Tab 1



ICCB 2025 Pre-Congress Sessions: Workshops, Training Courses and Forums

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Workshops

Shiny App Fundamentals in R

<u>Improve conservation project planning and monitoring with Conservation Standards theories of change</u>

Conservation planning in R: spatial data wrangling and spatial prioritizations

Introducing galah: the Atlas of Living Australia's R Interface for Accessing Biodiversity Data

Biodiversity Collage

<u>ConnectingLandscapes: A Decision Support System for modelling population connectivity and the effect of conservation and development scenarios</u>

<u>Planning for successful marine and coastal restoration – learn how to develop</u> <u>Restoration Suitability Models to aid in planning and site selection</u>

A holistic approach for understanding the diverse influences of conservation

ZIMS and PMx as Tools for Wildlife Rehabilitation and Release Programs - CANCELLED

Advancing regional-scale assessments of marine ecosystem change

Analysing Genomic Data with dartRverse: Accessible Tools for Conservation

A strategy for engagement of stakeholders in program management and evaluation using the tools of systems thinking - CANCELLED

<u>The Species Threat Abatement and Restoration (STAR) metric in practice: assess</u> potential, set targets and monitor progress

Baseliner - A Deep Dive into Wireless Sensor Networks for Conservation
How to use ecological and genetic data to monitor genetic diversity from local to international scales



Updating the IUCN Red List accounts of Australasian mammals

Geospatial Analysis in R

Oceania Voices: How to amplify Indigenous Voices in communicating conservation sciences

Training Courses

How to make good expert judgements

Introduction to Decision Science for Conservation

<u>Introduction to Systematic Conservation Planning with Marxan and Advanced</u>
Topics

Whale watching guidelines - Conduct and good practices

<u>Identifying Key Biodiversity Areas: How to harness a global tool for local</u> conservation action

<u>An Introduction to BoomBox - A New Tool That Combines the Benefits of Camera Traps with the Power of Playback Experiments</u>

An introduction to paperless data collection using KoBoToolbox

Building dynamic human-environment games for conservation science

<u>Open Source Geospatial Tools for Conservation under Climate Change - a Koala Case Study</u>

Fonseca Fellows Conservation Leadership Training and Mentoring Event

Hands-on training in genomic analyses for biodiversity conservation

<u>FieldFutures Harassment and Assault Prevention Training for Scientific Fieldwork</u>

Forums

How to incorporate migratory or highly mobile species into the Global Biodiversity Framework



Building Capacity for Community-Led Coexistence with Orangutans* Invite Only

Advancing Customary Land Rights in Area-based Conservation: Comparing Pathways, Barriers, and Enabling Factors Across National Contexts

<u>Uniting Land and Sea: Knowledge Exchange for Sustainable Solutions in the Legal Trade of Threatened Marine and Terrestrial Species - CANCELLED</u>

<u>Outlining Ethical Principles for Behaviour Change Interventions in Biodiversity</u> Conservation

Designing Social Media Imagery Guidelines for Conservation

Global guidance on determining reference states for measuring the state of nature

Workshops

Shiny App Fundamentals in R

Length: Half day AM

Date: Sunday, June 15th

ID: 2

Organizer: Alienor Chauvenet

Learn how to share your code and results with end users by creating Shiny apps in R. Ever wanted to share your R code with industry partners or end users who weren't familiar with the language? Or wished that you could build an interactive app that only required non-technical stakeholders to click a few buttons? Shiny is a popular R package that allows you to build highly interactive web applications—without needing any other programming languages. Using Shiny you can share your analyses as dashboards and visualizations, and create interactive platforms for anybody to use the tools you create. In this workshop, you will be introduced to the basic syntax and principles of R Shiny and we will develop an app that allows users to upload data, run analyses, and display the results in a figure and/or a map. This workshop is suitable for intermediate R users.

Improve conservation project planning and monitoring with Conservation Standards theories of change



Length: 1 full day

Date: Saturday, June 14th

ID: 15

Organizer: Sarah Pearson

This workshop will introduce participants to accessible and practical tools to support them in conservation project planning, monitoring, and adaptation. We will use the Open Standards for the Practice of Conservation (Conservation Standards) - a widely adopted set of practices and principles - to guide participants through specific tools of an adaptive management framework. The workshop will focus on a key Conservation Standards tool - developing theories of change which map assumptions about how priority strategies are expected to lead to conservation success. We will also introduce participants to the broader Conservation Standards framework, so they understand how the theories of change tool fits with other tools and steps.

This interactive and experiential learning workshop will support participants to understand how to build a powerful and logical results chain (theory of change) for their conservation work. The results chains are a tool to make assumptions explicit about how a conservation strategy will improve the situation, and provide scaffolding for identifying objectives and indicators, developing work plans and measuring results. Hosted by the Conservation Coaches Network of Australia Aotearoa, it will connect participants to the wider conservation planning and adaptive management community and share a library of tools to support real-world conservation work.

