

# How you ‘show up’ matters:

## A primer for understanding and practicing reflexivity in conservation sciences

Many science-based research projects strive for a transparent and objective process isolated from personal values. Despite this, personal and professional contexts (background, training, values, and beliefs) inevitably come with assumptions and bias. Ultimately, this influences how (and which) work is conducted, understood, communicated, and applied.

**Reflexivity** is the act of stepping back to critically assess your assumptions before, during, and after a project. This can be integrated throughout the research process and expressed in **positionality statements**, which acknowledge your identity and actions (personal and professional) and how they may impact your work.

Many disciplines already recognize the need for reflexivity in community-engaged or place-based work. Since conservation science projects often impact complex and interconnected social and natural systems, reflexivity should become standard practice.

**We encourage conservation science researchers and practitioners to incorporate reflexivity into their work.** This can be tricky and uncomfortable, but adds a valuable ‘gut check’ to reflect on how you are ‘showing up’ and if your actions align with your intentions. While there is no one way to ‘do reflexivity’, the process can lead to a transparent, adaptable, and self-aware approach that ultimately strengthens conservation outcomes.

**Reflexivity** can strengthen conservation outcomes through:

- Improved interpretation of results
- Revealing bias
- More transparent decision-making and management

**The following table is a starting point to develop positionality statements and incorporate reflexivity in your practices.** These prompts are flexible and can be personal reflections, more formal written positionality statements, or ongoing informal conversations throughout the research process.

Themes	Some things to ‘think’ about	Some things to ‘write’ about	Examples from the authors
	For <b>yourself</b> : What assumptions affect how you might ‘show-up’	For a <b>positionality statement</b> : How your background and experience(s) shape your relationship to the work	
<b>Your History and Training</b>	What ways of thinking are common in your field, and how do these influence how you approach your work?	What is your training or education (professional or other) in relation to the work?  What roles and experiences do you bring? How do they affect your perspective?  What is your history that brought you to the work?	<i>I am academically trained as a conservation biologist. I originally joined this work through a professional collaboration born of mutual interest in Indigenous sovereignty and wildlife ecology.</i>  <i>I am trained as a western scientist, with a focus on marine food webs. I was invited to this spatial reserve design planning process because of my expert knowledge in species X.</i>
<b>Research Context and Location</b>	What is your personal/institution’s/team’s/etc. relationship to the place you are working in/describing/writing about? Think beyond your specific affiliations.  How might your research impact local human or ecological communities? What do(es) the community/communities you are working with want from this research?	Where are you based? How does this relate to the location of the work?  How does the work fit into the community’s expressed needs, context, and location?  How does your work interact with its social, cultural, and historical context?	<i>I am based at University X, where I focus my research on population ecology of species A. I work with community Y’s municipal land use planning process that is shaping future housing and industrial zoning decisions. I contribute knowledge on ecological process Z as it informs the planning process.</i>  <i>I am a conservation scientist and postdoctoral fellow at the University of Y. I conduct my work with the community of X and on the lands and waters of X Nation territory, working with knowledge holders towards a broader understanding of harvest impacts on species Y.</i>

