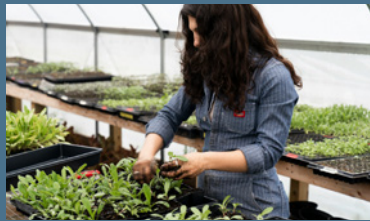
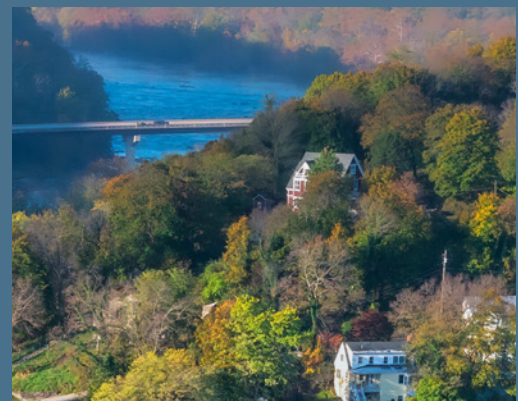


The logo for the Northeast Regional Center for Rural Development (NE RCRD). It features the letters "NE" in white on a dark blue rectangular background, followed by "RCRD" in white on a green rectangular background. The logo is set against a circular graphic that transitions from light blue at the top to green at the bottom.

NE RCRD



2023 Annual Report



Northeast Regional Center for Rural Development

*Enhancing the capacity of Land
Grant Universities
to foster regional prosperity
and rural development*



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Yuxuan Pan

Graduate Research Assistant

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Faculty Affiliate and Assistant Professor
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Graduate Research Assistant
(Effective August 2023)

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David Abler, Ph.D.

Penn State University
(Effective September 2023)

Doug Arbogast, Ph.D.

West Virginia University

Andrew Crawley, Ph.D.

University of Maine

Molly Donovan

University of New Hampshire
(Until February 2023)

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The Northeast Regional Center for Rural Development receives core funds from the U.S. Department of Agriculture's National Institute of Food and Agriculture (award #2021-51150-34733) as well as from Multistate/Regional Research and/or Extension Appropriations (project #NE1749), the Northeastern Regional Association of State Agricultural Experiment Station Directors, and the Pennsylvania State University, College of Agricultural Sciences. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the U.S. Department of Agriculture or those of other funders.

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MESSAGE FROM THE DIRECTOR

On behalf of and with thanks to NERCRD staff, associates, and collaborators, I am pleased to share this Annual Report for 2023 and a few highlights from last year. Two related research projects are underway on small business and entrepreneurial development in the U.S., especially of minority- and female-owned operations. One, a USDA NIFA-funded collaboration with West Virginia University, emphasizes factors associated with business success and failures. The other, a USDA ERS-funded collaboration, emphasizes access to credit and also considers food security and innovation. Related to both is a new survey project launching in 2024 that explores the roles of child- and elder-care in the Northeast—an issue of growing concern.

A key takeaway for our region of the 2022 national listening sessions was the urgent need to work on climate-related issues, especially in terms of their unique impacts on the Northeast region. We have started to invest time and resources in examining these implications for agriculture, rural economies, and communities, including barriers to and implications of green energy development.

On the national tourism and recreational economies front, we have continued our close collaborations with the National Extension Tourism Network (NET), even as we have had to scale back our administrative support. We were thrilled to receive the 2023 NET Partner Award at the group's national conference in Milwaukee, WI. Above all, this award acknowledges



Stephan J. Goetz

contributions that Kristen Devlin and Kim Boonie have made to NET over time. We look forward to continued collaborations, which include operationalizing the USDA Interagency Memorandum of Understanding between NIFA, the Forest Service, and Rural Development (see p. 20).

We have been working closely with the Northeast Extension Directors (NEED), under the leadership of Executive Director Ali Mitchell, building on our earlier contribution to the Northeast Ecosystems project that was jointly funded by NEED and the Northeast Regional Association (NERA). The new collaboration addresses community development (CD) impact measures, monthly exchanges among Extension CD leaders in the region, and infusing DEI principles into Extension programs.

I am most grateful to Drs. Heather Stephens and Rick C. Rhodes III for their continued leadership and guidance on the Technical Advisory Committee (TAC) and Board of Directors, respectively. Under their leadership, especially Heather's, the TAC has been re-energized and we deeply appreciate the input received. Peter Wulfhorst of Penn State Extension, who served in the capacity of Acting Associate Director, made significant contributions on a variety of projects, for which I am also very grateful.

Stephan J. Goetz, Ph.D.
Director and Professor
January 2024



bit.ly/nercrdnews



nercrd.psu.edu



linkedin.com/company/nercrd/

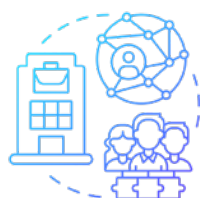


twitter.com/nercrd

About the NERCRD

The Northeast Regional Center for Rural Development (NERCRD) is one of the nation's four Regional Rural Development Centers (RRDCs) established by the Rural Development Act of 1972. The RRDCs work in partnership with the land-grant university (LGU) system to address the critical needs of the nation's rural communities. The NERCRD is hosted at Penn State and serves the 12-state region from Maine to West Virginia and the District of Columbia.

NERCRD Accomplishes Its Goals By:



Facilitating High-Impact Collaborations Across the Land-Grant System

NERCRD serves as a regional hub for our LGU partners, linking research and Extension faculty across state lines. By facilitating collaborative networks and partnerships, NERCRD enhances the capacity of the LGU system, so that it can work more effectively to foster regional prosperity and rural development.

Leading Impactful Research

Through a robust research portfolio, NERCRD researchers contribute to the science base so that other researchers and practitioners can better understand and address rural America's economic development problems. Recent NERCRD research has been used at the highest levels of the federal government, has been cited in groundbreaking studies on the economic mobility of Americans, and has appeared in highly ranked general science, disciplinary, and interdisciplinary journals.



Leveraging Strong Connections to Federal Resources

The Rural Development Centers have strong connections to federal resources, enabling us to network with other federal and private funding agencies and stakeholder organizations, and to connect them with the land-grant system. Over the last decade, the NERCRD leveraged \$2.40 in additional extramural funding for each dollar of core funds received from USDA National Institute of Food and Agriculture (NIFA).

How NERCRD is Governed:

The NERCRD is administered by a joint agreement between USDA and Penn State (the host institution). Major core funding comes from the USDA NIFA and the region's land-grant universities. NERCRD's Board of Directors is composed of administrators from the regional land-grant institutions and representatives of USDA NIFA and USDA Economic Research Service. With input from NERCRD's Technical Advisory Committee, the Board establishes policies and programming emphases. NERCRD's current emphasis areas are:

- Economic Development, Innovation, and Resilience
- Food Systems, Nutrition Security, and Agriculture
- Capacity Building and Facilitation

Learn more at: <https://nercrd.psu.edu/about/>

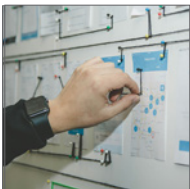
Economic Development, Innovation, and Resilience

NERCRD conducts research on the causes and consequences of economic resilience and innovation, and supports outreach that empowers communities to create vibrant local economies.

