Conference Call – October 7, 2020 – 3:00 pm EDT

Members present: Merlin Lindemann, Phil Miller (Incoming Chair), Don Beitz, Todd Applegate, Ryan Dilger,

Heidi Rossow, Del Gatlin, Joel Caton, Nancy Irlbeck

Administrative Advisors: Lesley Oliver USDA/NIFA: Steve Smith

National Academies/NRC:

Additional Attendees: Robin White

1. Lindemann called the meeting of the Coordinating Committee to order at 3:03 PM EDT.

- 2. Opening comments from Administrative Advisors
 - a. Oliver reported that the NRSP-9 has been renewed for another 5-year project. The Experiment Station Section recommended that, by the mid-term review, NANP needs to communicate a transition plan to move from off-the-top funding. They recommend that to all projects, but they have also made a fundamental change to the NRSP guidelines going forward regarding funding. The expectation for any new emerging innovation projects, by the time the renewal, the project has to have to have a clear plan to transition off of off-the-top funding by the end of the next 5-year renewal. They actually voted to not renew one of the NRSPs. The project must think about "How do we capture impacts as we move forward with the project?"
 - i. Oliver confirmed that the majority of the other 9 NRSPs will be sunset if they cannot show a change in their funding stream. She added there would be consideration for base-level support for things like database maintenance, transitioning from an "emerging innovation" to a "capacity" project, with additional functionalities and developments being funded by external sources.
 - ii. Lindemann noted that one task still outstanding is listing all publication projects, completed by committee members, that may be related to the project but maybe haven't been funded by NANP. Those kinds of publications, and the impact of people not just in science but also policy, supporting broad research communities, is the kind of things they want to see when it comes to a mid-year review.
 - i. Oliver commented that this is the first year, going forward, of the new guidelines, and a project will follow 5-5-0 year, snowballing out unless it goes to capacity or transforms itself to a different innovation project. Oliver noted there was no discussion regarding funding caps, noting that it is probably \$100,000 or less, with one NRSP currently getting \$50,000 annually. This project could definitely turn into a capacity project, but it must be considered how can we attract external dollars to continue building on the project. Plus, what is the bare minimum base product that we want to see continue long term and what is the cost to maintain?
- 3. Opening comments from USDA/NIFA Steve Smith
 - a. Smith has been named the official NIFA representative to this project. Smith also received the official NIMSS email confirming the renewal of NRSP-9.

- 4. Update from NRC/NASEM R. Schoen not on the call
 - a. Lindemann reported no updates from Schoen.
 - b. Dilger reported everything is on track for the Poultry revision. There has not been a lot of progress from the last month; on a pretty heavy writing phase going through the summarization of the literature, getting to the point of getting ready to make the final tables. The challenge is going through all the different categories of poultry.
- 5. Minutes of the September 9 conference call

Beitz moved to approve the minutes as distributed. Irlbeck seconded the motion. The motion passed.

- 6. Previous, ongoing, or old business items
 - a. Websites analytic report
 - i. No specific updates were reported. The report will be distributed quarterly or every six months.
- 7. Report/business from the Feed Composition committee
 - a. Dilger reported that the FC committee has been talking about the transition of the chairs. Dilger and White have been coordinating to put together announcements for post-doc/"Research Associate" position. Once everything is in place and sub-committee structures are finalized, the announcements can be posted.
 - b. Lindemann reminded that the budget for the new project term will be split up between universities for different tasks.
- 8. Report/business from the Modeling committee
 - a. White echoed Dilger's updates regarding post-doc position notices. White thanked the committee for selecting her as the chair of the Modeling committee.
 - b. Rossow heard from Mike Vandehaar and Dom Bureau.
 - i. Vandehaar recommended, that for planning the modeling ASAS modeling workshops, to try to plan to do the ADSA workshop before ADSA and ASAS workshop after ASAS, since the meetings are back to back in 2021.
 - ii. Bureau updated that a new date has been set for the International Symposium on Fish Nutrition and Feeding (ISFNF): June 6-11, 2021. He has resumed planning that modeling workshop.
 - c. Lindemann questioned progress, from an email from Hanigan regarding the student he had entering/formatting some data for swine modeling on the website.
 - i. Dilger had no knowledge of any changes; Surface 51 asked for a stop-order on new data entering the old system. Dilger reported that there has been no movement on uploads to Surface51 database. Everything is moving along, but we're in a position to not make any changes until that transition happens to the new database.
 - ii. Miller clarified, as he understood it as the student person was uploading data from the papers used in the swine NRC establishing the lysine requirements; they have mined the performance data from those papers.
 - iii. The email will be forwarded to White, so she can be aware of this little bit of activity that Hanigan was trying to finish up.
 - iv. Rossow commented that the modeling committee has made efforts to go back over the last 6-7 years of data for horse and beef. The swine data portion was just part of that effort to archive as much data as possible and get it into the database, so that when it

comes time to have data to upload, those would also be uploaded. This has been at least 3 years ongoing.

- d. Rossow commented that the only other major project still in progress is working with the programmer at UC Davis on the multi-species interface. Rossow also commented on the unknown status of the project to archive nutrition methods. No movement has been seen in quite a while.
 - i. Nathalie Trottier was the heading that archive project, but has since moved. Discussion commenced about positions on the modeling committee.
 - 1. Lindemann has 12-13 people interested in committee positions. They need to be broken out by committee, along with the existing members who desire to continue. The committees have not been set up yet, probably within the next couple of months.
- 9. New business items or updates
 - a. Weekly ASAS webinars October Nutrition series presented by, and highlighting, NANP
 - 1. (5) Recap of the NANP Summit
 - 2. (6) Partnership between NANP and NRC/NASEM relative to the nutrient requirement series; recap of Don Beitz' presentation from the Summit?
 - 3. (8) A webinar on the Modeling committee with, perhaps, demonstration of a model available on the website
 - 4. (8) A webinar on Feed Composition aspect of the website
 - ii. Lindemann has emailed ASAS twice with no response. Tedeschi received an email from Justin Bartlett at ASAS about scheduling some of the modeling activities from this summer for the webinar series.
 - 1. Lindemann will respond to that email to get the webinar series moving. The intention was not for the content of the first webinars to be modeling. The CC determined that the 4 topics (listed above) would be the topics, to use those as further encouragement to people to apply for NANP committee membership.
 - iii. Dilger provided a reminder to the CC that we have a braded PowerPoint slide format, and suggested that we should add a stylized slide stating that "We're still recruiting".
 - b. GANN Global Animal Nutrition Network
 - i. Lindemann worked a lot with ChalkLabs and Elsevier. On multiple occasions, the CC was asked to review their usage of GANN. Lindemann asked for any comments regarding GANN, as an email was received from ChalkLabs questioning where we want to go with this. Lindemann responded to that email stating that the project is up for renewal. This would be an expenditure of funds to continue maintaining that website.
 - 1. Gatlin asked if there is any way to track usage activity of GANN.
 - a. Lindemann stated there were some updates provided by ChalkLabs, but nothing overwhelming.
 - i. Lindemann added that the decision to move the management of the NANP website from ChalkLabs to Surface51 was a lack of responsiveness regarding website changes.
 - b. Dilger added that none of that information is connected with our analytics. We would have to ask ChalkLabs to provide information. It would have to be set up to start collecting information; if things have not been collected in that last five years, there won't be data to review.
 - 2. Applegate commented that it is still not returning the best data; it's probably not going to be a useful took if it is not going to be reliable.

- 3. Discussion commenced regarding the value of the investment and regarding the longevity and legacy of NANP after the NRSP-9 is sunset. The decision to continue the GANN may need to occur during the November or December CC meeting.
- c. Miller provided updates on the immediate tasks:
 - i. Miller, Dilger, and White have discussed logistics on post-doc positions.
 - ii. Miller and Lindemann have also been focusing on CC and sub-committee positions.
- d. Miller acknowledged and thanked Lindemann for his involvement and leadership in the project and renewal proposal of this NRSP-9 and for the assistance coordinating the transition to the new project and chairs.
- e. Lindemann reminded the CC of interest in the Zebrafish project putting together a suggested Zebrafish diet.
- 10. Closing comments from Administrative Advisors
 - a. Oliver encouraged the CC keep moving forward. Oliver and Lindemann will meet to discuss the post-doc positions and will work together for the hiring process. The chairs need to replace committee members and get the new committees established.
- 11. The meeting was adjourned at 3:55 PM EDT.

Conference Call – November 4, 2020 – 3:00 pm EST

Members present: Phil Miller, Merlin Lindemann, Don Beitz, Gary Cromwell, Ryan Dilger, Heidi Rossow,

Nancy Irlbeck, Del Gatlin, Carrie Williams, Joel Caton

Administrative Advisors: Rick Rhodes

USDA/NIFA:

National Academies/NRC: Robin Schoen

1. Miller called the meeting of the Coordinating Committee to order at 3:01 PM EST

- 2. Opening comments from Administrative Advisors
 - a. Rhodes congratulated the group on the renewal of the project. He encouraged the CC of setting place holders for two items for this next 5-year term:
 - i. The NRSP Review Committee's request for a business plan, to be evaluated during midterm reviews. The CC should consider how NRSP-9 is engaging the network? "Why is important for NRSP-9 to exist?" "How does it support animal nutrition in the future?"
 - ii. NRSP-9 should not be waiting until the last minute to do the impact analysis. The CC should consider "How do we describe the outputs of the project and what are the impacts?"
 - b. Miller, Lindemann, and Oliver have been communicating and plan to schedule a meeting to discuss processes/procedures for the financials.
- 3. Opening comments from USDA/NIFA Steve Smith
 - a. Smith was not on the call.
- 4. Update from NRC/NASEM R. Schoen
 - a. Schoen provided updates on Dairy and Poultry:
 - i. The Dairy report is in review. One review has already been returned. There are around 12 individuals reviewing the report. Schoen expects the reviews to come in approximately the first week of December. Schoen provided details on the review process, and noted they are questioning if it will hit the deadline of the Discover Conference in June 2021.
 - i. Poultry is going along well. There will be a meeting of all committee members in the next two weeks. Schoen is hopeful that it can go into review sometime in early spring. NANP sent Schoen a list of potential outside reviewers for the Poultry publication.
 - b. Schoen received a request from Robert Blair, an associate editor of *The Encyclopedia of Animal Nutrition*, formally The Encyclopedia of Farm Animal Nutrition, published by CABI. They would like to include an entry for NASEM/NRC, which would include a brief outline of the history and a list of publications. Schoen proposed collaborating with NANP to provide something.
 - i. Discussion commenced. Schoen will review encyclopedia entries to see the formatting that is needed and will determine the deadline.
 - ii. Miller will add this topic to the agenda for the December meeting.

5. Minutes of the October 7 conference call

Beitz moved to approve the minutes as distributed. Irlbeck and Caton seconded the motion. The motion passed.

- 6. Previous, ongoing, or old business items
 - a. Websites analytic report
 - i. No specific updates were reported. Dilger noted there have been steady increases, with now up to 650 people who have registered. Activity has been growing between 5-25 people per day. He added that a number of website projects are still being developed.
- 7. Report/business from the Feed Composition committee
 - a. Dilger reported that some members of the FC and Modeling committees have been coming together for the working group that is developing the educational marketing piece.
 - i. Surface 51 has provided the templates for the one-page pdf documents, for the website and for print. They are waiting on the working group to provide the content.
 - b. Surface 51 is still working on upgrading the FC and Modeling databases.
- 8. Report/business from the Modeling committee
 - a. Rossow reported no updates.
 - b. Lindemann provided updates on the 2020 ASAS summer workshop.
 - i. Lindemann has communicated with Justin Bartlett from ASAS, and NANP can link to the workshop recordings that are on YouTube. Dilger will follow up to ensure the recordings are linked on the website appropriately.
- 9. New business items or updates
 - a. Weekly ASAS webinars will we be submitting webinars from the Feed Composition and(or) Modeling committees
 - i. Lindemann provided background details regarding the 2020 summer workshop turning virtual, which ended at a total expense of \$20,000. Those changes included plans to set up a webinar series in the fall.
 - 1. Lindemann reported that the speakers never received their honoraria. There was a misunderstanding that the speakers haven't been paid yet because the thought was they might do another workshop later in 2020. This was resolved.
 - 2. Lindemann is finally getting responses from Bartlett/ASAS. Bartlett was also under the impression that the webinar series would be a repeat of the workshop. The workshop cannot be turned into a webinar series, as they could not be completed effectively over one-hour segments. Lindemann and ASAS discussed and determined that ASAS can still host a webinar series.
 - a. Lindemann questioned if the CC still wants to do the webinar series, noting that NANP has already garnered plenty of interest in committee membership.
 - i. Does NANP still want to do webinars on the committees?
 - ii. Does NANP still want to do webinars through ASAS?
 - 1. Dilger noted that one of the benefits of going through ASAS is that they already have the Zoom webinar license.
 - 2. Lindemann added that it is great to do it through ASAS, but NANP should aim to reach the whole animal science

- community, and the webinar series should also be advertised through ADSA, PSA, etc.
- iii. Dilger added that it would be ideal to wait until the spring semester, so that changes on the website and a few other projects are done before we start to highlight NANP, as opposed to increasing visibility to things that go out of date immediately.
- b. Miller will place this topic on the agenda for the January call.
- b. GANN Global Animal Nutrition Network
 - i. Miller questioned how to move forward with GANN.
 - 1. Discussion commenced regarding the past activity and the finances that would still be needed for upkeep and the return on the investment.
 - 2. Gatlin moved and Caton seconded to discontinue the development and funding of GANN. The motion passed.
 - 3. Miller will communicate with Gavin Laroux/Chalklabs that NANP will no longer continue support or development of GANN.
 - a. Dilger noted that we were pulling data from other databases, so there shouldn't be anything NANP needs to capture, so it should be a clean break.
 - 4. Irlbeck extended thanks to Lindemann and Cromwell for the extensive hours they put in on the GANN project.
- 10. CC, Feed Composition, Modeling Committees members for 2020-2025
 - a. Lindemann and Miller have been in discussion about membership of the committees. Lindemann has put together a spreadsheet of interested parties, and that has been forwarded to Dilger and White to review. In the coming weeks Miller and Lindemann will work with the committee chairs to put together a slate.
 - i. Miller does not anticipate major changes to the CC, but stated there will be slightly more changes to the other two committees.
 - ii. Lindemann asked Rhodes about getting input on committee makeup from the AAs. He recommended having a Zoom meeting with the AAs to look over slate for the CC, then also receive feedback about the other two committees.
 - 1. Rhodes encouraged Lindemann to propose a few dates and the AAs will meet with Miller and Lindemann to discuss the committee slates. The AAs defer to NANP recommendations but would like some input on the CC membership.
 - 2. Lindemann will send the AAs the spreadsheet for review. The AAs may provide general input such as "there's not enough representation from X region", etc. That spreadsheet may help to determine where there might be gaps.
- 11. Closing comments from Administrative Advisors
 - a. Rhodes provided no further comments.
- 12. Beitz moved and Irbeck seconded to adjourn the meeting of the NANP CC. The motion passed. The meeting was adjourned at 3:51 PM EST.

