THE POWER OF WORKING TOGETHER

Designing, Implementing, and Sustaining a Community of Practice to Support Organizational and Conservation Outcomes

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PURPOSE

This guidance document aims to provide conservation practitioners and professionals with the knowledge, tools, and resources needed to facilitate and participate in Communities of Practice. Grounded in real-world experiences, this guidance document combines practical, actionable strategies with insights from published and in-progress evaluations to provide conservation professionals with user-friendly guidance on engaging in and sustaining Communities of Practice. We, your authors, also incorporate our expertise as facilitators and participants in Communities of Practice.

A quick guide to navigating this document
The table of contents on page 2 provides an overview of the major topics covered in this document
The document follows a chronological format, moving from the early stages of forming a CoP to strategies for sustaining it over time. Feel free to jump to the section that best fits the current stage of your CoP.

For quick readers, each of the three major sections opens with a brief overview of what it includes and ends with a concise summary of key takeaways.

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PART 1: INTRODUCTION TO COMMUNITIES OF PRACTICE

In this section, you will explore the foundations of Communities of Practice (CoPs), including what they are, when they're useful, and the different levels of participation they involve. You will also learn about the benefits of CoPs for fostering collaboration and advancing conservation goals, illustrated with real-world anecdotes from conservation practitioners.

What is a Community of Practice (CoP)?

A Community of Practice (CoP) is a group of people who share a common concern, set of problems, or interest and come together to learn, exchange knowledge, and develop solutions (Wenger et al., 2011). A CoP has three core elements, as defined by Wenger-Trayner et al. (2023):

Core Element	Definition	Guiding Questions	Example
Domain	The shared area of interest, topic, or challenge that unites the group.	What issue or goal brings this group together? What do people identify with?	Conservation professionals working to reduce human disturbance to shorebirds via human behavior change.
Community	The members who engage in discussions, knowledge sharing, and collaboration.	What voices should be heard related to the domain? What relationships should form?	Biologists, land managers, outreach specialists, and social scientists.
Practice	How the community shares tools, knowledge, strategies, and approaches developed over time.	What should the community do together? How does learning occur?	Shared drive or resource repository; specific strategies skills or techniques

How is a CoP Different From Other Groups?

CoPs are intentional spaces, not just a buzzword. Simply calling a group a CoP without structuring it appropriately can limit the benefits for participants. CoPs differ from other collaborative groups in their focus on shared learning. **While all types of groups serve distinct roles, you may find that your group mixes and matches from the descriptions below.**

Group Type	Main Objective	Membership	Common Outputs And Deliverables
Community of Practice (Wenger-Trayner et al. 2023)	Informal space to engage in collective learning under a shared domain. Ongoing knowledge transfer where members generate ideas, try them in practice, and reflect on outcomes.	Active practitioners who benefit from the community in their own work. Membership is typically voluntary but can be financially supported.	Knowledge-sharing, best practices, case studies, informal peer support, skill development.
Working Group (Svejcar, 1996)	Focuses on a specific problem or initiative by facilitating communication, analyzing relevant information, and developing informed recommendations or strategies.	Subject matter experts and stakeholders with relevant expertise. Membership may be voluntary or appointed.	Reports, policy recommendations, strategies, frameworks, solutions.
Team (Kozlowski & Ilgen, 2006)	Focused on an organizationally relevant task, project, or function. Strive to accomplish goals via action and production, make decisions, and create, invent, and adapt solutions to resolve problems.	Clear and distinct roles, responsibilities and leadership structure where members are assigned roles based on their expertise	Project deliverables, completed tasks, reports, decisions, solutions.

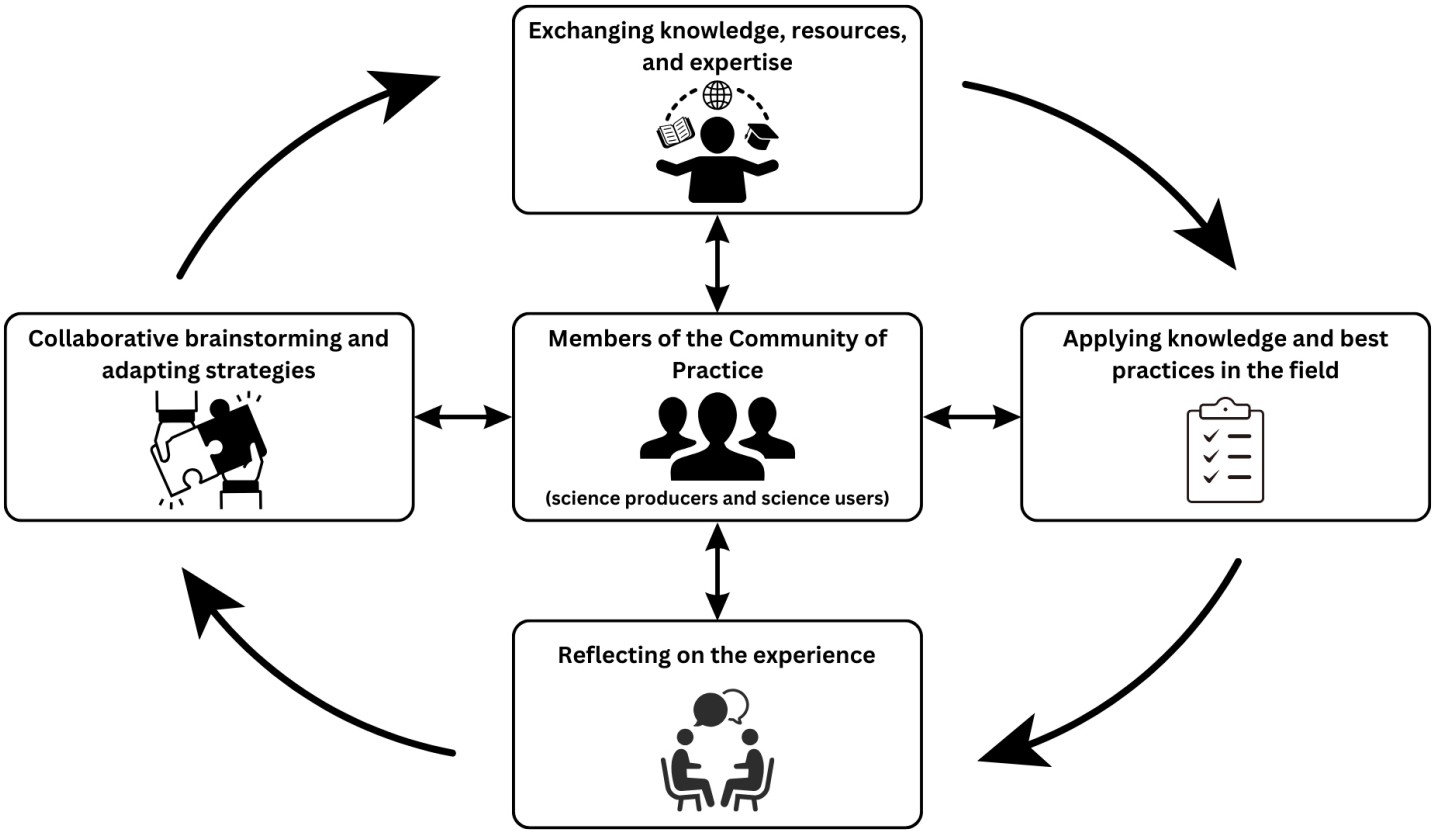
Levels of CoP Participation

People engage in CoPs at different levels, depending on their role, interest and availability. However, all members, regardless of level, should be viewed as equal learners who bring their own valuable perspectives, insights, and expertise. Responsibilities are often not mutually exclusive and will vary depending on the CoP objective and needs.

