Major funding for the 2021 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:

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><strong>Tuesday</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Wednesday</strong></td>
<td>7</td>
</tr>
<tr>
<td><strong>Thursday</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>Friday</strong></td>
<td>8</td>
</tr>
<tr>
<td>Workshops</td>
<td>9</td>
</tr>
<tr>
<td>Plenary</td>
<td>10</td>
</tr>
<tr>
<td>Presenter Information</td>
<td>11</td>
</tr>
<tr>
<td>Guide to Posters</td>
<td>13</td>
</tr>
<tr>
<td><strong>Session A</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Session B</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Session C</strong></td>
<td>14</td>
</tr>
<tr>
<td><strong>Session D</strong></td>
<td>14</td>
</tr>
<tr>
<td>Advisers, Reviewers, and Mentors</td>
<td>15</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! [#sccsny2021](https://twitter.com/sccsny2021)

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 2021 (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 2021 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 from 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
6

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

10:15am Plenary Address
Our relationship to the environment, past and future: lessons from engaged archaeological research
Kristina Douglass, Assistant Professor of Anthropology and African Studies, The Pennsylvania State University

11:00am Break

11:10am Talk session 1
Studying biodiversity in human-dominated systems
Moderator: Christian Rivera, PhD Candidate, University of Florida

A mixed-methods assessment of human-elephant conflict trends in northwestern Botswana
Megan McDaniels

Cost-effective auditory detection of coyotes in urban spaces using neural networks
Hunter Dillard-Jakubowicz

An integrated approach to prioritize carnivore conservation in shared landscapes
Mahi Puri

Water quality, biodiversity & ecosystem function of urbanized marine environments
Rinaldi Gotama

12:30pm Break

12:45pm Mentor cafés

1:30pm Break

1:45pm Speed talk session 1
New approaches for understanding biodiversity change over time
Moderator: Suzanne Macey, Program Manager and Biodiversity Scientist, Center for Biodiversity and Conservation, American Museum of Natural History

Newspaper archives suggest changes in whale species composition in the NY Bight
Danielle Brown

Distribution and current status of the larval tooth sawfish in Costa Rica
Jorge Valerio

Orphans without megafauna: can dispersal by water help Malagasy baobabs to survive?
Seheno Andriantsaralaza

Transgenes of genetically modified animals detected via environmental DNA
Charles Xu

Pleistocene fossils recontextualize the ecology of introduced turkeys in California
Ashwin Sivakumar

2:50pm Break

3:00pm Virtual poster session A
Wildlife research methods
Moderator: Amanda Sigouin, Biodiversity Specialist, Center for Biodiversity and Conservation, American Museum of Natural History

3:40pm Break

3:45pm Virtual poster session B
Wildlife management approaches
Moderator: Nadav Gazit, Visual Creative and Research Assistant, Center for Biodiversity and Conservation, American Museum of Natural History

4:30pm Adjourn
10:00am Welcome and Introduction
Felicity Arengo, Associate Director, Center for Biodiversity and Conservation, American Museum of Natural History

10:15am Plenary Discussion
Inspiring careers in conservation: SCCS-NY alumni share their journeys in the conservation field
Leo Douglas, Clinical Assistant Professor, New York University
Kaitlyn Parkins, Associate Director of Conservation and Science, NYC Audubon
Andrea Reid, Assistant Professor, The University of British Columbia
Moderator: Samantha Cheng, Biodiversity Scientist, Center for Biodiversity and Conservation, American Museum of Natural History

11:20am Break

11:30am Talk session 2
Novel methods in biodiversity research
Moderator: Felicity Arengo, Associate Director, Center for Biodiversity and Conservation, American Museum of Natural History

12:50pm Break

1:00pm Mentor cafés

1:45pm Break

2:00pm Speed talk session 2
Habitat management and restoration
Moderator: Ivan Monagan, PhD Candidate, Columbia University

Habitat disturbance trumps moonlight effects on the activity of tropical bats
Giulliana Appel

Introduced rats (Rattus rattus) in Puerto Rico, seed dispersers or seed predators?
Jahdil Torres-Caba

