

Coordinating Committee
National Animal Nutrition Program – NRSP-9

Conference Call – November 3, 2021 – 1:00 pm EDT

Members present: *Phil Miller, Gary Cromwell, Don Beitz (partial), Ryan Dilger, Del Gatlin, Heidi Rossow, Brian Small, Robin White, Carey Williams, Luis Tedeschi, Art Goetsch, Nancy Irlbeck*

Administrative Advisors: *Lesley Oliver, Rick Rhodes*

USDA/NIFA:

National Academies:

1. Miller called the meeting of the Coordinating Committee to order at 1:02 pm EDT.
2. Opening comments from Administrative Advisors
 - a. Oliver noted there was excellent discussion during the face-to-face meeting.
3. Opening comments from USDA/NIFA – Steve Smith, Frank Siewerdt (not on call)
 - a. Miller reported changes to the representatives. Along with Steve Smith, who is back at USDA, Frank Siewerdt will also represent USDA/NIFA.
4. Update from the National Academies – R. Schoen
 - a. No updates. Schoen was not on the call.
5. Minutes of the September 28-29 in-person meeting
Irlbeck moved to approve the September 28-29 in-person meeting minutes as distributed. Small seconded the motion. The motion passed.
6. Previous, ongoing, or old business items
 - a. Website report; www.animalnutrition.org
 - i. Dilger reviewed the password recovery function on the NANP website.
 - ii. Dilger met with Surface 51 last week. They are making good progress on both the feed composition and the modeling database requests. They are to the point where they can show different pieces, and they are asking for feedback from each of the committees.
7. Report/business from the Feed Composition (FC) committee
 - a. The FC committee is reworking the Resources part of the website.
 - i. It will be organized in a way to have more assets coming online. Surface 51 is helping to reorganize those pieces.
 - b. Dilger shared an example of video bumpers.
 - i. Now NANP has the independence and autonomy to create videos and brand everything with NANP.
 - ii. The FC committee is wanting to create short videos to explain some of the more complex topics that are harder to do on just a single piece of paper.
 - c. Dilger also elaborated on the organization on the website itself.
 - i. There will be the ability to filter using tags.

1. An individual can filter by typing something in to search, or by clicking on one of the listed keywords.
 - a. This is bringing a lot more usability of the website, helping users to find content that is now being created and dropped into this Resources section.
 - b. Surface 51 is recommending this is the best practice for being able to organize this information.
 - d. Surface 51 was asked to provide a quote to make a style guide.
 - i. A style guide will allow NANP to not have to dependent on Surface 51 for every piece of material/content.
 - ii. The guidelines will apply to everything that any of the committees may want to do.
 - e. The FC committee is finishing the second wave of 2-pagers.
 - f. The committee is back into grappling what do we call different types of ingredients. This needs to be figured out before large amounts of data is dumped into the databases.
 - i. On the backend, Dilger is making sure the database is ready to receive that data.
 - ii. There will be a global glossary of terms available on the website, in the Resources section, and those terms will plug into the individual databases.
 1. When a user accesses a definition, it will link to the individual page on that topic, thus connecting all the pieces together.
8. Report/business from the Modeling committee
- a. White reported the Modeling committee cancelled their most recent meeting.
 - b. A smaller subset of the group met and discussed ASAS workshops.
 - c. Hackmann will no longer lead the ADSA workshop. The committee is identifying an individual to take over that effort.
 - d. Two additional subsets of the committee are working on educational aspects.
 - i. Videos from the modeling side.
 - ii. Developing a course outline, which the committee will use to solicit quotes.
9. Replacements for Paul Patterson, CC; Casey Bradley, FC
- a. Patterson is retiring and will no longer continue his involvement on the NANP CC.
 - i. Discussion commenced.
 1. He was selected for his species/regional demographics; he's a poultry scientist from the northeast.
 - ii. **ACTION ITEM:** Rhodes will reach out to the northeast multi-state poultry project, to see if they have someone who might be interested in joining.
 - b. Bradley plans to step down from the FC.
 - i. She represented swine nutrition and the feed industry.
 1. Dilger would welcome input from the CC.
 2. Perspective from industry representatives is important. That is critical to consider when identifying replacements, and as NANP works more on the business model.
 - a. White agreed that it would be worthwhile to have more than one industry representative in the committees. They bring a valuable perspective.
10. New business items or updates items – action items from the in-person meeting
- a. Business model discussion – FASS; Miller, Lindemann

- i. Lindemann and Miller met with Jeremy Holzner, FASS, regarding establishing a 501c3.
 1. Holzner is preparing a proposal. Miller would like to have that on the agenda for the December meeting.
- b. Targeted customers/product development
 - i. Miller questioned if it is time to put together a working group.
 1. White has 3 individuals from the Modeling committee that have expressed interest in having those discussions. It would be easy enough to set them towards that task.
 2. Dilger also has a list. He will address it at the upcoming FC committee meeting.
 - ii. Miller will wait to hear back from the subcommittees about the makeup of working group, and, during a future meeting, can more specifically start to define some things.
- c. Future funding opportunities – Miller, Dilger, White
 - i. Miller asked if anyone had any additional ideas since the last meeting?
 1. Rossow questioned if it would it be worthwhile to submit a USDA grant application under one of the data subheadings, for archiving the production data that's associated with doing all the NRCs.
 - a. Surface 51 could give an accurate quote of hours needed if they know what is needed.
 - i. **ACTION ITEM:** White can follow up with them before the December meeting.
 - b. Rossow volunteered to take the lead.
- d. Educational platforms and social media – Dilger, Williams, Morstatter
 - i. Williams put together an infographic.
 - ii. Miller is scheduling a meeting with the social media person at Nebraska.
 - iii. FASS quoted infographic development at approximately \$63/hr.
 - iv. **ACTION ITEM:** Dilger will get quote from AMSA's social media management group, www.lookeast.com, to compare quote from FASS.
 - v. Miller, Williams, Morstatter, and others can put this together to bounce around at a future meeting.
- e. Midterm report
 - i. Collecting metrics – spreadsheet
 1. Caton, Miller, and Williams will compose the working group, with Dilger as a technical advisor. Others may be recruited.
 2. Dilger is still working on setting up the Google sheet.
 - ii. Survey (Williams)
 1. **ACTION ITEM:** For the December meeting, Williams will have sample questions for review.
 - iii. AA input
 1. Oliver noted it is important to follow through on these action items from the in-person meeting.
 - a. She added she needs to spend some time looking into other NRSPs' progress with engaging an evaluator.
 - iv. Impact on NASEM activities/publications/sales
 1. **ACTION ITEM:** Miller will connect with Schoen on this effort.
 - v. Developing impact statements – Sarah Lupis (future CC zoom call)

1. **ACTION ITEM:** Miller will reach out to Hess to inquire availability before the December meeting.
 - a. The CC determined it would be best to schedule a special Zoom call for the presentation, instead of hosting Lupis during a regular NANP monthly call.
 - i. It was suggested to set it up at the same time, but a different Wednesday.
 - ii. The meeting could possibly be recorded and made available to those who couldn't attend.
 - f. Future summit – Beitz, Irlbeck, Gatlin, others
 - i. Irlbeck and Beitz have been continuing discussion on the future summit. Nothing has changed since the discussion during the in-person meeting.
 1. Gatlin is still willing to help.
 - g. Modeling workshop(s) – replacement for Tim Hackmann
 - i. Identifying a replacement for Hackmann is in progress.
 - ii. ASAS workshop
 1. Tedeschi is still working on possible speakers for next year's workshop. He welcomes ideas from the CC on modelers to invite for the workshop.
 - h. Zebrafish diet
 - i. Small and Gatlin are still working on Zebrafish diet experiments.
 1. They are hoping to have some information next month in terms of evaluation.
 2. Small commented that the Zebrafish people he's chatted with at Idaho have expressed interest in diet effect on reproduction.
 - ii. [ISFNF 2020\(2021\)](#) still plans on meeting in person (and virtually) in Busan, South Korea in December.
 1. Gatlin is an invited speaker.
 2. Gatlin requested Miller add him to any further communication with Dominique relative to representation at this meeting, as Gatlin is happy to help on behalf of NANP.
11. Closing comments from Administrative Advisors
 - a. Rhodes complimented everyone on making clear progress against the objectives, in regards to the midterm report.
 - i. He noted that Hess will be advocating for the CC to develop a clear business plan.
 - b. Oliver noted it is approaching year end, and an annual report will need to be submitted.
 - i. She encouraged the committees to think of quick, but measurable and demonstrable statements that can be checked off.
 - ii. In terms of the midterm report, the group needs to think about if NANP wants to report all the publications of each individual, which used NANP resources, as opposed to just all the direct products of this committee/project's activities. The CC needs to think about how best to capture those.
 1. Miller noted that sometimes the link between NANP and some other NRSPs and some of those publications is pretty broad.
 - a. Discussion commenced on what to include, with Oliver noting it is okay to have bullet pointed lists from the committees.
 - b. **ACTION ITEM:** Miller will send all the approved minutes to Oliver.

- c. **ACTION ITEM:** Miller asked White and Dilger to condense their committee presentations from the in-person meeting into bullet statements.
 - i. The publications list for NANP activities should be up to date on the website.