Role	Description	Example Responsibilities
Facilitators	Guide discussions, set agendas, coordinate logistics, and ensure engagement	Organizing meetings, fostering collaboration, maintaining momentum, setting a space for knowledge transfer, note taking
Core members	Actively contribute, shape discussions, and lead initiatives	Sharing expertise and knowledge, piloting new ideas
Peripheral members	Participate occasionally, observing and learning	Providing occasional input
Transactional participants	Engage briefly to access specific knowledge or resources	Asking a question or providing input on specific topics

BRIDGING THE GAP

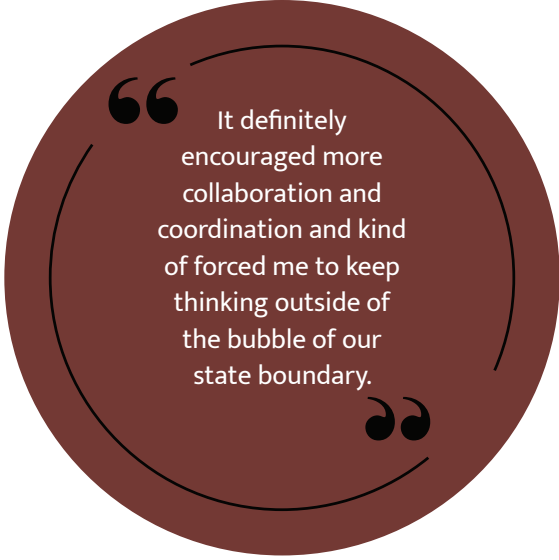
A CoP can be used to overcome the "research-to-implementation" gap in science-based conservation efforts (Livingston et al. 2024). To do so, both science users (e.g., practitioners and those who use scientific information for decision- and policy-making; Safford et al., 2017) and science producers (e.g., researchers and those who contribute knowledge and information generation for scientific purposes; Safford et al., 2017) must participate. Including both researchers and practitioners helps facilitate a two-way communication channel where research is co-produced to improve accessibility and relevance while also ensuring implementation strategies are empirically informed. It can be useful to have a designated facilitator for the CoP to assist with partner capacity, especially someone with designated funding for their time. See case study on page 17 for an example.



Uses of a CoP

CoP can be useful for groups who want to do the following:

- **Sustain knowledge exchange**: When ongoing learning and adaptation are needed rather than a one-time training or email communication
- **Promote cross-sector collaboration**: When a project or initiative involves multiple disciplines and each person can contribute their own area of expertise (e.g., biologists, social scientists, outreach professionals)
- **Foster peer support and continued communication**: When practitioners benefit from long-term engagement, mentorship, and shared experiences
- **Practice adaptive problem-solving**: When solutions need to evolve based on shared challenges and real-world feedback
- **Scale-up efforts**: When best practices should be shared and adapted across multiple locations, organizations, or efforts
- **Provide a space for co-production**: When developing new strategies, frameworks, or guidelines together



Key Benefits of a CoP to Participants

What's in it for you? A well-structured CoP can transform the way individuals and organizations collaborate. Here's what participants and leadership have said they gained from engaging in CoPs based on the evaluation findings from the Shorebird Disturbance Community of Practice. Read more about this CoP in Part 4: Case Study.

Time saving and efficiency

- Sharing resources, templates, and strategies improve efficiency instead of reinventing the wheel
- Faster problem-solving by tapping into collective expertise
- Streamlined communication and resource sharing across organizations
- *Hear it from a member: "we've definitely benefited and gotten a lot of good ideas and materials from the Community of Practice that we've put into place on our sites."*

Improved outcomes

- Encouraging collaboration and sharing rather than working in "silos"
- Leads to better informed decisions and stronger conservation strategies
- *Hear it from a member: "it's creating more of a connectedness to us, so that we can work together instead of being siloed in these little individual areas with their own problems. We can always work together better to benefit what we're all working on."*

Fostering a culture of learning

- Exposure to new ideas leads to adaptive management and social learning
- Opportunity to get feedback and share best practices, tools, and lived experiences
- *Hear it from a member: "[It was valuable to] just hear about other problems that folks were having, things about data collection and things like that. Be like, "...Oh, okay, so that's how we should be doing that." I thought it was very beneficial to make the effort to make sure I was able to participate, even if I wasn't really going in with anything major to report or needed input on."*

New relationships, networks, and collaboration

- Facilitating the growth of networks and collaborations that last beyond the CoP itself
- A diverse group of participants brings fresh perspectives
- *Hear it from a member: "…there was not as much coordination or communication between our 2 states even though we're neighboring… So it definitely encouraged more collaboration and coordination and kind of forced me to keep thinking outside of the bubble of our state boundary."*

Access to resources and experts

- Trying new approaches and adapting strategies based on community feedback
- Direct access to professionals with diverse skill sets
- *Hear it from a member: "We're not social science scientists, and we're also working on issues that are pretty contentious…having the resources, with this community of people all working on the same problem…having that expert input and helping us think through what we're doing in real time has been helpful."*

Power of collective action and identity

- Strengthening grant proposals and project justifications by demonstrating a broader support and wide area of implementation
- Opportunity to increase recognizability of strategies and initiatives
- *Hear it from a member: "And even our [partner]…they were super interested in doing this, because they just recently had a dog leash law change that permits dogs to run free on the beach. So they're looking for ways to kind of encourage the community to voluntarily leash their dogs…and the Community of Practice came up, and it was a great way for us to be like, 'yeah, we've been doing these campaigns and they were successful at these 2 sites. We'd love to help you do what we can to help you out with dog leash laws.'"*

How CoPs Benefit Conservation and Organizational Goals

While the examples below stem from shorebird conservation, these principles apply broadly to various conservation efforts

Ensuring science meets management needs and vice versa

- Scientists and practitioners stay aligned to ensure research is relevant and also being used
- On-the-ground management can benefit from evidence-based approaches discussed during CoP meetings
- Successful actions at one site can help justify and inspire similar management strategies at other sites by providing evidence of effectiveness

Breaking down silos and strengthening collaboration

- CoPs connect individuals working on the same species or issue to prevent isolation of current research, management, challenges, and more

- CoPs can create awareness and connectivity of efforts across a flyway or region
- During meetings, CoPs help to foster a network of people to collaborate with and rely on when future challenges or opportunities arise

Strengthening communication and outreach

- Members can frame their work as part of a larger effort rather than a one-off initiative to garner organizational and funding support and credibility
- CoPs can help explain conservation requests to the public by showing broader support and connectivity

Creating a sense of community and support

- Conservation work can be isolating, and CoPs can provide a space to share challenges and solutions with like-minded individuals with a shared experience
- CoPs help navigate overwhelming challenges
- CoPs can provide community to overcome eco-grief or compassion fatigue, both common in conservation

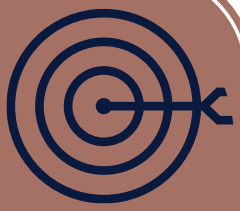
CoP IN ACTION

The Shorebird Disturbance Community of Practice was formed to support the design and implementation of community-based social marketing campaigns aimed at reducing human disturbance to shorebirds. Social science producers from the Dayer Lab at Virginia Tech facilitated the CoP on this topic, along with science users from NGOs, agencies, and local governments. To support the implementation of insights in coastal communications throughout the Atlantic Flyway. Through peer learning, shared lessons, and adaptive strategy development, members strengthened and tailored their campaigns to their unique local contexts. While carrying out these human behavior change campaigns, CoP members also collected social and biological data to assess on-the-ground outcomes.