Activities at a Glance:

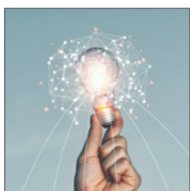
- National Listening Sessions Result in New, Widely Shared Insights for Rural Development (p. 4)
- Five-Year Project Enhances Understanding of Rural Innovation (p. 5)
- Minority and Female Entrepreneurship Research (p. 6)
- Supporting Tourism—including Agritourism and Outdoor Recreation—as an Economic Development Strategy (pp. 7-8)
- Laying the Groundwork for a 2024 Northeast Caregiving Survey (p. 8)

Impacts at a Glance:



Facilitating Rural Priority-Setting:

A report released by the Regional Rural Development Centers sheds light on the gaps in capacity of rural communities and identified and prioritized investments that could fill these gaps. These findings are being used by multiple constituent groups to prioritize their work. (p. 4)



Rural Innovation Insights:

A five-year study led by NERCRD resulted in numerous findings that policy makers can use to support rural innovation. For example, this research revealed the role that cloud-computing plays in rural innovation, offering insights for supporting innovative rural businesses. (p. 5)



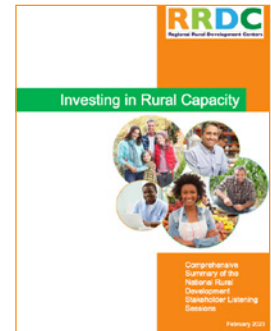
Evaluating Policy Effects on Female and Minority Entrepreneurship:

Research on the Community Reinvestment Act showed its positive effects on rural job growth for female and minority groups from 2012-2019. (p. 6)

National Listening Sessions Process Concludes, Resulting in New, Widely Shared Insights for Rural Development

The findings can be used by a broad audience of practitioners, decision makers, and government agencies to inform where programmatic efforts and resources may be most effective in tackling key issues facing rural communities.

From September 2021 to August 2022, the Regional Rural Development Centers conducted a comprehensive national initiative aimed at identifying the critical investments needed to build community capacity and improve quality of life in rural America. The effort culminated in a report released in February 2023, titled “Investing in Rural Capacity: Comprehensive Summary of National Rural Development Stakeholder Listening Sessions” (Entsminger et al., 2023).



The report summarizes results from the initiative’s eight virtual listening sessions, which convened stakeholders to identify rural development investments they viewed as the highest priorities for U.S. rural communities on the immediate horizon. Participants identified needs across four thematic areas:

Support and increase collaborative efforts across disciplinary, organizational, and geographic boundaries

Involve underserved groups and pursue greater equity

Inform decision making through place-based and community-engaged research and best practices

Build climate and related economic resilience into local, regional, and national planning

As a result of a large-scale campaign to share these results, rural stakeholders, decision makers, and federal partners have gained actionable insights into where investments can be made to greatest effect in rural recovery post-COVID.

NERCRD staff have used the findings, especially those pertinent to the Northeast, to inform their work. For example, the Listening Sessions revealed climate change and infrastructure to be high priorities for Northeast stakeholders, and NERCRD has incorporated this into its research and outreach efforts, for example by contributing to research on the relationship between broadband access and the number of agritourism operations, and by organizing a Digital Equity Summit (p.16).

The entire report, as well as topic-specific and region-specific sections of the report, are available for download on the RRDC website: <https://bit.ly/3SkD8wE>.

Funding to conduct this initiative was provided by the USDA National Institute of Food and Agriculture (NIFA) via a Cooperative Agreement and via the New Technologies in Agricultural Extension Program, which is coordinated by the Extension Foundation.

NERCRD-Led Project Enhances Understanding of Rural Innovation

Five-year USDA-funded project, “The Role of Innovation in Rural Firm Emergence and Vitality,” concluded in April.

Innovation lies at the heart of most entrepreneurial activity, and the goal of [this USDA NIFA-funded project](#), which ran from May 2018 to April 2023, was to deepen the understanding of whether and how entrepreneurial innovation can mitigate the growing economic threats facing rural U.S. workers and communities.



Project Team

NERCRD:
Stephan J. Goetz
Zheng Tian
Luyi Han

USDA Economic
Research Service:
Anil Rupasingha

National Science
Foundation
Timothy Wojan

Project Outputs (to date)

3

**published
papers**

15

presentations

Project Impact

Through robust sharing of the project findings with both national and international audiences, researchers, innovation policy makers, and non-technical audiences have increased their understanding of rural innovation, how it can be measured more effectively, and how it can be supported.

Featured Finding: Digital Divide Hinders Rural Innovation

The research team found that cloud-based computing directly contributes to business innovation, but rural businesses lacking sufficient broadband capacity to access cloud services are missing out on their innovation-boosting potential.

“Our findings provide concrete evidence that when rural businesses can access the cloud, they do so at similar rates as urban firms, and they engage in a similar volume of innovation,” said NERCRD Postdoctoral Scholar Luyi Han, lead author of the study, which was published in *Telecommunications Policy*. Get the full story at: <https://bit.ly/3CkiEv5>.



Jason Goodman via Unsplash

Exploring Success Factors in Minority and Female Entrepreneurship

NERCRD has partnered on two distinct projects focusing on different aspects of this topic

Factors Affecting the Success of Female and Minority Rural Entrepreneurs and Rural Economic Vitality

- Led by Heather Stephens, West Virginia University, and in collaboration with University of Maine

Prior research suggests that expanding entrepreneurship or self-employment is a key strategy for promoting economic growth in rural, distressed regions.

Furthermore, self-employment rates of women and minorities (especially Blacks) have lagged those of White males in rural areas. This project, led by West Virginia University, seeks to understand the factors that support or deter women and minority entrepreneurship and to translate these findings to help key stakeholders develop policies and programs to support women and minority entrepreneurs. Our objectives include

1. identifying the factors associated with higher shares of women and minority self-employed in rural counties using unique proprietary data;
2. examining the factors associated with the success or failure of women and minority entrepreneurs using confidential firm-level micro data; and
3. translating the research findings into Extension programming to support rural women and minority entrepreneurship and promote broad rural prosperity.

Minority- and Women-Owned Businesses, Food Security, Innovation and Access to Credit in Rural America

- Two-year project with Anil Rupasingha, USDA ERS

Limited access to credit threatens the viability of rural businesses and their ability to retain and generate jobs—effects that are compounded in minority neighborhoods and rural underserved communities. This project explores how the availability of financial credit affects rural entrepreneurial outcomes such as survival, employment, and sales growth, as well as differences in financing and outcomes for minority- and women-owned businesses. Using data from the Annual Business Survey and Census business datasets, the researchers are exploring variations in financial capital between rural and urban areas, and for minority- and women-owned small businesses. They also are investigating the role of innovation in rural businesses as it relates to financial capital access, and the extent to which financing constraints on entrepreneurship reduces the number of local food retail businesses in underserved communities, and the ability of federal rural programs to overcome financial market failures due to lack of information.

Supporting Tourism as an Economic Development Strategy

Recognizing that tourism, including agritourism and outdoor recreation, is an important economic development strategy for rural communities, NERCRD partnered on three projects aimed at helping communities identify and leverage their tourism and outdoor recreation assets.

Creating an Effective Support System for Small and Medium-Sized Farm Operators to Succeed in Agritourism

- *Led by Claudia Schmidt, Assistant Professor of Marketing and Local/Regional Food Systems, Penn State, and NERCRD Faculty Affiliate*

This four-year research and outreach project funded by USDA NIFA is drawing on extensive stakeholder input, guidance, and collaboration to develop and disseminate practical information that will allow small- and medium-sized farmers and rural communities to benefit from the growing consumer interest in agritourism activities. The project team also seeks to understand the roles and educational needs of various organizations in supporting agritourism; to improve understanding of factors that contribute to growth in agritourism across U.S. counties; and to deliver peer-reviewed educational materials to farmers as well as supporting organizations and policy makers. Now in its third year, the project has already resulted in several outcomes and impacts, some of which are described on p. 12.