Conservation planning in R: spatial data wrangling and spatial prioritizations

Length: 1 full day

Date: Saturday, June 14th

ID: 18

Organizer: Kristine Buenafe

Conservation planning prioritizes areas important for biodiversity conservation whilst minimizing economic costs, and quantifies ecological and economic impacts of conservation decisions. Conservation planning tools are applicable to a wide range of



conservation problems across marine, freshwater and terrestrial ecosystems, that can vary in spatial scales, relevant biodiversity features, managed uses, management actions, and budget. This workshop aims to teach participants the core principles of conservation planning and provide them with basic hands-on skills to formulate, solve, and interpret the results of conservation problems. We will cover the basics of working with spatial data in R through a range of topics—from data import and manipulation, to basic and advanced data visualization using a suite of different R packages—giving participants the tools they would need to handle spatial data confidently and accurately. Then, we will take this a step further and use these spatial data in decision-making by working through different conservation-planning workflows particularly through the R package prioritizr. After this workshop, the participants will be well-equipped with skills necessary to wrangle and visualize spatial data for different types of spatial analyses. Further, they will leave with a toolkit of the skills needed in conservation planning that can be applied in their own work.

Introducing galah: the Atlas of Living Australia's R Interface for Accessing Biodiversity Data

Length: Half day PM

Date: Sunday, June 15th

ID: 19

Organizer: Shandiya Balasubramaniam

The Global Biodiversity Information Facility (GBIF) is the world's largest biodiversity database, containing almost 2.5 billion observations of plants, animals, and fungi. These data are critical for answering research questions relating to species distributions, conservation of threatened taxa, or the potential impact of threatening processes at large spatial scales. In this workshop we introduce 'galah', an R package for accessing data from GBIF and its partner nodes. Developed by the Atlas of Living Australia (ALA), galah supports users to query and download data using tidyverse syntax, making it efficient and easy to use out of the box. Attendees will learn how to select source data from GBIF or one of 10 other national biodiversity infrastructures, generate summary statistics about observations or species, and make spatial, temporal, or taxonomic queries to meet their research needs.

Biodiversity Collage

Length: Half day AM



Date: Sunday, June 15th

ID: 20

Organizer: Fanny De Busserolles

The Biodiversity Collage is an engaging workshop designed to help participants understand the importance of biodiversity. Based on the IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) report, it transforms scientific facts into accessible knowledge about ecosystems, the benefits of biodiversity, and the threats it faces, such as habitat loss, climate change, and human impact.

In groups of 5-7, participants use 39 concept cards to build a visual collage illustrating the interconnections within biodiversity. These cards represent ecosystem services, human activities, the drivers of biodiversity loss and their consequences. Through discussion, participants gain a deeper understanding of the need to protect natural systems. The workshop ends with a collective discussion to create an action plan for addressing biodiversity loss.

This interactive approach encourages conversations about biodiversity conservation, making complex topics accessible and engaging. The Biodiversity Collage fosters collective intelligence and empowers participants to reflect on how biodiversity is crucial to human well-being and ecosystem health.

This citizen-led initiative follows a train-the-trainer model, encouraging participants to become facilitators and spread biodiversity education in their communities. Though played by over 61,000 people worldwide, the Biodiversity Collage is new to Australia, aiming to educate 1,500 participants by 2025. Will you join us in our mission to protect biodiversity?

ConnectingLandscapes: A Decision Support System for modelling population connectivity and the effect of conservation and development scenarios

Length: 2 full days

Date: Saturday, June 14th and Sunday, June 15th

ID: 22

Organizer: Caroline Sartor



ConnectingLandscapes (CoLa) is a new web-based Decision Support System (DSS) that provides the means to easily and efficiently model the impact of landscape-level changes on population connectivity and viability for any given species. Developed by University of Oxford's Wildlife Conservation Research Unit (WildCRU), Northern Arizona University and NASA, the CoLa DSS combines a series of analytical tools into an automated workflow. A graphical user interface, hosted on a cloud-based environment, enables users to conduct advanced landscape connectivity and population analysis without requiring advanced local computing power. Users require an existing species distribution model or a movement model which can be easily uploaded into the system. Alternatively, users can access demonstration habitat suitability models for species of conservation priority in Southeast Asia, prepared and pre-loaded by the international team. The system allows users to model connectivity and population dynamics in relation to current landscapes, but crucially also allows users to test and evaluate the effect of anticipated landscape changes, such as habitat loss, expansion or the development of infrastructure. Simulating scenarios of changes in the landscape in the DSS provides a method to understand the impact of these changes and, importantly, explore scenarios that minimize negative effects and balance the protection of biodiversity with economic and development goals.

Planning for successful marine and coastal restoration – learn how to develop Restoration Suitability Models to aid in planning and site selection

Length: Half day PM

Date: Sunday, June 15th

ID: 23

Organizer: Elisa Bayraktarov

The Nature Conservancy (TNC) is a global environmental nonprofit working to create a world where people and nature can thrive. In Australia, our scientific work goes beyond the traditional scope of conservation to tackle the toughest environmental challenges. Since 2017, TNC Australia has been pioneering techniques to restore lost shellfish reefs with 62 ha shellfish habitat and 6.5 ha of kelp forests restored using active and passive restoration methods. At the heart of every restoration action is planning and the assessment of whether restoration is feasible for one or multiple ecosystems at the desired location and can lead to lasting success. TNC Australia uses custom Restoration Suitability Models for site selection (shellfish, kelp and multi-species models) which consider known environmental tolerances and preferences of the species to restore in order to identify habitat suitability. The difference between Habitat Suitability Models and Restoration Suitability Models is that the latter also include



parameters on conflicting use at each location (e.g. mooring areas, navigation zones, protected areas etc.). This workshop will bring you TNC's Restoration Suitability Models approach to help you identify and prioritise the best locations for restoration depending on the ecosystem of choice while walking you step-by-step through the process.

