

# UW-Madison Center for Integrated Agricultural Systems FY20 Annual Report (July 1, 2019 - June 30, 2020)

## Unit mission/purpose

CIAS contributes to five of CALS' priority themes: changing climate, economic and community development, food systems, health and well-being, and healthy ecosystems. Although we are a small unit (currently 7.07 FTE, excluding director) we focus our efforts on leveraging resources to elevate innovation and create the conditions necessary for leaders to emerge. We align CIAS programs and priorities with the college's strengths and utilize the college's expertise for maximum synergy and interdisciplinarity.

**CIAS mission statement: UNDER REVISION** We facilitate the development of diverse and sustainable agricultural and food systems utilizing multidisciplinary, multi-professional research and education approaches. We seek creative production and marketing solutions to challenges facing people involved in small to medium agricultural and food enterprises.

**CIAS vision: UNDER REVISION** Our vision is of sustainable agricultural and food systems that contribute to the ecological, economic and social well-being of families, workers, consumers and their communities.

**Vision for the future: UNDER REVISION** We will plan and prioritize research, outreach and training that span disciplines and departments to further the Wisconsin Idea and cultivate sustainable, healthy food and farms. We will work closely with CALS faculty to achieve this vision, with the aim of increasing extramural funding and scientific publications while staying true to our emphasis on citizen participation.

## Notable research, outreach, and educational achievements

**Training students in interdisciplinary research:** This year we selected projects and implemented our multidisciplinary grant program for graduate student training, to strengthen CIAS's ties to CALS faculty and departments. Each item below includes the PI, position title, project title and funding source, and co-PIs.

- **Akins (PI), Wattiaux, Silva, Picasso, Kriegl, Cavadini** /RA Wells: Evaluation of stockpiling pastures to extend the fall grazing season (CALs 2-yr RA).
- **Picasso (PI), Gutierrez, Dawson, Kucek, S.Smith, N.Smith.**/RA Sandro: Developing high-quality cereals for organic and perennial systems in the Upper Midwest (CALs 2-yr RA).
- **Ruark (PI), Jackson, Wattiaux** /RA Augarten: Soil health and managed grazing (CALs 2-yr RA).
- **Jackson & Gratton** /postdoc Ofarnu: CCROP - LandLab Ecological Modeling.
- **Stevens** /RA Teal, SH Hughes: Lessons from COVID-19: Positioning Regional Food Supply Chains for Future Pandemics, Natural Disasters and Human-made Crises (Federal grant)
- **Wattiaux** /Agroecology PA Gobster: Assist with Dairy Science 471/472/473 (Spring 2021) (CIAS funds)
- **Wattiaux** /Animal & Dairy Science RA Pizzaro: Kernza straw as an alternative forage for dairy heifers (CIAS funds)

**Strengthening ties to Agroecology and other student programming:** With support from the Single Step Foundation, we continued our mini-grant programming to support innovative student summer research. In 2020, nine students working with CALS faculty **Jackson, Picasso, Bell, Silva, White, Gutierrez and Ozdogan** were awarded research grants (~\$1500 - 2000). Working with the Agroecology program and CALS faculty **Michael Bell, Annie Jones, and Bill Tracy**, CIAS staff scientist Sarah Lloyd will teach Agroecology 702 (methods) in the spring semester 2021. We communicated with **Bill Tracy** and **Steve Ventura** to explore additional ways to work more closely with the Agroecology Program. Building undergraduate capacity is also important to CIAS. We are the academic home for F. H. King Students for Sustainable Agriculture and employed nine CALS undergraduates and graduate students.

**Building Grassland 2.0 partnerships:** Four CIAS staff are involved in this ambitious project with **Adena Rissman**

and **Brad Barham**. CIAS played a central role in raising awareness of structural market and supply chain policy issues this spring. We were part of a team that developed the dairy farmer census, linked the project with the Center for Dairy Profitability and Wisconsin's farm organizations, and conducted structured interviews with Wisconsin milk haulers. We also linked this project with our work on cover crops (**CCROP**) by crafting a scope of work for FY21 that builds on strategic alliances between the two projects.

**Developing a network of academics for food freight research:** At the invitation of USDA-Agricultural Marketing Service - Transportation Division, CIAS is leading an assessment of the network structure for food flow in the United States. Partners include CALS faculty **Andrew Stevens** and **Steve Deller** (AAE), Ernest Perry (Eng), and Lindsey Day Farnsworth (Division of Extension). The working group includes faculty from universities and food system professionals in five states.

