

STRENGTHENING THE HEART OF CONSERVATION IN THE GREAT LAKES REGION

MICHIGAN CHAPTER OF THE SOIL AND WATER CONSERVATION SOCIETY
ANR MONTH SEMINAR
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ACKNOWLEDGMENTS
TODD SUTPHIN, IOWA SOYBEAN ASSOCIATION AND
CRAIG FICENEC, SAND COUNTY FOUNDATION
MARK BURBACH, UNIVERSITY OF NEBRASKA-LINCOLN
JANE FRANKENBERGER, PURDUE UNIVERSITY
JENNY SEIFERT, UNIVERSITY OF WISCONSIN-MADISON



STRENGTHENING THE HEART OF CONSERVATION IN THE NORTH CENTRAL REGION OF THE UNITED STATES AND MISSISSIPPI RIVER BASIN

SOIL AND WATER CONSERVATION SOCIETY
76TH INTERNATIONAL ANNUAL CONFERENCE
JULY 26-28, 2021

REBECCA POWER, UNIVERSITY OF WISCONSIN-MADISON AND NORTH CENTRAL REGION WATER NETWORK
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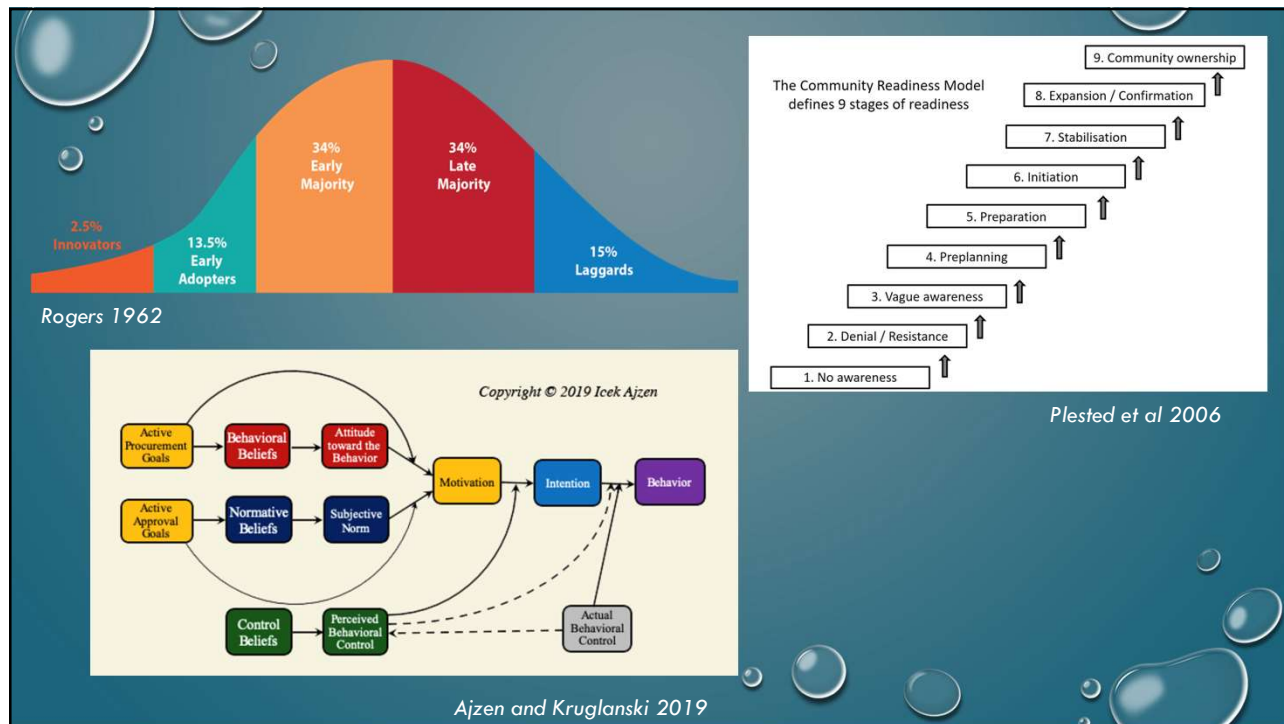
HOW DO YOU MAKE
SIGNIFICANT DECISIONS IN YOUR
PROFESSION? YOUR LIFE?



CHANGE STARTS AND CONTINUES WITH PEOPLE

- RELATIONSHIP BUILDING
- EXPANDING EQUITY
- INNOVATION
- LEADERSHIP
- ORGANIZING, ACCELERATING,
AND EXPANDING ACTION
- NAVIGATING COMPLEX
DECISIONS





CONSERVATION LEADERSHIP

- IT IS THE SOCIAL – NOT TECHNICAL - COMPLEXITY OF WATER PROBLEMS THAT OVERWHELMS WATER MANAGEMENT. (SCHULTZ 2011; ROCKSTRÖM, ET AL. 2014)
- SOCIAL FACTORS (E.G. EQUITY, WATER RIGHTS, NORMS, ATTITUDES, VALUES, BELIEFS, ETC.) ARE OFTEN THE PRIMARY DETERMINANTS OF MANAGEMENT SUCCESS OR FAILURE. (MASCIA ET AL. 2003; FLORESS ET AL. 2015)
- EMERGING WATER MANAGEMENT CHALLENGES DEMAND KNOWLEDGEABLE AND SKILLED LEADERS WITH ABILITIES BEYOND TECHNICAL EXPERTISE (BURBACH, ET AL. 2015; LINCKLAEN ARRIËNS & WHEN DE MONTALVO 2013; MORTON & BROWN 2011).
- MITIGATING WICKED WATER PROBLEMS REQUIRE INTERDISCIPLINARY COLLABORATION, PARTICULARLY FROM THE SOCIAL SCIENCES, TO FOSTER NEW THINKING, BEHAVIOR, AND INNOVATIVE IDEAS FOR MANAGEMENT OF WATER RESOURCES UNDER CONDITIONS OF RAPID CHANGE AND UNCERTAINTY. (JURY & VAUX 2005)

From Burbach 2021

CONSERVATION LEADERSHIP

- **Transformational leadership** (Bass, 1990; Antonakis, Avolio, & Sivasubramaniam, 2003)
- **Champions of Innovation** (Howell, Shea, & Higgins, 2005)
- **Entrepreneurial leadership** (Renko, Tarabishy, Carsrud, & Brännback, 2015)
- **Civic Capacity** (Sun & Anderson, 2012)
- **Boundary Spanning** (van Meerkkerk & Edelenbos, 2014; Williams, 2002)

From Burbach 2021

TABLE 1
Effectiveness of methods for establishing relationships with farmers and landowners.

