

Compiled by Mark Licht, Department of Agronomy, Iowa State University, Ames, IA

Total acreage of cover crops planted in Iowa in fall of 2018 are preliminarily estimated at 880,000 acres. This estimate is based on the Iowa Learning Farms farmer survey. Final estimates will be available in March of 2019. Cost shared acres through Practical Farmers of Iowa include 1,381 acres (\$55,240) from NRCS CIG grant and 21,755 acres (\$217,550) from ADM/Unilever Sustainable Soy Continuous Improvement program. Additional cost share opportunities include the Iowa Department of Agriculture and Land Stewardship, USDA-NRCS EQIP contracts, USDA-NRCS CSP supported contracts and crop insurance premium reduction (acres and monetary contribution unknown at time of reporting). Outreach efforts on cover crops in Iowa reached over 13,700 individuals through approximately 150 events, including Iowa State University Extension, Iowa Learning Farms and Practical Farmers of Iowa outreach activities. Other cover crop outputs included publication of five refereed scientific articles and two M.S. thesis. For 2018, there were seven graduate students, three post-doctoral research associates, and one research associate conducting research on cover crops and five new projects were funded.

Refereed Journal Articles

1. Acharya, J., Bakker M.G., Moorman T.B., Kaspar T.C., Lenssen A.W., and Robertson A.E. 2018. Use of fungicide seed treatments to compare corn seedling disease complex following a winter rye cover crop or a winter fallow. *Canadian Journal of Plant Pathology*.
<http://doi.org/10.1080/07060661.2018.1506503>
2. Gillette, K.L., Malone, R.W., Kaspar, T.C., Ma, L., Parkin, T.B., Jaynes, D.B., Fang, Q.X., Hatfield, J.L., Feyereisen, G.W., Kersebaum, K.C. 2018. N loss to drain flow and N₂O emissions from a corn-soybean rotation with winter rye. *Science of the Total Environment*. 618:982-997.
<https://doi.org/10.1016/j.scitotenv.2017.09.054>.
3. Korucu, T., Shipitalo, M.J., Kaspar, T.C. 2018. Rye cover crop increases earthworm populations and reduces losses of broadcast, fall-applied, fertilizers in surface runoff. *Soil & Tillage Research*. 180:99-106. <https://doi.org/10.1016/j.still.2018.03.004>.
4. Malone, R.W., Obrycki, J., Karlen, D.L., Ma, L., Kaspar, T.C., Jaynes, D.B., Parkin, T.B., Lence, S., Feyereisen, G.W., Fang, Q., Richards, T.L., Gillette, K.L. 2018. Harvesting fertilized rye cover crop: simulated revenue, net energy, and drainage Nitrogen loss. *Agricultural and Environmental Letters*. 3:170041. <https://doi.org/10.2134/ael2017.11.0041>.
5. Obrycki, J.F., Karlen, D.L., Cambardella, C.A., Kovar, J.L., Birrell, S.J. 2018. Corn stover harvest, tillage, and cover crop effects on soil health indicators. *Soil Science Society of America Journal*. 82(4):910-918. <https://doi.org/10.2136/sssaj2017.12.0415>.

Conference Proceedings

1. Licht, M. 2018. Cover crops for Iowa 101. Crop Advantage Series, Iowa State University Extension and Outreach, Ames, IA.
2. Waring E., Licht M., Juchems L., Staudt A., Helmers M., and Carlson S. 2018. Cover crop impact on crop yield and water quality: Comparing single species to mixtures. Proceedings of the 30th Integrated Crop Management, Ames, IA. Available:
<https://store.extension.iastate.edu/product/15488>

Conferences and Abstracts

1. Berti, M.T., Johnson B.L., Kandel H., Ransom J., Wick A., Ransom D., Ripplinger D., Nowatzki J., Peterson A., Wells M.W., Lenssen A., Patel S., Gesch R.W., Forcella F., and Matthees H. 2018.

CropSYS-CAP – A novel management approach to increase productivity, resilience, and long-term sustainability of cropping systems in the northern Great Plains – Research update. Annual meeting of the American Association for Industrial Crops, 23-26 September 2018. London, Ontario.