Conference Call – December 2, 2020 – 3:00 pm EST

Members present: Phil Miller, Merlin Lindemann, Don Beitz, Gary Cromwell, Ryan Dilger, Heidi Rossow,

Nancy Irlbeck, Del Gatlin, Joel Caton, Robin White

Administrative Advisors: Lesley Oliver, Bret Hess, Greg Lardy

USDA/NIFA: Steve Smith

National Academies/NRC:

1. Miller called the meeting of the Coordinating Committee to order at 3:01pm EST

a. Miller will send out the inquiry for schedules for next semester.

- 2. Opening comments from Administrative Advisors
 - a. Oliver reported a good discussion last week with all AAs, Miller, and Lindemann about NANP membership. Lardy agreed it was a successful meeting, and made a few additional suggestions, stating it will be a strong CC moving forward.
 - b. Oliver commented about recently working on the sustainable ag systems RFA, and recommended that NANP would be a good partner for anyone working on projects related to animal productions systems. She suggested that it would be a good potential alignment, and NANP may be able to build on some unique modeling opportunities.
- 3. Opening comments from USDA/NIFA Steve Smith
 - a. Smith reported briefly on two new consultants, one on the production side and one on the animal health side.
- 4. Update from NRC/NASEM R. Schoen (not on call)
 - a. The Encyclopedia of Animal Nutrition (CABI)
 - i. Schoen was not on the call to report an update.
 - b. Miller reported that Schoen stated that things are still progressing with both Dairy and Poultry nutrient requirement series. Dilger reported progress is being made on poultry, but the end is not in sight yet.
- 5. Minutes of the November 4 conference call

Beitz moved to approve the minutes as distributed. Irlbeck and Caton seconded the motion. The motion passed.

- 6. Previous, ongoing, or old business items
 - a. Websites analytic report
 - i. No specific updates were reported.
 - b. Miller, Lindemann, and Oliver met with Hector Santiago, the Associate Dean of Nebraska Agriculture Experiment Station, about moving the financials to the University of Nebraska. Miller is just waiting to hear back from them to set up a cost object. As soon as the cost object is done, invoices from Surface 51 and FASS can be paid. Miller expressed thanks to Oliver and Lindemann for their participation.

- c. Dilger provided an update on the website, noting that everything remains stable.
 - i. NANP is currently getting good exposure without additional marketing costs. However, NANP is still not reaching colleagues and grad students effectively.
 - ii. Projects for additional features are ongoing with Surface 51. The lead developer is expected to resume progress in January, with the upgrade of the databases.
 - iii. The marketing and education outreach piece has slowed, but things will pick back up in January.
 - iv. Irlbeck inquired if it would it helpful to email university department heads/deans.
 - 1. Dilger stated we may look into those types of efforts, targeting those who sign up through the website, and also targeting university departments. Dilger is trying to develop additional marketing skills to utilize those opportunities.
 - 2. Hess commented that it would be extremely important for the mid-term review impact analysis to report on the marketing efforts.
- 7. Report/business from the Feed Composition committee
 - a. Dilger reported no current updates.
- 8. Report/business from the Modeling committee
 - a. White reported no current updates.
- 9. New business items or updates
 - a. Professional society workshops/symposia
 - i. 2021 ASAS meeting workshop follow up
 - 1. ASAS workshop deadline is December 22. Tedeschi was interacting with ASAS on the deadlines. Miller will follow up with Tedeschi, copying White.
 - a. Caton noted that ADSA and ASAS are holding back-to-back meetings this year, so it has been discussed to do workshops on the overlap day.
 - 2. Miller added that typically ASAS covers some speaker and publication costs for approved symposia.
 - ii. Miller noted that we may need to reevaluate what level NANP can support workshops, with it being first year of new budget.
 - 1. Lindemann reviewed a report of past project spending. Within that, there is a listing of the symposia and workshop activities at ADSA, ADSA, ESS, PSA. NANP had the luxury of spending excess funds for those. With this being the first year of the new project, there is not a built-up of excess of dollars. However, NANP does have some funds from the post-doc positions that are not being utilized. Lindemann suggested the CC discuss using a portion of those funds towards maintaining momentum with workshops.
 - a. Discussion commenced on line items from the budget, particularly for symposia. Miller noted that there is \$69,000 annually to spend at the discretion of the committees. He also noted to take into consideration the website and maintenance, and development of other things, and maybe consider a lower amount of support for workshops due to those other expenses.
 - b. Smith encouraged to keep in mind the history of USDA/NIFA supporting workshops, adding that workshops at ADSA have been favorably viewed by their ad hoc reviewers. He noted that those requests do require lead time; more lead time is always better, but RFAs can come in year-round.

The LOI and full conference proposal have to be submitted 195 and 150 days, respectively, before the start of a conference.

- i. Tim Hackmann and Mark Hanigan submitted a previous funding request, that could be used as a template.
- 2. Caton reminded that it is important to consider those leveraged funds from USDA-ARS, or others, when reporting how NANP utilizes leveraged funds.
- b. GANN Global Animal Nutrition Network follow up
 - Contacting ChalkLabs, discontinuing GANN. Miller has contacted Gavin at ChalkLabs, informing them of discontinuing GANN, and that NANP is not interested in any intellectual property from that. Gavin replied and was very complimentary of NANP.
- 10. CC, Feed Composition, Modeling Committees members for 2020-2025
 - a. Miller reported no changes to existing members who expressed interest in remaining, but will be adding individuals to the CC. Miller is waiting to hear back from Rick on someone to represent the poultry area. Once that is official, notification will be sent to everyone, very quickly in the new year.
 - b. Dilger and White are still working on the advertising for post-doc positions. White added that is currently the major priority of the two committees, and that they might try to target individuals outside of the "comfort" species targeting horse, swine, etc.
 - c. Lindemann reported an update on filing an exception to UK for hiring post-docs. Lindemann is still waiting for a response on that. After that ruling, then advertising can proceed for the post-doc positions. Lindemann's hope is to get that done before Christmas.
 - i. Lindemann noted that one thing that didn't occur last time, that NANP should now do, is to develop a departmental seminar, which the post-docs can develop, and different people can present. If universities within 5 hours from each CC member can be targeted, NANP could get significantly more traction on outreach.
- 11. Closing comments from Administrative Advisors
 - a. Lardy commented that the discussion on outreach activities is important.
 - b. Hess added that he did reach out to the national impact writer, who agreed to put NRSP-9 on top of her list of projects to write impact statements about. This would be important to add in communications sent to departments.
 - i. Oliver added that when the impact writer gets in touch, AAs may be in touch to request additional details.
- 12. Lindemann moved and Cromwell seconded to adjourn the meeting of the NANP CC. The motion passed. The meeting was adjourned at 3:45pm EST.

Conference Call – February 3, 2021 – 3:00 pm EST

Members present: Phil Miller, Merlin Lindemann, Don Beitz, Gary Cromwell, Ryan Dilger, Heidi Rossow, Del

Gatlin, Robin White, Brian Small, Luis Tedeschi, Paul Patterson, Art Goetsch

Administrative Advisors: Lesley Oliver, Bret Hess, Rick Rhodes

USDA/NIFA: Steve Smith
National Academies/NRC: Robin Schoen

1. Miller called the meeting of the Coordinating Committee to order at 3:01pm EST

2. Introductions

- 3. Opening comments from Administrative Advisors
 - a. The AAs welcomed all new CC members and thanked everyone for their service for the next 5 years.
 - b. Oliver commented that NANP is a very productive and collaborative group, and encouraged the CC to be thinking about the next couple of years and how to use the good base of tools that have been developed so far and promoting these tools. She urged the CC to think about the impact as NANP works through the projects.
 - c. Hess complimented Miller, Lindemann, White, and Dilger on forming excellent committees.
 - d. Rhodes echoed everything Hess shared and added that, over the next 5 years, we'll be concentrating on the continuity of work in the development of a new business plan so that NANP can continue.
- 4. Opening comments from USDA/NIFA S. Smith
 - a. Smith reported a couple of updates. The recently inaugurated new administration has announced priorities. For this administration, climate change will be a "hot button". Likewise, new NIFA director, Carrie Castille, has named climate change and rural development as priorities. Smith suggested exploring and promoting how improved nutrition performance could have an environmental impact, and also looking into ways that it could tie into rural development, more than the obvious nutritional impact for improved nutrient management.
- 5. Update from NRC/NASEM R. Schoen
 - a. Schoen reported there may be a name change due to new branding initiative.
 - b. Two currently active nutrient requirement committees;
 - i. Nutrient Requirements for Poultry: Progress is being made every 2-3 weeks. It is hopeful to go into review later this year.
 - ii. Nutrient Requirements for Dairy: Hoping to come out of review within about a month. There is a deadline for submitting the revised chapters for early February. Once received, the big document has to be prepared internally and all changes have to be reviewed. The hope is to have the final version published in time for the ADSA Discovery Conference, which has been pushed to August, 2021.

- c. Encyclopedia of Animal Nutrition. The NASEM press presented Schoen with an alreadyprepared entry. There is currently nothing more that the NANP CC needs to do, unless they come back and ask for more information.
- d. They are pitching to the FDA and the Global Alliance of Pet Food Associations, a small project to adjust pet food requirements for animals with lower energy requirements, also called "metabolically efficient." It will be a workshop-based study and likely won't get started until Q4 in 2021, dependent on the FDA having sufficient funds.
- e. One of Schoen's goals for 2021, is to take a look at the way they do the committee generated reports and studies, and look to moving toward electronic versions of the reports. The reports themselves are difficult to put into e-book formats, because of the tables, etc. They will look at the committee processes, the NRC processes, and the way they organize studies and funding for them. Part of that will be looking at the interface with NANP, especially in regards to the model and feed ingredients. That will take shape over the next few months, and NASEM will probably engage NANP to discuss what changes should look like.
- 6. Minutes of the December 2, 2020 conference call

Beitz moved to approve the minutes as distributed. Cromwell seconded the motion. The motion passed.

- 7. Previous, ongoing, or old business items
 - a. Website report; www.animalnutrition.org
 - i. Dilger reported an overview of the website:
 - 1. The NANP website was completely revamped in 2017, using the company Surface 51, which has also been helping with marketing efforts.
 - 2. We have Google analytics built into the website to track everything, and that is used for the impact statements.
 - 3. Changes have also been made to the digital assets, the modeling and feed composition databases, which are now only accessible when a visitor registers through the NANP website.
 - 4. The committees will continue to build upon momentum over the last five years to keep integrating this by not only improving the number of ingredients and the number of nutrients in the database and the things we can do with the models, but also getting those in to the NASEM documents.
 - a. This will be the first time there will be (minimal) physical forms of feed composition tables. Poultry will outsource all data composition to NANP.
- 8. Report/business from the Feed Composition committee
 - a. Dilger provided comments of FC activity during the website report.
- 9. Report/business from the Modeling committee
 - a. White reported she is still getting her bearings with the projects that are in progress and priorities for the committee. Confirmations were sent to committee members. The committee is scheduling a regular conference call, which will be held before the regular monthly CC call.
 - b. 2021 ASAS meeting workshop; ADSA meeting workshops
 - i. Discussion commenced regarding how well received the past workshops have been.
 - ii. Tedeschi is planning a workshop at 2021 ASAS. NANP was able to secure the preconference date.