Method	Don't Know (%)	Not at All Effective (%)	Somewhat Effective (%)	Effective (%)	Highly Effective (%)
Introductions from trusted farmers	7	1	11	40	42
Introductions by trusted conservation practitioners	10	2	19	43	27
Attending meetings (e.g., field days) that farmers and landowners attend	8	1	23	42	27
Targeting opinion leader farmers	6	2	22	39	20
Offering incentives (e.g., soil testing kit)	19	4	26	35	16
Relying on walk-in customers	2	12	38	36	11
Endorsements from agricultural retailers or co-ops	25	2	28	33	12
Recruiting farmers/landowners at community gathering spots (e.g., coffee shops, restaurants)	26	4	26	27	17
Recruiting farmers/landowners at agricultural retailers (e.g., co-ops)	30	4	26	29	11
Newsletters	7	4	51	33	5
Cold-contacting landowners who own critical source areas	18	9	37	27	9
Cold-contacting farmers who farm critical source areas	19	9	37	25	9
Cold-calling farmers/landowners	14	17	38	24	7
Mass mailings to farmers/landowners	7	8	56	23	5
Offering swag (e.g., branded notebook, rain gauge, etc.)	27	19	35	14	5
Targeted Facebook ads	39	16	30	11	3
Billboards	52	13	24	10	2

CONSERVATION PRACTITIONER POLL 2021 SUMMARY REPORT



TABLE 2

Effectiveness of approaches to working with farmers and landowners to establish conservation practices.

Approach	Don't Know (%)	Not at All Effective (%)	Somewhat Effective (%)	Effective (%)	Highly Effective (%)
Building long-term relationships with farmers/ landowners through multiple interactions over time	1	0	0	13	86
Working face-to-face with farmers/landowners in the field	1	0	2	20	78
Cost share programs	1	0	7	34	58
Working face-to-face with farmers/landowners in your office	1	1	12	49	37
In-person field days and workshops	3	1	20	47	29
Working with farmers/landowners on conservation plans	3	2	21	50	25
Working with farmers/landowners on program application paperwork	4	5	26	47	20
Providing technical assistance to farmers/ landowners via phone	2	2	37	49	11
Providing technical assistance to farmers/ landowners via email	4	6	47	36	7
Processing conservation compliance requests (i.e., HEL, wetlands determinations)	20	14	37	24	5
Virtual field days, workshops, webinars, etc.	17	13	47	19	4
Providing technical assistance to farmers/landowners via web conferencing (e.g., Zoom, Webex)	39	14	34	11	2

CONSERVATION PRACTITIONER POLL 2021 SUMMARY REPORT



TABLE 4

Agreement with statements related to the workplace, programs, and interactions with farmers.

Statement	Strongly Disagree (%)	Disagree (%)	Uncertain (%)	Agree (%)	Strongly Agree (%)
Organizational procedures					
It's frustrating when program rules and procedures change from year to year	0	2	7	37	54
High employee turnover among conservation practitioners negatively impacts conservation momentum	0	3	7	47	44
Outreach-oriented					
Conservation organizations should facilitate more face-to-face time with farmers and landowners	0	1	9	58	32
Lack of field staff reduces my office's capacity to get conservation on the ground	1	8	14	36	42
Soil and water conservation agencies should develop stronger partnerships with agricultural retailers	1	5	26	52	17
More effort should be put into outreach to nonoperator landowners	1	5	29	47	18

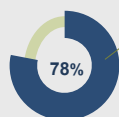
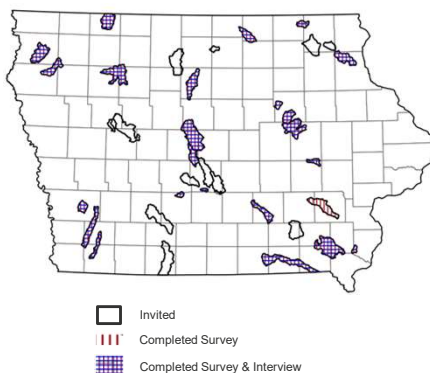
CONSERVATION PRACTITIONER POLL 2021 SUMMARY REPORT



<https://www.swcs.org/resources/publications/2021-conservation-practitioner-poll>

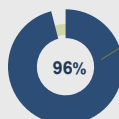
Background – Watershed diffusion

- 32 Project coordinators invited to participate to help identify and quantify the key characteristics of successful watershed projects.



25 Surveys Completed

78% of 32 project coordinators responded to the survey invitation and completed the survey.



24 Interviews Completed

96% of the 25 project coordinators who completed the survey scheduled and participated in phone interviews with Context to share additional insights.

Survey included questions on:

- Stakeholder awareness & commitment
- Coordinator tenure & experience
- Project leadership quality
- Watershed planning
- Collaboration
- Technical/Financial assistance

Results

Three characteristics of watershed projects highly correlated with successful track records of conservation implementation:

- Watershed plan quality**
- Leadership, including especially active farmer leadership**
- Stakeholder awareness and commitment**

Three key strategic considerations surfaced from the research:

- Watershed project coordinators must be supported** – professional development and staff retention
- Watershed plans should identify priorities through mapping and assessment** – to help identify existing and potential conservation practice location
- Watershed project coordinator tasks include social, technical, and administrative duties** – skills in each are necessary for a watershed project to succeed.

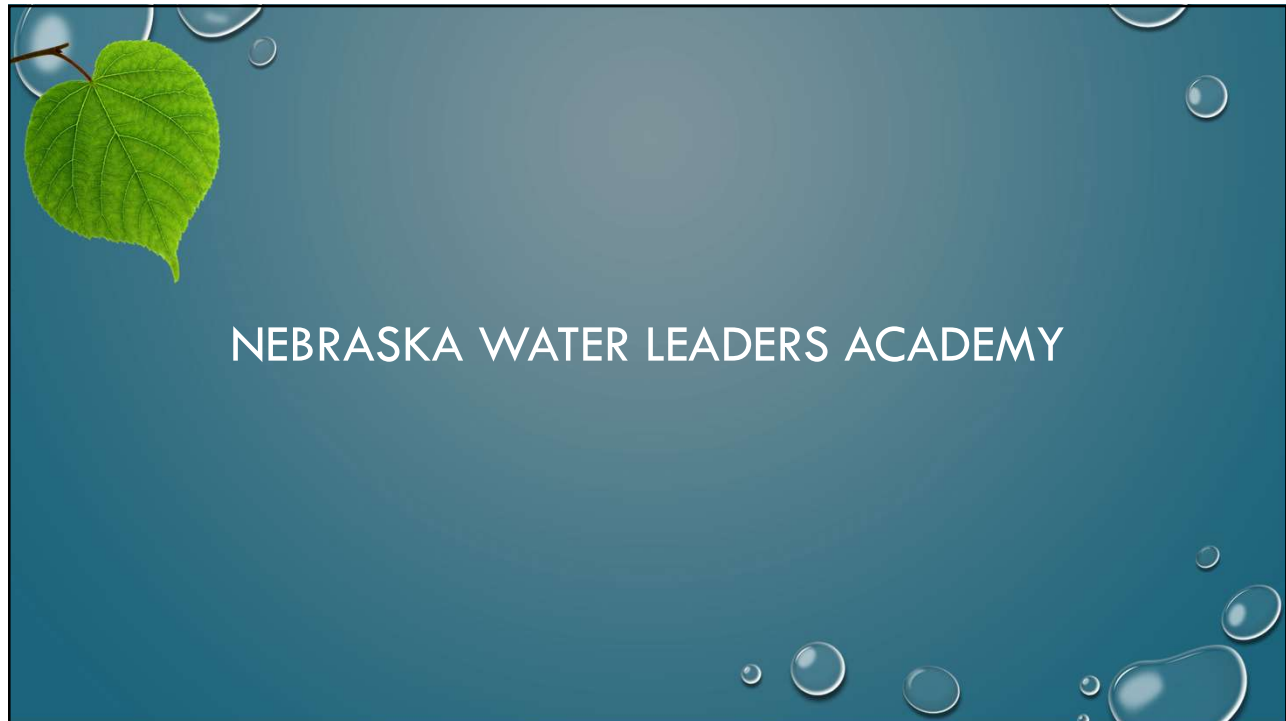
Table 2: Factors Contributing to Increased Cover Crop Adoption

