

SOPHIE WESTBROOK

sophiewestbrook@ksu.edu
orcid.org/0000-0002-0742-3781

1107 Throckmorton Plant Sciences Center
1712 Claflin Road, Manhattan, KS 66506

EXPERIENCE

Assistant Professor , Kansas State University Cropping systems, 70% research and 30% teaching	2026–present
Research Assistant Professor , Kansas State University Rangeland ecology, 50% research and 50% teaching	2024–2026
Graduate Student , Cornell University Ecology of weeds and agricultural ecosystems	2020–2024
Research Technician , Purdue University Stomatal mechanics and drought resistance	2019–2020

EDUCATION

PhD	Cornell University, Soil and Crop Sciences GPA: 4.3/4.3	May 2024
AB	Harvard University, Integrative Biology Graduated <i>summa cum laude</i> , GPA: 4.0/4.0	May 2019

TEACHING

[115/125] Using Spreadsheets (1 credit)	S 2026
[251] Range Management (3 credits in-person + online)	F 2024, F 2025, F 2026
[260] Field Identification of Range and Pasture Plants (1 credit)	F 2025
[360] Crop Growth and Development (3 credits)	F 2026
[365/400] Agricultural Biodiversity (3 credits)	S 2025, S 2026
[462] Range Grasses (2 credits)	F 2024
[490/790] Range Management Planning (3 credits)	S 2025
[602] Agronomy Capstone Experience (3 credits; co-instructor)	S 2026

[640] Cropping Systems (3 credits)	F 2025, F 2026
[670] Range Management Problems (1–3 credits)	F 2024, S 2025, F 2025, S 2026
[810] Agronomy Seminar (1 credit; co-coordinator)	S 2025, F 2025, S 2026
[Cornell] Weed Biology & Management (Co-instructor)	F 2023
[Cornell] Certified Organic Agriculture (TA)	S 2024

ADVISING

- Undergraduate Advisor** (1 current student)
- Undergraduate Faculty Mentor** (3 current and 2 former students)
- Graduate Major Advisor** (1 former student)
- Graduate Committee Member** (4 former students)

SERVICE

Professional Service

National FFA Environmental and Natural Resources CDE Committee	2026–present
North Central IPM Advisory Committee	2026–present
WSSA Invasive Plant Committee	2026–present
Chair, WSSA Invasive Plant Science and Management Symposium	2026–present
WSSA Undergraduate Research Award Committee	2026–present
Outstanding Paper Committee, <i>Invasive Plant Science and Management</i>	2025–present
Moderator, Kansas Natural Resources Conference	2026
Student Contest Judge, Weed Science Society of America	2025, 2026

Departmental/University Service

University Handbook & Policy Committee	2026–present
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Grow/Excite/Succeed Steering Committee	2026–present
Variety Performance Testing Committee	2026–present
East Central Kansas Advisory Committee	2026–present
Agronomy Education Center Management Committee	2026–present
E.G. Heyne Crop Science Lectureship Committee	2026–present
Undergraduate Recruitment Committee	2025–present
Undergraduate Scholarship Committee	2025–present
Course and Curriculum Committee	2025–present
Kling Anderson Lecture Committee	2024–2026
Range Management Faculty Search Committee	2024–2025
Geospatial Science Faculty Search Committee	2023–2024
[Cornell] Agroecology Group (Organizer)	2022–2024
[Cornell] Atkinson Sustainable Solar Group (Student Representative)	2022–2024
[Cornell] Graduate Student Association (Treasurer)	2020–2024
[Harvard] Harvard Science Review (President)	2015–2019

HONORS

Outstanding Reviewer Award Awarded to one person by <i>Invasive Plant Science and Management</i> journal	2025
Outstanding Teaching Assistant Award Awarded to one or two students per department at Cornell University	2024
Barbara McClintock Award Awarded to four students in the School of Integrative Plant Science	2024
Gerald O. Mott Award Awarded to one student per department by Crop Science Society of America	2024

