

MAY 14-19, 2023 BONITA SPRINGS, FLORIDA, USA

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Corkscrew Swamp Sanctuary

CONFERENCE CODE OF CONDUCT

In order to ensure a fair and equal experience for all participants of the Species on the Move conference 2023, we ask all participants to please adhere to the following code of conduct.

Expected behavior:

We expect all participants (including all delegates, conference organizers, volunteers, visitors, exhibitors and venue staff) to exhibit professional and considerate behavior in all venues during official conference proceedings, side events, meetings, official or unofficial social gatherings as well as on social media and online platforms.

- Be inclusive and respectful to all participants regardless of ability or disability, age, body size, language, culture, education, ethnicity, race, nationality, gender, background, opinions, ideologies, political views, religion, sexual orientation and social status
- Be considerate in speech and actions
- Be respectful and civil during any discussions or dialogue
- Be mindful of your surroundings and fellow participants
- Be respectful of the opinions of other participants even if they differ from your own
- Be constructive in your critique of ideas
- Engage in positive and productive discussions with fellow delegates
- Adhere to any requests from poster or talk presenters regarding social media (eg some may request no posting of images at the start of their talks or on their posters), and ask for permission before posting pictures focused on particular participants on online platforms or social media (general crowd shots are ok)

Unacceptable behaviour:

- Intimidation, harassment, bullying, abuse, discrimination, exclusion and harmful criticism of any form
- Harmful verbal or written comments
- Disruption of presentations or conference proceedings
- Physical assault, or any unwelcome contact
- Threat or intimidation
- Sexual harrasment

Consequences of unacceptable behavior:

Anyone requested to stop any unacceptable behavior is expected to comply immediately. The conference organizers reserve the right to dismiss any participants showing unacceptable behavior from the conference and prohibit attendance of future meetings. The conference staff or venue security may take any action deemed necessary and appropriate in order to ensure the safety of all conference participants.

Reporting or grievances:

Please contact one of the following people should you have a concern or wish to report someone engaging in the above mentioned unacceptable behaviors: Conference Co-Convenors:

Consequences of unacceptable behavior:

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Reporting or grievances:

Please contact one of the following people should you have a concern or wish to report someone engaging in the above-mentioned unacceptable behaviors:

Conference Co-Convenors:

Brett Scheffers, brett.scheffers@ufl.edu

Carolyn Cox, crcox@ufl.edu

Committee Contacts:

Morgan Tingely, mtingley@g.ucla.edu

Wendy-Lin Bartels, wendylin@ufl.edu

Early Career Committee Contact:

Rebecca Senior, rebecca.senior@durham.ac.uk

Conference Liaison Contact:

Katie Risher, kmacwilkinson@ufl.edu

https://pwd.aa.ufl.edu/sotm/2023-conference/code-of-conduct/



SUNDAY, MAY 14

| 0900- 1600 | Pre-Conference Workshops: |
|---------------|--|
| | Using microclimate data and models for ecological applications: Dave Klinges, Mike Kearney, Rebecca Senior and Lydia Solfer (Blue Heron BC.) A two-part Species Distribution Modeling workshop: SDM Part 1 Building species distribution models in accordance with the ecological niche theory and SDM Part 2 Theory and practice of model-based data integration for modeling species' distributions: Convenor Part 1: Mireia Valle, Convenors Part 2: Saras Windecker and David Uribe-Rivera (Great Egret BC) Application of connectivity modeling to identify and predict movement and range redistribution: Robert Fletcher, Andrew Marx, Maru lezzi, Alex Baecher (Pine BC) |
| 1400 | Registration Opens Calusa Pre-Function |
| 1800 | Welcome (informal) Social Event with Cash Bar Cypress Courtyard |

MONDAY, MAY 15

| 0700 | Registration Opens Calusa Pre-Function |
|------|--|
| | Calusa D-H |
| 0800 | Opening Remarks Brett Scheffers |
| 0825 | Formal Conference Welcome US Secretary Deb Haaland |
| 0835 | History and Future of SOTM Gretta Pecl |
| 0845 | KEYNOTE - Cross Theme Everglades: Past and Future James Kushlan and Kirsten Hines |
| 0945 | KEYNOTE - Cross Theme The rise of Anthropocene biodiversity Chris Thomas |
| | Coffee & Tea Break Calusa Pre-Function (Snacks provided) |
| | Calusa D-H (Session Chair, Beth Stys) |
| 1100 | KEYNOTE - Theme 3 Understanding ecological and evolutionary mechanisms facilitating or hindering range shifts Range dynamics through the lens of hybridization Mitra Menon |
| 1130 | KEYNOTE - Theme 7 Conservation paradigms and management strategies for a moving and (dis)connected future Reimagining conservation paradigms & management strategies for a moving and (dis)connected future: examples from a temperate marine system Natalie Ban |