Factors	IOWA					ILLINOIS					INDIANA					
	Clarke*	Adair	Union	Sioux	O'Brien	White	Wayne	Hamilton	Edwards	Wabash	Lawrence	Greene	Jackson	Bartholomew	LaGrange	Steuben
Early adoption of CCs due to more erodible soil (rolling hills)						x			x		x				x	
CC "culture" (i.e., network of growers who use CCs)	x			x		x	x	x	x		x				x	
Programs beyond EQIP and CSP	x				x	x	x	x	x	x	x	x	x	x		x
NRCS and SWCD employees are promoting CCs beyond their regular duties (entrepreneurial staff)	x			x		x			x	x	x	x				
Collaboration between organizations (NRCS, SWCD, Extension, Farm Bureau) and individual entrepreneurs (crop advisors, producers)	x			x		x			x		x		x		x	
Organic produce, pastured livestock and/or smaller-scale farms				x							x				x	
More cattle	x			x											x	

*Note: The counties that are highlighted in blue are the high CC adopters in their respective pairs.

Popovici, R., Bernard, M., Prokopy, L.S. (2020). The social factors influencing cover crop adoption in the Midwest: A controlled comparison. West Lafayette: Purdue University.





Nebraska Water Leaders Academy - Program Details

- Year-long program
- Meets 6 times for two days each (six locations in Nebraska)
- Early to mid-career professionals with wide-ranging interests in water resources
- ≤ 20 participants
- Three curricular pillars – Leadership, Policy/Law, Natural Resources
- Partnership with the Nebraska State Irrigation Association

Nebraska Water Leaders Academy - Objectives

- Develop scientific, social, and political knowledge about water and related natural resources.
- Develop and enhance critical thinking and leadership skills through process-based educational activities.
- Encourage and assist participants toward active involvement in water-policy issues at all levels.
- Integrate multi-disciplinary educational and leadership programs to promote long-term community engagement.
- Challenge traditional paradigms about water resources and facilitate creative solutions to water-resources issues.

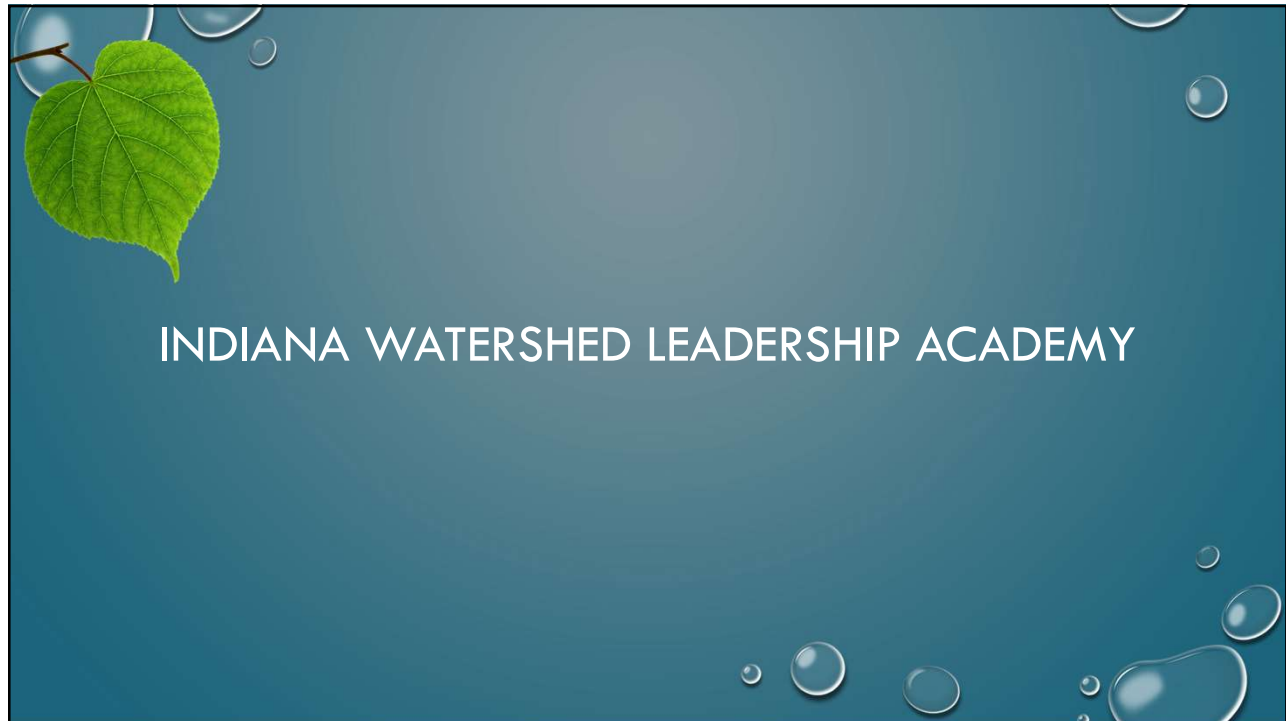


Results - Raters

	N	M	SD	t	df	Sig.	Cohen's d
Transform. Leadership – Pre Academy	350	3.02	.51	7.00	663	.000***	0.58
Transform. Leadership – Post Academy	315	3.28	.42				
Champ. of Innovation – Pre Academy	350	3.20	.48	7.50	663	.000***	0.59
Champ. of Innovation – Post Academy	315	3.47	.44				
Water Issue Awareness – Pre Academy	350	3.25	.63	7.21	663	.000***	0.56
Water Issue Awareness – Post Academy	315	3.57	.50				
Water Issue Engagement – Pre Academy	350	3.05	.75	7.20	663	.000***	0.56
Water Issue Engagement – Post Academy	315	3.43	.61				
Civic Capacity – Pre Academy	196	3.01	.60	5.06	291	.000***	0.63
Civic Capacity – Post Academy	174	3.33	.59				
Entrepren. Lead. Style – Pre Academy	349	3.14	.57	4.96	662	.000***	0.40
Entrepren. Lead. Style – Post Academy	315	3.36	.59				

*** $p < .001$.





Needs and challenges of those leading watershed efforts in Indiana

- Watershed efforts are led by professionals and volunteers with varied levels of experience and education
- Skills needed are broad:
 - Leadership and collaboration,
 - Watershed science
 - Organization and communication
 - Technology
 - Policies and planning
- The Indiana Watershed Leadership Academy was begun in 2006 to meet these needs.



