

2021 Pacific Seabird Group

48th Annual Meeting

22 – 26 February 2021



SPONSORS

We acknowledge the generous support of the following sponsors:

Mottled Petrel



Black-browed Albatross



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Peruvian Booby



DONORS

We thank the following individuals for their financial contributions.

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LOCAL COMMITTEE WELCOME

The PSG 2021 “Local” Organizing Committee would like to welcome you to the 48th Annual Meeting of the Pacific Seabird Group. It is truly an honor to bring to you this completely unprecedented event. For the first time in the history of PSG, the 2021 annual meeting is being conducted completely online. The transition from an in-person meeting to a virtual one has not been without challenges, but we feel that our virtual meeting format provides a surprisingly high level of engagement for participants. It also allows us to significantly decrease our carbon footprint for the meeting.

While some aspects of the 2021 meeting may be new to many of us, one thing that remains familiar is the outstanding quality of the Scientific Program that we have come to expect from a PSG Annual Meeting. Scientific Program Chair Roberta Swift and her team have created a fantastic program for this meeting featuring seabird research innovations, failures, surprises, and challenges from across the Pacific and beyond. One of the most exciting aspects of the virtual format of the 2021 meeting is that it provides an opportunity to welcome colleagues who may have had difficulty attending previous meetings due to time and travel costs.

This year the Local Organizing Committee is excited to bring you a new event: a workshop entitled “Implicit Bias, Privilege, and DEI - What does Seabird Research Need to Know.” This highly interactive workshop will be led by Ku‘ulani Keohokalole of People Strategies Hawai‘i and we encourage everyone to attend. Ku‘ulani will be leading the workshop and helping facilitate discussion on a variety of DEI topics throughout the meeting.

One of the most difficult decisions we all face when attending a PSG Annual Meeting is deciding which field trip to attend. It is not getting any easier in 2021 as you have nine field trips to choose from. These “Scenes from the Field” are a collection of virtual field trips from locations around the world! We will travel to seabird colonies and birding hotspots on both sides (and the middle!) of the Pacific and each trip will include footage from the field and a live Q&A with the hosts. And the best part is that each of the trips will be recorded and available online, so you can attend them all!

Once again, seabird ecologist and natural science illustrator [Olivia Townsend](#) has created incredible artwork for the meeting, but this time she has produced two complementary logos! The Arctic Tern (*Sterna paradisaea*) and Southern Royal Albatross (*Diomedea epomophora*) are good metaphors for the 2021 meeting theme “Apart together.” The combined range of these two iconic species spans much of the Pacific and overlaps the range of many of our members who will be coming together for the meeting. To order merchandise featuring Olivia’s logos, please visit the [PSG Online Store](#).



Finally, what would a PSG Meeting be without a silent auction to benefit student travel? This year, the [Silent AUktion](#) will run a little differently though: we are using the website [Charity Auctions Today](#) as the platform to move the silent auction to an online format. The auction is open from February 1-26, 2021 so get your bids in and help us reach our goal of \$2,500 in Student Travel Awards for PSG 2022 in San Diego, CA!

Once again, welcome to the 48th Annual Meeting of the Pacific Seabird Group. We look forward to sharing this time with you.

Marc Romano, Local Committee Chair, locochair@pacificseabirdgroup.org

Roberta Swift, Scientific Program Chair, Virtual Planning Committee Chair

Jen Barrett, Connect Consulting

Justine Miller, Luana Events

LoCo Subcommittee Chairs and Members: Kim Nelson, Stephanie Loreda, Christy Wails, Cheryl Strong, Corey Clatterbuck, Hannah Moon, Jennifer Urmston, Kristin Brunk, Kate Iaquinto, Zoe Burr, Dawn Breese, Lindsay Adrean, Amie Aguiar, Anne Poopatanapong, Adrian Gall, Nina O'Hanlon, Katie Stoner, Anna Vallery, Derek Harvey

GREETINGS FROM THE PROGRAM CHAIR

Welcome to the 48th Annual Meeting of the Pacific Seabird Group – our first fully online annual meeting! This year we are celebrating being “Apart Together, for Seabirds” after a year of social distancing from peers, family, and colleagues. You’ll notice some changes to the format. The meeting will run only on weekdays (weekends should be spent doing what you love, not sitting at a computer!). Each day will begin a little bit later, end a little bit earlier, and incorporate lots of breaks to limit screen fatigue. We hope this allows you to reach out to colleagues between sessions, take a break, and pace yourself because all of our great poster and oral presentations will be recorded and available anytime, and for a limited time after the meeting.

