

CURRICULUM VITAE

EDUCATION

- 2017- 2023 Ph.D. Biological Science, *University of South Dakota, SD, USA.*
- 2014-2017 M.S. Wildlife Science, Minor in Applied Statistics, *New Mexico State University, NM, USA.*
- 2007-2009 M.S. Natural Resources Engineering- Biodiversity and Habitat Management, *Azad University, Science and Research Branch, Tehran, Iran.*
- 2001-2005 B.S. Natural Resources Engineering, *University of Tehran, Tehran, Iran.*

PROFESSIONAL EXPERIENCE

- July 2024 - Present *UC Santa Cruz Chancellor's Postdoctoral Fellow*, Department of Ecology & Evolutionary Biology, University of California Santa Cruz, Santa Cruz, CA
- Sep. 2024 - Present *D. H. Smith Conservation Research Postdoctoral Fellow*, Department of Ecology & Evolutionary Biology, University of California Santa Cruz, Santa Cruz, CA; California Department of Fish and Wildlife
- 2023 - Present *Postdoctoral researcher*, Department of Ecology & Evolutionary Biology, University of California Santa Cruz, Santa Cruz, CA
- 2021- 2023 *Postdoctoral researcher*, Department of Biology, University of South Dakota, SD.
- 2017 - 2021 *Research Assistant*, University of South Dakota, SD
- 2019 (May-August) *Quantitative geospatial specialist*, Jornada Long Term Ecological Research (LTER) site, NM
- 2015- 2016 *GIS Specialist*, BLM, Las Cruces District Office (contracted through New Mexico Association of Conservation Districts), NM
- 2014- 2017 *Research Assistant*, New Mexico State University, NM
- 2012-2014 *Geospatial specialist*, Persian Wildlife Heritage Foundation, Tehran, Iran
- 2010 – 2012 *Wildlife Specialist*, United Nations Development Program, Department of Environment, Iran
- 2008-2010 *Research Assistant*, University of Tehran, Tehran, Iran

RESEARCH EXPERIENCE

- 2020-2021 *Research assistant*, University of South Dakota, SD. Evaluated trends in land surface temperature and NDVI to assess drought and disturbance impacts in the Mongolian Plateau.
- 2018-2019 *Field assistant*, University of South Dakota, SD. Studied the effects of invasive tree species on floodplain bird nesting success along the Missouri National Recreational River.
- 2015-2017 *Statistician & field assistant*. New Mexico State University, NM. Conducted ecological surveys and analyzed data of the Penasco least chipmunk and the New Mexico meadow jumping mouse.
- 2015 - 2016 *GIS specialist*, Bureau of Land Management, Las Cruces District Office (contracted through New Mexico Association of Conservation Districts), NM. Contributed to the Chihuahuan Desert Rapid Ecological Assessment by creating geospatial datasets and conducting habitat analyses.
- 2010 *Project manager*, Aban-Pajouh consulting company, Iran. Produced a management action plan for Alvand protected area, Iran.
- 2010 *Project manager*, Tarlan Society, Iran. Designed a habitat network for ungulates in Markazi province, Iran.
- 2009 *GIS specialist*, Mohitban Society, Iran. Produced species distribution maps for the central Zagros mammalian fauna project.
- 2009 *Project manager & statistician*, University of Tehran, Iran. Developed a mitigation plan to reduce the impacts of road construction on wildlife habitats in Khojir national park, Iran.
- 2008 *Wildlife specialist & statistician*, University of Tehran, Iran. Analyzed data for reintroduction of gazelle population in Sorkhe Hesar national park.
- 2008 *Field assistant & statistician*, University of Tehran, Iran. Investigated the ecology of Pleske's Ground Jay (*Podoces pleskei*) in Iran, University of Tehran, Iran.
- 2008 *Wildlife specialist*, University of Tehran, Iran. Contributed in writing action plan for wildlife management in Iran.