The Academy has been funded by a series of 319 Clean Water Act grant from the Indiana Department of Environmental Management, as well as participant fees, contributions, and Purdue University.

Participant roles and organizations (16 years, 499 total = 31/year)

County SWCD	75
Non-governmental organizations (conservation, environmental, "Friends of" organizations)	71
Volunteers (watershed leaders, lake residents)	49
State agency staff (IDEM, IDNR, Governor's office)	48
MS4 coordinators and city staff	46
Educators (teachers, Extension, informal)	44
County (health, drainage authorities, parks)	42
Private sector	39
Watershed Coordinators (usually funded by 319 program)	37
Students	26
Federal agency staff (USGS, NRCS, USEPA)	22
Total	499

IWLA structure combines face-to-face workshops and distance education

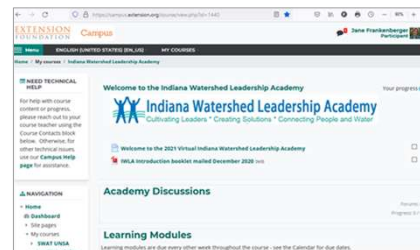
Face to face

- Builds network
- Peer to peer learning
- Preferred learning for most people



Distance education

- Most efficient use of time
- People are challenged to complete assignments which can require considerable effort
- They work in the context of their own watersheds to complete relevant and practical learning.



Outcomes for participants

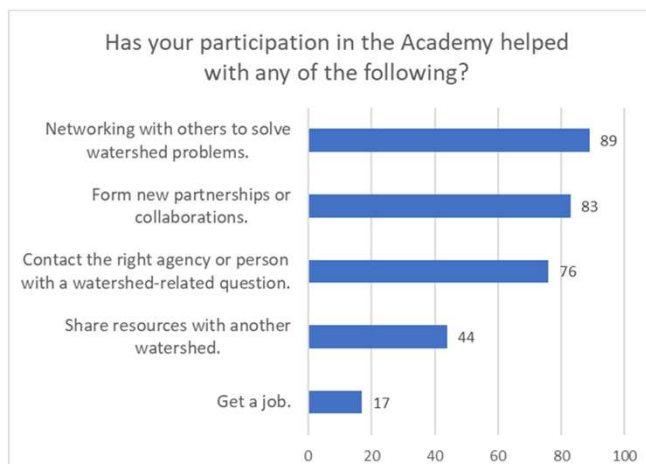
- Strengthened skills for watershed management
- Increased credibility & confidence
- Ability to access and use resources available
- Motivation to complete essential watershed management tasks

"This program turned my confidence and my career around. The people I met and the skills I learned in that short time have helped me create comprehensive programs for my community that are getting people involved and hopefully moving the needle for water quality!"



Outcomes for watersheds

- Survey sent to alumni for whom we have valid email addresses in 2020
- 136 received.



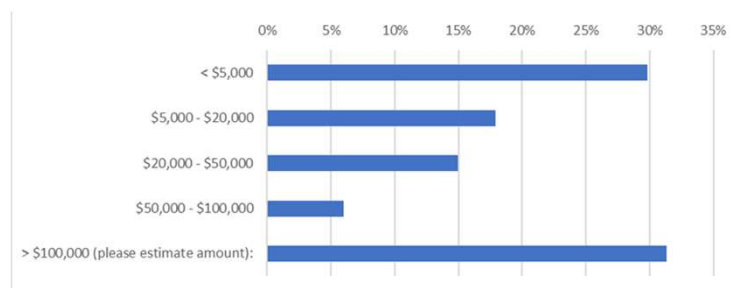
Since your participation in the Indiana Watershed Leadership Academy, have you used what you learned in any of the following?




Other (examples, out of 31 specific comments)

- I have used the mapping techniques and skills in locating sensitive areas when talking with clients and generating proposals for future projects.
- I have engaged stakeholders to complete a stormwater project that established native vegetation, controlled erosion, enhanced aesthetics, and created an opportunity for public education.

Please estimate the value of funds or in-kind contributions received by your organization that stem in part from your Academy experience.



- 9 responded with estimates of \$100,000 to \$500,000
- 5 said more than \$1 million
- Total estimated funding more than \$25 million
- In-kind examples also showed incredible contributions



MICHIGAN STATE UNIVERSITY


MSU Extension
 Michigan Lake & Stream Leaders Institute

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An intensive, multi-session statewide leadership development program, held biennially. Participants develop their technical and people skills in an atmosphere of openness, trust, friendship and camaraderie.


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CHAT

 The Confluence for W...

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The Confluence for Watershed Leaders

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SHOWING PERSONAL FEED 
 SORTED BY LAST ACTIVITY 



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MAR 31


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THU, MAR 31 • 9:00AM CDT
Leadership for Midwestern Watersheds