A holistic approach for understanding the diverse influences of conservation

Length: Half day AM

Date: Sunday, June 15th

ID: 25

Organizer: Jasmine Pearson

Achieving just and inclusive conservation requires shifting from a human-centric, instrumental perspective to a more relational one that considers a diversity of human and non-human entities, and the dynamic relations between them. The aim of this workshop is to expand current thinking around who and what is influenced by conservation in pursuit of strengthening evidence on the benefits of conservation. This workshop will hopefully encourage a more nuanced understanding of the web of influences tied to conservation initiatives and what this could mean for conservation assessment and impact evaluation. It will provide an opportunity for workshop participants to learn about a new approach and apply it to international conservation contexts. The workshop will comprise interactive and discussion-based group activities based on real-world conservation initiatives that will ask workshop participants to question the way in current approaches seek to evaluate conservation outcomes, hopefully inspiring new methods for assessing the benefits of conservation.

ZIMS and PMx as Tools for Wildlife Rehabilitation and Release Programs

Length: Full day + half day AM

Date: Saturday, June 14th and Sunday, June 15th

ID: 27

Organizer: Sara Sullivan

Conservation practitioners working with rehabilitation or release animals—whether they are affiliated with zoos, NGOs, or government agencies—face unique data



management and analysis needs. These needs revolve around ensuring proper care for individuals, tracking post-release success, and contributing to larger species recovery efforts. However, a disconnect persists between data collected on animals under human care and those in the wild, whether as part of release programs or intensively managed wild populations. Integrated data storage, analysis, and sharing that bridges the gap between in situ and ex situ management can significantly enhance the success of wildlife release programs. This workshop aims to foster collaboration and knowledge exchange between in situ and ex situ conservation practitioners, who will be introduced to existing population software tools used largely by the ex situ community. These include Species 360's Zoological Information Management System (ZIMS) for managing comprehensive animal records and the Species Conservation Toolkit Initiative's (SCTI) PMx for demographic and genetic analysis of intensively managed populations. Participants will learn how existing features and functionalities have been used in the recovery of some of Australia's most threatened wildlife (e.g., Regent Honeyeater, Tasmanian Devil, etc.) and consider enhancements for informed decisions at every stage of a reintroduction program - from rehabilitation and pre-release conditioning to post-release monitoring and long-term management.

Advancing regional-scale assessments of marine ecosystem change

Length: 2 full days

Date: Saturday, June 14th and Sunday, June 15th

ID: 29

Organizer: Kelly Ortega-Cisneros

Marine and coastal ecosystems deliver critical contributions to people but face diverse threats from climate change, pollution, and overexploitation. These threaten the sustainability of marine ecosystems in the near and long-term future and the services they provide. The Fisheries and Marine Ecosystem Model Intercomparison Project (FishMIP) aims to better understand and project the long-term impacts of climate change on fisheries and marine ecosystems. These model projections are associated with a number of uncertainty sources. Addressing these uncertainties is, therefore, crucial to improving the robustness of model projections and informing policy and adaptation planning.

This workshop aims to advance the regional marine ecosystem models currently participating in FishMIP to better assess the impacts of climate change on ecosystem functioning and biodiversity. The goal of this workshop is to synthesise recent advances in ecological models and marine observational data using global and regional datasets to test hypothesised responses to various anthropogenic (e.g. fishing) and climate



drivers. We expect our results to provide more robust assessments and projections of the potential impacts of climate change on marine biodiversity, ecosystem structure and functioning and fill in information gaps for regions under-represented in climate studies.

Analysing Genomic Data with dartRverse: Accessible Tools for Conservation

Length: 2 full days

Date: Saturday, June 14th and Sunday, June 15th

ID: 31

Organizer: Bernd Gruber

Conservation and wildlife management programs worldwide are increasingly incorporating genetic data into their monitoring and management efforts, facilitated by the decreasing costs of DNA sequencing technologies. While the accessibility of genetic data can lead to better-informed decision-making for conservation purposes, it also presents challenges for management teams with limited resources and little experience in analysing genomic-scale datasets. In this workshop, we will work with genomic datasets and conduct various analyses relevant to the genetic monitoring and management of wildlife species.

Using the widely adopted R package dartRverse, we will offer hands-on instruction in core analyses relevant to many conservation problems. This will include:

- Learning how to import and handle genomic data (SNPs and reference genomes).
- Estimating effective population size and key statistics such as inbreeding coefficients, fixation index, heterozygosity, and Hardy-Weinberg proportions.
- Identifying population units and revealing population structure.
- Assigning individuals to populations and identifying migrants.
- Identifying parents and relatives and reconstructing pedigrees in support of captive breeding programs.
- Using genetic simulations to support decision-making in conservation.

A strategy for engagement of stakeholders in program management and evaluation using the tools of systems thinking - CANCELLED



The Species Threat Abatement and Restoration (STAR) metric in practice: assess potential, set targets and monitor progress

Length: 2 full days

Date: Saturday, June 14th and Sunday, June 15th

ID: 34

Organizer: Francesca Ridley

The species threat abatement and restoration (STAR) metric quantifies the potential benefit to species of reducing and mitigating threats and restoring habitat in a particular place. STAR is now being used by a range of actors including conservation practitioners, private land-owners and businesses in measuring their potential contributions to reducing species extinction risk. STAR is also used to set baselines and measure progress in a nature-positive approach. Through a series of practical exercises, presentations and discussions, this workshop will equip participants with the knowledge and skills to implement the full chronology of the STAR Framework in the landscapes in which they work. This begins with estimating the potential benefit to species of actions to abate threats and restore habitat on a global or national scale, calibrating the calculation on a local-scale, implementing a target-driven threat abatement action plan and measuring progress against the calibrated baseline.

