The Marshall M. Weinberg

Student Conference on Conservation Science
New York
October 3–7, 2022

Conference Program
Major funding for the 2022 Student Conference on Conservation Science - New York (SCCS-NY) has been provided by Marshall M. Weinberg. In grateful recognition of his longstanding generosity toward the Center for Biodiversity and Conservation, this year's SCCS-NY is presented in his honor.

The Conference is organized by the Center for Biodiversity and Conservation at the American Museum of Natural History.

**Conference Partners:**

- Yale University School of the Environment
- Hawai’i Institute of Marine Biology
- Princeton University

**Conference Contributors:**

- Pace University

**Conference Prize Contributors:**

- Yale University Press
- Society for Conservation Biology
- Applied Biomathematics, Inc.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>4</td>
</tr>
<tr>
<td>General Information</td>
<td>4</td>
</tr>
<tr>
<td>Code of Conduct</td>
<td>5</td>
</tr>
<tr>
<td>Conference Agenda</td>
<td>6</td>
</tr>
<tr>
<td>Monday</td>
<td>6</td>
</tr>
<tr>
<td>Tuesday</td>
<td>7</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8</td>
</tr>
<tr>
<td>Thursday</td>
<td>9</td>
</tr>
<tr>
<td>Friday</td>
<td>11</td>
</tr>
<tr>
<td>Plenary</td>
<td>12</td>
</tr>
<tr>
<td>Presenter Information</td>
<td>13</td>
</tr>
<tr>
<td>Advisers, Reviewers, and Mentors</td>
<td>17</td>
</tr>
</tbody>
</table>

Full presentation abstracts are available on the SCCS-NY website: [www.amnh.org/sccsny](http://www.amnh.org/sccsny)

Follow us on Facebook! [facebook.com/CBC.AMNH](https://facebook.com/CBC.AMNH)

Join the conversation on Twitter! [#sccsny2022](https://twitter.com/sccsny2022)

Follow us on Twitter! [@CBC_AMNH](https://twitter.com/CBC_AMNH)
Acknowledgments

The Student Conference on Conservation Science (SCCS) is the only international conference designed for graduate students, post-doctoral fellows, and early-career professionals pursuing or considering the field of conservation science. Interactions with established conservationists encourage collaborations and advance research.

The Marshall M. Weinberg Student Conference on Conservation Science—New York 2022 (SCCS-NY) is a sister conference to the highly successful SCCS-Cambridge begun in 2000 by the University of Cambridge. Other SCCS conferences now include SCCS-Bangalore, SCCS-Australia, SCCS-Beijing, and SCCS-Hungary.

SCCS-NY 2022 is organized by the American Museum of Natural History's Center for Biodiversity and Conservation (CBC).

SCCS-NY Content and Logistics Coordination:
Felicity Arengo
Kristin Douglas
Nadav Gazit
Margaret Law
Ana Luz Porzecanski

Technology Coordinators:
Pete Ersts
AMNH IT Support Team

Program Design:
Nadav Gazit

The SCCS-NY Content and Logistics Coordination team would like to thank CBC and Museum staff and the volunteers without whom the conference would not be possible.

General Information

SCCS-NY is designed to foster dialogue and collaboration between the students, postdoctoral fellows, early-career professionals, and established conservationists in attendance. We care deeply about preserving the integrity of the work, research, and personal interactions of our speakers, mentors, presenters, and attendees. In order to find a balance between the expectations of presenters and attendees, and to make the meeting a safe and comfortable space for everyone, we have some basic guidelines. Please keep in mind CBC’s meeting Code of Conduct and apply it to your written and oral communication. Harassment, intimidation, or discrimination in any form will not be tolerated. Our speakers and presenters have invested considerable time and effort in the development of their material and copyright laws apply. We encourage open discussion on social media and ask attendees to share the science and ideas presented at SCCS with their followers. However, we ask that you be especially cautious about discussing the work that is being presented. Due to the nature of this conference you may be hearing about new or unpublished work that may not be suitable for sharing. If you choose to write about the conference following the scheduled sessions, you must gain approval from speakers/presenters prior to quoting, publishing, or otherwise referencing their research on the Internet or through other forms of media.
The Center for Biodiversity and Conservation (CBC) at the American Museum of Natural History (AMNH) works to promote a welcoming environment at its meetings, whether in virtual or physical spaces, that is safe, collaborative, supportive, and productive for all attendees, including volunteers, exhibitors, and service providers, and that values the diversity of views, expertise, opinions, backgrounds, and experiences reflected among the conference attendees. To that end, we expect all participants—attendees, speakers, mentors, and volunteers—to follow the Code of Conduct during the conference. This includes conference-related social events, and in related online communities and social media. All forms of communication among SCCS-NY 2021 participants during the meeting are considered within the scope of the conference, and thus fall under the jurisdiction of the Code of Conduct. These include public and private communications in virtual conference rooms, via electronic chat functions (e.g., Q&A box, Zoom Chat), emails, texts, social media, phone calls, and other forms of written, verbal, and non-verbal (including visual) communication.

**Expected Behavior**
- Treat everyone with respect and consideration.
- Communicate openly and thoughtfully with others and be considerate of the multitude of views and opinions that are different than our own.
- Be respectful in your critique of ideas.
- Consider your surroundings and computer screen contents when sharing your screen or appearing in live or pre-recorded videos to prevent the appearance of sensitive personal information, inappropriate background images, or disruptive content. This does not apply to unplanned cameo appearances by pets and children.
- Uphold and support the CBC’s commitment and actions to improve the events environmental and social impacts.
- Behave in accordance with professional standards and applicable laws.
- Respect the rules and policies of all venues and online platforms associated with the meeting.

**Unacceptable Behavior**
- CBC and AMNH do not tolerate discrimination or harassment on the basis of race, creed, color, religion, age, disability, marital status, partnership status, gender, sex, sexual orientation, gender identity, gender expression, genetic information, pregnancy, alienage or citizenship status, current or former participation in the uniformed services, status as a veteran, or national or ethnic origin, or on account of any other basis prohibited by applicable City, State, or Federal law.
- Sexual language and imagery, or any other potentially harassing material or behavior including but not limited to verbal comments, intimidation or unwelcome sexual attention, are not permitted at the conference and may not be incorporated into the visuals or presentations.
- Violating the rules and regulations of the online platforms and services.
- Participants asked to stop any harassing behavior are expected to comply immediately and to not repeat their behavior, or may be required to leave the conference, in the CBC’s sole discretion.
- Examples of unacceptable behavior include but are not limited to disruption of virtual meetings, inappropriate comments related to any of the categories listed above; harassing photography or recording; threatening, intimidating or stalking anyone at the conference as an attendee, staff, or presenter or otherwise disruption of talks at the conference or other associated events organized by the CBC.