Our scientific program includes 100 oral and poster presentations on a wide range of topics. Oral contributed paper sessions, posters, and special panel discussion sessions are interspersed with the student mentor mixer, early-career scientist panel, virtual field trips and our first **Diversity, Equity, and Inclusion Workshop**. Even our **Silent “Auktion”** and **PSG Annual Meeting Merchandise** have gone virtual! Many thanks to the PSG 2020 planning team who paved the way for this first virtual meeting.

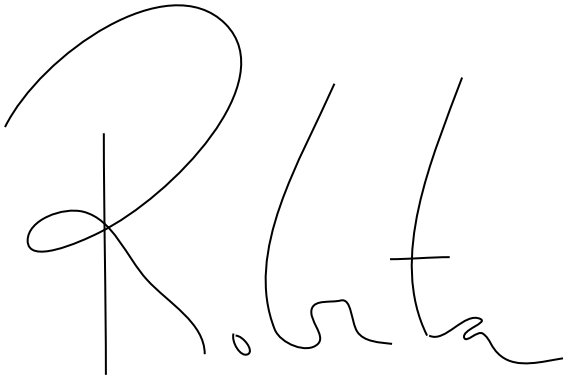
In addition to general sessions, three special sessions will cover timely issues. Wednesday afternoon’s symposium, “**Murrelets and Megafires,**” will investigate an emerging threat to an already threatened Marbled Murrelet population and discuss science and conservation that could help protect these seabirds. In Thursday’s “**Banding Together,**” we will celebrate and reflect upon the Bird Banding Lab’s 100-years of contributions to seabird conservation and research, with an eye toward the future. During Friday’s “**COVID-19 Hot Topics Lightning Round,**” participants will share briefs on how COVID-19 affected their seabird science in 2020 and beyond.

This year we have invited accomplished seabird experts from around the world to share their science with us. I am incredibly excited about our five plenary speakers. The meeting opens on Wednesday morning with Special Invitational Plenary **Dr. Scott Edwards** of Harvard University, who will share his research on molecular ecology of tubenosed seabirds, their mating systems, conservation and evolution. Both academe and athlete, Dr. Edwards cycled solo from the Atlantic to the Pacific in 2020, living his dream and paying it forward, while raising awareness and money to celebrate diversity. On Thursday morning, we welcome our second annual Early Achievements in Research and Science Communication plenary **Dr. Anant Pande**. Dr. Pande joins us from the Wildlife Institute of India with strategies from across the globe for researchers communicating in a post-pandemic world. On Thursday afternoon we are joined by Special Invitational Plenary **Dr. Stephanie Borrelle**, Marine and Pacific Regional Coordinator for BirdLife International. Dr. Borrelle will share “Seabird Wisdom” combining Maori conservation concepts and seabird science. She will discuss what it means to be a conservationist with colonial privilege re-learning her conservation practice so that it is equitable, decolonial, and as diverse as the seabird fauna of Aotearoa. Our fourth plenary on Friday morning is **Dr. William Montevecchi**, the PSG 2021 Lifetime Achievement awardee. Dr. Montevecchi’s plenary “There’s an ocean of information out there and it’s changing rapidly” will discuss recent changes in seabird science and how historical context, technological innovation and environmental change have shaped, enabled and compelled new research approaches and directions. Our fifth and final plenary, **Dr. Heather Renner**, will take us “To the edge of the world and back again; the once and future data” of Alaska Maritime National Wildlife Refuge.

