

Joint international call for synthesis proposals:
Interactions between biodiversity and climate change

Short Background:

Climate change and biodiversity loss threaten our planet at all socio-ecological and socio-economic levels. Climate change and biodiversity change are inherently interlinked. Each can worsen or improve the effects of the other, depending on the direction of change, making their combined management critical for having a habitable climate, self-sustaining biodiversity, and good quality of life for all. Although climate change and biodiversity change influence each other in complex, interdependent ways, they are often individually addressed in their own research disciplines, such that the interlinkages and feedbacks are often not fully addressed. Understanding the social determinants and the implications of climate-biodiversity interactions provides opportunities to mitigate mutually harmful effects for people and nature, with implications for equity both within and across generations.

Even more importantly, climate change and biodiversity change are mostly independently addressed in policy decision-making, which often leads to unnecessary competition of attention and resources and can drive negative outcomes when solutions are implemented considering only biodiversity or climate rather than leveraging their interlinkages to deliver co-benefits.

Why a joint call across synthesis centres?

Synthesis centres are research infrastructures that enable the development of knowledge synthesis from heterogeneous theories, information, data etc. as well as multiple perspectives from diverse groups. This highly effective research approach enables synthesis centres to be at the forefront of knowledge in critical areas such as Biodiversity, Environment and Climate Change. Given the global nature of the tightly coupled climate and biodiversity crises, several synthesis centres around the world have joined together to synthesize knowledge linking the biodiversity and climate change crises.

Related synthesis efforts taking place at different centres have the potential to shed light on how the two crises interact and affect each other, and provide information and models to tackle the enormous challenges of our time.

We aspire to facilitate and encourage joint interactions among the different teams working on different aspects of the same overarching topic. In addition to centre-specific synthesis working groups, we will provide opportunities for cross-project fertilization that includes seminars, training, symposia, and an “ubersynthesis” final in-person meeting and working group for some participants from each group.

This call:

This call is a joint call across nine synthesis centres with five centres offering support to host full Working Groups and four more centres that will provide additional financial support for participants ([Table 1](#)). Proposals are invited that focus on any aspect (ecological, biological,

social or economic) of climate-biodiversity interactions, within the prescribed focus or constraints of the individual centres.

We invite proposals from diverse teams of researchers, practitioners, policymakers, and other stakeholders. We anticipate supporting several Working Groups at the same time, hosted by different centres and one meeting of representatives of each Working Group at the close of the synthesis effort to develop an overarching summary of knowledge gained across the individual groups. Each Working Group will meet several times over the course of the next 2-3 years at one of the participating centres. The Synthesis Centre Consortium will facilitate regular joint virtual seminars, workshops and minisymposia, longer hybrid symposia, and other research and training activities during the active synthesis period. These activities will be aimed both at scientists participating in the Working Groups, and at others, particularly early career researchers, at any institution, who are not part of any of the funded synthesis projects.

Products and outputs are expected to include:

- high-profile, peer-reviewed publications that advance the science and/or offer problem-solving guidance
- other outputs relevant for decision-making (e.g., policy briefs, toolkits etc)
- a contribution to the training of the next generation of biodiversity-climate change scientists.

All proposals submitted to a centre must follow the centre-specific rules and will be reviewed through the centres' regular review process. Successful proposals will receive the same amenities as other synthesis activities of that centre. There is a possibility of co-sponsorship across different Centres (details in individual calls of centres). Some centres offer support for postdoctoral fellows; other centres may provide additional financial support (Table 1).

Timing (check [Table 1](#) for summary of dates):

- **Call open:** Differs by centre (check the centre call websites)
- **Full proposal deadline:** Differs by centre (check centre call websites)
- **Decision announced** at 'The First International Symposium on Synthesis Research in Aquatic Ecosystems' hosted by AquaSYNC and taking place 10-12 June 2025 in Copenhagen, Denmark (details how to join tbd)

Main features

This call supports and funds working group meetings at a participating centre. Support includes funding of all travel expenses (incl. hotel, travel, catering/daily allowance, support with the logistics). Centres also offer individual group support for PIs to get help with structuring and planning successful collaborative team synthesis projects. In some cases, centres also support data collation and analyses of data via dedicated centre staff.

Each centre will open this call individually via their own websites. Applicants can decide to which centre they want to apply. Each individual centre has different regulations and rules (e.g. working group composition, group leadership etc.).