**Consequences**
- Anyone requested to stop unacceptable behavior is expected to comply immediately.
- CBC staff (or their designees) may take any action deemed necessary and appropriate, including immediate removal from the conference without warning or refund.
- The CBC reserves the right to prohibit attendance at any future meeting or conference organized by the CBC.

**Reporting Unacceptable Behavior**
If you are the subject of unacceptable behavior, have witnessed any such behavior, or have any other concerns relating to unacceptable behavior, please immediately notify a CBC staff member listed in the program by email or phone. Screenshots or any evidence of the concern is helpful but not required.
- Call 212-496-3431
- Email sccs@amnh.org
- Individuals may also report prohibited conduct confidentially or anonymously through the Museum’s Compliance Hotline, by calling 1-800-620-5571. This 800-number is managed by an outside, independent service provider.

**Conference staff can provide support, including but not limited to:**
- Contacting AMNH Title IX officers in Human Resources: Benjamin Marzolf, Title IX Coordinator / Equal Opportunity Specialist: 212-769-5316, bmarzolf@amnh.org
### MONDAY
**October 3, 2022**

**Virtual**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 12:00pm  | Conference welcome  
Ana Luz Porzecanski, Director, Center for Biodiversity and Conservation, American Museum of Natural History |
| 12:15-12:45pm | Listen-up!  
Tune-in with better listening skills  
Christina Imrich, Co-Active Coach, Leadership Facilitator |
| 1:00pm | Break |
| 1:00-4:00pm | Workshops session 1 |

#### WORKSHOPS
**Session 1 | Virtual**

<table>
<thead>
<tr>
<th>Workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications of museum collections and phylogenomics to biodiversity conservation: part 1*</td>
</tr>
<tr>
<td>Organizers: Mary Blair, Center for Biodiversity and Conservation, American Museum of Natural History; Luca Pozzi, University of Texas at San Antonio; Anna Penna, University of Texas at San Antonio and Smithsonian National Museum of Natural History; Stephen Gaughran, Princeton University; Megan Wallace, Institute for Comparative Genomics, American Museum of Natural History; Lauren Clark, Institute for Comparative Genomics, American Museum of Natural History; Alexander Salis, Vertebrate Zoology, American Museum of Natural History; Evon Hekkala, Fordham University; Melina Giakoumis, City College of New York / City University of New York</td>
</tr>
<tr>
<td>*Part 2 is optional and will take place on-site on Friday, October 7.</td>
</tr>
<tr>
<td>Interactive, reproducible, and accessible species distribution modeling for conservation with Wallace</td>
</tr>
<tr>
<td>Organizers: Samuel Chang, Pace University; Beth Gerstner, Michigan State University; Bethany Johnson, City College of New York</td>
</tr>
</tbody>
</table>
| More effective conservation  
Organizers: David Johns, Marine Conservation Institute & Portland State University |
| What am I doing with my life? Career planning for conservation researchers and practitioners  
Organizers: Christian Rivera, Princeton University; Erin Betley, Mary Blair, and Nadav Gazit, Center for Biodiversity and Conservation, American Museum of Natural History; Eleanor Sterling, Hawaii Institute of Marine Biology, University of Hawai’i |
Welcome and Introduction
Ana Luz Porzecanski, Director, Center for Biodiversity and Conservation, American Museum of Natural History

Plenary Address
Beyond climate despair: navigating an age of crisis and engaging for change
Jennifer Atkinson, Associate Professor of Environmental Humanities, University of Washington

Break

Talk session 1
Tools for species management and conservation
- Entangled assumptions: sea turtles and paper parks in a small-scale fishery
  Allison Cutting
- The impact of population control on Asian black bear populations in Nagano, Japan
  Rinko Koido
- Climatic modelling predicts severe loss in range of endemic Himalayan toad
  Vishal Kumar Prasad

Break

Speed talk session 1
Habitats and landscapes
- Managing with logic in the Monarch Reserve
  Miramanni Mishkin
- Can urban parks be the suitable wingmen for protected areas?
  Annalee Anderson
- Climate-driven range shifts of a rare specialist bee and its host plant
  Mark Buckner
- Assessing habitat suitability, diversity, and activity patterns of NJ bats
  Amani Abdelsalam
- Temporal differences in forest disturbances in relation to community conservation
  Alexandria Cosby
- Characterizing mammal diversity on North American Great Lakes islands
  Nathaniel Wehr
- Effectiveness of sacred forests in biodiversity conservation: a meta-analysis
  Megan Sullivan

Break

Virtual poster session 1
Tools for species management and conservation
- Reconstructing recent stress and reproductive histories of Rice’s whales using baleen
  Rebecca Evey
- Acoustic deterrents (“pingers”) in reducing mortality of endangered river dolphins
  Merin Jacob
- Motion detecting camera traps for observing small nocturnal mammals in the tropics
  Tyler Savage
- Best practice hDNA extraction methods for fluid-fixed Malagasy microhylid frogs
  Meghan Forcellati
- Towards an assisted reproductive technology (ART) platform in songbirds
  Matthew Biegler
- Patterns of adrenal stress hormones in WWII-era Antarctic blue whales and fin whales
  Allison Case
- Nailing it! An evaluation of reproductive and stress hormones in elephant toenails
  Garrett Rich
- Ecological stressors are associated with soil biodiversity in North American forests
  Kaleb Frierson

Break

Adjourn
10:00am Welcome and Introduction
Felicity Arengo, Associate Director, Center for Biodiversity and Conservation, American Museum of Natural History