Tourism Resilience and Community Sustainability: Adaptation and Recovery of Rural Businesses and Destinations

- *Led by Doug Arbogast, Rural Tourism Development Extension Specialist, West Virginia University Extension*

This multi-state Hatch research project will examine resilience and recovery through the lens of rural tourism in the Northeast region. Planned objectives include conducting collaborative assessments of rural tourism at the multi-state level; investigating the resilience, adaptability, and recoverability of different components of the rural tourism system; and identifying strategies that tourism businesses and destinations are using to cope with the pandemic. NERCRD staff attended the project's first in-person meeting, held in Milwaukee, WI, on September 24, 2023, and are providing support to a complementary effort in which a newly formed group of Extension professionals is developing collaborative research and extension activities on tourism resiliency and community sustainability in the U.S. (see p. 20).



Photo by Olivia Hutcherson on Unsplash

Supporting Tourism as an Economic Development Strategy *(continued from previous page)*

Rural Community Well-Being: Using Tourism Indicators to Identify, Understand and Address COVID-19 Pandemic Impacts and Strategies for Resiliency

- Led by Doug Arbogast, Rural Tourism Development Extension Specialist, West Virginia University Extension

The long-term goal of this four-year integrated research and Extension project is to provide research-based information and destination management strategies for rural gateway destinations to enhance their sustainability and resiliency. In the project's first year, the research team identified case-study locations in New Hampshire, Pennsylvania, Vermont, and West Virginia, and convened local tourism leadership teams in each region. These teams meet monthly with the project team to coordinate research activities and to share learning materials on the tourism lifecycle, the importance of sustainable tourism, and the value of thinking beyond economic impacts.

The researchers also have identified rural tourism sustainability indicators, and have conducted online surveys of visitors to each of the case study regions to better understand trip characteristics, importance and performance of sustainability indicators, and competitiveness. Using these data, they have developed data dashboards that gateway community leaders can use for future assessment and stakeholder engagement. These data dashboards will be updated as additional analyses and assessments are conducted, and the researchers will write up their results for academic audiences as well.

Looking Ahead

2024 Survey to Explore Caregiving Across the Life Course in the Northeast

The North Central Regional Center for Rural Development (NCRCRD) recently launched NCR-Stat, a North Central regional dataset being developed as a venue and incentive for interdisciplinary collaboration. As part of this effort, along with researchers from The Ohio State University, the National Farm Medicine Center, Penn State, AARP, University of Minnesota, Purdue University, University of Rhode Island, and South Dakota State University, they developed a survey on Caregiving Across the Life Course. NERCRD researchers are partnering with the NCRCRD to deploy the survey in the Northeast region in 2024. The survey answers will be used to better understand "how caregiving intersects with community and economic development" in the Northeast region.



Photo by CDC via Unsplash

Food Systems, Nutrition Security, and Agriculture

NERCRD's work in this area helps communities understand the impacts of local and regional food systems and how to best capitalize on their potential benefits.

Activities at a Glance:

- NERCRD Graduate Researcher Yuxuan Pan Sheds Light on Household Nutrition Security During COVID-19 (p. 10)
- Advancing Agritourism on Many Fronts: New Agritourism Fact Sheets, Research Findings, and Conference Proceedings Released in 2023; New National Extension Working Group Formed (pp. 11-12)
- Research Finding: Women Farmers Quantitatively Linked to Better Community Well-Being (p. 13)

Impacts at a Glance:



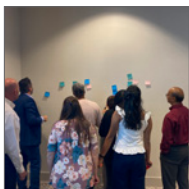
Shedding Light on Household Nutrition Security

NERCRD graduate researcher Yuxuan Pan led three studies this year exploring how external factors influence nutrition security at the household level, and was invited to share her findings with staff at the U.S. Food and Drug Administration. (p. 10)



Agritourism By the Numbers

Fact sheets released this year can be used to help strengthen and expand agritourism enterprises. They were developed for all 50 U.S. states by a project focused on helping small- and mid-size farms access the economic opportunities posed by agritourism. (p. 12)



Connecting Agritourism Scholars

NERCRD supported several efforts aimed at facilitating networking and sharing of scholarship in the agritourism-support community, including the development of a new, national knowledge-sharing network. (p. 11)

Left: agritourism workshop at the National Extension Tourism conference

NERCRD Researchers Honored With Two Awards for Research on Nutrition and Food Security

Zheng Tian, Claudia Schmidt, and Stephan Goetz were honored with two distinct awards for their paper titled “The Role of Community Food Services in Reducing U.S. Food Insecurity in the COVID-19 Pandemic,” which was published in the *Journal of Agricultural and Resource Economics* (JARE) in 2022. The paper was recognized by JARE with the 2023 Outstanding Journal Article Award, and also received the Penn State College of Agricultural Science’s 2023 High-Impact Research Publication in Nutritional and Food Security Award.



Zheng Tian (left) and Claudia Schmidt (right) at the Penn State College of Agricultural Sciences awards reception. Associate Dean for Research and Graduate Education Blair Siegfried (center), presented the award. Image Credit: Kaiyi Chan, Penn State.

The study found that food pantries, soup kitchens, and other community food services played a critical role in helping Americans meet their food needs, especially during the first five months of the COVID-19 pandemic. Middle-class Americans benefited the most from these services, demonstrating a key role these programs can play in times of crisis. The researchers also distilled their findings into a general-audience [article published in *The Conversation*](#), which was seen by more than 13,000 readers, and was republished by several national news organizations.

NERCRD Graduate Researcher Advancing Understanding of Nutrition Security

NERCRD graduate researcher Yuxuan Pan, a doctoral candidate in Penn State’s Energy, Environmental, and Food Economics program, led three studies this year exploring how external factors influence nutrition security at the household level. Penn State Assistant Professor of Agricultural Economics Linlin Fan is a co-advisor and collaborating closely on this work. Pan was invited to present her work at a session hosted by the Food and Drug Administration in November, underscoring the relevance of NERCRD research to federal policy makers.



- 1 In one study using Household Pulse Survey data from the Census Bureau, Pan and her co-authors found that the pandemic significantly impacted both food sufficiency and mental health. Pan is preparing to submit this for peer-reviewed publication.
- 2 In the second study, conducted in collaboration with Penn State and USDA-ERS, Pan and her colleagues used household scanner data to estimate the effect of COVID-19 on diet quality of minorities, measured by the Healthy Eating Index, and to compare impacts during the COVID-19 period to other periods. They shared these preliminary findings at the 2023 AAEA meetings, and will write them up for peer-review in 2024.
- 3 A third study examining the influence of grocery taxes on vegetable and fruit consumption is underway.



Advancing Agritourism

Agritourism is an opportunity for rural communities and farm operators to benefit from the growing consumer interest in on-farm experiences. In 2023, NERCRD engaged in several research and outreach efforts aimed at making this opportunity more accessible.

Conference Proceedings Expand Access to Scholarship

NERCRD staff provided project management, editorial, and graphic design support to the development of the first conference proceedings of the International Workshop on Agritourism (IWA). Published in July 2023, this volume increases access to the scholarship that was shared during the three-day conference, which was hosted by UVM in Burlington, Vermont, USA, 8/30-9/1/2022, and engaged more than 500 attendees from around the world. It contains 27 peer-reviewed, open-access papers, and can be used by Extension audiences, policy makers, and others interested in supporting farm viability, agricultural literacy, and community vitality through agritourism.

The Proceedings was edited by:

- Lisa Chase, University of Vermont Extension and 2022 IWA Conference Chair
- Chadley Hollas, Cultivating Tourism
- Xinyi Qian, University of Minnesota Tourism Center
- Claire Whitehouse, University of Vermont Center for Rural Studies

Learn more and access the proceedings at: <https://bit.ly/44o532p>.