12. Miller adjourned the meeting at 1:56pm EDT.

DRAFT

**Coordinating Committee
National Animal Nutrition Program – NRSP-9**

Conference Call – December 1, 2021 – 1:00 pm EST

Members present: *Phil Miller, Merlin Lindemann, Gary Cromwell, Don Beitz, Ryan Dilger, Del Gatlin, Heidi Rossow, Brian Small, Robin White, Carey Williams, Art Goetsch, Nancy Irlbeck, Joel Caton*

Administrative Advisors: *Lesley Oliver, Rick Rhodes*

USDA/NIFA: *Frank Siewerdt*

National Academies: *Robin Schoen*

1. Miller called the meeting of the Coordinating Committee to order at 1:01 pm EST.
2. Opening comments from Administrative Advisors
 - a. Oliver announced there is a new National Academies' panel on enhancing coordination between the land grant universities.
 - i. Oliver noted that this project may be something to which NANP can contribute.
 - b. Rhodes reviewed the provided document "ESS Leadership Strategies: Adapt to and Mitigate the Impacts of Climate Change". The ESS directors are pursuing and developing strategic leadership buckets to allow faculty and staff to pursue their interest in that. Rhodes added to keep an eye out for funding coming out of NIFA to support work there.
3. Opening comments from USDA/NIFA – Frank Siewerdt
 - a. Siewerdt introduced himself as a national program leader in the animal science division. His background is in genetics. In addition to the animal genetics, he manages the animal welfare program.
4. Update from the National Academies – R. Schoen
 - a. Schoen further discussed the blue-ribbon panel that Oliver mentioned. The activity will produce a short, high-level consensus report describing what the ingredients are for making impactful, collaborative, or coordinated projects. The panel is appointed, and there are some animal scientists on there.
 - i. Congressman Fortenberry from Nebraska, asked for this panel to be created with an eye towards the Farm Bill, and what they might include in terms of new language, funds. The idea is that this system is a powerful one, to the extent that there are ways to incentivize and make these collaborations more impactful.
 - ii. Ultimately they will have a workshop for stakeholders in which they will preview their ideas to get feedback from stakeholders
 - b. The Dairy NRC is on track to be released before Christmas.
 - c. The Poultry NRC keeps making progress. They continue to meet every 2-3 weeks now. Schoen is hoping it can go to review in the spring.
 - d. They have received very good signals from the National Pork Board, along with the Corn Growers, that they will put a substantial amount of money towards a new revision of the Swine NRC. This would put it around 75% where the funding would need to be.

- i. Schoen requested the CC to review an upcoming drafted statement of task, to provide some feedback on ways to narrow it or shorten the process, any ideas on what it might be missing.
- 5. Minutes of the November 3, 2021 meeting
 - Caton moved to approve the November meeting minutes as distributed. Irlbeck seconded the motion. The motion passed.
- 6. Report/business from the Feed Composition (FC) committee
 - a. The FC committee has been working with Surface 51 to finalize some pieces:
 - i. The video bumpers are now completed.
 - 1. Those bumpers will be on website along with other media on website.
 - 2. There will be a “dry matter” video, as it works better as video format.
 - ii. They are getting the media area of the website fleshed out.
 - iii. The 2-pagers are being finished.
 - iv. They are going to begin developing a style guide, to standardize media/marketing used for NANP. Dilger noted the importance of adhering to those guidelines. The guide should be ready by year end.
 - b. The committee is just waiting on data from the Beef NRC to get up into the database.
 - c. They are shifting focus now to the ‘glossary of terms’.
 - i. This will add quite a few nutrient names. There will be species specific terminology. The FC committee needs to review if the appropriate categories are listed.
- 7. Report/business from the Modeling committee
 - a. White reported the committee has had a couple of productive small group meetings in the past month, focused on brainstorming some different themes that can be used to echo the FC committee’s 2-pagers.
 - i. They have a set that would like to focus on “animal nutrition experiment calculations”, which sort of verge on modeling (marker-based calculations, nitrogen balance, etc.), more directed towards graduate students.
 - ii. Another set would be focused on interpreting and evaluating models.
 - b. There was also a small team meeting to develop an example syllabus for an online course. They now have a syllabus in place and sent it to the ANPRO CAMPUS group. White is waiting to hear back from them regarding what it might look like to operationalize that into a course under the different kinds of funding models they have available. White should have an update early next year.
- 8. Replacements for Paul Patterson, CC; Casey Bradley, FC
 - a. Patterson
 - i. Rhodes investigated replacement options. The multi-state committee, who hasn’t yet returned a name to him, but he expects one soon.
 - 1. This may be handled via email in between meetings.
 - b. Bradley
 - i. A list of potential members was identified by the FC committee and provided to the CC.
 - 1. Dilger noted they have not yet vetted any of the candidates yet. They are asking the CC for feedback on the individuals.

- a. The committee is looking for industry representation, and someone who has the connections, along with the passion to volunteer. They can consider more than one person.
 - i. Beitz noted support for Pyatt.
 - ii. Caton noted support for Jennings.
- b. Miller encouraged any other comments to be passed along to Dilger, who noted it would be ideal to have somebody ready for January.

9. New business items or updates items – action items from the in-person meeting

- a. Business model discussion – FASS; Miller, Lindemann
 - i. Lindemann and Miller followed up with FASS for a proposal about setting up NANP as a 501c3.
 - 1. Lindemann provided an overview of the details and processes.
 - a. Discussion commenced with Oliver regarding any examples of NRSPs who have transitioned to a non-profit already. Oliver noted that there are plenty of models with university affiliated projects, even if the NRSPs haven't.
 - b. Discussion was also held regarding potential issues with funds, holding funds and soliciting and securing funds from programs/grants/etc.
 - i. Lindemann noted that, for the related fees for setting up the 501c3, NANP could secure funding elsewhere if needed.
 - 1. Lindemann emphasized the importance of the perpetuity of this program, and finding ways of making it long-lasting.
 - ii. Miller clarified that there has been some recognition for some base-line funding, noting that because of the nature of the project, NANP may want to run some funding through universities.
 - 1. Siewerdt noted AFRI eligibility guidelines have no mention of tax status.
 - 2. Miller and Lindemann will get back with FASS and formalize this for January meeting for the CC to make a formal decision.
- b. Targeted customers/product development – place holder
- c. Future funding opportunities – place holder
- d. Educational platforms and social media – Dilger, Williams, Morstatter
 - i. Dilger has contacted LookEast, the company AMSA uses for social media development/management. They would start NANP down the social media path then hand it over in 3-6 months. The idea would be to bring them to a CC meeting to discuss what they can do. This will be discussed at the January meeting.
- e. Midterm report
 - i. Collecting metrics – spreadsheet (champion needed, NOT Ryan)
 - 1. Miller will follow up with Caton on championing this need.
 - ii. Survey (Williams)
 - 1. Williams will provide some draft questions to the CC before the January meeting.

- iii. AA input
 - 1. Oliver discussed progress on identifying an external evaluator, and provided background on some potential individuals.
 - a. Allison Teeters, Kansas State
 - i. She has some experience, specifically looking at research and extension capacity building programs and evaluating those.
 - ii. However, her timeline for her current project is about two years. It may be quite pricey and a little long.
 - 2. Carol Hanley, University of Kentucky
 - a. Her background is typically in STEM education. She recently completed her second doctorate, specifically related to qualitative methods for evaluation, and she has been doing program and project evaluations on federal grants.
 - b. Oliver talked to her briefly and sent her a few items and she has already returned a draft logic model for the project. She could probably come up with a quick draft evaluation plan before the next meeting, if the CC wanted her to move forward. She also confirmed she could work with the NANP timeline.
 - i. Oliver will send the draft logic model to the CC.
 - 3. Another group out of the University of Cincinnati
 - a. They are a professional, well established group who have been involved with evaluating federal projects that were funded through NSF and NIH.
- iv. Impact on NASEM activities/publications/sales
 - 1. Schoen will include this in initial comments at January meeting.
- v. Developing impact statements – Sara Delheimer (January 29, 2022; time TBA)
 - 1. Sarah Lupis deferred to Sara Delheimer, who wrote the NANP impact statement for previous project term. She also specializes in talking about how to develop impact statements.
 - 2. She can put on a webinar Wednesday 1/29/22, time flexible. It will be a 1-hour session; a 20-minute presentation with lots of time for questions.
- f. Future summit – Beitz, Irlbeck, Gatlin, others
 - i. Beitz discussed changing the order of the topics and will make the revisions and send an updated copy to the CC.
 - 1. He noted he's unsure of the compatibility of topic of #5, but wanted to leave it in there for the time being. There will probably be a #6 added as a summarization.
 - ii. The next goal is thinking about the individual topics with speakers.
 - 1. Beitz requested comments from the CC.
- g. Modeling workshop(s) – replacement for Tim Hackmann
 - i. Identifying a replacement for Hackmann is in progress.

10. Closing comments from Administrative Advisors

- a. Rhodes and Oliver noted the CC is making a lot of progress, which is great at the start of 2nd year period of this project term.

11. Adjourn

- a. Beitz moved to adjourn the meeting. Cromwell seconded the motion. Miller adjourned the meeting at 2:00pm EST.