10:15am Talk session 2
Humans and nature
What makes a conservation-focused video effective?
Darius Mahdavi
Collaborative socio-ecological research in community owned forests of Nagaland, India
Ramya Nair
Salmonella and avian influenza virus dynamics of urban-born white ibis
Katherine Christie
Bird diversity in agricultural landscapes of Sikkim-Darjeeling, Himalaya, India
Bishal Thakuri
Woodpeckers as indicators of bird diversity and habitat structure in managed forests
Tarun Menon
Live Q&A

11:35am Break

11:45am Plenary Discussion
Inspiring careers in conservation: SCCS-NY alumni share their journeys in the conservation field
Abe Borker, Program Director, UCSC Doris Duke Conservation Scholars Program
Clare Gupta, Associate Cooperative Extension Specialist, UC Davis
Suzanne Pierre, Founder and Lead Investigator, Critical Ecology Lab

Moderator:
Mary Blair, Biodiversity Informatics Director, Center for Biodiversity and Conservation, American Museum of Natural History
Live Q&A

12:50pm Break

1:00pm Mentor cafés

1:45pm Break

2:00pm Speed talk session 2
Tools for species management and conservation
Estimating population abundance and age-structure of spinner dolphins off O‘ahu
Liah McPherson
Invasive mammals largely follow niche conservatism
Biswa Bhusana Mahapatra
Genetic reconstruction of the invasion history of Gambusia spp. in India
Nabin Roy
The possibility of using Nigerian Bird Atlas Project data for population monitoring
James Oni
How are sharks doing? An integrated risk assessment for effects of fishing
Alifa Haque
Unoccupied Aerial Vehicle use to study breeding Clapper Rail in Delaware, USA
Hailey Glasko
The importance of tiger corridors in conservation of vultures
Aakash Bhushan
Live Q&A

2:55pm Break

3:00pm Virtual poster session 2
Species distributions
Prediction of 3D habitat complexity using a trait-based approach in coral reefs
Sofia Ferreira
Biogeographic and Beta-diversity patterns for southern Africa’s native freshwater fish
Joseph Makaure
Biogeography and ecology of Squamata associated with karst formation
Rindra Ramananyatova
Avian assemblages across an urban gradient in the Jos Plateau
Anap Ishaku
Multi-temporal habitat models using machine learning in Google Earth
Gabriel Alejandro Perilla
Habitat use by sloth bear in Chitwan National Park, Nepal
Bharat Sharma
Affects of climate change on shorebird nesting phenology
Abby Good
Live Q&A

4:00pm Adjourn
10:00am  Welcome and Introduction
Ana Luz Porzecanski, Director, Center for Biodiversity and Conservation, American Museum of Natural History

10:15am  Talk session 3
Conservation in aquatic systems

Living alongside otters
Vinni Jain

Larval flows: estimating population connectivity of Hawaiian reef species
Emily Conklin

Review: phylogeography of elasmobranchs based on life history traits and biogeography
Sudha Kottillil

Characteristics of elasmobranch fisheries in Malvan provides insights for management
Shruthi Kottillil

Live Q&A

11:30am  Break

11:45am  Speed talk session 3
Social dimensions of conservation

Understanding global wildlife trade in the fashion industry
Siyeun Kim

Natural dye potential of invasive plant species for commercial textile applications
Abigail LaCarr

Benefit-cost analysis in adopting ecolabelling certification for oyster mariculture
Sam Cheplick

Legal changes in Protected Areas are an inconvenient truth for global biodiversity
Clarice Mendes

Overcoming the political divide to expand support for climate change policy
Scott Kleinberg

Understanding the fishers to change the bottom trawl fishery in India
Roshni Mangar

Live Q&A

12:45pm  Break

1:00pm  Mentor cafés

1:45pm  Break

1:55pm  Virtual poster session 3
Conservation and restoration in changing landscapes

The past, present, and potential future of phosphorus management in the Everglades
Quinn Zacharias

Invasive alien plant species and their influence in mammals habitat selection
Shreyashi Bista

Global patterns and drivers of human population densities within protected areas
Moses Elleason

Antelope responses to anthropogenic influences may allow their long-term persistence
Rohit Raj Jha

Restoring one billion oysters to New York Harbor by 2035: a collaborative effort
Jennifer Zhu

Monitoring adaptive silviculture for wildlife
Jahiya Clark

Ecology of Uraeotyphlus caecilians in the altered habitats of India’s Western Ghats
Ranjith Vengat

Flight capacity and extinction of birds in the Colombian Andes
Irmak Erdem

Influence of livestock grazing on summer distribution of blue sheep
Danyang Shi

Live Q&A
Virtual poster session 4
Humans and nature

Bird-window collisions on a university campus and nationwide survey in China
Winnie Liao

Amending Hungarian legislation by implementing seed transfer zones
David Cevallos

Wildbook: artificial intelligence, conservation, technology and you
Megan McDaniels

Traditional Ecological Knowledge of Kauri Indigenous People to conserve in the Raggiana
Challis Pulotu

Citizen science and roadkill trends in Korean herpetofauna
Yucheol Shin

Tibetan herders’ motivation for monitoring snow leopards in Sanjiangyuan, China
Yue Yu

Exploring people’s relationships with nature through private land conservation
Rocio Lopez de la Lama

Using Local Ecological Knowledge to inform pangolin conservation in Thailand
Coral Keegan

The effect of helicopter noise pollution on birds on Governors Island
Leila Winn

Live Q&A

On-site

5:30-6:45pm Conference Reception  |  On-site Check-In
Arthur Ross Terrace, American Museum of Natural History
Please enter at 81st Street between Central Park West and Columbus Avenue

7:00-8:00pm Special Public Program

SciCafe: Cool Solutions for Hot Cities

Hall of the Universe

Timon McPherson
Professor of Urban Ecology & Director of the Urban Systems Lab, The New School

What is the role of urban natural spaces in adaptation to climate change?

Can cities like New York adequately prepare for the looming crisis?

Dr. Timon McPherson uses Big Data and Artificial Intelligence in scientific research geared to creating equitable and resilient cities. In this SciCafe, McPherson will discuss our new climate reality and insights from the latest Intergovernmental Panel on Climate Change reports, the important role of urban centers such as New York City in the development of climate change adaptation strategies, and the science behind potential solutions that are currently under investigation.

This event is a collaboration between the AMNH Public Programs and the Center for Biodiversity and Conservation’s Mack Lipkin Man and Nature Series.

