

# A 'living' guide to fostering collaborative practices in RENEW

Iteration 1 - March 2023

The RENEW project has its foundations in interdisciplinary and transdisciplinary collaboration, that is, research reaching across disciplines and beyond academia.

This document aims to facilitate consideration of, and guide, collaborative practices within and around RENEW. It will act as a 'living' resource for RENEW members and partners to use and feed into; this is the first of several planned versions that the Collaboration in Practice team will produce through the project lifetime. In addition to internal versions, at



Collaborating-in-nature. Photo: EHK

a later stage, drawing on collective learning in RENEW, we will develop this into a publicly available manifesto for collaborative practice, building on other manifestos about wildlife conservation [1], and interdisciplinarity across natural and social sciences [2].

This first iteration provides several prompts and working recommendations, based on our review of the academic literature and 'best practice' reports on interdisciplinarity, co-production, and other modes of research that bring together people from diverse disciplines and sectors. It is a start point, so please contact the Collaboration in Practice (X3) team if you have feedback, additions, amendments, or related ideas:

- Eleanor Hadley Kershaw, X3 Senior Research Fellow e.hadley-kershaw@exeter.ac.uk
- Angela Cassidy, X3 Co-Lead a.cassidy@exeter.ac.uk
- Susan Molyneux-Hodgson, X3 Co-Lead <u>s.hodgson@exeter.ac.uk</u>

We look forward to learning about collaboration with you!

# What is interdisciplinarity?

Definitions and typologies of interdisciplinarity abound [3], [4]. While interpretations vary, and the extent to which disciplines themselves can be understood as stable and discrete entities is arguable, three main distinctions can be observed:

- Cross- or multidisciplinarity, involving different disciplines interacting without integration;
- **Interdisciplinarity**, involving the integration of perspectives, theory, methods, data or other resources from more than one discipline; and
- Transdisciplinarity, where disciplinary boundaries are transcended altogether, either in innovative knowledge production or through the involvement of non-academic collaborators (or both) [4].

Related concepts include **co-design** and **co-production** of research or knowledge, which generally refer to active collaborative partnerships between academic and non-academic actors [5].

Given this conceptually crowded and ambiguous terrain, the X3 team is using 'interdisciplinarity' as a working umbrella term for multiple concepts and practices of collaboration across a range of differences, including but not limited to disciplinary training and expertise, sector or domain of practice. Many researchers do not identify with (only) one discipline and some consider themselves to be 'undisciplined', challenging the notion that stable disciplines are a necessary precursor to interdisciplinary work [6]–[8].









## What can we learn from existing research on and guidance for collaboration?

A huge body of research has explored the dynamics and practices of collaboration in academia and beyond, and documents detailing 'best practice' in interdisciplinarity have been produced by research funders, researchers and environmental organisations, among others. Here, we outline some of the overarching lessons and common themes across this wide range of literature, filtered through our own expertise and experiences of interdisciplinary collaboration.

A focus on *practices* is key. Everyday (relational, emotional, embodied and material) practices are how collaboration proceeds. The importance of *social cohesion and care* in these relations – care for each other, for the subjects and objects of our work, and for our practices – should not be underestimated [9].

#### Taking time...

All sources emphasise the extra time needed in interdisciplinary collaborative work, particularly for:

- Building shared cultures of trust, inclusivity and respect [10] by meeting regularly, including informally. This could include team meetings, reading groups, away days or field visits. While geographical proximity and shared or co-located workspaces have been found to be important [11], [12], virtual scaffolding through frequent online team meetings has taken a greater role since the Covid-19 pandemic. Both are needed, as well as opportunities to socialise together. This is important not only for fostering familiarity and developing positive relationships, but also to build sufficient camaraderie and mutual respect to be able to have difficult conversations [13].
- Creating safe spaces for exchange, where all team members are encouraged to ask questions and feel able to share their approach and perspective. This is particularly important when working across career stages, cultures, genders, and varying levels of confidence and experience [14].
- Identifying shared research/practical problems, formulated together [14]. While this was achieved during RENEW proposal-writing, it will be important to continue to articulate diverse perspectives on what the research or practical problems are, and to consider any differences in *ontology* (what there is; what the problems or research objects comprise) and *epistemology* (what and how we can know about them). Flexibility to adapt or adjust research questions may be needed [14], [15].
- Making motivations, perspectives, and expectations explicit through dialogue [14], [16]. Discussing the diverse standpoints, assumptions and expectations that team members and partners bring to the project allows space to identify difference, accommodate epistemological pluralism (multiple ways of knowing), and develop mutual understanding.
- Finding common goals and opening up unshared goals [11], [13], [16]. The RENEW bid outlines shared goals, but it will be necessary to revisit and maintain these as the project progresses. Fitzgerald et al. [11] suggest creating a 'project bible' that captures the overall vision. Equally, it is important to acknowledge goals that are not shared.
- Learning about each other's fields and developing shared language [11], [12]. Team members should take time to gain an understanding of each other's conceptual frameworks, methods and practices, and to explore overlaps or differences in terminology towards finding a shared language.
- Writing collaboratively and developing inclusive publication and communication strategies [11], [14], discussing authorship (including differences in conventions) from an early stage.