DRAFT

Coordinating Committee
National Animal Nutrition Program – NRSP-9
Conference Call – February 2, 2022 – 1:00 pm EST

Members present: *Ryan Dilger, Merlin Lindemann, Gary Cromwell, Don Beitz, Del Gatlin, Carey Williams, Art Goetsch, Nancy Irlbeck, Joel Caton, Brian Small, Robin White, Luis Tedeschi*

Administrative Advisors: *Lesley Oliver, Bret Hess, Rick Rhodes*

USDA/NIFA: *Steve Smith*

National Academies: *Robin Schoen*

Guests, Look East: *Amy tePlate-Church, Jamie Rzewnicki*

1. Dilger called the meeting of the Coordinating Committee to order at 1:01 pm EST.
2. Opening comments from Administrative Advisors
 - a. Oliver reported that Miller is working on getting her some impact statements or accomplishments to put into the annual report.
 - b. Oliver issued a reminder to take a look at the draft evaluation plan.
 - c. Hess noted the Impact Statement Workshop was excellent and applauded the participation from the CC.
3. Opening comments from USDA/NIFA – S. Smith, F. Siewerdt
 - a. Smith will give a more formal presentation during the April meeting.
 - i. As a reminder, USDA/NIFA will report a larger formal presentation on a regular basis – quarterly or twice annually.
4. Update from the National Academies – R. Schoen
 - a. The *Nutrient Requirements of Dairy Cattle, 8th Edition*, was released at the end of the year. An e-book is expected shortly. Agreements have been secured to translate into 4 different languages, so far. Glitches, which were not unexpected as people use it, are being fixed as they arise.
 - i. Some of that data will be shared with NANP. A separate meeting will probably need to be scheduled for that.
 - b. Poultry is steadily making progress; Schoen is hopeful it will go to review in the summer.
 - c. Things with the nutrient requirements of swine are heating up.
 - i. The National Pork Board contacted Schoen about 6 months ago.
 - ii. Since then, funding has lined up from Corn Growers, and Schoen has recently been contacted by USB.
 - iii. The prospects for starting it this year are very good.
 1. Schoen wants to first develop a statement of task that gets looked at by a lot of swine nutritionists, before it formally goes before NASEM for blessing. We've learned it's best to focus on new things and not to try to rewrite an entire report.
 - iv. Caton noted there was chatter within the ASAS national meeting program committee about the need for a symposium on swine nutrient requirements and what needs to be updated and what has been learned in the past ten years.
 - d. Schoen has approved a position description for an individual to serve as a program officer for the Nutrient Requirement series. That will be posted this month and Schoen will send NANP the job description so it can be circulated.

5. Minutes of the January 12, 2022 meeting
 - Irlbeck moved to approve the January meeting minutes as distributed. Lindemann seconded the motion. The motion passed.**
6. Report/business from the Feed Composition (FC) committee
 - a. Educational platforms and social media – Dilger, Williams, Morstatter (**Look East proposal, Appendix 1**)
 - i. Look East members, Amy tePlate-Church and Jamie Rzewnicki, joined the call.
 1. They each provided their professional backgrounds.
 2. It was noted that Jamie will likely do the bulk of the work proposed.
 3. tePlate-Church provided background on Look East, a public relations consulting firm established about 15 years ago by Charlie Arnot.
 - a. During his decades-long career involved in pork production Arnot realized agriculture was changing and animal production was becoming more intensive/larger, and there was public resistance and lack of understanding. Arnot pioneered the concept that it is necessary to have two-way engagement with consumers, public, food companies, so that modern ways of farming and production are more collaborative, working to earn more trust instead of defending the position about why we farm the way we do these days.
 - b. Look East truly works farm-to-fork. The proposal lists some of the associations/clients they work with.
 4. The proposal (Appendix I) addressed focusing on what NANP would like to do and achieve through increased Social Media.
 - a. The first step is to start with developing a strategy to be as effective and targeted as possible. The Look East team are really skilled at developing the right strategy for NANP and then putting that strategy into motion.
 - b. Initial conversations always start with the desired outcome.
 - i. What does NANP social media success look like?
 1. tePlate-Church reviewed the list of DESIRED OUTCOMES in the proposal.
 - a. Success for NANP around social media would be that NANP is recognized as a credible and reliable source for information and tools about nutrition needs for food production animals.
 - c. The target audiences identified are
 - i. Graduate students in animal nutrition
 - ii. Advisors for graduate students (professors, researchers at land grant)
 - iii. Professionals in animal feed industry

- iv. *There certainly will be others that will see the increased content because they will be interested, but as we look at targeting, those listed would be the audiences that would be targeted.
5. The Look East approach.
- a. Develop Strategy
 - i. What is going on now in social media in animal nutrition? Where are the target audiences today? How can NANP best show up and meet them there? Also, deploy some targeting strategies to ensure your good messages get to the right people and the right place.
 - b. Refresh or Rebuild Channels
 - i. There will be a need to refresh and or rebuild channels previously set up, to use the current messages and current brand standards.
 - ii. It is possible that there might be a need for a new channel or social media platform to be built from scratch.
6. Manage Social Content & Engagement
- a. For the first couple of months, it may be logical for Look East to manage those channels.
 - i. Look East would develop content, manage the channels, and would post at the recommended frequency.
 - 1. At the right time, there might be an intern/graduate assistant/etc. within NANP that could manage that social content. If and when that time occurs, Look East can definitely transition, help coach and onboard that individual. This could make NANP social media more self-sustaining.
7. To achieve the needs discussed, the proposal is outlined in 3 different segments. (Appendix I, page 6)
- a. Months 1-2; \$4,370: Develop Social Media Strategy
 - i. That would include interaction with all those involved to ensure Look East truly understands, that their questions are answered, to develop a spot-on strategy review.
 - b. Month 2; \$1,900: Refresh or Rebuild Channels
 - i. Look East would audit existing NANP channels and execute changes. The recommendation would likely be to start with only 3-4 platforms. The theory is to start the focus and really do well on 3-4 platforms first, instead of being in 12 places and not doing any of them justice.
 - c. Months 3-5*; \$2,850/mo (min. 3mos): Manage Social Content and Engagement
 - i. Look East would develop the posts, find the resources that can be linked, in terms of tools, or testimonials, or video clips, or

11. Dilger asked if Look East uses suite platforms for scheduling social media posts, and, if so, is there a subscription cost to use those.
 - a. Rzewnicki explained that for Twitter and Facebook, posts are scheduled natively through the platform itself. For some platforms, HootSuite can be used. Some of Look East's other clients have found that the free models tend to work well. If it would be of interest to schedule further out, that can be explored.
 - i. te-Plate noted that one of Look East's core values is "No Surprises". If something else comes up, it would be discussed, and they wouldn't move forward without an agreement.
12. Rhodes provided a suggestion that every institution represented on the call has an Office of Agricultural Communications, and those institutional communicators would be a great audience for the social media campaign. They would be able to provide an opportunity to both echo and amplify the work of institutional participants. It would also be a great way to demonstrate the impact of the federal funding that is supporting NRSP-9.
13. Hess posed a question about the pyramid (Appendix I, page 5), which is upside down, creating awareness leading down to advocacy. Where is NANP at in that continuum, and what does it take to achieve each step, ultimately to make an influence on those that are making decisions on funding, etc.?
 - a. NANP is starting on ground zero, step 1: Create Awareness. However, with the makeup of NANP, that could move pretty quickly to step 2: Building Credibility, as, with the connections to USDA/NIFA, land-grant universities and other research institutions, there's a great credibility connection already built into who NANP is. Then Look East would want to very quickly help support NANP into step 3: Sell a Solution, in that the tools and materials NANP provides are leveraged, and that the content and the messages are supporting the eventual organizational goals, as we look at funding streams, etc.
 - b. Both Brooke Humphrey and Fred Owens accepted the invitation to the FC committee, and both have been immediately actively engaged.
 - c. The FC committee continues to focus on educational materials.
 - i. Six of 2-pagers now available on the website.
 - ii. Dilger has pushed all the current NANP media onto the website, [Resources](#) section.
 1. If you click on the educational tag, it will display the 2-pagers.
 - a. These are already being distributed and used in curriculums
 - b. Tracking is enabled in backend for all pdfs. It is harder to track images.
 - iii. Dilger expressed the committee's desire is to get away from pdfs and move to videos.
 - d. Now that the committee has found a groove with the educational pieces, they will shift focus back to big data.
 - i. By the end of 2022, both the Beef and Dairy sets will be incorporated.

1. There are lots of things to work through in what was the final version of those reports. Either is not in a consolidated form that is easily uploaded. They have to go back and recreate that to get the individual records, and not just the summaries for each individual lab.
 - a. Dilger is working with Miller on how to get access to that information.
 - b. The FC committee is discussing “what are the ingredient names that should be used in a consolidated database”, “should we rethink the categories”, and finishing all the definitions of all the nutrients.

7. Report/business from the Modeling committee

- a. White reported that the Modeling committee had a meeting earlier this week.
- b. They have a team focused on developing complementary educational materials, similar to FC committee’s efforts.
 - i. The initial effort will center around tools to help support understanding of model evaluation; concepts, precision/accuracy, interpretation and calculation of different statistics. This is needed for both readers of modeling literature and those attempting to leverage models as tools.
 1. They have discussed developing the same types of 2-pagers, and developing videos.
 2. There has also been some interest in developing some interactive tools. White will have meetings with Surface 51 in the next few weeks, which will focus on the best strategy for those interactive examples.
 - ii. The committee has interest in expanding on what the FC committee has done for feed intake and energy. There are opportunities to discuss how to expand existing resources.
- c. Workshops/symposia
 - i. ASAS symposium
 1. Speakers have been selected and invitations are being sent.
 2. Two to three papers from the 2021 ASAS symposium are in progress, with a goal of submitting those sometime in the near future.
 - ii. ADSA
 1. Things are still being sorted for ADSA.
 - iii. PSA
 1. Sounds like a Poultry workshop will be planned for 2023.
 - a. Dilger added that PSA will be highlighting the NASEM. He has been asked to speak, and will speak about the NANP feed database.
 - iv. Aquaculture
 1. The workshop received good reviews.
 2. Interest has been expressed in holding another workshop late fall in 2022, internationally in Singapore.
 - v. International Workshops
 1. The committee has expressed interest in possibly holding workshops at European conferences in 2022.
 - a. Discussion commenced regarding pursuing international workshops, with a positive initial reaction from the CC.
 - b. White should have a more formal plan to present by the next CC meeting.
- d. Dilger and White have monthly meetings separate from subcommittee meetings, to work together to keep producing more content.