The Mack Lipkin Man and Nature Series was established in honor of Dr. Mack Lipkin, Sr., by his many friends and admirers. Dr. Lipkin was a physician who was a gentle and powerful force in advancing the most humane and caring practices of medicine.
WORKSHOPS
Session 2 | On-site

Check-in at Kauffman Theater Desk at 1:15pm

Expanding your teaching toolbox: An introduction to active teaching and scientific teaching approaches
Organizers: Ana Luz Porzecanski and Suzanne Macey, Center for Biodiversity and Conservation, American Museum of Natural History

Forensic entomology: Using insects of forensic importance to monitor biodiversity
Organizers: Denise Gemmellaro, Kean University

Museum exhibition design for post-pandemic audiences
Organizer: Anne Ricculli, Morris Museum, NJ (Smithsonian Affiliate)

Natural dyes from invasive plant species
Organizers: Anne Bower and Becky Flax, Thomas Jefferson University

Applications of museum collections and phylogenomics to biodiversity conservation: Part 2 (optional)
Organizers: Mary Blair, Center for Biodiversity and Conservation, American Museum of Natural History; Luca Pozzi, University of Texas at San Antonio; Anna Penna, University of Texas at San Antonio and Smithsonian National Museum of Natural History; Stephen Gaughran, Princeton University; Megan Wallace, Institute for Comparative Genomics, American Museum of Natural History; Lauren Clark, Institute for Comparative Genomics, American Museum of Natural History; Alexander Salis, Vertebrate Zoology, American Museum of Natural History; Evon Hekkala, Fordham University; Melina Giakouris, The Graduate Center, City University of New York
Plenary Speaker

Jennifer Atkinson
Associate Professor of Environmental Humanities, University of Washington

Beyond climate despair: Navigating an age of crisis and engaging for change

The age of climate consequences is upon us, and anxiety and despair are on the rise. After decades of focusing primarily on the external environmental impacts, the climate movement is beginning to take emotions seriously. Educators, activists and mental health professionals increasingly acknowledge that in facing the challenges ahead, we will need more than new policies and technology: we will also need the internal resources to build resilience for a climate-changed future. This talk will offer strategies for navigating the emotional fallout of our warming world – fear, anger, hopelessness and grief – and channel those emotions into creating a more just a sustainable future.

Dr. Jennifer Atkinson is an author and Associate Professor of environmental humanities at the University of Washington. Her seminars on Eco-Grief & Climate Anxiety have been featured in the New York Times, Washington Post, Los Angeles Times, Seattle Times, NBC News and many other outlets. Dr. Atkinson is currently working on a book titled An Existential Toolkit for the Climate Crisis, which offers strategies to help young people navigate the emotional toll of climate breakdown. She leads public seminars on climate and mental health in partnership with youth activists, psychologists, climate scientists and policy makers. Her podcast “Facing It” also gives people tools to channel eco-anxiety into action.
Spatial niche partitioning allows coexistence of armadillos and gopher tortoises
Namrata Bhandari
Valdosta state university, Valdosta, GA, USA

Salmonella and avian influenza virus dynamics of urban-born white ibis
Katherine Christie1, Julia Silva Seixas1, William Norfolk2, Rebecca L. Poulsen4, R. Scott Razier1, Erin Lipp1, Sonia M. Hernandez1,2
1Dalhousie University, Dalhousie, Canada; 2Department of Zoology, University of Toronto, Toronto, Ontario, Canada; 3Centre for Wildlife Studies, Mysuru, India; 4College of Public Health, University of Georgia, Athens, GA, USA

Larval flows: estimating population connectivity of Hawaiian reef species
Emily Conklin1, Evan Barba1, Luz Angela López de Mesa Aguado1, Chris Bird2, Anna Neuheimer1
1Hawaii Institute of Marine Biology, University of Hawaii, Kāne‘ohe, HI, USA; 2Department of Life Sciences, Texas A&M University—Corpus Christi, Corpus Christi, TX, USA; 3Aarhus Institute of Advanced Studies (AIAS), Aarhus University, Aarhus, Denmark

Entangled assumptions: sea turtles and paper parks in a small-scale fishery
Allison Cutting1, Terre Satterfield, Rashid Sumaila, Luca Marsaglia, Manuel Cortez1
1University of British Columbia

Living alongside otters
Vinni Jain1, Krithi K. Karanth1, Mahi Puri2
1Centre for Wildlife Studies, University of Georgia; 2Ashoka University

The impact of population control on Asian black bear populations in Nagano, Japan
Ririko Koido1,2, Misako Kuroe1, Hitoshi Kuga1, Naoki Ohnishi1, Ryosuke Kishimoto1, Yoshiaki Tsuda1
1Doctoral program in Biology, University of Tsukuba, Tsukuba, Ibaragi, Japan; 2Graduate school, University of Tsukuba, Ibaragi, Japan; 3National Centre for Biological Sciences, Bengaluru, Karnataka, India

Characteristics of elasmobranch fisheries in Malvan provides insights for management
Shruthi Kottillil1, Trisha Gupta1, Muralidharan Manoharakrishnan1, Chetan Rao1, Kartik Shanker1,2,3
1Dakshin Foundation, Bangalore, Karnataka, India; 2TERI School of Advanced Studies (TERI SAS), New Delhi, India; 3Centre for Ecological Sciences, Indian Institute of Science, Bangalore, Karnataka, India

Review: phylogeography of elasmobranchs based on life history traits and biogeography
Sudha Kottillil1, Chetan Rao1, Brian Bowen2, Kartik Shanker1,2
1TERI School of Advanced Studies, India; 2Centre for Ecological Sciences, Indian Institute of Science, Karnataka, India; 3Dakshin Foundation, Bangalore, Karnataka, India; 4Hawaii Institute of Marine Biology, Hawaii

What makes a conservation-focused video effective?
Darius J. Mahdavi, Daniel K. Riskin, Shelby H. Riskin
1Department of Ecology and Evolutionary Biology, University of Toronto; 2Department of Biology, University of Toronto Mississauga

Woodpeckers as indicators of bird diversity and habitat structure in managed forests
Tarun Menon1,2,3, Ghazala Shahabuddin4
1Centre for Ecology Development and Research; 2National Centre for Biological Sciences; 3Indian Institute of Science; 4Ashoka University