Although individual and organizational outcomes are not always direct results of a CoP, they can align, especially when members collaborate toward a shared goal. In this case, CoP participation contributed to improved campaign effectiveness across sites; thus, leading to promising social and biological outcomes for shorebirds listed under the Endangered Species Act. Social science analyses from this work show that the presence of other people and interactions with signs are predictive of greater visitor adherence to conservation guidelines (Büscher et al. 2025). Further, when stewards interact with visitors, it was found to significantly increase visitors' compliance rates to conservation behaviors (Büscher et al. 2025). From a biological perspective, analyses indicate that sites with consistent steward engagement saw fewer off-leash dogs, reduced disturbance events, and lower shorebird vigilance–all signs of improved conditions for shorebirds (Saunders et al., in review).

These kinds of outcomes can help justify and build buy-in for conservation initiatives by demonstrating tangible social and biological outcomes.

Section Takeaway



- CoPs are flexible and evolve over time. Some members may move between participation levels depending on their needs, capacity, and interests.
- CoPs benefit individuals, organizations, and conservation goals.
- A strong CoP balances structure with organic interaction. If it is too rigid/specific, it risks losing engagement. If it is too loose/broad, it may lack direction.
- Intentional facilitation is key. A CoP needs leadership, even if informal, to sustain momentum and impact and ensure its community is constantly evolving to fit the needs of its members.
- Many resources exist on the structure, purpose, and design of CoPs. See Part 5: Resources and Citations for more detailed information.

Now that we've covered what CoPs are and when to use them, the next section will dive into why integrating them into conservation work is valuable.

PART 2: RECRUITING PARTICIPANTS AND FORMING A COMMUNITY OF PRACTICE

In this section, we discuss the process of recruiting and inviting members to your CoP. We also cover benefits, common questions, challenges, and important considerations related to joining and facilitating a CoP. Drawing on insights from conservation practitioners, we highlight key reasons why leadership should support CoPs and why individuals may choose to participate.

Recruiting and Inviting Members

Forming a CoP starts with a clear invitation and engaging the right people. Below are tips and recommendations for identifying, reaching out to, and welcoming members into your CoP.

1. ***Who to invite***: While existing collaborators might be your strongest contributors, also seek out people from different roles, career stages, or regions to help enrich discussions and bring new perspectives to the CoP. To find these individuals, consider the different connections you have:
    a. Existing or known connections: Invite people who you know are already working within the domain of the CoP, such as site managers, volunteers, and researchers focused on the domain. Partners you already collaborate with can often be natural starting points.
    b. Word of mouth connections: Ask current members or colleagues to suggest individuals who could benefit from the CoP and/or whose expertise the group could learn from.

Define your scope: It can be difficult to strike the right balance between inclusion and manageable group size. Smaller groups often foster deeper connections and engage in richer discussions, while larger groups may expand reach and impact. Consider setting size limits (e.g., by region, project type, species focus) to help keep engagement relevant and focused.

2. ***How to reach out***: Once you know who you would like to invite, think about the different ways to connect. Consider a mix of the following approaches:
    a. Presentations and workshops: Share your CoP or pitch your CoP idea during a conference, webinar, or training. Provide a form for interested people to sign up for more information. This approach may naturally refine your audience since participants are already engaged with the topic.
    b. Direct email invitations: Personalized invitations work best by highlighting why the person's expertise is valuable and how their participation will benefit them and the group.
    c. Informal conversations: Discussions during field site visits, at professional networking events, or during ice breaker activities in other groups can help spark interest and provide a means of extending an invitation.

3. ***What to include in the CoP invitation***: Make your first contact with interested members welcoming, clear, and motivating. Consider including the following points:
    a. Purpose of the CoP and why it exists or aims to achieve
    b. Members' roles and what is expected of participants (e.g., join monthly calls, share resources, contribute ideas)
    c. Facilitators' roles and what the facilitation team will provide (e.g., structure, resources, networking support)
    d. Benefits to members and what they will gain from participating (e.g., peer support, practical tools, new knowledge)
    e. Flexibility and reassurance that roles and objectives can evolve with the needs of the group
    f. Next steps with clear instructions on how members can participate, join meetings, or learn more (e.g., soliciting an email reply, providing a link to a when2meet or other scheduling tool)

Convincing Leadership: Why Should They Support A CoP?

Many decision-makers and leaders want to see clear benefits before investing in a CoP, since it can take a lot of time, commitment, and organization. **Use these talking points to help make the case**.

> "I'm definitely gonna be using…what we learned from this campaign this year in our training next year…that has helped me as a training facilitator, an educator"

Strengthens collaboration: Demonstrate how CoPs foster new and strengthen current collaborations between organizations, individuals, and conservation efforts.

Hear it from a member: "It was great to connect…I'm in [State], and just to the south of us there in [State], there's no [Organization] office, and so there is not as much coordination or communication between our two states even though we're neighboring. So, we talked a good bit with the [State] folks. Just seeing the faces of the [Organization] people [in the CoP] was kind of an in-my-face visual reminder, like, 'hey! You have other things that you need to coordinate with them on. Other issues that …you need to follow up on.' So it definitely encouraged more collaboration and coordination and kind of forced me to keep thinking outside of the bubble of our state boundary."

Improves programs: Show what members will gain professionally from their level of participation and time commitment and how that can benefit their program or project.

Hear it from a member: And I'm definitely gonna be using…what we learned from this campaign this year in our training next year…that has helped me as a training facilitator, an educator…when I'm out on the beach, people will ask me certain things. But now I

know, with targeted messaging, ways I can phrase certain things to get them to do an action that I need them [to do]...now it's like, I have a specific way of doing that, and a methodology for doing that."

Broadens participation: Highlight the diverse types of organizations involved and the benefit that has for your project. This is particularly useful if your own team is small.

Hear it from a member: "...sharing of ideas and the gathering of the information was really helpful to me...we were such a diverse group in terms of like the organizations we work for and the different focuses of our organizations. I felt like [the campaign] was more robust, and there were more divergent ideas and strategies than if I was doing it with just my colleagues at [Organization]."

Share success stories: Share demonstrated enthusiasm from stakeholders, successful events or initiatives, or any associated outcomes.

Hear it from a member: "...it's just really helped my confidence. We all go out to our different sites, but knowing that you've got a whole practice behind you that's really excited to hear about how each step goes does a lot for the mindset when you're in the field."

