Supporting the Research Lifecycle with the National Agricultural Library - Transcript

Please stand by for realtime captions.

Amber speaker is into our culture and we had another presenter schedule but she had to bow out today. Before we get started, I will walk you through a few housekeeping reminders. If you have any questions you would like to ask Stephanie or if you have technical issues, please feel free to use the chat box. I will keep track of all the questions that come in and then I will read them back to Stephanie at the end of the presentation and she will respond to each of them. We are also recording the webinar and we will provide slides to everyone including a certificate of participation with the email you use. If anyone needs additional certificates because multiple people watched with you, please email us and include the title of today's webinar along with names and email addresses of those needed. You may zoom in on the slides being presented. To exit full-screen mode, go at the top of your screen so it expands and click on the blue return button to get back to normal view. Finally, we will be sharing a webinar satisfaction series with you. We will let you know when the survey is available in the URL will appear in the chat box. We appreciate your feedback after the session including comments on the style and the value of the webinar. With that, I will hand the virtual microphone over to Stephanie who will take it from here.

Thank you, Joe. I am delighted to be here today with everyone at the FDLP Academy. Like Joe said, I am Stephanie and I am the lead library and customer service at the agricultural library and have been in this role for just a short amount of time. Before that, I was at the University of Maryland which is one of the Federal depository libraries and I have some knowledge of what depository library and some of the collections look like from the academic research library side and prior to being an academic library, I was also at NAL as a specialist. Today, I will cover many of the tools and other information services that we have for the research life cycle. So, this is the mission at NAL. It is time for products and researches that have been developed to meet the needs and discover and access and build and preserve all sorts of agricultural data. Much of the information that we provide is based on our collections with billions of items in our role as a repository with funded research. So, I am sure many of you have seen different diagrams with the research lifecycle and this is the one I will use today to frame the structure of the talk. I will be showing different services and tools that we have at every step of the research lifecycle letter open to the public. We can support researchers all across the world to access information and data in agriculture. The objective of the talk today is to introduce these tools and services and help you learn how to conduct or support researchers through each part of the lifecycle by using these tools and services. This is just a quick overview of what I will be covering. Starting with research idea development, when we start the research lifecycle, we are often looking at ideas or we want to explore the background and if we have a research question, we want to explore that information. Any of you that are familiar with NAL are also familiar with AGRICOLA but if not, I will give an overview. It is a database with over 5 million records. We all know the right that information is being created in the past few decades. AGRICOLA is a catalog of collections and libraries and does reflect the holding that we have in the library but is also abstract database that covers many of the core agricultural journals. We have been producing AGRICOLA at the national agricultural library for 50 years. This is actually our 50 year anniversary right now. AGRICOLA contains a wealth of information from scientific research and policy documents and technical reports. Really, anything to do with agriculture and we try to include that in AGRICOLA. This is just a screen shot of AGRICOLA. You will notice that it says the database article citation in the catalog. The cataloging database is our citation database and indexing where we are pulling in content for many publishers and then indexing those. This is an example of what a record will look like. It is also provided by many vendors and if you are at an institution that has AGRICOLA

