November 20, 2025 Translation Working Group Call

Attendees: Abby Keller, Charlotte Malmborg, Janet Nackoney, Alexis O'Callahan, Jody Peters, Yishen Li, Kira Sullivan-Wiley, Collin VanBuren, Allison Gerken

Agenda

1. Announcement: EFI2026 Conference in Toronto on August 4-7. Working group and workshop applications are open until January 23
    a. Considering using time in person to work on manuscript proposed by Abby
    b. https://bit.ly/efi2026-workinggroups
    c. https://bit.ly/efi2026-workshops

2. **Social Science and Ecoforecasting Planning Award** Seed funding update (Jody)
    a. Just keeping this in here as a reminder. Nothing to do until December for a final round of reminders.
    b. Submission deadline: December 15.
    c. Advertising
        i. RFP Advertising Text
        ii. RFP promotion - advertising

3. Measuring impact of forecasts manuscript ideas (Abby)
    a. Goal of paper - if you are a forecaster interested in having your model support decisions, what typology might it follow
        i. Often "decision support" is listed as the primary end use of a forecast, but decision science is frequently not used in the development of the forecast. What is the cost of this disconnect?
    b. Next steps from the October call - Abby will continue to review NASA database; Collectively consider making a team for the project that meets more frequently for folks interested to move project forward?
        i. Use Vignettes compiled by the group to think about how consideration (or lack of consideration or unforeseen consequences) of governance structure and/or social context affects the decision relevance of forecasts (thinking about point 7 in this paper). Perhaps this could be something like semi-structured interviews of the researchers listed in this document
        ii. We have talked about measuring impact in other activities - understanding how we measure success quantitatively vs qualitatively
        iii. Connection to education is an underappreciated lens of co-production - connecting
    c. Discussion on call
        i. What is a forecast - people cite decision making as important for forecasts, but it doesn't often show up in description about forecast creation
        ii. NASA funded projects - the solicitation required end user/operationalization to be in the plan of the proposal before the work is done
        iii. Focus of paper - what does it mean to support a decision
        iv. What makes something a decision support tool

v. What can different fields learn from each other on the what they mean by decision support.
vi. Charlotte has experience with applying for a decision-support making grant (NASA)--extremely challenging to have both scientific questions/hypotheses and an operable tool (two goals)
vii. What other data might exist? When you get a grant, there are other reporting requirements. Is one of the requirements for NASA is connecting with end user is there interim reporting on the engagement with the end user
    1. Also over the lifetime of the grant - what was promised vs what was actually developed
    2. Think it would be hard to figure out impact
viii. Abby would like to be able to use LM methods to get those skills so that will influence what types of data we will be analyzing (e.g., reports vs personal narratives)
ix. How is decision support conceptualized?
    1. Real-time delivery; enabling evaluation tradeoffs by coupling models with different objectives
x. What was missing from abstracts - optimization, navigating uncertainty, using models as a tool to facilitate conversations and build consensus around a decision problem definition
xi. Next steps -
    1. What is the data
    2. What are the methods
xii. "DOs and DON'Ts for using climate change information for water resource planning and management: guidelines for study design" https://doi.org/10.1016/j.cliser.2018.07.002
xiii. What is the research question
    1. What can different fields gain and what are they missing
        a. What are different typologies of decision support that people could see where there models might fit in
        b. It reminds me (Alexis) of the forms of co-production/spectrum!
        c. Charlotte gave examples of levels
        d. Hopefully the outcomes people want would be started before the project/forecast is developed. How do you decide if you want a researcher to come in help as you think about decisions
            - Researcher want to answer science questions
            - Managers want to use the science to make decisions
    2. Then give our definition of what decision support is
xiv. Jagannathan, K., A. D. Jones, and I. Ray, 2021: The Making of a Metric: Co-Producing Decision-Relevant Climate Science. *Bull. Amer. Meteor. Soc.*, **102**, E1579–E1590, https://doi.org/10.1175/BAMS-D-19-0296.1.
xv. Decision support should be somehow addressing whatever the decision "problem" is, right? Making the decision (context) better as perceived by... decision makers or people impacted by those decisions?
xvi. From NASA perspective, the research questions and applications can go hand in hand. The RFPs require partnership with end user with decision making authority in their jurisdiction

1. Can we encourage partnerships to infuse decision with science and the science side sees the benefits their work has and are answering the questions the end user really needs
2. NASA's NASA's Application Readiness Levels (ARLs) to measure progress: see slide 1 below: https://above.nasa.gov/meeting_jan2017/docs/thur/1145_Larson_ASTM3%20EKL%20copy.pdf

xvii. Agencies may have the ability to collect the data, but don't have the in house expertise to make a decision plan

xviii. If we go for big N - does that mean going beyond the NASA grant system and expanding to decision support
1. Yes. Since NASA requires use of NASA tools this is a subset
2. Are there other funding that works in a similar way?
3. Yes, agree to go beyond NASA and use NASA as a specific case.
4. What shows up in the literature vs what happens with decision making - what is getting funded vs what is being spoken about
    a. If the papers coming out of the projects do not focus on the decisions being made but only focus on the science, then there is a disconnect between what is happening in the science and how to move the field forward and the loss of learning in the field.