Baseliner - A Deep Dive into Wireless Sensor Networks for Conservation

Length: 1 full day

Date: Sunday, June 15th

ID: 35

Organizer: Akiba

Wireless sensor networks (WSNs) allow for in situ, real-time, continuous monitoring of various environmental parameters. In ecosystems that are remote, difficult to access or fragile, they enable scientists and researchers to monitor ecosystem and habitat conditions. As climate patterns become more unpredictable, they facilitate the collection of large datasets over extended periods, offering insights into long-term ecological changes and trends, and ground-truthing data that informs models, policy and management practices.



WSNs are notoriously difficult to set up and maintain in environments where there is little to no power or communications infrastructure. Deploying and maintaining WSNs often requires technical expertise and expensive equipment, making them inaccessible to many researchers and conservationists. Many WSNs are not designed for conservation where needs are different from other industries such as agriculture monitoring where deployments tend to be short term and targeted for optimising yield.

In this workshop, we'll demystify WSNs for rugged and remote environments by setting up a simple WSN using the LoRa wireless protocol and a cellular and/or satellite connection. We'll go through different conservation applications, hardware and network options, software required and tradeoffs.

By the end of the workshop, attendees should understand the basic concepts of setting up and collecting data through an WSN, giving participants a better understanding of the possibilities and options.

How to use ecological and genetic data to monitor genetic diversity from local to international scales

Length: 1 full day

Date: Saturday, June 14th

ID: 36

Organizer: Robyn Shaw

Within-population genetic diversity is an important component of biodiversity, as it underpins the resilience of populations, and therefore species and ecosystems in turn. However, gathering genetic diversity estimates can be challenging, particularly for broad-scale monitoring of hundreds or even thousands of populations (e.g., for reporting to national and international programs of biodiversity monitoring). Fortunately, many existing monitoring datasets can contribute to this purpose, including ecological data and legacy genetic datasets, alongside new data. In this workshop for non-geneticists and geneticists, we explore methods and data for monitoring population resilience across multiple species that can use both direct measures of genetic diversity and ecological proxies. We explore how collaborations between ecologists, geneticists, species experts, and governmental stakeholders, can advance the protection of species' genetic diversity and resilience. The workshop will include hands-on practice in calculating genetic diversity indicators from a variety of data sources, as well as discussions around challenges and opportunities.



Updating the IUCN Red List accounts of Australasian mammals

Length: 1 full day

Date: Saturd, June 14th

ID: 37

Organizer: Diana Fisher

A once-a-decade update of mammal species accounts in the IUCN Red List is underway. This workshop will allow members of the Australasian Marsupial and Monotreme Specialist Group, Small Mammal Specialist Group, Bat Specialist Group, and others with knowledge of Australian, Melanesian and Wallacean mammal conservation to collaborate and progress updates of the Red List for Australian mammals. Participants will learn from experienced Red List trainers and assessors, and complete revisions of species in particular need of revision. We will focus on species accounts that will particularly benefit from in-person communication and support.

Geospatial Analysis in R

Length: 1 full day

Date: Saturday, June 14th

ID: 40

Organizer: Lisanne Petracca

Geospatial information systems (GIS) are commonly used by students, researchers, and managers across ecological disciplines for everything from study planning to visualization and data analysis. This workshop will give participants the tools to say farewell to ArcMap/QGIS and create reproducible geospatial workflows entirely within R, a freely available, open source, and efficient platform for geospatial applications. This workshop will focus largely on R packages terra (Hijmans et al. 2024) and ggplot2 (Wickham et al. 2024) and the use of real-life ecological datasets to cover: (1) basic spatial operations in R; (2) vector tools in R (e.g., select by feature and location, intersect, clip, buffer, create centroid, change projection, calculate area and perimeter, create random and regular points, and more); (3) raster tools in R (e.g., crop, resample, reclassify, Euclidean distance, change projection, create raster stack, neighborhood



statistics, extract values by point, and more); (4) cartography in R (static and dynamic); and (5) automation and use of online sources (e.g., GBIF, Movebank). All materials from the workshop will be made available for use and future reference by workshop participants.

Oceania Voices: How to amplify Indigenous Voices in communicating conservation sciences*

*Post congress session

Length: Half day

Date: Friday, June 20th

ID: 26

Organizer: Leanda Mason

Starting with a Welcome to Country by a local Elder, this workshop will be an extension of the symposium titled, "Moananuiākea – Recognising the value of Indigenous sciences in driving effective and equitable conservation efforts."

The intention of this workshop is to provide an example of how Indigenous knowledge systems can be effectively shared within conservation sciences, acknowledging the historical exclusion of non-Western forms of science within conventional communication outlets such as journal publications.

Our workshop will allow participants to have conversations, and share cultural practices. For example, intergenerational knowledge sharing:

- Dreaming
- Songlines
- Art

Storytelling from invited knowledge holders from indigenous conservation practitioners in action, will aid in facilitating discussions amongst participants in the breakout small group think tanks. Resources will be provided for communicating science in Indigenous ways, such as paints, art supplies etc. A strong focus will be on the most effective and respectful communication of sciences to all communities.