MacDonald-Musgrave Outstanding Graduate Student Award Awarded to one student in Soil and Crop Sciences at Cornell University	2023
Robert D. Sweet Outstanding MS Student Awarded to one student in Northeastern Weed Science Society	2023
Sophia Freund Prize Awarded to the highest-ranking graduating senior(s) at Harvard University	2019
Phi Beta Kappa Senior 48	2019

EXTRAMURAL FUNDING

Current Funding

North Central IPM (\$9,994)	2026–2027
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI) and Molly Reichenborn, <i>“Enhancing Invasive Weed Identification and IPM in North-Central Rangelands through an Interactive Online Course”</i> 	
Corteva Agriscience (\$6,000)	2026–2027
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI) and Michael Stamm, <i>“Spring Canola/Mustard Variety Trial at Manhattan, Kansas”</i> 	
EPSCoR Track 2 MICRA (\$9,968)	2026–2027
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI), <i>“Impacts of Biochar and B. subtilis on Weed–Crop Competition”</i> 	
One K-State Sustainability Fund (\$500,000)	2026–2030
<ul style="list-style-type: none"> • Bizhen Hu (Lead PI), Lani Meyer, John Green, Wesley Rostetter, Anthony Fink, Shelly Williams, Jennifer Bormann, Deana Core, Tricia Jenkins, Eleni Pliakoni, Kimberly Williams, Elizabeth Yeager, Matthew Sanderson, Valerie Padilla Carroll, Priscilla Brenes, Sophie Westbrook, Shreepad Joglekar, Cary Rivard, Lishan Su, Derek Jackson, Anita Dille, <i>“Growing Sustainable Food Systems”</i> 	

Completed or Cancelled Funding

Weed Science Society of America Innovative Grants Program (\$23,814)	2025–2026
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI), <i>“Integrating Research and Education to Understand Adaptation at Multiple Spatiotemporal Scales in Water-Limited Rangeland Weeds”</i> 	

USDA NRCS Kansas Conservation Innovation Grants (\$123,545)	2025–2028
<ul style="list-style-type: none"> This grant was cancelled due to the federal transition Sophie Westbrook (Lead PI), <i>“Remote-operated Robotic Mowers (RRMs) for Invasive Weed Control: Novel Application of an Emerging Technology to Promote Sustainable Rangeland Management”</i> 	
USDA NRCS Kansas Conservation Innovation Grants (\$83,261)	2025–2027
<ul style="list-style-type: none"> This grant was cancelled due to the federal transition Anita Dille (Lead PI), Gaurav Jha, Deepak Joshi, and Sophie Westbrook, <i>“Evaluating the Effectiveness of Drones for Seeding Cover Crops”</i> 	
Carbon A List (\$25,000)	2025–2025
<ul style="list-style-type: none"> Deepak Joshi (Lead PI) and Sophie Westbrook, <i>“Developing a Land Use Change Database for Kansas State Using High-Resolution Imagery and Open Data Sources”</i> 	
Schmittau-Novak Integrative Plant Science Small Grants (\$9,621)	2023–2024
<ul style="list-style-type: none"> Aleah Butler-Jones (Lead PI) and Sophie Westbrook, <i>“Bridging molecular, physiological, ecological, and biogeographical scales to understand how elevated temperature affects Palmer amaranth performance and control”</i> 	
Atkinson Center Sustainable Biodiversity Fund (\$7,230)	2023
<ul style="list-style-type: none"> Sophie Westbrook (Lead PI), <i>“Restoring biodiversity and ecosystem services to agricultural landscapes: Are annual flower strips the answer?”</i> 	
<i>Not Funded</i>	
USDA Organic Research and Extension Initiative (\$1,977,386)	2026–2030
<ul style="list-style-type: none"> Sophie Westbrook (Lead PI), DeAnn Presley, Gaurav Jha, Logan Simon, Anthony Zukoff, Megan Hughes, Bizhen Hu, Andrea Basche, Christian Stephenson, <i>“Strengthening Organic Crop Production through On-Farm Experimentation, Precision Technologies, Regional Monitoring, and Workforce Development”</i> 	
USDA NIFA AFRI Foundational & Applied Science (\$749,988)	2026–2031
<ul style="list-style-type: none"> Sophie Westbrook (Lead PI), Tina Sullivan, Brian Spiesman, John Losey, and Antonio DiTommaso, <i>“Harnessing Agronomy, Ecology, and Technology to Increase Manageability and Efficacy of Pollinator Plantings in Grain Cropping Systems”</i> 	
USDA NIFA AFRI Foundational & Applied Science (\$299,749)	2026–2028