National Extension Agritourism Working Group Strengthens Extension's Capacity to Serve a Growing Need

In 2022, the National Extension Tourism Network (NET) and NERCRD co-hosted a virtual gathering designed to set the stage for developing a national network of agritourism service providers and a platform for housing the latest research and most effective resources. In 2023, under the leadership of Lisa Chase (University of Vermont Extension), an in-person workshop held at the NET conference helped to move this effort forward and resulted in the formation of the National Extension Agritourism Working Group. This group will meet regularly in 2024 to grow the network, build out a central resource repository, and develop a shared vision and objectives. Learn more at: <https://bit.ly/3vV2WGR>.



Claudia Schmidt Recognized Nationally as Emerging Agritourism Leader

NERCRD Faculty Affiliate Claudia Schmidt is not only NERCRD's in-house agritourism expert—she also is recognized nationally as a leader in the field, made evident by her selection as this year's recipient of the National Extension Tourism Emerging Leader Award.

The award recognizes Schmidt's research and outreach contributions to the field of agritourism. Most notably, she is leading a USDA-NIFA funded project titled "Creating an Effective Support System for Small and Medium-Sized Farm Operators to Succeed in Agritourism," which launched in July 2020 and will run through June 2024, and engages partners at NERCRD, Penn State, University of Vermont, and Oklahoma State University. Schmidt is an assistant professor of marketing and local/regional food systems in Penn State's College of Agricultural Sciences.



Fact Sheets Provide New Insights Into Agritourism and Direct Sales for Every U.S. State

A major output of the agritourism project described above is a [set of agritourism and direct sales fact sheets for all 50 U.S. states](#). They provide comprehensive insights into the demographics of U.S. farms that offer agritourism activities or sell food directly to consumers or both. The fact sheets are available for all 50 states and are intended to help local decision makers, farmers, and the organizations that support them in their efforts to strengthen and expand agritourism enterprises. NERCRD also assisted with publicizing the fact sheets nationally.



Research Finding: Opening Farms to Visitors Boosts Nearby Farms' Direct Sales, and Vice Versa

The research team led by Schmidt found that agritourism and direct farm sales complement one another when they occur within the same community. The findings, published in *Agricultural and Resource Economics Review*, can help farmers and the local organizations that support them plan strategically for farm resilience and growth. These findings were publicized widely via a Penn State news release and presentations. Read the full story at <https://bit.ly/3Hr3PDU>.

Inaugural Maryland Agritourism Conference Reflects Increasing Interest in Agritourism

The first Maryland Agritourism Conference drew strong attendance from across the state and beyond, and included producers, non-profits, Extension professionals, students, and government officials. The event was organized by University of Maryland Eastern Shore Extension, and was held in Cambridge, Maryland, in December.



L-R: Heather Ersts, Dana Zucker, Lisa Chase, Claudia Schmidt, Carla Barbieri, and Prem Bhandari. Credit: Lila Karki/UMES.

NERCRD's Stephan Goetz and Claudia Schmidt attended the event, and Schmidt delivered a presentation during the plenary session, emphasizing the crucial need for a robust support system for agritourism operators in the United States.

Research Finding: Women Farmers Quantitatively Linked to Better Community Well-Being

Having more women in agriculture is associated with greater community well-being, according to a NERCRD and University of Wisconsin-Madison research team. Their work is the first to quantitatively assess this link in the U.S., and their findings suggest that women farmers approach their operations in ways that positively impact their communities. The study, published in January 2024 in *Applied Economics Perspectives and Policy*, revealed that U.S. counties with a higher share of farms owned or operated by women have higher rates of nonfarm entrepreneurship, longer life expectancies and lower poverty rates. The researchers found that the positive association with women farmers spilled over into neighboring counties, meaning that a greater share of women farmers in



Photo by Ny Menghor on Unsplash

one county was associated with greater community well-being in neighboring counties, too. Learn more at: <https://bit.ly/47MH3qx>.

Checking In on Past Investments

Ecosystem Services on Working Lands in the Northeast US

In 2022, NERCRD provided advisory support to a regional assessment of over 1,300 ecosystem service provisioning programs and policies across the U.S. Northeast. The assessment, conducted by Alicia F. Coleman and Mario Reinaldo Machado and commissioned by the Association of Northeast Extension Directors and the Northeastern Regional Association of State Agricultural Experiment Station Directors, culminated in a report published by the Extension Foundation in 2022. In 2023, Coleman and Machado also [published their findings in *Agricultural and Resource Economics Review*](#). In addition, Machado presented the findings to the Vermont Senate and House of Representatives in February, and Coleman presented the findings at the National Association of Community Development Extension Professionals annual meeting in Coeur D'Alene, Idaho, in June. The report also received extra publicity through its [coverage in a USDA Northeast Climate Hub feature story](#).

AgriCluster Resilience and Expansion (ACRE) Program Scales Up

The [ACRE project](#), led by the Lyson Center for Civic Agriculture and Food Systems, provides training in strategic business planning tools and processes that engage all stakeholders in a value chain to work collectively in carving out and defending a market niche.



NERCRD invested roughly \$23,000 in seed funding to this project with the approval of its Board of Directors in 2020, and the program team in turn leveraged an additional \$144,000 in a three-year grant from the Northeast Sustainable Agriculture Research and Education (NESARE) professional development program. With this funding, the ACRE team further developed the facilitator training program infrastructure, including an online course and toolkit. Since then, 28 service providers (including nonprofit and Cooperative Extension staff) have completed the online course, and have joined the ACRE Facilitator community of practice, which meets monthly. Another 127 are currently enrolled, putting the program well on its way toward having trained ACRE Facilitators in all Northeast states and Washington, D.C. Participants thus far are largely from the Northeast, but also include individuals from the Southeast and the Midwest, and from as far away as France and the Republic of Ireland.

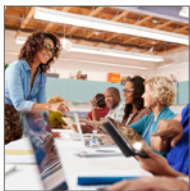
Capacity Building and Facilitation

NERCRD serves as a regional hub for our land-grant partners, facilitating collaborative knowledge- and program-sharing networks and partnerships. As a result, participants can work more effectively to foster regional prosperity and rural development.

Activities at a Glance:

- Building Extension's Capacity to Support Digital Inclusion (p. 16)
- Sharing Innovative Programming in Local Climate Action Planning (p. 17)
- Supporting Regional Impact Indicator Development (p. 17)
- Pursuing Diversity, Equity, Inclusion & Justice (DEIJ) Programming in the Northeast (p. 18)
- Looking Ahead with the National Extension Tourism Network (p. 19)
- Supporting Extension's Response to Opportunities in Outdoor Recreation Economies (p. 20)

Impacts at a Glance:



Advancing Digital Inclusion

The Northeast Digital Equity Summit provided more than 60 participants with professional development in digital equity best practices, barriers, and opportunities, and resulted in a new knowledge-sharing network. (p. 16)



Growing Extension's Outdoor Recreation Capacity:

A national outdoor recreation networking meeting co-organized by NERCRD and the National Extension Tourism Network in 2022 resulted in the creation of a new working group, which is developing regional pilot projects to assist communities with leveraging their outdoor recreation assets. (p. 20)



Scaffolding for Organizational Stability

With the successful completion of two major milestones in 2023, NERCRD collaborated with the National Extension Tourism leadership team to explore avenues for the organization's future independence and growth. (p. 19)



Peter Wulfhorst Fills Critical Role in NERCRD's 2023 Outreach Efforts

Penn State Extension Educator Peter Wulfhorst provided critical leadership to NERCRD's capacity-building efforts on an interim basis this year as the Center searched for an Associate Director. Wulfhorst provided valuable continuity to several ongoing efforts, and initiated new efforts as well. His contributions made the work described on pages 16-18 possible.

