Center for Biodiversity Outcomes Annual Report 2023





Arizona State University

We envision a world

where the diversity of life on Earth is valued and sustained for the benefit of all.

Our mission is to enable discoveries and solutions to sustain Earth's biodiversity in a time of rapid biophysical,

institutional, and cultural change.

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Access this report online at: <u>biodiversity.asu.edu/about</u>

Letter from the founding director

Dear Friends and Supporters of the Center for Biodiversity Outcomes,

As we reflect on another year of important work in the field of biodiversity conservation, I am filled with gratitude and pride for all that we have accomplished together. Through your support and dedication, we have made significant strides in advancing the science, policy, and practice of biodiversity conservation, and I am honored to serve as the Director of such a dynamic and impactful organization.



Over the past year, we have continued to tackle some of the most

pressing challenges facing our planet, from plastic waste to the ongoing threats of climate change and biodiversity loss. But we have also seen how our work can make a real difference in the lives of people and the planet, from the protection of endangered species to the promotion of sustainable livelihoods and equitable conservation outcomes.

One of our key achievements this year has been the launch of our new Strategic Plan, which sets out a bold and ambitious vision for the Center and its role in advancing biodiversity conservation. Building on our strengths in interdisciplinary research, policy engagement, and stakeholder collaboration, the Strategic Plan seeks to catalyze new approaches to conservation that are more effective, equitable, and sustainable.

Central to this vision is our commitment to advancing the science of biodiversity outcomes, which is essential for understanding the complex ecological, social, and economic factors that shape conservation outcomes. We have continued to support cutting-edge research that advances our understanding of these factors, while also promoting interdisciplinary collaboration and knowledge-sharing across disciplines and sectors.

At the same time, we have worked hard to translate this research into policy and practice, by engaging with policymakers, practitioners, and stakeholders to promote evidence-based decision-making and implementation. This has included working closely with governments, NGOs, and communities to promote sustainable livelihoods, empower local communities, and protect critical habitats and ecosystems.

In all of our work, we have been guided by a deep commitment to equity and justice, recognizing that conservation outcomes are inseparable from the social and political contexts in which they are embedded. We have therefore sought to amplify the voices of those most affected by biodiversity loss, including Indigenous peoples, local communities, and marginalized groups, and to build a more inclusive and equitable conservation movement.

None of this would have been possible without the support and dedication of our many partners and supporters, who have shared our vision and worked tirelessly to bring it to fruition. From our funders and donors, to our faculty affiliates and staff, to our community partners and stakeholders, we are deeply grateful for your commitment and generosity.

Looking ahead to the coming year, we know that the challenges facing us will only grow more complex and urgent. But we are also filled with hope and determination, knowing that the work we do together can make a real and lasting difference in the world.

Thank you for your support, partnership, and your unwavering commitment to biodiversity conservation. It is an honor to be part of such a vibrant and dedicated community, and I am excited to see what we can accomplish together in the years to come.

Sincerely,

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Leah Gerber, Founding Director for Center of Biodiversity Outcomes

Professor, School of Life Sciences



Faculty leadership



Leah Gerber Founding Director Professor School of Life Sciences

Staff



Gwen Iacona Assistant Director for Conservation Investment, Program Lead for Conservation Investment



Nellisabel Coira Administrative Assistant



Katherine Poe Program Manager

Research faculty







Candice Carr Kelman Assistant Clinical Professor School of Sustainability, Program Lead for Actionable Conservation Science and Coproduction Katie Cramer Assistant Research Professor Program Lead for Coral Reef Conservation

Jack Kittinger Research Professor School of Sustainability

Postdoctoral research scholars



Simon Lhoest Postdoctoral Researcher BAEF Fellow

Student workers and interns



Baylie Alley



Erin Murphy



Kourtney St. Clair



Camila Guerrero-Pineda



Aayushi Parikh



Katie Surrey-Bergman



Janna Hynds



Paola Sangolqui



Christopher Barton

Program Leads



Kwan-Lamar Blount-Hill

Program Lead for Justice and Equity in Conservation



Katie Cramer Program Lead for Coral Reef Conservation



Candice Carr Kelman

Program Lead for Actionable Conservation Science and Knowledge Coproduction



Caitlin Drummond Otten Program Lead for Decision-making and Science Communication