8. Business items

- a. Business model discussion – FASS; Miller, Lindemann (**update**)
 - i. All paperwork has been sent to FASS. The last email from Holzner stated FASS would reach out to the attorney to get the process moving.
- b. Targeted customers/product development – place holder
- c. Future funding opportunities – place holder
- d. Midterm report
 - i. Collecting metrics – spreadsheet
 1. Caton didn't realize he has become the default leader on this project, so he had no updates. Caton can provide something for the next meeting.
 - ii. Survey (Williams)
 1. Williams provided updates on the survey. All edits have been made. An intro/ending needs wordsmithed.
 - a. The last piece is IRB approval.
 - i. Dilger noted that will need to be done at one institution, and we should ask for an exception, because we are only asking for simple user feedback.
 1. Williams will inquire about the IRB exception.
 - iii. AA input
 1. Rhodes noted the key piece is to begin to focus on the impacts of the projects as it moves into the final two years. The social media piece certainly puts a strong spotlight on cadence and quality of the educational materials.
 2. Hess added that the report should also reflect the progress made on transitioning off of reliance solely on the off-the-top funding. It is important to highlight that progress made.
 - iv. Impact on NASEM activities/publications/sales
 1. No discussion occurred.
 - v. Developing impact statements – Sara Delheimer (**Recap**)
 1. Recording and notes were made available.
- e. Future summit – Beitz, Irlbeck, Gatlin
 - i. Beitz is working on a proposed program with speakers. He hopes to have that proposed program by the March meeting.
- f. Modeling workshop(s) – replacement for Tim Hackmann
 - i. Speaker invitations are in progress.

9. Closing comments from Administrative Advisors

- a. No additional comments were made.

10. Adjourn

- a. Dilger adjourned the meeting at 1:00pm EST.

Coordinating Committee
National Animal Nutrition Program – NRSP-9
Conference Call – March 9, 2022 – 1:00 pm EST

Members present: *Phil Miller, Ryan Dilger, Merlin Lindemann, Gary Cromwell, Don Beitz, Del Gatlin, Nancy Irlbeck, Joel Caton, Brian Small, Robin White*

Administrative Advisors: *Lesley Oliver*

USDA/NIFA: *Steve Smith*

National Academies:

Administrative Assistant: *Brittany Morstatter*

1. Miller called the meeting of the Coordinating Committee to order at 1:15 pm EST.
2. Opening comments from Administrative Advisors
 - a. Oliver reminded the CC about the midterm and annual reports.
 - b. Oliver will get with the external evaluator, Carol Hanley, to get a sense of the timeline and an estimate of her efforts. After, Oliver and Lindemann will meet to discuss the financials.
3. Opening comments from USDA/NIFA – S. Smith, F. Siewerdt
 - a. Smith reported that the director of NIFA, Carrie Castille, has resigned and will be leaving in early April. In the meantime, they will be announcing the interim acting director until there is a permanent appointment.
 - b. Two of three AFRI RFA's have gone live. [Foundational and Applied Science; Sustainable Agricultural Systems; and Education and Workforce Development.] They are still waiting on the release of the education RFA, which is being fast-tracked.
 - c. A more detailed report from NIFA will be given on April 6.
4. Update from the National Academies – R. Schoen
 - a. Schoen was not on the call and no update was provided.
5. Minutes of the February 2, 2022 meeting
Irlbeck moved to approve the February meeting minutes as distributed. Beitz seconded the motion. The motion passed.
6. Report/business from the Feed Composition (FC) committee
 - a. Dilger reported the committee is reviewing all ingredient names, nutrient definitions, categories, etc., all in preparation to bringing both the beef and dairy datasets into a common, consolidated database.
 - b. White and Dilger meet monthly ahead of the CC meeting. They also both meet with Surface 51 on a regular basis.
 - i. Surface 51 is up to speed on what's needed from a data science perspective. The plan is moving forward for integrating both beef and dairy, as a lot of pieces need to be in place before bringing millions of data points in. Dilger noted they are being very careful and doing lots of testing.
 - ii. New functionality is coming – users will be able to pull up a specific data set. (The default will be the consolidated data set. They will be able to pull up e.g. beef data set,

which will pull up all beef ingredient names, narrowed down from the consolidated data set.)

- c. The committee continues with the educational materials piece.
- d. Other parts of the website continue to get updated.
- e. A plan is in place with Surface 51 to increase our analytics, which will help with reviews, making sure we have the right metrics coming out of the website.
 - i. Look East – social media will tie into the analytics coming from the website.
- f. We are officially kicking off with Look East next week. Over the next 3 months, we will take the NANP brand and develop it over 3 different social media platforms, hoping to broaden NANP's audience and bring more people to the website.
- g. The Poultry NRC is still meeting on a monthly basis, but it remains stuck.

7. Report/business from the Modeling committee

- a. White reported the Modeling committee is days away from getting the animal performance databases back up.
 - i. They are awaiting confirmation confirming the committee's desired structure for download file (.CSV) is in its final form. Once finalized, it can be pushed back up to its live format.
 - 1. It will replace the old data structure with the new Drupal-based data, which is a lot more functional, and is designed to be much more flexible.
- b. The committee is still working on different educational materials.
 - i. They are discussing a tiered approach to those.
 - 1. There might be a two-pager, supplemented by a video and/or Shiny-based tools on the website. (Shiny is a product derived from RStudio, a statistical analysis program. It is really effective for data analytics and extremely good for data visualization.)
 - a. The committee is currently working on calculating and interpreting the fit statistics of a model.
 - i. A Shiny-based tool can be embedded in the website, allowing a user to upload model data and ground truth information and calculate what fit statistics might be for those.
 - 1. We would also want to be able to have a series of example databases which show where those different fit statistics break down.
 - b. In order to move forward on the component of including Shiny apps, NANP would need to procure a subscription to that service.
 - i. The service would allow NANP to have access to the servers in RStudio that house data and code, and the back end of those interfaces.
 - ii. The yearly packages range from \$500-\$3,000. This will be a future budget request from the committee.
 - iii. The FC Committee would also see value of having access to that tool, specifically for the advantages of data visualization.
 - iv. Lindemann noted students are unsatisfied with statistics courses, and this effort could be big. Discussion commenced and the others concurred.
 - v. Dilger shared a link relative to the topic:
<https://academic.oup.com/jas/article/99/5/skab086/6178508>

- vi. Dilger noted this could be a great kickoff for the social media campaign – an opportunity backed by an official organization instead of an individual company or individual.

8. Business items

- a. Business model discussion – FASS; Miller, Lindemann
 - i. The lawyer requested some additional documents, which Miller will follow up on. Good progress has been made.
- b. NIFA Partnership Award – Lindemann

PURPOSE: To annually recognize exemplary work from a team or individual at a Land-grant University or other cooperating institution or organization supported by the National Institute of Food and Agriculture (NIFA). The NIFA Partnership Awards Program will allow recognition of outstanding contributions in support of the NIFA mission and USDA Strategic Goals or Priorities that provide an outcome that positively impacts agriculture, the environment, communities, or people.

 - i. Lindemann wanted to bring a little bit of visibility to the program.
 - 1. Lindemann was interested in nominating the whole CC. However, the requirement includes brief but significant documentation for each nominated member, which will make it tough to include everyone.
 - a. Lindemann suggested nominating Miller, Dilger, and White.
 - i. Miller suggested Lindemann and Oliver as additional nominees.
 - 2. The CC was in favor of Lindemann moving ahead on this effort. Lindemann will work on gathering the required documents in by the April 1st deadline.
- c. Targeted customers/product development – place holder
- d. Future funding opportunities – place holder
- e. Midterm report
 - i. Collecting metrics and developing impacts (Caton)
 - 1. Caton drafted a list of metrics to collect for the midterm report.
 - a. Caton requested a real, functional timeline from the AAs.
 - b. Miller and Caton prompted the CC to review the document and provide feedback.
 - ii. Survey (Williams)
 - 1. Williams has completed final touches on the survey and will move forward.
 - iii. AA input
 - iv. Impact on NASEM activities/publications/sales
- f. Future summit – Beitz, Irlbeck, Gatlin
 - i. Beitz will provide more information during the April meeting.
- g. Modeling workshop(s) – ADSA; ASAS update Luis Tedeschi
 - i. White reported that the committee is in good shape for the summer workshops.

9. Closing comments from Administrative Advisors

- a. Oliver expressed appreciation for everyone's contributions and noted that the group is getting well set up for a good review.

10. Adjourn

- a. Miller adjourned the meeting at 1:57pm EST.