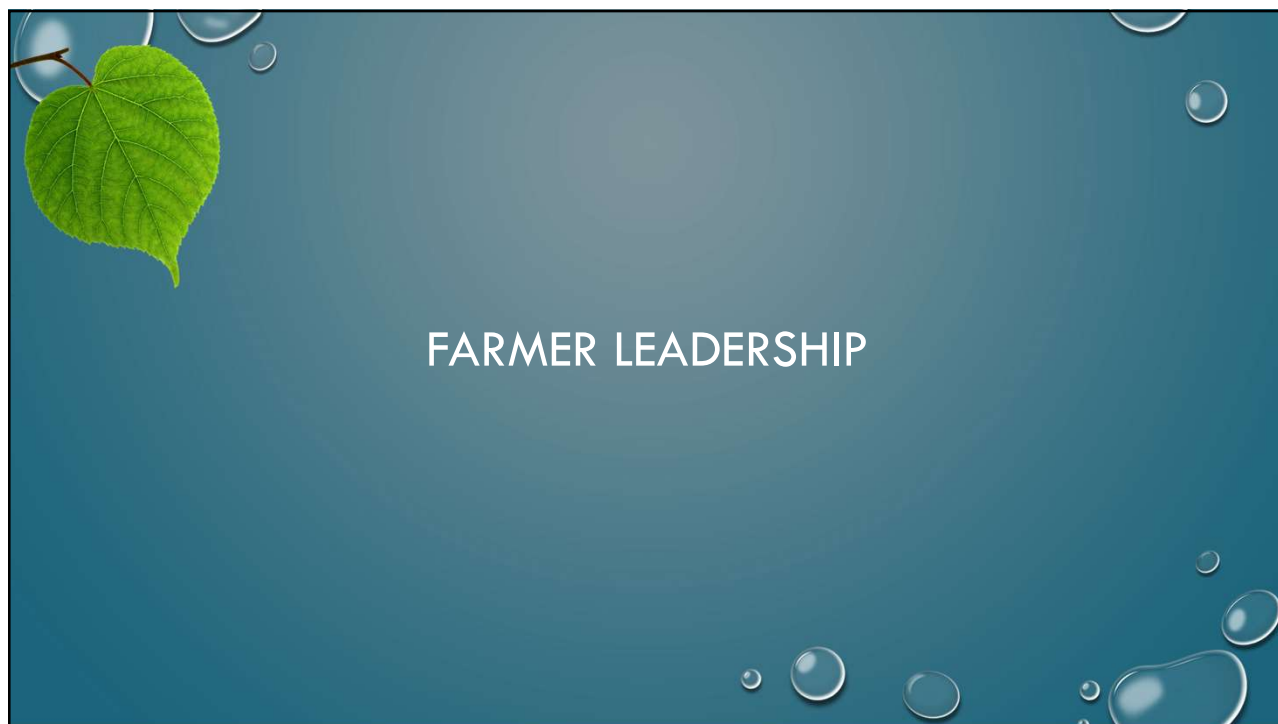

 Local Event



Welcome to The Confluence for Watershed Leaders!
 After you watch our Welcome...


 Jenny Seifert

<https://community.watershedleaders.org/>



FARMER LEADERSHIP



What does farmer leadership look like?

- Lead by example
- Peer-to-peer
- Consultation
- Decision-making

Download *Fostering and Facilitating Farmer Leadership in Watershed Management Projects* at
<https://northcentralwater.org/files/2019/07/MARBreport-7-2019.pdf?x16165>

Inspiring Farmers to be Leaders

Tap Your Potential:
A Training to Grow
Farmer Leadership in
Watershed Management

Partners: University of Arkansas, UW-Madison, Ohio
State University, Iowa State University, University of
Kentucky



Tap Your Potential

A training to Grow
Farmer Leadership
in Watershed Management

*Helping outreach professionals and educators empower
farmers to get more involved in water quality and soil
health improvement in their local watersheds.*

FACILITATOR'S
GUIDE

FARMER LEADERSHIP IN WATERSHED MANAGEMENT
MISSISSIPPI ATCHAFALAYA RIVER BASIN

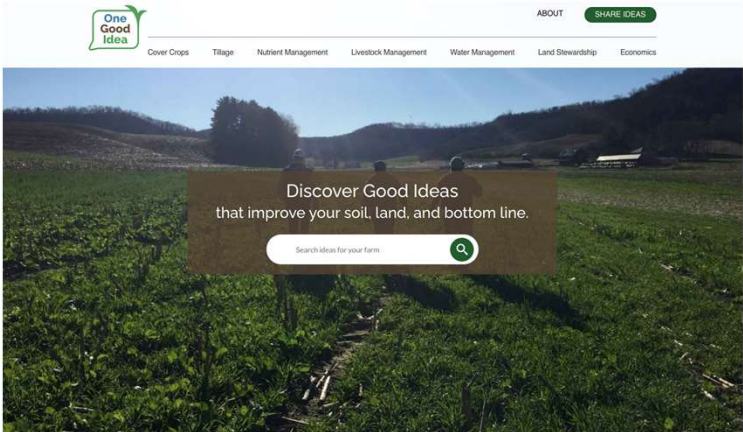


<https://northcentralwater.org/tap-your-potential-training-farmer-leadership-in-watershed-management/>



One
Good
Idea

*This project is supported financially by the U.S. EPA under
cooperative agreement MX – 00D87719.*



One Good Idea

ABOUT SHARE IDEAS

Cover Crops Tillage Nutrient Management Livestock Management Water Management Land Stewardship Economics

Discover Good Ideas that improve your soil, land, and bottom line.

Search Ideas for your farm

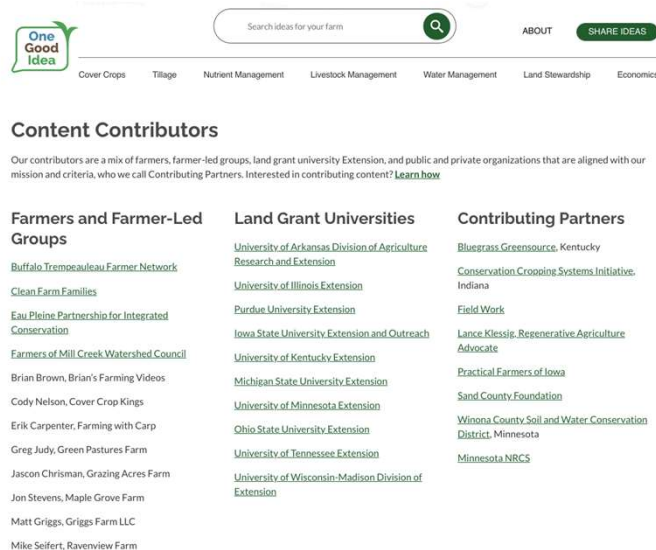
goodideafarm.org

- **What:** Clearinghouse of videos and podcasts featuring farmers sharing their practical ideas, advice, experiences
- **Why:** Facilitates farmer-to-farmer learning about soil and water conservation practices
- **Who:** Product of a collaboration between university Extension and farmers
- **Where:** Focused currently on Mississippi River Basin and Great Lakes states, with expansion potential

By farmers,
for farmers,
backed by
evidence



Nearly all
content is
crowdsourced



The screenshot shows the One Good Idea website. At the top is a search bar with the text "Search ideas for your farm" and a magnifying glass icon. Below the search bar is a navigation menu with links: Cover Crops, Tillage, Nutrient Management, Livestock Management, Water Management, Land Stewardship, and Economics. To the right of the search bar are links for "ABOUT" and "SHARE IDEAS".

Content Contributors

Our contributors are a mix of farmers, farmer-led groups, land grant university Extension, and public and private organizations that are aligned with our mission and criteria, who we call Contributing Partners. Interested in contributing content? [Learn how](#)

Farmers and Farmer-Led Groups	Land Grant Universities	Contributing Partners
Buffalo Trempealeau Farmer Network	University of Arkansas Division of Agriculture Research and Extension	Bluegrass Greensource, Kentucky
Clean Farm Families	University of Illinois Extension	Conservation Cropping Systems Initiative, Indiana
Eau Claire Partnership for Integrated Conservation	Purdue University Extension	Field Work
Farmers of Mill Creek Watershed Council	Iowa State University Extension and Outreach	Lance Klessig, Regenerative Agriculture Advocate
Brian Brown, Brian's Farming Videos	University of Kentucky Extension	Practical Farmers of Iowa
Cody Nelson, Cover Crop Kings	Michigan State University Extension	Sand County Foundation
Erik Carpenter, Farming with Carp	University of Minnesota Extension	Winona County Soil and Water Conservation District, Minnesota
Greg Judy, Green Pastures Farm	Ohio State University Extension	Minnesota NRCS
Jascon Chrisman, Grazing Acres Farm	University of Tennessee Extension	
Jon Stevens, Maple Grove Farm	University of Wisconsin-Madison Division of Extension	
Matt Griggs, Griggs Farm LLC		
Mike Seifert, Ravenview Farm		

#WhatsYourGoodIdea
social media
campaign

Help us make
farmers' good ideas
go viral!