Builds credibility of efforts: Discuss the credibility and reputation that is associated with CoPs and the empirical or anecdotal outcomes that result from working within them.

Hear it from a member (empirical): "With my organization, it's given us this level of being taken seriously about the issues that we are addressing in this program. For instance... because of being involved with this program, [Our municipality] has allowed us to establish a [redacted conservation program]...it shows that communities are taking us seriously...they want to be a part of something like that."

Convincing Participants: Justifying the Time Commitment

Many professionals struggle to justify time spent in a CoP. If you need to convince a higher-up (or yourself) that it is a worthwhile commitment, here are some key points to use:

Saves time overall: Access to ready-to-use resources or divide labor to collaboratively work on resources instead of starting from scratch

Hear it from a member: "I think in the beginning we had an idea like 'Oh, we'd have a web page and it'd do this' and then for the group collectively to take that over and produce the product where it wasn't left to the individual…we had a huge benefit from that because I don't think if we had to do that individually, it would have, it would have happened."

Strengthens work quality: Learn best practices and common mistakes to avoid

Hear it from a member: "I think that's been a learning benefit… it's always good to be reminded like, don't make those mistakes. And I think it's beneficial to the folks that are just kind of going through the process maybe for the first time, or for the first time in this way, and realizing like, okay, this is how we do it."

Enhances professional growth: Exposure to new ideas and skill-building to become more familiar with how others are navigating similar situations

Hear it from a member: "…getting ideas, or kind of seeing how other people are navigating these things, it's just…it's useful. It's instructive. So there's a benefit, a learning benefit even, for that. And then…being able to share our experiences…being able to provide thoughts on what we've found works, what doesn't work, etc."

Builds professional network: Provides opportunities to expand peer and professional networks to strengthen knowledge and programs

Hear it from a member: "…being able to have people that I can call on and ask…any specific sort of question that would help inform my volunteers better and help our student programming better. Like, improve that kind of science-based, research-backed kind of education programming that we do…being able to have the ability to just reach out to them and it's not random, because they know me, they've worked with me now. It's an easy connection. It's not just like a random email that pops up in their mailbox…it helps me build out our programs and helps increase volunteer knowledge and participation in that sense."

FAQs for Facilitators

How can I accommodate members with limited time and capacity?

Offer multiple ways to engage and remind members that they are always welcome. Some may contribute actively while others prefer to listen and apply insights. Do check-ins with members who have missed a couple consecutive meetings. Record meetings and take notes for asynchronous conversations. Adapt meeting times to accommodate busy seasons.

What if no one has funding to facilitate?

CoPs don't require funding to be effective. Many operate as informal peer networks with rotating leadership.

Who should facilitate?

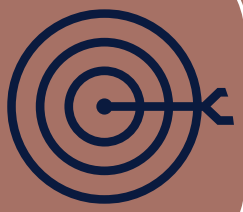
Ideally, a person with experience or training in facilitation should take the lead in facilitating

the CoP. If that is not possible, we recommend someone from your group participate in a facilitation training or seek advice from other CoP leaders, colleagues, or organizational leadership on effective ways to guide group discussions and maintain momentum.

How can I maintain momentum in a CoP?
Keep meetings engaging with guest speakers related to member interests, breakout and informal discussions, and clear action items. Ensure you are meeting members' needs and that everyone is seen as a learner and contributor to discussions.

Should we pay participants?
It depends! While payment can increase equity and accessibility, remove some barriers to participation, and encourage prioritization of CoP participation, many CoPs function effectively without stipends. Consider conveying the shared benefits and professional development incentives described earlier in this section if funding is not available. If the CoP is meeting the needs of participants, they will be more likely to want to attend on a voluntary basis.

Section Takeaway
A well-designed CoP saves time, fosters collaboration, involves key learners, and leads to better conservation outcomes. Whether you're a leader seeking efficiency or a participant looking to justify involvement, CoPs provide clear benefits that extend beyond individual efforts. In the next section, we'll dive into how to build and sustain a CoP for long-term success.



PART 3: A FACILITATORS GUIDE TO IMPLEMENTING AND SUSTAINING A COMMUNITY OF PRACTICE

This section is designed to walk CoP facilitators through key considerations and tips for establishing a CoP, running meetings, and sustaining engagement as well as sustaining the CoP. Example tips, guiding questions, agendas, and check sheets are included.

Establishing a Share Understanding to Set Your CoP Up For Success

To ensure ongoing participation and effectiveness, a CoP should start with clear, collaboratively defined objectives and expectations. Use the checklist below to guide discussions during a kickoff meeting or upon conceptualization of the CoP:

Mission and Domain: Define the purpose and focus of the CoP.
Example questions: What specific challenges or goals will this CoP address? What do members hope to gain from their participation in the CoP?

Community members: Come to an agreement on who to include in CoP discussions.
Example questions: Who are the relevant voices that need to be included to address our challenges or meet our goals? Who is missing from the table? How can we accommodate seasonal or temporary staff?

Time commitment and allotment: Set expectations for participation and duration.
Example questions: What is a realistic time commitment for members that balances needs with capacity? Will time commitment change throughout the year to accommodate field seasons and additional responsibilities?

Roles and responsibilities: Clarify roles for note-taking, agenda-setting, and facilitation, as well as how leadership transitions will be handled.
Example questions: How can responsibilities be distributed fairly to maintain engagement? How should information be distributed?

Member check-ins: Determine a time and frequency for reflecting on how the CoP is going: if the mission or domain needs to be edited, feasibility of participation, effectiveness of facilitation, and other evolving member needs. Consider if an anonymous mechanism can be included as well.
Example question: How often should we reassess goals and the CoP's domain? What platform can we use for confidential feedback?

Issue resolution pathways: Identify a conflict resolution mechanism for addressing concerns with CoP function, facilitation, and structure to make sure all voices are heard and valued.
Example questions: Who should members go to if they experience challenges within the CoP? How can we create a safe space to bring up sensitive topics?

Running a CoP Meeting: Best Practices and Recommendations

Below, you will find checklists and key considerations for facilitators to keep in mind before, during, and after a CoP meeting. These points serve as a foundation or reference to help guide your facilitation. You are encouraged to adapt, refine, and build on them to fit the unique needs and goals of your CoP.

Above all, remember that CoP meetings should be responsive to members' needs. Prioritize participation and allow space for organic, community-driven discussion. In the early stages of your CoP, a more structured agenda may help set expectations and build trust. Over time, as relationships strengthen and members grow more comfortable sharing challenges and success, a looser, more flexible approach may become more effective.