2020 was not easy for anyone. Longstanding and deep societal inequities were brought to the forefront in the midst of a global pandemic. We know these same inequities exist in science too. This year, we take steps to initiate critical conversations during our first diversity, equity and inclusion-specific workshop and by promoting thought-provoking conversations and posts throughout the meeting. We hope that you will come away from this meeting with new tools and insights, and with renewed determination to make positive

changes in our own organizations, universities, agencies, and institutions. Diversity makes our teams, our ideas, and our science better!

And finally, this “word” from the Program Chair would not be complete without thanking the more than 40 amazing volunteers who sprang into action to serve as part of the 2021 Scientific Program Committee, Local Committee and Virtual Planning Committee. Most of these volunteers were new to meeting planning but worked like experts, with cheer and ingenuity, charting new territory for every meeting element. Some of my favorite memories of PSG 2021 will be the experience of working with this inspiring group who rolled up their sleeves and worked together. **Thank you all for helping us chart this new course for PSG!**

A handwritten signature in black ink, appearing to read 'Roberta Swift'. The signature is fluid and cursive, with a large initial 'R' and a stylized 'S'.

Roberta Swift, Scientific Program Chair

Virtual Goodie Bag

Hot Podcast Alert

The [American Birding Podcast](#) brings together staff and friends of the American Birding Association as we talk about birds, birding, travel and conservation in North America and beyond.

The [BirdNote Threatened Podcast](#) is about answering the call to protect the birds and places we love.

Discount Code!

This week only, enjoy 10% off your purchases of nature posters, cards, and more at [Earth Sky & Water](#)
Use code **PSG2021**

Even after this week, if you make a purchase directly from that link you will also earn a 10% donation to PSG!

Cool Bird Blogs and Sites

[Dan Tallman's Bird Blog](#)

[10,000 Birds](#)

[Fatbirder](#)



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Pacific Seabird Group

PACIFIC SEABIRD GROUP EXECUTIVE COUNCIL FOR 2020–2021

Officers

Chair	Rob Suryan
Chair-elect	Roberta Swift
Past Chair	David Craig
Vice-chair for Conservation	Peter Hodum
Treasurer	Kirsten Bixler
Secretary	Olivia Bailey

Representatives

Alaska and Russia	Marc Romano
Washington and Oregon	Rachael Orben
Northern California	Katie Stoner
Southern California, Latin America, & Hawai'i	Cristián Suazo
Non-Pacific USA	Mary Cody
Canada	Kerry Woo
Asia and Oceania	Chung-hang Hung
Europe and Africa	Nina O'Hanlon
Student Representative	Kristin Brunk

Local Organizing Committee for the 2021 Annual Meeting

Marc Romano - Local Committee Chair
Jane Dolliver - Communications Committee Coordinator
Roberta Swift - Chair of the Scientific Program
Rob Suryan - Chair
Olivia Bailey - Secretary
Kirsten Bixler - Treasurer
David Craig - Chair of the Awards Committee
Kristin Brunk - Student Representative
Justine Miller, Luana Events - Conference Planner

PACIFIC SEABIRD GROUP'S DIVERSITY STATEMENT

The Pacific Seabird Group is an all-inclusive international society of professional seabird researchers and managers dedicated to the study and conservation of seabirds and their environment. PSG is committed to making diversity a core and abiding strength among our membership and all of our activities including programs, events, publishing, and professional development. Achieving diversity requires an enduring commitment to inclusion that must find full expression in the culture, values, norms and behaviors of the PSG. We support diversity in all of its forms, encompassing but not limited to age, disability status, economic circumstance, ethnicity, gender, race, religion and sexual orientation.

ACKNOWLEDGEMENTS

We would like to thank the following people and organizations for all their hard work to make this meeting possible.