Extension and Outreach Bulletins, Articles, and Blogs

1. Becker, S. 27 December 2018. Calculating the Real Numbers Behind Cover Crops. Practical Farmers Blog, Ames, IA. Available at <https://practicalfarmers.org/2018/12/calculating-the-real-numbers-behind-grazing-cover-crops/>
2. Bower, A. 9 February 2018. Shared Learning Calls: Have You Participated Yet? Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/02/09/upcoming-shared-learning-calls/>
3. Bower, A. 19 February 2018. Fool Proof Frost Seeding Legumes in the Small Grain Year. Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/02/19/fool-proof-frost-seeding-small-grain-year/>
4. Bower, A. 21 February 2018. Eight Planter Adjustments for Planting into Cover Crop Residue. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/02/21/eight-planter-adjustments-planting-cover-crop-residue/>
5. Bower, A. 13 June 2018. Five Goals and Five Challenges to Select a Summer Cover Crop. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/06/13/five-goals-and-five-challenges-to-select-a-summer-cover-crop/>
6. Bower, A. 11 April 2018. Field Day Recap: Cover Crops for Corn and Soybeans – Don Elsbernd. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/04/11/field-day-recap-cover-crops-for-corn-and-soybeans-don-elsbernd/>
7. Bower, A. 5 April 2018. New to Cover Crops Before Corn? Steve Berger Shares Tips for Success. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/04/05/new-to-cover-crops-before-corn-steve-berger-shares-tips-for-success/>
8. Bower, A. 26 September 2018. Sign Up for 2018 Small Grains Cost Share. Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/09/26/sign-up-for-2018-small-grains-cost-share/>
9. Bower, A. 16 August 2018. 2018 Cover Crop Directory – Bigger than Ever! Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/08/16/2018-cover-crop-directory-bigger-than-ever/>
10. Bower, A. 18 October 2018. Delayed Planting for Winter Small Grains. Practical Farmers Blog, Ames, IA. Available at <https://practicalfarmers.org/2018/10/delayed-planting-for-winter-small-grains/>
11. Bower, A. 25 September 2018. Stay on the Right Side of the Law When Selling Cover Crop Seed. Practical Farmers Blog, Ames, IA. Available at <https://practicalfarmers.org/2018/09/stay-on-the-right-side-of-the-law-when-selling-cover-crop-seed/>
12. Bower, A. 2018. Corn Following a Cover Crop. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
13. Bower, A. 2018. Conservation and Community. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
14. Carlson, S. 26 April 2018. 3 Steps to Extend Crop Insurance Deadline for Cover Crop Termination. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/04/26/three-steps-to-extend-crop-insurance-deadline-for-cover-crop-termination/>

15. Carlson, S. 17 September 2018. Don't Farm Naked This Fall: Get Paid \$10/A to Add Cover Crops. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/09/17/dont-farm-naked-this-fall-get-paid-10-a-to-add-cover-crops/>
16. Carlson, S. 13 August 2018. Small Grains, Modest Gains: A Pragmatic Approach." Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/08/13/small-grains-modest-gains-a-pragmatic-approach/>
17. Comito, J., B. Case Haub, and M.A. Licht. 2018. Rapid needs assessment and response technique. Journal of Extension. 56(2) Article 2TOT1. Available at: <https://www.joe.org/joe/2018april/tt1.php>
18. Filbert, M. 2018. Economic Impact of Grazing Cover Crops in Cow-Calf Operations. Practical Farmers of Iowa, Ames, IA. Available at <https://www.practicalfarmers.org/farmer-knowledge/research-reports/2018/economic-impact-grazing-cover-crops-cow-calf-operations/>
19. Filbert, M. 8 February 2018. RESEARCH REPORT: Economic Impact of Grazing Cover Crops in Cow-Calf Operations. Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/02/08/research-report-economic-impact-of-grazing-cover-crops-in-cow-calf-operations/>
20. Filbert, M., Bower A., and Ohde, N. 21 February 2018. Wildlife and Continuous Living Cover: What Does the Research Say? Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/02/21/wildlife-continuous-living-cover-research-say/>
21. Filbert, M. 27 April 2018. Field Day Recap: Grazing Cover Crops – Zak Kennedy." Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/04/27/field-day-recap-grazing-cover-crops-zak-kennedy/>
22. Filbert, M. 25 April 2018. Field Day Recap: Grazing Cover Crops – Bill Frederick, Dusty Farnsworth, and James Holz. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/04/25/field-day-recap-grazing-cover-crops-bill-frederick-dusty-farnsworth-and-james-holz/>
23. Filbert, M. 29 November 2018. Join a PFI Grazing Group. Practical Farmers Blog, Ames, IA. Available at <https://practicalfarmers.org/2018/11/join-a-pfi-grazing-group/>
24. Filbert, M. 2018. Putting a Value on Cover Crop Forage. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
25. Gailans, S. 2018. Corn Leaf Architecture for Interseeding Cover Crops. Practical Farmers of Iowa, Ames, IA. Available at <https://www.practicalfarmers.org/farmer-knowledge/research-reports/2018/corn-leaf-architecture-interseeded-cover-crops/>
26. Gailans, S. 2018. Spring-Seeded Cover Crops Ahead of Soybeans. Practical Farmers of Iowa, Ames, IA. Available at <https://www.practicalfarmers.org/farmer-knowledge/research-reports/2018/spring-seeded-cover-crops-ahead-soybeans/>
27. Gailans, S. 2018. Underseeded vs. Mid-Summer-Seeded Green Manures for Corn. Practical Farmers of Iowa, Ames, IA. Available at <https://www.practicalfarmers.org/farmer-knowledge/research-reports/2018/underseeded-vs-mid-summer-seeded-green-manures-corn/>
28. Gailans, S. 2018. The Cash in Cover Crops. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
29. Gailans, S. 2018. Connecting Farmers & Researchers: Tea bag soil health project continues a collaborative tradition. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
30. Gailans, S. 2018. Testing Solutions for Cover Crops in Iowa. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
31. Gailans, S. 11 September 2018. Field Day Recap: Cover Crops and On-Farm Conservation with Dennis Carney. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/09/11/field-day-recap-cover-crops-and-on-farm-conservation-with-dennis-carney/>