Collaborative socio-ecological research in community owned forests of Nagaland, India
Ramya Nair1, Alemba Yimkhiung1, Jona Yimkhiung2, Hankiumong Yimkhiung1, Kiyamong Yimkhiung1, Retsocham Yimkhiung1, Rethsuthong Yimkhiung1, Yapmuli Yimkhiung1, Shekhumcha Yimkhiung1, Sahil Nijhawan2,3,4
1Wildlife Protection Society of India, New Delhi, India; 2Nature Conservation Foundation, Mysuru, India; 3University College London, London, United Kingdom; 4Zoological Society of London, London, United Kingdom

Climatic modelling predicts severe loss in range of endemic Himalayan toad
Vishal Kumar Prasad1,2, Desiree Andersen1, Ghazala Shahabuddin1,4, Amaël Borzée3
1Laboratory of Animal Behaviour and Conservation, College of Biology and the Environment, Nanjing Forestry University, Nanjing, People’s Republic of China; 2Wildlife Institute of India, P.O. Box 18, Chandrabani, Dehradun – 248001, Uttarakhand, India; 3Laboratory of Animal Communications, Ewha Womans University, Seoul, Republic of Korea; 4Ashoka University, Rajiv Gandhi Education City, Sonipat – 131029, Haryana, India

Bird diversity in agricultural landscapes of Sikkim-Darjeeling, Himalaya, India
Bishal Thakuri, Bhog Kumar Acharya
Department of Zoology, School of Life Sciences, Sikkim University, Gangtok, Sikkim-737002, India
Assessing habitat suitability, diversity, and activity patterns of NJ bats
Amani Abdelsalam, Camilio A. Calderón-Acevedo, J. Angel Soto-Centeno
Department of Earth and Environmental Sciences, Rutgers University–Newark, Newark, USA

Can urban parks be the suitable wingmen for protected areas?
Annalee Anderson1, Olivia Smith, Abbey McComb, Anant Deshwai
Bradley University

The importance of tiger corridors in conservation of vultures
Aakash Bhushan, Sandeep Chouksey, Aniruddha Dhamonikar, Rahul Talegaonkar, Upendra Dubey, Malvika Colvin, Soumen Dey
Central India Landscape, WWF-India, New Delhi, India

Climate-driven range shifts of a rare specialist bee and its host plant
Mark A. Buckner, Bryan N. Danforth
Cornell University, Department of Entomology, Ithaca, New York, USA

Benefit-cost analysis in adopting eco labelling certification for oyster mariculture
David S. Cheplick1, Marzieh Motallebi, Michael Vassalos
Washington Sea Grant

Temporal differences in forest disturbances in relation to community conservation
Alexandria E. Cosby1, Bertrand Andriatsitohaina1,2, Brandon P.M. Edwards2, Mamy H.R. Maheritafika1,2,3, Mamy Razazftolama1,2, Travis S. Steffens1,2
University of Guéthary, Guéthary, CN, Canada; 1University of Guéthary, Guéthary, CN, Canada; 3Université de Mahajanga, Mahajanga, Madagascar; 4Carleton University, Ottawa, ON, Canada; 5University of Antananarivo, Antananarivo, Madagascar

Unoccupied Aerial Vehicle use to study breeding Clapper Rail in Delaware, USA
Hailey Glasko, Elisa Elizondo, Gregory Shriver
University of Delaware, Newark, DE, USA

The enigma of lion and human coexistence in the Saurashtra landscape
Keshab Gogoi, Yadavendra V. Jhala
Wildlife Institute of India, Dehradun, India

How are sharks doing? An integrated risk assessment for effects of fishing
Alifa Bintha Haque1, Samantha Sherman
1Nature-based Solutions Initiative, Department of Zoology, University of Oxford, Oxford, UK; 2Department of Biological Sciences, Earth to Oceans Research Group, Simon Fraser University, Burnaby, British Columbia, Canada

Understanding global wildlife trade in the fashion industry
Siyeun Kim
EcoHealth Alliance, University of Washington

Overcoming the political divide to expand support for climate change policy
Scott Kleinberg
Peace University

Natural dye potential of invasive plant species for commercial textile applications
Abigail LaCour1, Emily Akealtis1, Lauren Blanck1, Jessica Alashoushi1, Zoë Berger1, Samsad Jahan1, Angela Sidoti1, Becky Flax1, John Milligan1, Marlena Washington1, Anne Bower1
1Thomas Jefferson University, College of Life Sciences, Philadelphia, PA, USA; 2Thomas Jefferson University, School of Design and Engineering, Philadelphia, PA, USA

Invasive mammals largely follow niche conservatism
Biswa Bhusana Mahapatra1, Aravind N.1
1Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore, Karnataka, India; 2Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, India

Understanding the fishers to change the bottom trawl fishery in India
Roshni Mangar1, Amanda Vincent2,3, Sarah Foster2
1Project Seahorse Laboratory; 2Institute of Oceans and Fisheries

Estimating population abundance and age-structure of spinner dolphins off Oahu
Liah McPherson, Fabien Vivier, Lars Bejder
Marine Mammal Research Program, Hawaii Institute of Marine Biology, University of Hawai'i at Manoa, Manoa, HI, USA

Legal changes in Protected Areas are an inconvenient truth for global biodiversity
Clarice Mendes, Jayme Prevedello
Landscape Ecology Lab, Rio de Janeiro State University, Rio de Janeiro, Brazil

Managing with logic in the Monarch Reserve
Miramanni Mishkin
Universidad Nacional Autonoma de Mexico

The possibility of using Nigerian Bird Atlas Project data for population monitoring
James Paul Oni
Ogba Zoo and Natural Park, Nigeria

Genetic Reconstruction of the Invasion History of Gambusia spp. in India
Nobinraja M.1,2, Ravikanth G.1
1Ashoka Trust For Research In Ecology And The Environment, Bangalore, Karnataka, India; 2Manipal Academy of Higher Education, Manipal, Karnataka, India

Effectiveness of sacred forests in biodiversity conservation: a meta-analysis
Megan K. Sullivan1,2, Luke Browne1, Juan Carlos Penagos Zuluaga1,2, Jasmine Liu1, Akshay Surendra1,2, Sergio Estrada-Villegas1,2
1School of the Environment, Yale University, New Haven, CT, USA; 2New York Botanical Garden, Bronx, NY, USA