- 1. Past modelling workshops have been conducted over one whole day. Tedeschi is looking into making the workshop 1 or 2 days, with ASAS and ADSA being back-to-back for 2021 meetings.
- 2. Some funds were approved from the USDA. However, the USDA has not authorized any budgets for travel. If needed, if travel is approved, NANP can go back to request a complimentary funding request.
- 3. Miller thanked Tedeschi for all his efforts with the workshops.
- iii. Miller inquired with ASAS about recordings from last year's workshop, and asked about financial assistance for 2021.
- iv. Discussion continued about the scheduling of the 2021 workshops at ADSA and ASAS. Rossow reported that the ADSA advanced modeling workshop is already scheduled for July 11. Rossow will email the agenda to CC members.

10. New business items or updates

- a. Position descriptions for the post doc positions
 - i. Dilger elaborated on the vision for the FC post-doc position. It is an outgrowth of what FC has been doing for the last 4 years. The previous post-doc had animal science nutrition background. Both committees are aligned for the strategy now to be to hire someone with data science background, since the committees are full of individuals to support them when it comes to the inference in the nutrition space. Both positions are similar between the FC and Modeling.
 - 1. FC is more about the data science, managing the database, being able to do new visualizations, as well as data pipelines for bringing big data in. The intent is to connect more with commercial laboratories to bring the previous pieces into the data set and make this a very robust feed ingredient database.
 - ii. Beitz questioned whether the positions' employment benefits should be listed along with salaries.
 - 1. Lindemann noted that there are benefits, which will come through the University of Kentucky, so the financial impact to NANP is a bit less. Benefits amount to about 30% of the salary, Lindemann will clarify and will communicate with Dilger and White so those details can be communicated to applicants.

Beitz moved to empower the Feed Composition committee to use the developed position description to recruit a new post-doc hire. Cromwell seconded. The motion passed.

- iii. White agreed that the Modeling committee has an aligned vision with FC. The Modeling committee is also looking for someone with strong data handling skills, with more focus towards data analytics, along with the advanced modeling skills. The intent is to hire someone who can provide an alternative viewpoint on how to get the most out of databases and model tools that are being curated.
 - 1. Beitz suggested a minor edit towards the bottom of the job description.

Cromwell moved to empower the Modeling Committee to use the developed position description to recruit a new post-doc hire. Beitz seconded. The motion passed.

b. Impact statement

- Miller will serve as the one-point contact for any suggested edits to the impact statement. Miller encouraged CC members to submit comments and suggested edits to him asap.
 - 1. Cromwell noted that swine was not included.
 - 2. Cromwell also suggested adding a statement that this encompasses the full tenyear period, not just the last five years. Discussion commenced about including a statement that the program has been in place since 2010.
 - 3. Hess suggested the CC consider under the "Fine Tuning Animal Nutrition", maybe add "all of which helps minimize environmental impacts of farming." Additionally, under Climate Change", "and the associated carbon footprint of livestock production systems", so as to demonstrate that NANP is talking about climate change and contributing to better environmental health.
 - a. Tedeschi suggested to add "water footprint" also.

c. Advisory board

- i. When the AAs, committee chairs, and Miller and Lindemann discussed the members for the committees, the topic of industry representation and an advisory board was introduced.
 - 1. Miller encouraged the CC to think about the potential usefulness of advisory board for NANP, especially considering moving toward different funding development. This will be added to agenda for next meeting.
- d. Potential in-person meeting (discussion about members travel ability for the rest of 2021)
 - i. Miller inquired about CC members' ability to travel. Discussion commenced and, the overall consensus is that international travel is barred, and domestic travel is for emergency meetings only.
- 11. CC, Feed Composition, Modeling Committees members for 2020-2025
 - a. Miller reported that the final slates for the committees will be sent out to everyone as soon as all details are available and the website is updated.
- 12. Closing comments from Administrative Advisors
 - a. The AAs thanked the CC and encouraged NANP to continue to keep up the great work.
 - b. Miller stated he will look into the schedule for next (March) meeting, if a new time is needed.
- 13. Lindemann moved and Cromwell seconded to adjourn the meeting of the NANP CC. The motion passed. The meeting was adjourned at 4:07pm EST.

Conference Call - March 3, 2021 - 3:00 pm EST

Members present: Phil Miller, Merlin Lindemann, Don Beitz, Gary Cromwell, Ryan Dilger, Del Gatlin, Robin

White, Luis Tedeschi, Paul Patterson, Art Goetsch, Joel Caton

Administrative Advisors: Lesley Oliver, Bret Hess, Rick Rhodes

USDA/NIFA:

National Academies:

- 1. Miller called the meeting of the Coordinating Committee to order at 3:02 pm EST.
- 2. Introductions
- 3. Opening comments from Administrative Advisors
 - a. The AAs reviewed the items that NANP should prioritize during the discussions on how to position NRSP-9 in terms of its impact.
 - i. Climate change is a focus of the new administration at NIFA.
 - ii. How nutrition can affect the economic recovery is another area that will be emphasized and is often included as part of an impact analysis.
 - iii. The project should consider how its work will affect the larger population in terms of diversity, equity, and inclusion.
- 4. Opening comments from USDA/NIFA S. Smith (not on call)
 - a. No report.
- 5. Update from NASEM R. Schoen (not on call)
 - a. No report.
- 6. Minutes of the February 3, 2021 conference call

Beitz moved to approve the minutes as distributed. Caton seconded the motion. The motion passed.

- 7. Previous, ongoing, or old business items
 - a. Website report; www.animalnutrition.org
 - i. Dilger reported that the Impact Statement is now listed on the website at https://animalnutrition.org/assets/pdf-downloads.
 - ii. The website also now reflects the current composition of each committee.
 - 1. Miller will be distributing the contact list soon.
- 8. Report/business from the Feed Composition committee
 - a. Dilger reported that the FC committee met in February as a meet-and-greet. The committee will meet again in April.
 - i. The FC committee held a robust discussion about the component pieces to integrate into.

- ii. Other discussion occurred about creating the content for the one-page documents so Surface 51 can create the additional resources.
- iii. The committee also discussed the need for a business model. Dilger and White are coordinating between the two committees to identify how they can be a part of a business model.
- b. Both committees are currently searching for post-docs.
 - i. So far there has only been one applicant for the FC committee, and there have been 3 applicants for the Modeling committee. Dilger and White are exchanging candidate CVs as they are submitted.
 - 1. Dilger encouraged the CC to review the possibility of amending the position requirements to allow for a "research associate" for candidates with no doctorate but plenty of data science background.
 - a. Discussion commenced and the overall opinion from the CC was that a PhD shouldn't be required if a candidate is qualified by experience.
 - i. Tedeschi also suggested considering offering a PhD option, moving the individual ahead while also getting the work done.
 - Dilger agreed the suggestion is a creative option. He added that he has a current MS student working in his laboratory on digital ag components. If the candidate desired to pursue a PhD, it could be a good idea, and there could be a cost savings.
 - 2. Oliver clarified that the salary funds cannot be used for tuition, but can be used for stipend.
 - b. White added that this is the same issue for the Modeling committee, with one of the three applicants only having a MS, but has more aligned experience than the other two with their PhDs.
 - c. Lindemann noted the group of applicants for the last hiring also were not qualified because of the PhD requirement, but that the right person shouldn't be passed over. He suggested prioritizing the tasks of the positions and questioned if someone with a MS can accomplish the grant writing needed.
 - 2. Dilger confirmed that the position requires the applicant is able to move locations on their own dime.
 - 3. March 15 is the "open until" application date, but interviews can commence prior to that date.
- c. Miller provided an update on the status of the billing with Surface 51. Everything with the funds should be straight now and should proceed more smoothly.
 - i. Dilger noted that he and White will be having a kickoff meeting with Surface 51 in the next two weeks, and that Surface 51 is actively working on the database and completing the updates requested.
- 9. Report/business from the Modeling committee
 - a. White reported the Modeling committee met within the last two weeks.
 - i. The committee discussed the ongoing projects.
 - 1. The flexible modeling platform is still in good shape and waiting for the post-doc/research associate hire so the project can move through the proof of concept phase.

- 2. For the database project, the group has been migrating over to a GitHub repository for updating code.
- 3. During the upcoming meeting with Surface 51, the discussion will include determining their involvement in the long-term upkeep of the modeling side of the database.
- 4. The committee also discussed workshops for this summer.
 - a. The ADSA workshop is good to go.
 - b. The ASAS workshop is being finalized, and the MC is in the process of sending out invitations to potential speakers.
- ii. The group also discussed sustainability planning and an advisory board.
 - 1. Concerns were brought up about the sustainability planning. They questioned how we handle competitive issues long term, but overall, there was plenty of positive opinions on the benefit of an advisory board.

10. New business items or updates

- a. Advisory board
 - i. White stated that the Modeling committee's conversation was at very end of their meeting, so there was not a lot of substantive discussion.
 - 1. They have elected to organize the Modeling committee into sub-committees, and a small subset have expressed interest in developing an advisory board and perhaps integrating with that advisory board.
 - ii. Dilger stated that the FC committee also did not hold a formalized discussion.
 - 1. Miller noted that, previously the FC committee discussed the business model with a focus on industry, but that academic and government input should also be included.
 - Dilger added that the tone was still in that area of a business model of individuals who come from industry positions wanting to have some input and expressing interest to help develop that type of model, but the committee did not specifically discuss an advisory board.
 - iii. Oliver agreed it is reasonable for NANP to have an advisory group, suggesting that as the project engages representation from both industry related organization and individual companies, it may reveal a potential business plan. Oliver noted that NASEM reports are periodic, there could be value seen in NANP providing ongoing work in between the long interims between the NASEM reports.
 - 1. Hess agreed that it is a sustained effort whereas the Nutrient Requirement series are more periodical with large gaps in between. He added that it's that value piece and it might be worth starting to look at doing a more comprehensive impact analysis, which may convince investors in this project in the future.
 - 2. Miller noted Schoen's comments from the last meeting regarding how NASEM may change the reports in the future. Miller shared his opinion that, moving forward, NANP's activities can make a great argument to support and keep NASEM work more dynamic. He noted that with the modeling activities, there is a much greater potential, using that platform and the expertise on that committee and keeping the models contemporary. Using the workshops to disseminate that information would be an advantage and have big impact.
 - a. Miller directed White and Dilger to discuss the topic of an advisory board with the two working committees.

- i. Dilger mentioned to look at "how can we maintain momentum between the NASEM documents" and suggested that the Poultry Requirements, in its first update since 1994, may be the last one ever written, and it was difficult to get industry support. In thinking about this, the discussion came up within the FC committee that we have nutrient composition data that's real, and we want to bring those pieces in from analytical labs, but if we don't have the nutritive values that go with that, then it's not as important from a feed formulation perspective. As we've thought about that, we've got models, and those models belong to NASEM, we'd have to have an agreement in place with NASEM, not only for support and funds, but also to be able to actually express the outcome of the models that are owned by them, in a live fashion in our database. NASEM has been a great partner and we need to consider how to make the resource more useful, the feed composition side integration with modeling.
- b. Miller inquired about the revenue potential for those nutrient requirements for NASEM.
 - i. How much momentum and interest is there with them moving forward with that? Is that something they foresee to be sustainable, as maybe it is a niche that NANP can fill?
 - ii. Caton added that there will always be a need for that kind of nutrient requirement information. We maybe need to rethink that platform (i.e., how the nutrient documents are delivered, and move forward).
- b. Potential in-person meeting
 - i. Money is budgeted for an in-person meeting. Miller asked the CC if they are interested in looking at meeting in-person at the end of 2021 or early 2022?
 - 1. Discussion commenced and the consensus was that an in-person meeting is valuable and essential.
 - a. Cromwell suggested an annual meeting.
 - 2. Although there was support for holding an in-person meeting as soon as safely possible, Tedeschi noted that it may be difficult to make that happen in late 2021, as more groups are overly eager to reconvene;
 - a. Tedeschi also suggested having a meeting with speakers to present specific topics, maybe even coming from outside NANP.
 - i. Cromwell commented that past CC meetings usually had 2-3 outside speakers and they have always been beneficial.
 - Discussion occurred regarding hosting all three committees in-person, and it was concluded that the budget for that is a concern and the other committees could possibly meet in conjunction with another professional meeting.
 - ii. Miller will send out polls for locations and times (fall 2021 and spring 2022.)
- c. Future business model for NANP (2025 onward)
 - i. Miller inquired the low likelihood of receiving funding post-2025.
 - 1. Hess commented that the decision has been made by the experiment station directors, through the action of the Review Committee, to have two types of

NRSPs; one to address emerging issues, the other would be standard NRSPs that are more long-term.