Building Extension's Capacity to Support Digital Inclusion

The National Listening Sessions described on p. 4 revealed infrastructure to be a high priority for Northeast stakeholders. At the same time, the NERCRD Technical Advisory Committee recommended that special attention be paid to opportunities to integrate research and extension, and to the cross-cutting areas of diversity, equity, inclusion and access and the rural/urban divide. To these ends, Peter Wulfhorst convened a multi-state team to organize and implement the 2023 Northeast Digital Equity Summit, which was held on September 19. Members of the planning team also included:

- Cristy Schmidt, Penn State Extension
- Isaias Y Tesfalidet, University of Maryland Extension (UME)
- Jesse M. Ketterman, UME
- Paul Treadwell, Cornell Cooperative Extension

After issuing a Call for Proposals in May 2023, the planning team identified nine presentations that provided a platform for Extension and Research faculty to learn from one another and expand capacity for digital equity programming in the Northeast and beyond. More than 130 people registered for the event, and roughly half attended the live event. The complete lineup and recordings from the event [are available online](#), along with slides and other resources.

NERCRD staff are working with the planning team to leverage momentum from the event, which may include regional collaborations and education/outreach to highlight where work is still needed in the region.

Dimensions of Digital Inclusion

- Affordable and robust broadband
- Internet-enabled devices that meet needs of the user
- Digital literacy training
- Quality technical support
- Applications and online content that encourage self-sufficiency, participation, and collaboration

Excerpted from: Gallardo, Roberto. 2023. "Digital Equity 101." Presented at the Northeast Digital Equity Summit, online, September 19.

Sharing Innovative Climate Action Programming

Led by Peter Wulfhorst, NERCRD convened Penn State faculty members Peter Buck and Brandy Robinson, who delivered a webinar titled, “Local Climate Action Planning: Penn State and Municipal Partners Implementing Together.” The webinar, which took place on June 28, and garnered 31 registrations, provided an overview of the Local Climate Action Program (LCAP), a partnership initiative of the PA Department of Environmental Protection, Penn State’s Sustainability Institute, Penn State’s Department of Energy and Mineral Engineering, and ICLEI: Local Governments for Sustainability. While this webinar described a Pennsylvania-based program and related opportunities for PA municipalities, it also gave non-PA



Photo by Andres Siimon via Unsplash

participants an overview of an innovative program that could potentially be replicated in other states. Watch the recording at: <https://bit.ly/42jBwXm>.

Regional Impact Indicators Working Group

The Northeast Community Development (CD) Extension community has long endeavored to find common indicators by which to measure the impact of their programming, so that they can communicate collectively about their regional-level impacts. This has been challenging due to the limited number and capacity of CD Extension professionals in the region and the varying contexts in which they carry out their work. In 2023, two efforts emerged to address this need. The region’s CD program leaders, with support from Ali Mitchell (NEED) and Hannah Carter (University of Maine), held initial conversations about how the Northeast can contribute to a National Indicators and Impacts Report that is under development.



At the same time, Penn State Extension’s Matt Spindler has conducted research on the impact-measurement efforts at different universities in the region and developed a Delphi survey to solicit feasible common

impact indicators from key informants in the region. To help bridge these two efforts, Wulfhorst helped convene a joint meeting in November 2023, during which Spindler presented his findings and plans for operationalizing them, and the CD program leaders shared feedback

on his approach going forward. The group also brainstormed possible avenues for building evaluation capacity in the region. The NERCRD will continue to support these collective efforts in 2024. Watch the NERCRD newsletter for updates and ways to participate.

Expanding Avenues for Diversity, Equity, Inclusion, and Justice Programming in the Northeast

In April 2023, the Northeast Extension Directors (NEED) [hosted a workshop](#) that provided in-depth training on Diversity, Equity, Inclusion, and Justice to 20 participants from 10 Northeast Land-grant Universities. This workshop was designed to create a strong regional cohort that could continue to learn from and with each other. It also was intended to deliver a significant portion of the training elements from the national Coming Together (for Racial Understanding) curriculum, so that a subset of the participants could complete the five-day Coming Together certification as a regional cohort.

The workshop was designed and delivered by a team led by Abby Harper. Other team members included Melissa Schroeder (Cornell University); Patreese Ingram, Justine Lindemann, and Cristy Schmidt (Penn State); and Jennifer Seabrook-Scott (University of Delaware). The workshop was supported and funded by NEED.

Given the workshop's success and its alignment with NERCRD's goals, Wulfhorst and TAC Chair Heather Stephens are leading the NERCRD in an exploration of how to support the expansion of this work in the region. We look forward to reporting on this effort as it unfolds throughout the year.

Exploring Programming to Bridge Partisan Divide

The Braver Angels organization was brought to NERCRD's attention by TAC Member David Kay. The organization's mission is to "bring Americans together to bridge the partisan divide and strengthen our democratic republic." In his role leading capacity-building efforts for NERCRD,

Wulfhorst attended the national Braver Angels conference in July 2023, to learn more about the group's efforts to bridge political divides. He is exploring whether and how the NERCRD could engage with this group or its programs in the Northeast.

Looking Ahead

NERCRD Unveiling New Website in 2024

NERCRD has been working with a third-party web developer on redesigning its website, which will be launched in early 2024. We are hopeful that this new platform will help us more effectively communicate about the programs, research, and impact of NERCRD and its partners. Feedback and suggestions on the new site — and on all of NERCRD's communications — are welcome! Please send them to krd111@psu.edu.





The NET Design Team stopped for a photo op with “The Bronze Fonz” on their way to a strategic planning meeting in Milwaukee. From L-R: Xinyi Qian, Ann Savage, Jake Powell, Jada Lindblom, Doug Arbogast, Bryan Fluech, Natalie Chin, Katie Higgins, and April Turner. Photo: Kristen Devlin.

Looking Ahead with the National Extension Tourism Network

February 2023 marked the conclusion of an intense period of growth for the network’s leadership team, and at the same time ushered in a new era of organizational stability and opportunity.

The National Extension Tourism (NET) Design Team and NERCRD successfully completed an intensive 18-month project-accelerator program designed to help NET plan for sustainable growth and stability as an independent organization and to elevate its visibility within the Cooperative Extension system. The project, which was funded by USDA NIFA as part of the Extension Foundation’s “New Technologies for Ag Extension” (NTAE) technical assistance and grant program, concluded in February 2023 and resulted in a number of outcomes and impacts, including new marketing materials, publications, a new committee on Diversity, Equity, and Inclusion, and a draft organizational growth plan to help NET’s leadership team envision ways to sustainably grow the organization. [Many project outcomes are available here.](#)

NERCRD staff continued to play a supporting role while the organization

prepared for its biennial national conference which took place in Milwaukee, WI, in September 2023, contributing to the development of NET’s first conference sponsorship prospectus and leading the NET communications committee in its effort to publicize all aspects of the conference, including the release of [a post-conference newsletter published in October.](#)

With the successful completion of these major milestones, NERCRD staff have been collaborating with the NET leadership team to sustainably reduce the level of administrative support NERCRD provides, so that NET can pursue long-term organizational stability. At the same time, NERCRD is supporting two new initiatives emerging from the network: the National Extension Agritourism Working Group and the National Extension Outdoor Recreation Working Group. See pages 11 and 20, respectively, for more information.

NERCRD Awarded National Extension Tourism Partner Award

The NERCRD was honored by the National Extension Tourism Network (NET) as the recipient of the 2023 NET Partner Award. This award recognizes contributions that have made a significant positive impact on the NET organization or its members as a whole. The award was announced during a banquet at the 2023 National Extension Tourism Conference in Milwaukee, WI, in September. NERCRD Communications Specialist Kristen Devlin and former NERCRD Associate Director Jason Entsminger were there to receive the award on behalf of the NERCRD.