Coordinating Committee
National Animal Nutrition Program – NRSP-9
Conference Call – April 6, 2022 – 1:00 pm EDT

Members present: *Phil Miller, Ryan Dilger, Merlin Lindemann, Gary Cromwell, Don Beitz, Del Gatlin, Nancy Irlbeck, Joel Caton, Brian Small, Robin White, Heidi Rossow, Carey Williams*

Administrative Advisors: *Lesley Oliver, Bret Hess*

USDA/NIFA: *Steve Smith*

National Academies: *Robin Schoen*

Administrative Assistant: *Brittany Morstatter*

Guests: *Carol Hanley*

1. Miller called the meeting of the Coordinating Committee to order at 1:02 pm EDT.
2. Opening comments from Administrative Advisors
 - a. Oliver introduced Carol Hanley, who will be serving as program evaluator and will be joining CC calls to gain better understanding of NANP activities.
 - b. Oliver is working on data for the 2021 report.
 - c. Hess reported the Extension Foundation is preparing a grant proposal to pursue funding from NRCS on one of their climate-smart commodity grants.
 - i. They have identified an industry partner who works in ice cream. They have 3-4 test sites that will be included in their proposal. The objective is to produce a carbon-neutral ice cream.
 - ii. They are interested in advice from the dairy world, dairy nutrition. They asked Hess to bring the request to NANP to see if NANP would be interested in being part of the grant.
 1. The grant application is due May 6; target approval date is in the summer.
 2. White asked what they expect out of an animal nutrition partner.
 - a. They are seeking evaluation of whatever application they are using with farmers to determine their carbon footprint along the chain.
 - b. White noted the Modeling committee would be in support of participation in this. Discussion continued, with Hess noting this footprint evaluation/validation could be a space NANP could expand into.
 - i. Irlbeck noted this would be on point with the NANP Summit currently being planned.
 - c. Dilger noted the FC committee may not be as helpful on this in the short term, but encouraged the Modeling committee to pursue it.
 - iii. White was prompted to have the Modeling committee pursue this. Miller can help facilitate as needed. Hess will be in touch to arrange meeting with White and the project leads to connect.
3. Opening comments from USDA/NIFA – S. Smith, F. Siewerdt
 - a. Smith deferred his comments to later in the meeting.
4. Update from the National Academies – R. Schoen
 - a. The *Nutrient Requirements of Dairy Cattle, Eighth Revised Edition* is selling well. Some corrections are being made and NASEM is preparing the eBook version.

- b. The Poultry committee continues to progress forward. They are trying to find ways to promote progress on the areas that are still not finished. Every time the committee meets, there are steps forward. The hope is for going to review in the summer.
- c. There has been progress on Swine with lining up the organizations interested in funding the project: National Pork Board; Corn Growers; IFEEDER; the Soybean Board. A statement of task is being developed and Schoen expressed concern regarding the best way to share that with swine nutritionists, in order to have a collective discussion around determining what is most important to update, to avoid rewriting the whole document.
 - i. Beitz suggested Lindemann and Miller send it to the swine-oriented members of the regional multi-state committee. Discussion commenced.
 - ii. Miller suggested, when soliciting input, to avoid previous participants to avoid biases, and that it is also very important to get perspectives from industry.
- d. They are starting to receive good candidates for the program officer position that will oversee the nutrient requirements program. The position could be filled within a couple of months.
- e. NASEM Blue Ribbon Panel: Enhancing Coordination Between Land-Grant Universities and Colleges. *“A Blue Ribbon Panel will explore how enhanced coordination, collaboration, and integration within the Land Grant system can increase the impact of research, education, and extension on the success of U.S. agriculture as it addresses new competitive challenges, pressures on environmental systems, and demands from consumers.”*
 - i. The panel will be holding a workshop in a couple of months to talk about what it thinks are the most important factors related to the land-grant system and collaboration as a whole.
 - ii. Schoen will send a list of the preliminary observations of this group. There will be a form to collect comments. The CC was asked to participate in providing comments.

5. Minutes of the March 6, 2022 meeting

Irlbeck moved to approve the March meeting minutes as distributed. Williams seconded the motion. The motion passed.

6. Report/business from the Feed Composition (FC) committee

- a. Dilger reported the FC committee is currently hyper-focused on the database, in preparation for bringing in beef and dairy.
 - i. They finished all the nutrient definitions and are now working on consolidating ingredient names, which gets tricky when bringing in the in vivo animal-derived values along with the analytical values. The committee will be doing a lot of data science over the summer to prepare datasets going into the database.

7. Report/business from the Modeling committee

- a. White reported the Modeling committee has put together some example R shiny apps that might be installed on the website, which are in internal review. They are working forward on what it might look like to add those to the website over the next several months.

8. Business items

- a. Expanded NIFA Report – Steve Smith
 - i. Smith provided the group with an overview of the written report he provided on NIFA updates. (**Appendix A**)
 - 1. Dr. Dionne Toombs will be stepping in as acting director.

2. Smith noted there is not a lot of real news on the budget item because apportionment is still underway.
 - ii. All RFAs are now out. Most of the programs in those are now open and soliciting applications. <https://www.nifa.usda.gov/afri-request-applications>
 1. Smith encouraged the CC to review and consider those.
 2. Smith explained details of the Crosscutting Programs.
 - b. Future summit – Beitz, Irlbeck, Gatlin
 - i. Beitz provided a written report by email. (**Appendix B**)
 1. The CC reviewed Beitz’s proposal and discussion commenced.
 - a. Beitz requested feedback about the edited title.
 - b. Beitz requested CC suggestions for speakers not yet identified.
 - i. There is not a topic related to fish. Gatlin suggested he and Small could identify someone to capture the seafood space.
 - c. Beitz requested CC suggestions on a big-name expert who could summarize the Summit.
 - d. The CC agreed a one-day program will be most appropriate.
 - e. Lindemann recommended presentation(s) during lunch, and suggested providing an evening meal with presentations, to retain people if the program goes more than one day.
 - f. Gatlin recommended adding discussion time, maybe within groups, strategically timed in the program in addition to the featured speakers.
 2. This discussion will continue during the next monthly CC meeting.
 - c. Business model discussion updated – FASS; Miller, Lindemann
 - i. Miller and Lindemann met with Jeremy Holzner at FASS to discuss feedback from the lawyer.
 1. **ACTION ITEM:** Miller will send out an email to address the questions that need answered regarding group naming and funding.
 - d. Other business
 - i. 38th Meeting of Fish Feed and Nutrition Workshop, July 11-13, University of Idaho, <https://www.eventbrite.com/e/38th-meeting-of-fish-feed-and-nutrition-workshop-registration-298852113717>
9. Closing comments from Administrative Advisors
 - a. Hess posed a question to Smith on the lead time for submissions for conference grants and letters of intent.
 - i. Smith explained that the submission deadlines for conference grants is rolling.
 1. He strongly recommended to consider the timeline to submit a grant request for the Summit. Submitting too early is not a problem, but too late can cause issues. With the current Summit proposal being discussed, it appears there is enough detail to submit a letter of intent soon, even if the dates aren’t firm (projected dates would be ok). By getting the process early, there is better chance for an efficient and successful process.
10. Adjourn
 - a. Miller adjourned the meeting at 2:05pm EDT.

Coordinating Committee
National Animal Nutrition Program – NRSP-9
Conference Call – June 1, 2022 – 1:00 pm EDT

Members present: *Phil Miller, Ryan Dilger, Gary Cromwell, Don Beitz, Nancy Irlbeck, Joel Caton, Heidi Rossow, Luis Tedeschi, Brian Small*

Administrative Advisors: *Bret Hess*

USDA/NIFA: *Steve Smith*

National Academies:

Administrative Assistant: *Brittany Morstatter*

Guests:

1. Miller called the meeting of the Coordinating Committee to order at 1:03 pm EDT.
2. Opening comments from Administrative Advisors
 - a. Hess reported the midterm review for NRSP-9 is due next year; the progress that NRSP-9 has been making is good evidence that the project is working towards the recommendations provided to this committee at the time of renewal. As the end of summer nears, the AAs will be coordinating the midterm review so that the information can be provided to the review committee this winter.
3. Opening comments from USDA/NIFA – S. Smith, F. Siewerdt
 - a. Smith had no comments.
4. Update from the National Academies – R. Schoen
 - a. Schoen was not on the call.
 - b. Schoen relayed via email that they are optimistic they will be able to hire a program administrator very soon.
 - c. Dilger and Miller had a call with Schoen, Paul Kononoff, and Bill Weiss, to have general discussion about the ability to utilize data provided for the dairy NRC.
 - i. The meeting was fruitful. They were able to determine NANP will be able to use that database to incorporate it in the NANP database. Weiss was planning on follow-up with some laboratories.
 - d. Miller reached out to Galen Erickson regarding the laboratory information for the beef report. He indicated to Miller that, as long as individual specific records or laboratory IDs were not identified, the data could be utilized for the purposes of NANP.
5. Minutes of the May 4, 2022 meeting
Beitz moved to approve the May meeting minutes as distributed. Small seconded the motion. The motion passed.
6. Report/business from the Feed Composition (FC) committee
 - a. Dilger reported everyone will see lots of updates. The committee is still sifting through to identify the correct individual records to be summarizing.
 - i. Beef will be easier than dairy.
 - ii. A data scientist has been hired to work with Surface 51 to prepare that data and then hand it off to the web developers for upload.

- iii. Within the committee, they are finalizing the alignment of individual ingredients across, and doing that based on compositional analysis. None of those ingredients currently exist in the database because they are all forages, presently focused on only swine and poultry. This will greatly expand the number of ingredients we have.

7. Report/business from the Modeling committee

- a. Tedeschi provided a brief update. The committee hasn't met since the last meeting.
- b. The invited speakers for the ASAS preconference workshop are set and the abstracts are submitted. The workshop is scheduled for Sunday, June 26.
 - i. The 3 papers from last year's preconference were submitted to JAS and should now be available online.