| 1200 | Lunch Calusa Terrace/Calusa D-H | | |
|------------------|--|---|--|
| 1300 | Early to Late Career Networking Event and Discussion Calusa B | | |
| 1400 -1530 | Breakout Sessions | | |
| Location | Calusa A | Calusa C | Great Egret |
| Session Chair | Bryan Falk | Jennifer Sunday | Lise Comte |
| Time | Theme 7 - Conservation paradigms and management strategies for a moving and (dis)connected future | Theme 1 - Detection, attribution, and prediction under species on the move | Theme 3 – Understanding ecological and evolutionary mechanisms facilitating or hindering range shifts |
| 1400 | Presenter: Maria Beger Title: A Static-Dynamic Conservation Planning Framework For Functional Shifts Across Multiple Taxa Authors: Maria Beger, Katie M Cook, Mark Miller, Masaru Mizuyama, Brigitte Sommer, James D. Reimer | Presenter: Tayler Clarke Title: Eastern Tropical Pacific Reef Fish On The Move Authors: Tayler M. Clarke, Fernando A. Zapata, Juan José Alvarado, Andrea Arriaga Madrigal, Arturo Ayala- Bocos, Jorge Cortés Núñez, Amilcar Cupul Magaña, Andrés López Pérez, Juan P. Quimbayo, Héctor Reyes-Bonilla, Fernando Rivera, Paola Rodríguez- Troncoso, Jenny C. Rodríguez- Villalobos, Fabian A. Rodríguez Zaragoza, Johanna Segovia, Sonia Bejarano | Presenter: Daniel Hahn Title: The Genomic And Physiological Architectures Of Seasonal Phenology Shifts Show Limited Pleiotropy In A Fruit Feeding Fly. Authors: Thomas H.Q. Powell, Qinwen Xia, Gregory J. Ragland, Jeffrey L. Feder, and Daniel A. Hahn |
| 1415 | Presenter: Isaac Brito Morales Title: Managing Dynamic Ocean Front Ecosystems For Species On The Move Authors: Isaac Brito- Morales, Vincent Rossi, Floriane Sudre, Christoph Rohner, Matthieu Le Corre, Audrey Jaeger, Sophie Laran, Lee Hannah | Presenter: Laura Thompson Title: Species Traits And Environmental Factors That Influence Whether Amphibian Populations Shift Their Range In Response To Climate Change Authors: Merri Collins, Erin Muths, Madeleine Rubenstein, Laura Thompson, Sarah Weiskopf | Presenter: Olivia Rahn Title: Does Habitat Quantity Decline Towards A Species Range Edge? Authors: Olivia J. Rahn, Anna L. Hargreaves |
| 1430 | Presenter: Cameryn Brock Title: Spatial Planning For Climate Change: Land Use For Conservation, Agriculture, And Energy Authors: Cameryn J. Brock, Patrick R. Roehrdanz, Amy E. Frazier, Christina M. Kennedy, Ashley E. Larsen, Lee Hannah | Presenter: Jonathan Belmaker Title: Dissecting Change In Alien Species Numbers: Detection, Vector Activity Or Establishment? Authors: Jonathan Belmaker, Yehezkel Buba | Presenter: Saras Windecker Title: Improving Predictive Performance Of Trait- Sdms Across Environmental Gradients Authors: Saras M. Windecker, David E. Uribe- Rivera, Will Morris, Laura J. Pollock, Peter A. Vesk |

| Location | Calusa A | Calusa C | Great Egret |
|------------------|--|---|---|
| 1445 | Presenter: Michelle Canic Starke Title: Human-Assisted Movement Of Species In Response To Climate Change: Literature Review And Development Of Organizational Guidelines For The Nature Conservancy Authors: Michelle Canick Starke, Mark Anderson | Presenter: Olivia Bates Title: Predicting Future Distributions Of Insects Under Climate Change Authors: Olivia K. Bates, Cleo Bertelsmeier | Presenter: Joris Wiethase Title: Insights Into The Explanatory Power Of Species Traits As Predictors Of Range Shifts Authors: Joris H. Wiethase, Philip S. Mostert, Christopher R. Cooney, Colin M. Beale |
| 1500 | Presenter: Katie Cresswell Title: Using A Fishery To Mitigate The Impact Of A Problematic Range- Extender Authors: Katie Cresswell, Klaas Hartmann, Rich Little, Caleb Gardner, John Keane, Scott Ling | Presenter: Nathan King Title: Trailing Edge Population Loss In A Key Coastal Foundation Species; Risks And Consequences For Below Species Level Biodiversity. Authors: Nathan G King; Pippa J Moore; Dan A Smale | Presenter: Jeremy Kerr Title: Species' Temperature Tolerances Help Predict Their Distributions Across Regions And Within Habitats Authors: Gabrielle Ednie, and Jeremy T. Kerr |
| 1515 | Presenter: Olga Koppel Title: Thermal Position strongly predicts bumblebee diversity at local scales Authors: Olga Koppel, Dr. Jeremy Kerr | Presenter: Eden Tekwa Title: Warming And Dispersal Rate In Marine Food Webs Lead To Heterogeneous Range Shift Effects Authors: Eden Tekwa, Malin Pinsky, James Watson, Jennifer Sunday | |
| 1530 | Coffee & Tea Break Calusa Pre-Fu | nction (snacks provided) | |
| 1600-1730 | Breakout Sessions | | |
| Location | Calusa A | Calusa C | Great Egret |
| Session Chair | Roger Griffis | Brett Scheffers | Rebecca Senior |
| Time | Theme 7 - Conservation paradigms and management strategies for a moving and (dis)connected future | Theme 1 - Detection, attribution, and prediction under species on the move | Theme 5 - Ecological responses to climate change from micro to macro scales |
| 1600 | Presenter: Chris Nadeau Title: Does Increasing Genetic Diversity Help Sensitive Populations Adapt To Warming? Authors: Christopher Nadeau, Randall Hughes, Abe Miller- Rushing, Nicholas Fisichelli | Presenter: Sarah Weiskopf Title: Emerging Climate Signals: Aligning Range Shift Studies With Climate Change Exposure Authors: Sarah R. Weiskopf, Madeleine A. Rubenstein, Adam J. Terando, Jared Bowden, Maria Isabel Arce Plata, Heidi Nguyen, Shawn L. Carter | Presenter: Tsun Fung Au Title: Forest Demographic Shift Alters Drought Sensitivity And Resilience Authors: Tsun Fung Au |