How do biological communities respond to habitat amount gain or loss?
Clarice Mendes

Habitat predictors of a vertebrate community in a fragmented Neotropical landscape
Keerthikrutha Seetharaman

Tropical dry forest restoration: the effectiveness of fertilization and irrigation
Laura Toro

Examining ecological interactions of urban tree & vertebrate species in Delhi, India
Vallon Sheel

Apes in space: mapping hunter-great ape overlap in Congo’s swamp forests
Katherine Meier

2:55pm Break

3:00pm Virtual poster session C
Land use and landscapes
Moderator: Erin Betley, Biodiversity Specialist, Center for Biodiversity and Conservation, American Museum of Natural History

3:40pm Break

3:45pm Virtual poster session D
Conservation in social-ecological contexts
Moderator: Kim Landrigan, Capacity Development Specialist, Center for Biodiversity and Conservation, American Museum of Natural History

4:30pm Adjourn

7:00pm Special Public Program
SciCafe: Humans, Culture, and Climate Change
How can we better understand the dynamic relationship between humans and their environment over time, especially in a time of rapid climate change?
Kristina Douglass, Assistant Professor of Anthropology and African Studies, The Pennsylvania State University

Introduction: Eleanor Sterling, Jaffe Chief Conservation Scientist, Center for Biodiversity and Conservation, American Museum of Natural History

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.
Thursday  
October 7, 2021

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

10:15am  Talk session 3  
Wildlife harvest and trade  
Moderator:  
Mary Blair, Director, Biodiversity Informatics Research, Center for Biodiversity and Conservation, American Museum of Natural History

The online trade of freshwater turtles and tortoises in the Philippines  
Antonio Lorenzo II

Corporate actors in high seas fisheries  
Gabrielle Carmine

Evaluating white-tailed deer management program effectiveness in southeastern NY  
Ralph Green

Farmed or poached? The trade of live Indonesian birds in the Philippines  
Josef Job Raymundo

11:00am  Break

11:45am  Speed talk session 3  
Exploring peoples’ relationship with nature  
Moderator:  
Peter Galante, Biodiversity Informatics Scientist, Center for Biodiversity and Conservation, American Museum of Natural History

Agriculture, wildlife, and conservation in the Galapagos Islands  
Francisco Laso

Impacts of socioeconomic drivers on community resilience to human-elephant conflict  
Lynn Von Hagen

Understanding patterns and dynamics of China’s bird markets for improving management  
Zhijian (Toto) Liang

Waterway: dissolving the limits of scientific language  
Ayana Harscoet

What we tweet about invasive species: expanding discourse on Japanese knotweed  
Joseph Jaros

Active or passive learning? How to promote coexistence with felines in the Caatinga  
Afonso Dinis