- a. This project could fall into the latter. However, there is a requirement to fully justify the support NANP would receive by the experiment station directors, which would involve a complete business plan that illustrates that this project has the ability to sustain itself in some manner that does not require reliance on experiment station funding.
 - i. There will be some level of support, but it is expected to be self-supporting. The exact level of base support has not been prescribed yet, but is subjective, with a project demonstrating other sources of funding.
 - 1. There is a precedent set with NRSP-3 (atmospheric deposition) which has been at a base-level \$50,000 per year for at least 3 terms so far. That decision to set that base-line was set a long time ago at that level.
- ii. Miller will put this on the agenda for April, but asked for thoughts on how NANP is going to sustain itself moving forward, hopefully with baseline funding plus additional support.
 - 1. There is a lot of potential on the FC side; Miller hasn't yet talked to the Modeling committee.
 - a. The nature of feed composition and the ability to work with industry data lends itself to lending support.
 - b. What would the Modeling committee look at as far as looking for funds down the road to support the modeling activities?
 - i. White established that some folks were interested in discussing this idea. Some ideas include code and database access, modeling-for-pay type activities, etc. There are also likely a lot of creative options, such as following a similar model to the American Registry of Professional Animal Scientists (ARPAS) with accreditation, as there is a need for national accreditation for nutritionists. As the MC gets together and discusses ideas, there will be more concrete numbers around what type of revenue could be expected to be generated from those different activities.
 - c. Miller added that we're probably moving away from a "post-doc" type person, and rather looking for someone who is more permanently hired to manage the database, website, and do the modeling work, considering a post-doc individual is potentially looking for another job outside of the post-doc realm.
 - d. Miller will continue to keep that on the agenda moving forward.
- d. Meeting day and time
 - i. Miller polled the CC about changing the schedule to 1-2 pm Eastern (12-1 pm Central) on the first Wednesday. Nobody on the call stated that time wouldn't work. Miller will send a note out verifying the change.
- 11. Closing comments from Administrative Advisors
 - a. Hess commented that developing an advisory board is very useful, and they will be able to give ideas on the possibilities of solutions such as the creative ideas that White mentioned.

- i. Rhodes agreed in terms of developing and identifying impacts of the project in terms of building elements of that business plan.
- 12. Beitz moved and Dilger seconded to adjourn the meeting of the NANP CC. The motion passed. The meeting was adjourned at 4:04pm EST.



Conference Call - April 7, 2021 - 1:00 pm EDT

Members present: Phil Miller, Gary Cromwell, Don Beitz, Joel Caton, Ryan Dilger, Del Gatlin, Art Goetsch,

Nancy Irlbeck, Heidi Rossow, Brian Small, Luis Tedeschi, Carey Williams

Administrative Advisors: Bret Hess, Greg Lardy

USDA/NIFA:

National Academies:

1. Miller called the meeting of the Coordinating Committee to order at 1:04 pm EDT.

- 2. Introductions
 - a. Introductions were made for any members who were not present during the previous calls.
- 3. Opening comments from Administrative Advisors
 - a. Hess commented on the American Jobs Plan released by the Biden administration, noting that there is a section pertaining to advancing US leadership and critical technologies to upgrade America's research infrastructure. The plan urges Congress to invest in a number of areas, with the most relevant to NANP being an infrastructure package of \$11.5 billion for colleges of agriculture across the US. Hess suggested there may be opportunities for NANP to engage with stakeholders during this process.
 - i. Discussion commenced regarding the timing and mechanics of the plan, with Hess and Lardy noting that movement would have to be made through Congress, so it would be a couple of months, and that there is keen interest in ensuring the process is equitable among all the institutions.
- 4. Opening comments from USDA/NIFA S. Smith (not on call)
 - a. No report.
- 5. Update from NASEM R. Schoen (not on call)
 - a. No report. Miller provided some comments that Schoen emailed:
 - i. Dairy has been making great progress. It is anticipated to be signed off on within the next couple of weeks, and the hope is to have it available for the August Discover Conference.
 - ii. Poultry is meeting every 3 weeks. Dilger added that chapters are out of the subcommittees and being reviewed by full committees. The step after that review is to send it to external reviewers.
- 6. Minutes of the March 3, 2021 conference call

Caton moved to approve the minutes as distributed. Dilger seconded the motion. The motion passed.

- 7. Previous, ongoing, or old business items
 - a. Website report; www.animalnutrition.org

i. Dilger reported there is a meeting set up with Surface 51. White and Dilger are actively meeting with Surface 51, working heavily on the modeling side to bring that up to speed. As they continue to still work on the feed composition databases, switching them from the old system to the new system. Surface 51 continues to provide what NANP needs to keep these resources online. Largely, Dilger is trying to involve White more, to further develop the relationship. There are a few additional pieces that need to be finished by NANP so Surface 51 can finish off a few projects, but everything is going smoothly.

b. Advisory board

- i. Dilger reported that the FC committee was interested in bringing in more industry perspective as it relates to the development of a business model. The Modeling committee had an even more robust conversation around that point, focusing on making sure the plan is developed correctly for the use, and leverage the value NANP has in the databases, such as it goes beyond just freely available to education, but that it is also revenue generating.
 - 1. Miller added this will be an ongoing discussion, and that the plan should probably be mapped out when going into year two.
- c. Potential in-person meeting (poll result)
 - i. The results: 9 voted for spring 2021, 4 voted for fall 2020. (No one voted only for fall 2020.)
 - 1. Hess commented that the Experiment Station Section Meeting is currently planned for September 28 thru October 1 in Squaw Valley/Alpine Meadows, California (near Lake Tahoe), and an invitation is extended to NANP to consider joining that meeting to hold an in-person NANP meeting. The directors will be repolled in June for indications on moving forward for fall meeting, and the venue has already been secured and might have availability to host a NANP meeting. Hess might have additional information by the May meeting.
 - Discussion commenced regarding scheduling, with the CC concluding to poll again within the next few months. Miller will put this on the agenda for the May meeting.
- d. Future business model for NANP (2025 onward)
 - i. Dilger noted there are a couple of moving parts that need to be considered. One of those is the concept of "How do we need to change our databases to generate revenue to allow NANP to be independent from the USDA?"
 - 1. Both committees have discussed and expressed that they want to be involved, but that the CC should become a big part of the development of a NANP business model.
 - a. Within the next year or two, once the post-docs are situated, an idea of how much will it take to maintain the databases on a yearly basis to keep NANP going can be determined, as that's the number needed to be sustainable. It will be necessary to change the databases to allow NANP to be flexible for the changing needs in the government. The subcommittees are largely made up of academics, but NANP needs an industry perspective. Dilger commented on the current resources and how they need to change to be more flexible to make NANP sustainable, with sustainable long-term relationships, as with NASEM, and how an industry perspective included on an advisory board would benefit those sustainability measures.

- 8. Report/business from the Feed Composition committee
 - a. Feed composition data request (UC Davis)
 - i. A PhD student would like access to the full data set for 5 or 6 specific ingredients.
 - 1. As stated on the website, access must be approved by CC for each individual request.
 - a. Miller may add an item to the May meeting agenda to alter that access approval to allow the chair of the CC to give approval on those requests, unless a large conflict arises.
 - 2. This UC Davis PhD student's access request was approved by the CC.
 - b. Dilger reported that the FC committee did not meet in March, but will meet in April.
 - c. Post-docs The subcommittees have advertised online. Things are coming closer together between the modeling and feed composition committees, each wanting to use the other's data. They are searching for a post-doc for each.
 - i. They have made virtually no progress finding candidates. Dilger commented on the hurdles of salary expectations for someone coming in at the correct degree level. He suggested some alternate approaches, such as merging the two positions into one position, or making both into part-time positions. Nothing from Kentucky states that a post-doc cannot hold a second job. Dilger has a potential candidate for a part-time person through his personal company, and White has only conducted one interview so far, which went terribly.
 - 1. Discussion was held and the CC was supportive of interviewing Dilger's candidate.
- 9. Report/business from the Modeling committee
 - a. Miller will ask White to email the CC with an update from the Modeling committee.
 - i. Tedeschi noted there have been recent meetings within the committee, discussing upcoming workshops.
- 10. New business items or updates
 - a. Summer call schedule (date and time)
 - i. Miller inquired if the first Wednesday at 1pm Eastern/12pm Central will work into the summer. No objections were stated.
 - b. NANP Committees Contact list
 - i. The list was emailed. Since its distribution, Gary Cromwell's email has changed. For any other changes, CC members should contact Lindemann or Miller, and the corrected list will be distributed next week.
- 11. Closing comments from Administrative Advisors
 - a. Hess applauded NANP for the great work continuing to pursue composing a business model for the future. He encouraged everyone to feel free to engage the AAs along the way.
- 12. Cromwell moved and Caton seconded to adjourn the meeting of the NANP CC. The motion passed. The meeting was adjourned at 1:58pm EDT.

Conference Call – May 5, 2021 – 1:00 pm EDT

Members present: Phil Miller, Merlin Lindemann, Gary Cromwell, Don Beitz, Joel Caton, Ryan Dilger, Del

Gatlin, Art Goetsch, Nancy Irlbeck, Heidi Rossow, Brian Small, Paul Patterson, Robin

White

Administrative Advisors: Leslie O

Leslie Oliver, Bret Hess, Rick Rhodes

USDA/NIFA:

National Academies: Robin Schoen

1. Miller called the meeting of the Coordinating Committee to order at 1:03 pm EDT.

- 2. Introductions
 - a. There were no new members on the call to introduce.
- 3. Opening comments from Administrative Advisors
 - a. Oliver is encouraged about the sustainability business plan, but noted it is discouraging about the report of the post-doc hiring situation.
 - b. Hess provided an update on the infrastructure request. APLU did submit a letter to the leaders of the House and Senate agriculture committees, requesting at lease \$11.5 billion inclusion of research infrastructure that would go to US colleges of agriculture.
 - i. Over 350 signatures were received on that letter from non-academic institution stakeholders.
 - ii. Some of the specifics of the letter include "investment is necessary to advance the critical work being done at institutions across the country to support American jobs, recruit a diversity of talent for the agriculture science pipeline, address climate challenges, and ensure ongoing US leadership in food and agriculture innovation."
 - iii. The goal is still to identify champions. Some progress is being made, but a champion has not yet been identified. If we're going to see movement on introducing a bill, we'll know by next month.
 - iv. Rhodes shared that while we haven't identified that congressional supporter, we have support by the Biden administration who released American jobs plan, for \$1.3 trillion, in which \$40 billion is earmarked to support infrastructure. There is a high-level holding area for the \$11.5 billion request by the APLU.
- 4. Opening comments from USDA/NIFA S. Smith (not on call)
 - a. No report was submitted.
- 5. Update from NASEM R. Schoen
 - a. Schoen reported that for the Dairy report, all but 2 chapters plus the model, are approved by the report referee/coordinator.
 - i. They just held a meeting with National Academies Press to see what can be available by late August for the Discover Conference. They don't think they will have a final book by that time, but they will have something for the conference participants, and by then the

model will have been beta tested. Perhaps by 2-3 months later, there will be a book, an e-book, and a model. They are now discussing pricing, packages, discounts, etc.

- b. For the Poultry report, Shoen reported that chapters are being circulated for internal review, but is unsure when it will be ready for external review, which is expected to be after a couple more months.
 - i. Schoen remarked that it's stunning how much is going to be updated from the 1994 report, but also, how much is still lacking. She hopes the report sets the research agenda for the future.
 - 1. Discussion commenced about the need and importance for including the research needs and gaps that exist.
- c. Schoen provided additional updates in terms of NASEM and new study groups.
 - i. There is one related to dogs and cats of low energy needs that is starting to get legs.
 - 1. Trying to reduce overall energy content of diet, do you decrease other nutrients? That may be true for some, but not other nutrients.
 - 2. It was intended to be a small study, but IFEEDER and AFIA pet food committee are interested, along with the FDA. Discussions have begun.
 - ii. It may be considered to open the door on whether the 2005 report on dogs/cats needs to be updated, but there are other species that need to be looked at too.
 - 1. Thinking about business models and how we do this, Schoen has some initial thoughts about maybe redesigning how NASEM undertakes these studies, namely that they are a lot of work for individuals and take a long time.
 - a. Schoen is in the process of laying out a number of different options. Once that is compiled, she wants to share it with NANP for feedback, maybe having a separate discussion around that, looking into novel approaches and how to make the most of it for both NASEM and NANP.
 - iii. Schoen also noted a suggestion from Dr. Tom Spencer of the University of Missouri, to have an academy study looking at how to help gene editing move forward through looking at the state of animal genomes, for research needs related to animal genomes, regulatory sciences needs to facilitate their approvals, and the commercial innovative potential for all of this.
- 6. Minutes of the April 7, 2021 conference call

Beitz moved to approve the April 7th minutes as distributed. Irlbeck seconded the motion. The motion passed.

- 7. Previous, ongoing, or old business items
 - a. Website report; www.animalnutrition.org
 - i. Dilger reported everything is stable with the website. Working with Surface 51, Dilger and White continue to bring things closer between the two sub-committees. The website is always in development, but things are moving along as they should be.
 - b. Potential in-person meeting (poll result)
 - i. The results of 2nd Doodle poll: 10 indicated for fall, in conjunction with the meeting of the Experiment Station directors, 4 indicated for spring; only one of those 4 indicated spring only. In contrast to the previous poll, there is now strong interest in meeting in the fall during the Experiment Station Section Meeting.
 - 1. Discussion commenced regarding travel restrictions still in place, and rooming information.