Beckett Sterner Program Lead for Big Data and Biodiversity



Janna Goebel

Program Lead for Sustainability Education



Kailin Kroetz

Program Lead for Economics and Biodiversity



Erin Murphy Program Lead for Pollution and Environmental Policy



Beth Polidoro Program Lead for Marine Conservation

Thank you!

Our most profound appreciation goes to all the students, volunteers and consultants who helped advance our strategic goals in fiscal year 2023.

Learn more about the team at: <u>biodiversity.asu.edu/people</u>

Actionable science

Our primary objective is to help mainstream biodiversity in decision-making by advancing initiatives in education, research and partnerships to:

- Train the new biodiversity generation
- Establish a replicable model for effective conservation action
- Center biodiversity in the world's decision making



Our approach engages three dynamically integrated fields: education, research and partnerships. Through our actionable science model, we bridge academia and stakeholders to produce biodiversity conservation science that informs local, national and global decision-making.



As we implement our actionable science model, we study ourselves to increase our success rate and provide a scalable model that other institutions can apply globally.

Our strengths

We have access to a unique set of tools and resources that allow us to partner with various sectors, including other academic institutions, to address some of the most pressing biodiversity conservation issues of the 21st century.

NGOs	Corporations	Governments
NGOs focus on action. Universities focus on learning. Together we create solutions to pressing biodiversity issues. NGOs often lack the time and resources needed to stay abreast of cutting edge scientific research. The center bridges this gap.	The corporate sector has shown increasing commitment to considering sustainability issues over the past decade. However, many companies lack the data, expertise and incentive to rigorously consider biodiversity in operations. We work with companies to ensure they have the expertise to implement effective biodiversity management plans across their core	Sound environmental policy requires not only cutting-edge scientific data and expert analysis, but also the ability to translate that academic knowledge into the real world. The center offers policymakers a range of services that can help them translate science into meaningful policy decisions.

	operations.	
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Table 1. How we partner with different sectors to generate sciencebased solutions to pressing biodiversity conservation problems



We embrace the plurality of values that different communities ascribe to biodiversity, ranging from economical to the cultural and intrinsic value. This requires a multi-stakeholder, interdisciplinary approach to define the "solution space" for the biodiversity outcomes we seek to achieve.

We align our values to those of The New American University, Arizona State University's reconceptualization of 21st century higher education. This new concept focuses on the inclusion and success of all its students and a social responsibility to the communities ASU serves.

ACCESS

Engagement of stakeholders and decisionmakers Inclusion and diversity

IMPACT

Focus on human and ecosystem well-being Solution-oriented

EXCELLENCE

Innovation Transdisciplinary research



Focal areas

Our research, education and partnership initiatives are all framed within the following three overlapping areas:

- Evidence, metrics and monitoring: Developing empirical support for measuring impact and evaluating outcomes, training and capacity building for what constitutes evidence and how evidence can be used.
- Decision science and data tools: Creating tools to support evidence-based decisions, working with decision-makers on defining needs for knowledge and decision-making structures, and researching how to translate knowledge into action.
- **Stakeholder engagement:** Connecting students and faculty with strategic partners, decision-makers and practitioners.