32. Gailans, S. 6 July 2018. Field Day Recap: Thinking Outside the Box With Cover Crops. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/07/06/field-day-recap-thinking-outside-the-box-with-cover-crops/>
33. Gailans S. 26 June 2018. Field Day Recap: Wows and Woes of Diversifying with Cover Crops and Small Grains. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/06/26/field-day-recap-wows-and-woes-of-diversifying-with-cover-crops-and-small-grains/>
34. Gailans, S. 16 January 2018. RESEARCH REPORT: Corn Leaf Architecture for Interseeded Cover Crops. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/01/16/research-report-corn-leaf-architecture-for-interseeded-cover-crops/>
35. Gailans, S. 17 January 2018. RESEARCH REPORT: Spring-Seeded Cover Crops Ahead of Soybeans. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/01/17/research-report-spring-seeded-cover-crops-ahead-of-soybeans/>
36. Gailans, S. 4 April 2018. Field Day Recap: Cover Crops for Corn and Soybeans – Josh Nelson & Austin Charlson. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/04/04/field-day-recap-cover-crops-for-corn-and-soybeans-josh-nelson-austin-charlson/>
37. Gailans, S. 5 April 2018. Field Day Recap: Cover Crops for Corn and Soybeans – Mike Jackson. Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/04/04/field-day-recap-cover-crops-for-corn-and-beans-michael-jackson/>
38. Iowa Learning Farms. [43 blogs with a Cover Crop topic tag](#). Blog, Iowa Learning Farms, Ames, IA.
39. Jones, T. 5 December 2018. Field Day Recap: Expanding Conservation with Cover Crops, Livestock and Small Grains.” Practical Farmers Blog, Ames, IA. Available at <https://practicalfarmers.org/2018/12/expanding-conservation-with-cover-crops-livestock-and-small-grains-at-akr-farm-near-dayton/>
40. Kooima, S. 26 July 2018. Field Day Recap: Cover Crops & Soil Health at the Grundy County Fair. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/07/26/field-day-recap-cover-crops-soil-health-at-the-grundy-county-fair/>
41. Lane, R. 5 April 2018. Field Day Recap: Cover Crops for Corn and Soybeans hosted by Clark Thompson.” Practical Farmers Blog, Ames, IA. <https://www.practicalfarmers.org/blog/2018/04/05/field-day-recap-cover-crops-for-corn-and-soybeans-hosted-by-clark-thompson/>
42. Licht M., Juchems L., Comito J., Helmers M., and Carlson S. 2018. Demonstrating Cover Crop Mixtures on Iowa Farmland: Management, Soil Health, and Water Quality Benefits. Armstrong Research and Demonstration Farm Research Progress Report, Iowa State University, Ames, IA. Available: <https://lib.dr.iastate.edu/farmprogressreports/vol2017/iss1/32>
43. Licht M., Juchems L., Comito J., Helmers M., and Carlson S. 2018. Demonstrating Cover Crop Mixtures on Iowa Farmland: Management, Soil Health, and Water Quality Benefits. Northeast Research and Demonstration Farm Research Progress Report, Iowa State University, Ames, IA. Available: <https://lib.dr.iastate.edu/farmprogressreports/vol2017/iss1/32>
44. Licht M., Juchems L., Comito J., Helmers M., and Carlson S. 2018. Demonstrating Cover Crop Mixtures on Iowa Farmland: Management, Soil Health, and Water Quality Benefits. Northern Research and Demonstration Farm Research Progress Report, Iowa State University, Ames, IA. Available: <https://lib.dr.iastate.edu/farmprogressreports/vol2017/iss1/32>