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Twitter: @GoodIdeaFarm

Our audience is the early “middle adopters”

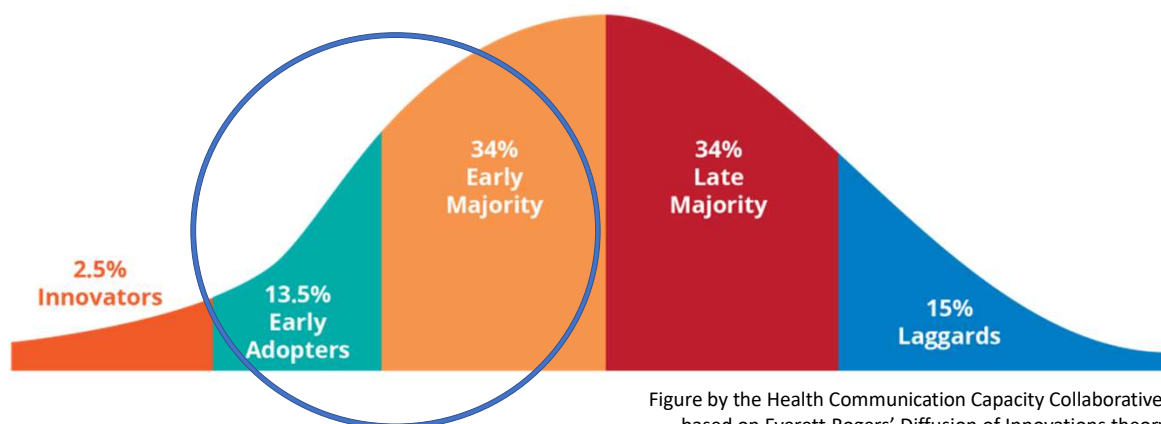


Figure by the Health Communication Capacity Collaborative, based on Everett Rogers' Diffusion of Innovations theory

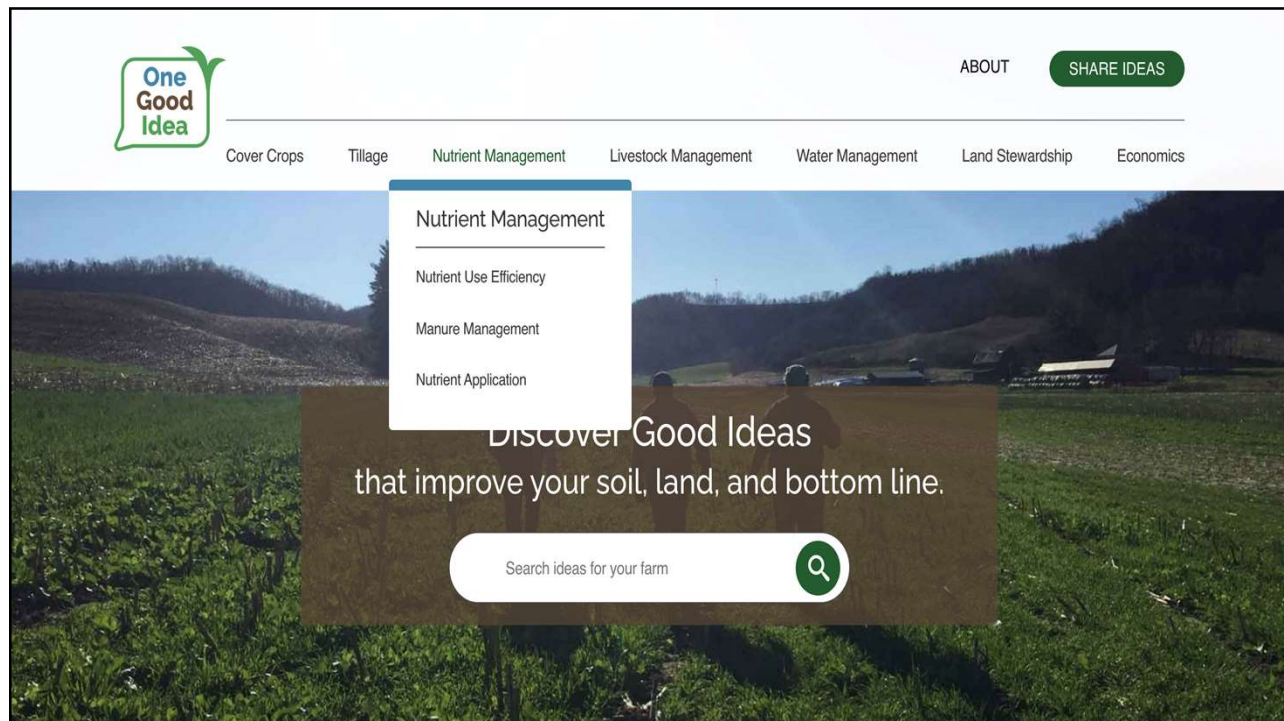
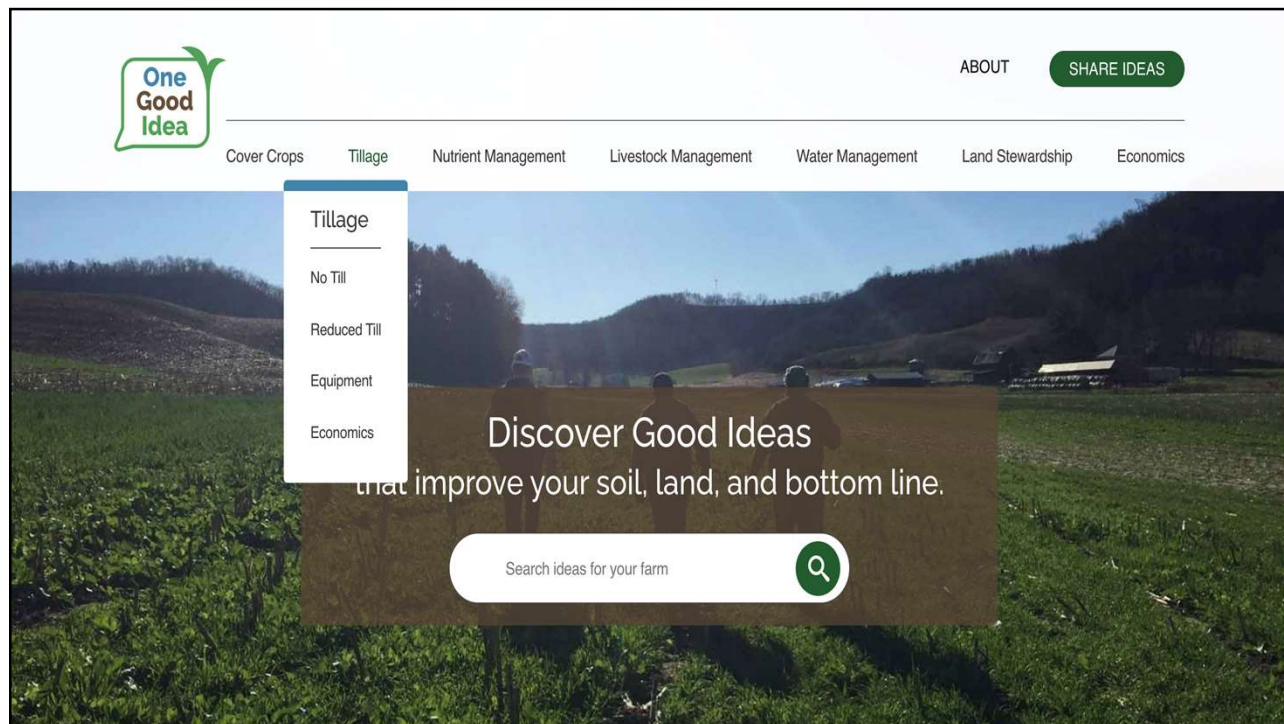
Peer-to-peer communication is considered the gold standard in changing people's behavior.