11:30am  Break

12:35pm  Break

1:00pm  Virtual workshops session

4:00pm  Break

4:15pm  Awards & closing remarks

4:30pm  Adjourn

Friday  
October 8, 2021

10:00am  Network and learn: grow your leadership skills for conservation action

11:30am  Break

1:30pm  Workshops

4:30pm  Adjourn
<table>
<thead>
<tr>
<th>Day</th>
<th>Workshops</th>
</tr>
</thead>
</table>
| Thursday | An Introduction to Conservation Planning: A Participatory Training for Tomorrow’s Leaders in Conservation  
Organizers: Varsha Suresh & Jaclyn Lucas, Foundations of Success |
|        | Collaborating Across Sectors and the True Nature of Partnering  
Organizers: Christina Imrich, Leala Rosen, Conservation Leadership Program; Wildlife Conservation Society; Stuart Patterson, Fauna & Flora International; Conservation Leadership Programme; Kate Mastro, Wildlife Conservation Society; Nina Hadley, Global Wildlife Conservation |
|        | Communicating and Visualizing Data for Conservation  
Organizer: Simon Queenborough, Yale School of the Environment |
|        | Species Distribution Modeling in R and Wallace  
Organizers: Beth Gerstner, Michigan State University; Samuel Chang, Pace University; Gonzalo Pinilla-Buitrago, City College of New York; Matthew Aiello-Lammens, Pace University; Mary Blair, American Museum of Natural History |
|        | Using QGIS for Species Conservation: Mapping Suitable Habitat and Connectivity  
Organizers: Manette Sandor, Columbia University & American Museum of Natural History; Peter Galante, American Museum of Natural History |
|        | What I Wish I’d Known About Writing for Journals and Popular Media  
Organizers: Andrea DiGiorgio, Princeton Writing Program & Rutgers University; Cathryn Freund, Massive Science |
| Friday | Addressing Causes, Not Symptoms  
Organizer: David Johns, Portland State University |
|        | Dugongs and Sea Dragons: Using Game Play and Storytelling to Engage Diverse Conservation Voices  
Organizers: Joshua Drew, State University of New York College of Environmental Science and Forestry; E. Christopher Parsons, University of Exeter |
|        | Elevating Pitches: Networking for Science and Academia  
Organizers: Sara Kross & Michael Levin, Columbia University |
|        | Statistical Approaches in Conservation: Moving from Correlative to Mechanistic Models  
Organizer: Cristian Dambros, Federal University of Santa Maria, Brazil |
|        | What am I Doing with My Life? Career Planning For Conservation Researchers and Practitioners  
Organizers: Mary Blair, American Museum of Natural History; Christian Rivera, University of Florida; Alex Moore, Princeton University |
Our relationship to the environment, past and future: lessons from engaged archaeological research

For the past 18 months the spread of COVID-19 has dominated news cycles and is at the forefront of local, national and international concerns. The coronavirus pandemic is one of many human-driven socio-ecological crises we face as a global community. In August of this year, the United Nations’ Intergovernmental Panel on Climate Change (IPCC), an international body of researchers who evaluate and synthesize the science of climate change, released their latest report. The report documents in sobering detail the extent to which our planet’s climate is changing due to human activity. And, like the coronavirus pandemic, the climate crisis intersects with and compounds other problems, such as biodiversity loss, and food, energy, and water insecurity. The exceptional challenges of the present moment can seem insurmountable, but they present an opportunity to draw from deeper time and learn how people and ecosystems adapted to changing conditions in the past.

I became an archaeologist because I believe in the power of storytelling. Storytelling is fundamental to human evolution and is what defines humans as a species. We have all had the experience of learning from our elders, those who came before us. If we think about it, we have millions of years of cumulative human experience on the planet to learn from. Our ability to pass knowledge from one generation to the next is central to our survival. Archaeology can inform our approaches to contemporary conservation by telling the stories of how ancient peoples shaped landscapes, responded to past climate change, interacted with diverse species of plants and animals, and sustained livelihoods over centuries and millennia.
Connecting the dots: Lionfish dispersal between shallow- and deep-water habitats
Montana Airey
Cornell University, Ithaca, NY, USA

A mixed-methods assessment of human-elephant conflict trends in northwestern Botswana
Erin Buchholtz, Megan McDaniels, Anna Songhurst, Graham McCulloch, Amanda Stronza
Texas A&M University, College Station, TX, USA; Wild Me, Portland, OR, USA; Ecoexist, Maun, NG, Botswana

Corporate actors in high seas fisheries
Gabrielle Carmine, Juan Mayorga, Nathan A. Miller, Jaeyoon Park, Guillermo Ortuño Crespo, Henrik Österblom, Enric Sala, Jennifer Jacquet
New York University, New York, NY, USA; Duke University, Durham, NC, USA; University of California, Santa Barbara, CA, USA; Global Fishing Watch, Washington, DC, USA; Stockholm University, Stockholm, Sweden; Pristine Seas, National Geographic Society, Washington, DC, USA

New empirical evidence on humans’ effect on assemblage species richness
Victor Cazalis
German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, Leipzig, Germany

Relating American Eel abundance to environmental DNA concentration in the Bronx River
Sam Chew Chin, John Waldman, Mike Bednarski, Merry Camhi, Jake LaBelle
CUNY Graduate Center, New York, NY, USA; York College, Jamaica, NY, USA; Queens College, Queens, NY, USA; Virginia Department of Wildlife Resources, Henrico, VA, USA; Wildlife Conservation Society, Bronx, NY, USA; California State University Monterey Bay, Seaside, CA, USA