Conference Planning: Justine Miller, Luana Events

Virtual Conference Planning and Implementation: Jennifer Barrett, Connect Consulting

Scientific Program: Roberta Swift, Holly Freifeld, David Pereksta, Nacho Vilchis, Yasuko Suzuki, Jonathan Plissner, Andre Raine, Becca White, Amelia DuVall, Kristina McOmber, Derek Harvey

Virtual Programming Committee: Roberta Swift, Rob Suryan, Nina O'Hanlan, Annette Henry, Rachael Orben, David Craig, Marc Romano, Olivia Bailey, Mi Ae Kim

Local Chair: Marc Romano

General Coordination/Advice: Kim Nelson

Student Events: Kristin Brunk, Kate Iaquinto

Early Career Scientist Panelists: Mayumi Arimitsu, Holly Ann Naholowa, Motohiro Ito, Kristina McOmber, Ilana Nimz

Fundraising: Corey Clatterbuck, Hannah Moon

Meeting Website and Registration: Adrian Gall, Zoe Burr, Jenny Howard

Merchandise Website: Anne Poopatanapong, Christy N. Wails

Silent AUKtion: Jennifer Urmston, Kristin Brunk, Dawn Breese and all the generous donors who contributed

Social Media: Laura Bliss, Julia Gulka, Jenny Howard, Ed Jenkins, Olivia Townsend, Anna Vallery, Brad Wilkinson

Field Trip Organizing: Zoe Burr, Stephanie Loredó

Field Trip Videos and Hosts: Steve Holzman, André Raine, Benjamin Galardo, Carlos Zavagala, Ivan Vicente, Lauren Pederson, Jon Plissner, Cecilia Soldatini, Javier Alcala, Max Quintero, Yuri Albores, Sarah Youngren, Dan Rapp, Angelique Songco, Retch Pagliawan, 大槻都子 (Kuniko Otsuki), 高島美登里 (Midori Takashima), 全慈 武石 (Masayoshi Takeishi)

ACKNOWLEDGEMENTS CONTINUED

Field Trip Subtitles and Transcripts: 木幡愛梨 (Airi Kowata), 伊藤那奈 (Nana Ito), 大槻都子 (Kuniko Otsuki), Theodore Squires, Javier Arata, Stephanie Lored, Annette Henry

Communications: Stephanie Lored, Christy Wails, Cheryl Strong

Social Events: Jennifer Urmston, Stephanie Lored

Program Production: Lindsay Adrean, Zoe Burr, Nina O'Hanlon, Dawn Breese

Registration Goodie Bags: Lindsay Adrean, Amie Aguiar

Diversity, Equity, Inclusion Event: Ku'ulani Keohokalole, Peoples Strategies, Hawai'i and Katie Stoner, Anna Vallery, Derek Harvey

Special Session and Discussion Organizers and Panelists: Roberta Swift, Becca White, Jonathan Felis, Amelia Duvall, Martin Raphael, Lisa Ellsworth, Steven Singer, Anne Poopatanapong, Scott Pearson, Adam Duarte, Phyllis Reed, Jonathon Valente, Tony Celis-Murillo, Matt Rogosky, Jennifer McKay, Jennifer Learned, William Kendall, Beth Flint, Patrick Keenan

Volunteer Organizer: Justine Miller

Session Hosts: Jan Roletto, Alexa DeJoannis, Kerry Woo, Morgan Gilmore, Alexis Will, Francis Daunte, Sarah Durham, Katie O'Reilly, Shilo Felton, Noah Dolinajec, Peter Hodum, Roberta Swift, Marc Romano, Anna Vallery, Lindsay Adrean, Jennifer Urmston, Derek Harvey, Zoe Burr, Stephanie Lored, Javier Arata, Kate Iaquinto, Kristin Brunk, Katie Stoner, David Craig, Rob Suryan

Student Presentation Judges: We are grateful to the 40 volunteer judges who have reviewed the scientific presentations of students at the annual meeting: Josh Adams, Yumi Arimitsu, Mary Cody, Melissa Costagliola-Ray, David Craig, Alexa DeJoannis, Noah Dolinajec, Mark Drever, Sarah Durham, Alyssa Eby, Shilo Felton, Alexa Foster, Caroline Fox, Adrian Gall, Anthony Gaston, Morgan Gilmour, Julia Gulka, Sarah Hecocks, Annette Henry, David Hyrenbach, Trevor Joyce, Nina Karnovsky, Kathy Kuletz, Jenni Learned, Don Lyons, Caitlin Marsteller, Katie O'Reilly, Anant Pande, Cristian Pinto, Michael Polito, Jan Roletto, Marc Romano, Stephanie Schneider, Jonathon Valente, Anna Vallery, Christy Wails, Rebecca White, Alexis Will, and Kerry Woo.