| Location | Calusa A | Calusa C | Great Egret |
|----------|--|---|---|
| | Presenter: Thomas Hoctor | | Presenter: Israel Borokini |
| 1615 | Title: The Florida Wildlife Corridor: | Presenter: Brett Scheffers Title: Vertical Collapse In Assemblage Complexity Due To Shifts In Precipitation And Novel Biotic Interactions Authors: Brett R. Scheffers, Alex Baecher and Edmund Basham | Title: Integration Of Iterative Species Distribution Modeling And Field Surveys Of A Federally Threatened Desert Perennial Authors: Israel T. Borokini, Kenneth Nussear, Blaise Petitipierre, Thomas E. Dilts, Peter J. Weisberg |
| | | Presenter: Gretchen Hansen | Presenter: Claire Butler |
| 1630 | Presenter: Patricio Pilscoff Title: Climate Change- Refugia At Regional And Local Scale In Chile Authors: Patricio Pliscoff | Title: Predicting Climate Change Impacts On Polkilotherms Using Physiologically Guided Species Abundance Models Authors: Gretchen JA Hansen, Erin M Schliep, Josh North, Christopher Custer, Jenna Nelson, Holly Kundel, Tyler | Title: Comparative Effects Of Ocean Warming On Kelp- Herbivore Interactions On Australian Temperate Reefs Authors: Claire L. Butler, Adriana Vergés, Scott Ling, Scott Bennett |
| | | - | Presenter: Stef Haesen |
| 1645 | Presenter: Erik Stabenau Title: Resilience And Restoration: Managing For The Future Of Everglades National Park Authors: Erik R Stabenau, Andrea J Atkinson, Chinwa M Naja | Presenter: Laura Pollock Title: An Obvious Yet Challenging Proposition: Species Need Prey To Move Authors: Laura Pollock, Isaac Eckert, Dominique Caron | Title: Microsdm: Is It Worth To Incorporate Microclimate Into Species Distribution Models? Authors: Stef Haesen, Jonathan Lenoir, Eva Gril, Pieter De Frenne, Jonas J. Lembrechts, Koenraad Van Meerbeek |
| 1700 | Presenter: Chris Bergh Title: Rising Seas And The Florida Key: Collaboration And Coordination Among Florida's Wildlife Organizations Authors: Logan, Benedict, Chris, Bergh, Kevin, Kalasz | Presenter: Heather Hunt Title: Climate, Currents And Species Traits Contribute To Early Stages Of Marine Species Redistribution Authors: Jorge García Molinos, Heather L. Hunt, Madeline E. Green, Curtis Champion, Jason R. Hartog, Gretta T. Pecl | Presenter: Jones Quartey Title: Distribution And Population Dynamics Of Recurvirostridae In Ghana; A Case Of Range Shift In Migration Authors: Jones K. Quartey, Alfred A. Nuoh, Emanuel N. A Taye and Yaa Ntiamoa- Baidu |
| | Presenter: Anne Clay | Presenter: Gopal Murali | |
| 1715 | Title: The Spread Of Chytridiomycosis And Its Implications For Wild Amphibian Welfare | Title: Assessing Terrestrial Vertebrates' Exposure To Future Extreme Heat Events Authors: Gopal Murali, Takuya Iwamura, | |
| | Authors: Anne S. Clay and Grey Fernandez | Shai Meiri, Uri Roll | |
| 1800 | Welcome Reception Royal Palm | n Courtyard (drinks & Hors d'oeuvres prov | rided) |

TUESDAY, MAY 16

| | | , | | |
|------------------|--|---|---|--|
| 0700 | Registration Opens Calusa Pre-Function | | | |
| | Calusa D-H (Session Chair, Beth Stys) | | | |
| 0800 | KEYNOTE - Theme 12 Ecosystem and biome shifts, including geochemical impacts from species on the move A Century of Change in the Arctic and the effects of nascent beaver engineering Ken Tape | | | |
| 0830 | | KEYNOTE - Theme 6 Invasion risk and range redistribution of non-native species under climate change Pine invasions under climate change Martin Nuñez | | |
| 0900 | functional, and phylogenetic | KEYNOTE - Theme 4 Impacts of climate change on community structure and patterns of taxonomic, functional, and phylogenetic diversity Drivers and implications of changes in tree species composition across the world's forests Adraine Esquivel-Muelbert | | |
| 0930 | | servation in the era of synthetic biology se potential role of synthetic biology in a | turbulent world | |
| | Coffee & Tea Break Calusa P | Pre-Function (Snacks provided) | | |
| 1100 | KEYNOTE - Theme 2 Leveraging bioinformatics, big data science, and emerging technologies to study species on the move Elucidating biodiversity change in the Anthropocene Laura Antao | | | |
| 1130 | KEYNOTE - Theme 9 Cultural, social, and economic dimensions of changes in species distributions Anticipatory Ecology Meets Speculative Design: Cross-disciplinary approach of communicating scientific data through visual storytelling Sophie Falkeis | | | |
| 1200 | Lunch Calusa Terrace/Calus | a D-H | | |
| 1300 | Mini Workshops & Discussion: Climate, Movement and Welfare Ecology (Calusa A) **see conference app for details Vittoria Elliot HIGHRESCORAL STRESS: An ecologically validated global dataset of coral reef exposure to thermal stress (Calusa C) **see conference app for details Maria Beger | | | |
| 1400 -1530 | Breakout Sessions | | | |
| Location | Calusa A | Calusa C | Great Egret | |
| Session Chair | Gretta Pecl | Miguel Bastos Araújo | Laura Antao | |
| Time | Theme 1 - Detection, attribution, and prediction under species on the move | Theme 4 - Impacts of climate change on community structure and patterns of taxonomic, functional, and phylogenetic diversity | Theme 2 - Leveraging bioinformatics, big data science, and emerging technologies to study species on the move | |