8. Business items

- a. Business model discussion updated – FASS; Miller, Lindemann
 - i. Miller and Lindemann met with FASS. The FASS lawyer did not believe it was necessary to do an inquiry in every state about the use of the NANP name.
 - 1. Holzner will also inquire about trademarking.
 - ii. This is getting close to finalization. A board of directors will need to be identified.
- b. Future summit – Beitz, Irlbeck, Gatlin
 - i. Beitz has a subcommittee call planned next week.
 - ii. He has had some initial communications with NASEM to hold the summit at the national academies building.
 - iii. Beitz has received no comments from CC members about the draft agenda.
 - iv. Beitz has identified 3 potential additional speakers for the program.
 - v. The poster session is a great idea. Williams has been invited to join the subcommittee call to further develop the idea.
- c. NANP social media strategy – Dilger, Morstatter
 - i. Dilger reported he and Morstatter have been in discussions with LookEast.
 - ii. The next phase is implementation of the social media strategy LookEast provided. The strategy document was shared by email prior to the meeting.
 - 1. They will teach us best practices for developing NANP social media.
 - 2. LookEast will run the NANP social media platforms for the next 3 months.
 - a. They have identified which platforms will be most effective, how often to post, and what type of content.
 - b. This strategy will also solicit and develop partnerships from ASAS, ADSA, PSA, NASEM, USDA NIFA, etc.
 - c. They have brought on a consultant with an animal nutrition background.
 - d. Dilger and Morstatter will be trained to utilize the software to develop and schedule the social media content.
 - e. Generally, they are suggesting 1-3 posts per week per platform. The trick is that posts need to be formatted differently for each platform. LookEast will be setting up templates to create the different graphics which will unify the different posts/formats.
 - 3. Feedback is necessary from the CC and subcommittees. Dilger requested the CC review and provide feedback on the strategy.
 - 4. Beitz questioned what kind of information will be posted and who will be putting it out. He suggested that someone will need to oversee, which might be a full-time role.

- a. Dilger confirmed that in most organizations, it is a full-time individual or a team.
 - b. The goal of this contract with LookEast is to develop best practices and training wheels for the next 3 months. After which, NANP can continue with LookEast, which is quite expensive, or we can do it ourselves.
 - c. Beitz suggested NANP consider hiring a scientific communicator to manage the social media efforts.
 - i. Dilger noted that is a common model, and it is exactly how LookEast has built their team. He suggested maybe FASS could provide some of these services, or that another individual could be hired. There are options.
 - ii. If NANP is serious about using social media as a primary promotion piece, it will require dedication for it to succeed. It has the potential to be the most effective way to reach a much broader audience.
5. Miller noted the strategy is pretty ambitious, and questioned if NANP consider paring down a little bit in terms of how much goes out and how often, until we can figure out the particulars.
- a. Dilger recommended to see how difficult it is for LookEast over the next 3 months. The strategy includes utilizing partnerships. The hardest content will be the information we produce, like member spotlights. It can be difficult to obtain member content. LookEast has developed the content pillars and we will have metrics in place to see how many individuals are being reached.
 - b. Discussion commenced regarding the costs.
 - i. Dilger noted NANP is not contracted for any cost beyond the initial contract terms, 3 months, \$14,000. LookEast is invoicing for hours as we go along. There is no requirement to continue on with them at the helm thereafter. NANP can continue with them after the initial 3 months, but that may be a larger cost than if we seek partnership with FASS or hiring a dedicated individual.
6. Hess questioned the measurements/metrics of previous social media efforts.
- a. Dilger clarified that we are basically starting fresh, with insignificant past activity to measure.
 - b. The goal here is to increase the following of NANP.
 - i. Dilger explained the metrics that will be available as the social media work develops.
7. Miller asked if the efforts of LookEast will be easy to hand off to NANP at the end of the contract period.
- a. Dilger emphasized that the sequencing is important. There is not an individual in place right now, but having someone in place is important for training, alongside the strategy development. Dilger and Morstatter are working together with LookEast to get as much institutional memory developed as possible. Essentially, the strategy developed is an SOP, listing where/how/when/who to post, but not the content for scheduling on a weekly basis.
 - i. He noted that other groups hire their own media specialist then have LookEast develop their strategy to implement it in-house.

We can do the same, but we do not have that media specialist inherently in place.

- b. Hess commented that NIFA does have a communications department, led by one of the best communicators in the land-grant system. He impressed the need to make sure NIFA is one of the followers, noting it is important to coordinate with NIFA.
 - i. Discussion commenced regarding partnerships to amplify, including NIFA, Sara Delheimer, NASEM, etc.
 - ii. Morstatter explained the process of the monthly content briefs, and noted that it will be very important for participation from committee members, both in terms of member spotlights, and also sharing the NANP social media posts on the platforms as content increases.
 - 1. Hess noted that every month, the director of the NIFA communications office emails a toolkit, with items of communication for each week, so that those can be shared/spread. Similarly, the APLU sends out something similar. He suggested it might be a template to follow.

d. Budget

- i. Miller will be putting together budget information to discuss during the July meeting.

9. Closing comments from Administrative Advisors

- a. No additional comments were provided. Hess noted the project is very well on track for the midterm review.

10. Adjourn

Beitz moved to adjourn the June NRSP-9 coordinating committee meeting. Caton seconded the motion. The motion passed. Miller adjourned the meeting at 1:52pm EDT.

Coordinating Committee
National Animal Nutrition Program – NRSP-9
Conference Call – July 6, 2022 – 1:00 pm EDT

Members present: *Phil Miller, Merlin Lindemann, Ryan Dilger, Art Goetsch, Brian Small, Del Gatlin, Carey Williams, Heidi Rossow, Joel Caton, Robin White, Luis Tedeschi, Don Beitz (partial)*

Administrative Advisors: *Lesley Oliver, Bret Hess*

USDA/NIFA:

National Academies: *Robin Schoen (partial)*

Administrative Assistant: *Brittany Morstatter*

Guests:

1. Miller called the meeting of the Coordinating Committee to order at 1:02 pm EDT.
 - a. Miller may be absent for the August meeting and will appoint someone to lead it.
2. Opening comments from Administrative Advisors
 - a. Oliver is waiting on USDA budget information.
 - b. Hess reported that an acting director of NIFA has been appointed. NIFA hopes to have someone identified by fall/winter 2022.
 - c. Hess recommended planning a business meeting for the fall, which will be beneficial for inclusion of reports in the midterm review. Oliver concurred and will connect with Hanley for follow up.
 - i. Discussion commenced regarding scheduling and format.
 1. There was strong support for holding two 2-hour Zoom sessions for the business meeting.
 2. The first week of October was determined the best time to schedule.
 - a. **ACTION ITEM:** A poll will be sent out to determine the best days/times.
 3. **ACTION ITEM:** Miller will appoint a planning group to begin putting together the business meeting agenda, which will include showing progress on the recommendations from the Review Committee for 1) weaning from off-the-top funding, and, 2) an evaluation of NANP impacts.
3. Opening comments from USDA/NIFA – S. Smith, F. Siewerdt
 - a. Smith and Siewerdt were not on the call.
 - b. Caton issued a reminder that the Farm Bill is coming.
4. Update from the National Academies – R. Schoen
 - a. Poultry is looking at going to review in September.
 - b. Funding has started coming in for a Swine update. The hope is that it will get started in fall 2022.
 - c. Schoen announced that a new program officer will be coming on board at the end of July.
5. Minutes of the June 1, 2022 meeting

Beitz moved to approve the June meeting minutes as distributed. Caton seconded the motion. The motion passed.
6. Report/business from the Feed Composition (FC) committee

- a. The FC committee did not meet in June. They are currently planning for monthly meetings.
- b. They have aligned on ingredient definitions. Dilger sent the data scientist down the rabbit hole of trying to recreate the actual data that went into the beef and dairy datasets.
 - i. The intermediary steps do not exist and have to be generated. It takes about 20 minutes for each ingredient. That is the step necessary to have the individual records which are required to bring into the database.
 - ii. In parallel, the data scientist is working with Surface 51 to prepare for the upload of that information.
 - iii. Once that system is in place, NANP will be able to start to leverage connections, going after different commercial labs to get more perennial data import procedures in place. That will then leverage what is published with NANP for the data curation steps and having a moderated data upload on a more regular basis, not just waiting for a NASEM report to come along.
 - iv. This will be the sole focus for the next year, so that when the business model is in place, data can be plugged in. The goal is trying to automate and use as little labor as necessary to maintain the databases.
 - 1. Discussion commenced regarding future NASEM reports/updates. Schoen recommended having a special meeting about feed ingredients/models when putting together the Swine update.

7. Report/business from the Modeling committee

- a. White reported personnel updates that should help with moving some projects forward.
 - i. A student from UC-Davis has expressed interest in working with the Modeling committee on some work-around data structures, and trying to address some of the challenges with the consistency of the reporting of information and journal articles. Discussions will be occurring with journals around what types of opportunities there are for more consistent data reporting guidelines through the journals and working on some aspects of the animal performance database, attempting to streamline formats and things that are used to publish animal performance data.
 - ii. Another individual has expressed interested in working with the Modeling committee on constructing the educational documents, designing the shiny apps, and developing content for the online course, which could be a mode of income generation in the long term.
- b. Tedeschi provided a recap of the workshop that was held during 2022 ASAS Annual Meeting.
 - i. The workshop was two presentations with 3 hands-on sessions. Feedback requested more hands-on.
 - ii. The workshop was in-person only. Tedeschi remarked that when it was held online, there was higher attendance.
 - iii. Although 35 people registered, about 45 people showed up. About half were from US, 20% from South America, 15% from Europe. Lots of students this time; about 70% were students.