We would like to acknowledge that many members of this organization work with seabirds on traditional lands of numerous Tribes. We honor with gratitude the land itself and these native people, past and present.

About the Front Cover: Our PSG 2021 Annual Meeting artwork was once again designed by seabird ecologist and natural science illustrator [Olivia Townsend](#). Olivia designed the PSG 2020 Annual Meeting logo and for 2021 she has produced two matching logos for the meeting! The Arctic Tern (*Sterna paradisaea*) and Southern Royal Albatross (*Diomedea epomophora*) are good metaphors for the 2021 meeting theme "Apart together." The combined range of these two iconic species spans much of the Pacific and overlaps the range of many of our members who will be coming together for the first time via a virtual platform.

CONFERENCE MEETINGS

All interested members are welcome to attend any of these meetings. In particular, please come to Wednesday's Conservation Committee meeting and Thursday's PSG Members' meeting, where you can learn about PSG's activities during the year and make comments or raise issues that concern you.

Monday, February 22

9:00-18:00 Executive Committee Meeting

12:00-13:00 Workshop: Studying Seabirds Using Wildlife Audio Recorders

16:00-18:00 Northeast Asia Seabird Conservation Committee

Tuesday, February 23

8:00 - 9:00 Central California Coast Joint Venture: What Should Coordinated Seabird Conservation Look Like on the Central California Coast?

9:00 - 10:00 USFWS Pacific Seabird Program

9:00 - 12:00, 13:00 - 15:00 Marbled Murrelet Technical Committee (Breakout groups starting at 13:00)

10:00-11:30 Exploratory Offshore Wind Discussion

10:00 - 12:00 Aleutian Tern Technical Committee

13:00-14:00 Seabird Monitoring Committee

14:00-16:00 American Bird Conservancy Gillnet Bycatch Meeting

15:00 - 18:00 Scripps's and Guadalupe Murrelets Technical Committee

15:00 - 17:00 North Pacific Albatross Working Group

16:00 - 17:30 Tufted Puffin Technical Committee

16:00-18:00 Kittlitz's Murrelet Technical Committee

Wednesday, February 24

12:00-13:00 Conservation Committee

Thursday, February 25

11:00-12:00 PSG Members' Meeting

Friday, February 26

12:00-13:00 Past Chairs Luncheon

SCHEDULE-AT-A-GLANCE

Monday 22 February 2021				
	Track 1		Track 2	
0900-1800	Executive Committee Meeting			
1200-1300			Workshop: Studying Seabirds Using Wildlife Audio Recorders	
1600-1800			Northeast Asia Seabird Conservation Committee	
Tuesday 23 February 2021				
	Committee Meetings: Virtual on Zoom			
	Track 1	Track 2	Track 3	Track 4
0800-0900			California Central Coast Joint Venture	
900-1000	Marbled Murrelet Technical Committee			USFWS Pacific Seabird Program
1000-1100		Aleutian Tern Technical Committee	Exploratory Offshore Wind Discussion	
1100-1200				
1200-1300	LUNCH	LUNCH	LUNCH	LUNCH
1300-1400	Marbled Murrelet Technical Committee	Marbled Murrelet Technical Committee	Seabird Monitoring Committee	
1400-1500				American Bird Conservancy Gillnet Bycatch
1500-1600	Scripps & Guadalupe Murrelet Technical Committee	North Pacific Albatross Working Group		
1600-1700			Tufted Puffin Technical Committee	Kittlitz's Murrelet Technical Committee
1700-1800				
1900-2100	Welcome Happy Hour on WHOVA			