| Location | Calusa A | Calusa C | Great Egret |
|----------|--|--|---|
| 1400 | Presenter: Adam Smith Title: Natural Niche Truncation Limits Our Ability To Foresee The Future With Species Distribution Models So Let's Look To The Past Authors: Adam B. Smith | Presenter: Lise Comte Title: Pervasive Effects Of Climate Change On The Functional Composition Of Riverine Fish Communities Authors: Lise, Comte, Xingli, Ciam, Julian, D. Olden, Albert, Ruhi, and Pablo, A Tedesco | Presenter: Jennifer Sunday Title: Assessing Continental Geographic Ranges Of Nearshore Fish Using Environmental Dna Authors: Kate Sheridan, Matt Lemay, Margot Hessing-Lewis, Jennifer Sunday |
| 1415 | Presenter: Leon Tkacenko Title: Improving Projections Of Species Distribution Models To Novel Climates Using Additional Data Authors: Leon A Tkacenko and Julie L Lockwood | Presenter: Miguel Bastos Araújo Title: Climate Change And The Reorganisation Of Animal Communities Authors: Miguel B. Araújo, Juan David González-Trujillo, Manuel Mendoza | Presenter: Gavriella Hecht Title: Examining The Role Of Parity On Biting Activity For Anopheles Mosquitoes During 2007- 2012 In El Oro, Ecuador Authors: Gavriella L.Y. Hecht, Timothy J. Fik, Sadie J. Ryan |
| 1430 | Presenter: Brooke Bateman Title: Climate Change Impacts On Wintering Birds In The Eastern United States Over The Last Century Authors: Chad B Wilsey, Sarah P Saunders, Timothy D Meehan, Nicole L Michel, Brooke L Bateman, William DeLuca, Jill L Deppe, Joanna Grand, Lotem Taylor, Geoffrey S LeBaron | Presenter: Dan Smale Title: Climate-driven shifts in the structure of kelp forests leads to altered biodiversity, productivity and resilience Authors: Dan Smale, Nathan King, Harry Teagle, Pippa Moore | Presenter: Aurore Maureaud Title: Fishglob – Towards A Collaborative Platform Integrating Scientific Bottom- Trawl Survey Data To Study And Manage Species On The Move Authors: Aurore A. Maureaud, M.L. Deng Palomares, Bastien Merigot, FishGlob consortium |
| 1445 | Presenter: Nicola van Wilgen- Bredenkamp Title: Identifying The Most Climate Change Vulnerable Plant Species In A Global Endemism Hotspot, The Cape Peninsula Authors: Nicola J. van Wilgen- Bredenkamp, Jasper A. Slingsby, Chad Cheney, Wendy B. Foden, Patricia M. Holmes, Anthony G. Rebelo | Presenter: Adam Eichenwald Title: The Impact Of Microclimate On The Persistence Of A Desert Bird Community Authors: Adam J. Eichenwald, J. Michael Reed | Presenter: Brunno Freire Dantas de Oliveira Title: How Well Species Distribution Models Predict Species Range Shifts? Authors: Authors: Brunno F. Oliveira, Lise Comte, Romain Berrand, I-Ching Chen, Sarah Diamond, Lesley Lancaster, Jonathan Lenoir, Jérôme Murienne, Gretta Pecl, Malin Pinsky, Brett Scheffers, Jennifer Sunday, Laura Thompson, Fabricio Villalobos, Jonathan Rolland, Gade Grenouillet |
| 1500 | Presenter: Sarah Roberts Title: Spatiotemporal Modeling Reveals Distribution Shifts Of Common Marine Predator - Bottlenose Dolphins | Presenter: Nora Salland Title: Revisiting Historical Kelp Forests In A Biogeographic Transition Zone In The NE Atlantic: Determining Ocean Warming Winners And Losers | Presenter: Morgan Tingley Title: Avian Vagrancy: Underlying Mechansisms And Potential For Facilitating Range Shifts |

| Location | Calusa A | Calusa C | Great Egret |
|---------------|--|--|---|
| | Authors: Sarah M Roberts, James Thorson, Janet Nye | Authors: Nora Salland, Cat Wilding, Antony Jensen, Dan Smale | Authors: Morgan W. Tingley, Benjamin A. Tonelli, and Casey Youngflesh |
| 1515 | Presenter: Erik Iverson Title: Facilitating Migration and Persistence with Adaptive Mitonuclear Replacement for Conservation Authors: Erik Iverson | | Presenter: Max Titcomb Title: Utilizing Citizen Science Monitoring Data To Model Past & Present Fish Distribution In The Caribbean Authors: Max Titcomb, Brice X Semmens |
| 1530 | Coffee & Tea Break Calusa Pre-F | unction (Snacks provided) | |
| 1600-1730 | Breakout Sessions | | |
| Location | Calusa A | Calusa C | Great Egret |
| Session Chair | Morgan Tingley | Anibal Pauchard | Rob Gurlanick |
| Time | Theme 5 - Ecological responses to climate change from micro to macro scales | Theme 6 - Invasion risk and range redistribution of non-native species under climate change | Theme 3 - Understanding ecological and evolutionary mechanisms facilitating or hindering range shifts |
| 1600 | Presenter: David Klinges Title: Climate Variability And Change Across Scales Using A Novel Global Microclimate Database Authors: David H. Klinges, Jonas J. Lembrechts, Ilya M. D. Maclean, J. Alex Baecher, Jonathan Lenoir, Brett R. Scheffers | Presenter: Cleo Bertelsmeier Title: Biological Invasions As Model System For Climate Change Ecology Authors: Cleo Bertelsmeier, Jelena Bujan, Olivia Bates | Presenter: Brett Scheffers Title: Seasonality And Experimental Acclimation Generate Thermal Tolerance Plasticity That Is Unaccounted For In Macroecology Authors: Brett Scheffers, Brunno Oliveira, Sebas Mena, Rob Fletcher, and Daniel Hahn |
| 1615 | Presenter: Yi-Hsiu Chen Title: Climate Vulnerability Of Mountain Biota Revisited Authors: Yi-Hsiu Chen, I-Ching Chen | Presenter: Luke Evans Title: Invasion Risk Posed By The Pet Trade Authors: Luke J. Evans, J. Alex Baecher, Brett R. Scheffers | Presenter: Sarah Diamond Title: Thermal Physiological Traits Mediate Butterfly Range Shifts Under Recent Climate Change Authors: Sarah E. Diamond, Osmary A. Medina-Báez, Carmen R. B. da Silva |

| | Calusa A | Calusa C | Great Egret |
|----------|--|---|---|
| 1630 | Presenter: I-Ching Chen Title: Acceleration Of Biological Responses In Anthropocene Authors: I-Ching Chen, Yi- Wen Chen, Malin L Pinsky, Jonathan Lenoir | Presenter: Clare Rodenberg Title: Spatiotemporal Variability In Weather And Snow Depth Affects The Invasive Spread Of A Damaging Nonnative Forest Pest In North America Authors: Clare A. Rodenberg, Jonathan A. Walter, Kyle J. Haynes | Presenter: Jane Hill Title: Habitat Connectivity For Promoting Species Range Shifts – Who Benefits And Where? Authors: Jane K. Hill, Sarah A. Scriven, Charles A. Cunningham |
| 1645 | Presenter: Benjamin Freeman Title: The Escalator To Extinction Is Already In Motion In The Tropics Authors: Benjamin Freeman | Presenter: Evelin Iseli Title: Rapid Upwards Spread Of Non- Native Plants Across Multiple Mountain Regions Authors: Evelin Iseli, Jake M. Alexander, MIREN Consortium | Presenter: Anna Hargreaves Title: Biotic Interactions More Often Constrain Species Warm Vs Cool Range Edges Authors: Anna L Hargreaves Alexandra Paquette |
| 1700 | Presenter: Katie Cook Title: Predicting Macroalgal Range Shifts In Aotearoa New Zealand To Inform Climate-Smart Conservation Management Authors: Katie M. Cook, Kate Neill, Wendy Nelson, Tom Brough, Brenton Twist, Carolyn Lundquist | Presenter: Nikunj Goel Title: A Predictive Theory Of Human Mediated Biological Invasions Authors: Nikunj Goel, Andrew M. Liebhold, Cleo Bertelsmeier, Mevin B. Hooten, Kirill S. Korolev, and Timothy H. Keitt | Presenter: Tayler Clarke Title Eastern Tropical Pacific Reef Fish On The Move Authors: Tayler M. Clarke, Fernande A. Zapata, Juan José Alvarado, A. Zapata, Juan José Alvarado, Ayalia-Boco, Jorge Corfes Núñez, Amilicar CupulMagaña, Andrés Log- Pérez, Juan P. Quimbaya, Hector Reyes-Bonilla, Fernando Rivera, Deads Nodriguez-Tonocso, Jenny C. Rodfriguez Zaragoza, Johanna Segovia, Sonia Bejarano |
| 1715 | | Presenter: Tonya Howington Title: For Richer Or Poorer: Comparing The Impact Of Invasive Species On The Richness Of Eveglades Taxonomic Groups Authors: Tonya Howington | |
| Location | Calusa Pre-Function | | |
| 1745 | Social & Poster Session Calusa Pr | e-Function (Bring Drink Ticket) | |