Pre-Meeting Preparation Checklist

- ☐ Determine if a virtual CoP or in-person CoP is best for your members needs and accommodations (e.g., if geographically dispersed, virtual may be best, if all members are local to a region, in-person might be better)
- ☐ Establish a listserv for communication
- ☐ Send a meeting invite and request an RSVP
- ☐ Identify a centralized place to store resources, notes, etc. and ensure all members have access Send agendas at least a week in advance and allow for member input
- ☐ Maintain agenda flexibility for member-driven topics
- ☐ Work with members to establish a code of conduct for meeting participation (e.g., take and give space by knowing when to speak up and when to step back to ensure all voices are heard)

- [ ] Encourage members to prepare discussion points to enhance engagement and participation

During The Meeting Checklist

- [ ] Review the agenda at the start of the meeting and adapt to include member-driven topics (see example agenda in Appendix 1)
- [ ] Start with an ice breaker activity that gets everyone contributing and make sure everyone meets everyone else
- [ ] Ensure all members have the opportunity to have the floor
- [ ] Use probing discussion questions as needed to deepen the value of conversations
- [ ] Identify tangible next steps or action items to try before next meeting
- [ ] Identify any lingering questions, topics, etc. to cover next time
- [ ] Have a note taker keep notes that focus on decisions, key insights, and action items; recap at the end if you have time
- [ ] Manage time well and finish the meeting on time

Tips For Meeting Facilitation

- Avoid facilitators taking all of the space by probing for discussion from the members
- Encourage cameras to be on for virtual meetings to build rapport
- Utilize breakout groups if the community if large to foster deeper discussions
- Limit the use of slides and prioritize conversations over presentations
- Foster familiarity and trust by keeping an informal atmosphere and following through on commitments
- Rotate facilitators or discussion leaders to distribute leadership opportunities
- If participants have more than one native language, translate slides and offer live translation

Post-Meeting Checklist

- [ ] Follow-up within a few days with meeting notes and next steps to maintain momentum
- [ ] Share notes and action items through multiple channels
- [ ] Upload any shared materials, notes, recording, etc. to a central repository
- [ ] Encourage ongoing dialogue between meetings by encouraging members to share questions or needs on the listserv
- [ ] Follow-up with members who missed the meeting to see if they have any questions or needs

How Facilitators Can Help Sustain Long-Term Engagement From Members

To maximize the benefits of participation and ensure members remain actively engaged, a CoP should be structured in ways that make it valuable and relevant to its members. Encouraging participation, fostering trust, and creating opportunities for meaningful collaboration all contribute to a community that members want to be part of. The following section highlights five key strategies for sustaining long-term participation.

Choose the Right Format

Deciding whether to host your CoP primarily in person, virtually, or through a hybrid approach can shape how members connect and collaborate. Conservation practitioners are often geographically dispersed, which can make virtual CoPs a practical choice. However, in-person gatherings can deepen trust and relationships in a way that can be challenging to emulate in a virtual setting. Facilitators should weigh the tradeoffs and consider opportunities that combine both formats when possible. For example, even if you have a virtual CoP, it can be valuable to explore whether an in-person meeting is possible once a year, even if the meeting is part of a conference that people are attending.

Key Points:

- Virtual CoPs are best for geographically dispersed groups or those with limited time and resources for travel. Virtual meetings allow for consistent and broader engagement and are easier for knowledge-sharing across regions or species ranges.
- In-person CoPs are ideal for building trust, strengthening relationships when members are local. However, retreats, field visits, or annual gatherings at meetings or conferences can reinforce relationships built in virtual communities.
- Be mindful of internet connectivity, travel costs, and language accommodations when choosing an appropriate format.

Optimize CoP Structure For Engagement

An effective CoP structure balances organization with flexibility, ensuring that discussions remain meaningful while allowing for relationship building. Facilitators can refine meeting formats, resource-sharing platforms, and interaction methods to promote engagement in ways that members prefer.

Key Points:

- Maintain small group discussions to boost participation, engagement, and trust
- Identify mechanisms for collecting anonymous feedback on CoP function, facilitation, and structure to make sure all voices are heard and valued

Encourage Participation and Trust

A strong sense of trust is essential for open knowledge-sharing and collaboration within a CoP. Encouraging transparent discussions, recognizing contributions, and fostering accountability through follow-ups helps create a supportive and engaging environment where members feel valid, heard, and can rely on each other.

Key points:

- Encourage open discussion of successes and challenges, which is often where learning moments occur.
- Foster accountability through follow-ups on commitments and prioritize being present during meeting times when possible (e.g., blocking out time on your calendar for regular CoP meetings, not overbooking your schedule)
- Use mood polls (i.e., anonymous questionnaires to gauge members' moods) or informal discussions at the beginning of meetings to understand engagement and well-being, and adjust meeting topics as necessary to align with needs

Collaborate Through the CoP

CoPs provide an ideal space for sharing knowledge and collaboratively developing strategies and solutions. Dividing tasks based on member expertise allows members to contribute based on their strengths while fostering a sense of shared ownership.

Key Points:

- Collaboration strengthens engagement by getting input from each member
- Labor division builds collective capacity which can minimize the burdens small teams face
- Enhanced real-world applicability and implementation of CoP outcomes and products

Prioritize Community Check-Ins and Reflections

Regular check-ins and structured reflections help ensure the CoP remains aligned with its goals and continues to meet members' needs. By gathering feedback and assessing engagement, facilitators can adapt topics, formats, and strategies to enhance participation and maintain relevance and engagement. Annual or biannual CoP check-ins and reflections can help members feel more connected to the subject and feel more comfortable responding honestly after gaining familiarity with the members and purpose of the group.

Key Points:

- Regularly assess alignment with goals, lessons learned, challenges, and successes
- Collect structured member feedback via group reflection discussions
- Use group reflections to inform future planning and decision making
- See example agenda (Appendix 1) for an example of community reflection questions

FIVE KEY CONSIDERATIONS FOR SUSTAINING A COP

Keep the Domain and Goal Central

Ensure discussions lead to tangible actions / recommendations while allowing for broader dialogue. Too often, groups lose sight of their purpose which can lead to talking about problems with no action.

Ensure Multi-Disciplinary Representation

Encourage participation from researchers, practitioners, managers, and volunteers. This helps ensure science is being implemented but also being informed by on-the-ground applications and knowledge. Everyone's an expert.

Foster A Discussion-Oriented Atmosphere

Prioritize open dialogue to build trust and strengthen cross-disciplinary relationships. CoPs are valuable places for networking and collaboration, and finding overlapping identities, concerns, and projects can be useful for future use. Helps ensure everyone feels they are a member and an equal contributor to the conversation.

Allow For Flexibility

Adapt schedules, participation models, and platforms to maintain inclusivity, adaptability, and relevance to all members. Mitigate the urge for members to cancel. Small groups can have equally valuable and meaningful discussions, so ensure members who do join get the chance to participate fully even when attendance is low. Additionally, use different platforms of communication to accommodate communication styles and needs.

Plan For CoP Longevity

Integrate CoP participation and formation into grant proposals to sustain engagement via financial support. Particularly in conservation where teams are small and capacity is low.

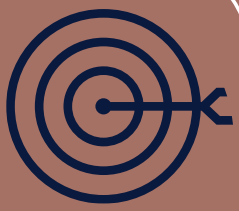
Disseminating CoP Success

Effectively sharing CoP outcomes ensures that lessons learned, best practices, and success stories reach a broad audience while reinforcing the collaborative nature of a CoP. Because CoPs emphasize co-production and shared knowledge, it is important to recognize contributions and include members in dissemination efforts.