8. Business items

- a. Business model discussion updated – FASS; Miller, Lindemann
 - i. A response has been received from FASS; Miller will work with Lindemann to put together a 3-year budget for the lawyer. Miller anticipates this should be wrapped up by the time the business meeting in the fall.
- b. Future summit – Beitz, Irlbeck, Gatlin

- i. Beitz left the call early and was unable provide an update.
 - 1. Gatlin noted the plan is to hold the summit in April 2023. Beitz has been in contact with NASEM to schedule a venue. Some progress has been made on topics/speakers. Beitz can provide a more complete update next month.
 - ii. Caton noted the deadlines for grants: Letter of intent: 195 days prior to start of conference. Full conference grant application: 150 days prior to start of conference.
ACTION ITEM: The letter of intent for the summit needs to be submitted as soon as possible. Miller will work with Beitz, Irlbeck, and Gatlin.
- c. NANP social media strategy – Dilger, Morstatter, Williams
- i. Dilger reported we are now in the 3-month implementation phase with Look East. They have a nutrition specialist writing the content. Dilger expressed the importance of the CC and subcommittee members to help support the social media efforts, not only by following the NANP social accounts, but by also sharing the posts on the different platforms, so that they are more broadly circulated, leveraging the networks of NANP committee members to build the social media presence/following. Growth is starting to be seen.
 - 1. Miller and Dilger have discussed moving to a university journalism hub to sustain social media efforts after the 3-month period is over.
 - 2. Miller noted that a colleague from UNL, Andrea Watson, teaches an advanced diet formulation course and has been adapting materials from the NANP website for the course. He’s hoping as she puts materials together for the fall course, they can use it as an example to showcase how somebody would use the information in the classroom.
- d. Budget
- i. Miller still trying to get the budget information from UNL. **ACTION ITEM:** Miller will send out budget information via email.
9. Closing comments from Administrative Advisors
- a. No additional comments were provided.
10. Adjourn
- Miller adjourned the meeting at 2:02pm EDT.

Coordinating Committee
National Animal Nutrition Program – NRSP-9
Conference Call – August 17, 2022 – 1:00 pm EDT

Members present: *Phil Miller, Ryan Dilger, Art Goetsch, Joel Caton, Luis Tedeschi, Gary Cromwell, Art Goetsch, Heidi Rossow, Nancy Irlbeck, Robin White (partial), Don Beitz (partial), Brian Small (partial)*

Administrative Advisors: *Lesley Oliver, Bret Hess, Rick Rhodes*

USDA/NIFA: *Steve Smith*

National Academies: *Robin Schoen (partial), Albaraa Sarsour*

Administrative Assistant: *Brittany Morstatter*

Guests: *Carol Hanley*

1. Miller called the meeting of the Coordinating Committee to order at 12:02 pm EDT.
2. Opening comments from Administrative Advisors
 - a. Oliver thanked those who have been working with Hanley.
 - b. Rhodes provided the dates for the Experiment Station Section annual meeting; 9/25-28. One of the groups that will be reporting out is the NRC Review Committee. Rhodes hopes to discuss some of the accomplishments of NRSP-9 with the NRC RC.
3. Opening comments from USDA/NIFA – S. Smith, F. Siewerdt
 - a. Smith provided no comments.
4. Update from the National Academies – R. Schoen
 - a. Schoen introduced Albaraa Sarsour, the new program officer at the National Academies. Sarsour will primarily focus on the animal nutrient requirement series.
 - i. ***Please add to CC emails; he will eventually become the liaison to NANP.**
 - b. Poultry is inching closer to review.
 - c. A few mistakes are being corrected in the Dairy, and they are still waiting for the e-book. Translations into multiple languages are in progress, with interest in even more languages.
 - d. Funding is starting to come in for the Nutrient Requirements of Swine.
 - e. The Blue-Ribbon panel for land grant collaboration plans to have a small report coming out from that group will likely hit at the end of September.
5. Minutes of the July 6, 2022 meeting
Irlbeck moved to approve the July meeting minutes as distributed. Caton seconded the motion. The motion passed.
6. Report/business from the Feed Composition (FC) committee
 - a. The FC committee has made it all the way through beef dataset.
 - b. On the dairy side, we only have access to data for about 40% of the ingredients, and for the other 60%, we are missing one or more labs.
 - i. The data from the individual records cannot be recreated. Dilger has reached out to Paul Kononoff to set up a meeting and is trying to bring Andres Schlageter back on as well.
 - c. A meeting is scheduled to finalize preparing the database for upload of beef and dairy datasets. Efforts will also ensure the database will work for uploading future datasets as well.

- i. Independent parties have reached out. (Companies working with specific ingredients or analytical labs who are happy to share data.) Dilger is trying to get a census of how they can provide the data, to develop a data import procedure, so that we can continually get new data in the future.
 - ii. Discussion commenced about the missing data.
 - iii. The committee is discussing best practices for nutrient composition data.
- d. The PSA annual meeting was a good meeting. Dilger reported good traction for NANP.

7. Report/business from the Modeling committee

- a. White reported a couple of interns have come on board to help with some committee activities.
 - i. Activities include working with Surface 51 on a strategy to get the modeling database up and running, and designing a new data filtering strategy.
 - ii. They have also contacted the EIC of JDS to solicit an invitation to put together a perspective article on fair data principles and their application in the animal sciences. The idea was well received by the editors.
 - iii. Hoping to expand from the 8-10 data sets we currently have, a list of meta analyses that have been published in JDS and JAS over the last 2-5 years has been compiled. The plan is to reach out to those authors to solicit the database they use in their meta-analysis of the contribution to the animal performance data.
 - iv. There will also be intern efforts to develop the educational curriculum.
- b. A modeling workshop will be held at 2023 ADSA.

8. Business items

- a. Business model discussion updated – FASS; Miller, Lindemann
 - i. Miller identified 6 names from the coordinating committee to include as ‘members of the board’ for the documents the lawyer is filing. Those names can be changed later. The process should be completed in near future.
- b. September meeting;
 - i. Discussion commenced regarding scheduling.
 - 1. **ACTION ITEM:** Morstatter will set up a Doodle poll for the first two weeks of October, for two 2-hour blocks.
 - ii. Miller mentioned some topics for the agenda, particularly noting the mid-term report and the next funding cycle. **ACTION ITEM:** Miller will prepare an agenda and distribute to the CC.
- c. Future summit – Beitz, Irlbeck, Gatlin
 - i. Miller distributed the draft program via email.
 - 1. Irlbeck reviewed the efforts.
 - a. The speakers are still being contacted. The working group requested feedback from the CC on the speakers.
 - i. The World Wildlife Fund has a sustainable livestock division. There is potential interest for a WWF speaker.
 - ii. **ACTION ITEM:** The CC members will review the speakers and provide feedback to the working group.
 - iii. **ACTION ITEM:** The CC empowered the working group to move forward on confirming speakers, and subsequent second-choice speakers if the first-choice speakers are unavailable.
 - 2. The proposal includes a graduate student poster competition over the noon hour. The selection criteria are being developed for the 6-10 students.

3. The proposed dates are April 11, 12, 13, 18, 19, 20, and the hope is to hold the Summit in the National Academies building.
 - a. **ACTION ITEM**: Morstatter will prepare a Doodle Poll for the proposed dates.
 4. The goal is to have a publication developed from the Summit.
 - a. Caton volunteered to have a discussion with *Animal Frontiers*. The CC approved Caton to discuss the draft agenda and publication plan with the EIC of *Animal Frontiers*.
 - d. NANP social media strategy – Dilger, Morstatter, Williams
 - i. Dilger reported on the continued efforts of Look East at growing the NANP social media. The benefit of working with them is a better roadmap of what content to post and how to create that content. LinkedIn has had the most traction.
 1. Miller will be setting up a meeting with the social media group at University of Nebraska.
 - e. Budget – expenditures/balance
 - i. Miller discussed a few rough budget details, but plans to expand on the details at the October meeting. Overall, financially, NANP is in good shape.
 - f. Pre-ASAS modeling workshop evaluation report – draft (Carol Hanley)
 - i. Hanley discussed the evaluation process, and her recommendations include generating better survey questions for the next modeling workshop.
 1. A working group will be developed, for developing better questions.
 - ii. Hanley is currently working through the Google analytics for the website.
 1. In order to evaluate the education and documents, Hanley requested assistance from members of the CC. Dilger offered to continue to assist.
 - iii. Hess noted the evaluation deadline should be December 1, so it is ready in time the AAs to conduct the midterm review.
 - g. Leading Culture Change Through Professional Societies of Biology (BIO-LEAPS) (attached)
 - i. Information was emailed prior to the CC meeting. Miller was contacted by ASAS about the opportunity. Miller and Caton will find out more from ASAS and will report back.
 - h. Other Business
 - i. Irlbeck attended the Comparative Nutrition Society meeting. Due to her efforts, CNS is now very familiar with NANP.
9. Closing comments from Administrative Advisors
 - a. Hess reminded the CC of the deadlines for the midterm review and extended thanks to Hanley for being overly thorough. Critical to the review is the progress that has been made on becoming a nonprofit and efforts towards a different business model, particularly alternate sources of funding to sustain the project.
 - b. Hess expressed support of the summit plans and noted that Colorado State University has submitted a grant proposal to NIFA to host a climate summit. He noted that the list of speakers in the NANP summit draft program hits the mark and could feed quite well into the climate summit roadmap. He encouraged the CC to keep that in mind moving forward as there could be opportunities to interact.
 - c. In regards to the LEAP program, Hess noted the possibility of interacting with the Experiment Station Session Diversity Catalyst Committee, of which, NRSP-9 AA Rick Rhodes serves as the Executive Vice Chair.

10. Adjourn

Beitz moved and Caton seconded to adjourn meeting. The motion passed.
Miller adjourned the meeting at 2:12pm EDT.