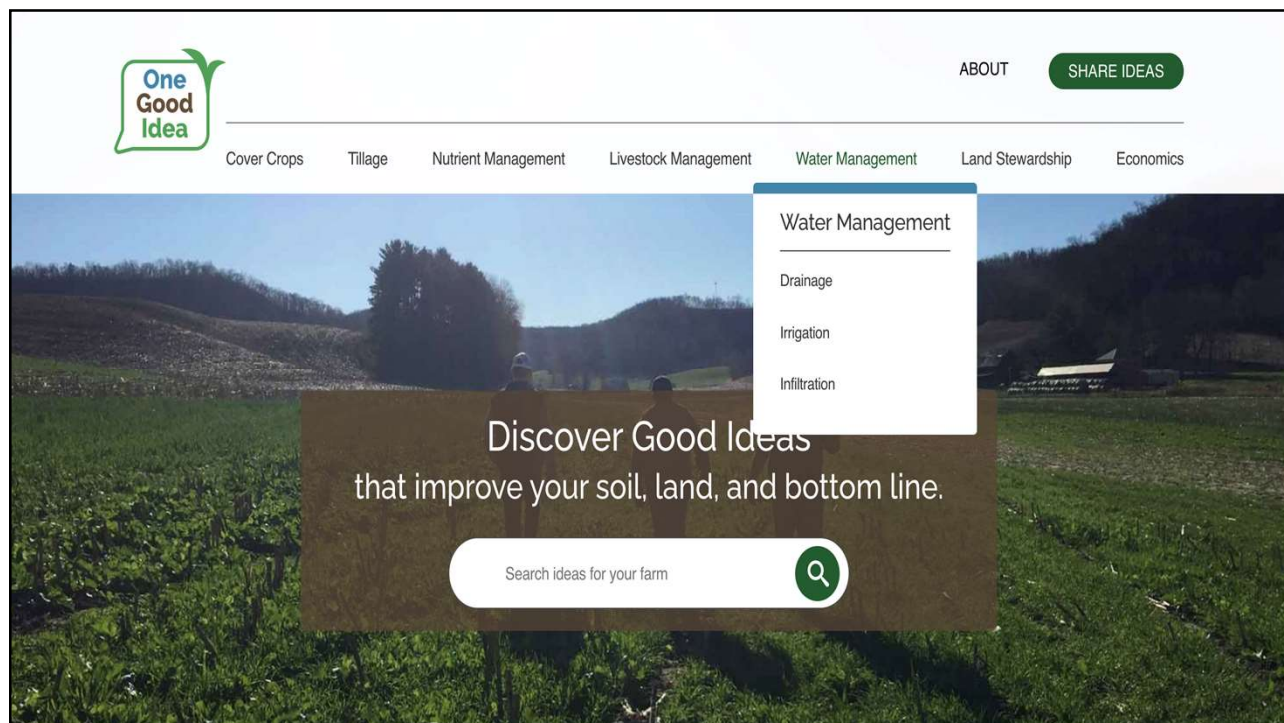
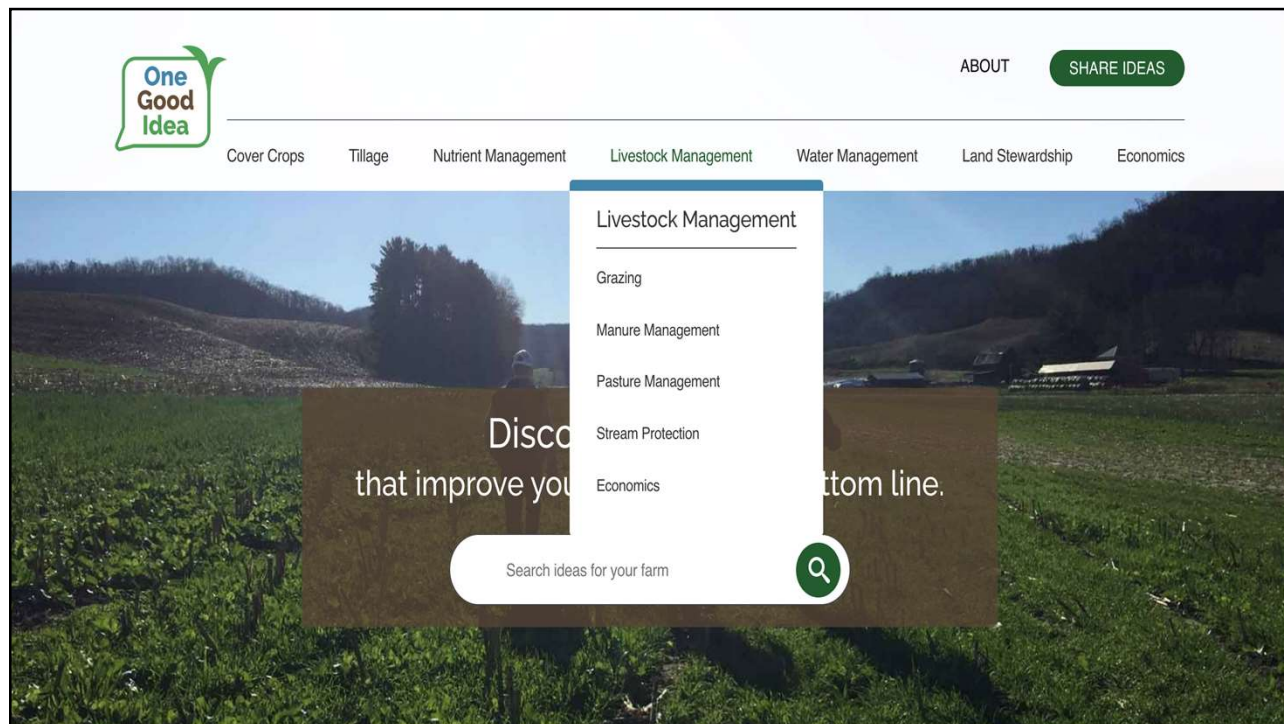