The four hour session will consist of three elements to provide an interactive session that shares knowledge from various regions, and facilitates dialogue.

As an important Indigenous protocol from Oceania cultures, traditional food will be



provided as part of ceremony.

Training Courses

How to make good expert judgements

Length: Half day AM

Date: Sunday, June 15th

ID: 1

Organizer: Mark Burgman

We use expert judgements extensively in conservation science, especially when the evidence we need is unavailable or incomplete, the decision is urgent, and the consequences of a wrong decision are appreciable. Expert judgement is important in most instances, for example, when deciding on the best course of action to manage a threatened species or ecosystem, or the best strategy to reduce the extent of invasive species. Scientists are subject to a host of psychological and contextual biases that make their estimates of quantities or the outcomes of future events unreliable. Standard approaches to using experts are susceptible to them. This workshop will provide an introduction to some simple and effective ways of deciding who is an expert, and how to engage with them to obtain relatively accurate and well calibrated judgements.

Introduction to Decision Science for Conservation

Length: Half day AM

Date: Saturday, June 14th

ID: 3

Organizer: Jennifer McGowan

Decision Science for Conservation is the process of systematically choosing what actions to take, when, and where to deliver outcomes for nature and people, and doing so while considering social, economic, or political constraints, threats and costs. Thinking through and structuring conservation challenges into decision-science frameworks is an invaluable skill set for anyone in the field of conservation to have.



Whether you are wondering how to invest in restoration sites, secure threatened species, choose between managing or protecting areas for biodiversity, or how to optimize enforcement, decision-science can help you get closer to making better decisions. This training is tailored to a general audience but most relevant to anyone interested in informing conservation strategies and decision-making. Our instructors bring expertise working across government, NGOs, and universities, and will share insights from the real world alongside theory and practical applications where decision-science delivered outcomes for nature and people. We will cover the basics of decision science for conservation, and move through toy problems and activities so that all participants walk away feeling more comfortable with the concepts needed to help move the field of conservation forward.

Introduction to Systematic Conservation Planning with Marxan and Advanced Topics

Length: Half day PM

Date: Saturday, June 14th

ID: 8

Organizer: Fernanda Brum

In a constantly changing world and accelerating biodiversity loss, planning for biodiversity persistence and ensuring peoples livelihoods pose a difficult challenge to planners and decision makers aiming to address the various – sometimes conflicting – goals of diverse stakeholders. Systematic conservation planning (SCP) is concerned with the prioritization of resources for biodiversity conservation and is often used in the design of terrestrial, freshwater, and marine conservation area networks. Marxan is the world's leading conservation decision-support tool, assisting governments, industry and nongovernmental organizations (NGOs) in land and seascape planning. In this training course we will introduce the Marxan Planning Platform (MaPP), a user-friendly online version of Marxan that overcomes the technical barriers to use Marxan, and guides users through intuitive workflows and interface to facilitate collaborative planning on the cloud. Our training course introduces attendees to SCP and core spatial planning concepts, and uses a case study to guide users through the MaPP workflow to discuss key components of a SCP process. Attendees will be able to build on a basic understanding of SCP to use MaPP to support spatial conservation planning. The training will finish with a brief introduction to advanced uses of Marxan, including connectivity and zoning to demonstrate the broader scope of Marxan applications.



Whale watching guidelines - Conduct and good practices

Length: Half day AM

Date: Saturday, June 14th

ID: 10

Organizer: João Bernardo Barreiros

Human contact with cetaceans has existed for hundreds of years and evolved from hunting to touristic activities. Whale and dolphin species and populations evolved to live in multiple aquatic ecosystems and, recently, due to pressure from human development have been affected in multiple ways. Nowadays, whale watching is widely accepted as an economic source for some regions that rely on this sector. Tourism has also been evolving and throughout the XXth century, new legislations and protocols appeared in order to limit this activity in an attempt to protect cetaceans worldwide.

This training course aims to inform not only about the evolution, diversity and characteristics of cetaceans but mainly to share current dangers and risks towards species, inform about existing legislations on whale watching activities and discuss protocols as well as the role and guidelines of researchers on board.

Identifying Key Biodiversity Areas: How to harness a global tool for local conservation action

Length: Half day PM

Date: Sunday, June 15th

ID: 11

Organizer: Anna McCallum

Identifying Key Biodiversity Areas (KBAs) and prioritising their protection or restoration is essential to the survival of threatened species and ecosystems. KBAs are sites that contribute significantly to the global persistence of biodiversity and are identified using a globally standardised science-based approach. Supported by IUCN, KBAs can help inform the delivery of several core GBF targets. This course will introduce KBAs, featuring speakers and case studies from the Pacific and Asia to demonstrate their application in conservation planning. Participants will learn about the criteria and quantitative thresholds within the KBA Standard, equipping them with the skills needed



to identify and delineate KBAs. The course will be led by members of Australia's National Coordination Group (NCG).

An Introduction to BoomBox - A New Tool That Combines the Benefits of Camera Traps with the Power of Playback Experiments

Length: 1 full day

Date: Saturday, June 14th

ID: 14

Organizer: Jacinta Plucinski

BoomBox connects to any commercially available camera trap to create an Automated Behavioural Response system (ABRs). When the camera trap is triggered, BoomBox plays audio, turns on lights and/or triggers other modalities to create a remote playback system that captures animal responses to specific cues.