available, this is the interface right now that we are providing at AGRICOLA through the NAL website. We are actually doing revitalization work or starting a revitalization project so you may see information asking for feedback or if you use the webpage, you might have a request pop up for feedback. We are hoping we can gather a lot more information about what we would like to see happening and then to offer a new and free version. When I was talking about the indexing part, we also produced another product called the NAL thesaurus in this the source has several hundreds of thousands of terms and the descriptors are available in English and Spanish. We have a partnership with several libraries and information services in the Spanish-speaking world. They actually translate English terms that we add every year into Spanish to make sure those terms translate in a way that makes sense of how they are used technically in the Spanish-speaking research community. If there are hierarchal equivalents and relationships. It is used so the terms from the thesaurus are what we use to index articles in AGRICOLA and it is also for many of our information products at the library and many other organizations in addition to the library use terms from the NAL to do indexing and basically it is one of the primary controls. Another source of background information is PugAg. Several of you that are familiar to this information, PugAg will not be new to you. It looks at what kind of content is in there and it is a researchable database of information in agriculture. It is not meant to replace AGRICOLA but to be complementary to it where you can access full text. There are links in between AGRICOLA and PugAg and out to PugAg for full text and then PugAg also has some links into AGRICOLA for certain items. In addition to including full text from a wide range of items, this is also meant to capture the research output of USDA conducted or funded research. So, if you are working with researchers or are a researcher yourself and are applying for funding, we are increasing different grant programs with funded researchers to submit a copy of the journal article and I have a little bit later on with some details about how that would happen. Basically, it will provide access to fund agricultural research. This is just an example of the record. You will see that it has the general metadata that we see in most literature databases and also include some citation metrics that we are pulling in with links into the publisher through DOI. You might notice that there is also API and other organizations with a feed of information so you can use that PugAg API to look at feeds of information. The PugAg contains links to publication and we use the best available text. Many of these are embargoed for 12 months. That means that they will be published and then 12 months later, it will be open. If the publisher does make that text available and open for free with the open access title, it will also be open through PugAg. Another really great source of background research information is the food safety research project database. Food safety research information office is a unit inside of NAL and they are the ones that produced the research database. It tracks food safety funded by federal and nonfederal resources to help coordinate research planning and minimize duplication for research. The research project database has filtering options by keywords and titles or dates. You can also filter results on several different categories on the left-hand side of the page. You will see the URL for that project database here. There is also a research publication feed that is available through the database and it often has a preprint. It has the latest and most recent research and often things are added to the database. It has over 200 journals that are included and you can get beads of information from this by the different journals or the subject that you would like. All right, one other service that is available for researchers that is related to background research is the animal welfare review training. There are actually some dates of training that are open right now for registration. These trainings are offered by a group in the library called the animal welfare information center and they are usually a day and a half in person workshops but have now been modified to be available virtually for the course of the day. The registration is free and the workshop covers events that have led to the animal welfare act. It covers information requirements as they pertain to scientists and covers alternative concepts. These are different ways to have research that is done with animals and finding alternatives. It also covers several different databases in building searches related to the strategies and how to run them. You can see there is little bit of information and

in addition to the synchronous training that is offered on certain days, there is also an asynchronous online version of the workshop that is offered in collaboration with Oregon State University. If you know a researcher that might like to attend this but are not able to extend on the data that is offered as a live training, there is this workshop available online. In addition to the trainings that are available, they do offer customizable training and these can be anywhere from one hour to three hours long. Let's say you have graduate students in the animal science department that need specialized training for animal research, the can provide that training. Since we are also used to doing these things virtually, it is easy for them to set up an online version of the training and offer that. All right, that brings us to the end of some of the tools and services we have for background information. Now, I will talk about some research planning that we offer. One of the key areas that we focus on at NAL is data in agricultural data. We also offer a data management. Some of you might be involved with some efforts but it is really important that we see that many times data management skills are not something that researchers have been trained in. Often times, data management is a little bit of an afterthought in the research process or maybe that is given to a graduate student rather than being done directly by research. This can lead to data loss and all the way from technical failures and human problems to the media degrading over time if data is not preserved correctly. Also, one thing that is not listed that I know that happens is someone in your research group has the data on their computer and then they leave or you lose touch with them and you lost the data. Having a data management plan for your research project is really important to help overcome some of the data management challenges. So, a plan helps lay out what information you will be creating and who is responsible for it. It is not a very in-depth document. Most plans are just a couple pages long. It is something that you should be able to skim and it should be very concise. It is kind of an internal document as part of the research and not something you will generally be publishing although you do need to submit them sometimes if you are doing a grant proposal. It says why would you want to create one and you might be applying for funding in the funding project is requiring a data management plan. Another reason could be that you are doing a project that is a public access project and maybe it is federally funded or other kind of mandates to make data and information publicly acceptable. Also, we want to make sure that we are managing our data properly so that in the future of our research and even if we are not making it open to the public, us as researchers want to make sure that the data is findable and reusable to ourselves and others in our smaller research. So, there are a few things about what you should put in your data management plan and the type of data you will be collecting. Do you have a specific software you are using and it talks about where you will store your data and how that will remain in if we are going to share and provide access to that and if it will be somewhere openly available where people have to request it individually. Who in the research group is responsible for this and how will this be monitored and reported? One thing I want to note is we have a special service for data management consultations at NAL. The cabbie got is that researchers who qualify or can take advantage of the service must be applying for a source of USDA funding. They don't have to be affiliated but they do have to submit a grant or to have publicly accessible research there USDA. There is a webpage that is listed that provides examples of data management plans of agriculture. That can be used to draft an initial data management plan and we also have tools that are listed on the website as well that are templates to help with the data management plan. Once that has been drafted, that can be sent in to the main contract and we will have the librarians do the data management planning and review those and respond to that. Now, we have gotten to the point in the research lifecycle where we are conducting the research in the lab and the field or any other way that we are assessing our research. One thing I want to mention is we have several domains and data applications that are available through NAL. One is the federal lifecycle comments and that is several that are around the assessments. People that are doing research in lifecycle assessments are often using and reusing different data sets to build their model or build the analysis that they need so they are often very interactive. Another workspace we have is the genome research workspace and people are