45. Licht M., Juchems L., Comito J., Helmers M., and Carlson S. 2108 Demonstrating Cover Crop Mixtures on Iowa Farmland: Management, Soil Health, and Water Quality Benefits. Southeast Research and Demonstration Farm Research Progress Report, Iowa State University, Ames, IA. Available: <https://lib.dr.iastate.edu/farmprogressreports/vol2017/iss1/32>
46. Ohde, N. 17 January 2018. Frost Seeding Red Clover into Winter Small Grains. Practical Farmers Blog, Ames, IA. Available at <https://www.practicalfarmers.org/blog/2018/01/17/frost-seeding-red-clover-into-winter-small-grains/>
47. Patel, S., Lenssen A.W., Moore K.J., Berti J.T., Gesch R.W., and Matthees H.L. 2018. Integrating oilseed cash cover crops in a corn and soybean rotation system in Iowa. Midwest Cover Crop Council annual meeting. 13-14 March 2018. Fargo, ND. Poster and abstract
48. Patel, S., Lenssen A.W., Moore K.J., and Berti M.T. 2018. Management and productivity of corn and alfalfa intercropping. ASA-CSSA-SSSA annual international meetings, 2-4 November 2018. Baltimore, MD.
49. Plastina, J. and Carlson, S. 9 March 2018. Economics of Cover Crops. Farminar, Practical Farmers of Iowa, Ames, IA. Available at <http://www2.econ.iastate.edu/faculty/plastina/presentations/Plastina-180309.pdf>
50. Practical Farmers of Iowa. 2018. Winter Cereal Rye Cover Crop Effect on Cash Crop Yield: Year 10. . Practical Farmers of Iowa, Ames, IA. Available at [https://practicalfarmers.org/wp-content/uploads/2018/01/18.FC .CC.Winter Rye Effect on Yield Year 10.pdf](https://practicalfarmers.org/wp-content/uploads/2018/01/18.FC_CC.Winter_Rye_Effect_on_Yield_Year_10.pdf)
51. Practical Farmers of Iowa. 2018. Photo Feature: 2018 Spring Cover Crop Field Days. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
52. Practical Farmers of Iowa. 2018. Innovating for Profit in Extended Rotations: Oats, Triticale, and custom machinery on James Asmus' farm. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
53. Staudt, A. and Kaspar, T. 25 January 2018. [*Earthworms and Cover Crops*](#). Podcast, Conservation Chat, Iowa Learning Farms, Ames, IA.
54. Tetrick, J. 2018. Teaming Up to Diversify: Cereal rye finds a good fit during organic transition. The Practical Farmer, Practical Farmers of Iowa, Ames, IA.
55. Worley, S. 27 September 2018. Field Day Recap: Cover Crops + Small Grains = A Perfect Pair for Soil Health and Water Quality. Practical Farmers Blog, Ames, IA. Available at <https://practicalfarmers.org/2018/09/field-day-recap-cover-crops-small-grains-a-perfect-pair-for-soil-health-and-water-quality/>

Videos and webinars

1. Berges, S. 20 June 2018. [*Leaving a Conservation Legacy: How to Include Conservation in a Farm Lease and Document Your Conservation Goals*](#). Webinar, Iowa Learning Farms, Ames, IA.
2. Brown, C. 16 May 2018. [*Cover Crops as Part of the Farm Lease Arrangement*](#). Webinar, Iowa Learning Farms, Ames, IA.
3. Carlson, S. 11 January 2018. Data and Science of Cover Crops. Webinar to NWF Cover Crop Champions. Practical Farmers of Iowa, Ames, IA.
4. Deen, B. 6 February 2018. Red Clover: Still the 'Cadillac' of Cover Crops. Farminar, Practical Farmers of Iowa, Ames, IA. Available at <https://www.practicalfarmers.org/farmer-knowledge/farminar-archive/red-clover-still-cadillac-cover-crops/>
5. Doudlah, M. Cover Crops & Crop Rotations in Organic. 2018 Annual Conference, Practical Farmers of Iowa. Available at <https://www.youtube.com/watch?v=pDpklMafZRI>
6. Ehrhardt, R. 7 December 2018. Grazing Cover Crops with Sheep. Farminar, Practical Farmers of Iowa, Ames, IA. Available at <https://practicalfarmers.org/2018/12/grazing-cover-crops-with-sheep/>