Cost-effective auditory detection of coyotes in urban spaces using neural networks
Hunter Dillard-Jakubowicz, Peter Galante
American Museum of Natural History, New York, NY, USA

Water quality, biodiversity & ecosystem function of urbanized marine environments
Rinaldi Gotama
Chinese University of Hong Kong, Hong Kong

Evaluating white-tailed deer management program effectiveness in southeastern NY
Ralph Green, Danielle Begley-Miller
Pace University, Pleasantville, NY, USA; Teatown Lake Reservation, Ossining, NY, USA

The online trade of freshwater turtles and tortoises in the Philippines
Antonio N. Lorenzo II, Emerson Y. Sy
TRAFFIC International Southeast Asia, Selangor, Malaysia; University of Santo Tomas, Manila, Philippines

Examining the socio-ecological drivers of human–wolf conflict using occupancy models
Prashant Mahajan, Dharmander Khandal
Wildlife Institute of India, Dehradun, India; Tiger Watch, Rajasthan, India

An integrated approach to prioritize carnivore conservation in shared landscapes
Mahi Puri, Andrew Marx, Hugh P. Possingham, Kerith A. Wilson, Krithi K. Karanth, Bette A. Loiselle
University of Florida, Gainesville, FL, USA; Centre for Wildlife Studies, Bengaluru, India; The University of Queensland, Brisbane, Qld, Australia; The Nature Conservancy, South Brisbane, Qld, Australia; Institute for Future Environments, Queensland University of Technology, Brisbane, Qld, Australia; Duke University, Durham, NC, USA; Center for Latin American Studies, University of Florida, Gainesville, FL, USA

Farmed or poached? The trade of live Indonesian birds in the Philippines
Josef Job Raymundo
Philippine Center for Terrestrial and Aquatic Research, Hagonoy, Bulacan, Philippines
Orphans without megafauna: can dispersal by water help Malagasy baobabs to survive?  
Senen Andriantsaralaza, Rakouth Bakolimala  
1University of Antananarivo, Madagascar; 2Lemur Love, San Diego, CA, USA

Habitat disturbance trumps moonlight effects on the activity of tropical bats  
Giuliana Appel, Adria López-Baucells, Ricardo Rocha, Christoph F. J. Meyer, Paulo Estefano D. Bobowiec  
1Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil; 2Biological Dynamics of Forest Fragments Project, Manaus, Brazil; 3Granóllers Museum of Natural Science, Granollers, Spain; 4University of Lisbon, Lisbon, Portugal; 5University of Porto, Vairão, Portugal; 6University of Salford, Salford, UK

Newspaper archives suggest changes in whale species composition in the NY Bight  
Danielle M. Brown, John Wiedenmann  
Department of Ecology, Evolution, and Natural Resources, School of Environmental and Biological Sciences, Rutgers University, New Brunswick, NJ, USA

Active or passive learning? How to promote coexistence with felines in the Caatinga  
Afonso Dinis, Ana Rainho, Cláudia B. de Campos, Cláudia Martins  
1Universidade de Lisboa, Lisboa, Portugal; 2Institute for the Conservation of Neotropical Carnivores – IPC, Atibaia, SP, Brasil

Waterway: dissolving the limits of scientific language  
Ayana Harscoet  
Bowdoin College, Brunswick, ME, USA

What we tweet about invasive species: expanding discourse on Japanese knotweed  
Joseph Jaros, Sara Kuebbing  
1Fordham University, Bronx, NY, USA; 2University of Pittsburgh, Pittsburgh, PA, USA

Understanding patterns and dynamics of China’s bird markets for improving management  
Zhijian Liang, Tien Ming Lee  
Sun Yat-sen University, Guangzhou, Guangdong, China

Apes in space: mapping hunter-great ape overlap in Congo’s swamp forests  
Katherine Meier  
Yale University, New Haven, CT USA

How do biological communities respond to habitat amount gain or loss?  
Clarice Mendes, Jayme Prevedello  
State University of Rio de Janeiro, Rio de Janeiro, Brazil