submitting genomes into the workspace and annotating the data and people are coming and sharing this with an interactive data workspace. You also have a Geo data workspace and collection of geographic data so you have researchers that are using GIS and this might be good for that data. We also have research in a source called food in a central. Some of this is compiled by our nutrition researchers and this is a really cool product because a lot of people build applications on this data Central Avenue can see there is information on getting the API downloading data so many people have built research tools or other interactive things based on the food data. There is additional content and I am trying to think of all the different elements but there are different elements related to food in here that are compiled by researchers at USDA and other partners added to that data. All right, in addition to research that is a little bit more virtual or can be done with electronics information, we also have opportunities for people to do research in our collection. Right now, the building is closed and the collections are close. We do have documents of what is going on but during you know, regularly operating times, we had a huge collection of materials and we are one of those congressionally designated depositories of U.S. government documents in agriculture. We have a huge collection of agriculture and any related disciplines of government documents at NAL. So, I have one slide that shares some of the different research or books or other things that have been created using items from the USDA collection and one is a digital collection and I think this is the Illinois society where they have a digital newspaper collection and use some of those to fill in gaps or titles related to only agriculture in that collection. They can have a microlpidoptera website and there are different types of culture and refrigeration in freight trains and all sorts of research have come out of materials from the collections that researchers have used. We welcome people to come visit that or use our collections for support research. In addition to our regular collections, we also have a special collections and this includes the manuscript collections and personal papers or rare books. We also have a ton of different objects like different types of sheep wool in different types of instruments. We have photographs, posters and really cool posters and many have been digitized. Some are almost propaganda about healthy eating and especially different times and things like that. There are great posters in the digital collection and as you can imagine, many people like to visit the library to do research into these individuals or types of materials. Here is an example of different books that have been published based on research in the special collection. We have a huge collection with the study of phone repairs and we have illustrations and watercolors that were done as it was released before typography was available. Researchers can use that and we also have stuff on democracy and individuals that were policymakers or impacted different parts of policy and government. So, those collections are open. You can see something about history or production so we do have many collections that are important for individual species or geographic regions depending on which researchers or manuscript collection we have and where it is located. So, after you have completed your research, we get to the part of the research lifecycle where we are doing our writing and publishing. We have a ton of more services as most libraries have to support individual services but I did want to talk about a few things we have that are open to the public. One thing is that in most of the databases, we have information about how to sites and records and also downloading or exporting that information. At the beginning of my presentation when I was talking about those pieces of background information, researchers can capture the records and when they get to the manuscript drafting phase, they are able to appropriately cite what they have collected. They can use the citation manager or whatever source they have to manage that. Also, our special collection has a guide to populate citations. Many of the images that we make available, there are still questions about copyright and reuse of that for different manuscripts. Often if they are writing about, we have guidance on that. If there government produced images or if there are images from different collections and what the copyright restrictions might be. There is also examples of how to do sightings of some of these collection materials and often it can be challenging to look at how to cite special items from manuscripts or other special collections. There are some citation examples as well. All right, the next section we will