Key Points:

- Give credit where credit is due: Acknowledge and highlight the collective effort behind CoP achievements.
- Co-authorship and co-presentations: Where possible, involve CoP members in publications, presentations, and reports to reflect their contributions.
- Shared storytelling: Encourage members to share their experiences and insights to illustrate the influence of the CoP.
- Measure results: Provide a way to quantify the results of the CoP products or projects by having a facilitator track metrics for shared projects (e.g., number of people who interact with CoP-produced materials) or share a common tool for all members to track their own metrics (e.g., standardized spreadsheet). The summarized results across members can be impressive and justify continued participation, leadership support, and funding.
- Accessible dissemination: Use multiple formats–reports, webinars, case studies, infographics, social media–to reach a diverse audience. Prioritize communication channels that members prefer so they can highlight the collective efforts.

Section Takeaway



Successfully implementing a CoP requires intentional planning, effective facilitation, and ongoing engagement strategies. Establishing clear goals, structuring meetings for meaningful discussion, and fostering trust among members helps ensure a CoP remains active and valuable. CoPs can sustain participation through flexibility and responsiveness to members' needs.

PART 4: CASE STUDY

In this section, we present a case study of a CoP that was formed to reduce human disturbance to shorebirds and inform disturbance management. This case study serves as an example of how conservation professionals worked collaboratively through a CoP to promote conservation goals. Below, we summarize the background of the CoP, the domain and goals, activities/practice, and reflect on the evaluation process and outcomes to share lessons learned, recommendations, and broad outcomes.

Shorebird Disturbance Community of Practice

Virtual CoP along the Atlantic Flyway | 2021 – 2023

Domain: Purpose and Focus

The Shorebird Disturbance Community of Practice was established to reduce human disturbance to shorebird through the application of human behavior change strategies– specifically, community-based social marketing (CBSM). Human disturbance – when human activity alters shorebird behavior or physiology – is a major conservation challenge along the Atlantic Flyway. This CoP aimed to bridge research and practice, moving years of dedicated biological and social science insights to on the ground activities. As a result, the CoP aimed to equip conservation practitioners with the knowledge, tools and peer support needed to design and implement evidence-based human behavior change campaigns. See Figure 1 for more information on the CoP origin.

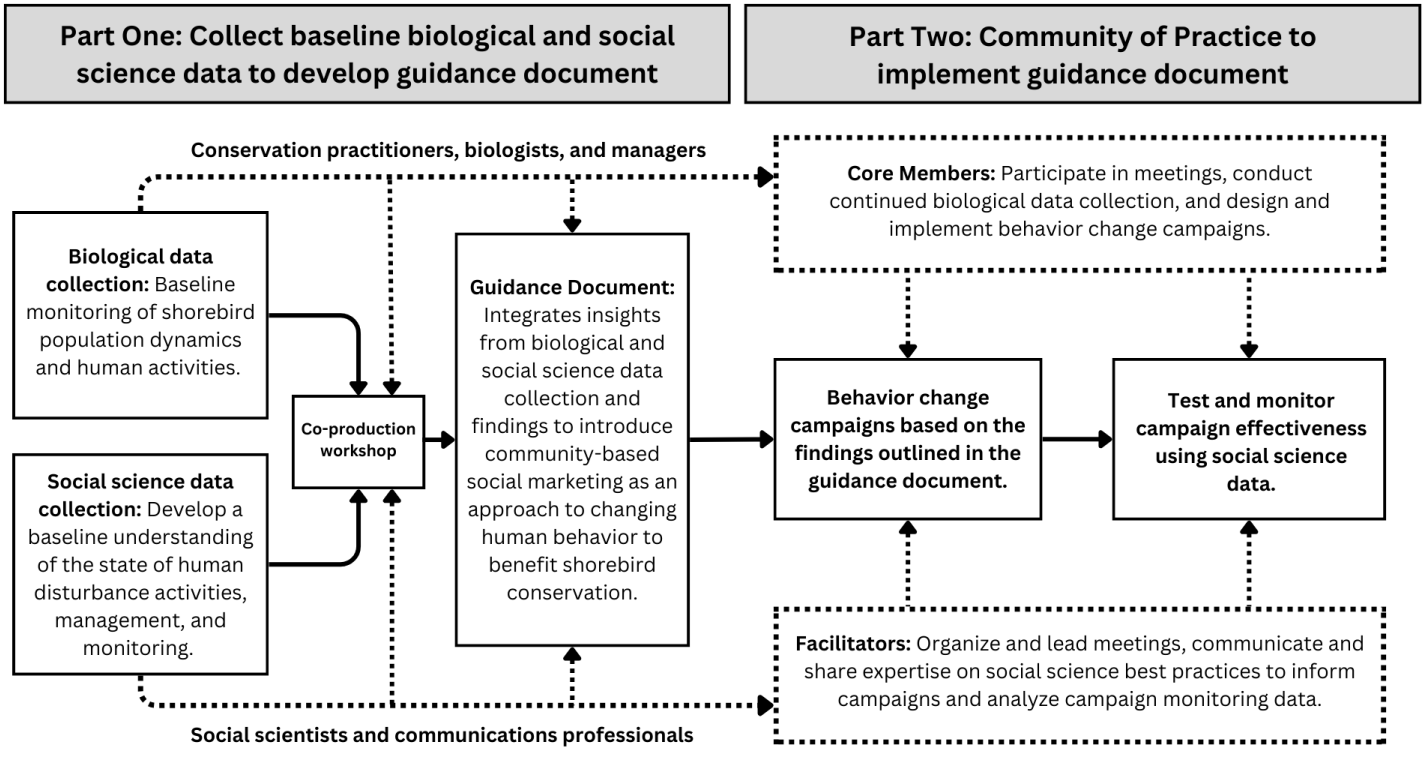


Figure 1: Schematic of co-produced social-ecological project and the components of the Community of Practice. From Livingston et al. (2024) Co-production in action: Navigating the research-to-implmentation space in wildlife conservation through a Community of Practice.

Community: Who Was Involved

The CoP consisted of 14 members representing 7 organizations/entities across 8 states along the US portion of the Atlantic Flyway (Massachusetts, Vermont, Connecticut, New York, Virginia, North Carolina, South Carolina, Georgia). Participation primarily occurred on three levels (Figure 2):

- *Facilitators*: The project PIs (i.e., a graduate student, university professor who is a social scientist, and a communications professional) who organized meetings, guided CoP discussions, and disseminated CoP outcomes broadly.
- *Core members*: Conservation professionals (e.g., biologists, managers, and coordinators) who regularly engaged with the CoP, led the work at study sites, and/or were directly involved in the design and implementation of campaigns.
- *Peripheral members*: Those who participated selectively or specialists contributing to expertise on a limited basis (e.g., seasonal interns, marketing professionals)