- **Sophie Westbrook (Lead PI)**, Doohong Min, Jeremie Kouame, and Deepak Joshi, *“Harnessing Living Mulches to Maximize Profitability, Soil Health, and Weed Suppression in Grain Cropping Systems”*

Kansas Water Institute (\$49,745)

2027–2029

- **Sophie Westbrook (Lead PI)**, Deepak Joshi, Michael Stamm, and Anabelle Laurent, *“Integrating Physiology and Remote Sensing for Precision Management of Brassica Crops”*

[Preproposal] One K-State Sustainability Fund (Est. \$500,000)

2026–NA

- Nellie Hill-Sullins (Lead PI), **Sophie Westbrook**, Molly Reichenborn, Keith Harmony, Ajay Sharda, and Nathan Childers, *“Holding the Line: Detecting and Disrupting Old World Bluestem Invasion”*

[Preproposal] One K-State Sustainability Fund (Est. \$480,000)

2026–NA

- Mishelle Hay McCammant (Lead PI), Laura Moley, Jason Bergtold, Logan Britton, **Sophie Westbrook**, Anita Dille, Andres Patrignani, Gaurav Jha, Walter Dodds, Kim Hiller, Bizhen Hu, Sarah Jackson, Shakil Kashem, Lee Skabelund, Jessie Vipham, Logan Thompson, and Trisha Moore, *“Sustainability Analytics: An Interdisciplinary Certificate for Solving Complex Sustainability Challenges”*

[Preproposal] NCR Sustainable Agriculture Research and Education (Est. \$250,000)

2026–2029

- **Sophie Westbrook (Lead PI)**, Brandon Schlautman, David Van Tassel, and Timothy Crews, *“Integrated Weed Management Programs for Perennial Legume and Oilseed Cropping Systems”*

Kansas Soybean Commission (\$110,001)

2026–2028

- **Sophie Westbrook (Lead PI)**, Tina Sullivan, and Christopher Little, *“Optimizing cover crop species and management to minimize pests, disease, weeds, and drought in soybean”*

Corteva via HALO (\$99,873)

2026–2028

- **Sophie Westbrook (Lead PI)**, *“Optimizing Cropping Systems Management to Maximize Fallow Efficiency”*

[Preproposal] Foundation for Food and Agricultural Research (Est. \$450,000)

2026–2030

- **Sophie Westbrook (Lead PI)**, Augustine Obour, Emma Briggs, John Holman, Deepak Joshi, Mindy King, Doohong Min, and