SCHEDULE-AT-A-GLANCE

Wednesday 24 February 2021			
830-900	Scenes from the Field: The guano islands of Peru - Carlos Zavalaga (Track 3)		
900-915	Welcome and Opening Remarks (Track 1)		
915-945	PLENARY 1: Dr. Scott Edwards, Special Invitation (Track 1) MOLECULAR ECOLOGY OF TUBENOSED SEABIRDS (PROCELLARIIFORMES): MATING SYSTEMS, CONSERVATION AND EVOLUTION		
945-1000	Coffee Break/Technical Transition		
	Track 1	Track 2	Track 3
1000-1030	Conservation Biology	Tracking and Distribution	Spatio-Temporal models
1030-1100			
1100-1115	Coffee Break		
1115-1200	Conservation Biology	Tracking and Distribution	
1200-1300	LUNCH		Conservation Committee Meeting
1300-1400	Conservation Biology	Discussion Session: Murrelets and Megafires	
1400-1415	Coffee Break		
1415-1500	Conservation Biology	Tracking and Distribution	
1500-1700		DEI Workshop: (Track 1) Implicit Bias, Privilege, and DEI - What does Seabird Research Need to Know?	
1700-1730	STUDENT MENTORING RECEPTION		Scenes from the Field: Seabirds of Midway Atoll - Jon Plissner
1730-1800			Scenes from the Field: Field Work on Aiktak Island, Alaska - Dan Rapp and Sarah Youngren
1800-1900	Build Your Own Happy Hour on WHOVA!		

SCHEDULE-AT-A-GLANCE

Thursday 25 February 2021			
	Track 1	Track 2	Track 3
830-900	Scenes from the Field: Markham's storm petrel in the Atacama desert, Chile Benjamin Gallardo (Track 3)		
900-930	PLENARY 2: Dr. Anant Pande; Early Achievements in Research and Science Communications (EARS)(Track 1) COMMUNICATING IN A POST-PANDEMIC WORLD: STRATEGIES FROM ACROSS THE GLOBE FOR SEABIRD RESEARCHERS		
930-1015	Foraging Ecology	Non-breeding biology	
1015-1100		Breeding Biology	
1100-1200	PSG Members Meeting (Track 3)		
1200-1300	LUNCH/ Networking Time		
1300-1330	PLENARY 3: Dr. Stephanie Borrelle, Special Invitation (Track 1) SEABIRD WISDOM		
1330-1500	Foraging Ecology	Contaminants and Marine Debris	Banding together: Reflections on a Century of BBL
1500-1600	BREAK - Poster Pre-Perusal Period		
1600-1700	LIVE Poster Session on WHOVA		
1700-1800	DINNER BREAK		
1800-1830	Scenes from the Field: (Track 3) Japanese Murrelets in Kaminoseki, Japan – Midori Takashima		
1830-1900	Scenes from the Field: (Track 3) Tubbataha Reefs Natural Park, Philippines - Angelique Songco		
1900-2000	Build Your Own Happy Hour on WHOVA!		

SCHEDULE-AT-A-GLANCE

Friday 26 February 2021			
	Track 1	Track 2	Track 3
800-830	"Seabird Sessions" with Grant Humphries, David Grémillet, and Marianna Chimienti		
830-900			Scenes from the Field: Natividad Island & Espíritu Santo, Mexico
900-945	PLENARY 4, Lifetime Achievement Award, Dr. William Montevecchi (Track 1) THERE'S AN OCEAN OF INFORMATION OUT THERE AND IT'S CHANGING RAPIDLY		
945-1015	Population Biology	Climate Change	
1015-1030		Coffee Break	
1030-1130	Population Biology	Tools & Techniques	COVID-19 Hot Topics Lightning Round (45 minutes)
1130-1200			EARLY CAREER SCIENTIST PANEL
1200-1300	PAST CHAIRS LUNCH		
1300-1330	PLENARY 5, Heather Renner TO THE EDGE OF THE WORLD AND BACK AGAIN; THE ONCE AND FUTURE DATA		
1330-1430	Behavior	Management, Policy, Planning	
			Field Fails
1430-1500			
1500-1530	Coffee Break		
1530-1600	Scenes from the Field: (Track 3) Hawaiian Petrels in Kaua'i, Hawai'i, USA- Andre Raine		
1600-1630	Scenes from the Field: (Track 3) Winter Birding in Newport, OR, USA - Steve & Rachel Holzman		
1630-1730	CLOSING CEREMONY (Track 1)		
1730-1830	* Closing HAPPY HOUR: See you in 2022!*		