It is possible to apply to more than one centre, but investigators must alert each centre that you have done this via email to the relevant centres and as a note in the proposals.

Obtaining synergy across multiple working groups?"

As part of our mission of broadly catalyzing synthesis science around biodiversity and climate change, other goals of this joint call include contributing to building an international climate-biodiversity scientific community, facilitating across-project synergies and interactions, and training the next generation of scientists who will focus on this topic.

The call benefits from diverse teams working on the same theme. In order to achieve cross-project interactions, the participating synthesis centres and initiatives will plan various co-ordinated activities. Additionally, the centres will jointly consider and act to ensure meaningful complementarity among the proposals to be funded; this will be a secondary criteria of the decision-making process. We hope that the different projects can learn from each other and find commonalities to explore. Additionally, the funding centres will specifically encourage early career researchers to participate in individual WGs and in these cross-project activities. Potential cross-project activities include regular joint seminar series, a starting and a final hybrid symposium and exploration of the participation in a special issue of a journal on this topic.

Participating centres & responsible contact persons for further questions.

- [sDiv - Synthesis Centre for Biodiversity of iDiv](#) - Head of sDiv Marten Winter - Marten.Winter@idiv.de
- [The John Wesley Powell Centre for Analysis and Synthesis](#) - Director Jill Baron - Jill.Baron@colostate.edu
- [National Centre for Ecological Analysis & Synthesis \(NCEAS\)](#) - Director Ben Halpern - halpern@nceas.ucsb.edu
- [AquaSYNC](#) - Leader of AquaSYNC Jesper H. Andersen - jha@niva-dk.dk
- [ASCEND](#) - Deputy Director of Team Science Farai Kapfudzaruwa - farai.kapfudzaruwa@uct.ac.za
- [Institute for Global Change Biology](#) - Director Peter Reich - preich@umich.edu
- [Sinbiose/CNPq the Brazilian Synthesis centre on Biodiversity and Ecosystem Services](#) - Executive Secretariat - Marisa de Araujo Mamede - mmamede@cnpq.br
- [Just Transformations for Sustainability](#) - Director Arun Agrawal [will begin in early 2025]
- [Centre for the Synthesis and Analysis of Biodiversity \(CESAB\)](#) - Scientific director Nicolas Mouquet - nicolas.mouquet@fondationbiodiversite.fr
- [Canadian Institute for Ecology and Evolution \(CIEE-ICEE\)](#) - Director Diane Srivastava ciee-icee@biodiversity.ubc.ca

What is funded in this call?

Support for synthesis varies by centre, please check [Table 1](#) and specific centre websites for more information.

(1) Funding for entire working groups:

- **The John Wesley Powell Centre for Analysis and Synthesis (Colorado, USA)** invites teams of scientists and managers to address this topic. At least one Principal Investigator must be a scientist with the U.S. Geological Survey. The Powell Center offers support for an early career Fellow.
- **The African Synthesis Centre for Climate Change, Environment and Development (ASCEND)** invites teams composed of a mix of researchers, policymakers and/or practitioners to address this topic. **ASCEND offers the opportunity for a team to apply for a 2-year postdoctoral research fellow** based at ASCEND. A team co-lead should be African or based at an African institution. Applications are expected to open in December 2024.
- **sDiv, the Biodiversity synthesis centre in Germany (Leipzig)** invites teams of scientists to address this topic. At least one participant needs to be an [iDiv member](#) and should be involved early in the proposal development.
- **AquaSYNC** invites teams of scientists to address this topic. Proposals for a Working Group (2025-2026) should have a focus on marine and/or freshwater biodiversity and climate change in the Arctic and sub-Arctic. At least two members of the Working Group should come from NIVA and/or Akvaplan. A Norwegian chair of the Working Group is an advantage.
- **The National Centre for Ecological Analysis and Synthesis (NCEAS)** invites teams of scientists to address this topic. There are no constraints on team membership.
- **The Institute for Global Change Biology (IGCB) at the University Michigan (USA)** in partnership with the initiative for **Just Transformations for Sustainability (JTS) at Notre Dame University**, invites teams of scientists to address this topic. At least one participant must be from Michigan and Notre Dame.
- **SinBiose/CNPq**, the Brazilian Synthesis centre on Biodiversity and Ecosystem Services, is a possible future partner of this initiative and will potentially invite teams to address this topic. Call for projects is expected later in the 1st half of 2025.