Characterizing mammal diversity on North American Great Lakes islands
Nathanial H. Wehr1, Hailey M. Boone1, Samuel R. Wehr2, Jerrold L. Belant1
1State University of New York College of Environmental Science and Forestry, Syracuse, NY, USA; 2Oberlin College, Oberlin, OH, USA

Invasive species largely follow niche conservatism
Biswa Bhusana Mahapatra1, Aravind N.1
1Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore, Karnataka, India; 2Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, India

Benefit-cost analysis in adopting eco labelling certification for oyster mariculture
David S. Cheplick1, Marzieh Motallebi, Michael Vassalos
Washington Sea Grant

Temporal differences in forest disturbances in relation to community conservation
Alexandria E. Cosby1, Bertrand Andriatsitohaina1,2, Brandon P.M. Edwards2, Mamy H.R. Maheritafika1,2,3, Mamy Razazftolama1,2, Travis S. Steffens1,2
University of Guéthary, Guéthary, CN, Canada; 1University of Guéthary, Guéthary, CN, Canada; 3Université de Mahajanga, Mahajanga, Madagascar; 4Carleton University, Ottawa, ON, Canada; 5University of Antananarivo, Antananarivo, Madagascar

Unoccupied Aerial Vehicle use to study breeding Clapper Rail in Delaware, USA
Hailey Glasko, Elisa Elizondo, Gregory Shriver
University of Delaware, Newark, DE, USA

The enigma of lion and human coexistence in the Saurashtra landscape
Keshab Gogoi, Yadavendra V. Jhala
Wildlife Institute of India, Dehradun, 248002, India

How are sharks doing? An integrated risk assessment for effects of fishing
Alifa Bintha Haque1, Samantha Sherman
1Nature-based Solutions Initiative, Department of Zoology, University of Oxford, Oxford, UK; 2Department of Biological Sciences, Earth to Oceans Research Group, Simon Fraser University, Burnaby, British Columbia, Canada

Understanding global wildlife trade in the fashion industry
Siyeun Kim
EcoHealth Alliance, University of Washington

Overcoming the political divide to expand support for climate change policy
Scott Kleinberg
Peace University

Natural dye potential of invasive plant species for commercial textile applications
Abigail LaCour1, Emily Akealtis1, Lauren Blanck1, Jessica Alashoushi1, Zoë Berger1, Samsad Jahan1, Angela Sidoti1, Becky Flax1, John Milligan1, Marlena Washington1, Anne Bower1
1Thomas Jefferson University, College of Life Sciences, Philadelphia, PA, USA; 2Thomas Jefferson University, School of Design and Engineering, Philadelphia, PA, USA

Invasive mammals largely follow niche conservatism
Biswa Bhusana Mahapatra1, Aravind N.1
1Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore, Karnataka, India; 2Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, India

Understanding the fishers to change the bottom trawl fishery in India
Roshni Mangar1, Amanda Vincent2,3, Sarah Foster2
1Project Seahorse Laboratory; 2Institute of Oceans and Fisheries

Estimating population abundance and age-structure of spinner dolphins off Oahu
Liah McPherson, Fabien Vivier, Lars Bejder
Marine Mammal Research Program, Hawaii Institute of Marine Biology, University of Hawai'i at Manoa, Manoa, HI, USA

Legal changes in Protected Areas are an inconvenient truth for global biodiversity
Clarice Mendes, Jayme Prevedello
Landscape Ecology Lab, Rio de Janeiro State University, Rio de Janeiro, Brazil

Managing with logic in the Monarch Reserve
Miramanni Mishkin
Universidad Nacional Autonoma de Mexico

The possibility of using Nigerian Bird Atlas Project data for population monitoring
James Paul Oni
Ogba Zoo and Natural Park, Nigeria

Genetic Reconstruction of the Invasion History of Gambusia spp. in India
Nobinraja M.1,2, Ravikanth G.1
1Ashoka Trust For Research In Ecology And The Environment, Bangalore, Karnataka, India; 2Manipal Academy of Higher Education, Manipal, Karnataka, India

Effectiveness of sacred forests in biodiversity conservation: a meta-analysis
Megan K. Sullivan1,2, Luke Browne1, Juan Carlos Penagos Zuluaga1,2, Jasmine Liu1, Akshay Surendra1,2, Sergio Estrada-Villegas1,2
1School of the Environment, Yale University, New Haven, CT, USA; 2New York Botanical Garden, Bronx, NY, USA

Characterizing mammal diversity on North American Great Lakes islands
Nathanial H. Wehr1, Hailey M. Boone1, Samuel R. Wehr2, Jerrold L. Belant1
1State University of New York College of Environmental Science and Forestry, Syracuse, NY, USA; 2Oberlin College, Oberlin, OH, USA
Towards an assisted reproductive technology (ART) platform in songbirds
Matthew T. Biegler, Anna Keyte, Wei Wang, Ji-Dung Luo, Kirubel Belay, Asha Sidhu, Elijah Harter, Christina Szi, Paul Collier, Hagen U. Tilgner, Thomas Carroll, Erich D. Jarvis
The Rockefeller University, New York, NY, USA; Weill Cornell Medicine, New York, NY, USA

Invasive alien plant species and their influence in mammals habitat selection
Shreyashi Bista, Lakmi Raj Joshi, Mahadev Bista, Bijaya Neupane, Bipina Singh Dhami
Institute of Forestry, Nepal

Patterns of adrenal stress hormones in WWII-era Antarctic blue whales and fin whales
Allison Case, Alyson Fleming, Kathleen Hunt, Janine L. Brown, Matthew Savoca, John Ososky, Michael McGowen
1 George Mason University, Manassas, VA, USA; 2 University of North Carolina Wilmington, Wilmington, NC, USA; 3 Smithsonian-Mason School of Conservation, Front Royal, VA, USA; 4 Center for Species Survival, Smithsonian Conservation Biology Institute, Front Royal, VA, USA; 5 Hopkins Marine Station, Stanford University, Pacific Grove, CA, USA; 6 Department of Vertebrate Zoology, National Museum of Natural History, Washington, DC, USA