Topics

We maintain an online inventory of biodiversity research projects covering a variety of topics, including:



- Actionable Science in Conservation
- The Business Case for Biodiversity
- Adaptive Management and Ecosystem Services in Marine Reserves
- Prioritizing Actions for Endangered Species Recovery
- Nature's Role in Achieving the Sustainable Development Goals
- Biodiversity Outcomes and Green Economic Development
- Community Science in Conservation
- Conservation Education and Professional Development
- Conservation Markets
- Mitigating Plastic Pollution
- Sustainable Fisheries and Human Wellbeing

The year in review

Below are a few selected highlights from research, education, activities with our partners and note-worthy events during FY23. Please find more information about our activities in the media, publications and events sections and online: bit.ly/32cJuUl



UNDERSTANDING THE COST OF ACHIEVING A CONSERVATION OUTCOME

This research was funded by the Arthur L. and Elaine V. Johnson Foundation. In FY22, we completed the three primary objectives of this funding: (1) We created a web-based prototype Conservation Investment Tool to allow users (e.g., mid-to-senior-level government, foundation, and NGO staff) to explore tradeoffs between investment choice and biodiversity loss and use this information to inform national and international funding decisions under different socioeconomic growth trajectories. A paper detailing this work was published in the prestigious journal "Nature Sustainability"; (2) We developed a methodology for compiling conservation funding using Peru as a case study. We gathered funding data for the years 2009-2018 for the country, and the method and results have been submitted as a paper to the high-impact journal "Conservation Letters." We have also completed funding mapping for several other countries, including Bhutan, Benin, Madagascar, and Zambia; and (3) To promote consistency and competency in conservation costing practice; we have developed a web-based conservation intervention cost data portal that includes instructions and materials on how to collect and report cost data as well as our database listing existing cost studies and summarizing the data they use. We provided a training session introducing scientists and practitioners to this work at the International Congress on Conservation Biology and continue to update portal resources. Learn more at bit.ly/3lXcGXp





DECISION SCIENCE FOR ENDANGERED SPECIES PESTICIDE RISK ASSESSMENT

Modern agriculture relies on pesticides to ensure crop productivity. Assessing potential impacts of pesticides on endangered species is stymied by uncertainty in data and lack of coordination between agencies. As a result, it is challenging to determine pesticide use regulations that ensure the conservation of threatened species. We are working with Bayer to develop decision science-based approaches to enhance the efficiency of risk assessment for pesticides to threatened species. Our published research demonstrates significant gains in efficiency in the species risk assessment process. We are currently applying our approach with high-resolution pesticide usage data to identify priority regions throughout the US for assessing pesticide risk to endangered species. We are also developing a novel risk assessment metric that helps to identify species that are most at risk from pesticide exposure.



ASU's Center for Biodiversity Outcomes founding director Leah Gerber participated in a sponsored presentation at GreenBiz 2022 on Teaming Up To Tackle Plastic Waste: How Cross-Industry Partnerships Can Ignite Long-Lasting Change. The hour-long panel on cross-industry partnerships, with a particular focus on sports and education. The panel, moderated by Chris Coulter from GlobeScan, and also featuring Rick Schlesinger, President of Business Operations for the Milwaukee Brewers, addressed plastic waste as one of the most critical issues of our generation, examining what innovative solutions can we create and their impact on future generations.



CONSERVATION SOLUTIONS LABORATORY

Chemonics International is a private international development company that works for donors and the private sector to manage projects in developing countries. Its mission is to promote meaningful change worldwide to help people live healthier, more productive, and more independent lives. We have partnered with Chemonics to create the Conservation Solutions Lab, a collaboration dedicated to practically and equitably engaging cities in conservation. The Conservation Solutions Laboratory is a network of conservation and development experts who link research with practice and implementation to generate new knowledge. Its mission is to operate as a living lab and conduct engaged scholarship and use-inspired research.



AMAZON BUSINESS ALLIANCE

We have partnered with USAID, Conservation International and Walton Sustainability Solutions Services to develop a platform for promoting green growth in Peruvian Amazonian communities. This project is designed to produce tangible results that stakeholders can use to decrease deforestation, natural resource degradation, and biodiversity loss, without compromising the livelihoods of the people living in these communities. This initiative will promote investment in and improve economic outcomes for small-holder farmers and entrepreneurs in pilot communities, while allowing Peru to better meet the Sustainable Development Goals developed by the UN.