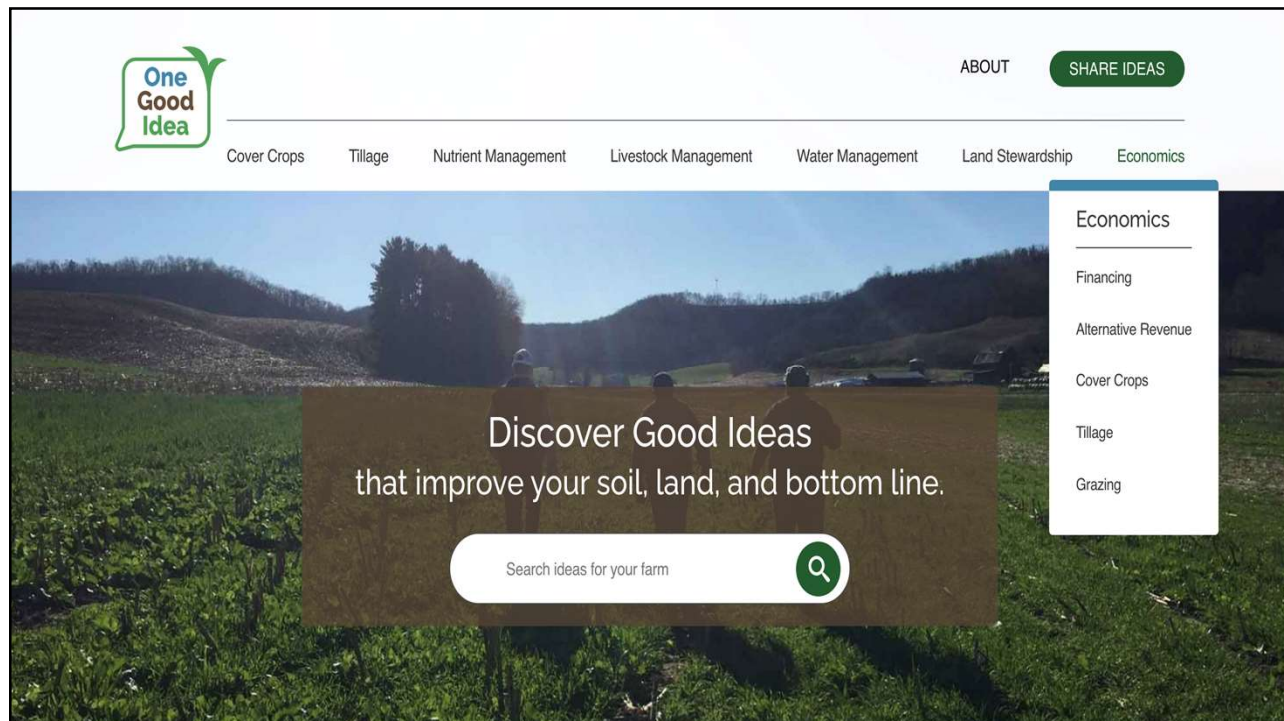
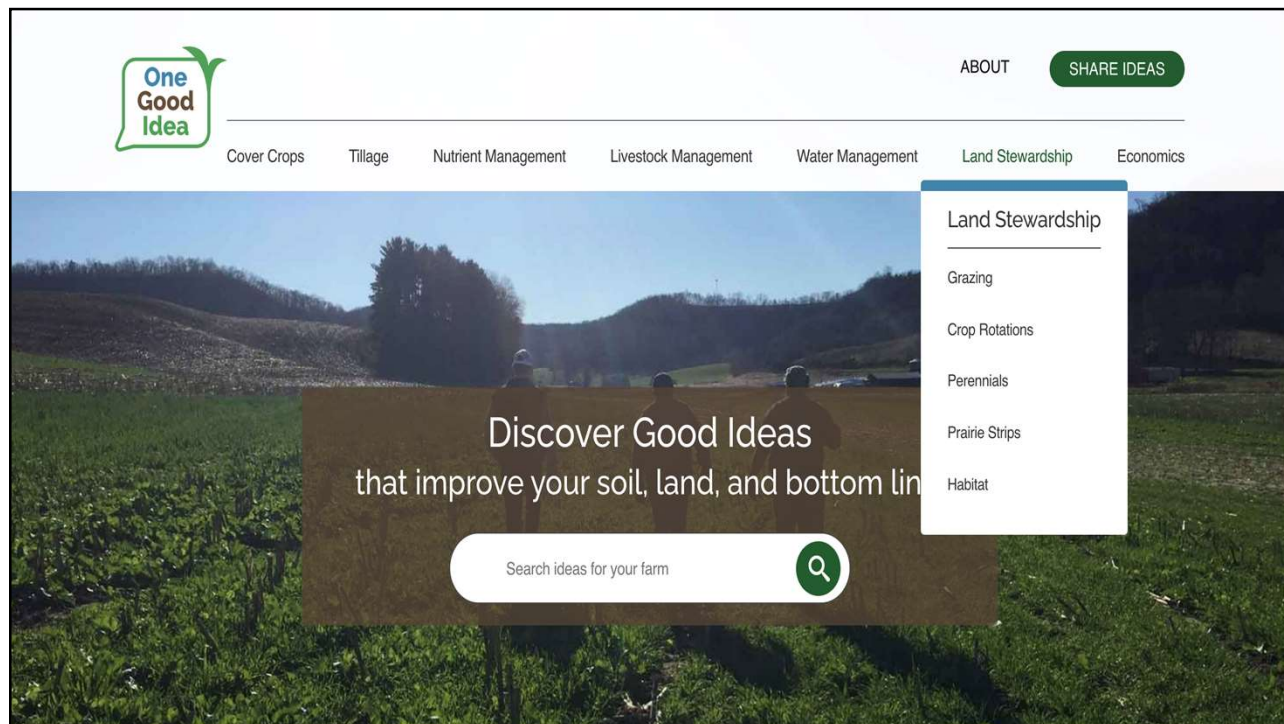
One Good Idea is about farmers and the people who support them working and learning together to create a culture of conservation in agriculture.



The image shows the homepage of the 'One Good Idea' website. At the top left is the logo, which consists of the words 'One Good Idea' in a green, rounded font with a small green leaf icon. To the right of the logo is a navigation bar with links for 'ABOUT' and a green button labeled 'SHARE IDEAS'. Below this is a horizontal menu with categories: 'Cover Crops', 'Tillage', 'Nutrient Management', 'Livestock Management', 'Water Management', 'Land Stewardship', and 'Economics'. The 'Cover Crops' category is selected, and a dropdown menu is open, listing sub-topics: 'Cover Crops', 'Species Selection', 'Seeding', 'Termination', 'Grazing', 'Benefits', 'Equipment', and 'Economics'. The main content area features a large background image of a green field with a barn in the distance. Overlaid on this image is a dark brown box containing the text 'Discover Good Ideas that improve your soil, land, and bottom line.' Below this text is a white search bar with the placeholder text 'Search ideas for your farm' and a green magnifying glass icon.







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community

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Share One Good Idea with farmers and
colleagues, and consider contributing
content



THANK YOU!