ABRs' combine the benefits of camera traps, such as lack of human observers, continuous monitoring and large datasets, with the power of playback experiments that investigate the drivers of wildlife behaviour by manipulating the environment. ABRs enhance playback experiments by removing the presence of humans that can disrupt natural behaviours, and expanding the target species to include rarer or nocturnal species.

BoomBox ABRs allows researchers to conduct a unique suite of experiments on wild animals in complex environments. It can be used to study predator/prey interactions to present, historically present or introduced predators, intraguild interactions, reactions to human activity or animal intelligence. It also enables novel non-lethal deterrence methods.

In this training course we'll introduce BoomBox ABRs, share research and applications that use the system and discuss how it may be applied to participants' field of research, including considerations, best practises and limitations. We'll then provide participants with hands-on training to set up and program the system, before opening discussions on new ideas and features.

An introduction to paperless data collection using KoBoToolbox

Length: 1 full day



Date: Saturday, June 14th

ID: 15

Organizer: Leejiah Dorward

Conservation research and practice often entails the collection of complex data sets across a wide array of environments. KoBoToolbox offers a free digital data collection ecosystem designed for fast, efficient and secure paperless data collection in a range of environments. These tools allow for collection of an array of different types of data (text, multiple choice, GPS, audio, photos etc) using mobile phones or computers in online and offline environments. While primarily used for collecting questionnaire data, these tools are equally well suited to the recording of ecological data.

The course will cater for participants from a range of disciplines and is aimed at those with no prior experience of KoBoToolbox. Over one day, we will provide all the information required for attendees to start using these tools on their own. The course will cover: 1. How to write complex forms using KoboToolbox form builder and XLSForms; 2. Deploying forms to collect data online or offline with mobile devices, or via internet browsers; 3. Managing, accessing and downloading data from servers. There will also be time set aside to offer bespoke support and advice to participants with existing projects that they wish to use with KoBoToolbox.

Building dynamic human-environment games for conservation science

Length: 2 full days

Date: Saturday June 14th and Sunday June 15th

ID: 5

Organizer: Andrew Bell

A 2-day workshop/short course for graduate students and early-career researchers, covering:

- Games as research tools vs games as learning
- Where do we apply games (conservation dilemmas)?
- What do we learn from dynamics, equilibria, interactions?
- What do game interventions look like? (surveys, experiments, debriefs, follow ups)
- Designing a game
- Coding a game



- Testing and tailoring a game
- Designing and implementing an experiment (context, process, sampling, pre-testing, permissions, training, data collection, field coordination, analysis)

This workshop is ideally suited for researchers who would like to conduct a games experiment, would like to learn a bit more about how to develop a full experiment, and who would like to be part of a community of common interest around games experiments.

Good things to come to the workshop with:

- 1. Ideas of human-environment dilemmas or game designs to work on
- 2. A basic comprehension of the NetLogo agent-based modeling platform (whose participatory simulation capabilities we will use to develop games). NetLogo documentation, user quide, basic tutorials and dictionary are all here.

Open Source Geospatial Tools for Conservation under Climate Change - a Koala Case Study

Length: 2 full days

Date: Saturday June 14th and Sunday June 15th

ID: 6

Organizer: Catherine Kim

Presented by Geospatial Share (https://brisbane-geocommunity.netlify.app/), this training course will assemble renowned geospatial experts to step participants through critical skills in the application of open source geospatial tools to conservation problems over 2 days of training. We will use the Koala, an iconic Australian species under threat, to explore these tools. The course will cover:

- Getting started with geospatial tools in R
- Working with climate projection models
- Modelling the future distribution of koalas
- Putting it all together with conservation spatial planning
- Integrating R with QGIS to make beautiful maps

The content will build the geospatial skills of conservation professionals, academics,



and students - skills which are applicable to any conservation problem. Knowledge of geospatial data and methods will be helpful but is not essential. All presenters are experts with deep practical experience in delivering technical training working in different aspects of conservation. There will be opportunities to network and problem-solve geospatial issues throughout the training course. What will participants leave with? A better understanding of the application of open source geospatial tools to solve conservation problems, along with all training materials used in the course including codebooks and data.

Fonseca Fellows Conservation Leadership Training and Mentoring Event

Length: 2 full days

Date: Saturday June 14th and Sunday June 15th

ID: 13

Organizer: Antony Lynam

This training program is to empower future conservation leaders (Fonseca Fellows participants and additional students from Asia-Pacific) to cultivate integral leadership skills essential for designing and leading successful projects that actively engage communities in efforts to preserve habitats and species around the world. By strengthening self-awareness and collaboration, enhancing public speaking abilities, and equipping participants with a robust understanding of behavior change science and social marketing tools, this program aims to foster impactful community involvement. Participants will learn to effectively mobilize resources and inspire collective action, driving meaningful change in environmental practices and conservation efforts.

Anticipated Outcomes:

- Empowered and motivated young conservation leaders equipped with the skills and networks to drive positive change in the Asia Pacific region.
- Strengthened collaboration and knowledge-sharing among conservation professionals and organizations in the region.
- Increased visibility and recognition of the importance of conservation leadership development.