PRIORITIZING ENDANGERED SPECIES RECOVERY

We have partnered with the National Socio-Environmental Synthesis Center and the U. S. Fish and Wildlife Service to develop a tool to compare different funding allocation strategies for actions to recover endangered species. This tool is called the Endangered Species Recovery Explorer. This tool can be used to evaluate potential consequences of alternative resource allocation strategies. For example, the tool can be used to examine how different allocation protocols, under the same budget constraints, affect the number of species recovered and the number of species for which extinction is averted, and more. The Recovery Explorer tool is designed to be exploratory, allowing decision makers to examine alternative approaches to resource allocation by making the important components of the decision process transparent.

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GIRLS CONSERVE

GirlsConserve, a pilot program that engages girls in STEM careers using a culturally-relevant One Health approach, was funded by ASU's Foundation Women and Philanthropy with an award start date in early FY23. In March of FY23, in collaboration with the Center for Gender Equity in Science and Technology (CGEST), the two centers hosted 28 9th - 12th grade students over a Spring Break immersion camp that combined environmental leadership training, real-world experiences, and the things that most interest the students. Through campus programs, field trips, and collaboration with peers from other Arizona high schools, students explored how their lived experiences set them up to be change makers for the world, topics in environmental justice, and their interaction between environmental health and public health. \rightarrow

INTERNATIONAL UNION FOR CONSERVATION OF NATURE RED LIST OF THREATENED SPECIES

The International Union for Conservation of Nature Red List of Threatened Species is the world's standard for quantifying species extinction risks. It is used worldwide to inform policy, planning and conservation action. The Red List includes details on threats to species, their ecological requirements, geographic distribution and information on how to reduce or prevent extinctions. The IUCN Red List of Threatened Species Partnership is a selective group of ten international institutions. ASU is one of only three university partners worldwide to join forces in guiding the scope and application of scientific data for global and national biodiversity conservation. We are devising strategies for species conservation and biodiversity decision-making through this partnership. This partnership is led by our Associate Director, Beth Polidoro. In October, the center and the Conservation Innovation Lab hosted a talk by Newcastle University Research Associate Louise Mair, PhD., about the International Union for Conservation of Nature's (IUCN) Species Threat Abatement and Restoration (STAR) Metric.

The ASU-IUCN team submitted updated Red List assessments for the world's commercial tuna and billfish species, highlighted in several international media events and at the IUCN World Conservation Congress in Marseille, France, in September 2021. The team has also submitted updated assessments for all of the reef-building corals in the Atlantic Ocean, the results of which were presented by SOLS Ph.D. student Luis Gutierrezatthe International Coral Reef Symposium in Bremen, Germany, in July 2022. Dr. Beth Polidoro was recently named to the IUCN Star Metric Interim Committee under the leadership of Frank Hawkins. The committee will ultimately be under the IUCN Red List Committee, which is the governance structure of the formal ASU-IUCN Red List Partnership. Learn more at bit.ly/2NKZjgE

ESTABLISHING THE FOUNDATIONS FOR STRUCTURED DECISION MAKING AND ADAPTIVE SPATIAL MANAGEMENT IN THE GALAPAGOS MARINE RESERVE

Founding Director Leah Gerber continued work on a grant from the Lenfest Ocean Program of the Pew Charitable Trusts in partnership with conservation scientists working in the Galapagos National Park in Ecuador. The project is titled "Establishing the foundations for structured decision making and adaptive spatial management in the Galapagos Marine Reserve." It focuses on developing a modeling and monitoring approach to assist the Galapagos National Park Directorate in refining management goals and conservation decisions. This work provides empirically supported insight into the characteristics of actionable knowledge, relationships between scientists and decision-makers and decisionmaking structures.

