

Alexandra E. Seglias

Denver Botanic Gardens
Research & Conservation Department
909 York Street, Denver, CO 80206
alexandra.seglias@botanicgardens.org
alexseglias.wordpress.com

EDUCATION

- M.S. **Northwestern University and Chicago Botanic Garden.** Evanston, Illinois
Plant Biology and Conservation. March 2017
“Germination ecology of forb species native to the Southwest U.S.: Implications for restoration”
- B.S. **Dickinson College.** Carlisle, Pennsylvania
Biology, German (minor). *Cum laude*. 2012

APPOINTMENTS

- 2020 – Present **Seed Conservation Research Associate**
Denver Botanic Gardens, Denver, CO
- 2017 - 2020 **Seed Conservation Research Assistant**
Denver Botanic Gardens, Denver, CO

PUBLICATIONS

- Seglias, A. E. (2022) Can alpine plant species “bank” on conservation? Using artificial ageing to understand seed longevity. *Applications in Plant Sciences*. doi.org/10.1002/aps3.11493
- Philpott, M., *et al.* (2022) Harnessing the power of botanical gardens: Evaluating costs and resources needed for exceptional plant conservation. *Applications in Plant Sciences*. doi.org/10.1002/aps3.11495
- Finch, J., Seglias, A. E., Kramer, A. T., Havens, K. (2022) Recruitment varies among milkweed seed sources for habitat specialist but not generalist. *Restoration Ecology*, doi: 10.1111/rec.13725.
- Seglias, A. E., Finch, J., & Kramer, A. T. (2020) Germination behavior of forbs native to the southwestern United States following exposure to short-term seed bank conditions (-20°C). *Seed Science Research*, 30(2), 81-91. doi:10.1017/S096025852000001X
- Seglias, A. E., Williams, E., Bilge, A., & Kramer, A. T. (2018) Phylogeny and source climate impact seed dormancy and germination of restoration-relevant forb species. *PLoS ONE* 13(2): e0191931.

GRANTS & AWARDS

- 2023 BGC Forest Service Rare Plant Partnership Grant – “Conservation of rare Colorado plant species”, \$9,600
- 2022 Center for Plant Conservation, Conservation Champion for the month of March, <https://saveplants.org/conservation-champion-alexandra-seglias/>
- 2021 Colorado Native Plant Society, Steinkamp Grant – “How does increased temperature resulting from climate change affect the growth, reproduction, and survival of two rare Colorado alpine plants?”, \$1,025
- 2021 Participant in Center for Plant Conservation IMLS funded project: “RNA Integrity as a powerful metric of aging in preserved seed collections of wild rare plant species” (MG-245983-OMS-20)
- 2018 American Public Gardens Association, Tree Gene Conservation Partnership – Increasing diversity and resilience in *ex situ* collections of *Quercus sadleriana*, \$5,760
- 2017 Participant in Cincinnati Zoo and Botanical Garden IMLS funded project:

- 2016 “Establishing the Exceptional Plant Cryo Bank: Collaborative Research for Ex Situ Conservation of Endangered Plants 2018-2020” (MG-30-17-0055-17)
Native Plant Society of New Mexico Research Grant, \$450

SELECTED PRESENTATIONS

- 2023 “Can alpine species take the heat?: Effects of increased temperatures on early life stages of alpine plant species.” Oral presentation – Center for Plant Conservation Meeting, Phoenix, AZ.
- 2021 “The use of open top chambers to understand the response of two rare alpine species to increased warming.” Oral presentation – Rare Plant Symposium, Trinidad, CO.
- 2020 “Can alpine species “bank” on conservation?” Oral presentation – Center for Plant Conservation Virtual Meeting
- 2019 “Seed ecology of restoration-relevant forb species: phylogeny and climate influence inter- and intraspecific variation in germination.” Oral presentation – HAR/SER – RM. Fort Collins, CO.
- 2018 “The effects of frozen storage on seed dormancy and germination patterns of native southwestern forb species.” Oral presentation – Botany 2018. Rochester, MN.
- 2017 “Does frozen storage change the germination performance of native southwestern forb species?” Oral presentation – National Native Seed Conference 2017. Washington, D.C.

MEDIA

- 2022 “Denver Botanic Garden scientists are keeping tabs on how climate will change Colorado’s flora.” Denverite Interview and story by Kevin Beaty.
<https://denverite.com/2022/06/01/denver-botanic-garden-scientists-are-keeping-tabs-on-how-climate-will-change-colorados-flora/>
- 2022 “Climate change is coming to your backyard garden.” 9News with Kyle Clark.
<https://www.9news.com/video/news/local/next/next-with-kyle-clark/climate-change-is-coming-to-your-backyard-garden/73-4a71af28-3f8b-41a9-a0e9-7f09e6e7ac99>
- 2021 “Rare alpine plants and the chamber of warming.” Denver Botanic Gardens Blog.
<https://www.botanicgardens.org/blog/rare-alpine-plants-and-chamber-warming>
- 2020 “Can alpine species ‘bank’ on conservation?” Denver Botanic Gardens Blog.
<https://www.botanicgardens.org/blog/can-alpine-species-bank-conservation>
- 2019 “The challenges of germinating rare alpine species.” Denver Botanic Gardens Blog.
<https://www.botanicgardens.org/blog/challenges-germinating-rare-alpine-species>
- 2017 “Seed conservation of rare plants in Colorado.” International Network for Seed-Based Restoration. <http://ser-insr.org/news/2017/11/6/seed-conservation-of-rare-plants-in-colorado>

OUTREACH

- 2019 – 2020 Denver Metro Regional Science and Engineering Fair Judge, Senior Projects – Plant Sciences and Microbiology. Denver, CO
- 2018 Denver Metro Regional Science and Engineering Fair Judge, Junior Plant Sciences Division. Denver, CO
- 2017 – 2019 Science Chats. Science Pyramid, Denver Botanic Gardens, Denver CO

MANUSCRIPT REVIEWER

Biological Conservation, Plant Biology, PLoS One, Journal of Plant Growth and Regulation