- 1. Resist-Accept-Direct, Contributing to a RAD Understanding of Climate Change Effects on Wildlife Refuges and Implications for Management Daniel Asyn
- 2. Low movement evolution undermines MPA effectiveness in the face of climate change Alicia Caughman
- 3. Convening science to conserve the Florida Wildlife Corridor, a large landscape conservation effort
- 4. Eurasian otter activity in Hong Kong constrained temporally by dogs and spatially by sea level rise Yu Hin Yau
- 5. Climate change knowledge, attitude and perception of undergraduate students in Ghana Benjamin Ofori
- 6. Delineating boundaries of Marine Turtle Management Areas (MarTuMAs) within Southeast Asia Rushan bin Abdul Rahman

Social & Poster Session Continued

7. Informing climate-smart adaptation of northeastern plant communities using joint species distribution modeling

Matthew Fertakos

8. NOAA Fisheries Distribution Mapping and Analysis Portal (DISMAP): Visualizing Changing Distributions

Melissa Karp

9. Assessing potential for shifting distributions in NOAA Fisheries' marine mammal and sea turtle climate vulnerability assessments

Matthew Lettrich

10. Do functional traits explain invasive plant species establishment across elevational gradients? An experiment in the Andes mountains of Chile

Anibal Pauchard

11. A Decadal Nationwide Assessment of Climate-Driven Species Redistribution Using Citizen Science

Gretta Pecl

12. High-Resolution Projections of Global Sea Surface Temperatures Reveal Critical Warming in Humpback Whale Breeding Grounds

Hannah von Hammerstein

 Multiple dimensions of extreme weather events and their impacts on biodiversity Juan David González-Truiillo

14. Forecasting the impacts of global change on a bee biodiversity hotspot Mark Buckner

15. Forecasting transboundary range shifts under climate change

Isaac Eckert

16. Genetic diversity among populations along two latitudinal clines in an invasive ant Marina Ascunce

 $17. \ Current \ and \ potential \ distribution \ of \ non-native \ plants \ in \ the \ Andes: \ the \ role \ of \ anthropization \ at \ multiple \ spatial \ scales$

Eduardo Fuentes

- 18. Applying invasive ecology to test how biotic interactions affect range shifts across large gradients Namfon Booncharoen
- 19. The establishment and development of invertebrate biotas associated with anthropogenic habitats

Joshua Sammy

20. Ecological Modeling to Support Management of Shifting Black Seabass

21. Influence ocean fronts on the movement of whale sharks Bilardo Nharreluga

22. Does urbanization facilitate ecological invasions into otherwise unsuitable regions?

Noah Bowen

23. Online Tools for Collaboration Across the Florida Ecological Greenways Network and Beyond Sarah Lockhart

WEDNESDAY, MAY 17

| 0700 | Excursion to Cypress Forests and Grassland and Wetland Ecosystems (See email for details on excursion) **DAY OFF from Conference if not Attending Excursion** | |
|------|--|--|
| 1800 | Featured Film: Path of the Panther Great Egret (cash bar available) | |

THURSDAY, MAY 18

| 0800 | Registration Opens Calusa Pre | Registration Opens Calusa Pre-Function | | |
|-------------------|--|--|--|--|
| 0800 | Discussion Group: Finding our way through Eco-Anxiety Calusa Terrace Wendy Foden | | | |
| Location | Calusa D-H (Session Chair: Rebe | ecca Senior) | | |
| 0900 | KEYNOTE - Theme 1 Detection, attribution, & prediction under species on the move A mechanistic understanding of species on the move in an uncertain world Alexa Fedston | | | |
| 0930 | KEYNOTE - Cross Theme Ice on the Move: What observing the underside of Antarctica's ice shelves now can tell us about future sea level rise Peter Washam | | | |
| 1000 | KEYNOTE - Cross Theme Innovative solutions for people and wildlife in a changing climate Nikhil Advani | | | |
| | Coffee & Tea Break Calusa Pre-Function (Snacks provided) | | | |
| 1100-1200 | Breakout Sessions | | | |
| Location | Calusa A | | Great Egret | |
| Session Chairs | Jonas Lembrechts | Justin Nowakowski | Birgitta Evengård | |
| Time | Theme 5 - Ecological responses to climate change from micro to macro scales | Theme 7 - Conservation paradigms and management strategies for a moving and (dis)connected future | Theme 11 - OneHealth and Implications of species on the move for human and animal health | |
| 1100 | Presenter: Montague Neate- Clegg Title: The Combined Phenological, Latitudinal, And Elevational Responses Of North American Birds To Climate Change Authors: Montague H. C. Neate- Clegg | Presenter: Kiley Dancy Title: Scenario Planning To Inform U.S. East Coast Fisheries Management Response To Climate- Driven Changes In Fishery Distribution Authors: Kiley Dancy, Jonathan Star, Sean Lucey, Michelle Bachman, Travis Ford, Karla Gore, Moira Kelly, Toni Kerns, Wendy Morrison, Roger Pugliese | Presenter: Birgitta Evengard Title: Climate Change And The Transition Of Infectious Diseases In The North Authors: Birgitta Evengard | |