PUBLICATIONS

- Goljani Amirkhiz, R., Brown, T., Hong, G., Leitner, K., & Zavaleta, E.S. 2024. In press. Hierarchical habitat selection for reconstructing past and present niches and distributions of data-limited species under climate change. *Diversity and Distributions* [10.1111/RG.2.2.29635.87844](https://doi.org/10.1111/RG.2.2.29635.87844).**

Hyde, M., Oakleaf, J.K., deVos, J., Bergman, D.L., Crooks, K.R., Young, J.K., **Goljani Amirkhiz, R.**, Frey, J.K., Breck, S.W. 2025. Food subsidies reduce livestock

depredations by a recovering carnivore. *Animal Conservation*

<https://doi.org/10.1111/acv.70028>.

Swanson, D.L., Stager, M. Vézina, F. Liu, J. McKechine A.E. **Goljani Amirkhiz, R.** 2023.

Evidence for a maintenance cost for birds maintaining highly flexible basal, but not summit, metabolic rates. *Scientific Reports* 13, 8968 <https://doi.org/10.1038/s41598-023-36218-w>.

Shirkey, G., John, R. Chen, J. Venkatesh, K. **Goljani Amirkhiz, R.** et al. 2023. Land cover change and socioecological influences on terrestrial carbon production in an agroecosystem. *Landscape Ecology* 38, 3845-3867 <https://doi.org/10.1007/s10980-023-01647-5>.

Saraf, S., John, R. **Goljani Amirkhiz, R.** Venkatesh, K. Jain, K. Rigge, M. Giannico, V. Boyte, S. Chen, J. Henebry, G. Jarchow, M. Laforteza, R. 2023. Biophysical drivers for predicting the distribution and abundance of invasive yellow sweetclover in the Northern Great Plains. *Landscape Ecology* 38, 1463-1479 <https://doi.org/10.1007/s10980-023-01613-1>.

Goljani Amirkhiz, R., John, R. Swanson, D.L. 2023. A Bayesian approach for multiscale modeling of the influence of seasonal and annual habitat variation on relative abundance of ring-necked pheasant roosters. *Ecological Informatic* 75: 102003 <https://doi.org/10.1016/j.ecoinf.2023.102003>.

Liu, M., Kinnicutt, P. **Goljani Amirkhiz, R.** Swanson, D.L. 2022. Arthropod prey and diets of woodland migrants are similar between natural riparian woodlands and anthropogenic woodlots in the northern prairie region. *Avian Conservation and Ecology* 17, 45 <https://doi.org/10.5751/ACE-2317-170245>.

Venkatesh, K., John, R. Chen, J. Jarchow, M. **Goljani Amirkhiz, R.** Giannico, V. Saraf, S. Jain, K. Kussainova, M. Yuan, J. 2022. Untangling the impacts of socioeconomic and climatic changes on vegetation greenness and productivity in Kazakhstan. *Environmental Research Letters* 17, 095007 <https://iopscience.iop.org/article/10.1088/1748-9326/ac8c59/meta>.

Venkatesh, K., John, R. Chen, J. Xiao, J. **Goljani Amirkhiz, R.** Giannico, V. Kussainova, M. 2022. Optimal ranges of social–environmental drivers and their impacts on vegetation dynamics in Kazakhstan. *Science of the Total Environment* 847, 157562 <https://doi.org/10.1016/j.scitotenv.2022.157562>.

Youtz, J., **Goljani Amirkhiz, R.** Frey, K.J. 2022. Modeling the impact of climate change and wildfire on the Dusky Grouse (*Dendragapus obscurus*) in the American Southwest: implications for conservation. *Avian Conservation and Ecology* 17, 35
<https://doi.org/10.5751/ACE-02222-170135>.

Goljani Amirkhiz, R., Dixon, M.D. Palmer, J.S. Swanson, D.L. 2021. Investigating niches and distribution of a rare species in a hierarchical framework: Virginia's Warbler (*Leiothlypis virginiae*) at its northeastern range limit. *Landscape Ecology* 36, 1039-1054
<https://doi.org/10.1007/s10980-021-01217-7>.

Swanson, D.L., and **Goljani Amirkhiz, R.** 2021. Mid-summer arrival by Blue Grosbeaks at the northern extent of their breeding range: evidence for dual breeding? *Journal of Field Ornithology* 92, 127-142 <https://doi.org/10.1111/jfo.12367>.