As part of the Lenfest Ocean Program project Establishing the foundations for structured decision making to support management in the Galápagos Marine Reserve, we hosted a workshop with the Galapagos National Park Directorate (GNP) in June 2023. The workshop was held in Puerto Ayora, Santa Cruz, Galápagos at the Galapagos National Park Directorate headquarters. This workshop was jointly organized by ASU and the Galapagos National Park Directorate. The general goal of the workshop was to facilitate knowledge exchange and collaboration between the end users and the research team. The specific workshop objectives were to provide updates on progress to the GNP, engage park staff in developing the sea cucumber case study for the handbook, and collect data on the relevance of our work for the park. Participants consisted of staff from the Galapagos National Park Directorate with emphasis on the marine protected area. Attendees were designated by the Ecosystem Director at the GNPD. Learn more at bit.ly/3kg2d64

ENVIRONMENTAL COMMUNICATION AND LEADERSHIP GRADUATE CERTIFICATE

Students continued to apply for this graduate certificate, which we launched in fall 2017. We designed this certificate to train graduate students in science-based fields to communicate their findings effectively to public audiences and decision-makers. In spring semester 2023, ELC students developed and led sections of curriculum for our GirlsConserve program for high school students. We are currently offering this certificate across all campuses. Learn more atbit.ly/20MmmG4

PLASTIC POLLUTION EMISSIONS WORKING GROUP

Dr. Gerber and Dr. Polidoro were co-authors of a widely acclaimed Science article titled "Predicted growth in plastic waste exceeds efforts to mitigate plastic pollution," published in September 2020. The research indicates that plastic waste accumulates around the globe far faster than it is being broken down by human or environmental means. Dr. Beth Polidoro and Ph.D. student Erin Murphy led a session at the International Marine Debris Conference (IMDC) in Busan, Korea, in September 2022 on the impacts of plastic on higher levels of biological organization. Building upon ongoing work in American Samoa, with funding from the NOAA Marine Debris Program, Dr. Polidoro published a Blog on the results of the project to date to monitor and reduce plastic pollution.





Open to all graduate students across ASU

Graduate Certificate in Environmental **Communication and Leadership**

This certificate trains graduate students in environmental sciences to communicate their findings to the broader public and decision makers. Graduate students will obtain valuable training in leadership and will learn to communicate with public, media, policy makers and other relevant stakeholders.

Students will learn to:

Effectively communicate with the public, including media and decision-makers, to translate complex technical and scientific concepts into easy to understand language.

BIO 578 Environmental Leadership and Communication (3 credits) is the core course for this 15 credit hour certificate. This course is designed to build skills specific to environmental policy and management (offered in spring 2019).

Demonstrate leadership skills such as strategic thinking and planning, team management, conflict resolution, collaboration, mentorship and self-reflection.

Inform policy and decision-making for

an organization, governmental body or other institution by describing their goals and incentives.

Students will complete 12 additional credits of coursework from our approved course list in the areas of policy and management, communication and leadership.

To apply, you need:

- 1. Graduate Admissions application
- 2. Official transcripts
- 3. GRE scores

biodiversity.asu.edu/education

The Center for Biodiversity Outcomes is a partnership between the Julie Ann Wrigley Global Institute of Sustainability and the School of Life Sciences.

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Rhodes, J.R., Armsworth, P.R., Iacona, G., Shah, P., Gordon, A., Wilson, K.A., Runting, R.K. and Bryan, B.A., 2022. Flexible conservation decisions for climate adaptation. One Earth, 5(6), pp.622-634. (link)

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Gerber, L.R., Reeves-Blurton, Z., Gueci, N., Iacona, G. D., Beaudette, J.A., Pipe, T. (2023). Practicing mindfulness in addressing the biodiversity crisis. Conservation Science and Practice. doi: 10.1111/csp2.12945 (link)

Harding, E., Kroetz, K., Breetz, H.L., Malakoff, K.L., Thompson, A.L., Jackson, H.B., Armsworth, P.R. and lacona, G.D., 2023. Partnerships between organizations that manage protected land in California are associated with groups with environmentally oriented missions. Conservation Science and Practice, p.e12959 (link)

