution, Tropical Ecology, Peer J*, ESA Annual meeting abstracts (2022); **Guest Subject Editor:** *Frontiers in Conservation Science*

- Member, Ecological Restoration Alliance, India (2022 onward)
- Member, IUCN SSC Western Ghats plant specialist group (2021 onward)
- Member, OpEN: Open Ecosystems Network (2022 onward)
- Member of the Ecological Society of America, USA (ESA) (2020 -22)
- Member of the Society for Ecological Restoration, USA (SER) (2019 -20)
- Member of the Association for Tropical Biology and Conservation (ATBC) (2021-22)
- Member of the International Biogeography Society (IBG) (2017-18)
- Fellow, Academy for Future Faculty, Texas A&M University (2019 onward)
- Life member of Indian Association for Angiosperm Taxonomy (IAAT)
- Member of Bombay Natural History Society (2011-12)
- Correspondent and curator of the Fergusson College Herbarium (2016-2017)

## Selected Media Coverage

---

- Grasslands are thriving ecosystems. [Deccan Herald](#) (2022)
- Indian savannas are NOT wastelands [Research Matters](#) (2022)
- Indian grasslands hold a treasure trove of endemic plants. [Mongabay](#) (2022)
- Removal of Banni's invasive 'mad tree' Prosopis is not the solution. [Mongabay](#) (2021).
- Not Wastelands: Non-forest Habitats of the Western Ghats. [Roundglass sustain.](#) (2020)
- Old-growth grasslands should be valued, not destroyed [AgriLife Today](#) (2020)
- 5 things to know about fighting climate change by planting trees. [Science News](#) (2019)
- Abandoned plantations in forested areas may not recover fully: Study. [Mongabay.](#) (2019)
- Do more plants invite more insects? Study explores the question. [Research Matters](#) (2018)
- New plant species discovered in Western Ghats [Nature India](#) (2016)
- Grass is greener-sans plantation drives. [Pune Mirror](#) (2015)