Amending Hungarian legislation by implementing seed transfer zones
Cevallos David, Bede-Fazekas Ákos, Kovendi-Jako Anna Szitari Katalin, Tanacs Eszter, Halassy Melinda, Torok Katalin
1 Department of Plant Systematics, Ecology and Theoretical Biology, Eotvos Lorand University, Budapest, Hungary; 2 Centre for Ecological Research, Institute of Ecology and Botany, Vácrátót, Hungary; 3 Department of Environmental and Landscape Geograhy, Eotvos Lorand University, Budapest, Hungary; 4 Landscape and Conservation Ecology Research Group, Centre for Ecological Research, Institute of Ecology and Botany, Hungary

Monitoring adaptive silviculture for wildlife
Jahiya Clark, Alexe Siren, Toni Lyn Morelli
University of Massachusetts, Amherst

Siang river in Arunachal Pradesh splits red panda into two phylogenetic species
Supriyo Dalui, Avijit Ghosh
1 University of Calcutta, Kolkata, West Bengal, India; 2 Zoological Survey of India, Kolkata, West Bengal, India

Global patterns and drivers of human population densities within protected areas
Moses Eleassion, Eben Goodale, Christos Mammides
Guangxi University, China

Flight capacity and extinction of birds in the Colombian Andes
Imark Erdem
University of Toronto, Toronto, ON, Canada

Reconstructing recent stress and reproductive history of Rice’s whales using baleen
Rebecca Evey, Matthew Savoca, John Ososky, Michael McGowen, Jeremy Goldbogen, Kathleen Hunt
1 George Mason University, Fairfax, VA, USA; 2 Hopkins Marine Station, Pacific Grove, CA, USA; 3 Smithsonian-Mason National Museum of Natural History, Washington D.C., USA; 4 Smithsonian Mason School of Conservation, Front Royal, VA, USA

Prediction of 3D habitat complexity using a trait-based approach in coral reefs
Sofia Ferreira
University of Hawaii at Hilo, Hawaii

Best-practice hDNA extraction methods for fluid-fixed Malagasy microhylid frogs
Meghan R. Forcellati, Alexander T. Salis, Christopher J. Raxworthy
Columbia University, New York, New York, USA

Ecological stressors are associated with soil biodiversity in North American forests
Kaleb J. Frierson, John M. Carlile, Andrea Dávalos
SUNY Cortland, New York, USA

Affects of climate change on shorebird nesting phenology
Autum Blanchard, Emily Bonds, Marisla Bongiovanni, Abby Good, Faith Huntley, Hampton Warner
Clemson University, Clemson, SC, USA

Avian assemblages across an urban gradient on the Jos Plateau
Afan Anap Ishaku, Iwajomo Soladoye, Dami Filiibus Danjuma
University of Jos, Nigeria

Acoustic deterrents ("pingers") in reducing mortality of Endangered River dolphins
Merin Jacob, Aaranya Gayathri, Vishnupriya Kolipakam, Hiyashi Sarma, Syeda Tabassum Tasfia, Sunny Deori, Anurag Rokade, Ranjana Negi, Abdul Wakid, Qamar Qureshi
Wildlife Institute of India, Chandrabani, Dehradun – 248001, Uttarakhand, India

Antelope responses to anthropogenic influences may allow their long-term persistence
Rohit Raj Jha, Kavita Isvaran
Louisiana State University

Using Local Ecological Knowledge to inform pangolin conservation in Thailand
Coral Keegan, Saravanee Namsupak, Eileen Larney
1 Yale School of the Environment, New Haven, CT, USA; 2 Zoological Society of London, Kanchanaburi, Thailand

Bird–window collisions on a university campus and nationwide survey in China
Shu-Yueh Liao, Danyang Shi, Binvin V. Li
Duke Kunshan University, Kunshan, Jiangsu, CN

Exploring people’s relationships with nature through private land conservation
Rocio Lopez de la Lama, Kai Chan
1 University of British Columbia

Biogeographic and β-diversity patterns for southern Africa’s native freshwater fish
Joseph Makaure, D.J. Stewart
1 SUNY College of Environmental Science and Forestry
Wildbook: artificial intelligence, conservation technology, and you
Tanya Berger-Wolf1, Jason Holmberg2, Charles Stewart2, Megan McDaniels1, Jason Parham3, Daniel Rubenstein4, Jonathan Crall1, Jacob Levenson5, Jonathan Van Oast1, Drew Blount1, Colin Kingen1, Benjamin Scheiner1, Tanya Stere1, Mark Fisher1, Howard Windsor1
1Wild Me, Portland, OR, USA; 2Translational Data Analytics Institute and Department of Computer Science and Engineering, Ohio State University, Columbus, OH, USA; 3Department of Computer Science, Rensselaer Polytechnic Institute, Troy, NY, USA; 4Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ, USA; 5U.S. Department of the Interior, Washington, DC, USA

In multi-temporal habitat models using Machine learning in Geneva Earth Engine
Gabriel-Alejandro Perilla1, Luis Romero Jiménez1, Helena Olaya-Herrera1, Carlos Jair Muñoz1, Cristian A. Cruz-Rodriguez1, Hector Manuel Arango1, Dairo A. Escobar Ardila1, Erika Suarez-Valencia1, Elkin A. Noguera-Urbano1
Instituto Humboldt, Colombia

Invasive armored catfish: a major problem in freshwater conservation
Yasmin Quintana
University of Texas AT&M

Biogeography and ecology of Squamata associated with karst formation
Rindra Ramanjaratavo1, Hajaniaina Rasoloarison2, Randriambinintsoa Tiavina2
1United Nations Development Programme (UNDP), Toliara, Madagascar; 2University of Mahajanga, Mahajanga, Madagascar; 3University of Antananarivo, Antananarivo, Madagascar

Nailing it! An evaluation of reproductive and stress hormones in elephant toenails
Garrett Rich1, Rebecca Stennett2, Marie Galloway2, Mike McClure2, Rebecca Riley1, Elizabeth Freeman1, Kathleen Hunt1
1Georgia Mason University, Fairfax, Virginia, USA; 2The Maryland Zoo in Baltimore, Baltimore, Maryland, USA; 3Smithsonian’s National Zoo and Conservation Biology Institute, Washington DC, USA