Swanson, D.L., and **Goljani Amirkhiz, R.** Dixon, M.D. 2020. Patterns and potential causes of changing winter bird distributions in South Dakota. *The Prairie Naturalist* 52, 45-57
<https://digitalcommons.unl.edu/tpn/319/>

Goljani Amirkhiz, R., Frey, K.J. Breck, S.W. Cain, J.W. Oakleaf, J. Bergman, D.L. 2018. Predicting spatial factors associated with cattle depredations by the Mexican wolf (*Canis lupus baileyi*) with recommendations for depredation risk modeling. *Biological Conservation* 224, 327-335 <https://doi.org/10.1016/j.biocon.2018.06.013>.

Goljani Amirkhiz, R., Kaboli, M. Karami, M. Ghodsizadeh, Z. Nourani, E. 2012. Male Alborz red sheep (*Ovis gmelini* × *O. vignei*) migration corridors selection from summer to fall habitats in Jajroud Protected Area Complex, Iran. *Journal of Russian Ecology* 43, 67-76
<https://doi.org/10.1134/S1067413612010067>.

Hadipour, E., Karami, M. Abdoli, A. **Goljani Amirkhiz, R.** 2011. A study on Eurasian otter (*Lutra lutra*) in Amirkelayeh wildlife refuge and International Wetland in Guilan Province, Northern Iran. *IUCN Otter Specialist Group Bulletin* 28, 84-98
https://www.iucnosgbull.org/Volume28/Hadipour_et_al_2011.html.

Satei, N., Kaboli, M. Cheraghi, S. Karami, M. **Goljani Amirkhiz, R.** 2010. Breeding activities and successes of Pleske's ground jay (*Podoce spleskei*) in Touran Biosphere Reserve, Semnan Province, Iran. *Podoces* 5, 35-41
<https://api.semanticscholar.org/CorpusID:53462561>.

Goljani Amirkhiz, R., Kaboli, M. Karami, M. Naimi, M. Alizadeh, A. 2009. Fall habitat suitability modeling of Central Alborz Wild Sheep (*Ovis gmelini* X *O. vignei*) in Jajrood Protected Complex, Iran. *Journal of Natural Environment* 63, 173-186
https://jne.ut.ac.ir/article_29170.html?lang=en

Chalani, M., Ghoddusi, A. Ghadirian, T. **Goljani Amirkhiz, R.** 2008. First Pallas cat (*Felis manul*) photo trapped in Khojir National Park, Iran. *Cat News* 49, 7
https://savemanul.org/docs/Chalani_et.al_2008_pc_iran.pdf.

Mostafavi, S.M., Alizadeh, A. **Goljani Amirkhiz, R.** Mohammadi, S. 2008. Spring and summer habitat suitability mapping for wild goat (*Capra aegagrus aegagrus*) in Lar National Park. *journal of Sciences and Techniques in Natural Resources* 5, 111-121
<https://www.sid.ir/paper/143830/en>.

IN PREPARATION, REVIEW OR REVISION (drafts available upon request)

Brown, T.M., Albright, S., Arnold, A., Brown, E., Brown, C., Brunschwiler, A., Chevreuil, V., Cheung, R., Cortes, D., Gallardo, J., Hanna, K., Lozano, R., Rebellon, J., Santillana, L., Silberberg, K., Yoo, J., **Goljani Amirkhiz, R.**, Ruegg, K., Hooten, M.B., Zavaleta, E.S. Fine-scale habitat associations and climate-driven vulnerability of the Sierra Nevada Rosy-Finch (*Leucosticte tephrocotis dawsoni*). In prep.

Bernier, K., Seglund, A., **Goljani Amirkhiz, R.**, & Zavaleta, E.S. Brown-Capped Rosy Finch (*Leucosticte australis*) habitat suitability and abundance in Colorado. In prep

SELECTED PRESENTATIONS

Goljani Amirkhiz, R., Brown, T., Hong, G., Leitner, K., & Zavaleta, E.S. 2025. Hierarchical, multi-scale habitat modeling reveals multi-decade niche contraction of an alpine songbird under climate change. *International Association for Landscape Ecology meeting*. Raleigh, NC.