Learn more about our research at: biodiversity.asu.edu/research

FACULTY ENGAGEMENT

Innovative solutions require diverse perspectives. We partner with various faculty across ASU to conduct research that sheds light on biodiversity conservation issues. Our affiliate faculty network of more than 120 ASU faculty members in 24 colleges and 57 schools amplifies our reach and convening power. We are a world leader in biodiversity policy and practice, with long-standing relationships in government, corporate and non-profit sectors. We enhance the university's prestige via our capacity to generate solutions and shape the global biodiversity crisis narrative. We help build ASU's fundraising research portfolio through aggressive pursuit of grant opportunities. We develop innovative undergraduate and graduate training programs under the vision and leadership of the GFL. This fiscal year, we supported ten Program Leads. Most of our faculty affiliates come from the School of Life Sciences, the School of Sustainability, the School of Human Evolution and Social Change, and the School of Earth and Space Exploration. We engaged with the Program Leads to scale the reach and impact of center research and activities, applying for several proposals led by the transdisciplinary team.

TRAINING OPPORTUNITIES

We support an internship program established by Associate Center Director Beth Polidoro in which undergraduates are placed with our partner organizations. Through our partners, who include the IUCN, the Phoenix Zoo, the Desert Botanical Garden and other associated organizations, students are afforded available opportunities to engage in local and global conservation work, gaining crucial skills and professional connections. To date, more than 45 students have participated in this program.

STUDENT ENGAGEMENT

The center is fortunate to work with dedicated, passionate undergraduate and graduate students. Our students engage in various projects, including scientific research, communications and marketing, project management and event planning. As part of our commitment to train the next generation of conservationists, we have diligently worked to expand our Environmental Communication and Leadership Certificate, which is offered to graduate students through the School of Life Sciences. Additionally, we have continued our student internship program, aimed at educating undergraduate students about actionable conservation science, as well as the research process, center administration, and science communication. Moreover, we have used funding from the ASU Foundation's Women and Philanthropy grant to establish GirlsConserve, a culturally responsive high school conservation education program, aimed at empowering underserved and historically marginalized groups-particularly girls of color-to learn about and become involved in environmental conservation. We are striving to bring greater diversity of thought and experience into the conservation field by assigning students to projects that align with their career interests and provide them with hands-on experiences and mentoring to help them hone their transferable skills and learn to network with professionals in their field, gaining a competitive advantage in the workforce.



The center provides a uniquely supportive and inclusive environment for our students. As conservation scientists face an ecological crisis, we provide a workplace that cultivates hope and inspires future leaders to become agents of change. We have recently led a thought piece on mindfulness and ecological grief. Our Graduate Certificate in Environmental Communication and Leadership provides students in environmental disciplines with the important leadership and communication skills needed to increase their influence and reach above and beyond academia. As the majority of our current graduate students are women, we foster a supportive culture that recognizes the unique challenges faced by women in conservation. Similarly, we make considerable effort to uplift girls and women of color in our programs and to promote culturally-responsive learning. CBO is not just a research center, but a community of diverse, highly driven academics who are making a tangible difference for biodiversity across the globe. Our students have, and will continue to, become conservation leaders across sectors because of the support that they have received from CBO and ASU.

In the Fall of FY23, the Center for Biodiversity Outcomes hosted external affiliate, Duan Biggs Ph.D., where he discussed economic and policy incentives for managing poaching for charismatic megafauna with our students.

In the Spring of FY23, CBO hosted two roundtable talks. In early April, <u>Kwan-Lamar Blount-Hill</u>, CBO Program Lead for Justice and Equity in Conservation, discussed his work with Society for Conservation Biology Disciplinary Inclusion Task Force, to study the disciplinary and demographic diversity of its membership as well as the efforts by SCB and its Social Science Working Group to institutionalize Diversity, Equity, Inclusion, and Justice. Blount-Hill continued to discuss the concept of inclusive conservation science and how it connects to issues of inclusion in the scope of biodiversity practice. The second talk featured José D. Anadón, <u>Conservation Innovation Lab Alumni</u> and ecologist researching the impact of global change on the distribution of biodiversity and ecological processes. Anadón presented an overview of current trends of rural abandonment, data on the decline of hunting in southern Europe (and other parts of the world), and discussed the consequences of those declines.