During the event, NET Award Chair Ann Savage noted that the NERCRD team has been “an invaluable partner” to NET through its leadership, administrative and communications support, and partnership on the New Technologies for Agricultural Extension project.



L-R: NET Chair Xinyi Qian, Kristen Devlin, and Jason Entsminger.

Supporting Extension’s Response to Opportunities in Outdoor Recreation Economies



Photo by Adam Bouse via Unsplash

In January 2023, the USDA announced a plan to expand economic opportunities related to recreation in communities surrounding America’s national forests, which is outlined in the Interagency Memorandum of Understanding on Supporting the Nation’s Outdoor Recreation Economy (MOU). The MOU states that building the U.S. recreation economy is one of the USDA’s top priorities and calls on the Regional Rural Development Centers to help implement the MOU. To that end, NERCRD and the National Extension Tourism Network (NET) collaborated to launch the National Extension Outdoor Recreation Working Group (NEORWG), which is chaired by

Doug Arbogast (West Virginia University) and Jake Powell (Utah State University) and held its first meeting in February 2023. A primary objective of this group is to convene a community of Extension professionals to engage with the goals of the MOU.

In June, NERCRD worked with Arbogast and Powell to convene a smaller subset of this group to form a steering committee. With leadership from the Western Rural Development Center’s Betsy Newman, steering committee members have been meeting regularly along with representatives from each of the Regional Rural Development Centers, to establish a vision and mission for the group and to develop strategies for implementing regional pilot projects that will leverage the MOU. Each regional group will work with their respective RRDC to develop a funding proposal based on the pilot project. [Learn more about the National Extension Outdoor Recreation Working group here.](#)

Administrative Updates

Zheng Tian Promoted to Assistant Research Professor at NERCRD

Effective July 1, Dr. Zheng Tian accepted a new position with NERCRD as Assistant Research Professor. Tian joined the Center as a postdoctoral scholar in October 2017. His research interest is regional and urban economics, focusing on industrial agglomeration, migration, spatial econometrics, and the input-output model. During his time at NERCRD, Zheng has obtained Special Sworn Status with the U.S. Census Bureau to utilize the Federal Data Center at Penn State, and he has co-authored several peer-reviewed papers published in *Applied Economic Perspectives and Policy*, *Food Policy*, *Agricultural and Resource Economics Review*, *Choices*, *Journal of Agricultural and Resource Economics*, and *Spatial Economic Analysis*, and *Journal of Agriculture, Food Systems, and Community Development*. He also has given or contributed to dozens of presentations on behalf of the NERCRD.

Dr. Tian obtained his Ph.D. in Economics from West Virginia University (WVU) in 2014. His dissertation examined the relationship between industrial agglomeration and input-output linkages among industries. After graduating from WVU, he worked as an assistant professor at the International School of Economics and Management of the Capital University of Economics and Business in Beijing, China, from 2014 to 2017. He was a visiting scholar at the Regional Research Institute, WVU, before joining the Center.



Zheng Tian

NERCRD Welcomes New Graduate Research Assistant Yuan (Timothy) Zhuang



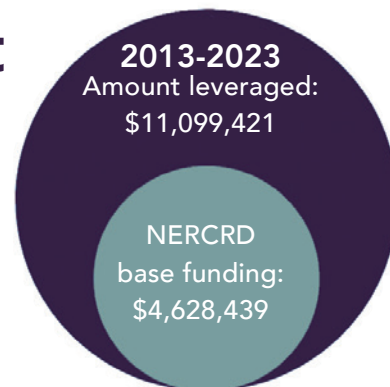
Yuan Zhuang

In August, NERCRD welcomed its newest graduate research assistant, Yuan Zhang, who is a student in the Penn State Department of Agricultural Economics, Sociology and Education.

Zhuang is originally from Jinhua, China, and lived in Beijing for 20 years. He holds a bachelor's degree in agribusiness from Oklahoma State University and a master's degree in agricultural and applied economics from University of Wisconsin-Madison. His research interests are regional economics, economic geography, and rural development. He is currently providing general research support to the Center.

NERCRD Funding Snapshot

Over the last decade, the NERCRD generated \$2.40 in external grants each year for every \$1.00 in base funding.



Through its core federal investment, the NERCRD is able to build strong collaborative networks in the Northeast and across regions and work across federal, state, and private agencies to secure funding with partners to address the nation’s pressing rural development issues. NERCRD’s 2023 grant portfolio included:

Title	Sponsor	Start Date	End Date	Amount
Core Funding:				
The Northeast Regional Center for Rural Development - FY2020	USDA National Institute of Food and Agriculture (NIFA)	09/01/2020	8/31/2023	\$474,880
The Northeast Regional Center for Rural Development - FY2021	USDA NIFA	09/01/2021	08/31/2024	\$494,027
The Northeast Regional Center for Rural Development - FY2022	USDA NIFA	09/01/2022	08/31/2024	\$599,100
The Northeast Regional Center for Rural Development - FY2023	USDA NIFA	09/01/2023	08/31/2024	\$704,232
Leveraged Funding:				
New Technologies for Agriculture Extension Accelerator Program: National Extension Tourism Network	Extension Foundation-USDA-NIFA-NTAE	09/01/2021	02/28/2023	\$85,000
The Role of Innovation in Rural Firm Emergence and Vitality	USDA NIFA	05/01/2018	04/30/2023	\$499,993
Creating an Effective Support System for Small and Medium-Sized Farm Operators to Succeed in Agritourism (C. Schmidt PD)	USDA NIFA	07/01/2020	06/30/2024	\$133,628* \$498,051**
Minority- and Women-Owned Businesses, Food Security, Innovation, and Access to Credit in Rural America (A. Rupasingha PD)	USDA Economic Research Service	09/01/2022	8/31/2024	\$349,986* \$459,983**
Rural Community Well-Being: Using Tourism Indicators to Identify, Understand and Address COVID-19 Pandemic Impacts and Strategies for Resiliency (D. Arbogast PD)	USDA NIFA via West Virginia University	09/01/2022	12/31/2025	\$200,301* \$522,995**
Factors Affecting the Success of Female and Minority Rural Entrepreneurs and Rural Economic Vitality (H. Stephens PD)	USDA NIFA via West Virginia University	05/15/2023	05/14/2026	\$143,905* \$649,915**

