

Center for Biodiversity Outcomes

Enabling solutions to sustain Earth's biodiversity



The gap

Earth has a growing biodiversity crisis creating profound ecological and societal consequences. As unprecedented shifts in climates and ecosystems occur, anthropogenic stressors will continue to interact with natural processes in ways that are poorly understood.

Policymakers, corporations, NGOs and other institutions on the front lines of biodiversity challenges are not getting the usable research and implementable solutions they need.

Historically, academics have remained in the ivory tower, NGOs have responded to crisis and there has been little cross-fertilization of respective capacities.

Conservation successes have been limited not because we lack the answers, but because we have not worked together in ways that can effectively address biodiversity loss in a rapid changing world.

2 | biodiversity.asu.edu

The opportunity

The Arizona State University Center for Biodiversity Outcomes is a world-leader in the field of environmental and biodiversity decision science.

We catalyze the implementable solutions Earth's biodiversity crisis demands through research, education and partnerships with institutions worldwide.

By integrating high quality data into novel and user-friendly decision frameworks, we are able to facilitate data-driven decisions for government, corporate and NGOs, while informing and supporting science-based decision making in biodiversity conservation.

Thanks to our multiple partnerships and the innovative power of ASU, we facilitate sustainable biodiversity management by reducing the impact of key biodiversity loss drivers, such as habitat loss and fragmentation, overexploitation, pollution and poaching.

Our broad approach considers all the ways in which biodiversity is important to society, including wellbeing, economy and culture.

In addition, we pioneer new models of engagement based on our experimental learning and constantly self-assess to enhance our influence and reach.

Our mission is to enable the discoveries and solutions needed to

sustain Earth's biodiversity in a time of rapid biophysical, institutional

and cultural change. We envision a world where the diversity of life

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

Our approach

We innovate new approaches to achieve biodiversity outcomes based on three programs: research, education and partnerships. As we implement this actionable science model, we study ourselves to improve this approach, increasing its success rate and serving as a scalable model other institutions can apply across the globe.

Research

We produce insights that transform the way the world thinks about, values and manages biodiversity.

Partnerships

We engage partners from NGO, corporate and government sectors to apply innovative research results to achieve real-world change.

Education

We draw on the intellectual firepower of ASU to train the next generation of diverse conservation leaders, training them to communicate with non-specialist audiences to increase influence and reach.



Tailored solutions



NGOs

NGOs focus on action. Universities focus on learning. Together we create solutions to pressing biodiversity issues. Often times, NGOs lack the time and resources needed to stay abreast of cutting edge scientific research. The center helps bridge this gap.

Conservation International

CI builds a strong foundation of science, partnership and field demonstration to empower societies to responsibly care for nature for the well-being of humanity.

Problem: Lack of collaboration between researchers and practitioners means valuable research at world-renowned academic institutions does not inform practice, limiting transformative conservation impact.

Solution: ASU provides CI with a wealth of research capacity and an immense opportunity to interact with, train and influence the next generation of conservation leaders. We have onboarded seven professors of practice to teach courses on conservation practices. We partner CI scientists with ASU faculty to advance research and train students and early career scientists via postdoctoral fellowships.



Corporations

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 operations.

Electric Power Research Institute

EPRI is dedicated to finding solutions for clean electricity by identifying, researching and addressing issues via technology and social programs.

Problem: The U.S. Endangered Species Act mandates that the government take actions to conserve threatened and endangered species and ecosystems. For the electric power industry, it is especially important to preemptively estimate ESA compliance costs.

Solution: We are developing a tool to estimate the range of potential operational, reputational, legal and regulatory risks, including an evidence-based comprehensive framework for assessing pre-compliance and compliance costs, while also increasing awareness of sustainable practices.