Romulo Lollato, <i>“Integrating Livestock, Annual Forages, and Cover Crops into Kansas Grain-Based Cropping Systems”</i>	
USDA NIFA AFRI Foundational & Applied Science (\$747,075)	2025–2029
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI) and Sarah Ganske, <i>“Integrating Ecological and Management Perspectives to Assess Indirect Effects of Climate Change on Invasive Rangeland Weeds”</i> 	
[Preproposal] NCR Sustainable Agriculture Research and Education (Est. \$199,000)	2025–2028
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI), Deepak Joshi, Sam Cloete, Heather Lewis, Andy Hurst, and Emily Kaminski, <i>“Harnessing Multi-Seed Pellet (MSP) Technology for Restoration and Biodiversity Enhancement on Marginal Lands in Kansas”</i> 	
USDA NIFA AFRI Foundational & Applied Science (\$299,185)	2025–2027
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI) and Gaurav Jha, <i>“Monitoring and Minimizing Water Use by Rangeland Weeds in a Changing Climate”</i> 	
EPSCoR Track 2 MICRA (\$4,823)	2024–2025
<ul style="list-style-type: none"> • Sophie Westbrook (Lead PI), <i>“Effects of Biochar and Drought on Rangeland Plant Community Recovery”</i> 	
<i>Federal Capacity Funds</i>	
Capacity Grant: Hatch	2024–2029
<ul style="list-style-type: none"> • Anita Dille (Lead PI), Eric Adee, Rachel Cott, Sarah Ganske, and Sophie Westbrook, <i>“Developing Integrated Weed Management (IWM) strategies for Kansas cropping systems”</i> 	
Capacity Grant: Hatch Multistate	2024–2026
<ul style="list-style-type: none"> • Jaymelynn Farney (KS Lead PI), Dale Blasi, Emma Briggs, Keith Harmony, John Holman, Doohong Min, Molly Reichenborn, Logan Thompson, Justin Waggoner, Jason Warner, Sophie Westbrook, and participants in Illinois, Indiana, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming, <i>“NC1181: Optimizing forage and grazing cattle management”</i> • Regional Excellence in Multistate award winner 	

PUBLICATIONS

Book Chapters (3)

Westbrook, A. S., Nepal, J., & Ryan, M. R. (2026). Warm season grass cover crops. In Duiker S. W. & Clark A. (Eds.), *Cover Crops for Sustainable Soil Management*. Burleigh Dodds.

Westbrook, A. S., DiTommaso, A., & Menalled, F. D. (2025). Ecological principles in the study of edible weeds. In F. D. Menalled & R. Ebel (Eds.), *Agroecology of edible weeds and non-crops. Ecological and socio-economic potential of the associated plant biodiversity* (pp. 1–24). Elsevier.

Westbrook, A. S., Nikkel, E., Clements, D. R., & DiTommaso, A. (2022). Modeling and managing invasive weeds in a changing climate. In L. H. Ziska (Ed.), *Invasive species and global climate change* (2nd ed., pp. 281–305). CABI.

Peer-Reviewed Journal Publications (47)

Snider, G., De Bernardi, M., Hill, B., Roenne, M., Kerr, L., Thompson, L., & **Westbrook, A. S.** (accepted). Associations between aboveground vegetation, soil seedbanks, and soil properties in Kansas tallgrass prairie. *Rangeland Ecology & Management*.

Kubinski, E., **Westbrook, A. S.,** Lattes, S., de Villiers, A., Kuhlman, B., McRyehew, I. I., Berrios-Ortiz, L., DiTommaso, A., & Menalled, F. (accepted). Teaching ecological weed management: A laboratory exercise on weed community assembly. *Weed Technology*.

Stup, R. S., **Westbrook, A. S.,** Morris, S. H., Losey, J., DiTommaso, A. (accepted). Development of flower strips near agricultural fields with minimal weed management. *Agriculture, Ecosystems & Environment*.

Schroeder de Souza, J., Hettiarachchi, G. M., **Westbrook, A. S.,** Rutter, B., and Dille, J. A. (accepted). Effects of soil texture and pH on soybean (*Glycine max*) emergence and injury from sulfentrazone and chlorimuron-ethyl herbicides. *Weed Science*.

Esitmez, B., Özaslan, C., **Westbrook, A. S.,** & DiTommaso, A. (accepted). Weed seed bank composition and species distribution in vineyards of Türkiye. *Weed Technology*.