- a. The Experiment Station Section Meeting is currently planned for September 28 thru October 1 in Squaw Valley/Alpine Meadows, California (near Lake Tahoe). Rooms are blocked at <u>Squaw Valley Ski</u> Resort.
- b. Hess recommended a NANP meeting would be most appropriately scheduled towards the front end or back end of the section meeting. Past NANP in-person meetings typically lasted 1.5 days.
- c. Miller will discuss the specifics with Hess.
- 8. Report/business from the Feed Composition committee
 - a. The FC committee met for the second time last week and will be meeting monthly through the summer. Dilger reported they are working well and are diving into the different components.
 - i. The committee has reinvigorated the educational marketing piece of the one/two-pagers and have sent the very first concepts to Surface 51 to stylize.
 - 1. The first will be about percentages. Mark Edwards developed the idea and content. There is a meeting with Surface 51 next week to go over the draft.
 - 2. The second will quickly follow the first, and will be on dry matter.
 - 3. There are other topics being developed, which will also be related to the modeling side.
 - 4. Surface 51 is expecting to do up to 15 of these educational documents.
 - ii. There has been a lot of interest from the new members regarding why we don't have certain things in the database; how are we going to get beef into the database, (don't have dairy data set yet), why are we missing nutritive values, etc.
 - Miller has asked Dilger to put together a white paper justifying why we want to continue to partner with NASEM. However, Dilger is adamaent that information belongs to NASEM, and we don't want to step overbounds. We have already created the infrastructure in the database to display those, but we want to ensure we're legally on good ground to be able to do so.
 - iii. The committee is continuing to discuss an advisory board. Casey Bradley, coming from industry, is providing a lot of input.
 - 1. Dilger noted that all fits into "what are the resources we developed and how do we bring that into our business model?" Having those nutritive values is going to make it important for someone in industry to be able to formulate a diet, and the business model has to go beyond just a simple analytical piece.
 - b. There was not much to update on hiring.
 - i. Dilger has yet to receive any individual who is interested in the FC position, even though it is being advertised in a number of different places.
 - 1. The FC committee believes that it is simply not going to work to find a data scientist as a traditional post-doc in this role.
 - 2. With the type of work that is needed, NANP needs somebody who can manipulate databases and numbers.
 - 3. Dilger has been discussing with Surface 51 and whether they can do it or someone local who has the expertise that can be hired. They would have a better chance as a company to find the right talent, then NANP would buy out some of their time.
 - a. Surface 51 will be advertising later this month.
 - b. The committee has some safeguards in place to keep moving along until the right person is found.

- 9. Report/business from the Modeling committee
 - a. White reported the Modeling committee has gone through 2 full searches for a post-doc.
 - i. The first was seeking data science credentials. From the applicants, White requested two screening interviews; one did not respond, and the other went poorly, so no formal interview was extended.
 - ii. The second search readvertised the position to the animal science modeling community. Five applicantions were received and two formal interviews were held. The committee determined that neither were adequately qualified.
 - iii. The committee has discussed the idea of competency exams.
 - iv. The current discussion has been the idea to contract with Virginia Tech's undergraduate program in computational modeling and data analytics, where a lot of students will do contract work while in school or recent grads might be interested in doing some contract work. The suggestion is to hire someone like that, basically an undergraduate hire, for the immediate time frame for specific projects in development, while advertising for a post-doc during the summer and fall, when better candidates might be found.
 - 1. Oliver commented that funds for the post-doc position are held at University of Kentucky for UK employees with a different duty station, and that she's unsure how that would work for this type of suggested situation. She suggested needing to discuss this offline.
 - a. White clarified that the idea would be to pay the student as a contact employee, so NANP could probably use same model as currently using with Surface 51.
 - b. Modeling workshop and funding.
 - i. There was no money in the budget included for workshops.
 - 1. Discussion commenced. In the past, NANP provided funding of about \$10,000-\$20,000 from year to year. These workshops have been really successful. There is more flexibility after year one.
 - a. Miller suggested considering up to \$5,000-\$10,000, as there are funds not currently used for a post-doc and from lower administration fees that budgeted. Miller polled the CC on thoughts regarding providing funding for a workshop.
 - i. The overall concensus was positive. Miller will work with Tedeschi.
 - ii. Rossow inquired if Beef has sought out USDA NIFA funds like Dairy had, or if they have sought other outside sources of funding for workshops.
 - White reported they were successful in procuring that USDA NIFA funding, but that most of those funds are for travel expenses, which the USDA is not currently paying out, so they decreased funds to 10% of the original request.
 - a. NANP can possibly rerequest funds closer to the time of the events.
 - b. There was also some limitations of multi-year funding; White will confirm that with Tedeschi.
 - 2. Miller will work with White and Tedeschi on a budget.

- 10. New business items or updates
 - a. Miller inquired if Cromwell has any information/records regarding the contract with UC Davis on the multi-species platform they were going to develop. This would have been from the first five-year term of the NRSP-9.
 - i. Cromwell will check his records.
 - 1. Suggestions were added to reach out to Mark Hanigan and Tim Hackmann, as they may have some documentation.
 - b. White requested some feedback from the CC for an idea brought up by the Modeling committee during the discussions about an advisory board.
 - i. One of the Modeling committee members, Emiliano Raffrenato, <u>RUM&N</u> (Italy), has extended the idea of his company providing support for this multi-species platform, perhaps in a complimentary manner, or in place of the existing contract.
 - 1. He framed it as a partnership that could move NANP towards a more sustainable model.
 - 2. White stated there may be concerns with conflict-of-interest, but that there are some convincing arguments there. She requests the CC think on it a while and discuss later.
 - a. Irlbeck commented that, to avoid the conflict of interest, you should be open to others to avoid a monopoly.
 - 3. Miller will include this topic on the agenda for the June meeting.
- 11. Closing comments from Administrative Advisors
 - a. Rhodes noted he looks forward to seeing everyone in Squaw Valley.
 - b. Hess commented that the committee is making excellent progress, and the AAs look forward to updates on employing post-docs and the advisory board.
- 12. Miller adjourned the meeting at 1:55pm EDT.

Conference Call – June 2, 2021 – 1:00 pm EDT

Members present: Phil Miller, Merlin Lindemann, Gary Cromwell, Don Beitz, Joel Caton, Ryan Dilger, Del

Gatlin, Art Goetsch, Nancy Irlbeck, Heidi Rossow, Brian Small, Luis Tedeschi, Paul

Patterson, Robin White, Carey Williams

Administrative Advisors: Lesley Oliver, Bret Hess, Rick Rhodes

USDA/NIFA: Deb Hamernik
National Academies: Robin Schoen

1. Miller called the meeting of the Coordinating Committee to order at 1:02 pm EDT

- 2. Opening comments from Administrative Advisors
 - a. Oliver and White have made progress working through the University of Kentucky system to get someone hired for translating the species models.
 - b. Rhodes noted that the full agenda is a clear indicator of the progress of NSRP-9.
 - c. Hess commented that President Biden did release the budget, noting that one thing we're pleased at was the 27% increase in the Hatch funds. The hope is that Congress will support that budget line.
 - d. Hess also noted that the NRSP Review Committee (RC) met this morning to discuss mid-term reviews.
 - i. He remarked that NANP is making excellent progress.
 - ii. The NRSP RC did mention the possibility of making it a requirement for an impact analysis from all the committees that have been around for a while.
- 3. Opening comments from USDA/NIFA D. Hamernik
 - a. Smith moved on from NIFA; Hamernik is filling in temporarily as the representative from NIFA.
 - i. NIFA will be advertising for Smith's position by the end of month.
 - ii. Hamernik commented on the new priorities being focused on by the new US administration, with climate change noted as a huge priority.
 - iii. Hamernik introduced herself and remarked she is looking forward to working with NANP temporarily.
 - b. Hamernik provided updates on NIFA.
 - i. NIFA is still working remotely. More information on permanent duty stations for NIFA employees will be available later in the month.
 - ii. The 2022 budget is out and the numbers are remarkable for NIFA.
 - iii. AFRI has a new funding opportunity for extension education and climate hubs; the deadline is July 2021 for 2022.
 - iv. There will be a new program for Farm of the Future. Stakeholder input sessions were held in May.
 - 1. It is for a test bed and demonstration site. It will go to one award to one land grant university.
 - v. The website is still a mess, and they are not working at full staff in the communications department yet.

- 1. Hamernik will email more information.
- c. Lindemann questioned if anyone has been identified to champion the infrastructure bill yet?
 - i. Hess reported there has been a champion identified on the Democratic side, but has not been named yet. The system is currently seeking a Republican to co-champion.
- 4. Update from NASEM R. Schoen
 - a. Schoen reported
 - i. NRC Poultry continues to plug along. The committees members are reviewing each other's chapters. Schoen is hoping it will go into review this fall.
 - ii. NRC Dairy report has all but one chapter that has passed the scrutiny of the coordinator. The hope is to have the model ready by the Discover Conference. The report may not be ready by then, but will be by later fall.
 - iii. Both will be released as eBooks. Pricing is still being decided.
- 5. Minutes of the May 5, 2021 conference call

Beitz moved to approve the May 5th minutes as distributed. Caton seconded the motion. The motion passed.

- 6. Previous, ongoing, or old business items
 - a. Website report; www.animalnutrition.org
 - i. The website is stable.
 - ii. Dilger and White are continuing discussions with S51, in terms of ongoing projects, which largely have to do with revamping both databases. Surface wants to have all rules of engagement set in place for what our needs are before they handle the whole project. Dilger is expecting serious effort in that area in the next week or two.
 - b. In-person meeting
 - i. Hess reviewed the Experiment Station Section meeting details.
 - 1. September 27-30
 - 2. Squaw Valley/Alpine Meadows
 - a. The average room rate \$169/night.
 - b. The meeting will be held in the village, not the resort.
 - 3. The meeting itself starts with reception on 9/27, then two days of programming.
 - a. After the business meeting, there will be a high-camp tram ride for sight-seeing
 - b. The next day, after the Experiment Station standing committees meet, there will be an optional lunch cruise on Lake Tahoe.
 - i. Both of these events would be available to NANP attendees.
 - c. Hess noted that this ESS meeting could be made available to NANP attendees, providing an overview of the general programming.
 - i. The resort's recommendation was that a NANP meeting would be better scheduled for the latter part instead of the front-end of the week.
 - ii. Hess suggested an agenda should be developed for a NANP meeting.
 - Discussion commenced on accommodations and plans for joining with Experiment Station directors for meals on Wednesday and Thursday for joint-networking.



- 2. Discussion occurred regarding the timing for an in-person NANP meeting.
 - a. Miller will work with Hess to start planning a NANP in-person meeting. Miller might recruit a couple of people to have another 1-2 individuals involved in as planning moves forward.
- 7. Report/business from the Feed Composition (FC) committee
 - a. The FC committee is currently working on a number of things.
 - i. The committee is working with Surface 51 on an open search currently for hiring a data scientist.
 - ii. The committee is very active and is meeting monthly.
 - iii. They are working on educational pieces (2-pagers). The first 3 of those will be finished soon. Those will all be hosted on the website and are designed to plug into ag academic curriculums at high school or higher education level. They are very basic concepts.
 - iv. There is a new effort looking at where we have holes in the FC database. There is virtually no information included on fatty acids.
 - 1. They are starting to use industry connections to get more data for the database. Fatty acids and carbohydrate fractions.
 - a. All of that is to dovetail what we want to do incorporating the beef data set, and hopefully dairy soon as well. We don't currently have any commercial lab data. It will give that flexibility to bring in lots of different data streams.
- 8. Report/business from the Modeling committee
 - a. White reported the Modeling committee has been working on a couple of things related to the animal performance side of the database.
 - i. They are discussing a different structure to the data with the transition into the new database platform.
 - 1. In the old system, the data was in a very long format, which is not terribly efficient.
 - a. They are going to try out the wide format, (which would be what more people would be familiar with, with a table. They have communicated with Surface 51 on implementing this.
 - b. There have been renewed efforts on clarifying some of the metadata around the different databases.
 - i. Codes aren't terribly intuitive, so this would be making sure that we are at least internally able to recognize what those are, and eventually have that metadata imbedded within the website for ease of use.
 - c. For the common modeling platform, they have been able to draft a statement of work for the type of activities that needs to be done to get that project moving forward.
 - i. There are some potential candidates for this "contract worker" position.
 - 1. Official interviews haven't yet been conducted. The process will be able to be moved through fairly quickly once the contract process through UK is worked out.
 - a. The hope is to hire this contract position for a short project to have some immediate action over the summer and beginning into the Fall semester, with the goal of having a post-doc hired by the end of fall.
 - 2. The committee will continue to advertise for a post-doc position.