* NERCRD portion

** Total amount granted, including NERCRD portion

Publications and Presentations

Peer-Reviewed Publications

- Goetz, Stephan J., Connor Heaton, Muhammad Imran, Yuxuan Pan, Zheng Tian, Claudia Schmidt, Umair Qazi, Ferda Ofli, and Prasenjit Mitra. 2023. "Food Insufficiency and Twitter Emotions During a Pandemic." *Applied Economic Perspectives and Policy* 2023 45: 1189–1210.
- Han, Luyi, Timothy R. Wojan, and Stephan J. Goetz. 2023. "Experimenting in the Cloud: The Digital Divide's Impact on Innovation." *Telecommunications Policy* 2023 47 (7): 102578.
- Hira, Anil, Paul D. Gottlieb, Neil Reid, Stephan J. Goetz and Elizabeth Dobis. (Forthcoming). *Cooperatives Across Clusters: Lessons from the Cranberry Industry*. Oregon State University Press.
- Hollas, Chadley R., Lisa Chase, Claudia Schmidt, R. David Lamie, Lori Dickes, Doolarie Singh-Knights, Rachael Callahan, Gail Feenstra, Mary Stewart, and David Conner. 2023. "Agritourism Critical Success Factors." In *International Workshop on Agritourism 2022 Conference Proceedings*, 49–53.
- Lamie, R. David, Lisa Chase, Claudia Schmidt, Corinne Stewart, Emilio Chiodo, Rita Salvatori, and Lori Dickes. 2023. "International Research Network for Agritourism." In *International Workshop on Agritourism 2022 Conference Proceedings*, 128–31.
- Loveridge, Scott, Mark Skidmore, Robert Shupp, Paula K. Miller, Courtney Cuthbertson, and Stephan J. Goetz. 2023. "Rural US Residents Recognize Anxiety Better than Urbanites and Suburbanites but Hold Similar Stigma." *The Journal of Rural Health* 2023 39: 860–869
- Schmidt, Claudia, Zheng Tian, Stephan J. Goetz, Chadley R. Hollas, and Lisa Chase. 2023. "Agritourism and Direct Sales Clusters in the United States." *Agricultural and Resource Economics Review*, 52 (1): 168–88.
- Schmidt, Claudia, Stephan J. Goetz, and Steven Deller. 2024. "Women Farmers and Community Well-Being Under Modeling Uncertainty." *Applied Economic Perspectives and Policy*, January.

Reflecting on the Impact of NERCRD Research

The table below shows impact factors of journals in which NERCRD research was recently published. For definitions of terms, visit: bit.ly/3wDNlml. Compiled by Yuxuan Pan

Journal Name	Google Scholar H-5 index	Journal Impact Factor	5-year Impact Factor	Immediacy Index	Citable Items	% Articles in Citable Items
<i>Applied Economic Perspectives and Policy</i>	46	5.8	5.1	1.1	113	100
<i>Agricultural and Resource Economics Review</i>	16	1.3	1.7	0.3	25	100
<i>The Journal of Rural Health</i>	44	4.9	4.7	0.4	85	93
<i>International Journal of Production Research</i>	117	9.2	8.8	1.4	380	98
<i>Telecommunications Policy</i>	56	5.6	4.9	2.3	102	98
<i>Tourism Economics</i>	44	4.4	3.9	0.7	90	92

Special Reports

- Entsminger, Jason, John Green, Rachel Welborn, Renee Wiatt, Zuzana Bednarikova, Rianna Gayle, and Yuxuan Pan. 2023. "Comprehensive Summary of National Rural Development Stakeholder Listening Sessions." Regional Rural Development Centers. <https://ag.purdue.edu/rrdc/national-initiatives/listening-sessions.html>.

Presentations

- Chase, Lisa, Kristen Devlin, Chadley R. Hollas, Jake Powell, Claudia Schmidt, Jason Entsminger, R. David Lamie, and Doolarie Singh-Knights. 2023. "Developing a National Agritourism Support Network." Presented at the 2023 National Extension Tourism Conference, Milwaukee, WI, September 26.
- Eades, Daniel, Douglas Arbogast, Jinyang Dang, Luyi Han, and Stephan J. Goetz. 2023. "Rural Community Well-Being: Using Tourism Indicators to Identify, Understand and Address COVID Pandemic Impacts and Strategies for Resiliency." Presented at the 2023 National Extension Tourism Conference, Milwaukee, WI, September 27.
- Goetz, Stephan J. 2023. "Be on the Lookout: Funding and Leverage Panel Discussion." Presented at the Joint Council of Extension Professionals' Public Issues Leadership Development Conference, Arlington, VA, April 17.
- Goetz, Stephan J., John Green, Maria Marshall, Betsy Newman. "The Regional Rural Development Centers: A Stakeholder Engagement Meeting with Dr. Manjit Misra." Online, October 12.
- Han, Luyi, Stephan J. Goetz, and Zheng Tian. 2023. "Racial and Ethnic Shares and Income Growth: Evidence from US Counties." Presented at the 70th Annual North American Meetings of the Regional Science Association International, San Diego, CA, November 17.
- Han, Luyi, Anil Rupasingha, Stephan J. Goetz, and Yuxuan Pan. 2023. "Impact of the Community Reinvestment Act on Minority and Female Employment Growth." Presented at the 2023 Agricultural and Applied Economics Association, Washington, DC, July 24, and [published on AgEcon Search](#).
- Han, Luyi, Zheng Tian, Stephan J. Goetz, and Timothy R. Wojan. 2023a. "Decomposing the Rural-Urban Export Gap: Evidence from U.S. Firms." Presented at:
 - The 70th Annual North American Meetings of the Regional Science Association International, San Diego, CA, November 15.
 - As a "dry run" to the National Center for Science and Engineering Statistics with the National Science Foundation, August 14.
- Han, Luyi, Zheng Tian, Stephan J. Goetz. 2023. "How Export Performance Is Mediated by Varieties of Innovation, Owner Characteristics, and Location." Presented at the 62nd Annual Meeting of Southern Regional Science Association, Savannah, GA, March 30.
- Han, Luyi, Zheng Tian, Stephan J. Goetz, and Timothy R. Wojan. 2023. "Are Some Innovation Self-Reports in the Annual Business Survey Biased? A Regression Discontinuity Test." Presented at the 62nd Annual Meeting of Western Regional Science Association, Big Island, HI, USA, February 15.
- Han, Luyi, Timothy R. Wojan, and Stephan J. Goetz. 2023. "Internationalization of the Rural Nonfarm Economy and the Cloud: Evidence from US Firm-Level Export Data." Presented at the 2023 Meeting of the Agricultural & Applied Economics Association, Washington, D.C., July 23, and [published on AgEcon Search](#).

(Continued on next page.)

Presentations, continued

- Hollas, Chadley R., Lisa Chase, and Claudia Schmidt. 2023. "Developing an Effective National Support Network and Resource Repository for Agritourism Operators in the U.S." Presented at the 2023 National Association for Community Development Extension Professionals Conference, Coeur D'Alene, ID, May 1.
- Pan, Yuxuan, Linlin Fan, Stephan J. Goetz, and Alexander Stevens. 2023. "The Impact of COVID-19 on Racial Inequality in Diet Quality." Presented at the 2023 Meeting of the Agricultural & Applied Economics Association, Washington, D.C., July 25, and [published on AgEcon Search](#).
- Pan, Yuxuan, Linlin Fan, and Stephan J. Goetz. 2023. "Unemployment, Food Insufficiency and Mental Health during the COVID-19 Pandemic." Presented at the 70th Annual North American Meetings of the Regional Science Association International, San Diego, CA, November 16.
- Schmidt, Claudia, Jason Entsminger, Lisa Chase, Chadley R. Hollas, and Stacy Tomas. 2023. "Setting the Course for a Sustainable Future for Agritourism Operators." Presented at the 2023 National Extension Tourism Conference, Milwaukee, WI, September 27.
- Schmidt, Claudia, Steven Deller, Stephan J. Goetz, and Zheng Tian. 2023. "Women Farmers in the United States and Community Well-Being." Poster presented at the Penn State Extension Educator Conference, State College, PA, October 24.
- Schmidt, Claudia, Jason Entsminger, Kelci Lo, Chadley Hollas, Stacy Tomas, Stephan J. Goetz, and Sarah Cornelisse. 2023. "United States Agritourism Fact Sheets." Poster presented at the Penn State Extension Educator Conference, State College, PA, October 24.
- Schmidt, Claudia, Luyi Han, Arian Moghadam, and Stephan J. Goetz. 2023. "Impact of Broadband Access on Agritourism Operations in the United States." Presented at the 2023 Agricultural and Applied Economics Association, Washington, DC, July 25, and [published on AgEcon Search](#).
- Schmidt, Claudia, Luyi Han, Arian Moghadam, and Stephan J. Goetz. 2023. "Impact of Broadband Access on Agritourism Operations in the United States." Poster presented at the Penn State Extension Educator Conference, State College, PA, October 24.
- Tian, Zheng, Claudia Schmidt, and Stephan J. Goetz. 2023. "Food Insecurity and Stimulus Payments during the Pandemic: Impacts on Different Minorities in the U.S." Presented at the 95th International Atlantic Economic Conference, Rome, Italy, March 22.*
- Tian, Zheng, Claudia Schmidt, and Stephan J. Goetz. 2023. "Household Hardship and Stimulus Payments during the Pandemic: Differences Across Ethnic Minorities in the United States." Presented at the 2023 Meeting of the Agricultural & Applied Economics Association, Washington, D.C., July 25, and [published on AgEcon Search](#).
- Tian, Zheng, Luyi Han, Stephan J. Goetz. 2023. "User Entrepreneurship and Firm Employment Growth." Presented at the 62nd Annual Meeting of Southern Regional Science Association, Savannah, GA, March 30-April 1, 2023.
- Tian, Zheng, Stephan J. Goetz, and Luyi Han. 2023. "Tracing the Geography of Agriculture: Shift-Share Analysis of Major Crop Acreage in the U.S. from 1890 to 2017." Presented at the 70th Annual North American Meetings of the Regional Science Association International, San Diego, CA, November 16.
- Tian, Zheng, Luyi Han, and Stephan J. Goetz. 2023. "Examining Rural-Urban Innovation Disparities: A Study Using the Oaxaca-Blinder Decomposition Method." Presented at the 70th Annual North American Meetings of the Regional Science Association International, San Diego, CA, November 16.