Westbrook, A. S., Butler-Jones, A. L., Kezar, S., Stup, R. S., Sosnoskie, L. M., & DiTommaso, A. (accepted). Impacts of temperature and palmer amaranth (*Amaranthus palmeri*) biotype on glyphosate efficacy and competition with corn. *Weed Science*.

Snider, G., Spencer, K., Roenne, M., Kerr, L., Joshi, R., & **Westbrook, A. S.** (2026). Effects of UAV-applied triclopyr plus fluroxypyr rates on weeds and

desirable forbs in Kansas tallgrass prairie. *Agrosystems, Geosciences & Environment*, 9, e70430.

Snider, G., Schrock, H., & **Westbrook, A. S.** (2026). Impacts of livestock grazing and prescribed fire on rangeland seedbanks: A review. *Rangelands*, 10.1016/j.rala.2026.06.002

Stup, R. S., **Westbrook, A. S.**, Morris, S. H., Losey, J., Stehman, L., Gugerty, J., DiTommaso, A. (2026). Field margin plantings do not increase weed pressure within crops relative to other margin management strategies. *Weed Science*, 10.1017/wsc.2026.10141

Kerr, L. & **Westbrook, A. S.** (2026). Effects of seed stratification on germination of four weedy rangeland forbs. *Weed Science*, 74, e37.

Westbrook, A. S., Djuric, N., Pelzer, C. J., Ball, M., Caldwell, B. A., DiTommaso, A., Marschner, C. A., & Ryan, A. (2026). Effects of soil tillage and nutrient management on weed abundance during the transition to organic grain production. *Weed Science*, 74, e16.

Westbrook, A. S., Butler-Jones, A., Morris, S. H., Goldman, M., Agrawal, A., & DiTommaso, A. (2025) Deer impact seedbanks and plant communities over 18 years of post-agricultural succession. *PLoS One*, 20, e0339466.

Milbrath, L. R., Morris, S. H., Biazzo, J., **Westbrook, A. S.**, & DiTommaso, A. (2025). Seedling emergence of two knapweed (*Centaurea*) species from different soil depths. *Invasive Plant Science and Management*, 18, e30.

Xu, S., Özaslan, C., **Westbrook, A. S.**, Kezar, S., & DiTommaso, A. (2025). Effects of soil moisture on competition between a central New York State Johnsongrass (*Sorghum halepense*) biotype and corn. *Weed Science*, 73, e80.

Stup, R. S., **Westbrook, A. S.**, & DiTommaso, A. (2025). Friend or foe? Conservation and management of common milkweed (*Asclepias syriaca*). *Weed Technology*, 39, e85.

Kochendoerfer, N., **Westbrook, A. S.**, McMillan, C. E., Lapierre, P. A., Zaman, M. A., Morris, S. H., DiTommaso, A., & Grodsky, S. M. (2025). Co-location of sheep grazing and solar energy production yields agrotechnological synergies. *Agricultural Systems*, 229, 104403.

Yang, S., Chen, C., Yang, Y., Teng, L., Liu, J., Gui, W., Zhu, J., Zhou, W., **Westbrook, A. S.**, & DiTommaso, A. (2025). Differential responses of weeds and rice to shading stress from oilseed rape straw mulch. *Crop Protection*, 189, 107038.

Westbrook, A. S., Wilcox, N.-R., Stup, R., Djuric, N., Xu, S., Coffey, R., Özaslan, C., Xia, R., Urmaza, S., Sher, M., & DiTommaso, A. (2024). What we still don't know about weed diversity: a scoping review. *Weed Research*, 64, 418-433.

Pratt, M. K., **Westbrook, A. S.**, & DiTommaso, A. (2024). Reproductive strategy, management, and medicinal uses of field horsetail (*Equisetum arvense*). *Weed Technology*, 38, e47.

Hameed, O., Ugine, T., **Westbrook, A. S.**, & Losey, J. (2024). Consumption of nectar-like sugar solutions promotes longevity and fecundity in the ladybird beetles *Harmonia axyridis* and *Hippodamia convergens*. *Arthropod-Plant Interactions*, 18, 763–770.