talk about is the dissemination and preservation part. After our research has been drafted and submitted and then we want to share what we have published broadly and preserve that so that other people can access it and get that information. We have two tools that I would like to talk about a little bit. One is PugAg which I mentioned earlier and also the agricultural data. That includes information that is created by USDA and also funded by USDA. If you are working with individuals or are a researcher and have been funded by USDA, we would like to get the article or item that you have submitted to be included. Right now, we don't have a very automatic process with those materials to be collected so it is somewhat voluntary but we just have it set up now where you can email us the manuscript and it is always really helpful for us if there is a DOI included with the submission. I am using the word manuscript because we can't always have the version of record or the publisher version included in the database. Often, we want to provide the accepted manuscript which is the version of the article that has been accepted for publishing but doesn't have all the formatting and copy editing and other things to create the version of record that is finally published in the scholarly journal either online or in print. In some cases, there are open access and other versions of record that are open for everyone. If the publisher does provide free access through those records, that can become the best available version and we will think about that. Depending on what the agreement and licensing is, when the main script is cemented and published, that will depend on which version should be submitted. If you have questions, I shared the email address and you can submit any questions to the general NAL and we will make sure it gets to the right people about submitting research. So, we would be delighted to have more information submitted to PugAg to keep that information available. Other places we have where we share information is the ad data comments. We do have a catalog and data repository available in the data comments. The catalog part is data sets that can be reusable for anyone in the catalog points to data sets in agriculture's that are not necessarily hosted at NAL but maybe they are funded by USDA and it will be submitted to another repository. We like to have a record of that in the catalog regardless of whether or not we post it in the data repository. If there are not data repositories available and this is a USDA research funded project, we do have a space for people to submit data and basically what we are offering to researchers is to either submit a record of the research in a third party repository or submit the whole data set to us and we will make that available for reuse and create a cataloging record for that as well even as it is posted. We work to ensure that it meets the fair data standards. I believe I put that in another slide that talks about what fair means but we have a process to meet those standards. There is an actual data submission manual and several videos that have been recorded on training people on how to prepare for submission and how to add different parts of metadata when they submit their data. This provides a little bit of information on this graphic about if there is a suggested data set citation and if we have links or published articles or manuscripts. We have information to collect DOI and those things related to the data. Any other source data could be reusing data from other sources. We can capture that and in addition to other discussed metadata with what is created. That gets us to the end of the research lifecycle and the tools that we have. If you have any questions related to the tools and services that we have available, we have a chat service or you can send us an email using the form with the URL and we are happy to answer any questions right now or in the future. Thank you for your time and attention and I am happy to take questions.

Thank you, Stephanie. Great webinar. I learned a lot. Any questions for Stephanie? Here we go, Lauren says -- I lost it there for a second. Excuse me. Sorry, for some reason I lost this chat. One second, please. Here we go. Lauren says does this do any systematic tracking or research publications that site NAL collections? Any tracking of historic or scientific research using NAL collections?

We have done a little bit of that in some of the images that I shared of books and things like that have been compiled through that process. We recently subscribed to the dimension database which tends to

have pretty good metrics and analysis tools within it. So, we are hoping that we can use some of that to help us but one of the difficulties is that a lot of people do research in our collections and they are not publishing scholarly research. It might be popular books or articles and I know one of the Washington Post authors use collections and materials for articles which of course are very popular and have a lot of impact but we don't necessarily find them in and were research database. We do have a little bit of a challenge with that and we have spent some time thinking about this but that is something that we would like to think about more. Maybe we would like to partner on that but we would be open to that conversation.

Okay, thank you. Gina asked if you get any questions from industrial researchers.

Assuming the companies, the answer is yes. We get quite a range of questions in our reference services and depending on the scope of the questions, we have library and second do background research and if it happens to be sometimes there are new companies that are trying to do some research, without really collect reports or anything like that but we do have some background information. Sometimes, let's say someone wanted to make a supplement and they wanted all research that we had in the whole collection, we can put together a short bibliography on questions like that to help but we don't really have a service for higher like a research service geared towards commercial research in that way. I hope that answers your question and if not, you can follow up and I can try to clarify.

Thank you, Stephanie. Lauren made the question that or the comment that I will follow up. Any other questions for Stephanie? I assume that is regular business hours.

Yes, that is offered from 8:30 until 4:30 p.m. and this is a pretty new service for us. We just launched it in February. Obviously, with the library itself being closed, we didn't have a way to connect with people immediately. We can have a conversation with them and it took us a little bit but we made it a priority to get it up and running. Things seem to be going well.

Thank you. Here is a question. Is there information for people that want to import or import agricultural items.

We do help provide that information that is a part of USDA that is legislatively mandated on that. That is on the health section service and hopefully I am getting the right words for the acronyms. That is with people that are doing importing and exporting and there are different licenses that are needed and some things that are dependent on the country of origin and if they are importing or the country they are going to if they are exporting. We end up referring those questions to different helpdesk's to get more detail.

Okay, thank you. Any other questions for Stephanie? Would this apply to any disciplines?

I would say many disciplines have federal funding that they are often using but even now, some of the larger private funding foundations, they are looking at the request for proposals. I know we have that National Science Foundation and the Department of Energy. They are all asking for data management plans as part of those grant packages. Usually, it doesn't have to be long or be a huge part of the submission but it is just a couple of pages this is a new requirement and maybe they didn't have a great data management plan or they weren't sure but they may have gotten feedback that the data management plan was a part of the proposals that are submitted. They might know that the data management plan is something that they were not strong at in the past so we do have that service to

review the data management plans and make suggestions or maybe ask questions that you had not thought about as part of the data management.