Examining ecological interactions of urban tree & vertebrate species in Delhi, India  
Vallari Sheel, Madhusudan Katti  
North Carolina State University, Raleigh, NC, USA

Pleistocene fossils recontextualize the ecology of introduced turkeys in California  
Ashwin Sivakumar, Alexis Mychajliw  
1Flintridge Preparatory School, La Canada Flintridge, CA, USA; 2Middlebury College, Middlebury, VT, USA; 3La Brea Tar Pits Museum, Los Angeles, CA, USA

Tropical dry forest restoration: the effectiveness of fertilization and irrigation  
Laura Toro, Francisco Torres-Romero, Jennifer S. Powers  
1University of Minnesota, St. Paul, MN, USA; 2Fundación Natura, Colombia

Introduced rats (Rattus rattus) in Puerto Rico, seed dispersers or seed predators?  
Beth Kaplin, Tomás Carlos-Joglar, Johanna Delgado-Acevedo, Jahdiel Torres-Caba  
1Antioch University, Keene, NH, USA; 2Penn State University, State College, PA, USA; 3Texas A&M University, Commerce, TX, USA

Distribution and current status of the largemouth sawfish in Costa Rica  
Jorge A. Valerio-Vargas, Mario Espinoza  
1Centro de Investigación en Ciencias del Mar y Limnología (CIMAR), Universidad de Costa Rica, 2060, San José, Costa Rica; 2Universidad de Costa Rica, 2060, San José, Costa Rica

Impacts of socioeconomic drivers on community resilience to human-elephant conflict  
Lynn Von Hagen  
Auburn University, Auburn, AL, USA

Transgenes of genetically modified animals detected via environmental DNA  
Charles C.Y. Xu, Claire Ramsay, Mitra Cowan, Paul Lasko, Rowan D.H. Barrett  
1Redpath Museum, McGill University, Montreal, Quebec, Canada; 2McGill University, Montreal, Quebec, Canada; 3McGill Integrated Core for Animal Modeling (MICAM), McGill University, Montreal, Quebec, Canada

Distribution and current status of the largemouth sawfish in Costa Rica  
Jorge A. Valerio-Vargas, Mario Espinoza  
1Centro de Investigación en Ciencias del Mar y Limnología (CIMAR), Universidad de Costa Rica, 2060, San José, Costa Rica; 2Universidad de Costa Rica, 2060, San José, Costa Rica

Impacts of socioeconomic drivers on community resilience to human-elephant conflict  
Lynn Von Hagen  
Auburn University, Auburn, AL, USA

Transgenes of genetically modified animals detected via environmental DNA  
Charles C.Y. Xu, Claire Ramsay, Mitra Cowan, Paul Lasko, Rowan D.H. Barrett  
1Redpath Museum, McGill University, Montreal, Quebec, Canada; 2McGill University, Montreal, Quebec, Canada; 3McGill Integrated Core for Animal Modeling (MICAM), McGill University, Montreal, Quebec, Canada
### Session A

**Testing the consistency of hybridization outcomes between two damselflies in Spain**  
Rosa Sánchez-Guillén1,2, Luis Arce-Valdés1, Janne Svaegers2,3, Maren Wellenreuther1,6, Bengt Hansson2  
1Instituto de Ecología A.C., Xalapa, Veracruz, Mexico; 2Lund University, Lund, Scania, Sweden; 3KU Leuven, Leuven, Flemish Brabant, Belgium; 4The New Zealand Institute for Plant & Food Research Ltd, Nelson City, Nelson, New Zealand; 5University of Auckland, Auckland, Auckland, New Zealand

**SSF analysis of lions reveals broad- and nuanced fine-scale movement patterns**  
Mary Burak  
Yale University, New Haven, CT, USA

**Observing North Atlantic right whale calling activity via passive acoustic monitoring**  
Marissa Garcia  
Harvard University, Cambridge, MA, USA

**Microhabitat partitioning by two sympatric cleaner gobies in Barbados**  
Jeniece German, Henri Valles  
University of the West Indies, Cave Hill, Barbados