<p><b>Personal Information and Values</b></p>	<p>What biases might you bring? Report on this if it is safe to do so (more details in the discussion section of the full manuscript*)</p> <p>Is the positionality of every individual author (vs. group) relevant?</p> <p>Which values and personal information are most relevant to the work? How?</p>	<p>What are your personal values/philosophies?</p> <p>How does this drive your perception of research, management, policy, etc.?</p> <p>Who are you (in relation to the work)?</p>	<p><i>I am a researcher that holds a personal ethical position that wildlife-management/research should be non-lethal, regardless of efficacy.</i></p> <p><i>I am a person of XX ancestry who lives in X territory. I am committed to decolonizing research practices. I've spent N years learning about X Nation's lands and laws, which informs my research practice.</i></p> <p><i>I am an independent researcher who was invited to support X project, through X task. I have not visited X territory but contribute experience from X, Y, Z disciplines.</i></p>
<p><b>Motivations and Goals</b></p>	<p>How will you personally benefit from the work? Do your research partners benefit reciprocally? How?</p>	<p>What are your motivations or goals in doing this work?</p> <p>What changes do you hope to influence through your work?</p>	<p><i>Research partners involved in this work believe effective conservation solutions require locally-led wildlife governance in partnership with western-science research.</i></p> <p><i>Academic research partners intend to publish this research in a peer reviewed paper and contribute information for policy and/or decision-makers. Additional research products will be developed for use by local research partners for Z purpose.</i></p> <p><i>This research was motivated by a desire to develop management practices that combine Indigenous Knowledge and western-scientific evidence. Researchers involved in this work believe that such management practices improve management outcomes.</i></p>
<p><b>Responsibility and Accountability</b></p>	<p>Do you have permission to share this research? Are you the right person to share it?</p> <p>Have you considered the impacts and consequences of your work within/beyond your research team?</p> <p>Have you considered the values/philosophy of your funding sources? How does this influence/shape your work?</p>	<p>Who are you responsible and/or accountable to on this project? Who are your funders? How do they influence your work?</p> <p>How will you return and communicate the research results to the community/communities in a useful way?</p> <p>How might publishing an academic paper impact the community (e.g., press coverage, tourist exposure, non-resident advocacy campaigns, etc.)? Are other forms of communication a better fit for the community/communities?</p>	<p><i>The data from this co-developed project is owned by the First Nation with whom I collaborate. Outputs developed to distribute this information are co-developed before communicating our work more broadly.</i></p> <p><i>I come to this work funded by a private donor who is invested in large mammal conservation. I work in dimensions of non-profit conservation and Indigenous sovereignty. I address both positions by communicating the limitations and intended outcome of my research, and the assumptions and expectations of our project partners, to our project team and to our audiences.</i></p>
<p><b>Partnerships</b></p>	<p>Do you have relationships with the community/communities you are writing about?</p> <p>Have you clarified with research partners how best to address research questions that are relevant to them?</p> <p>Whose voice(s) are you including or excluding in the research process?</p>	<p>Who are your partners in this work and how do you work together?</p> <p>How do you benefit from the collaboration?</p> <p>What are the conditions of your partnership?</p>	<p><i>I have developed and signed a protocol agreement with X partners.</i></p> <p><i>Beyond research activities, I provide free research and technical support to X partners at their request.</i></p> <p><i>Research partners review and provide direction on research activities at regular, agreed upon intervals and project milestones.</i></p> <p><i>My association with X partner establishes local credibility and could open more opportunities for research and/or funding from external bodies.</i></p>

# Key considerations

## Acknowledging your values improves transparency and accountability within your work.

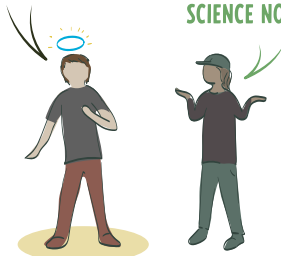
Being open about your values (to yourself and others) can improve the interpretation of results, reveal bias and result in more transparent decision-making and management outcomes.

MY *OBJECTIVE* RESEARCH SHOWS THAT X MANAGEMENT STRATEGY IS JUSTIFIED!



I AM SO SORRY ABOUT ALL MY PRIVILEGES!

COOL... CAN WE TALK SCIENCE NOW?



[CRINGE]... I WORDED IT PERFECTLY IN THE PAPER, BUT AM I DOING IT IN REAL LIFE?



## Positionality is not performance: center the work and be specific.

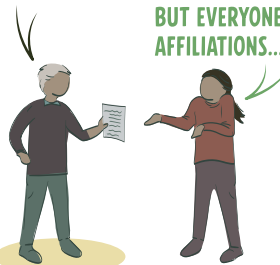
Overly acknowledging your position can take away from the work itself. By centering the work and your relationship to it, you will create more meaningful outcomes.

## Reflexivity is relational: think about responsibilities.

Conservation science research typically takes place where people's relationships with ecosystems will be directly impacted. Therefore, reflexivity can help you think about the implications of your work and whether you are acting in the way you intend to.

I SEE YOU ARE ALIGNED WITH INTEREST GROUP X ... YOU ARE BIASED! I'M *NOT* GOING TO PUBLISH THIS...

BUT EVERYONE HAS AFFILIATIONS...



#GOODWORK SO HAPPY TO BE VISITING [NAMEDROP] 😊

YIKES IS THIS A SHOW? I'M. RIGHT. HERE. DO YOUR FOLLOWERS HELP MY WORK?



I CREATED A GROUND-BREAKING PARTNERSHIP WITH MANY CO-AUTHORS!

I'VE NEVER HEARD OF THIS PAPER...



## Communicating reflexivity/positionality may be risky.

Practicing outward reflexivity may not be straightforward or safe for everyone. In these cases, crafting a positionality statement could still be beneficial, even if it isn't shared publicly. Those who are able, are encouraged to normalize these practices.