



NGRAC Meeting – February 21, 2024, Meeting Minutes

National Genetics Resources Advisory Council Members Present: Dr. Jim McFerson (Chair), Dr. David Butruille, Dr. Paul Gepts, Dr. Stephen Kresovich, Dr. Sarada Krishnan, Dr. Mike Lomas, Dr. Margaret Smith, Dr. Troy Ott, and Dr. Terrence Tiersch – 9

Members Absent: – 0

USDA Ex-Officio Present – Dr. Gayle Volk - 1

USDA Ex-Officio Absent: Dr. Harvey Blackburn – 1

Guest: Bert Cramer, Office of Homeland Security, USDA

NAREEE Board Staff Present: Ms. Kate Lewis, NAREEE Board Executive Director/Designated Federal Officer (DFO) and Ms. Michele Simmons, Program Support Specialist

I. Welcome, Roll Call, Quorum Check and Updates

DFO Lewis welcomed the group, took roll call, and noted that the quorum was met.

Ms. Simmons asked if there were any revision to the January minutes. There were a few revisions and additions. DFO Lewis made the changes. Ms. Simmons will send out the updated minutes via email to the Council for a vote. If all are in favor of the changes, she will post the January minutes to the NGRAC website.

II. Remarks from Dr. Jim McFerson, NGRAC Chair

Dr. McFerson discussed the potential of a federal government shutdown. He asked DFO Lewis if there is a shutdown, what would be the implications for the NGRAC? DFO Lewis informed him that the current Continuing Resolution, will fund the Federal Government through March 1, 2024. If there is a shutdown DFO Lewis will inform the NGRAC what they can and cannot do until a budget is in place. Dr. McFerson stated that if there is a shutdown the members could meet without DFO Lewis and Ms. Simmons to continue the work of the Council, with the understanding the meeting is not official.

DFO Lewis took a vote from the Council to suggest that Mr. Cramer’s presentation be moved up on the agenda to discuss the USDA Office of Homeland Security’s interest in genetic resource management before they discussed old business. The Council were all in favor.

III. Homeland Security Discussion from Bert Cramer:

DFO Lewis introduced Mr. Cramer to the Council. He gave a brief background of his bio. Mr. Cramer mentioned that he sent a few pre-read materials prior to this February 21st meeting that were an overview of the different National security-oriented spaces across the U.S. government and how it fits into the larger kind of national security perspective. He asked the Council if they had any questions on any of the pre-read materials.

Dr. Lomas stated that he read through the materials and that there should be some connection between some of NGRAC's work products and national security-oriented spaces.

Dr. McFerson also agreed. In looking at the alignment of the deployment document that NGRAC's been working on, several of the concepts were evident in the pre-reads. When you do a search for agriculture, there is very little that comes up for genetic resources. He stated that a lot of what's in documents is presented as biotechnology and what it can do for our economy. Are there entry points or engagement opportunities for our Council?

Mr. Cramer stated he can help NGRAC publicize their mission across the USDA by stimulating discussions about and presentations by NGRAC about animal and plant genetic resources as a strategic asset in natural security.

Dr. Tiersch stated that it's NGRAC's job to put together actionable recommendations from the outside for the Secretary of Agriculture. He wondered if Mr. Cramer could lay a challenge out for NGRAC For example, suggest what issues might NGRAC want to really think about and make useful contributions."

As an example, Mr. Cramer stated that a big picture question to USDA could be, do you know who is requesting the genetic resources that NGRAC's charged to maintain? How are the USDA scientists using NGRAC's information in partnerships with other partners who may have a different perspective of the value of these resources? How is USDA protecting or mitigating risk associated with working with potential adversaries on these kinds of things?

Dr. Volk asked Mr. Cramer to provide the Council with some background and information about the queries on germplasm distributions this office has made to her.

Mr. Cramer stated he is trying to understand who's been accessing across the history of the existence of this kind of unique national asset. Is there subsequent published research or patents that come out of these requests?

Dr. Volk asked is there a desire to restrict our international and national distribution that we currently have for the plant system?

Mr. Cramer stated that as a result of the analysis that the NGRAC will be doing, it will be the owner that will need to think about having these things and what NGRAC is using them for? What are others using them for? Can we say to the American public that is a net benefit to us? What kind of steps for mitigation should be considered?

Dr. Volk asked how do you determine if there is a net benefit to us and who makes that decision?

Mr. Cramer stated that it would be the owners of the capability. What was the initial impetus to establish it and is it meeting them? If those things can be answered positively then we're meeting that mission. If that's not the case, is there something we can do with the way that we operate this capability to redress that or to mitigate that?

Dr. Tiersch stated NGRAC's role wouldn't be to solve or provide those answers. It would be NGRAC's role to USDA to say they should have the resources put forward to answer those questions because NGRAC only makes recommendations.

Mr. Cramer said that if USDA doesn't have the resources in place what is it that USDA will need to answer this question?

Dr. McFerson stated he noticed in reading through the China-focused pre-read materials is how explicitly genetic resources, germplasm and plant breeding are addressed at the highest executive level. From what he could see, the Chinese government has recognized how important it is for their country to maintain and utilize genetic resources. Maybe this could be an opportunity for the NGRAC to communicate how important genetic resources are.

