CSCCE Community Profile

Ecological Forecasting Initiative

doi: 10.5281/zenodo.5032317

COMMUNITY OVERVIEW

The Ecological Forecasting Initiative (EFI) is a grassroots research consortium aimed at building and supporting an interdisciplinary and global community of practice around near-term, iterative ecological forecasts. Launched in 2018, EFI supports the idea that iterative forecasts both accelerate research and help us better understand whether nature is predictable, while improving environmental decision making. EFI, supported by NSF and the Alfred P. Sloan Foundation, brings researchers together from across disciplines and academic, government, NGO, and corporate sectors. Members share lessons learned about creating and using forecasts to understand, manage, and conserve ecosystems with a particular emphasis on broadening diversity and inclusion so ecological forecasts can be useful and usable by all people.

- Website: ecoforecast.org

COMMUNITY BASICS

400* members on Slack / participating in working groups

*this number is an estimate

Mostly online with some in-person events*

*all activities were online during the COVID-19 pandemic

International

Open - anyone can join

KEYWORDS

Disciplines / skills

- INTERDISCIPLINARY
- SOCIAL SCIENCE
- ENGINEERING
- DATA SCIENCE
- EDUCATION
- ENVIRONMENTAL SCIENCE

Programming and goals

- STANDARD SETTING
- KNOWLEDGE GENERATION
- INFRASTRUCTURE DEVELOPMENT
- PROFESSIONAL DEVELOPMENT
- SKILLS DEVELOPMENT
- MENTORING
- OUTREACH AND EXTERNAL COMMUNICATIONS
- DIVERSITY, EQUITY, AND INCLUSION

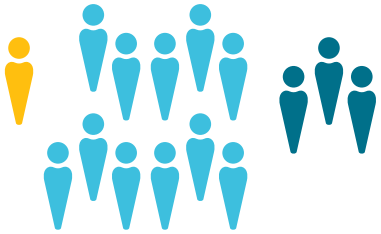
Stakeholder relationships

- MULTI-STAKEHOLDER

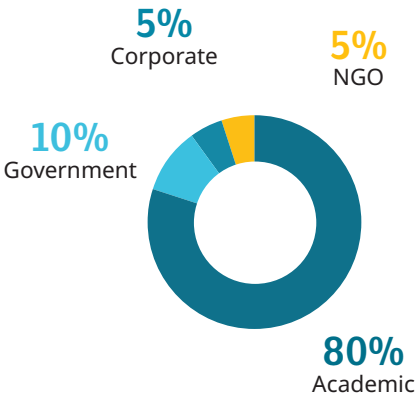
COMMUNITY STRUCTURE

Community Management

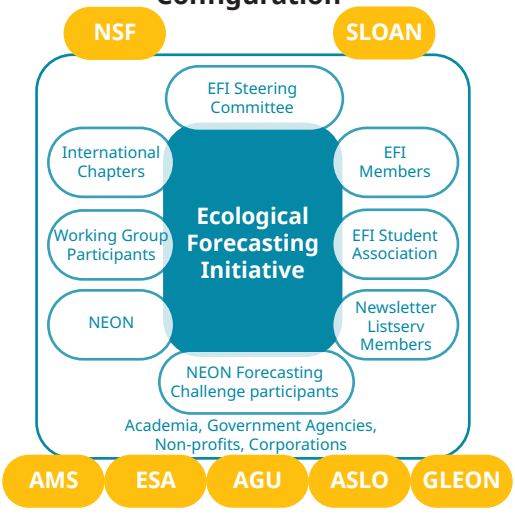
Community management is provided by the **Program Manager** (0.8 FTE), 11 **Steering Committee Members** (3.0 FTE total), and three **Graduate Students** (0.75 FTE total). Additional assistance is provided by other steering committee members.



Members



Community Configuration



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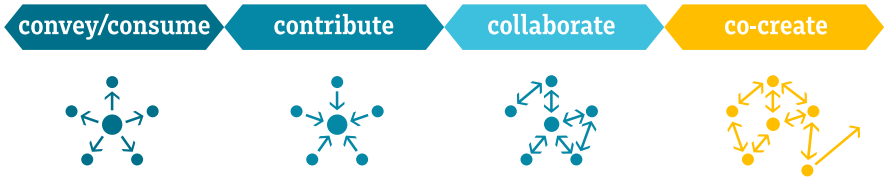
PROGRAMMING

Programming includes steering committees charged with long-term strategic planning, the NEON Forecast Challenge (which encourages and provides data and cyberinfrastructure support for the creation of forecasts), nine working groups who coordinate activities, tasks, and outputs (e.g., hold monthly meetings, compile and develop materials, protocols, manuscripts, host panels, etc). There are also two international chapters (Canada and Australia) that govern and convene meetings. The community newsletter comes out every 6-8 weeks and there are one-off panels and panel series on topics of interest.