Motion detecting camera traps for observing small nocturnal mammals in the Tropics
Tyler Savage1, Erin Avanzato2, Kelly Bayruns2, Zinnia Ruch2, Jeffrey Klemens1
1Thomas Jefferson University, Philadelphia, Pennsylvania, USA; 2Wildlife Institute of India

Habitat use by sloth bear in Chitwan National Park, Nepal
Bharat Sharma1, S. Sathyakumar1
1Asia Network for Sustainable Agriculture and Bioresources; 2Wildlife Institute of India

Influence of livestock grazing on summer distribution of blue sheep Pseudois nayaur
Danyang Shi
Duke Kunshan University, Kunshan, Jiangsu, China

Citizen science and roadkill trends in the Korean herpetofauna
Yuchao Shin1,2, Kyungmin Kim1, Jordy Groffen1, Amael Borzee1
1Department of Biological Sciences, Kangwon National University, Chunchon, Gangwon-do, Republic of Korea; 2Laboratory of Animal Behaviour and Conservation, College of Biology and the Environment, Nanjing Forestry University, Nanjing, People’s Republic of China; 3Interdisciplinary Program of EcoCreative, Ewha Womans University, Seoul, Republic of Korea; 4Department of Fish and Wildlife Conservation, Virginia Tech, Blacksburg, Virginia, USA

Propagule pressure of invasive Lantana camara is correlated with canopy cover
Yukti V. Taneja1, Navendu V. Page1, R. Suresh Kumar2, Rohit Naniwadekar3
1Wildlife Institute of India, India

Ecology of Uraeotyphlus caecilians in the altered habitats of India’s Western Ghats
Ranjith Vengat1,2, David J. Gower1, Ramachandran Kolharambath1
1Centre of Education, Kerala, India

The role of community committee in the sustainable management of caterpillar fungi
Junyan Wang
Beijing Fuqun Social Service Center, China

The effect of helicopter noise pollution on birds on Governors Island
Leila Winn, Katie Schneider-Paolantonio
New York University, New York, USA

Tibetan herders’ motivations for monitoring snow leopards in Sanjiangyuan, China
Yue Yu1, Yufang Gao1, Nan Jiang1, Xiang Zhao2
1Yale School of the Environment, New Haven, CT, USA; 2Shan Shui Conservation Center, Beijing, Beijing, China

Restoring one billion oysters to New York Harbor by 2035: a collaborative effort
Jennifer Zhu, Danielle Bissett, Tatiana Castro
Billion Oyster Project, New York, NY, USA

The past, present and potential future of phosphorus management in the Everglades
Quinn Zacharias1,2, David Kaplan1
1Yale School of the Environment, New Haven, CT, USA; 2University of Florida, Gainesville, FL, USA

In alphabetical order
Presenters
Posters
In presenter's last name

16
Special thanks are due to all those who have given so generously of their time and talents to advise, review, and mentor. They include:

**Dan Ardia**
Franklin & Marshall College

**Felicity Arengo**
American Museum of Natural History

**Daniel Baldassarre**
The State University of New York Oswego

**Erin Betley**
American Museum of Natural History

**Mary Blair**
American Museum of Natural History

**Bekka Brodie**
Columbia University

**John Cigliano**
Cedar Crest College

**Christina Colon**
Kingsborough Community College

**Sunny Corrao**
NYC Department of Parks and Recreation

**Georgina Cullman**
NYC Department of Parks and Recreation

**Stephanie Cziczo**
New York University

**Kristin Douglas**
American Museum of Natural History

**Diego Ellis Soto**
Yale School of the Environment

**Nick Friedenberg**
Cold Spring Harbor Laboratory

**Stephen Gaughran**
Princeton University

**Nadav Gazit**
American Museum of Natural History

**Anthony Giordano**
SPECIES

**Andrés Gómez**
ICF International, Inc.

**Martha Groom**
University of Washington

**Evan Hekkala**
Fordham University; American Museum of Natural History

**Ned Horning**
American Museum of Natural History

**Christina Imrich**
Coaching & Consulting

**David Johns**
Portland State University

**Jeffrey Klemens**
Thomas Jefferson University

**Kimberly Landigan**
American Museum of Natural History

**Jenna Lawrence**
Columbia University

**Barnaby Marsh**
Saint Partners

**Suzanne Macey**
American Museum of Natural History

**Nicole Mihnovets**
Columbia University

**Ivan Monagan**
Columbia University

**Eugenia Naro-Maciel**
New York University

**Matt Palmer**
Columbia University

**Natalia Piland**
The Nature Conservancy

**Ana Luz Porzecanski**
American Museum of Natural History

**Luca Pozzi**
University of Texas

**Simon Queenborough**
Yale School of the Environment

**Anne Ricculi**
Drew University

**Christian Rivera**
Princeton University

**Jessica Rothman**
Hunter College

**Dan Rubenstein**
Princeton University

**Kimberley Russell**
Rutgers University

**Manette Sandor**
Columbia University

**Amanda Sigouin**
American Museum of Natural History

**Neha Savant**
NYC Department of Parks and Recreation

**Kaia Tombak**
Hunter College

**Laura Twersky**
St. Peter’s University

**Eleanor Sterling**
Hawaii Institute of Marine Biology, University of Hawai‘i, American Museum of Natural History

**Anne Toomey**
Pace University

**Stefanie Wilks**
Columbia University

**Sylvia Wood**
NYC Department of Parks and Recreation
Center for Biodiversity and Conservation

The Center for Biodiversity and Conservation (CBC) at the American Museum of Natural History was established in 1993 in response to concern among its scientists over rapid species loss and increasing ecosystem degradation around the world, and to leverage Museum resources to heighten public understanding and stewardship of biodiversity. Entering its third decade, the CBC transforms knowledge into conservation action through pioneering multidisciplinary collaborative research, capacity development, and by convening and connecting key actors. The CBC has developed a distinctive approach, fostering co-creative processes with strategic partners across all of our programs and projects. CBC staff members, including multiple conservation scientists and outreach specialists, work closely with communities and local partners to establish common goals and research priorities; design, implement, evaluate, and adaptively manage model conservation programs; and share results with people facing similar challenges. Thus our work spans the full cycle of conservation action, connecting diverse perspectives and sources of knowledge to conservation problems and solutions.