Goljani Amirkhiz, R., Brown, T., Hong, G., Leitner, K., & Zavaleta, E.S. 2024. Fine-resolution historical breeding distribution and niche of Sierra Nevada Gray-crowned Rosy-Finch (*Leucosticte tephrocotis dawsoni*) indicates the importance of snowpack. *American Ornithological Society Meeting*. Estes Park, Colorado.

Goljani Amirkhiz, R., Brown, T., Hong, G., Leitner, K., & Zavaleta, E.S. 2024. Fine-resolution historical breeding distribution and niche of Sierra Nevada Gray-crowned Rosy-Finch (*Leucosticte tephrocotis dawsoni*) indicates the importance of snowpack. *Ecological Society of America meeting*. Long Beach, California.

Goljani Amirkhiz, R., Dixon, M.D. John, R. Swanson, D.L. 2022. Relationships between changes in relative abundance of male Ring-necked pheasant (*Phasianus colchicus*) and its habitat components at multiple scales in South Dakota. *The 56th Annual Meeting and Virtual Conference of South Dakota Chapter of Wildlife Society*.

Goljani Amirkhiz, R., Dixon, M.D. Palmer, J.S. Swanson, D.L. 2019. Applying an ensemble of small models to predict breeding distribution of Virginia's warbler in South Dakota. *American Ornithological Society Meeting*. Anchorage, Alaska.

Baltensperger, AP., **Goljani Amirkhiz, R.** Dixon, M.D. Swanson, D.L. 2019. Modeling the Implications of Future Bioenergy Scenarios on Bird Diversity and Abundance in the Northern Great Plains. *American Ornithological Society Meeting*. Anchorage, Alaska.

Goljani Amirkhiz, R., Dixon, M.D. Palmer, J.S. Swanson, D.L. 2019. Applying an ensemble of small models to predict breeding distribution of a rare species: Virginia's warbler (*Oreothlypis virginiae*) at the northeastern periphery of its range. *US- International Association for Landscape Ecology Meeting*. Fort Collins, Colorado.

Goljani Amirkhiz, R., Dixon, M.D. Palmer, J.S. Swanson, D.L. 2018. Ensemble modeling to predict Virginia's Warbler (*Oreothlypis virginiae*) breeding distribution at the northeastern periphery of its range. *The Ecological Society of America Annual Meeting*. New Orleans, Louisiana.

Goljani Amirkhiz, R., Frey, K.J. Bergman, D.L. Breck, S.W. Cain, J.W. Oakleaf, J. 2017. Predicting spatial factors associated with cattle depredations by the Mexican wolf (*Canis lupus baileyi*) in Arizona and New Mexico. *The 24th annual conference of the Wildlife Society*. Albuquerque, New Mexico.

Goljani Amirkhiz, R., Frey, K.J. Bergman, D.L. Breck, S.W. Cain, J.W. Oakleaf, J. 2017. Predicting spatial factors associated with cattle depredations by the Mexican wolf (*Canis lupus baileyi*) in Arizona and New Mexico. *The 50th joint annual meeting of Arizona and New Mexico chapters of the wildlife society*. Farmington, New Mexico.

Youtz, J., **Goljani Amirkhiz, R.** Frey, K.J. 2017. A habitat suitability model for the dusky grouse in the American Southwest (Accepted for oral presentation). *The 50th joint annual meeting of Arizona and New Mexico chapters of the wildlife society*. Farmington, New Mexico.

Youtz, J., **Goljani Amirkhiz, R.** Frey, K.J. 2016. A habitat suitability model of dusky grouse in New Mexico. *The 49th joint annual meeting of Arizona and New Mexico chapters of the wildlife society*. Flagstaff, Arizona.

Goljani Amirkhiz, R., 2011. A potential distribution map for leopard (*Panthera pardus*) in central Zagros. *The conference of Conservation of biodiversity in central Zagros*. Isfahan, Iran.

Goljani Amirkhiz, R., Khosravi, R. Kaboli, M. 2009. Studying some Ecological characteristics of Goitered Gazelle (*Gazella subguturosa*) at Sorkhe Hesar national park. *The first national conference on the conservation ecology*. Tehran, Iran.