7. Ewolt, R. and Marston, J. 6 March 2018. Planter Technology for Cash Crops in Cover Crops. Farminar, Practical Farmers of Iowa, Ames, IA. Available at <https://www.practicalfarmers.org/farmer-knowledge/farminar-archive/planter-technology-cash-crops-cover-crops/>
8. Helmers, M. 14 November 2018. *Conservation Learning Labs: Evaluating Nutrient Reduction Practice Implementation at the Delivery Scale*. Webinar, Iowa Learning Farms, Ames, IA.
9. Kuhn, K. 19 September 2018. *Benefits of Conservation Planning to Farmers, Landowners and Society*. Webinar, Iowa Learning Farms, Ames, IA.
10. Licht, M. 12 December 2018. *#NoTillb4Beans and #CoverYourBeans: Highlighting Field Performance Improvements and Nutrient Reduction Strategy Gains*. Webinar, Iowa Learning Farms, Ames, IA.
11. McDaniel, M. 15 August 2018. *Decomposition of Tea as a Low-Cost, Scientifically-Robust Soil Health Indicator*. Webinar, Iowa Learning Farms, Ames, IA.
12. McDaniels M. Using Tea Bags to Assess Soil. 2018 Annual Conference, Practical Farmers of Iowa. Available at <https://www.youtube.com/watch?v=u-l9-pNE46U>
13. Practical Farmers of Iowa. Cover Crops & Weed Control. Practical Farmers of Iowa, Ames, IA. Available at <https://www.youtube.com/watch?v=avV2PUcixv8>
14. Practical Farmers of Iowa. 21 September 2018. Fred Abels on Growing Cereal Rye for Silage Practical Farmers of Iowa, Ames, IA. Available at <https://youtu.be/dsunZmNI7oo>
15. Robertson, A. 21 February 2018. *Who Knew? Cover Crops, Corn, and Water Molds*. Webinar, Iowa Learning Farms, Ames, IA.

New Grant Funding Obtained

1. Comito J. Iowa Learning Farms: Building a Culture of Conservation-Farmer to Farmer: Iowan to Iowan, Iowa Department of Agriculture and Land Stewardship. \$366,958. 1 January 2019 – 31 December 2021.
2. Comito J. Putting it Together: An Innovative Approach to Increasing Iowa’s Conservation Infrastructure, USDA-Natural Resources Conservation Service. \$408,463. 1 August 2018 – 1 November 2022.
3. Licht M., Robertson A., Hartzler R., Hodgson E., and Lenssen A. Corn management following cereal rye cover crop with strip tillage and in-row fertilization. Iowa Nutrient Research Center. \$114,822. 2018 – 2020.
4. Robertson A., Licht M., Hartzler R., Hodgson E., Lenssen A., McDaniel M., Moorman T., and Plastina A. Improving cereal rye cover crop BMPs to increase adoption of cover crops by Iowa farmers. Iowa Nutrient Research Center. \$348,422. 2018 – 2020.
5. Robertson A., Lenssen A., and Moorman T. Influence of spatial planting arrangement of a winter cereal rye cover crop on corn productivity. Iowa Nutrient Research Center. \$68,000. 2018 – 2020.

Theses and Dissertations

Name	Date	Degree	Title
1. T. Sklenar	Summer 2018	M.S.	Winter cereal rye and selected brassica cover crops for forage prior to soybeans
2. M. Witt	Spring 2018	M.S.	Variation in Maize Hybrid Germplasm Performance following a Winter Rye Cover Crop

M.S. and Ph.D. Graduate Students

Name	Degree	Major professor	Title
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1.	A. Chen	Ph.D.	A.W. Lenssen and K.J. Moore	Selecting perennial cover crop grasses for reduced competitiveness with maize
2.	S. Patel	Ph.D.	A.W. Lenssen and K.J. Moore	Intercropping winter annual cover crops with maize and soybean and corn-alfalfa interseeding
3.	B. Tow	M.S.	M.A. Licht	Using cover crops to improve soil health while providing grazing for a cow-calf herd (case study creative component)
4.	A. Carlson	M.S.	M.A. Licht	Cover crops effects on soil health, nutrient reduction and productivity in Iowa (literature review creative component)
5.	M. Schnabel	M.S.	M.A. Licht	Corn management following cereal rye cover crop with strip tillage and in-row fertilization
6.	D. Gust	M.S.	M.A. Licht	Cereal rye impact on soybean yield on a Ziegenfuss soil series in southeastern Michigan
7.	E. Waring	Ph.D.	H. Helmers	Influence of cover crop mixtures on nutrient loss in agricultural drainage systems