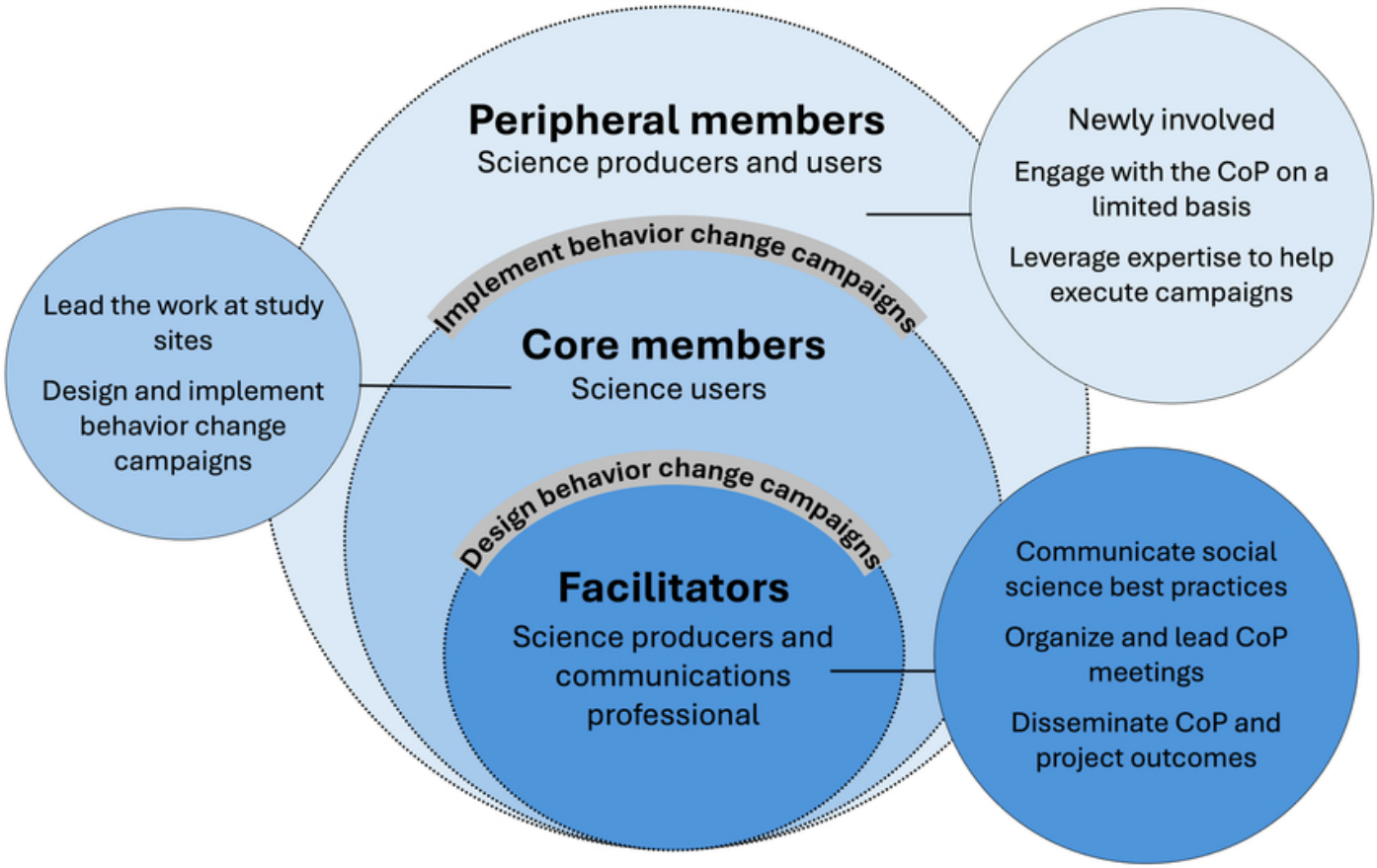


Figure 2: Levels of participation in the Community of Practice. From Livingston et al. (2024) Co-production in action: Navigating the research-to-implmentation space in wildlife conservation through a Community of Practice.

Practice: Activities and Implementation

CoP meetings were structured to guide members through CBSM campaign development, from behavior selection and message design to monitoring and strategy implementation. Meetings included the following:

- *Collaborative problem solving*: Members shared updates, sought feedback, and discussed successes and challenges related to their campaign
- *Resource co-development*: members worked together to refine materials for campaigns (e.g., graphics, signs, websites, and messaging)
- *Peer learning:* Informal discussion provided insight and practical solutions for campaign implementation, supplemented by formal discussions on social science, empirically tested behavior change strategies, and more

Evaluation And Key Takeaways

Using the Value Creation Framework (Wenger et al., 2011) and the CDC's CoP evaluation model, we assessed CoP activities and outcomes to understand what members valued, areas of improvement, and identify recommendations for future iterations of the CoP.

Reporting Metrics

Through 9 different CBSM campaigns implemented during this project and the opportunity to disseminate information at several conferences in the Americas, our efforts allowed us to educate, communicate with, and influence the behavior of over 6,100 people along the Atlantic Coast. Additionally, the contributions of each individual site resulted in a large-scale coordinated effort to improve coastal management across the Flyway, with over 1,050 acres of coastal areas under improved management. An online, accessible toolkit is available to managers and conservation professionals that highlights the best practices, case studies, and lessons learned from this work.

Members Found Value In

- Having a **dedicated space** for collaboration, labor division, and informal learning.
- **Peer-led discussions** that generated new perspectives and solutions.
- **Relationship-building**, which strengthened long-term capacity and future partnerships.

Common Challenges

The primary barrier to participation was limited capacity among members. Expanding participation required adapting to field seasons, providing logistical support (e.g., sending out agendas and tasks in advance for adequate planning and preparation), and maintaining consistent communication (e.g., following up with meeting notes and recordings).

Recommendations for Future Iterations of the CoP

- *Structured engagement*: Use listservs and shared platforms (e.g., Google Drive or Basecamp) to streamline coordination and communications
- *Foster discussion*: Dedicate time every meeting for all members to have the opportunity to share successes and challenges to enhance peer learning. Encourage all to participate whether members' have a big update or a small one.
- *Increase inclusivity*: Rotate discussion leaders and draw on diverse expertise to ensure all members feel valued.
- *Support capacity*: Provide logistical support (e.g., clear scheduling, stipends, pre-meeting information, and note taking) to reduce barriers to participation.
- *Make the community definition clear*: To ensure valuable voices do not slip through the cracks, establish a shared definition of community so that all who are involved with the domain feel like they are part of the community (e.g., seasonal staff).

This CoP demonstrated how structured peer support can enhance the application of human behavior change strategies in shorebird conservation. Future efforts should focus on maintaining engagement, reducing capacity constraints, and strengthening long-term collaboration by facilitating relationship building.

Source and Resources

Information provided by Sami Livingston. Refer to the citations below for more in-depth information on the CoP and evaluation outcomes.

Livingston, S., Dayer, A. A., Zebrowski, A., Sterling, A., Schillerstrom, N., Archibald, T., & Chaves, W. (2024). Co-production in action: Navigating the research-to-implementation space in wildlife conservation through a Community of Practice. Conservation Science and Practice, 6(11), e13251.

Livingston, S., Dayer, A.A., & Archibald, T. A Systematic Approach to Community of Practice Evaluation using the Value Creation Framework (June 25, 2025).

PART 5: RESOURCES AND CITATIONS

In this section, you will find additional resources for learning more about what CoPs are and how to use them, as well as citations for all the works referenced in this guide.