DETAILED SCHEDULE

*Note: **bold** indicates presenting author, * indicates student presenter*

Wednesday 24 February 2021			
830	Scenes from the Field: The guano islands of Peru - Carlos Zavalaga (Track 3)		
900	Welcome and Opening Remarks		
915	PLENARY 1: Dr. Scott Edwards, Special Invitation (Track 1) MOLECULAR ECOLOGY OF TUBENOSED SEABIRDS (PROCELLARIIFORMES): MATING SYSTEMS, CONSERVATION AND EVOLUTION		
945	Coffee Break/Technical Transition		
	Track 1	Track 2	Track 3
	Conservation Biology	Tracking and Distribution	Spatio-Temporal Models
1000	LIGHT IMPACTS ON THE THREATENED SEABIRD COMMUNITY OF THE JUAN FERNÁNDEZ ISLANDS, CHILE Peter Hodum, Pablo Manriquez, Guillermo de Rodt, Hector Gutierrez, Valentina Colodro, Ryan Carle, Paola Gonzalez	FORAGING AND PARENTAL CARE STRATEGIES IN THE COLONY OF FREGATA MAGNIFICENS IN THE ESPÍRITU SANTO ARCHIPELAGO, MÉXICO Giulia Giambalvo*, Cecilia Soldatini, Yuri V. Albores-Barajas, Gemma Abaunza, Niels Rattenborg	PATHS TO UNDERSTANDING SEABIRD RESPONSE TO HABITAT, ECOSYSTEM, AND CLIMATE CONDITIONS USING SPATIO-TEMPORAL MODELS James Thorson
1015	FIRST REPORT OF HOUSE MICE DENSITY INDEX IN A MAJOR BREEDING COLONY OF PERUVIAN DIVING-PETRELS IN PERU Dayana Alva-Gutierrez*, Sara Wang, Cinthia Irigoien-Lovera, Diego Gonzales-DelCarpio, Isabella Díaz-Santibáñez, Michael Polito, Carlos Zavalaga	NEW STRATEGIES FOR VISUALIZING SEABIRD DISTRIBUTIONS USING THE COLORIST PACKAGE IN R Justin Schuetz, Matt Strimas-Mackey, Tom Auer	SPATIO-TEMPORAL MODELS PROVIDE VAST POSSIBILITIES FOR ANALYSIS OF AT-SEA SEABIRD SURVEY DATA Yumi Arimitsu, James Thorson, John Piatt, Gary Drew, Kathy Kuletz, Bill Sydeman, Caitie Kroeger, Dan Cushing
1030	GEOGRAPHIC STRUCTURING OF EMPEROR AND ADELIE PENGUIN AND WEDDELL SEAL COLONIES IS INTERCONNECTED David Ainley, Michelle LaRue, Leo Salas Salas, Nadav Nur, Jay Rotella, Jarrod Santora, Sharon Stammerjohn	MODELING AT-SEA DENSITY OF MARINE BIRDS ON THE U.S. PACIFIC OUTER CONTINENTAL SHELF Jeffery Leirness, Josh Adams, Lisa Ballance, Michael Coyne, Jonathan Felis, Trevor Joyce, David Pereksta, Arliss Winship	
1045	ASHY STORM PETRELS EXPAND THEIR BREEDING HABITAT IN THE MEXICAN ISLANDS Maria Felix Lizarraga, Yuliana Bedolla Guzmán, Alejandra Fabila Blanco, C. Alicia Aztorga Ornelas		
1100	Coffee Break		