**Creating financial tools for profitable farms:** In partnership with **Erin Silva** and the OGRAIN project, CIAS created the *OGRAIN Compass* spreadsheet. This decision support tool helps grain producers interested in converting to organic production to navigate the financial challenges of the transition based on projected costs, yields, and sales. CIAS staff are partnering with **Brad Barham** on decision support tools for grass-based livestock operations. CIAS is now collaborating with **Paul Mitchell** and UW-River Falls faculty on a *Hemp Compass* spreadsheet for interested producers to understand the costs and risks of this emerging crop.

**Growing a Wisconsin Farm to College Community of Practice:** Funded through a Specialty Crop Block Grant, CIAS is convening food services operators from six Wisconsin university campuses, including UW-Madison, to support staff and operations to increase purchase of Wisconsin-grown fruits and vegetables. This project has successfully connected campuses with more local vendors and allowed CIAS to be present to offer technical assistance to support campuses through the challenges presented by COVID-19.

**Understanding dairy supply management:** With a seed grant from the Baldwin competition, CIAS upped its participation in efforts to address dairy oversupply. We are working closely with **Mark Stephenson** at the Center for Dairy Profitability and Chuck Nicholson from Cornell. We strengthened relationships with general farm organizations (Wisconsin Farm Bureau Federation, Wisconsin Farmers Union, National Farmers Organization), and participated in #DairyTogether meetings. We convened farmer meetings to methodically address key issues and documented the discussion, and we provided key research and analysis to address knowledge gaps. CIAS partnered with CALS Global and **Stephenson** to feature a renowned German dairy economist **Torsten Hemme**, director of the International Farm Comparison Network ([IFCN](#)) in a webinar this spring, engaging an audience of nearly 100. We are also bringing dairy supply management issues into the Grassland 2.0 project, working closely with **Brad Barham** and Nick Jordan (UMN) to develop a dairy census to be released in early 2021.

**Responding to needs arising from the COVID-19 pandemic:** CIAS continues to convene the Wisconsin Local and Regional Food COVID-19 Response Group to discuss strategies to maintain or create supply chains and markets for small- and medium-sized farms and other food businesses. Additionally, CIAS is offering alternative delivery methods of our training and outreach programs, including online classes. We were able to link our work on food freight to a USDA-COVID-19 Rapid Response proposal (awarded July 2020) that funds an RA for **Andrew Stevens** and a graduate student hourly worker.

### **Outreach activity**

**Beginning farmer schools:** One hundred fifteen participants enrolled in five schools for beginning dairy and livestock producers, cut flower growers, apple growers and urban agriculturalists.

**Conferences and other events:** CIAS staff presented or facilitated discussions at conferences, meetings, field

days, workshops, public lectures, trainings, and webinars that reached about 2,625 people. CIAS coordinated the sixth annual Great Lakes Great Apple Crunch with 1,815,331 participants in six states and led the second annual Wisconsin Chili Lunch reaching 48,454 participants.

**Communications:** CIAS published three reports and CIAS staff and director published twelve academic journal articles. The CIAS website had 64,610 visitors logging 118,461 page views, CIAS social media attracted 4,798 followers, and 4,659 email and website subscribers received regular updates about CIAS and specific projects.

### **Climate and diversity**

CIAS staff formed a subcommittee to explore racial equity as it relates to our work. The subcommittee organized on-going staff learning activities and scheduled a WISELI Bias Training for December 2020.

Much of our current diversity work is focused on Tribal Nations. At the request of the CIAS Citizens Advisory Council (CAC), **Dan Cornelius** and the Oneida Nation of Wisconsin was to host the 2020 summer meeting, but the meeting was moved to an online presentation about Tribal food sovereignty. The online meeting was a success as more than 40 individuals joined the zoom session for Dan's presentation (available online at <https://www.youtube.com/watch?v=WJq4bBpU2sg> ). CIAS worked with the College of Menominee Nation and the Lac Courte Oreille Community College to resubmit a proposal to support education and production training for food sovereignty (resubmission delayed until 2021).

CIAS worked with **Tom Brown** to organize the CALS Our Shared Future event for the last week of March 2020, but it was postponed due to COVID-19. CIAS staff serve on the Academic Staff Assembly ad hoc committee developing a land acknowledgement statement, with the Chancellor and Faculty Senate showing interest in using the statement throughout campus. CIAS is financially supporting and mentoring a Tribal scholar through the Intertribal Agriculture Council and the Inter-institutional Network for Food and Agriculture Systems.