In FY23 alone, 65 students of diverse ages and backgrounds have participated in CBO-affiliated programs or worked with our center's Director. This figure does not include students who are indirectly involved with CBO (e.g., students who are advised by our Program Leads), nor does it account for the many students whom we have engaged at public events over the years, such as ASU's Homecoming Block Party and Open Door events.





Figure 1: Total number of students who have worked with CBO per year since FY15.

Thought Leadership

Founding Director Leah Gerber gave an interview on National Public Radio in a segment titled Gone For Good: How A Species Is Declared Extinct. Alongside the companion piece, "How to save more species before they are gone forever," This work underscores the need for standardization of cost reporting to better support understanding of Endangered Species Act compliance costs. Dr. Gerber also served as an Expert Witness for U.S. Senate Committee on Environment and Public Works, Examining Biodiversity Loss: Drivers, Impacts, and Potential Solutions. Drs. Gerber and Iacona served on the National Academy of Science Panel, National Biodiversity and Climate Change Assessment and continue to lead the conceptual development of a US National Biodiversity Strategy.

Goals and accomplishments

CBO reports proposal activity in three levels: proposals written by Center personnel, proposals written by Program Leads or co-led by Center personnel and proposals on which CBO played a catalyzing or enabling role. The Center scales our impact through involving and supporting our broad network of ASU faculty affiliates in submitting proposals to government, foundation and private sources of funding. Since the center was founded in 2014, we have requested over \$309 million in external funds and secured over \$5.7 million. Through our Program Leads initiative, we are scaling our fundraising efforts dramatically. We are also developing a robust philanthropic portfolio by working closely with the ASU Foundation to identify potential new sponsors and curate our relationships with existing sponsors.



Looking ahead from the founding director

As we reflect on our accomplishments in the past year, it is important to look ahead and outline our vision for the future. The challenges facing biodiversity conservation are immense, but they also present us with unique opportunities to make a lasting impact. Moving forward, our center remains committed to advancing scientific knowledge, fostering innovative solutions, and promoting effective policies to address the global biodiversity crisis. We recognize the urgency of our mission and the need for collaborative efforts across disciplines, sectors, and geographic boundaries.

With nine years of experience behind us, CBO has become a globally recognized boundary organization that creates actionable outcomes by working with partners around the world. In our tenth year, we will continue to advance our research and education agenda around achieving biodiversity outcomes. We aim to strengthen our partnerships with local communities, conservation organizations, and governments to enhance the implementation of sustainable practices. We will continue to prioritize interdisciplinary research, leveraging technology and data-driven approaches to understand complex ecological systems and develop evidence-based strategies for conservation and restoration.

Additionally, we will focus on capacity building and education, empowering the next generation of leaders in biodiversity science and policy. Through our educational programs, workshops, and mentorship opportunities, we seek to inspire and equip students and professionals with the knowledge and skills necessary to address biodiversity challenges effectively. As we embark on this journey, we are committed to embracing innovation and promoting diversity, equity, and inclusion within our center and the broader biodiversity community. By fostering an inclusive environment, we can harness the collective wisdom and diverse perspectives necessary to tackle the complex socio-ecological problems we face. CBO will continue to play a pivotal role in shaping a sustainable and biodiverse world for generations to come.



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Consider donating at: biodiversity.asu.edu/contribute



The Center for Biodiversity Outcomes is a partnership between the Global Institute of Sustainability and Innovation and the School of Life Sciences.



Thank you

Thank you for your support and dedication in protecting Earth's biodiversity.