#### Taking risks & experimenting

Collectively experiment with novel ways of working, take risks (e.g., with playful methods), while ensuring practical protections for those who might be more vulnerable such as early career researchers [11], [13].









#### **Being reflexive**

Reflecting on our own worldviews and on our collaborative relations, recognising vulnerabilities, power differentials and hierarchies [13], [14], and considering differences beyond disciplines [17], [18].

#### Adopting collaborative dispositions

Collaborative dispositions include neighbourliness [13], respect, humility, and open-mindedness [14].

#### Mutual support at scale

While this guide focuses on project- and individual-level recommendations, collaboration takes place within a wider research ecosystem involving universities and many other organisations. Wider support for interdisciplinarity can include organisational commitment [16], training and facilitation provision [10], provision of infrastructure for sharing resources, and tailored administrative and engagement expertise [11].

### **Preliminary recommendations for RENEW**

On the basis of the existing literature and 'best practice' reports, our expertise and experiences of inter- and transdisciplinary collaboration, and our conversations with RENEW colleagues to date, we propose some preliminary recommendations for consideration in the current phase of the project:

- Themes sharing their work during the All Team meetings has been invaluable; continue to make time for this and make presentations accessible to all team members via the RENEW SharePoint.
- Everyone is finding it hard to keep track of Theme numbers and names! Although all Themes
  nominally have a short title (e.g., Collaboration in Practice, Community Action, Land Managers),
   Themes might consider choosing/using a short Theme name rather than their number.
- The Biodiversity Parliament, All Team and Theme meetings, ECR meetings, ESI coffee mornings, and first Collaboration in Practice workshop have provided opportunities for colleagues to meet (within and across Themes) including over coffee and dinner. Continue to meet regularly, find time for inperson meetings, and consider organising RENEW away days, with plenty of time for informal conversation. Consider the possibilities for supporting bottom-up creative and social activities (book, film, art/craft groups, lunch clubs, evening socials, walks, trips, etc.) for RENEW, online or in-person.
- **Build in time to discuss working practices**. These often differ significantly between disciplines and individuals; regularly discussing cultures, preferences and goals may help to identify and work productively with differences. **Bear in mind differences in cultures and working practices when interacting with partners** too; timelines and expectations can vary immensely.
- **Build in time to consider multiple problem framings**, interpretations and models of core ideas like 'biodiversity', 'biodiversity renewal' and 'people-in-nature' that we all bring to the table. As the project unfolds, openly considering these underpinning and bigger-picture questions will aid internal collaboration alongside RENEW's wider interactions with partners, policy, media and communities.
- With so many research centres and projects at the University of Exeter focusing on environmental
  and ecological topics, there is an exciting but sometimes overwhelming proliferation of events.
   RENEW should consider coordinating seminar events and other activities with other relevant
  projects and institutes: at times pooling resources may also be beneficial.
- RENEW has been assembling a highly talented Secretariat team, with considerable expertise in their
  own professional domains. Similarly, RENEW's partners have an incredible wealth and diversity of
  expertise. Appreciating and drawing on this expertise (while being mindful of workloads) is key.









- In addition to opportunities for informal learning within and across Themes, RENEW should consider
   UoE- and externally-sourced (tailored) training, coaching and/or facilitation provision (open to all team members) for key skills and capabilities such as leadership, engagement, and collaboration.
- Having now spent time with most Themes and started our fieldwork with RENEW, the Collaborations
  team have really enjoyed getting to know such a fantastic group of people. The degree of excitement
  about the project, and the genuine interest in and enthusiasm for learning from each other's work is
  really striking. Thank you for your collaboration, and we look forward to seeing where we all go next!