xix. Paper intros always talk about the importance of decision making. But bridging the gap is very rare.

xx. What is a decision support tool - is the juice worth the squeeze for the end user. Are the resources they have to make decision good enough or are they wanting other resources. Example - if you know the trout show up in a stream in April, then don't need a forecasting model to tell you the trout with show up. You have the historical data and that is enough for you.
1. This may be too big, so may be good to have a case study
2. Barrier of entry - if I gave someoen a model could they run it themselves?
3. Next steps could be understanding how climate change may affect the scenarios (e.g., the trout example)
4. What tools/indicators are managers using for their decision making.
5. Asks the question of whose responsibility it is to grow our collective knowledge around decision support.

xxi. 2 lenses of making decisions - do you have a hammer or do you have a nail
1. Decision provenance
2. Who is requesting/offering the inforamtion/decision support
3. Question from Q&A from the Nov Stats Seminar on conservation decision making - how does systematic conservation planning compare to Structured Decision Making
4. Does "decision-support" assume a one-directional flow of information/skills vs. "co-production" as a two-way street?
    a. from a NASA perspective, it would be a two-way co-production
5. Is it a nail or a screw

xxii. What data do we want to target?
1. Maybe we can separate our literature scope based on the urgency/salience of the problem (is it a nail or hammer situation?) like wildfires/prescribed fire, wildlife

conflict, HABs = very openly need help from scientists… vs. theory-led (hammer-led) forecasting?

2. Think about things that would affect a community or impact more than just the individual
    a. Private decisions vs public decisions
        - Decisions about communally owned land is in scope, decisions about privately owned land is out of scope
3. What is the line between climate forecast model vs ecological forecast
    a. If we broaden out to climate forecasting
        - Climate is part of environment
        - Is it a temporal scale or is it a weather
        - Are we just thinking about biotic component modeling
        - Maybe it's about the decision being made - climate could inform a decision made about land
        - What about something that influences policy vs management?
        - But we're not focusing on decisions made around emissions, etc
        - Earth system models often incorporate seasonal to decadal and multi-decadal scale climate dynamics - E.g. climate forcing on hydrological systems, which in turn affect ecosystems
        - Water quality, tick population density, maybe models for wildlife populations (esp. recreational hunting species to determine harvest levels allowed)
        - Earth system models often incorporate seasonal to decadal and multi-decadal scale climate dynamics.
            - A good summary on the time scales of earth system prediction: https://youtu.be/7zV-uT_Xx28?si=OPy-RThAxiClEakm
    b. Maybe start with small n to identify typologies to come up with some case studies that could then inform a big N analysis
        - How do we get to this list of cases
        - Could set up Zotero bibliography and have tags
        - Our discussion reminds me of this paper: Cash et al 2003, **Knowledge systems for sustainable development** https://www.pnas.org/doi/10.1073/pnas.1231332100
    c. Create a shared Google sheet where people list keywords
    d. Start with anything environmental with the terms “decision support” in it
        - Good to see the scope that are using that type of terminology
        - Want to find things on this will be used to make decisions
        - The LLM will be helpful to identify other words used to help identify what other keywords are used in other disciplines.
        - https://elicit.com/ - if not everyone has access, Kira has access to it
        - Some groups are steering away from “decision support” because it is seen as a one way sharing of information, whereas co-production is favored because of the collaborative approach to get to decision making

        - Co-production, co-development, adaptive management, collaborative management
    - Focus less on semantics and more on substance on how decisions are made
    - “management tool development” or similar language…
    - does it need to be a team that is half researcher half manager (or whatever combination)
4. Want to think about the audience for the paper
5. Next steps
    a. Want a shared doc with who is the audience, what is the goal and a shared library
    b. Have an annotated bibliography doc - but that can come up organically

4. Tutorials status; https://ecoforecast.org/engaged-research-tutorials/
    a. Complete videos:
        i. Intro: https://youtu.be/-WQEwt7U7sE
        ii. Why: https://youtu.be/Pek5HtAqE9A
        iii. When: https://youtu.be/o3DnY4IJfEM
        iv. What: https://youtu.be/xLRZmZ-Adc8
        v. Who: https://youtu.be/eDUc8Sf9v5I
    b. Videos in progress
        i. How - Review the slide deck How-Alexis and script Script and Interview Ideas;
            1. Pre-work of co-production component was reduced for this and could be developed into a blog post
                a. Continue to think about where this could go
                b. https://medium.com/ suggested by Colin (Alexis has an account here already: https://medium.com/@alocal; but do we want to publish under a new account under EFI?)
                c. Yishen shared DOI BLM resources on co-production: A Toolkit for Coproducing Actionable Science to Support Public Land Management https://www.ntc.blm.gov/krc/legacy/course/1189
        ii. Barriers - from a previous call, Charlotte shared she is happy to write the script, but prefers to not be recorded.
            1. The material is really good and we want to encourage Charlotte to continue to work on the script!
               From Charlotte, DRAFT: https://docs.google.com/document/d/10Km99JFwJ3QUBDEdnA0YbXmXkE1_utfgc9cekGiah4Y/edit?tab=t.0
            2. Kira willing to narrate if no one else volunteers. But happy to have others volunteer.