Wednesday 24 February 2021 (cont.)			
	Track 1	Track 2	Track 3
	Conservation Biology	Tracking and Distribution	
1115	A SPATIAL ANALYSIS OF WEDGE-TAILED SHEARWATER (ARDENNA PACIFICA) FALLOUT ON SOUTHEAST OAHU, HAWAI'I Jennifer Urmston, Susan Carstenn, Keith Swindle, K David Hyrenbach	INDIVIDUAL CONSISTENCY IN SPACE-USE AND TIMINGS DURING THE NON-BREEDING PERIOD OF A TROPICAL SEABIRD, THE ROUND ISLAND PETREL Kirsty Franklin*, Ken Norris, Jennifer Gill, Norman Ratcliffe, Simon Butler, Nik Cole, Carl Jones, Kevin Ruhomaun, Vikash Tatayah, Malcolm Nicoll	
1130	REDUCING ANTHROPOGENIC SUBSIDIES CURBS DENSITY OF AN IMPORTANT MARBLED MURRELET NEST PREDATOR IN A PROTECTED AREA Kristin Brunk*, Elena West, M Zach Peery, Anna Pidgeon	SEASONAL LIFE-STAGE AND MARINE HEATWAVE AFFECT MOVEMENT PATTERNS AND HABITAT-USE OF COMMON MURRES Stephanie Loreda*, Rachael Orben, Robert Suryan, Donald Lyons, Josh Adams, Shawn Stephensen, Jeannette Zamon	
1145	ASSOCIATIONS AMONG MASS MORTALITY EVENTS, SEABIRD DEMOGRAPHY, AND OCEAN CLIMATE TRENDS IN CENTRAL CALIFORNIA Kirsten Lindquist, Pete Warzybok, Meredith Elliott, Julie Howar, Jan Roletto, Nadav Nur, Taylor Nairn, Jaime Jahncke	IMPROVING UNDERSTANDING OF TROPHIC LINKS AND INDIVIDUAL-LEVEL MOVEMENT AND HABITAT USE OF NON-BREEDING NORTHERN GANNETS Julia Gulka, Evan Adams, Alicia Berlin, Kevin Friedland, Andrew Gilbert, Chandra Goetsch, William Montevicchi, Matthew Perry, Iain Stenhouse, Kate Williams	
1200-1300	LUNCH		Conservation Committee Meeting
	Track 1	Track 2	Track 3
	Conservation Biology	Discussion Session	
1300	A SEABIRD'S EYE VIEW OF ARTIFICIAL LIGHT AND THE MOON Hannah Moon*, Megan Porter	Murrelets and Megafires: increased challenges for Marbled Murrelets in an era of climate change	

Wednesday 24 February 2021 (cont.)

1315	TRANSLOCATION OF BLACK-FOOTED ALBATROSSES FROM MIDWAY ATOLL, USA TO CREATE A BREEDING COLONY ON GUADALUPE ISLAND, MÉXICO Eric VanderWerf, Federico Méndez Sánchez, Julio Hernández Montoya, Robby Kohley, Adrien Pesque, Lindsay Young, Leilani Fowlke, Marisol Torres Aguilar, Eduardo Ponce Guevara, Humberto Berlanga García	Murrelets and Megafires: increased challenges for Marbled Murrelets in an era of climate change	
1330	NOT SO MICE? THE CONSUMPTIVE AND COMPETITIVE IMPACTS OF INVASIVE HOUSE MICE (MUS MUSCULUS) ON SOUTHEAST FARALLON ISLAND Michael Polito, Bret Robinson, Pete Warzybok, Russell Bradley		
1345	RESULTS OF FIVE YEARS OF TRANSLOCATIONS OF HAWAIIAN PETRELS AND NEWELLS SHEARWATERS AT KĪLAUEA POINT NATIONAL WILDLIFE REFUGE Lindsay Young, Andre Raine, Robby Kohley, