The AgNIC Data Working Group: University Collaboration with the National Agricultural Library

Erica M. Johns, Head of Research Services and Scholarly Engagement, Albert R. Mann Library, Cornell University

Cynthia Parr, Technical Information Specialist, National Agricultural Library, Agricultural Research Service, US Department of Agriculture

The Agriculture Network Information Collaborative (AgNIC) is a group of member institutions "dedicated to enhancing collective information and services...for all those seeking agricultural information."¹ AgNIC member institutions are predominantly US landgrant universities,² but include Agriculture and Agri-Food Canada, and the collaborative has established strategic partnerships with the International Association of Agriculture Information Specialists (IAALD), the International Food Policy Research Institute (IFPRI), and the United States Agricultural Information Network (USAIN).³ AgNIC is a project-based initiative that accomplishes tasks through working groups related to established interest areas, such as agriculture data.⁴

The AgNIC Data Working Group (DWG) started in 2017 as a response to the DataRefuge movement, a campaign to safeguard federal data (particularly environmental and climate data) from politically motivated removal.⁵ The DWG was concerned about continued, long-term access to data sets from the United States Department of Agriculture (USDA), in addition to the climate and environmental data that DataRescue events⁶ focused on saving. These open, publicfacing events, also called "archive-a-thons," were highly mobilized and efficient, with community-sourced efforts conducted at a speed that allowed for fairly comprehensive and fast scraping of endangered government data. Before an AgNIC effort could advance towards rescuing the researcher-identified, highly impactful data sets, the working group found that most data sets were already cataloged and saved within the archive-a-thon framework. Despite the reduced urgency of participating in relevant data rescue activities, however, the DWG realized a need for ongoing conversations around the diverse makeup and management of agriculture data.

The DWG initially wanted to capitalize on existing studies by agriculture researchers, attempting to mine data from the Ithaka S&R interview transcripts on agriculture data publishing venues.⁷

Unfortunately, the varied institutional review board contracts from the 19 participating universities made this effort overly cumbersome. During the mining process, however, the National Agricultural Library (NAL) reviewed both the repositories that accept agricultural data, and agricultural journals' datasharing policies, to determine whether there was an obvious

Ag Data Commons aims to "foster innovative data re-use, integration, and visualization to support bigger, better science and policy;" and the DWG's support for Ag Data Commons includes outreach to university faculty about its webinar series and policies for data inclusion and submission.

home for agriculture data.⁸ NAL found that while many subdisciplinary repositories exist for agriculture data, there was not one clear, all-encompassing, agriculture data repository. The DWG hopes that NAL's Ag Data Commons can become this repository, as it is already cataloging all USDA-funded data and accepting extramurally funded USDA data into its repository. Currently, Ag Data Commons also considers accepting agriculture data funded externally by state offices and other sources on a case-by-case basis. Ag Data Commons aims to "foster innovative data re-use, integration, and visualization to support bigger, better science and policy;" and the DWG's support for Ag Data Commons includes outreach to university faculty about its webinar series and policies for data inclusion and submission—all in an effort to build Ag Data Commons content, educate researchers, and facilitate data sharing.

In late 2017, DWG members from the University of Maryland created a survey to understand the data management practices of diverse and

interdisciplinary agriculture researchers internationally, working with the DWG to review the survey instrument and assist with its distribution.⁹ The University of Maryland team also worked with NAL to create USDA data management plan (DMP) guidance on the NAL website, including encouragement for researchers to make use of data management planning services offered through their university libraries.¹⁰

Another subset of the DWG organized a workshop in 2018 called "Driving Innovation through Data in Agriculture (DIDAg),"¹¹ funded by the USDA National Institute of Food and Agriculture (NIFA). DIDAg, a Food and Agriculture Cyberinformatics and Tools (FACT) Initiative workshop for researchers and librarians, focused on data management and publication for agricultural economics and dairy agroecosystems. The workshop addressed long-term goals and supporting objectives for the two research domains, including the following:

- Shared understanding of existing policies and resources related to public access to data and agricultural data management
- Clear expectations for research data management and publication in selected research domains, both so that researchers can plan for them and so that information professionals can support them
- Improved cyberinfrastructure, training materials, and business models
- A road map for supporting the next generation of data-intensive research in agricultural economics and dairy agroecosystems

Most recently, the DWG has created a reviewer checklist associated with USDA DMP guidelines. Some USDA program officers have vetted the checklist, and the DWG hopes that the checklist will be provided to grant proposal reviewers as a resource, much like the data management planning guidance is referenced in grant application guidelines, in addition to being used as a training tool for researchers.¹² Next steps for the AgNIC DWG is a follow-up to the DIDAg workshop in late summer 2019, issuing best practices for data management within the sub-disciplines of agriculture, and continued training for agriculture librarians in research data management.

Endnotes

- 1. "About AgNIC," Agriculture Network Information Collaborative, accessed June 15, 2019, <u>https://www.agnic.org/about</u>.
- 2. "List of Partners," Agriculture Network Information Collaborative, accessed June 15, 2019, <u>https://www.agnic.org/partners</u>.
- 3. "AgNIC Strategic Partnerships," Agriculture Network Information Collaborative, accessed June 15, 2019, <u>https://www.agnic.org/sites/default/files/partnerships.pdf</u>.
- 4. "Check Us Out and Get Involved!," Agriculture Network Information Collaborative, accessed June 15, 2019, <u>https://www.agnic.org/sites/default/files/AgNIC_JoinUS.pdf</u>.
- 5. "About," DataRefuge, accessed June 15, 2019, <u>https://www.datarefuge.</u> <u>org/about</u>.
- 6. "Archiving Data," Environmental Data & Governance Initiative, accessed June 15, 2019, <u>https://envirodatagov.org/archiving/</u>.
- 7. Danielle Cooper et al., *Supporting the Changing Research Practices of Agriculture Scholars* (New York: Ithaka S+R, June 7, 2017), <u>https://doi.org/10.18665/sr.303663</u>.
- 8. Cynthia Parr, Erin Antognoli, and Jonathan Sears, "How Agricultural Researchers Share Their Data: A Landscape Inventory," *Biodiversity Information Science and Standards* 1, e20434 (2017), <u>https://doi.org/10.3897/tdwgproceedings.1.20434</u>.
- 9. Adam Kriesberg, Richard Punzalan, and Morgan G. Daniels, "Data Practices of Agricultural Scientists: Global Insights" (presented at the USAIN 16th Biennial Conference, Pullman, WA, May 14, 2018).

- 10. "Guidelines for Data Management Planning," USDA National Agricultural Library, accessed June 15, 2019, <u>https://www.nal.usda.gov/ks/guidelines-data-management-planning</u>.
- 11 "Driving Innovation through Data in Agriculture (DIDAg)," USDA National Agricultural Library, accessed June 15, 2019, <u>https://www.nal.usda.gov/ks/didag2018</u>.
- 12. "Guidelines for Data Management Planning."
- © 2019 Erica M. Johns and Cynthia Parr



This article is licensed under a Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <u>https://creativecommons.org/licenses/by/4.0/</u>.

To cite this article: Erica M. Johns and Cynthia Parr. "The AgNIC Data Working Group: University Collaboration with the National Agricultural Library." *Research Library Issues*, no. 298 (2019): 41–45. https://doi.org/10.29242/rli.298.5.