| Location | Calusa A | Calusa C | Great Egret | |
|------------------|--|---|---|--|
| 1115 | Presenter: Lydia Soifer Title: The 3d Velocity Of Microclimate Change Authors: Lydia Soifer, James Ball, Hamish Asmath, David Coomes | Presenter: Bryan Falk Title: Managed Relocation And Invasive Species Implications: Ongoing Efforts By The National Invasive Species Council Authors: Bryan Falk, Stas Burgiel | Presenter: Gavriella Hecht Title: Comparative Spatiotemporal Analysis Of Cases Of Human Dengue Virus In El Oro, Ecuador Authors: Gavriella LY. Hecht, Jason K. Blackburn, Sadie J. Ryan | |
| 1130 | Presenter: Rebecca Senior Title: Global Loss Of Climate Connectivity In Tropical Forests Authors: Rebecca Senior, Jane Hill, David Edwards | Presenter: Catarina Frazao-Santos Title: Marine Spatial Planning In (Changing) Polar Regions Authors: Catarina Frazão Santos, José C. Xavier, Elena Cissi, Tundi Agardy, Charles N. Ehler, Renuka Badhe, Kevin A. Hughes, Susie M. Grant, David Santos, Sara García-Morales, Catarina Pereira Santos & Rui Rosa | Presenter: David Redding Title: Climate Change Is Driving A General Expansion Of Zoonotic And Vector-Borne Diseases Risk Authors: David Redding, Rory Gibb, Kate Jones | |
| 1145 | Presenter: Kathryn Smith Title: Global Impacts Of Marine Heatwaves On Foundation Specie Authors: Kathryn E. Smith, Dan A. Smalw | Presenter: Isaac Eckert Title: National Or Transnational Coordination Is Key For Protecting Biodiversity On The Move Authors: Isaac Eckert & Laura J. Pollock | Presenter: Anastasia Emelyanova Title: Selected Wildlife Infections in The Circumpolar Arctic - A Bibliometric Review Authors: Anastasia Emelyanova, Audrey Savolainen, Antti Oksanen, Pentti Nieminen, Olga Loginova, Khaled Abass, Arja Rautio | |
| 1200 | Lunch Calusa Terrace/Calusa D-H | | | |
| 1300 | Narrative Currents: how to share climate change stories from MPA practitioners and marine scientists from around the globe (Facilitated forum and solicitation for stories) Great Egret Madeline McEwen and Lee Hannah | | | |
| 1400-1500 | Breakout Sessions | | | |
| Location | Calusa A | Calusa C | Great Egret | |
| Sesion Chairs | Juliano Palacios Abrantes | Malin Pinsky | Monte Neate-Clegg | |
| Time | Theme 7 - Conservation paradigms and management strategies for a moving and (dis)connected future | Theme 4 - Impacts of climate change on community structure and patterns of taxonomic, functional, and phylogenetic diversity | Theme 3 - Understanding ecological and evolutionary mechanisms facilitating or hindering range shifts | |
| 1400 | Presenter: Juliano Palacios Abrantes Title: Timing And Magnitude Of Climate- Driven Range Shiffs In Transboundary Fish Stocks Challenge Their Management | Presenter: Malin Pinsky Title: Warming And Cooling Catalyze Widespread Temporal Turnover In Biodiversity | Presenter: Dirk Nikolaus Karger Title: How Climate Extremes Stall Food Webs On The Move | |

| Location | Calusa A | Calusa C | Great Egret |
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| | Authors: Palacios-Abrantes, Juliano, Frölicher, Thomas L., Reygondeau, Gabriel, Sumaila, U. Rashid, Tagliabue, Alessandro, Wabnitz, Colette C. C., Cheung, William W. L. | Authors: Malin L. Pinsky, Helmut Hillebrand, Shane A. Blowes, Jonathan M. Chase, Laura H. Antão, Myriam R. Hirt, Ulrich Brose, Michael T. Burrows, Benoit Gauzens | Authors: Dirk N. Karger, Laura J. Pollock, Louise O'Connor, Luigi Maiorano, Yue Dou, Wilfried Thuiller, Catherine H. Graham |
| 1415 | Presenter: Jennifer Smith Title: Lose Home Or Eat More! Spiny Lobsters Prefer Native Prey Over Novel, Range-Extending Urchin Pest Authors: Jennifer E. Smith, John Keane, Craig Mundy, Caleb Gardner & Michael Oellermann | Presenter: Kenneth Feeley Title: Climate-Driven Species Migrations Change The American Flora Authors: Kenneth J. Feeley, Catherine H. Bravo A., Belen Fadrique J., Timothy M. Perez, and Daniel F. Zuleta | Presenter: Nikki Moore Title: Informed expectations reveal relationships between dispersal ability and range shifts Authors: Nikki A. Moore, Brunno Oliveira, Lise Comte, Jennifer M. Sunday |
| 1430 | Presenter: Brooke Bateman Title: Protected But Not Against Climate Change: How Climate Change Could Affect Birds In Protected Areas In Canada And The Us Authors: BL Bateman, JX Wu, CB Wilsey, L Taylor, CW Schuurman, SR Parker, MA Gahbauer, and PJ Heglund | Presenter: Jean-Philippe Lessard Title: A Single Range- Expanding Species Reshapes Alpine Ecosystems And Their Belowground Diversity Authors: Isaac M.K. Eckert, Tonia De Bellis, Gabriel Muñoz, Steven W. Kembel, Martin A. Nuñez, Jean- Philippe Lessard | Presenter: Erica Nielsen Title: Eco-Evolutionary Dynamics Of A Climate- Driven Range Expansion Of The Owl Limpet, Lottia Gigantea Authors: Erica S. Nielsen, Samuel Walkes, Rachael A. Bay, Eric Sanford, Jacqueline Sones, Richard Grosberg |
| 1445 | Presenter: Lucy Van Kleunen Title: Decision-Making Under Uncertainty For Species Introductions Into Ecological Networks Authors: Lucy B Van Kleunen, Katie A Peterson, Meghan T Hayden, Aislyn Keyes, Aaron J Schwartz, Henry Li, Laura Dee | Presenter: Brunno Freire Dantas de Oliveira Title: Historic Biome Stability Predicts Contemporary Ecosystem Stability Authors: Brunno F. Oliveira, Lucie Kuczynski, Kathryn Mercier, Eben North Broadbent, Beatriz Lopez Gutierrez, Jesús Pinto- Ledezma, Jeannine Cavender- Bares, Ana Carnaval, Katharine A. Marske, Gabriel Costa | Presenter: Kevin Owen Title: Karenia Brevis Cysts And Implications For The Biogeographic Response Of This Red Tide Species To Global Climate Change Authors: Kevin C. Owen, Daniel P. Owen, Jen L. Venero |
| 1500 | Presenter: Elizabeth Znidersic Title: Acoustic Restoration: Using Soundscapes To Benchmark And Fast- Track Recovery Of Ecological Communities Authors: Elizabeth Znidersic and David Watson | Presenter: Dominique Caron Title: Trophic Niche And Climate Shape The Structure Of Avian Diversity Authors: Dominique Caron, Isaac Eckert, Laura Pollock | Presenter: Sean Parks Title: Protected Areas Not Likely To Serve As Steppingstones For Species Undergoing Climate- Induced Range Shifts Authors: Sean A. Parks, Lisa M. Holsinger, John T. Abatzoglou, Caitlin E. Littlefield, Katherine A. Zeller |