This unique event will provide a transformative experience for the next generation of conservation leaders, inspiring them to tackle the pressing challenges facing biodiversity and ecosystems in the Asia Pacific region and beyond.



Hands-on training in genomic analyses for biodiversity conservation

Length: 2 full days

Date Saturday June 14th and Sunday June 15th

ID: 16

Organizer: Isaac Overcast, Laura Bertola, Ilha Byrne, Anubhab Khan, Laura Tensen

Recent developments in sequencing techniques and bioinformatics have produced a wealth of genomic resources for a wide range of organisms, including many species of conservation concern. Although the applicability of these data for informing management plans and policy is evident, integration of genetic considerations is still scarce. There is a need for relevant bioinformatics training targeting researchers and practitioners primarily working in conservation who are considering using population genetics as a tool to address applied questions on the ground. We therefore propose to host a two-day hands-on training course, which will cover the use of genetic data for informing conservation management and policy, various data types (e.g. metabarcoding, RADseq, SNP panel data), and guide participants from filtering raw data to exploring meaningful population parameters (e.g. diversity, structure, connectivity) and to producing publication-ready figures. This training course is specifically targeted towards Oceanian researchers/practitioners working in conservation, with the aim to improve the accessibility of the field of conservation genetics and to encourage participants to connect to colleagues who do similar work.

FieldFutures Harassment and Assault Prevention Training for Scientific Fieldwork*

*Post congress session

Length: Half day

Date: Friday, June 20th

ID: 9

Organizer: Melissa Cronin

Fieldwork is essential for training and research in many scientific disciplines. Unfortunately, the unique hierarchical structure of fieldwork coupled with the remote and informal nature of field sites heightens the risks of gender-based harassment and assault during fieldwork, especially for women and other marginalized groups.



Traditional scientific and academic workplace practices emphasize post-incident reporting to the institution rather than prevention efforts. The <u>FieldFutures</u> training guides participants to prevent, intervene in, and effectively report incidents of sexual harassment and assault in field settings. Through a series of practical intervention scenarios, this workshop guides participants on how to be an active and engaged bystander, how to report incidents, and how to plan inclusive fieldwork settings to minimize risk. Equipped with these tools, participants can play a role in ensuring that field settings are safer, more equitable, and more welcoming for the next generation of field scientists.

Forums

How to incorporate migratory or highly mobile species into the Global Biodiversity Framework

Length: 1 day

Date: Sunday, June 14th

Organizer: Angela Liu

International environmental legislation and guidance in the past several years have pushed for increasing area-based management measures, with the landmark target of protecting 30% of land and oceans by 2030 ("30 by 30") underpinning much of national biodiversity goals. Alongside the increasing number of protected areas in the past decade, there has also been rapid developments in spatial prioritization and conservation planning tools in order to optimize the selection of this "30%". However, many migratory species have not been able to benefit from this increase in area-based management. Much of this is due to an inadequate consideration of their transboundary ranges and spatiotemporally dynamic migratory stages. As a result, nearly half of all migratory species have experienced population declines and increased extinction risk (UNEP, 2024). This forum will bring together migratory species experts, policy makers, and spatial planners to define the unique challenges, and propose novel solutions, for how migratory species can be considered in national biodiversity commitments. The intended outcome aims to be a collaborative publication either looking at the current state of how national commitments have integrated migratory species or a guide to help strategically design conservation action, including but not limited to area-based management tools, dynamic closures, or multilateral species protection plans.

Building Capacity for Community-Led Coexistence with Orangutans*



*Post-congress session

Length: Half day

Date: Friday, June 20th

ID: 5

Organizer: Julie Sherman

This forum focuses on fostering long-term coexistence between communities and orangutans. We will use an interactive forum to engage Indonesian and global experts in social development and orangutan conservation to address the pressing issue of human-orangutan conflict and coexistence. Through discussion, knowledge exchange, and idea generation, our forum aims to generate actionable outputs to guide community-led coexistence interventions in diverse socio ecological settings. Local practitioners will outline the human-orangutan conflict challenges they face, and the group will discuss and brainstorm potential interventions and how they could be tailored for effective implementation in specific contexts. The group will develop an action plan for implementing participatory workshops that prioritize positive outcomes for both local communities and orangutans. Additionally, we will outline a monitoring and evaluation framework to assess the effectiveness and impact of workshops and interventions. During the forum, we will produce a series of recommendations, guidelines, and goals for these workshops, along with a list of potential interventions to establish coexistence. This forum will inspire cross-sectoral partnerships that support orangutan conservation and community well-being. Our approach aims to have far-reaching benefits for human-orangutan coexistence, promoting interdisciplinary collaboration and supporting communities to take ownership of conservation strategies for more positive and sustainable outcomes.

Advancing Customary Land Rights in Area-based Conservation: Comparing Pathways, Barriers, and Enabling Factors Across National Contexts

Length: 2 full days

Date: Saturday, June 14th and Sunday, June 15th

ID: 7

Organizer: Paul Thung



International targets to scale up area-based conservation raise major social justice concerns relating to the historical alienation of Indigenous Peoples and Local Communities (IPLCs) from their customary lands. It is therefore important that the 2022 Kunming-Montreal Global Biodiversity Framework under the Convention on Biological Diversity, which sets a target to protect 30% of the earth's surface by 2030, emphasises respect for IPLC rights. One mechanism for doing so is through Other Effective Area-based Conservation Measures (OECMs), which are envisaged as more inclusive. However, the success of international intentions and mechanisms to enhance social justice outcomes on the ground is mediated by national laws and policies governing area-based conservation, which may or may not support IPLC presence, rights, and livelihoods.