**Historical structure in African leopards (Panthera pardus) across sub-Saharan Africa**  
Danielle M. Lema1, Corey Anco2, Alexis Neffinger2, Evan Hekkala3  
1Fordham University, Bronx, NY, USA; 2American Museum of Natural History, New York, NY, USA; 3Draper Natural History Museum, Cody, WY, USA

**Estimating the location of genetic divergence using machine learning**  
Riquier Mascarenhas da Silva  
City College of New York, NY, USA

**Assessing genetic diversity of one-horned rhinoceros of Nepal**  
Abhinaya Pathak1, Yu-Cheng Hsu2, Amir Sadaula1, Janardan Joshi1, Prashamsa Paudel4,5, Prasham Paudel5, Corey Anco2, Amir Sadaula3  
1Department of National Parks and Wildlife Conservation, Babarmahal, Kathmandu, Nepal; 2National Dong Hwa University, Taiwan; 3National Trust for Nature Conservation, Kathmandu, Nepal; 4Ministry of Industry, Tourism, Forest and Environment, Province 2, Nepal; 5Tribhuvan University, Kirtipur, Nepal

**Evaluating butterfly wing traits in a novel environment devoid of forest birds**  
Christian-Ja Quinata, Haldre Rogers  
Iowa State University, Ames, IA, USA

**Comparing methods of surface area and mass estimations of large marine mammals**  
Milagros Rivera  
University of California, Santa Cruz, CA, USA

**Does training prey to avoid predators work? A meta-analysis**  
Jennifer Zhu1,2, J. Stephen Gosnell3, Laila Akallal4, Micah Goltzman4, Chelsea Wepy2, Victor Siev2  
1The Graduate Center City University of New York, NY, USA; 2Baruch College CUNY, New York, NY, USA

### Session B

**Can increased anthropization modify the vocalization of the Guiana dolphin?**  
Teresa Belderrain1, Rodrigo Tardín2,3, Maria Alice dos Santos Alves1, Israel Maciel2  
1Universidad Federal Rural do Rio de Janeiro, Seropédica, Rio de Janeiro, Brazil; 2Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil; 3Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

**Using species’ traits to improve extinction risk assessments**  
Minali Bhatt  
Michigan State University, East Lansing, MI, USA

**Use of social media to investigate den disturbance by humans**  
Tammy Cloutier1, Gregory Rasmussen2, Anthony Giordano1, Beth Kaplin4, Lisabeth Wiley2  
1Antioch University New England, Keene, NH, USA; 2Painted Dog Research Trust; 3Rand, Zimbabwe; 4SPECIES; Ventara, CA, USA; 5University of Rwanda, Kigali, Rwanda

**Impacts of giant tortoise introduction on terrestrial wildlife: Santa Fe, Galapagos**  
Elizabeth Fuhrman  
SUNY College of Environmental Science and Forestry, Syracuse, NY, USA

**Bat navigation pulse adjustments in response to urban ultrasonic background noise**  
Corinne Hultman  
Fordham University, New York, NY, USA

**Historical maps provide insight into a century and a half of habitat change in Fiji**  
Katherine Lawson  
SUNY College of Environmental Science and Forestry, Syracuse, NY, USA

**Setting conservation priorities for endangered birds in Ecuador**  
Wilderson Medina, Stuart Pimm  
Duke University, Durham, NC, USA

**Managing with logic in the Monarch Reserve**  
Miramann Mishkin  
Universidad Nacional Autonoma de Mexico, Morelia, Michoacán de Ocampo, Mexico

**Incorporating anthropogenic disturbance into SDMs of the common woolly monkey**  
Ariek Barakat Norford, H. Resit Açıkgöz  
Stony Brook University, Stony Brook, NY, USA

**When a leopard met a human: examining leopard attacks on people in Himachal Pradesh, India**  
Shweta Shivakumar1, Vidya Athrey3, Morten Odden1, Sat Pal Dhiman4, Srinivas Vaidyanathan1,2, Krithi K. Karanth2,3  
1Centre for Wildlife Studies, Bangalore, India; 2Wildlife Conservation Society- India, Bangalore, India; 3Inland Norway University of Applied Sciences, Elverum, Norway; 4Joint Secretariat (Forests) to the Government of Himachal Pradesh, HP, India; 5Foundation for Ecological Research Advocacy and Learning, Bangalore, India; 6The Nicholas School of Environment, Duke University, USA