Post-Doctoral Researchers and Research Associates

1. Bartel C., postdoctoral research associate. A.W. Lenssen. A novel management approach to increase productivity, resilience, and long-term sustainability in cropping systems in the northern Great Plains.
2. Parvej R., postdoctoral research associate. M.A. Licht. Improving cereal rye cover crop BMPs to increase adoption of cover crops by Iowa farmers.
3. Acharya, J. research associate. A. Robertson. Influence of spatial planting arrangement of a winter cereal rye cover crop on corn productivity.

Popular Press Articles Authored

1. Comito J. February 2018. Who owns any creek?. Wallaces Farmer. p.44. Farm Progress, Chicago, IL.
2. Gailans, S. June 2018. Finding Cash in Cover Crops. Wallaces Farmer Farm Progress, Chicago, IL.
3. Gailans, S. September 2018. Tea Bag Test for Soil Health. Wallaces Farmer Farm Progress, Chicago, IL.
4. Gailans, S. December 2018. Grow Your Own Nitrogen. Wallaces Farmer Farm Progress, Chicago, IL.
5. Iowa Learning Farms. January 2018. Assessment card helps keep soil in top health. Wallaces Farmer. p.41. Farm Progress, Chicago, IL.
6. Iowa Learning Farms. March 2018. Lessons learned from a career in cover crops. Wallaces Farmer. p.44. Farm Progress, Chicago, IL.
7. Iowa Learning Farms. May 2018. Cover crop acres rising in Iowa at slower rate. Wallaces Farmer. p.27. Farm Progress, Chicago, IL.
8. Iowa Learning Farms. July 2018. College interns spread water quality message. Wallaces Farmer. p.40. Farm Progress, Chicago, IL.
9. Iowa Learning Farms. August 2018. Spring travels influence conservation goals. Wallaces Farmer. p.36. Farm Progress, Chicago, IL.
10. Iowa Learning Farms. August 2018. Goal made: ILF visits state's 100 county fairs. Wallaces Farmer. p.48-49. Farm Progress, Chicago, IL.

11. Iowa Learning Farms. December 2018. Study: covers reduce nitrates without hurting yields. Wallaces Farmer. p.18. Farm Progress, Chicago, IL.
12. Jones, T. April 2018. N Strategies for corn following cover crop. Wallaces Farmer Farm Progress, Chicago, IL.
13. Licht M. November 2018. Social media campaign to promote cover crops. Wallaces Farmer. p.50. Farm Progress, Chicago, IL.
14. Ohde, N. January 2018. Frost-seeding red clover into winter small grains. Wallaces Farmer Farm Progress, Chicago, IL.
15. Ohde, N. February 2018. No-till, organic and roller-crimper – making it work. Wallaces Farmer Farm Progress, Chicago, IL.
16. Practical Farmers of Iowa. March 2018. New cover crop cost-share program. Wallaces Farmer Farm Progress, Chicago, IL.
17. Practical Farmers of Iowa. August 2018. Cover Crop Q&A at Farm Progress Show. . Wallaces Farmer Farm Progress, Chicago, IL.
18. Teachout, C. June 2018. Interseeding cover crops in extra-wide corn rows. Wallaces Farmer Farm Progress, Chicago, IL.
19. Teachout, C. July 2018. Cover Crops’ Effect on Weed Control. Wallaces Farmer Farm Progress, Chicago, IL.

Field Days

1. ISU Emerging Farmer RNR Workshop, Story County, Mar. 6 = 29
2. Creston Emerging Farmer RNR Workshop, Union County, Mar. 15= 8
3. Women Landowners Field Day, Union County, Mar. 28 = 19
4. Meyer Field Day, Bremer County, Mar. 29 = 101
5. Emerging Farmers Workshop, Sioux County, Apr. 24= 33
6. Marshall Co. Women Landowners Workshop, Marshall County, Jun. 7 = 25
7. Story Co. Cover Crop Field Day, Story County, Aug. 8= 52
8. Lake Geode Watershed Field Day, Des Moines County, Nov. 7 =66
9. Nick Meier Field Day, Black Hawk County, Nov. 13 = 45
10. Dick Lund Field Day, Pocahontas County, Nov. 14 = 23
11. Mike Helland Field Day, Story County, Nov. 15 = 25
12. Cedar Creek Partnership Field Day, Wapello County, Nov. 20 =55
13. Kossuth County Cover Crop Field Day, Kossuth County, Nov. 27 = 49
14. Lower Skunk River Field Day, Henry County, Nov. 28 = 49
15. Clayton County Cover Crop Field Day, Clayton County, Nov. 29= 37