| Location | Calusa A | Calusa C | Great Egret | |
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| 1515 | | Presenter: Charlotte Clay Title: Variation In Functional Composition Of Reef Fishes Along A Tropical-To-Temperate Gradient Authors: Charlotte G. Clay, James D Reimer, Masami Obuchi, Katle M Cook, Masam Mizuyama, Brigitte Sommer, Iori Kawamura, Hiroki Kise, Maria Beger | Presenter: Robert K. Colwell Title: Still No Evidence Of Poleward Range Shifts In The Tropics, But Lowland Biotic Attrition May Be Underway Authors: Robert K. Colwell and Kenneth J. Feeley | |
| 1530 | Coffee & Tea Break Calusa Pre-Fu | Coffee & Tea Break Calusa Pre-Function (Snacks provided) | | |
| 1600-1730 | Breakout Sessions | | | |
| Location | Calusa A | | Great Egret | |
| Session Chair | Wendy Foden | Mark Urban | Aurore Maureaud | |
| Time | Theme 7 - Conservation paradigms and management strategies for a moving and (dis)connected future | Theme 1 - Detection, attribution, and prediction under species on the move | Theme 3 - Understanding ecological and evolutionary mechanisms facilitating or hindering range shifts | |
| 1600 | Presenter: Justin Nowakowski Title: Protected areas slow declines unevenly across the tetrapod tree of life Authors: A. Justin Nowakowski, James I. Watling, Alexander Murray, Jessica L. Deichmann, Thomas S. Akre, Carlos L. Muñoz Brenes, Brian D. Todd, Louise McRae, Robin Freeman, Luke O. Frishkoff | Presenter: Maite Erauskin- Extramiana Title: Implications For Global Tuna Fishing Industry Of Climate Change- Driven Alterations In Productivity And Body Sizes Authors: Maite Erauskin-Extramiana, Guillem Chust, Haritz Arrizabalaga, William W. L. Cheung, Josu Santiago, Gorka Merino, Jose A. Fernandes- Salvador | Presenter: Joseph Baecher Title: Informing Global Range Shifts With Biologically-Relevant Connectivity Layers Authors: Joseph A Baecher, Luke Evans, Brett R Scheffers | |
| 1615 | Presenter: Wendy Foden Title: Conservation Under Climate Overshoot: A New Role For National Parks Authors: Wendy B. Foden, Guy F. Midgley, Namita Vanmali, Nicola J. van Wilgen Bredenkamp, Kerry- Anne Grey and Kay Murray | Presenter: Mark Urban Title: Using Mechanistic Insights To Predict The Climate-Induced Expansion Of A Top Predator Authors: Mark C. Urban, Christopher P. Nadeau, & Sean L. Giery | Presenter: Barrett Wolfe Title: Behavioural Mechanisms Facilitating Persistence At A Marine Predator's Range Extension Front Authors: Barrett W. Wolfe, Quinn P Fitzgibbon, Jayson M Semmens, Sean R Tracey, Gretta T Pecl | |

| Location | Calusa A | Calusa C | Great Egret |
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| 1630 | Presenter: Jake Lawlor Title: Assessing Global Marine Protected Areas In The Context Of Anticipated Species Range Shifts Authors: Jake Lawlor, Jessica Couture, William Cheung, Mark Costello, Lee Hannah, Enily Pidgeon, Gabriel Reygondeau, Jennifer Sunday | Presenter: Mireia Valle Title: The Importance Of Incorporating Water Column Data Into Species Distribution Models: A Case Study For Commercial Fish Of Atlantic Ocean Authors: Mireia Valle, Eduardo Ramirez-Romero, Leire Ibaibarriaga, Leire Citores, Jose A Fernandes and Guillem Chust | Presenter: Paul Taillie Title: Climate Adaptation Pushes Insular Endemic Species Closer To Extinction Authors: Paul Taillie and Robert McCleery |
| 1645 | Presenter: Mmoto Masubelele Title: Vulnerability And Adaptation Of Species And Biodiversity To Climate Change According To Management Of National Parks In South Africa Authors: Mmoto L Masubelele and Mohlamatsane M Mokhatla | Presenter: Jackson Valler Title: Climate Adaptation Postdoctoral Fellows Program: Climate-Mediated Species Movement Authors: Jackson Valler and Madeleine Rubenstein | Presenter: Verena Wang Title: Ontogenetic Habitat Constraints Of Marine Fishes In Temperate Environments Authors: Verena H. Wang, Lorenzo Ciannelli, Mark W. Nelson, Matthew J. Ajemian, Stephanie K. Archer, Marissa L. Baskett, J. Emmett Duffy, James W. Morley |
| 1700 | Presenter: Asena Goren Title: Dynamic Demography And Healthy Ecosystems Authors: Asena Goren | Presenter: Marcela Brasil de Castro Godinho Title: Anurans On The Move In The Atlantic Forest: What Happen To The Distributions In Different Scenarios Of Climate Change? Authors: Marcela, BrasilCodinho, Ricardo J., Sawaya and Ana Carolina, Carnaval | |
| 1715 | Presenter: Venetia Briggs-Gonzalez Title: Florida's Crocodiles: A Tale Of Two Shores Authors: Venetia S. BriggsGonzalez, Paul M. Evans, Frank J. Mazzotti | Presenter: Naití A. Morales Title: New migrants for scientists, old news for locals: Recent records of large sharks in the remote Rapa Nui (Easter Island) Authors: Naití A. Morales, Amy R. Coghlan | |
| 1800 | Banquet Dinner Calusa Terrace (dinn | er, drinks and music; bring drink tic | kets) |