**Fishing for answers: analysis of tuna fishery responses for Mobula bycatch mitigation**  
Jennifer Waldo, Melissa Cronin  
University of California - Santa Cruz, Santa Cruz, CA, USA
### Session C

<table>
<thead>
<tr>
<th>Title</th>
<th>Presenters</th>
<th>Institution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species spatial uncertainty effects on the IUCN Red List Criterion B metrics</td>
<td>Samuel Chang Triguero</td>
<td>Pace University, Pleasantville, NY, USA</td>
</tr>
<tr>
<td>Microhabitat preferences of mated female fireflies with and without light pollution</td>
<td>Caroline Dressler</td>
<td>Brown University, Providence, RI, USA</td>
</tr>
<tr>
<td>Fitness landscapes are flexible, powerful tools for conservation management</td>
<td>Max Gatts&lt;sup&gt;1,2,3&lt;/sup&gt;, George Shillinger&lt;sup&gt;4&lt;/sup&gt;</td>
<td>1Princeton University, Princeton, NJ, USA; 2Upwell Turtles, Monterey, CA, USA; 3Lost Years Institute, Mill Valley, CA, USA; 4Stanford University, Pacific Grove, CA, USA</td>
</tr>
<tr>
<td>Land use as a driver of fish community changes in New York’s Oswego River Watershed</td>
<td>Kate Henderson</td>
<td>SUNY College of Environmental Science and Forestry, Syracuse, NY, USA</td>
</tr>
<tr>
<td>Aren’t you dying to know? The ecological role of small cemeteries in New York City</td>
<td>Lily Kunkel</td>
<td>New York University, New York, NY, USA</td>
</tr>
<tr>
<td>Evidences on the evolutionary transition of Miconia (Melastomataceae) in the Andes</td>
<td>Naisla Manrique-V.&lt;sup&gt;1&lt;/sup&gt;, Isabela Galardo Varassin&lt;sup&gt;2&lt;/sup&gt;, Luan Salles Pasos&lt;sup&gt;2&lt;/sup&gt;, María Eugenia Morales-P.&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1Universidad Pedagógica y Tecnológica de Colombia, Tunja, Boyacá, Colombia; 2Universidad Federal do Paraná, Centro Politécnico, Curitiba, Paraná, Brazil</td>
</tr>
<tr>
<td>Environmental impacts on invasive aquatic plants in the lower Hudson region</td>
<td>Teresa Pacelli</td>
<td>Pace University, Pleasantville, NY, USA</td>
</tr>
<tr>
<td>Ecological niche models can guide biodiversity surveys for parasites species</td>
<td>Morgan Starlight&lt;sup&gt;1&lt;/sup&gt;, Erica E. Johnson&lt;sup&gt;1,2&lt;/sup&gt;</td>
<td>1City College of New York, City University of New York, New York, NY, USA; 2The Graduate Center of the City University of New York, New York, NY, USA</td>
</tr>
<tr>
<td>The role of urbanization in rodent diversity in a small city in Chiapas, Mexico</td>
<td>Gloria Tapia</td>
<td>El Colegio de La Frontera Sur, San Cristóbal de Las Casas, Chiapas, Mexico</td>
</tr>
</tbody>
</table>