*International travel supported by non-federal funds.

(Continued on next page.)



NERCRD Graduate Researcher Yuxuan Pan (fourth from right in maroon shirt) attended the AAEA meetings this year, along with her colleagues from Penn State's Department of Agricultural Economics, Sociology and Education.

Presentations, continued

- Tian, Zheng, Luyi Han, Timothy R. Wojan, Stephan J. Goetz, and Anil Rupasingha. 2024. "User Entrepreneurship and Firm Employment Growth." Poster presented at the American Economic Association Annual Meeting, San Antonio, TX, January 5.
- Tian, Zheng, Timothy R. Wojan, and Stephan J. Goetz. 2023. "Growth Trajectories of Rural Innovative Firms." Presented at the 62nd Annual Meeting of Western Regional Science Association, Big Island, HI, February 15.
- Wojan, Timothy R., Stephan J. Goetz, Zheng Tian, and Luyi Han. 2023. "Grassroots Design Meets Grassroots Innovation: Rural Design Orientation and Firm Performance." Presented as a "dry run" to the National Center for Science and Engineering Statistics with the National Science Foundation, August 18, and to the 62nd European Regional Science Association Congress, Alicante, Spain, August 30.

News Releases and Non-Technical Publications

- Devlin, Kristen. 2023a. "[Fact Sheets Provide New Insights into Agritourism and Direct Sales for US States.](#)" Penn State News, June 2.
- Devlin, Kristen. 2023b. "[Digital Divide Hinders Rural Innovation, Study Shows.](#)" Penn State News, June 9.
- NERCRCR. 2023. "[NERCRD 2022 Annual Report.](#)" February 1.
- NERCRCR. 2023a. "[NERCRD Newsletter, February 2023 Edition,](#)" February 1.
- NERCRCR. 2023b. "[Events, Opportunities, and Resources, March/April 2023 Edition,](#)" March 24.
- NERCRCR. 2023c. "[Events, Opportunities, and Resources, April/May 2023 Edition,](#)" April 20.
- NERCRCR. 2023d. "[Events, Opportunities, and Resources, June 2023 Edition,](#)" June 2.
- NERCRCR. 2023e. "[NERCRD Newsletter, June 2023 Edition,](#)" June 26.
- NERCRCR. 2023f. "[Events, Opportunities, and Resources, July 2023 Edition,](#)" July 14.
- NERCRCR. 2023h. "[Events, Opportunities, and Resources, August 2023 Edition,](#)" August 14.
- NERCRCR. 2023g. "[Events, Opportunities, and Resources, October 2023 Edition,](#)" October 9.
- NERCRCR. 2023h. "[Events, Opportunities, and Resources, November 2023 Edition,](#)" November 20.
- NERCRCR. 2023i. "[NERCRD Newsletter, December 2023 Edition,](#)" December 13.

Publications Facilitated by NERCRCR

(Project management by Kim Boonie; copy-editing and/or design by Kristen Devlin)

- Arbogast, Doug, and Jake Powell. 2023. "Engaging the Outdoor Recreation Sector's Growth." National Extension Tourism. March.
- Chase, Lisa, Chadley Hollas, Xinyi Qian, and Claire Whitehouse, eds. 2023. "International Workshop on Agritourism 2022 Conference Proceedings."
- Curtis, Kynda, and Natalie Chin. 2023. "Building Diversity, Equity, Access, and Inclusion in Tourism Outreach." National Extension Tourism. March.
- Martin, Heather, Rose Hayden-Smith, and Kristen Devlin. 2023. "The NET Effect: Members of the National Extension Tourism Network Help Raise the Bar in Sustainable Tourism and Outdoor Recreation." Extension Foundation.
- Stewart, Gwynn. 2023. "Scenic Byways Boost the Tourism Sector." National Extension Tourism. February.

Webinars and Online Events Hosted by NERCRCR

- Buck, Peter, and Brandi Robinson. 2023. "NERCRCR Webinar: Local Climate Action Planning—Penn State and Municipal Partners Implementing Together." Presented at the NERCRCR Webinar Series, June 28.
- 2023 Northeast Digital Equity Summit Presentations (see p. 16 for more information about this event, which took place on September 19.):
 - Bergson-Shilcock, Amanda, Kenneth Smith, and Vernelle Mitchell-Hawkins. 2023. "Closing the Digital Skill Divide and Empowering Workers for the Future: Best Practices, Lessons Learned and Suggestion for Improvement."
 - Gallardo, Roberto. 2023. "Digital Equity 101."
 - Halerz Schmidt, Cristy, and Bertram Johnson. 2023. "Penn State Extension's Digital Literacy & Equity Pilot - Key Takeaways and Lessons Learned from Building Community Partnerships and Delivering Basic Computer Workshops with Senior Populations."
 - Leach, Kathryn. 2023. "Year Two Findings from a Cornell Cooperative Extension Digital Literacy Mentoring Program in a Rural Community Resistant to Change."
 - Matychak, Xanthe, Foad Hamidi, Erin Higgins, Samantha Musgrave, and Rob Moore. 2023. "Baltimore Community Efforts Toward Sociotechnical Justice."
 - Ternus, Amber, and Marceline Kanalaupuni-Naff. 2023. "Digital Equity Survey Mapping Project."
 - Welborn, Rachel, and Kenneth Sherin. 2023. "Enhancing Digital Equity: Empowering Communities Through Extension Programs."
 - Slides and recordings of these presentations are available at: <https://nercrd.psu.edu/northeast-digital-equity-summit-resources/>

About the Regional Rural Development Centers

The Regional Rural Development Centers (RRDCs) are regionally focused centers funded by the United States Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) to link research with Extension/outreach in the areas of rural economic development, forming a one-stop-shop connection to the nationwide network of Land-Grant college and university researchers, educators, and practitioners.

Established by the Rural Development Act of 1972, the RRDCs are a trusted source of economic and community development data, decision tools, education, and guidance for the nation's rural communities, and build capacity in the Land-Grant University System to address crucial needs in our nation's rural communities development issues. Learn more at rrdc.info.

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