- a. White noted there is immense competition for these skills, with other positions being a lot more attractive than the one NANP is offering, and that NANP should expect to continue to have trouble finding a candidate.
- d. The main advertising opportunity is also related to another ongoing project: workshops.
 - i. The workshops are underway for the summer meetings. Their activity should be able to be reported on within next two months.
- e. Sustainability planning initiatives:
 - i. The committee is inviting a representative from the group <u>anpro campus</u> to the next committee meeting, to discuss how we might be able to work with them to develop some paid-for training courses in the modeling area.
 - 1. They are a specialist education company that focuses on developing and deploying technical skills training in the agricultural space.
 - 2. This initial meeting would be for our team to get an understanding of what this online training space looks like, the challenges and opportunities. This is being explored as a possible income opportunity.
- 9. New business items or updates
 - a. Social media proposal
 - i. This topic was moved to next meeting. Miller requested everyone review the proposal sent by email.
 - b. Modeling Committee projects with RUM&N Consulting
 - i. Discussions have occurred about leveraging some of the resources at <u>RUM&N</u> to accomplish some of these Modeling committee tasks.
 - 1. Emiliano Raffrenato has made the offer that they have technical data scientists within the company, and it would be in the company's interest to partner with NANP on some of these activities.
 - a. A specific example would be the translation of the NRC model code for equine and dairy, followed by beef and swine, from their native languages into R, which is the platform that will be used to integrate them into the common modeling platform.
 - White presented this during the last call, and noted hesitance in terms of potential conflicts of interest. However, it provides an interesting case to move forward towards some NANP-Industry collaborations.
 - b. As this develops, White would formalize what the specific tasks might be.
 - White requested CC input regarding how to go forward with discussions, moving forward in private discussions with Raffrenato, or do we need to post a formal solicitation to all nutrient model requirement companies that we are looking for partners.
 - 1. A solicitation would be via the NANP website. White is unsure whether a solicitation would need to be submitted through an advertising media or by directly contact the competing companies, etc.
 - a. White knows of around 3 other companies that might have interest and/or capabilities.
 - 2. Schoen questioned if there may be some copyright issues that NRC would need to understand.

- a. White expects there probably will be, and White can coordinate with Schoen.
 - Dilger wants to be in the discussion with Schoen, thinking in terms of developing the NANP business model.
- b. Miller asked White to develop a sort of outline plan on how this might work in terms of cooperation/projects/how we would open up to other companies, for the next CC meeting.
 - i. White may develop that in collaboration with Raffrenato.

c. World Wildlife Fund

- i. Miller and Patterson had an initial call with Monica McBride (WWF). Down the road, Miller would like to add Dilger and White on another call.
 - 1. Patterson provided some notes on the most recent WWF project, which was a life cycle analysis of novel feed ingredients.
 - a. They have been working with Quantis. The project evaluated 3 food waste-to-feed technologies for laying hens; one was black soldier fly larvae, one was a food waste feed, and one was a bakery byproduct meal. Patterson formulated these into a commercial hen diet at 5, 10, and 15%, and then Quanits followed the impact of those on a life cycle analysis, including global warming potential, a land use impact using a soil quality index, impact on water consumption, and marine eutrophication.
 - i. The one thing that became clear throughout this project, in the end, they were formulating for low life cycle analysis impact.
 - ii. There is a growing database of feed ingredients that have a life cycle assessment to them. Just like you could formulate a diet with certain parameters for protein or energy, etc., you could formulate a diet to a threshold of a life cycle analysis. Instead of formulating a diet to least cost, you could formulate a diet to lowest environmental impact.
 - 1. Each of these strategies would take aggregating data into our feed ingredient databases that would be a new parameter.
 - b. Patterson believes this is an opportunity and WWF is keen to work with NANP.
 - c. Miller suggested getting White and Dilger on a call with Patterson and WWF. Comments can be funneled to Miller to discuss during said call.

d. Zebrafish discussions

- i. Miller, Gatlin, Lindemann, Beitz, and Small have rekindled the discussion on developing a standardized Zebrafish diet.
- e. In-person/digital presence at ASAS annual meeting
 - i. Dilger recommended having a digital presence. He recommended the same as last year, but without a live presence, like a virtual ad people can click on.

10. Closing comments from Administrative Advisors

a. There were no closing comments.

11. Irlbeck moved and Lindemann seconded to adjourn the meeting. The motion passed and Miller adjourned the meeting at 2:04pm EDT.

Conference Call – July 7, 2021 – 1:00 pm EDT

Members present: Phil Miller, Merlin Lindemann, Gary Cromwell, Don Beitz, Joel Caton, Ryan Dilger, Del

Gatlin, Art Goetsch, Nancy Irlbeck, Heidi Rossow, Brian Small, Paul Patterson, Robin

White

Administrative Advisors: Lesley Oliver, Bret Hess, Rick Rhodes

USDA/NIFA: Deb Hamernik
National Academies: Robin Schoen

1. Miller called the meeting of the Coordinating Committee to order at 1:02 pm EDT.

2. Opening comments from Administrative Advisors

- a. Hess reported there are a few congressional champions for the infastructure bill identified on the democratic side, and they still need a republican champion identified. It is uncertain whether ag research will be included in the bill.
- 3. Opening comments from USDA/NIFA D. Hamernik
 - a. Hamernik reported they are in the middle of massive hirings.
 - b. NIFA staff is working from virtual duty stations now, and the decision to remain working remotely will be announced by July 19.
- 4. Update from NASEM R. Schoen
 - a. Schoen reported the Poultry committee continues to meet.
 - b. They are working hard to have a Dairy manuscript mostly complete by the Discover Conference in August. The hope is that conference attendees can have a preview version. It is on track to be published before the end of 2021.
 - i. The pricing is still being determined. There has been discussion about charging/bundling the model with the sale of the book.
 - ii. Schoen will be at the Discover Conference for a panel discussion about possibilities for doing these updates in the future. Schoen plans to involve NANP in the conversation.
- 5. Minutes of the June 2, 2021 conference call

Beitz moved to approve the June 2nd minutes as distributed. Irlbeck seconded the motion. The motion passed.

- 6. Previous, ongoing, or old business items
 - a. Surface 51 report; www.animalnutrition.org
 - i. Dilger and White are working with Surface 51 on database changes.
 - ii. They are working with the FC committee on the educational pieces. The first of nine one-page educational pieces has been developed.
 - b. In-person meeting; 2021 Experiment Station Section Meeting
 - i. Miller will be meeting with Hess to discuss registration.

- 1. The plan would be arrival on 9/27, business on 28-29 (full day on the 28th, partial day on 29th), depart on 9/30.
- 2. Hess detailed some logistics for the meeting.
 - a. The closest airport, Reno, is 40 minutes away. There is a shuttle that costs \$85 each way.
 - b. The ESS has a block of rooms, available now until August 26th. Hess can send the room registration link, but advises it is probably better to call.
 - c. Hess reviewed the ESS agenda, noting NANP is invited to the Wednesday morning "Agricultural Research is the Solution to Climate Change" session.
 - i. After, there would be a breakout session with the intent of having NANP at their own breakout to build on that discussion and come up with solutions from the animal nutrition perspective. This would be an opportunity to be more actively engaged in the overall conference, outside of the NANP business meeting.
 - 1. Hamernik encouraged the separate breakout session for NANP on climate change.
 - d. A couple of breakout rooms are reserved for the NANP business meeting.
 - e. NANP members will have the opportunity to visit with the ESS attendees at all networking breaks and all meals, including dinner on Wednesday evening, after the climate change discussion.
 - i. That dinner will be at High Camp, which is only accessible by tram ride.
 - f. Hess noted that NANP could be involved in the opening reception on Monday.
- 3. Miller will recruit 2 additional CC members to plan the agenda and planning. He will be getting budget information from the business office for expenses.
 - a. Lindemann will assist with building the agenda. Caton also volunteered.
 - i. The proposed agendas and details will be distributed asap so that arrangements can be made.
 - The agenda will include discussion of development of the business model and discussion on how to platform things with NASEM.
- 7. Report/business from the Feed Composition (FC) committee
 - a. The FC committee has maintained conversation over the summer, with efforts towards the educational pieces. Next will be discussion of the database and how to bring those pieces online.
- 8. Report/business from the Modeling committee
 - a. White reported the Modeling committee has continued monthly meetings.
 - i. In the last meeting, came together with <u>anpro campus</u>, an ag-focused online learning provider. The committee asked them to discuss online education opportunities and challenges.
 - 1. White noted the group is at the stage to start getting quotes, and requested approval from the CC to obtain quotes from different companies for animal modeling courses through an online education provider.

- a. Discussion commenced, and it was concluded that the program sounds like something that could sustain itself, even with the cost of translating into Spanish and Portuguese.
 - i. White noted there would be 5-7 modules, 2-3 hours of content within each module, plus a couple of workshop type events, and that enrollment should do pretty well, as there could be a number of applications: graduate students, company training, etc.
- b. White was informed last week that Abbas Ahmadi, the programmer at UC Davis who was going to do the multispecies tool, will be retiring. White will get more information, as this may be a complication for future progress.
- 9. New business items or updates
 - a. Social media proposal
 - i. NANP needs to do more on social media. Previously, this was attempted by the post-docs, but was not fully realized.
 - ii. This proposal comes from The Sunswine Group, whose president is Dr. Casey Bradley, who serves on the NANP FC committee, coming from the non-academic realm.
 - 1. It will be for only social media. Bradly has an ag background, which is needed for developing relevant content on NANP social media accounts.
 - iii. Discussion commenced regarding the cost of the proposal, which is quoted at \$18,000 per year.
 - 1. Dilger thinks it is possible to negotiate a smaller contract to begin and then develop further for next fiscal year.
 - Dilger will refer to the quote from Surface 51 to see the cost comparison.
 Miller and Dilger will go back to Casey to discuss.
 - b. Data specialist
 - i. Both committees have struggled finding post-docs and finding people who can work with models that are affordable for the NANP budget. Both committees have been developing creative solutions.
 - 1. Dilger obtained a proposal for a Data Specialist position employed through Surface 51.
 - a. Surface 51 advertised, and was able to hire a someone with those skills as a full-time employee, who NANP would have on retainer – outsourcing these projects to Surface 51. This individual hired would be, effectively, dedicated to NANP, and NANP can have open-ended access for future projects.
 - i. The benefits of this arrangement are the flexible hours and having a direct line of communication.
 - Miller discussed with the University of Nebraska about the funding, noting there were no concerns. This will need to be more formalized in writing.
 - i. Oliver has still not heard back from the Purchasing Division about financing something like that. Oliver will keep pressing for that information.
 - c. Miller called for a vote of the CC to empower the FC committee to fund something like this.

Discussion commenced and the comments were all positive.
 There is flexibility that NANP can move to post-docs in the future if ideal candidates are found.

Beitz moved and Patterson seconded to empower Dilger to move forward on the proposal with Surface 51 once the approval of the funds is determined. The motion passed.

- c. Data request Feed Composition database
 - i. A commercial entity.
 - 1. Dilger noted that the <u>Memorandum of Agreement</u> (MOA) on the website does not limit for commercial use.
 - a. To date, they can access the mean, but not raw data, so requests are submitted through the FC committee. Requests are becoming more frequent.
 - b. More information is needed in order to evaluate the request. There is concern about the need for restricting the full raw data. For this request, we don't know who the company is or what data they want.
 - i. Dilger will obtain more information.
 - c. Dilger requested the CC formalize a policy on data requests, particularly for commercial use.
 - Lindemann and Miller will redraft the current MOA to address the commercial interests, and will circulate that draft for comments from the CC.
 - 1. Dilger will notify the entity that NANP is working on this.
- d. Future agreement(s) with NASEM
 - i. This will be discussed at the next call.
- e. Diet formulation link to NANP website
 - i. Dr. Mike Azain, professor emeritus from the University of Georgia, has inquired about providing a link for a diet formulation for the NANP website. Dr. Gene Pesti is a coauthor of this program.
 - 1. This is not a commercial product; it is a diet formulation package that anybody can use for no charge.
 - 2. Miller requested feedback from the CC.
 - a. Discussion commenced, with it being noted that there is a precedent set with previously having links on the old webpage for Luis Tedeschi's webpage with rations.
 - b. Dilger suggested adding another page where other resources could go, which could make NANP the "great" resource, especially for classrooms, as courses are always looking for new resources.
 - c. Miller, Irlbeck, and Patterson volunteered to review it, and Miller encouraged everyone to look at it.
 - i. This item will be put on the agenda for next meeting.
- f. Modeling Committee projects with RUM&N Consulting
 - i. This will be discussed during the next meeting.
- g. Zebrafish update
 - i. Gatlin has put together a basal diet. It was suggested to take a little more time at the August NANP meeting to talk about this.

- h. Digital presence at ASAS annual meeting
 - i. NANP will have a digital booth at ASAS, at no cost due to sponsorship of the workshop.
- 10. Closing comments from Administrative Advisors
 - a. Rhodes commended the committees on the post-doc workarounds.
- 11. Miller adjourned the meeting at 2:04pm EDT.