- email list
- newsletter
- webinar
- Twitter
- website
- online community platform
- GitHub eco4cast organization

- contact community manager directly
- submit newsletter content
- ask questions in a webinar / post in the chat
- replies on social media
- write a guest blog post
- share a resource
- contribute code

- contact one another directly
- meet in small groups
- @mention or discuss on community platform
- co-author blog posts or papers (asynchronously)

- simultaneous co-authoring (e.g., using Google docs)
- participate in working groups
- organize events together

champion

COMMUNITY CHAMPIONS

The EFI Student Association and two International Chapters (Canada and Australia) each coordinate their own meetings and activities, keeping the EFI Steering Committee Chair updated to make connections or gain input from the broader community.

CHAMPIONS take on additional activities to support or advance the community. They are sometimes described as emergent leaders.

MAINTAIN

- code review / maintainer roles
- act as informal community managers

GROW

- recruit new members
- represent the community at external events

EVOLVE

- serve on a steering committee or other advisory role

THE COMMUNITY PARTICIPATION MODEL

The CSCCE Community Participation Model describes four modes of member engagement that can occur within a community – CONVEY/CONSUME, CONTRIBUTE, COLLABORATE, and CO-CREATE – and one that can occur both inside and outside of it: CHAMPION. All modes may be present at once, with some members interacting in multiple modes – or a community may have member engagement that falls into only some of the modes described. The model enables the mapping of community member behaviors to programming and other infrastructural support that the community manager, convening organization, or funder may provide to the community.

For more information, see the CSCCE community participation model.

Online In-person

COMMUNITY TOOLBOX

Communications

Email
Blog
Twitter
Zoom
GitHub
Constant Contact
Slack
YouTube

Productivity

R
Google Drive
Google Analytics
Qualtrics
GitHub

Community platform

GitHub
Slack

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OUTPUTS & EVALUATION

Success looks like an increase in the number of individuals who know how to create and make environmental management decisions with forecasts, the generation of more forecasts across a wide range of ecosystems, communities, and populations, and growth in membership, working group and Slack participation.

Successes over the last year

There have been a number of new people participating in Slack discussions, the EFI NEON Forecasting Challenge, working groups, hosting panels, authoring manuscripts, and other activities that have brought the community together to do more than what can be done individually.

- **Growth** - added new working groups
- **Growth** - added new members
- **Engagement** - increased activity of members
- **Activities** - creating community outputs together
- **Funding** - added a new revenue stream

Evaluation and Reporting

- Community member surveys
- Reports for community team
- Reports for leadership

Opportunities

Connect with government agencies to highlight the need for more funding and RFPs for interdisciplinary ecological forecasting research.

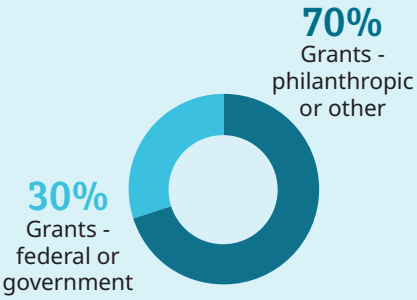
- **Growth** - launch new program or project
- **Growth** - add new members
- **Engagement** - increase member activity
- **Engagement** - more members acting as champions
- **Activities** - create community outputs together
- **Activities** - host conference(s) / workshops
- **Funding** - secure new funding stream
- **Value** - more members expressing recognition of the community's value

Challenges

Biggest challenge is funding to support dedicated staff.

- Financial sustainability
- Evaluation
- Time management
- Staff or volunteer burnout
- Too few staff or volunteers
- Increasing diversity

FUNDING



Funding Streams

- 70% funding from the Alfred P. Sloan Foundation
- 30% funding from the NSF Research Coordination Network program

Members can apply for **professional development stipends** *or* **travel funds to attend EFI events** *through the Ecological Forecasting Initiative.*

ABOUT THIS PROFILE

This profile is part of a research project conducted by the Center for Scientific Collaboration and Community Engagement (CSCCE). You can find out more about the project, and view more community profiles, on our website.

Information for this profile was submitted by Jody Peters, Program Director.

Last updated: 29 June 2021

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