This 2-day forum will explore the role of national contexts in shaping conservation outcomes for IPLCs. It aims to identify common barriers, enablers, and pathways for advancing customary land rights in conservation across different countries. Scholars and practitioners from around the world will exchange insights and experiences, creating a space for co-reflexivity and shared learning. The forum will culminate in a joint paper that highlights key factors influencing the success of these efforts, offering practical insights for conservation practitioners, activists, funders, and researchers aiming to secure IPLC land tenure.

Uniting Land and Sea: Knowledge Exchange for Sustainable Solutions in the Legal Trade of Threatened Marine and Terrestrial Species

Length: 1 full day and 1 half day AM

Date: Saturday, June 14th and Sunday, June 15th

ID: 8

Organizer: Rosa Mar Dominguez Martinez

The exploitation of wildlife poses the largest threat to threatened species and fuels the fourth most profitable global trade, with seafood being the most traded commodity globally. Despite extensive work present for terrestrial and marine species, the collaboration between experts across these landscapes remains limited, hindering the exchange of solutions that could benefit both. We aim to bridge this gap by fostering cross-sector collaboration and knowledge exchange. Our forum will focus on the legal trade of marine and terrestrial wildlife for human consumption and bring together experts from diverse fields - social science, economics, law, and conservation - to address the distinct challenges terrestrial and marine landscapes face. Our forum will compare trade patterns, supply chains, and legislative frameworks, identifying gaps.



challenges and opportunities for more effective conservation efforts. We aim to develop actionable strategies for protecting globally traded threatened species by applying lessons from one field to the other. This knowledge exchange will offer a venue for participants to share their expertise, uncovering challenges and successes, and exploring solutions that require a broader interdisciplinary context. The insights gathered will form the basis of a peer-reviewed article, guiding better practices and future policies for sustainable wildlife trade management and fostering long-term conservation impact.

Outlining Ethical Principles for Behaviour Change Interventions in Biodiversity Conservation

Length: Half day AM

Date: Sunday, June 15th

ID: 9

Organizer: Diogo Veríssimo

This forum will focus on outlining ethical principles for behaviour change interventions specifically within the context of biodiversity conservation. By analyzing the ethical principles of the International Social Marketing Association (ISMA) and the FORGOOD ethics framework from behavioral science, this forum will examine whether these guidelines can be directly applied to biodiversity conservation efforts or if they need adaptation to fit this unique context. This session will gather experts from various aspects of conservation to discuss the ethical implications of interventions that seek to influence human behavior for the benefit of biodiversity. Drawing on case studies and examples, we will examine how ethical principles can be maintained while achieving the goals of conservation. The discussion will address key issues such as fairness, transparency, respect for local cultures and knowledge, and the duty of care in promoting behavior change. This includes the ethical responsibility to ensure interventions are data-driven, carefully designed, deployed, and measured to maximize positive impact while minimizing unintended negative consequences. By the end of the session, we aim to establish a working set of ethical guidelines tailored to biodiversity conservation efforts, which can help guide future interventions and research in the field.

Designing Social Media Imagery Guidelines for Conservation

Length: 1 full day



Date: Saturday, June 14th

ID: 12

Organizer: Meghan Shaw

With the growing popularity of social media as a communication tool, there comes a need for conservationists to better understand what the effects of social media could be on wildlife, the environment and conservation. Recent research on the types of images posted to social media has found that inappropriate image choices can exacerbate the illegal exotic pet trade, illegal wildlife tourism, the approach of wildlife in their natural habitats, and can even create the perception that species are less endangered than they actually are. On the other hand, social media images have also been used to inspire positive behaviour change, inspire biodiversity friendly policies, and even garner more donations for conservation efforts. However, there are currently no set guidelines for best practice use of social media images (outside of the IUCN primate specific guidelines).

This forum is a chance for researchers and practitioners in conservation imagery or social media to design a set of guidelines for social media imagery design and use, in order to help organisations and individuals promote positive change, instead of unintentional harm towards wildlife. Following ICCB, we will publish these guidelines alongside a media release.

Global guidance on determining reference states for measuring the state of nature

Length: Half day AM

Date: Sunday, June 15th

ID: 14

Organizer: Molly Grace

Understanding how humans have shaped the natural world helps inform decisions to restore it. For example, some environmental accounting approaches measure nature uplift by assessing the observed condition of a focal area against reference states: the intact and undegraded state of environmental assets (like vegetation, fauna, soil, or water) within the focal area. Reference states are defined by the extent and characteristics of environmental assets within the focal area observed/expected under a specific reference framing (e.g., pre-industrial). The characterisation of reference states



is well-developed in Australia, where reference state is often defined as the extent and condition of assets prior to colonisation. For example: Queensland uses maps of "pre-European" Regional Ecosystems; and Victoria has mapped "Ecological Vegetation Classes" as of 1750. However, determining reference extent and condition is not straightforward in many parts of the world. To improve transparency in determination of reference states, we have developed guidance on choosing a reference framing, assessing extent of assets under the chosen framing, and selecting condition indicators. This framework will help determine reference state for any asset, anywhere in the world, with applications in environmental accounting and beyond. In this forum, we will review the latest developments of this framework and solicit feedback and input.