---

### Session D

<table>
<thead>
<tr>
<th>Title</th>
<th>Presenters</th>
<th>Institution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focal area choices impact equity and efficiency in systematic conservation planning</td>
<td>Karen Dietrich</td>
<td>University of Northern British Columbia, Prince George, British Columbia, Canada</td>
</tr>
<tr>
<td>Synthetic review: Mobula ray bycatch in tuna fisheries and best mitigation practices</td>
<td>Jeannie Johnson, Katherine Seto, Melissa Cronin</td>
<td>1University of California Santa Cruz, Santa Cruz, CA, USA</td>
</tr>
<tr>
<td>Madagascar’s magic bullet? Ecotourism for lemur conservation and poverty alleviation</td>
<td>Cecilia H. Kim, Andrea L DiGiorgio</td>
<td>Princeton University, Princeton, NJ, USA</td>
</tr>
<tr>
<td>Optimism and pessimism influence donation behavior differently by political leaning</td>
<td>Darius Mahdavi&lt;sup&gt;1&lt;/sup&gt;, Daniel K. Riskin&lt;sup&gt;2&lt;/sup&gt;, Shelby H. Riskin&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1Department of Ecology and Evolutionary Biology, University of Toronto, Toronto, Ontario, Canada; 2Department of Biology, University of Toronto Mississauga, Mississauga, Ontario, Canada</td>
</tr>
<tr>
<td>Collaboration, practicality, and success in the SWCC’s Carnivore Monitoring Project</td>
<td>Tatum McConnell, Matthew Palmer&lt;sup&gt;1&lt;/sup&gt;, Rob Rich&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1Columbia University, New York, NY, USA; 2Swan Valley Connections, Condon, MT, USA</td>
</tr>
<tr>
<td>Human-wildlife coexistence: mange in urban canids</td>
<td>Bahar Pahlevani&lt;sup&gt;1&lt;/sup&gt;, Maureen Murray&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1Tufts University Cummings School of Veterinary Medicine, North Grafton, MA, USA; 2Lincoln Park Zoo Urban Wildlife Institute, Chicago, IL, USA</td>
</tr>
<tr>
<td>Supporting Justice, Equity, Diversity, and Inclusion in Environmental Science</td>
<td>Racine Robinson</td>
<td>Pace University, New York, NY, USA</td>
</tr>
<tr>
<td>Conservation in real life: a tale of a socio-cultural and political forcefield</td>
<td>Johannes Neumann</td>
<td>Richard Gilder Graduate School, American Museum of Natural History, New York, NY, USA</td>
</tr>
<tr>
<td>How to live in equilibrium with nature: sharing Indigenous knowledge</td>
<td>Fidelia Morales Marin</td>
<td>Stibrawpa, Yorkin, Limón, Costa Rica</td>
</tr>
</tbody>
</table>
Special thanks are due to all those who have given so generously of their time and talents to advise, review, and mentor. They include:

Matthew Aiello-Lammens  
Pace University

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

Adriana Bravo  
University of Toronto

Samantha Cheng  
American Museum of Natural History

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

Wendy Erb  
Cornell Lab of Ornithology

Nick Friedenberg  
Cornell Agroscience

Helen Fox  
Coral Reef Alliance

David Johns  
Portland State University

Peter Galante  
American Museum of Natural History

Nadav Gazit  
American Museum of Natural History

Anthony Giordano  
SPECIES

Andrés Gómez  
ICF International, Inc.

Martha Groom  
University of Washington

Kate Hanson  
William Peace University

Rob Harbert  
Stonehill College

Evan Hekkala  
Fordham University; American Museum of Natural History

Ned Horning  
American Museum of Natural History

Martha Hurley  
Global Wildlife Conservation

Kimberly Landrigan  
American Museum of Natural History

Tom Langen  
Clarkson University

Suzanne Macey  
American Museum of Natural History

Nicole Mihnovets  
Columbia University

Ivan Monagan  
Columbia University

Eugenia Naro-Maciel  
New York University

Kate O’Conner  
Catskill Mountainkeeper

Jennifer Phillips  
Bard College

Ana Luz Porzecanski  
American Museum of Natural History

Simon Queenborough  
Yale School of the Environment

Anne Ricculli  
Drew University

Christian Rivera  
University of Florida

Dan Rubenstein  
Princeton University

Kimberley Russell  
Rutgers University

Manette Sandor  
Columbia University

Amanda Sigouin  
American Museum of Natural History

Jill Spear  
National Geographic Society

Eleanor Sterling  
American Museum of Natural History

Maria Strangas  
American Museum of Natural History

Anne Toomey  
Pace University

Mike Treglia  
The Nature Conservancy

Lina Valencia  
Re:wild

Judith Weis  
Rutgers University
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.