NANP Coordinating Committee September 28-29, 2021 Olympic Valley, CA

In-PersonVirtual (partial)Phil MillerHeidi RossowRobin WhiteRyan DilgerLuis TedeschiPaul PattersonJoel CatonRobin SchoenDon BeitzNancy IrlbeckLesley Oliver (partial)Del Gatlin

Carey Williams Deb Hamernik (partial) Merlin Lindemann
Brian Small Art Goetsch

<u>Day 1</u>

- 1. Call to Order; Introductions
 - a. Miller thanked Morstatter, Hess, and ESS coordinator, Jenn Tippetts, for coordinating the in-person meeting.
- 2. Review of the Agenda
 - a. Miller will work with Hess on arranging a Zoom meeting with Sarah Lupis, on impact statements.
- 3. Comments from Administrative Advisors, USDA NIFA, NASEM
 - a. Oliver detailed the timeline for the mid-term review. The process will begin next fall and Oliver will be searching for an evaluator.
 - i. The CC considered using the same individual from MN that assisted last time.
 - b. Within 60 days after this meeting, NRSP-9 will need to file 1st year report. Oliver directed the CC to work with the FC and Modeling committees to gather information on 1st year impact, including any accomplishments, workshops, meetings, publications, citations, educational resources and educational output, etc. She noted this will help with the mid-term review as well.
 - i. Committee members should also consider personal projects that have used NANP resources/tools.
 - 1. Discussion was held regarding direct and indirect impacts of the project, especially quantifying and articulating the impact on the NRC's.
 - 2. Discussion was also had regarding how to translate committee member work/research/etc. time into dollar figures, and effectively communicating leveraging of funds.
 - 3. Caton noted it is important to also discuss the business model and the plan for becoming more self-sufficient.
 - c. Schoen extended thanks to NANP for all the assistance and contributions to the NRC's.
- 4. Approval of minutes from August 2021 CC meeting
 - a. Irlbeck moved to approve the August 4 minutes as distributed. Small seconded the motion. The motion passed.
- 5. Review of Feed Composition Committee activities; short- and long-term goals Dilger
 - a. Dilger reviewed FC committee activities and goals. See Appendix A.

- Dilger noted the data scientist hired through Surface 51 is working out very well, and Miller noted that hiring structure is much more efficient for the needs of NANP
- ii. Robust discussion was held regarding the educational pieces, and videos (YouTube and on the website) and social media.
 - 1. Any videos that could be added to NANP's resources can be branded NANP. Any materials should be sent to Dilger.
- 6. Review of Modeling Committee activities; short- and long-term goals White
 - a. White reviewed Modeling committee activities and goals. See Appendix B.
 - i. Miller noted, in the 5-year project budget, there are no line items for workshops, so the committee needs to think about revenue streams for funding the workshops. He reminded White to keep the CC involved, to help provide funding when possible.
 - 1. White remarked that the committee needs to work on the goal of the workshops to become self-sufficient.
- 7. Website update Dilger (Irlbeck, Beitz, Williams, and Tedeschi to review)
 - a. Dilger reviewed the <u>www.animalnutrition.org</u> website and analytics. See Appendix C.
 - i. Discussion was held about the pros and cons of development of a mobile app, and Dilger noted that it is very difficult to add an app, and there is a lot of overhead to get an app designed and approved.
 - ii. Dilger remarked on the need to grow referral and social media paths, which will help NANP learn how traffic is being directed to the site.
 - iii. Miller urged the CC to make it a regular practice to review the website.
 - b. Dilger noted that the NANP impact statement has been added to the website.
 - c. Dilger reminded the CC that NANP has stylized/branded templates for everything.
- 8. NASEM moving forward interactions with NANP- Schoen
 - a. Schoen discussed future plans for NASEM and the future of the relationship between NASEM and NANP. See Appendix D.
 - i. They are looking into rebooting the NRC Nutrient Requirements update/revision process.
 - 1. There is discussion of updating chapters separately, as needed.
 - a. Miller recommended looking into getting feedback from users; chapters, models, how much they are using the chapters, etc.
 - i. Williams added that equine nutrition classes use the horse NRC as a textbook.
 - b. Irlbeck suggested to consider creating an "applied" version, to have all the nutrient requirements but not necessarily all the background; it would be more user-friendly so one wouldn't have to nearly be a scientist to use the NRC.
 - i. Schoen would like to find a way to support raising the profile of animal nutrition in more practical ways, with relevance to health, ecosystem, climate change, etc.
 - ii. Environmental impacts of production is a big topic in all species and gaps need to be determined so research can be funded.
 - 1. Williams suggested partnering with industry to finance research.

- iii. There has been increasing difficulty recruiting people for the NRC revisions.
 - 1. Miller noted the commitment should be better laid out, as some individuals end up doing way more than they first agreed.
 - a. Tedeschi added with all the years between revisions, there starts to be a disconnect between generations of scientists.
 - i. He suggested to not actually disband the committees they would still be somewhat "responsible" through until the next edition, as a sort of continuum.
- iv. Tedeschi also recommended the addition of satellite reports at the end of chapters, which will lessen the load of reports during the revision of the large report. They could be revisited more often. (Example: Al).
 - 1. There was also discussion of making it into a sort of living document, to update the nutrient values, models, with proper version control.
 - a. Schoen noted that feedback from the FDA and state/federal officials is that when there are changes too often, it disrupts their regulations.
 - Tedeschi added that it may start getting disconnected. (e.g., An update to chapter 10 could disconnect from information provided in chapter 1). Miller agreed, for information closely linked, an update to a chapter may change models, equations.
 - b. It was suggested that maybe ASAS could host a panel on how NASEM could address and move forward with NRC updates.
 - Caton added that there has been chatter for the 2022 or 2023 ASAS meeting, one of the symposia would look at the 2016 Beef NRC going forward.
 - 2. Tedeschi questioned if there is a way to establish new studies to be conducted before the NRC revisions.
 - a. Williams noted they are already identifying gaps in the equine NRC.
 - b. Rossow added that for vet schools, the NRCs are the only good resources. However, the newer versions have fewer of the deficiencies, and to reincorporate those would be a really big bonus.
 - 3. Irlbeck suggested curating a collection of the old NRC's, which she noted would be highly used. Discussion commenced on curation of the NRC's and search filter options.
- v. Miller stated NANP will want to come together with NASEM to further discuss this and keep this as a high priority. He will identify some CC members to join the discussion.
- 9. Future model (business) for NANP -Miller, Lindemann, Dilger, White, AAs
 - a. Short- and long-term goals
 - Lindemann provided background of the complications of NANP not being a legal entity and entering into contracts, holding funds, etc. There has also been difficulty and delays with switching funds to new institutions for a new 5-year project.

- 1. He provided information about the process of becoming a non-profit organization (501c3).
 - a. A 501c3 can receive funds from a variety of entities, including federal funds.
 - b. A 501c3 provides protection for individuals for liability and provides the value of working with a legal team.
 - c. A board of directors must be established.
 - This would streamline activity and funding approval, as that would go through the board of directors instead of getting permission from a university.
 - d. Yearly tax documents must be filed.
 - i. Lindemann's group used FASS to establish the 501c3, act as the business office for the group, which included filing the tax documents required annually.
 - e. The cost estimate for the process of becoming a 501c3 is between \$3,500-\$8,000, varying by state, plus the yearly tax filing fees and service fees from a business office to run the organization.
 - i. Lindemann volunteered to generate funds for making NANP into a 501c3, if needed.
 - f. ACTION ITEM: Miller and Lindemann will develop a budget and bullet point statement, and will work with FASS to transition NANP to a 501c3 within the next year of the project.
- b. MOA with outside academic and industry partners
 - i. Currently NANP has a MOA that has been drafted and approved, but in its current state, is not dynamic enough.
 - 1. NANP is not a legal entity, so how would agreements or liability be enforced?
- c. Funding Sources
 - i. What are the funding sources going to be?
 - 1. There should be some base funding from NRSP.
 - a. Administration expenses, maintenance.
 - Miller mentioned it is still feasible to have base funds every 5 years out of an institution for maintenance, but other workshops and meetings, etc., could have funds elsewhere. Then a 501c3 could still provide fund housing.
 - b. Hamernik suggested consulting with the NRSP Review Committee, because all NRSP's are going to have to go through this
 - 2. The University of Kentucky still holds a gift fund dedicated to NANP, managed by Oliver's office.
 - 3. Other sources?
 - a. Short courses and educational resources?
 - i. There is a lot of value in marketing the educational pieces.
 - b. A combination of donations and pay-for-service options?
 - i. E.g. A 5-year pledge, but they would pay yearly.

- ii. Rossow suggested forming a subcommittee to get some ideas on customer discover for products. There is a way of custom targeting; ask companies what they would be willing to pay for.
 - 1. Customer development has to be a piece of the fee-for-service.
 - a. There are customer matching service companies that can lead through the start up process.
 - ACTION ITEM: Oliver will check with a group from the University of Kentucky.
 - It was noted that most Research Parks will train the "chair" on client but not do it for them.
 - Rossow questioned if it would be beneficial to first determine what would be of interest to potential customers.
- iii. Irlbeck suggested reference books, like a textbook with access for a semester at a time.
- iv. Tedeschi questioned what NANP would be changing monthly to warrant a monthly fee.
- v. Williams suggested co-branding with companies; when producing a video or publication, they could have their logo on it for a fee.
 - 1. Hamernik added that partnerships are encouraged, with necessary disclaimers.
- vi. Caton noted that once set up as a 501c3, NANP could be eligible for certain competitive programs.
- vii. Modeling workshops at companies, for staff. Corporate trainings.
 - 1. Discussion was held on company modeling groups and proprietary information. There are some companies who would be happy to see some modeling techniques, to improve their own models, but it only makes sense if they can save money doing it.
 - a. Small added that it is important to determine what industry thinks is important.
- c. ACTION ITEM: Miller directed White and Dilger to engage the committees on ideas for funding opportunities.
- 4. Oliver wondered about seeking out those who fund the NRC's.
 - a. Dilger agreed that is a great place to start.
 - b. Schoen added ingredient companies, small and large, should be potential sponsors, and give to the NRC's.

- Schoen would like to see NASEM and NANP coordinate in seeking out the same companies to fund NRC's, and noted to be careful of over-tapping the same groups.
 - The two need to coordinate as such to show the value of the NANP work/databases will continually be evolving between NRC revisions.
 - a. NANP should be transparent about the link to NASEM and the reports.
- Caton suggested that <u>AFRI SAS grants</u> might be a potential funding option that could serve NANP needs. Discussion was held regarding USDA DSFAS CIN AFRI grants; A1541.
- 10. Educational platforms and methods to disseminate program activities Caton, Dilger, White
 - a. Social Media
 - i. Casey Bradley, The Sunswine Group, previously submitted a proposal for a social media specialist, at cost of \$18,000/yr. Surface 51 also submitted a high quote.
 - 1. The CC previously determined that cost to be too high.
 - a. Dilger circled back with Bradley, and discussed possibly recruiting funds from industry for the service.
 - b. Small expressed there may be a conflict of interest with using a committee member's company.
 - Dilger noted another option. AMSA used a firm that was not that expensive and more mature than The Sunswine Group. ACTION ITEM: Dilger will check with AMSA to look into the company, lookeast.com and ask for a portfolio piece.
 - ii. Most of the current social media hasn't be utilized since the previous post-docs used it (infrequently) in 2017-2018/2015.
 - iii. NANP needs to determine, "what is the goal of posting?"
 - 1. Dilger noted that people have to know about you before your brand can spread.
 - a. He also noted that we're not ready for social media until we're really ready, otherwise it loses direction and momentum.
 - 2. Trying to direct traffic to the website.
 - 3. Trying to direct traffic to the educational resources.
 - 4. Tedeschi suggested teasers for workshops, highlighting publications. He also suggested updates for ADSA and ASAS newsletters and cobranding with the societies to draw on their audiences.
 - 5. For students, "what can I get there/what will give me a boost?"
 - 6. ACTION ITEM: Miller determined there needs to be a working group for social media content schedule development. Williams and Morstatter will work on this, along with input from Dilger.
 - b. Infographics
 - i. ACTION ITEM: Miller and Morstatter will obtain a quote from FASS for future infographic development.
 - ii. The CC reviewed a few example infographics that Caton pointed out from NIFA.
 - iii. NANP needs to determine, "what do we want them for?"
 - 1. Promotions
 - 2. Science

- 3. To link to whatever the social media is doing
- 4. Newsletter; 6 times per year
 - a. Selling advertisement space in the newsletter could be as a revenue stream.
 - b. Sign-up could be integrated from the website.
- c. 1-pagers
 - i. Dilger provided a status update of the 1-pagers during the FC committee update.
- d. Extension programming
 - i. One of the questions for the mid-term review is integration. Extension is a positive.
 - ii. Could programs be developed to teach extension formulation?
 - 1. Tedeschi proposed teaming up with Extension for hands-on workshops on modeling, to "train the trainers".
 - a. It was questioned who the Extension educators would teach the models to.
 - i. Develop it as a reference for them to use.
 - ii. E.g. TAMU Beef Cattle Short Course could add a session on this.
 - iii. Williams agreed that livestock extension does a lot of nutrition related things.
 - 1. Oliver suggested an app, on nutrition deficiencies.
 - When discussed in the committees, committee members strongly felt they do not want NANP to touch Body Condition Scoring.
 - On the other hand, in Nebraska, diet formulation is not extension, but rather feed specialists. Caton added that the majority of livestock diets are managed by private feed specialists.
 - b. The University of Nebraska LPLEC does a lot of nutrition, manure input, output. NANP could partner with them.
 - 2. Oliver suggested showing the impact may not be directly, but could trickle.
 - 3. Caton suggested also looking into K-12 STEM, and 4-H and FFA. There is a national curriculum but they could use some new materials. They could be shown some tools they could use.
 - a. There are also special USDA grants for education in low income or in under-represented/minority communities.
 - iii. Schoen noted that there is a lot of talk about integration with extension and education, but usually data is delivered with no follow-up. She suggested maybe Instagram would be useful as an incoming extension connection.

11. Adjourn

a. Tedeschi moved to adjourn the meeting. Caton and Irlbeck seconded. The motion passed and the meeting was adjourned at 3:59pm PDT.