Websites

CADR: Collaborative Action and Dispute Resolution, Community of Practice Webinars

- Bureau of Land Management
- https://www.ntc.blm.gov/krc/legacy/course/880

Introduction to Communities of Practice

- Wenger-Trayner Website
- https://www.wenger-trayner.com/introduction-to-communities-of-practice/

Evaluating Communities of Practice

- Centers for Disease Control and Prevention (CDC)
- http://medbox.iiab.me/modules/en-cdc/www.cdc.gov/phcommunities/resourcekit/evaluate/why_evaluate.html

Guidebooks

Communities of Practice Within and Across Organizations

- Etienne Wenger-Trayner, Beverly Wenger-Trayner, Phil Reid, Claude Bruderlein
- https://www.wenger-trayner.com/cop-guidebook/

Promoting and Assessing Value Creation in Communities and Networks: A conceptual framework

- Etienne Wenger, Beverly Trayner, Maarten de Laat
- https://www.researchgate.net/publication/220040553_Promoting_and_Assessing_Value_Creation_in_Communities_and_Networks_A_Conceptual_Framework#fullTextFileContent

Scholarly Articles on CoPs

Improved Organizational Performance Through Communities of Practice

- Schenkel, A., & Teigland, R. (2008). Improved organizational performance through communities of practice. Journal of knowledge management, 12(1), 106-118.

How and why are communities of practice established in the healthcare sector? A systematic review of the literature

- Ranmuthugala, G., Plumb, J. J., Cunningham, F. C., Georgiou, A., Westbrook, J. I., & Braithwaite, J. (2011). How and why are communities of practice established in the healthcare sector? A systematic review of the literature. BMC health services research, 11(1), 273.

Evaluating Communities of Practice and Knowledge Networks: A Systematic Scoping Review of Evaluation Frameworks

- McKellar, K. A., Pitzul, K. B., Yi, J. Y., & Cole, D. C. (2014). Evaluating communities of practice and knowledge networks: A systematic scoping review of evaluation frameworks. EcoHealth, 11(3), 383-399.

Co-production in action: Navigating the research-to-implementation space in wildlife conservation through a Community of Practice

- Livingston, S., Dayer, A. A., Zebrowski, A., Sterling, A., Schillerstrom, N., Archibald, T., & Chaves, W. (2024). Co-production in action: Navigating the research-to-implementation space in wildlife conservation through a Community of Practice. Conservation Science and Practice, 6(11), e13251.

A Systematic Approach to Community of Practice Evaluation Using the Value Creation Framework

- Livingston, S., Dayer, A.A., & Archibald, T. A Systematic Approach to Community of Practice Evaluation using the Value Creation Framework (June 25, 2025).

Working Groups and Teams

What Are Working Groups and Why Should Scientists Be Involved

- Svejcar, T. J. (1996). What are working groups and why should scientists be involved. Weed Technology, 10(2), 451-454.

Enhancing the Effectiveness of Work Groups and Teams

- Kozlowski, S. W., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. Psychological science in the public interest, 7(3), 77-124.

Human Disturbance to Shorebirds

Observing the Effectiveness of Stewards and Cameras in Promoting Behavior for Beach-nesting Bird Conservation: A Mixed-Method Approach

- Büscher, M., Dayer, A. A., Livingston, S., & Amendola, E. (2025). Observing the Effectiveness of Stewards and Cameras in Promoting Behavior for Beach-nesting Bird Conservation: A Mixed-Method Approach. Preprint.

Community-based social marketing influences shorebird responses along the U.S. Atlantic coast

- Saunders, S. P., Livingston, S., Michel, N., Addison, L., Amendola, E., Casas, S., Hayser, A., Menser, V., Sterling, A., and Dayer, A. A. Community-based social marketing influences shorebird responses along the U.S. Atlantic coast. (In review at Ornithological Applications).

PART 6: APPENDIX

EXAMPLE AGENDA

Example agenda from a CoP focused on reducing shorebird disturbance through human behavior change campaigns (i.e., community-based social marketing).

AGENDA

Welcome and site updates

- Introductions
- Member updates
  - What have you done so far or what are you planning to do?
  - What is going well or not so well?
  - Any learning moments to share?

Feedback on outreach materials

- Bring something to share to inspire others or bring a resource you want feedback on.

Biological monitoring questions

- Q&A with the biological analysis team. Bring any questions you have on data entry, protocols, etc.!

Community of Practice check-in and reflection

Questions in advance helped members reflect on what they have been doing instead of getting lost in the day-to-day; holding them accountable to ensure they are making progress and implementing ideas and resources.

Communicate that feedback early and often at any stage is important and help boost engagement, participation, and morale.

Discussion Points (For Facilitator Reference)

Welcome And Site Updates (1)

- Brief introductions, if new members are joining
- Member updates (time for folks to discuss any immediate needs and things they may need help with)
  - Members give a **10-15 minute update (2)** on their experiences so far since the last meeting (show pictures, signs, handouts, etc.) **Generic probing questions (3)**:
    - What have you done so far or what are you planning to do?
    - What is going well or not so well?
    - Any learning moments to share?
  - As sites are approaching campaigns (or starting them), opportunity for feedback, suggestions, expertise, and insight from others on materials, ideas, signs, etc.
  - Optional: ask folks to **bring a social media post (4)**, observation, or something else to share to inspire others or bring a resource they want feedback on (e.g., sign, letter, implementation plan)

Feedback On Outreach Materials

- Can be lumped in with above updates or done separately. Whatever feels best
- Time for sites to discuss any immediate needs and things they may need help with
- As sites are approaching campaigns (or starting them), opportunity for feedback, suggestions, expertise, and insight from others on materials, ideas, signs, etc.
- Ask folks to bring a social media post, observation, or something else to share to inspire others or bring a resource they want feedback on (e.g., sign, letter, implementation plan)

Biological Monitoring Questions

- **Q&A with biological analysis team (5)**

Cop Check-In And Reflection (6)

- How did members approach developing a CBSM campaign? Probe the following discussion points:
  a. Deciding where to do a campaign (and getting buy in for the campaign)
  b. Deciding what the focus of the campaign will be (what behavior to change
  c. Deciding what messages to use in campaigns
  d. Deciding what behavior change strategies to use for outreach
- What factors helped members during these steps (a-d) of the campaign process?
  - What resources, support, conversations, or other sources did members find useful?
- What are some lessons learned from the campaign process?
  - What might members do differently in the future?
  - What barriers did members face and need to overcome?

1. Leave space for lots of time! Time is crucial for people to feel like their opinions, challenges, and successes are being valued. Be flexible with the agenda as this is the most important part of the CoP meeting and cannot be replicated over email. Engagement and learning happen here, input and immediate feedback is given. Trust and camraderie are established when ample time is given to all.

2. Send questions ahead of meeting so members can prepare and engage. Keeping questions generic offers room for diverse perspectives, honesty, etc.

3. Sharing tangible products is critical for getting useful feedback and promoting a positive community dynamic. This is really important in virtual settings and accommodates different types of learning syles.

4. Getting feedback was often lumped into member updates. If possible to have as a separate action ensures that this is not overlooked.

5. Q & A with team is a great place to seek input from transactional participants.

6. Periodic check-ins can help with evaluations. Ask open-ended questions to gauge the utility of the approach, lessons learned, and areas recommendations for the future that align with your domain and CoP objectives.