Westbrook, A. S., Stup, R., Morris, S., Ugine, T., & DiTommaso, A. (2024). Establishing flower strips near agricultural fields with minimal weed management. *Agriculture, Ecosystems & Environment*, 374, 109157.

Stup, R., **Westbrook, A. S.**, & DiTommaso, A. (2024). Impact of burial depth and root segment length on vegetative propagation of common milkweed (*Asclepias syriaca*). *Weed Science*, 72, 562–566.

Marschner, C. A., Colucci, I., Stup, R. S., **Westbrook, A. S.**, Brunharo, C. A., DiTommaso, A., & Mesgaran, M. B. (2024) Modeling weed seedling emergence for time-specific weed management: a systematic review. *Weed Science*, 72, 313-329.

Westbrook, A. S., Morris, S., Stup, R., Xia, R., Coffey, R., & DiTommaso, A. (2024). Annual flower strips increase biodiversity even if planting is delayed. *Annals of Applied Biology*, 185, 81-90.

Shen, H., Dong, S., DiTommaso, A., **Westbrook, A. S.**, Li, S., Zheng, H., Zhi, Y., Zuo, H., Wang, Q., Liu, J. (2024). Physiological factors contribute to increased competitiveness of grass relative to sedge, forb and legume species under different N application levels. *Science of the Total Environment*, 906, 167466.

Westbrook, A. S. & DiTommaso, A. (2023). Hybridization in agricultural weeds: a review from ecological, evolutionary, and management perspectives. *American Journal of Botany*, 110, e16258.

Esposito, M., **Westbrook, A. S.**, Maggio, A., Cirillo, V., & DiTommaso, A. (2023). Neutral weed communities: the intersection between crop productivity, biodiversity, and weed ecosystem services. *Weed Science*, 71, 301-311.

Westbrook, A. S., Milbrath, L. R., Weinberg, J., & DiTommaso, A. (2023). Biology of Invasive Plants 3. *Vincetoxicum nigrum* (L.) Moench and *V. rossicum* (Kleopow) Barbarich. *Invasive Plant Science and Management*, 16, 3-26.

Westbrook, A. S., Amirkhani, M., Taylor, A. G., Loos, M. T., Losey, J. E., & DiTommaso, A. (2023). Multi-Seed *Zea* Pellets (MSZP) for increasing agroecosystem biodiversity. *Weed Science*, 2, 160-171.

Kordbacheh, F., Mohler, C. L., Taylor, A. G., **Westbrook, A. S.**, Rahimian-Mashhadi, H., Alizadeh, H. M., & DiTommaso, A. (2023). Optimising cutting method and timing for the control of *Abutilon theophrasti* seed production. *Weed Research*, 63(1), 34-44.

Losey, J., Allee, L., Gill, H., Morris, S., Smyth, R., Wolleman, D., **Westbrook, A. S.**, & DiTommaso, A. (2023) Predicting plant attractiveness to coccinellids with plant trait profiling, citizen science, and common garden surveys. *Biological Control*, 176, 105063.

Westbrook, A. S., & McAdam, S. A. (2022). The poisoned chalice of evolution in water: physiological novelty versus morphological simplification in Marsileaceae. *American Fern Journal*, 112(4), 320-335.

Averill, K. M., Morris, S. H., **Westbrook, A. S.**, Hunter, M. C., & DiTommaso, A. (2022). Ivyleaf morningglory (*Ipomoea hederacea* Jacq.) competition is not intensified by drought in silage corn in central New York State, USA. *Canadian Journal of Plant Science*, 102(5), 957-963.

DiTommaso, A., Mohler, C. L., & **Westbrook, A. S.** (2022). Response of hairy galinsoga (*Galinsoga quadriradiata*) to nitrogen, phosphorus, and competition from lettuce. *Weed Science*, 70(5), 579-586.