Thank you. I am sorry for the background noise. I have another application that is covering my mute button so I apologize for any background noise. Any other questions? We have a little bit of time so we have time for questions. The food data center, I was trying to research the foods that had carbohydrates and then rank them and stop eating them. With that center help me out?

I was going to say for your specific thing, I am not exactly sure if the data is available that way but you could download it and look at it. I explored it a little bit but I haven't done a deep dive into the data. I know there is a data source and they might have better functionalities for sorting the top ones but what you can do is you can put in all sorts of data and if you were using any kind of re-tracking apps, you can put in whatever you are eating and it will say potatoes and skin on or skin off and there are some name brands so it might be potatoes or serving size and get the data in different formats that can be in 100 grams or serving sizes and it will tell you how many carbohydrates there are.

We deftly have to check that out.

Yeah, it is pretty cool and a lot of people are doing recipes. Maybe you are creating a recipe and you aren't sure what the calories are, you can come and look up the calories for different serving sizes or different amounts.

Great, thank you very much. Jen says you work together for agriculture and I don't know exactly what you mean by that. Getting a shout out here, excellent webinar.

Great. I don't remember which slide I was talking about. I know we have several partners in Spanish-speaking countries that help us with the terms. We have thousands of new terms with new technical areas in agriculture. Those of you that might have more knowledge with language and understand that you can't translate things like one-to-one all the time. That term was used technically and that could be different. That is why we have partners that help us translate this into what terms are used in Spanish to mean the same thing.

Janet says that can translate to Spanish.

You can only build subjects on terms. Okay, I understand that.

I do feel like there tends to be an international scope and even though we are focused on structuring outputs at USTA and USDA funded things, that is not the only contest we have. We have index journals worldwide and a ton of content from other countries and we have a lot of materials with that collection and historic material. When government documents used to be printed more, we had a huge exchange program and we had agricultural departments in other countries for their government research documents. We acquired a huge body of international agricultural information that way. Now, with things being published electronically, we don't have that program anymore but a lot of other foreign government information is available on the Internet that anyone can access. We have collected a lot of that.

Thank you. I am supposed to stop at 3:00 so we still have a little bit time for questions. Relating to AWIC, we have a webinar with them on June 23rd. Please come back for that one.

Yes, one of the reasons I put that training at the beginning when we were talking about that background research is they focus a lot on literature skills and of course, they do the training hopefully to build competency related to animal welfare. They are still transferable through different types of research. As they offer the training, it is usually more targeted towards students or people that have projects that are reviewed by different rules and bodies at institutions. The literature searching skills that they are talking about can be used across that research life.

Great. Jamie put that satisfaction survey in the chat box. This is an easy to search site and it will be right there. Any last questions? We are getting down to the end and this has been a fantastic webinar. I have learned a lot and I'm sure you have too. Don't forget our upcoming webinars. We have one coming up this Thursday. Please come back for that. That is taking care of grandma and caregivers. That is another good one.

I just wanted to reiterate that I am working across several services that we have across NAL and if you are thinking there is a service that we don't offer that would be of interest to you , feel free to reach out to me with suggestions or if there is an opportunity for partnering, I am open to talk about that with anyone.

Great. We have time for maybe one or two more questions if anyone has anything for Stephanie before we close out. I am getting some shout outs here. Thank you, thank you, thank you. It was a great webinar.

We are very thankful for the opportunity to present to the audience and we just hope that we can engage in the future. There are people from a bunch of different institutions and I had worked at NAL for a long time and one of the things that I did was work up the water and agricultural information center. We had a project with technical terms and we had a student from the University of Puerto Rico that was an intern with us and helped us with some of the translations of those terms and he is one of the people that taught me about how there is not really a one-to-one translation with the way the freezing is in the technical language is different. I think he was also the one that sparked the idea that we should increase our partnership with Spanish-speaking institutions.

Please come back again and present again. You are welcome back so please do that.

I know other units have presented and I think we have our team that has been the done some presentations. They are the ones to ask a lot of questions. Spivak it sounds good. We are almost at 3:00. I think I should close things out. We could go on for a long time, I know. Thank you one more time. Come back and thank you Jamie for the great technical support work. Come back Thursday for another great webinar and more to come in June or May I should say in June too. All throughout the rest of the year. Thank you and have a great rest of your day.

Great, thank you for joining today. Goodbye. [Event Concluded]