- 1. Discuss midterm report Miller, Caton, Lindemann, AAs
 - a. Metrics
 - i. Oliver sent Miller some recommendations.
 - 1. For the last project, the committees were not involved, so the report was limited. Caton had a lot of involvement in the last cycle.
 - ii. Lindemann commented that for the last midterm report, Hess noted it was not very strong.
 - NANP was in a major transition, where there was a lot of productivity occurring, but not without issues. The biggest project was the website. Lindemann provided an overview of the website update process and vendor issues.
 - a. The transition did not help to view productivity which was recognized by those who received report and they did not penalize for that.
 - iii. As part of the process, NANP should engage an individual who does those kinds of impact surveys. Previously, Jennifer Kushner from University of Wisconsin-Madison lead the review and initial drafting.
 - 1. Lindemann has provided the files to Miller.
 - One of the major things that came out of what Kushner reviewed, is NANP doesn't have as much visibility in industry as we hoped. Lindemann noted how and where NANP is presented is important. We interact with NASEM, and industry knows the NRC's but didn't know NANP.
 - a. Additionally, at the time, we were just beginning the process of the modeling symposia/workshops at the societies.
 - b. So, NANP visibility is growing.
 - c. It is important to communicate with that person preparing the review what NANP is/does, so they can effectively communicate with NANP stakeholders.
 - d. It is about 4 months from engagement to report, which is fast, but NANP has to prepare materials for the individual and then we need time to review the report received.
 - 3. Miller noted that Oliver mentioned trying to identify the individual spring/summer 2022.
 - a. He pointed out, that as a group, NANP needs to have an idea of those materials and impact and what to focus on. We are starting to realize our impact is growing, and has plenty of room to grow, but as we grow, by that time, we'll have wide array of interaction we will need to include.
 - i. A list of items to include will be helpful. A list of names will also be helpful for now.
 - ii. ACTION ITEM: Miller will solicit input from the AA's.
 - 1. Miller noted it would also be beneficial to devote an upcoming CC call to have Sarah Lupis present on impact.

- a. There was discussion on Lupis' fee, \$90/person. Miller will find out and believes that would be money well spent.
- b. Irlbeck reported that Lupis is willing to do a Zoom.
- 4. Caton noted some of Oliver's points for information to collect as NANP starts to prepare for the mid-term review:
 - a. Consider looking at funds; leveraged funds, matched funds. Oliver counselled the group away from indirect.
 - b. Direct and indirect funds (workshops and grants for studies)
 - c. Do not duplicate the last cost analysis; only provide updates.
 - d. Direct and indirect publications.
 - i. Caton noted that the NANP is a small army of nutritional experts, if you look at all three of the committees. It may be prudent for the CC to construct an email to committee members as we approach midterm/annual, and list things we want them to forward to us.
 - Grants/funds, publications, time commitment of self or research specialists. Beef NRC citations. It should include citations to show impact.
 - 2. Caton noted it is important to have as broad of an impact scope as possible.
 - ii. Tedeschi asked If NASEM has a Google Scholar that keeps track of NRCs/publications.
 - Schoen noted they would definitely have sales numbers, but is unsure if they would have citation numbers.
 - 2. ACTION ITEM: Schoen will talk to the National Academies Press to look into the reporting.
 - iii. Miller suggested putting together a spreadsheet to track what NANP committee members are doing, to ID publications, brief description of activity, educational uses, etc.
 - Dilger agreed a shared spreadsheet document should be developed to collect as much information as possible. It will need to be managed well, and members should be updating their activity at least every quarter.
 - 2. Miller suggested continuing it through the annual report.
 - 3. Dilger shared a tracking document for the FC committee educational pieces. They are keeping things organized by project, date, key features. This could be extended out.

- a. ACTION ITEM: A champion needs identified and a spreadsheet needs developed and seeded with information that needs to be tracked. Once developed, Caton and 2-3 other members could contribute information to use as examples for everyone else. Dilger offered to provide support.
- iv. Caton stated there would be merit from getting input from Dairy and Poultry committees as they function now; do they view NANP as a strong asset?

 Comments from those committees could be beneficial for the mid-term report.
 - 1. Schoen could ask the Dairy and Poultry committees their comments on NANP.
 - a. Discussion commenced on whether feedback from the committees would be helpful, with mixed reactions.
 - i. Irlbeck suggested that it could give NANP a baseline if there are low feedback responses; "didn't know NANP."
 - Caton suggested that just including acknowledgements that NANP was a valuable partner would be enough for report.
- b. Potential survey
 - i. Currently, Google analytics is being used to track website analytics, but not <u>how</u> people are using the website. Williams suggested trying to survey the impact of the web users. "For what/why, is the website used?"
 - 1. Miller asked how to drive people to participate in a survey.
 - a. Must be short and on a clickable scale (ranks, vote 1-5, positive/negative, then a comment box on the bottom.)
 - b. Must express appreciation of the person visiting site, and explain why we're asking them to do the survey.
 - c. Must list time required; the shorter, the better.
 - d. Rossow suggested an incentive of a link to something they want, like a publication access.
 - i. Irlbeck added an alternative, of something that we have new on our website "See what we've done new!"
 - Dilger noted that developing the question content is the hard part.
 Dilger can help set up the survey once questions are developed.
 Intelligence could be built into the survey
 - a. Discussion was held on survey set up/question examples. It was noted to think about "what do we want to get out of results of survey?"
 - i. The purpose is to see how people engage on the website and what areas are being engaged. Also, to see the different clientele utilizing the website; what was beneficial; what wasn't.
 - 1. How did you get information before NANP?
 - 2. How are you using the website, and what resources are you using?
 - 3. How impactful do you feel those resources are?

- 4. How often do you access the site?
- 5. What do you use this resource for?
 - a. Education; manuscripts; formulation?
- b. Williams volunteered to help develop the survey. Miller suggested Williams get in touch with the committees, and that Miller and Lindemann could be involved.
 - i. ACTION ITEM: Williams will start drafting potential questions, and then Williams, Miller, and Lindemann will discuss areas to add/remove.
- c. The survey email would likely get sent from the NANP Gmail address.
 - i. ACTION ITEM: Dilger will address Surface 51 about getting a standardized email address for NANP from the NANP domain.
- c. Impact Statements
 - i. Irlbeck questioned if the 2-pagers are ready to be sent to faculty, as that could be an impact.
 - 1. Dilger noted that it is a bit premature. Only half are completed, and there are no videos yet developed.
 - a. Miller suggested students could be directed to videos already posted.
 - 2. It was questioned if there is a list we could send to faculty members, to ask advice on what other 2-pagers/videos/etc. they would find beneficial.
 - a. This could grow a partnership with academia.
 - b. Dilger noted that this is a piece of brand management, to format emails to animal science departments, with links to the website and resources, then blast the emails to all animal science related persons.
 - i. Miller suggested that we could request the departments' social media managers to blast the emails around their departments.
 - ii. Williams added that we need a simple "What is NANP" infographic to catch the eye.
 - 1. Williams started transitioning the 2-pager impact statement into an infographic.
 - 2. This could be included in society newsletters.
 - 3. ACTION ITEM: Dilger will ask to be sent the original Illustrator file.
 - iii. Tedeschi asked how should students be rewarded for visiting. Ideas were discussed:
 - 1. Social media referrals; "Lead 10 people to the NANP website and get ..."
 - 2. Rewards of books
 - 3. "Find the mistake on this page; find it and get free book."
 - 4. "Find 5 references that mention X, and win ..."

- 2. Future Summit(s) Beitz, Lindemann
 - a. Beitz reviewed his outline. See Appendix E.
 - i. Summit format: Presentation + facilitated discussion + publication.
 - ii. Discussion commenced on the topics suggested.
 - 1. Patterson noted there are plant-based eggs (for Option 2).
 - 2. Patterson suggested a 5th topic might be Zoonotic disease; African swine flu, etc. That may be more on the animal health side.
 - 3. Miller noted Option 1 is timely, but questioned how to make it unique.
 - a. Irlbeck suggested refocusing it to make it positive about animals/animal ag.
 - b. Tedeschi agreed; what is the impact of animals on environment, and then what are mitigations. What is the real impact of livestock on the environment? He encouraged to have the format not be on the defensive but rather be proactive.
 - c. Caton also agreed, noting to format it so that animal ag is the solution, not the cause, like the population believes. It has been spun incorrectly we need to correct that.
 - d. Rossow questioned if we need to include companion animals, or consider life cycle analysis.
 - e. Ilrbeck suggested looking at the environmental impact of milk vs. fake milk.
 - i. Discussion concluded that would only be attacking other forms of agriculture, but the goal should be to raise ag, not fight each other.
 - f. Tedeschi commented that there is an FAO group working on a methane report and suggested inviting someone to talk on this.
 - i. The lack of agreement of all the members on that committee on measurements on methane is pretty big. Measurements methods are not that accurate. The climatologists like to use the top down approach, but we need to defend the bottom up approach. Maybe something like "Are we [at the level] with saying animals are definitely giving this, given we are not [at the level] with methodology?"
 - g. Miller added looking at the true impact of animal agriculture: How grazing systems are adapting to climate change. Animal ag is an important commodity and it's being negatively affected. There are some nice examples of Dakota grazing, carbons.
 - h. Small added the topic of water availability and quality. He noted that this could almost be a topic in itself; it will be the biggest concern in another 20 years.
 - Rossow also added salty soils along with the water topic.
 - b. Stakeholders
 - i. Discussion was held on who the audience is that we are trying to reach.
 - 1. It was noted that we cannot come in strictly as advocates, but more to address questions.

- a. Rossow suggested that the audience shouldn't be at the national level, more at the state level, like the <u>National</u> Governors' Association.
- c. Location
 - i. Fall 2022 or later.
 - ii. Washington DC or Kansas City; NIFA leaders are now headquartered in Kansas City, but other leaders are in DC.
 - 1. Discussion commenced about the best location.
 - a. Even though NIFA is now in Kansas City, some people aren't necessarily there. For travel, the majority of the people would be closer to DC.
 - b. Discussion commenced on hybrid options.
- d. ACTION ITEM: Beitz will revise the draft proposal. Irlbeck and Gatlin will assist.
- 3. National Meetings Miller, Tedeschi, Rossow
 - a. Workshops and Symposia
 - i. Workshops are held on a yearly basis.
 - ii. Rossow reported that the Modeling committee grant for the Dairy workshops has run out. The 2022 workshop was the final one funded by the grant.
 - iii. Also, Tim Hackmann has stepped down from doing future workshops. There is opportunity for someone new.
 - iv. Miller questioned if there is there any way to bring them together or maybe alternate years for ADSA and ASAS. He also noted that maybe there is a more effective way to hold the workshops.
 - 1. Rossow stated the focus of the workshops at ADSA and ASAS are very different approaches/different techniques.
 - 2. Rossow believes the workshop approach is needed, but maybe not every year.
 - ACTION ITEM: The Modeling committee needs to determine who will follow Hackmann. Tedeschi will engage White to see where this might go.
 - i. Another suggestion was that after 5 years of workshops, maybe they could be reduced to a half day focused on one modeling topic, or, alternate between symposium and workshop, or half/half.
 - 1. They are not designed to be a great place to learn R.
 - b. The workshops have been very impactful.
 - c. Miller noted that the budget for the first year has some additional funding that could likely support workshops.
 - 3. Discussion commenced on the grant situation for the ASAS workshop.
 - a. Tedeschi hopes to be granted an adjustment from the USDA to the grant's travel funding.
 - Caton noted he is sitting on a grant that got an extension so he will work with Tedeschi to look at options.

- b. Moving forward: 1) Plans are to move ahead. 2) See if additional money from NIFA/supplement can be obtained. 3) Miller will try to firm up costs.
- 4. Williams suggested it is good idea for a workshop at ESS for the equine side

4. Zebrafish update – Small

- a. Gatlin and Small updated the CC on the progress of their Zebrafish standardized diet research. Gatlin noted that all fish have survived, but have not grown as well as with the Chinese diet or the Zeigler diet. Another formulation in the works; Small and Gatlin will be doing additional comparisons.
 - i. Discussion also commenced on suggestions of including insect protein.
- 5. Review of travel expenses submission and budget update Miller
 - a. Miller reviewed the budget and noted that, for year 1, NANP is financially in good shape.
 - b. Travel Expenses:
 - i. Miller reviewed expense reimbursement request form to submit with receipts.

6. Additional business

- a. Monthly Call: date/time
 - i. The meeting scheduled for October 6 is cancelled.
 - ii. The regular monthly call date/time of the first Wednesday at 12pm CT remains.
- b. Grants; Publications
 - i. Rossow noted that in the past, the post-docs were the ones to do the work on the grants and the publications.
 - 1. She suggested the CC consider hiring one post-doc to take care of grants and publications.
 - 2. Robin White needs to be involved in this conversation addressing this issue.
 - 3. Maybe we should revisit pursuing the more traditional post-docs to have these tasks completed.
 - ii. Discussion commenced about the work, and about salary/benefits.
 - iii. Dilger mentioned sharing resources between the two committees, between a post-doc and the data scientist at Surface 51.

7. Adjourn

a. The meeting was adjourned at 3:15pm PDT.