Averill, K. M., **Westbrook, A. S.**, Pineda-Bermudez, L., O'Briant, R. P., DiTommaso, A., & Ryan, M. R. (2022). Effects of Tertill® weeding robot on weed abundance and diversity. *Agronomy*, 12(8), 1754.

Wolff, A., **Westbrook, A. S.**, & DiTommaso, A. (2022). In the ruins: the neglected link between archaeology and weed science. *Weed Science*, 70(2), 135-143.

Magidow, L. C., DiTommaso, A., **Westbrook, A. S.**, Kwok, M. J., Ketterings, Q. M., & Milbrath, L. R. (2022). Soil characteristics of North American sites colonized by the non-native, invasive vines black swallow-wort and pale swallow-wort. *Northeastern Naturalist*, 29(1), 108-132.

Averill, K., **Westbrook, A.S.**, Morris, S., Kubinski, E., & DiTommaso, A. (2022). Silage corn yield is reduced by burcucumber competition and drought in New York State. *Weed Technology*, 36(1), 86-92.

Westbrook, A. S., Bhaskar, V., & DiTommaso, A. (2022). Weed control and community composition in living mulch systems. *Weed Research*, 62(1), 12-23.

DiTommaso, A., Averill, K. M., Qin, Z., Ho, M., **Westbrook, A. S.**, & Mohler, C. L. (2021). Biomass allocation of *Vincetoxicum rossicum* and *V. nigrum* in contrasting competitive environments. *American Journal of Botany*, 108(9), 1646–1661.

Bhaskar, V., Bellinder, R. R., Reiners, S., **Westbrook, A. S.**, & DiTommaso, A. (2021). Significance of herbicide order in sequential applications to target weeds in a sunn hemp living mulch. *Weed Technology*, 35(4), 565-573.

Westbrook, A. S., Han, R., Zhu, J., Cordeau, S., & DiTommaso, A. (2021). Drought and competition with ivyleaf morningglory (*Ipomoea hederacea*) inhibit corn and soybean growth. *Frontiers in Agronomy*, 3, 720287.

Bhaskar, V., **Westbrook, A. S.**, Bellinder, R. R., & DiTommaso, A. (2021). Integrated management of living mulches for weed control: a review. *Weed Technology*, 35(5), 856-868.

Little, N. G., DiTommaso, A., **Westbrook, A. S.**, Ketterings, Q. M., & Mohler, C. L. (2021). Effects of fertility amendments on weed growth and weed-crop competition: a review. *Weed Science*, 69(2), 132-146.

DiTommaso, A., Milbrath, L. R., Marschner, C. A., Morris, S. H., & **Westbrook, A. S.** (2021). Seed germination ecology of meadow knapweed (*Centaurea × moncktonii*) populations in New York State, USA. *Weed Science*, 69(1), 111-118.

Westbrook, A. S. & McAdam, S. A. (2021). Stomatal density and mechanics are critical for high productivity: insights from amphibious ferns. *New Phytologist*, 229(2), 877-889.

Westbrook, A. S. & McAdam, S. A. (2020). Atavistic stomatal responses to blue light in Marsileaceae. *Plant Physiology*, 184(3), 1378-1388.

Publications in Review or Revision (1)

Aubert, A. M., Roozeboom, K. L., **Westbrook, A. S.**, Ruiz Diaz, D. A., Zarnzendorf, M. E., Hauk, J. H., & Stamm, M. J. (in review). Winter canola biomass and nutrient uptake and partitioning in the U.S. central Great Plains.

Outreach Publications (2)

Westbrook, A. S. (2023) Research report: annual flower plantings on farms. *New York Certified Organic (NYCO)*.

Westbrook, A. S. (2023). Does drought favor crops or weeds? *Northeastern Weed Science Society* [Tied for first place in student contest].