Goljani Amirkhiz, R., Khosravi, R. Kaboli, M. 2009. A spring potential distributing map of gazelle (*Gazella subguturosa*) in Sorkhe Hesar national park. *The first national conference on the conservation ecology*. Tehran, Iran.

Moshtaghi, N., **Goljani Amirkhiz, R.** 2008. Predicting noise damper on subway in Khojir National Park. 2008. *The conference of worldwide day of environment*. Tehran, Iran.

THESES

Goljani Amirkhiz, R. 2023. Application of hierarchical species distribution models to avian species of South Dakota and Upper Missouri River Basin, University of South Dakota.

Goljani Amirkhiz, R. 2017. Predicting spatial factors associated with cattle depredations by the Mexican wolf (*Canis lupus baileyi*) in Arizona and New Mexico, New Mexico State University.

Goljani Amirkhiz, R. 2009. Spatial modeling of Habitats and corridors of Alborz red sheep (*Ovis gmelini* × *O. vignei*) in Jajroud protected area. Azad University, Tehran, Iran.

Goljani Amirkhiz, R. 2005. Rodents of Miandasht Wildlife Refuge. Bachelor dissertation, University of Tehran, Iran

TEACHING & REALTED EXPERIENCE

- Spring 2024 *Instructor* – Graduate Seminar: Advanced Applied Statistics - Analysis of Distribution and Abundance, Department of Ecology and Evolutionary Biology, University of California, Santa Cruz.
Designed and taught a graduate seminar focused on advanced statistical methods for ecological data analysis, emphasizing real-world applications and hands-on learning.
- Fall-2023 *Guest Lecturer* – Habitat Suitability Modeling, Advanced Geospatial Analysis Course, Department of Biology, University of South Dakota, SD.
Introduced habitat suitability modeling techniques and their applications in conservation science
- Spring-2022 *Guest Lecturer* – Regression Models, Drone Applications Course, Department of Biology, University of South Dakota, SD.
Taught regression modeling techniques for analyzing aerial data.
- Fall-2021 *Guest Lecturer* – Classification Methods in Machine Learning, Remote Sensing Course, Department of Biology, University of South Dakota, SD.
Introduced classification methods and their use in remote sensing for environmental research.
- Fall-2018 *Guest Lecturer* – Introduction to Models, Landscape Ecology Course, Department of Biology, University of South Dakota, SD.
Provided an overview of ecological modeling approaches with practical applications

Reza Goljani Amirkhiz

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- Spring-2017 *Teaching Assistant – Principles of Fish and Wildlife Management*, Department of Fish, Wildlife, Conservation, and Ecology, New Mexico State University, NM.
Supported student learning in wildlife management principles, facilitated lab sessions, and graded assignments.
- Fall-2016 *Teaching Assistant – Individuals, Populations & Communities*, Department of Biology, New Mexico State University, NM.
Assisted with lectures and led labs focused on population biology and community ecology.

MENTORING EXPERIENCE

- Fall & winter 2025 Undergraduate Senior Thesis Advisor: Agentic AI for automated georeferencing of historical species records, Department of Ecology and Evolutionary Biology, University of California Santa Cruz, CA.
- Summer-2025 CAMINO Undergraduate Mentor: Mentored two undergraduate students through the Center to Advance Mentored, Inquiry-Based Opportunities (CAMINO), focusing on advancing GIS and statistical analysis skills.
- Fall & winter 2024 Mentoring one undergraduate student at the Conservation Science and Solutions Lab, University of California, Santa Cruz, in statistical analysis.
- Summer-2024 CAMINO Undergraduate Mentor: Mentored one undergraduate student through the Center to Advance Mentored, Inquiry-Based Opportunities (CAMINO), focusing on advancing GIS and statistical analysis skills.
- Summer-2023 CAMINO Undergraduate Mentor: Mentored two undergraduate students through the Center to Advance Mentored, Inquiry-Based Opportunities (CAMINO), focusing on advancing GIS and statistical analysis skills.
- 2023- 2025 Mentored three graduate students at the Conservation Science and Solutions Lab, University of California, Santa Cruz, in learning and applying advanced statistical modeling techniques.
- 2021-2023 Mentored two graduate students and one undergraduate student in designing research projects and performing statistical analyses, Department of Biology, University of South Dakota, SD.
- 2015 Mentored one undergraduate student in GIS and statistical analysis to build a habitat suitability model for dusky grouse in New Mexico, Department of Fish, Wildlife, and Conservation Ecology, New Mexico State University, NM.