Government

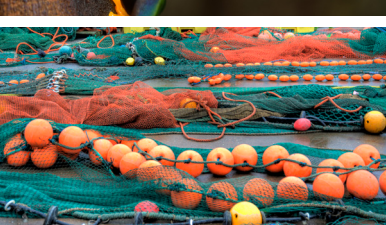
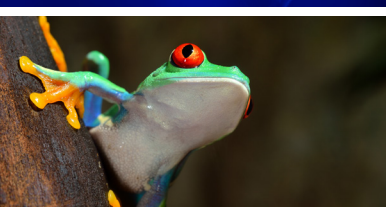
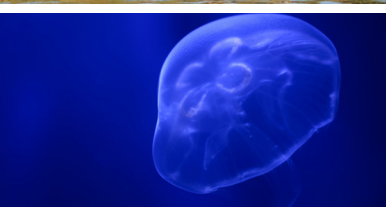
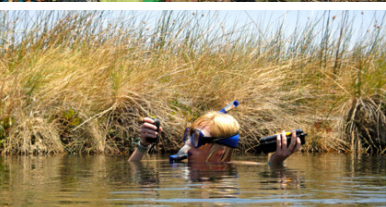
Sound environmental policy requires not only cutting-edge scientific data and expert analysis, but also the ability to translate that academic knowledge into the real world. The center offers policy makers a range of services that can help them translate science into meaningful policy decisions.

Republic of Myanmar

After half-century in isolation, Myanmar held democratic elections in 2015. It is home to a remarkable diversity of unique species and ecosystems. In 2015, Myanmar updated its National Biodiversity Strategy and Action Plan and confirmed commitment to the United Nation's Sustainable Development Goals.

Problem: The nation faces challenges in understanding how best to implement conservation plans in the wake of increasing economic development.

Solution: With the Science for Nature and People Partnership we developed a framework to document, measure and value ecosystem services delivered by Key Biodiversity Areas. Myanmar now has an opportunity to serve as a global example for how to include biodiversity in sustainable development.



We can help

NGOs	Corporations	Governments
<p>Field and laboratory instrumentation</p> <p>Online courses and certification programs</p> <p>User-defined and user-friendly decision-making tools</p> <p>Affiliated faculty and students improve and strengthen research agendas</p> <p>Specialized monitoring tools</p> <p>Complex and multidisciplinary data analyses</p> <p>State-of-the-art remote sensing and data management technologies</p>	<p>Executive education</p> <p>User-defined and user-friendly decision-making tools</p> <p>Research driven by institutions' feedback</p> <p>Capacity bolstered by our network of over 10,000 scientists representing hundreds of organizations</p>	<p>User-defined and user-friendly decision-making tools</p> <p>Research driven by institutions' feedback</p> <p>Specialized monitoring tools</p> <p>Complex and multidisciplinary data analyses</p> <p>State-of-the-art remote sensing and data management technologies</p> <p>Affiliated faculty and students improve and strengthen research agendas</p> <p>State-of-the-art remote sensing and data management technologies</p> <p>Online courses and certification programs</p>



Training the next generation of conservation leaders

The center provides a platform for exemplary training and research experiences for students at all levels of learning. It draws on a critical mass of intellectual firepower and is a shining example of the kind of problem-solving that ASU's singular brand of interdisciplinary freedom can produce. Some of the opportunities available include:

- ➔ **More than 125 faculty affiliates who engage from 33 different schools and units across ASU**
- ➔ **More than 50 external research partnerships of cross-disciplinary faculty**
- ➔ **Numerous graduate and postdoctoral fellowships through partner organizations**
- ➔ **Graduate Certificate in Environmental Communication and Leadership**
- ➔ **Biodiversity Conservation in Practice class taught by professors of practice**
- ➔ **Opportunities to network and meet expert guest speakers**

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

Center for Biodiversity Outcomes
Arizona State University
PO Box 875402
Tempe, AZ 85287-5402
United States

(480) 727-9873
biodiversity@asu.edu
biodiversity.asu.edu

Copyright © 2018