Dr. Lomas stated that we already have federal US agencies, including USDA, which fund science to tackle the kinds of problems that Dr. McFerson just mentioned, including sustainable protein sources for growing everything, whether it be finfish, shellfish, pigs, chickens, or cows. What's the disconnect there?

Dr. Ott stated the connection that we're not making is the connection to national security, that we're tying it to production efficiency, sustainability, and profitability. Is that the disconnect?

Dr. Lomas stated that there's probably a disconnect between what is defined as national security and what factors into that. Food security is probably lower on the priority list in the U.S. in terms of national security than in China. They have a massive population and not enough land to grow stuff to feed their people.

Mr. Cramer stated that these are important points in the importance of genetic resources. His intent today was to highlight that our primary competitor and also partner in the agriculture space is thinking about these things in a very different way than we are. It's important because we do have that very close relationship. We have a certain obligation to think about what that means.

DFO Lewis asked if there were any questions for Mr. Cramer. There were none. She thanked him for his time and meeting with the NGRAC.

IV. Old Business

Deployment Document

Dr. Butruille gave an update on the Deployment Document. He emailed the latest version with the latest input to the NGRAC February 20th. There is still a bit of work to

do, but it's starting to take form. There are some comments in the document made around national security.

Dr. Gepts asked if it needs to be made clear in the document what deployment is? It also needs to state what are the circumstances of the deployment. He indicated he had a feeling that deployment is an activity that comes after pre-breeding or breeding or what they call biotechnology. It should be made clear with a drawing as to where we are.

Dr. McFerson said it would be useful to take a look at the graphic that Dr. Tiersch provided for insertion in the Deployment document.

Dr. Tiersch stated that deployment is a process and it's connected to collections. If there is a crisis you need to collect for a crisis, so you have that material to deploy when the crisis occurs. Maybe there should be a rule that if you're going to save one unit of germplasm, it should solicit a deployment plan at least three different levels of scale.

Dr. McFerson stated this is draft nine of the Deployment document. He encouraged other Council members to review the document and provide feedback. Dr. McFerson asked if there were any comments or questions? There were none.

NPGS Crop Vulnerability Statements

Dr. McFerson gave an update on the Crop Vulnerability Statement. The final draft was sent to the Council via email for their review prior to this meeting. Some of the Council Members didn't review the final statement. There were a few suggestions from the Council that need to be incorporated in the Crop Vulnerability Statement. Dr. McFerson will add the comments for further discussion and hopefully, the document will be approved at the NGRAC meeting in March.

Tribal Document

Dr. McFerson stated that the Tribal document is still on hold. He is still attempting to communicate with Dr. Preston Hardison to see if there isn't something we can move along. He will update the Council once he hears from Dr. Hardison.

Interagency Aquaculture Initiative- Aquaculture America Conf. 2/19 – 2/21/24

Dr. Tiersch gave an update on the Interagency Aquaculture Initiative. He returned from the Aquaculture America Conference that was held in San Antonio, TX, a few days ago. A three-hour session involved the USDA, NOAA, and the U.S. Fish and Wildlife Service. They collaborated to develop a national framework for aquatic genetic resources. The end product will be a white paper describing the situation and giving suggestions on how to move forward toward a national framework.

He congratulated Dr. Butruille on the Deployment document. Dr. Tiersch stated the Deployment document is very important and kept coming up in the sessions.

Aquaculture is fish farming, which is mostly the USDA. The U.S. Fish and Wildlife Service is involved in conservation endangered species, and NOAA is involved with natural fisheries, the kind of animals we collect from the wild. This is a very broad initiative. We need to see where the white paper is going to go. We hope to narrow that

down into something more focused for USDA later as a document through the NGRAC. He asked if there were any comments or questions. There were none.

V. New Business

Planning FY24 Council Meeting

Drs. Gepts (Davis, CA) and Tiersch (Baton Rouge, LA) previously volunteered in hosting at their locations. Dr. McFerson mentioned that DFO Lewis suggested to have the meeting in Washington, DC, have some of the REE National Program Leaders of the agencies, others from USDA, and other agencies outside of USDA to be present and discuss their response to NGRAC reports

Dr. Gepts stated that there's a meeting of the NPGS curators scheduled at UC Davis in mid-August (August 13-15: Plant Germplasm Operations Committee meeting and Curator Workshop). This would be a chance to meet with Curators and visit units of National Plant Germplasm Systems.

The Council will have further discussions of the FY24 in-person meeting at the next NGRAC meeting in March.

DFO Lewis asked if there were any questions or comments. There were none.

VI. Wrap-up/Adjourn

The meeting adjourned at 2:10 pm ET.

The next meeting is scheduled for Wednesday, March 20, 2024, at 1 p.m. ET.

Acronyms: DFO: Designated Federal Official; NLGRP: National Laboratory for Genetic Resource Preservation; NAREEEAB: National Agricultural Research, Extension, Education, and Economics Advisory Board; NPGS: National Plant Germplasm System; OBPA: Office of Budget & Program Analysis; OCS: Office of the Chief Scientist; OGC: Office of the General Counsel; OCR: Office of Congressional Relations.