#### References

- [1] C. Packham, P. Barkham, and R. Macfarlane, Eds., *A People's Manifesto for Wildlife*. 2018. [Online]. Available: https://www.chrispackham.co.uk/wp-content/uploads/Peoples-Manifesto-Download.pdf
- [2] A. Balmer et al., 'Towards a Manifesto for Experimental Collaborations between Social and Natural Scientists', Experimental Collaborations, Jul. 03, 2012. https://experimentalcollaborations.wordpress.com/2012/07/03/towards-a-manifesto-for-experimental-collaborations-between-social-and-natural-scientists/ (accessed Nov. 28, 2018).
- [3] K. Huutoniemi, J. T. Klein, H. Bruun, and J. Hukkinen, 'Analyzing interdisciplinarity: Typology and indicators', *Research Policy*, vol. 39, no. 1, pp. 79–88, Feb. 2010, doi: 10.1016/j.respol.2009.09.011.
- [4] J. T. Klein, 'Typologies of Interdisciplinarity: The Boundary Work of Definition', in *The Oxford Handbook of Interdisciplinarity*, R. Frodeman, Ed. Oxford University Press, 2017, pp. 21–34.
- [5] G. G. Page et al., 'Co-designing transformation research: lessons learned from research on deliberate practices for transformation', Current Opinion in Environmental Sustainability, vol. 20, pp. 86–92, Jun. 2016, doi: 10.1016/j.cosust.2016.09.001.
- [6] H. Kara, 'The Undisciplined Interdisciplinary Researcher', *Helen Kara*, Jun. 27, 2018. https://helenkara.com/2018/06/27/the-undisciplined-interdisciplinary-researcher/ (accessed Jan. 13, 2022).
- [7] L. Sjoberg, 'Undisciplined IR: Thinking without a Net', in *What's the Point of International Relations?*, Dyvik, J. Selby, and R. Wilkinson, Eds. Routledge, 2017, pp. 159–169.
- [8] 'Becoming Undisciplined Archives', ASAP/J, Jun. 29, 2022. https://asapjournal.com/tag/becoming-undisciplined/(accessed Feb. 15, 2023).
- [9] A. Kerr and L. Garforth, 'Affective Practices, Care and Bioscience: A Study of Two Laboratories', *The Sociological Review*, vol. 64, no. 1, pp. 3–20, Feb. 2016, doi: 10.1111/1467-954X.12310.
- [10] J. Brinton and T. Haynes, 'What has NERC learnt so far...', presented at the NERC Interdisciplinary Research to Solve Environmental Challenges Workshop, Sep. 2022.
- [11] D. Fitzgerald, R. Lane, K. Waddington, and M. Willis, *Two Ways of Telling This Story: Best Practice in Interdisciplinary Collaboration*. Cardiff University, 2019. [Online]. Available: http://orca.cf.ac.uk/120662/
- [12] K. Prager, S. Morris, M. Currie, and K. Macleod, 'Developing a Culture of Interdisciplinary Excellence at the James Hutton Institute: Exploring Interdisciplinarity', The James Hutton Institute, 2015. [Online]. Available: https://www.hutton.ac.uk/research/projects/dice
- [13] A. S. Balmer *et al.*, 'Five rules of thumb for post-ELSI interdisciplinary collaborations', *Journal of Responsible Innovation*, vol. 3, no. 1, pp. 73–80, Jan. 2016, doi: 10.1080/23299460.2016.1177867.
- [14] L. Cole and A. Davies, 'British Ecological Society Guides to Better Science: Interdisciplinary Research', British Ecological Society, 2021.
- [15] R. Hails, 'Interdisciplinary Working', presented at the Changing the Environment Town Hall Webinar, 2020.
  [Online]. Available:
  https://webarchive.nationalarchives.gov.uk/ukgwa/20220204084438/http://nerc.ukri.org/research/funded/prog rammes/changing-the-environment/news/webinar-changing-the-environment/changing-the-environment-webinar-slides/
- [16] G. Kass, 'Fostering Interdisciplinary Working in Natural England', Natural England, UK, 2018.
- [17] R. Freeth and G. Caniglia, 'Learning to collaborate while collaborating: advancing interdisciplinary sustainability research', *Sustain Sci*, vol. 15, no. 1, pp. 247–261, Jan. 2020, doi: 10.1007/s11625-019-00701-z.
- [18] V. Boix Mansilla, M. Le Lamont, and K. Sato, 'Shared Cognitive— Emotional—Interactional Platforms: Markers and Conditions for Successful Interdisciplinary Collaborations', *Science, Technology, & Human Values*, vol. 41, no. 4, pp. 1–42, Jul. 2015, doi: 10.1177/0162243915614103.