JOURNAL REVIEWER

Landscape Ecology, Ecology and Evolution, Plus One, Remote Sensing, Land, Journal of Ornithology

SCHOLARSHIP, AWARDS & HONORS

- 2024 Chancellor's Postdoctoral Fellowship, University of California Santa Cruz, *\$5000 and UC faculty hiring incentive*
- 2024 Smith Conservation Research Fellowship, Cedar Tree Foundation, Society for Conservation Biology, Washington, DC, *\$135,000*
- 2023 Distinguished Ph.D. Dissertation Award, University of South Dakota
- 2021 Cable Fellowship, University of South Dakota, *\$20,000*
- 2021 Award, Husmann Memorial Scholarship, South Dakota Ornithology Union, *\$800*
- 2019 Summer Graduate Research Fellowship, Jornada Long Term Ecological Research (LTER) site, *\$6000*
- 2018 Travel award, University of South Dakota's Graduate Research and Creative Scholarship Grant, *\$750*
- 2017 Travel award, Bernice Dillon Memorial Foundation, *\$1070*
- 2016 New Mexico View Geospatial Scholarship, *\$250*
- 2016 Travel award, 6th Natural History of the Gila Symposium, Western New Mexico University: *\$200*
- 2012 Scholarship, International Visitor Leadership Program on Wildlife Conservation and Habitat Management in the United States of America, United States Department of State, Bureau of Educational and Cultural Affairs: *\$10,000*

PROFESSIONAL DEVELOPMENT

- 2025 Teaching and Learning Center (TLC) at UCSC: Registered for Equity-Minded Mentoring Certificate Program (Starting Jan 2025)
- 2024 FieldFutures Training: Preventing Sexual Harassment & Assault in Fieldwork
- 2024 The Sierra Rescue International Wilderness First Aid
- 2023 NASA's Applied Remote Sensing Training (ARSET), Biodiversity applications for airborne imaging Systems.
- 2022 NASA Topical Workshop: Broadening the use of NASA datasets by the Species Distribution Modeling community.

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- 2018 Applications of Spatial Data: Ecological niche modeling tutorial, National Institute for Mathematical and Biological Synthesis, Dec 3-5th, Knoxville, TN.
- 2016 Incorporating climate change data. Feb 4th, Flagstaff, AZ, taught by Jeremy Weiss
- 2016 New Technologies in Wildlife/Fisheries Management. Feb 4th, Flagstaff AZ, taught by Michael Shafer.
- 2015 Multi-Model Inference. Nov 6th, Las Cruces, NM, taught by David R. Anderson
- 2013 Habitat Suitability Modelling in R, Azad University, Science and Research Branch, Tehran, Iran, taught by Babak Naimi.
- 2012 Habitat Management and Wildlife Conservation, A Joint U.S./Iran Workshop, Apr 2 – 4th, UCI, Ca, taught by Tim Bradley, Frank Davis, Barry Noon, and others
- 2007 Advanced Analyses in GIS. Azad University, Science and Research Branch, June 2–20th, Tehran, Iran, taught by Babak Naimi

SERVICE

- 2025-26 Committee Member, Inclusion, Diversity, Equity, and Action (IDEA) Committee, Department of Ecology and Evolutionary Biology, University of California, Santa Cruz.
- 2024 Co-Organizer, Symposium on The Ecology, Evolution, and Conservation of North America's Rosy-Finches, American Ornithological Society.
- 2024 Panelist, Career Panel for First-Year Biology Students, University of California, Santa Cruz, 06/06.
- 2022 Contributor, Recommendation Report: Broadening the Use of NASA Datasets by the Species Distribution Modeling (SDM) Community.
- 2021 Reviewer, IdeaFest, University of South Dakota, 04/03
- 2016-17 Vice president, Iranian Students Organization (ISO), New Mexico State University
- 2015 Treasurer, Graduate Students Organization (GSO), Department of Fish, Wildlife, and Conservation Ecology (FWCE), New Mexico State University.