Event Date	Event Name/Description	Location	County	Number of Attendees
3/27/2018	Cover Crops for Corn and Soybeans	Oskaloosa	Mahaska	40
3/28/2018	Cover Crops for Corn and Soybeans	Belmond/Clarion	Wright	25
3/29/2018	Cover Crops for Corn and Soybeans	Story City	Story	38
6/19/2018	Wows & Woes of Diversifying with Cover Crops and Small Grains	Weldon, IA	Decatur	11
6/26/2018	Thinking Outside the Box with Cover Crops	Washington, IA	Washington	71
6/27/2018	Combine Clinic for Small Grains Harvesting	Grundy Center, IA	Grundy	11
6/28/2018	Small Grains, Big Opportunities – Graze, Brew, Harvest, Build Soil	Bedford, IA	Taylor	9

7/12/2018	Small Grains, Modest Gains: A Pragmatic Approach	Janesville, WI	Out of State	93
7/17/2018	Expanding Conservation with Cover Crops, Livestock, and Small Grains	Dayton, IA	Webster	39
7/18/2018	Cover Crops and Soil Health at the Grundy County Fair	Grundy Center, IA	Grundy	40
7/20/2018	Improving Organic Crop Production	Paullina, IA	O'Brien	50
7/30/2018	Conference: Rotationally Raised – Making Small Grains Work	Mankato, MN	Out of State	65
8/7/2018	Weed Control for Organic Row Crops	Jefferson, IA	Greene	125
8/15/2018	Tour WIU Organic Research Farm	Roseville, IL	Out of State	31
8/28/2018	Cover Crop Farmer Experts at the Farm Progress Show	Boone, IA	Boone	4000
9/6/2018	Cover Crops & On Farm Conservation	Marble Rock, IA	Floyd	23
9/10/2018	Cover Crops + Small Grains = A Perfect Pair for Soil Health and Water Quality	Stanton, IA	Montgomery	49
9/22/2018	From Rotational Grazing to Regenerative Grazing	Grant City, MO	Out of State	40
11/13/2018	Making Cover Crops Pay	Waterloo, IA	Blackhawk	55
11/14/2018	Making Cover Crops Pay	Laurens, IA	Pocahontas	20
11/15/2018	Making Cover Crops Pay	Huxley, IA	Story	20

Additional Outreach Events

Hawkeye Power Farming Show, Black Hawk County, Feb. 28 = 28
 Conservation Partnership Day, Polk County, Mar. 12 = 19
 Midwest Cover Crop Council Conference, Fargo, ND, Mar. 14 = 205
 Leadership Iowa Presentation, Franklin County, Apr. 6 = 38
 Cherokee Women Landowners Meeting, Cherokee County, Apr. 17 = 17
 SWCD Conference Keynote Speaker, Albuquerque, NM, Jul. 30 = 425
 Cedar Rapids Water Quality Panel Discussion, Linn County, Sep. 21 = 10
 Women in ABE Tour, Story County, Nov. 26 = 18
 49 Conservation Station Fleet Events, State wide, Apr. 6-Oct. 7, = 5,011

Event Date	Event Name/Description	Location	County	Number of Attendees
1/2/2018	Cover Crops for Better Corn and Soybeans	Iowa Falls	Hardin	40
1/4/2018	2018 Unilever/ADM Launch Meeting and Lunch	Des Moines	Polk	136
1/5/2018	Yankton Seed House Cover Crop Program	Yankton, SD		40
1/11/2018	Pisces Foundation Water Quality Funders Meeting	Washington, DC		10