FRIDAY, MAY 19

| | Calusa D-H (Session Chair: I-Ching Chen) | | | |
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| 0830 | KEYNOTE - Theme 8 Governance, legal, and ethical issues for shifting species and changing ecosystems Governing Shifting Species and Changing Ecosystems: What Role Might Ecological Grief Play? Robin Kundis Craig | | | |
| 0900 | KEYNOTE - Theme 5 Ecological responses to climate change from micro to macro scales Microclimate change: the hidden driver of species redistributions Jonas Lembrechts | | | |
| 0930 | KEYNOTE - Theme 10 Indigenous knowledge and species on the move Rewilding in Finland: overview of the approach and stories from the field Antoine Scherer | | | |
| 1000 | Coffee & Tea Break Calusa Pre-Function (Snacks provided) | | | |
| 1030-1130 | Breakout Sessions | | | |
| Location | Calusa A | Calusa C | Great Egret | |
| Session Chair | Wendy Lin-Bartles | Brunno Oliveria | Julie Lockwood | |
| Time | Theme 9 - Cultural, social, and economic dimensions of changes in species distributions | Theme 1 - Detection, attribution, and prediction under species on the move | Theme 5 - Ecological responses to climate change from micro to macro scales | |
| 1030 | Presenter: Gretta Pecl Title: Climate-Driven 'Species-On-The- Move' Provide Tangible Anchors To Engage The Public On Climate Change Authors: Gretta T Pecl, Rachel Kelly, Chloe Lucas, Ingrid van Putten, Renuka Badhe, Curtis Champion, I- Ching Chen, Omar Defeo, Juan Diego Gaitan-Espitia, Birgitta Evengård, Damien Fordham, Fengyl Cuo, Romina Henriques, Sabine Henry, Jonathan Lenoir, Henry McGhie, Tero Mustonen, Stephen Oliver, Nathalie Pettorelli, Malin L Pinsky, Warren Potts, Julia Santana-Garcon, Warwick Sauer, Anna-Sofie Stensgaard, Morgan W. Tingley, Adriana Verges | Presenter: David Eduardo Uribe-Rivera Title: Understanding The Effects Of Imperfect Detection And Information Sharing On The Temporal Predictive Performance Of Occupancy Models Authors: David E. Uribe- Rivera, Gurutzeta Guillera- Arroita, Saras M. Windecker, Solomon Z. Dobrowski and Brendan Wintle | Presenter: Marius Somveille Title: Predicting How Bird Migration Responds To Climate Change At Different Scales Authors: Marius Somveille | |
| 1045 | Presenter: Anna Woodhead Title: Who Sees What? Differing Perceptions Of Marine Species Re- Distribution in Small Scale Tropical Fisheries Authors: Anna J. Woodhead, Paola Diaz, Magnus Nyström, Christina C. Hicks, Albert V. Norström | Presenter: Pallieter De Smedt Title: Predicting Soil Fauna Distribution in Their Non- Native Range: Terrestrial Isopods in North-America As Model Case Authors: Pallieter De Smedt, Pieter Sanczuk, Lander Baeten, Kris verheyen, Katalin Szlavecz | Presenter: Matthew Watson Title: Chaging Body Size In A Changing Climate: How Terrestrial Vertebrates Respond To Environmental Pressures Authors: Matthew Watson and Jeremy Kerr | |

| Location | Calusa A | Calusa C | Great Egret |
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| 1100 | Presenter: Mona Holy Title: Why Is The Role Of Biodiversity So Hard To Retell? Examining Effects In Public Diversity Narratives Through System Dynamics Authors: Mona Holy, Christian Hof | Presenter: Janelle Morano Title: Quantitative Characterization Of Fine- Scale Distributional Changes For Spatially Managing Fisheries Authors: Janelle L. Morano, Patrick J. Sullivan, Kevin Friedland | Presenter: Katherine Dale Title: Tradeoffs Between Phenology And Geography Constraints In Response To Environmental Changes In The Eastern Pacific Authors: Katherine E Dale, Lorenzo Cianelli, Jerome Fiechter, Mercedes Pozo Buil, Rubén Esteban García Gómez, Paty Jiménez- Rosenberg, Gerardo Aceves Medina, Andrew R. Thompson, John G. Field, Toby D. Auth, R. Ian Perry, Lauren Rodgers, Rebecca A. Howard, Rebecca G. Asch |
| 1115 | Presenter: Jessica Kahler Title: Complex Interactions Between Climate Change And Wildlife Crime In Social- Ecological Systems Authors: Jessica Kahler, Maria del Pilar Morales Giner, Vanessa Hull, and Jane Southworth | Presenter: Erik Beever Title: Assessing alternative land-use strategies to create spatial heterogeneity for bird species on the move, amidst climate variability Authors: Erik A. Beever, Adam B. Smith, Jennifer L. Wilkening, and Frankie D. Gerraty | Presenter: Ward Fonteyn Title: Extreme Blind Spot: Incorporating Climatic Extremes In Species Distribution Modelling Authors: Ward Fonteyn, Josep M. Serra-Diaz, Bart Muys, Koenraad Van Meerbeek |
| Location | Calusa D-H | | |
| 1130 | Closing Ceremony - Remarks and Awards Brett Scheffers | | |
| 1200 | Coffee & Tea Break Calusa Pre-Function (Snacks provided) | | |
| Location | Blue Heron | | |
| 1300-1700 | Workshop • Creating your own downscaled future climate data for ecological applications using CHELSA CMIP6 Convenor: Dirk Nikolaus Karger | | |

All Conference abstracts can be viewed via the QR code below





**Please note that the second set of restrooms by Blue Herron are designated for Gender Neutral and will have a sign displayed throughout the conference



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