DRAFT

Coordinating Committee
National Animal Nutrition Program – NRSP-9
Conference Call – September 7, 2022 – 1:00 pm EDT

Members present: *Phil Miller, Ryan Dilger, Robin White, Don Beitz, Del Gatlin, Brian Small, Nancy Irlbeck, Carey Williams, Heidi Rossow, Joel Caton, Art Goetsch (partial)*

Administrative Advisors: *Bret Hess*

USDA/NIFA: *Steve Smith*

National Academies: *Albaraa Sarsour*

Administrative Assistant: *Brittany Morstatter*

Guests: *Carol Hanley*

1. Miller called the meeting of the Coordinating Committee to order at 1:03 pm EDT.
2. Opening comments from Administrative Advisors
 - a. Hess reserved comments until the end of the meeting.
 - b. Due to scheduling conflicts, Dr. Lardy has been unable to participate. Hess recommended keeping Dr. Lardy on the roster until the end of the year, at which time can be reviewed.
3. Opening comments from USDA/NIFA – S. Smith, F. Siewerdt
 - a. Smith reserved comments until the end of the meeting
4. Update from the National Academies – R. Schoen, Albaraa Sarsour
 - a. Schoen was not on the call.
 - b. Sarsour is getting reviewers together for Poultry. There are about 2 chapters still being written and the rest are in committee reviews.
 - c. Swine is still waiting for funding.
5. Minutes of the August 17, 2022 meeting
Beitz moved to approve the August meeting minutes as distributed. Irlbeck seconded the motion. The motion passed.
6. Report/business from the Feed Composition (FC) committee
 - a. The FC committee has been trying to figure out how to align between beef and dairy across the different ingredients.
 - i. They determined they should rethink the way that we have users identify which ingredient they want to study.
 1. The committee will meet with Surface 51 on Sept. 9, to put together a new approach for users to build a query, which will be in a hierarchical fashion, where the user will choose the ingredient then add attributes to it.
 - a. In doing so, ingredient names do not have to align directly between NASEM reports. The user will be able to build their ingredient based on their specifications.
 - i. They believe they have enough metadata in the system, but just need to tweak the way the user finds the information.
 - b. Dilger discussed how things will change from the user side and explained the better flexibility, making it easier for the users.

- b. Beef is finished and ready to be pushed into the database.
- c. The committee was able to find the original Dairy data, and they have the Python code to apply to that.

7. Report/business from the Modeling committee

- a. White reported some breakthroughs on data from work on the Modeling group.
- b. The committee has sent a request to Surface 51 for a diagram and video to explain the new approach to downloading data from the animal performance database
 - i. This will allow a user to do a much more comprehensive search across the different data contributions which are in that database.
 - 1. In the previous filter and download approach it was challenging, driven by database as the primary level. This allows for a more robust comparison among the different contributions into that broader dataset.
 - ii. In the coming weeks, they hope to have a functional query and download page for that animal performance data ready to launch.
- c. Through September, an intern will be working on the drafts several two-page documents. The committee will be discussing refining the right language for these.
- d. The committee continues to pursue the idea of a perspective paper for JDS, focusing on fair data principles for use in publishing animal nutrition data. The JDS EIC is excited to continue the discussion on animal performance reporting. An initial draft is in development.

8. Business items

- a. Business model discussion updated – FASS; Miller, Lindemann
 - i. Miller is awaiting an update from FASS lawyers.
- b. October meeting – items for the meeting – set time blocks
 - i. The two-part meeting will take place Oct. 3: 1-3pm CDT; Oct. 12: 9-11 CDT
 - ii. Miller encouraged the two subcommittee chairs to contribute major items for the agenda. **ACTION ITEM**: Miller will distribute the agenda soon.
- c. Future summit – Beitz, Irlbeck, Gatlin
 - i. **ACTION ITEM**: Beitz will reach out to NASEM to confirm availability for Wednesday, April 19, 2023, (with the second priority date of Wednesday, April 12, 2023).
 - ii. Once date is confirmed, speakers can be confirmed.
 - 1. No changes have been made to the current proposal, except adding a name to the topic from the World Wildlife Fund, [Melissa Ho](#).
 - 2. It was recommended to avoid international speakers, if possible.
 - iii. Irlbeck encouraged CC members to think about how to target graduate students. **ACTION ITEM**: Irlbeck and Williams will develop submission criteria for the graduate student poster competition.
 - iv. Caton reported that *Animal Frontiers* has a full slate for 2023, but that JAS may consider including a special section from the Summit.
 - v. The LOI must be submitted at least 195 days before the start of the conference. The full Conference Grant application must be submitted, at minimum, 150 days before the start of the conference (November 20, 2022).
 - 1. **ACTION ITEM**: The conference grant LOI must be submitted **before October 6, 2022** (for the April 19 date; before Sept. 29 for the April 12 date).
 - a. <https://www.nifa.usda.gov/sites/default/files/2022-04/AFRI-Letter-of-Intent-Instructions-FY22.pdf>

2. When the application is submitted, Smith recommended sending an email to notify the program leader that the application has been submitted.
 3. There is a \$50,000 maximum.
 - vi. Discussion commenced regarding invitations for the Summit.
 1. Smith pointed out that any flavor of 'lobbying' means that NIFA funds cannot be used for the conference.
 - a. If congressional staffers attend because of a broadcast alert, as opposed to a targeted announcement, that shouldn't be a conflict.
 - b. Miller noted to keep this in mind as announcements/invitations are developed.
 - vii. Hanley recommended developing an attendee post-Summit electronic evaluation.
 - d. NANP social media strategy – Dilger, Morstatter, Miller
 - i. Miller has discussed with UNL journalism department's entrepreneurial program for graduate students, for taking on social media projects. The hope is to meet with them within the next week.
 - ii. Dilger reported that working with Look East has been fantastic. They are excited by NANP's work.
 1. The activity has been on par with similar association/society groups.
 2. The next step is to develop a transition plan.
 - e. Leading Culture Change Through Professional Societies of Biology (BIO-LEAPS)
 - i. Miller received an email back from ASAS, who are excited. They have the next plans outlined and will work with Miller and Caton.
 - f. Other Business
 - i. Irlbeck requested to include an additional topic on the October meeting agenda, to discuss the possibility of adding exotic animal nutrition into the scope of NANP.
 1. Hess and Smith discussed restrictions for hatch funding and the need to focus on research and agriculture (farm animals). As NANP explores new business models, the plan could develop to expand and rely on other sources of funding. It would be imperative to document how data outside of the scope of animal agriculture is funded by a different stream.
 - ii. Hanley noted the deadline for the evaluation report is upcoming, and requested explanations for any objectives not met.
9. Closing comments from Administrative Advisors
- a. Hess relayed notes from Oliver for those who receive direct distributions to document funding distributions for the annual budget.
 - i. Miller noted funding is anticipated to be similar to past distribution. **ACTION ITEM:** Miller will include the budget and expenses on the October meeting agenda.
10. Adjourn
- Miller adjourned the meeting at 2:06pm EDT.

Appendix D

Summit Discussion

Location: National Academy of Science Building, Washington DC

Timing: Spring 2023; proposed dates: April 11, 12, 13, 18, 19, 20

Stakeholders: Animal commodity groups, Agriculture Committee staffers, USDA leadership, members of CFAR, AFIA, Agricultural Experiment Station leaders, NAS, FFAR, Governors Council

Mission: To evaluate the use of animals to sustainably provide for healthy human diets

Producing Healthy Diets from Sustainable Animal Systems

9:00-9:15 **Introduction** – Don Beitz, Iowa State

9:15- 9:45 **The era of opportunity for livestock sustainability**—*Sara Place, Chief Sustainability Officer, Elanco Animal Health*

9:45-10:15 **Animal source foods in healthy, sustainable, and ethical diets** – *Frederic Leroy, Vrije Universiteit Brussel,*
(frederic.leroy@vub.be)

10:15-10:30 **Coffee break**

10:30-11:00 **Meeting the grand challenges of animal agriculture on environment and world food security** – *Frank Mitloehner, UC-Davis*

11:00-11:45 **Use of alternate proteins to replace animal-derived foods**

- a. Production of alternatives to traditional milk – *Anna Aleena Paul, Crit. Rev. Food Sci. Nutr. 2020.*
- b. Production of meats from alternate proteins and via cell culture – *Natalie R. Rubio (Tufts University), Nature Communications 11: #6276, 2020*
- c. Alternative egg production – *Speaker*

Noon-1:00 **Lunch and Poster Session** (6-10 posters)

1:00-1:30 **Impact of climate change on livestock** – *M. Melissa Rojas-Downing, Sean A. Woznicki, Michigan State University*

1:30-2:30 **Environmental Panel with Robin White as moderator**

Impact of food animals on environment (climate change)

- a. Methane and nitrous oxide production by livestock and its mitigation – *K.A. Beauchemin, Lethridge R&D Center; A.N. Hristov, PSU*

NANP 2022 Evaluation Report

- b. Water availability and quality – *Mark Landefeld and Jeff Beltinger, Ohio State University*
- c. Role of nutrition on lessening of carbon footprint of food animals
 - i. Beef cattle – *Greg Thoma, University of Arkansas, C. Alan Rotz; USDA, PSU*
 - ii. Dairy cattle – *Ermias Kebreab, UC-Davis*
 - iii. Poultry and Swine – *Speaker? Roger Cady?*
 - iv. Aquaculture – *R. Naylor, Stanford University*

2:30 – 3:15 Coffee break

3:15 – 3:45 **Use of life cycles assessment in food and agriculture (supply chains)** – *Marty Matlock, Univ. of Arkansas*

3:45-4:15 **Do animals have a role in future food systems?** – *Imke de Boer, Wageningen Univ.;* Carter Roberts or Rebecca Shaw, World Wildlife Fund?

4:15-4:30 **Summary** – *Merlin Linderman and Phil Miller, NANP Leadership*

Publication: Goal is to have a written document

Other potential presentations:

Animal source foods and improved growth and development in children – *Jamie Jonker*

Environmental impacts of U.S. food waste – *Shannon Kenny, US. EPA Office of Research and Development; Jenny Stephenson, US. EPA Region 9*