(2) Funding for additional support: After announcing the funding decisions, funded projects may apply for **additional support**:

- **The CESAB synthesis centre (Montpellier, France)** will open a call to allow researchers based in France to attend meetings of groups funded under this joint synthesis call. More details on the application procedure (to be made by both the researcher based in France and the PIs of the group concerned) will be provided in early 2025.
- **The Canadian Institute of Ecology and Evolution (CIEE-ICEE)** will open a separate call to enable a researcher based at a Canadian university to join a meeting of a funded group under this call. More details on the application procedure (to be made by both the researcher based in Canada and the PIs of the group concerned) will be provided in early 2025.
- In addition to the WGs hosted by **Institute for Global Change Biology (IGCB) at the University Michigan (USA)** and the initiative for **Just Transformations for**

Sustainability (JTS) at Notre Dame University, IGCB and JTS offer each WG funded by the other Centres the opportunity to apply for a **2-year project supporting a postdoctoral Synthesis Fellow** who would be a key member of their WG, being placed at University Michigan or Notre Dame, and co-mentored by both a UM or Notre Dame faculty member (who would also become part of the WG) and one of the WG leaders.

Call specific FAQ

Please read all call relevant documents at the call website of individual centres at which you want to apply. This is an exciting but also new funding activity and we acknowledge that this call is a bit more complex than the usual individual synthesis centre calls.

We will offer a few call specific FAQ online sessions to help potential applicants with their questions and to explain what type of questions and projects we envision to see as proposals. Please check the websites of the individual centres for details on these online sessions. Also please feel free to send your specific questions to the centre representatives you most likely want to apply to.

- **How do I decide at which centre I apply?**
 - It's up to you. Each centre is slightly different in their specific guidelines (e.g. group composition) so please check if your proposal is a good match for a specific centre. Given the topic of this call, we also encourage trying to minimize your CO₂ travel footprint.
- **How can I apply for an IGCB/JTS funded postdoc?**
 - For funded WGs seeking an IGCB or JTS postdoc, an application will be required that addresses specific questions about the scientific goals and plans of the IGCB/JTS Centre; identifies and describes the fit of the University of Michigan or Notre Dame faculty member, the benefits to the planned research of incorporating a postdoc; and plans for the postdoc research and training. The application will be made following the selection of a proposal as a funded WG by another Centre.
- **How can I apply for an ASCEND funded postdoc?**
 - For applications for an ASCEND postdoc, this is part of the general ASCEND team application process.
- **How can I apply to be a Powell Center Fellow?**
 - Powell Center Fellows are identified by the Principal Investigators of each proposal, not by the Powell Center
- **Can we meet at different centres?**
 - No. All funded meetings for your group will take place at the centre that funds your proposal.
- **What is included in the funding for meetings?**
 - Please read the whole call description as well as all call and centre specific material at the individual centres.
 - The call funds primarily Working Group meetings, which generally includes funding for travel, accommodation and catering and/or daily allowance (centre specific).
 - Some centres also offer support for postdoctoral fellowships.
- **Does this call support new data collection?**

- No. This call does not support new primary data collection using fieldwork or laboratory work. The focus for this call is synthesis of already existing data and knowledge from diverse sources (e.g., databases, completed field surveys, climate models, satellite imagery, field experiments, theoretical models etc.).
- **Can I apply to different centres?**
 - In principle yes. But you need to adapt your proposal according to the centre specific rules. If you apply to more than one centre, principal investigators must alert each centre that you have done this via two pathways, 1) email to those centre representatives mentioned in this call and mention it in all proposals clearly in the beginning (e.g. “This proposal idea was also submitted within this call to XYZ”). Not informing the involved centres can lead to a rejection of all of your submissions in this call.
- **How can I get involved in the virtual seminars, minisymposia, workshops, hybrid symposia, and other research and training activities?**
 - Check regularly the websites of the involved centres next year.
 - Plans for these are still in development and will be likely more concrete towards mid of 2025, but are likely to incorporate features or be modeled after prior successful initiatives such as the the PUGSLEY ([Pop-Up International Global Symposia about Life & Ecology for You](#)) 3-year on-line Symposium organized by P Reich, and the 2-day University Michigan IGCB-MIDAS Symposium on Understanding Biodiversity in a Changing Planet, March 2024. Volunteers to help organize and implement these initiatives will be welcomed.