PRESENTATIONS

[Webinar Moderator] Organic Fertility Management: An Overview for Certified Crop Advisers

ASA–CSSA–SSSA, August 2026

Associations between Aboveground Vegetation, Soil Seedbanks, and Soil Properties in Kansas Tallgrass Prairie

Hatch Multistate Annual Meeting, July 2026

Effects of Soil Tillage and Nutrient Management on Weed Abundance During the Transition to Organic Grain Production

Soil and Water Conservation Society, July 2026

Impacts of Soil Amendments on Weed-Crop Competition

MICRA Seminar, March 2026

Control of Noxious Weeds: Sericea Lespedeza, Johnsongrass, Teasels

Kansas Noxious Weeds Short Course, February 2026

Advancing Weed Ecology Education in Kansas, Montana, and New York

Weed Science Society of America, February 2026

Digital Accessibility in PDF and Excel

Agricultural & Applied Economics Association Teaching Academy, February 2026

Deer Impact Seedbanks and Plant Communities over 18 Years of Post-Agricultural Succession

Kansas Natural Resources Conference, February 2026

Forage, Seedbanks, and Soil at Rannells Ranch

Hatch Multistate Annual Meeting, August 2025

Native Pasture Management

K-State Research and Extension, Shawnee County, July 2025

Functional Composition and Biodiversity of Non-Crop Plant Communities in Extensively Managed Agricultural Landscapes

Department of Plant Pathology Seminar, March 2025

Establishing Flower Strips near Agricultural Fields with Minimal Weed Management

Weed Science Society of America, February 2025

Control of Noxious Weeds: Sericea Lespedeza, Johnsongrass, Teasels

Kansas Noxious Weeds Short Course, February 2025

Tips and Tricks for Low(er)-Stress Academic Writing

Agronomy Graduate Student Association, December 2024

AI and Precision Agriculture Technologies for Soil-Water-Energy Nexus

Panel participant, Kansas State AI Symposium, October 2024

How Weed Management Practices Influence Weed Communities

Cornell Cooperative Extension, May 2024

Planting Time Influences Annual Flower Strip Establishment when Weed Abundance is Low

Northeastern Weed Science Society, January 2024

Integrating Ecology and Seed Technology to Improve Establishment of Pollinator Plants

Cornell Seed Conference, November 2023

Vulnerabilities in Weed Biology

Cornell Cooperative Extension, March 2023

Multi-Seed *Zea* Pellets (MSZP) for Increasing Agroecosystem Biodiversity

Northeastern Weed Science Society/Weed Science Society of America, January 2023

Awarded first place in NEWSS graduate student presentation contest

Biology, Ecology, and Management of Invasive Swallow-worts (*Vincetoxicum* spp.)

Upper Midwest Invasive Species Conference, October 2022

Effects of Tertill® Weeding Robot on Weed Abundance and Diversity

Northeastern Weed Science Society, July 2022

Awarded second place in graduate student presentation contest

PEER REVIEW

Associate Editor, *Invasive Plant Science and Management* (2024–present)

(Co-)reviewed articles for *Agricultural Systems*, *Agronomy Journal*, *Agronomy for Sustainable Development*, *Biological Conservation*, *BMC Ecology*, *Crop Science*, *Environmental Entomology*, *Frontiers in Sustainable Food Systems*, *Invasive Plant Science and Management*, *MDPI Agronomy*, *Nature Scientific Reports*, *North American Colleges and Teachers of Agriculture*, *NeoBiota*, *Pest Management Science*, *Preslia*, *Weed Biology and Management*, *Weed Research*, *Weed Science*, as well as university and national grant applications

PROFESSIONAL AFFILIATIONS

Soil and Water Conservation Society <i>Emerging Leaders Program</i>	2025–present
Crop Science Society of America	2025–present
North American Colleges and Teachers of Agriculture	2024–present
Gamma Sigma Delta	2024–present
American Society of Agronomy	2024–present
Weed Science Society of America	2023–present
Society for Range Management	2025–2026