1/19/2018	Annual Conference Presentation: An Economic Evaluation of Cover Crops in Midwestern Agriculture	Ames	Story	80
1/19/2018	Annual Conference Presentation: Developing Relationships to Implement Conservation on Rented Cropland	Ames	Story	35
1/20/2018	Annual Conference Presentation: Using the SmartMix Calculator to Develop Good Cover Crop Mixes	Ames	Story	69
1/20/2018	Annual Conference Presentation: Learning From On Farm Research: Field Crops	Ames	Story	61
1/20/2018	Annual Conference Presentation: More Sunlight to Corn = Space for Cover, Companion & Cash Crops	Ames	Story	40
1/20/2018	Annual Conference Presentation: Cover Crops and Crop Rotation in Organic Systems Without Livestock	Ames	Story	62
2/3/2018	Iowa Farm Bureau Young Farmers Conference	Ankeny	Polk	90
2/13/2018	AAI Presentation	Des Moines	Polk	35
2/15/2018	NRCS Cover Crop Training	Des Moines	Polk	140
2/28/2018	PCM IL Mtg #1	Gifford, IL		40
2/28/2018	PCM IL Mtg #2	Chenoa, IL		10
3/5/2018	Southeast Nebraska Soil Health Meeting	Syracuse, NE		82
3/7/2018	Twin States Cover Crop Training	Iowa City	Johnson	40
3/9/2018	Cedar River Watershed Meeting	Toddville	Linn	60
3/13/2018	Soil Health and Cover Crop Forum	Manitowoc, WI		80
3/13/2018	Midwest Cover Crop Council Partner Update	Fargo, ND		200
4/3/2018	ISU/ PFI's Cover Crop ROI Study	Ankeny	Polk	10
4/6/2018	ISU's Soils Class	Ames	Story	90
4/20/2018	Unilever Food Strategizing	Englewood Hills, NJ		30
4/27/2018	Soil Health Institute Econ CC	Webinar		20
5/1/2018	SmithfieldGRO RCPP Kick-off	Ankeny	Polk	8
5/2/2018	WFF State Nutrient Reduction Loss Task Force Gathering	Des Moines	Polk	15
5/15/2018	Economics of Cover Crops	Ames	Story	20
5/17/2018	Smithfield Roeslien Energy	Princeton, MO		70
5/29/2018	EDF/ PFI/ ISU Cover Crop Economics	Webinar		3
6/5/2018	This Week in Agribusiness	Dayton	Webster	
6/7/2018	Blue Earth Soil Health Meeting	Blue Earth, MN		10

6/14/2018	Monsanto Agronomist Training	Boone	Boone	50
6/21/2018	Institute for Journalism and Natural Resources	West Chester	Washington	25
6/28/2018	Crane Creek Watershed Meeting with ISA	Tripoli	Bremer	6
7/10/2018	Conservation in Action	Maryland	Out of State	120
7/16/2018	Ag Retailer Training	Fort Dodge, IA	Webster	10
7/17/2018	Ag Retailer Training	Farnhamville, IA	Calhoun	10
7/17/2018	Ag Retailer Training	Wall Lake, IA	Sac	10
7/18/2018	Adoption Accelerator for Low Cost Soil Health Technologies & Decision Support Tools	San Francisco, CA	Out of State	40
7/24/2018	Corn in Context Crop Rotation Conference	Ames, IA	Story	35
7/26/2018	Seed Growers Conference	Omaha, NE	Out of State	35
7/26/2018	Heartland Coop + Growers	Omaha, NE	Out of State	4
8/14/2018	Roger Wilcox partner event	Correctionville, IA	Woodbury	45
8/15/2018	Dekalb County SWCD	Dekalb, IL	Out of State	55
8/23/2018	Tama County Soil Health	Tama, IA	Tama	60
8/28/2018	Cargill Grower Meeting	Pella, IA	Marion	20
8/28/2018	Modern Ag Experience_Cousers	Huxley, IA	Story	
9/12/2018	CCG Crooked Creek Watershed Meeting	Washington, IA	Washington	5
9/28/2018	Osher Lifelong Learning Institute - Compatible Cropland and Conservation Practices	Slater, IA	Story	20
9/21/2018	Gazette's Iowa IDEAS Conference	Cedar Rapids	Linn	10
10/2-3/2018	Local Farmers Host Unilever Team	Central Iowa	Story, Jasper, Boone, Marion	50
10/16/2018	Watershed Academy Presentation	Lewis	Cass	50
10/21/2018	NRCS CIG Workshop	Washington D.C.	Out of State	
10/23/2018	Iowa Cattlemen's Assn. Field Day	Lamoni	Decatur	55
11/1/2018	DMWW Cover Crop Presentation	Des Moines	Polk	25
11/27/2018	Women in Ag Leadership Conference Award Recipient Presentation	Ames	Story	60
11/28/2018	Conservation Infrastructure Conference & Cover Crop Working Group	Huxley	Story	80
12/1/2018	Friend of the Family Farmer Iowa Farmers Union Award Recipient Presentation	Perry	Dallas	100
12/4/2018	US Testing Network Annual Meeting	Chicago, IL	Out of State	25
12/12/2018	Non-GMO Working Group Meeting	St. Louis, IL	Out of State	30
12/18/2018	Grazing Pilot Project Launch	Ames	Story	10

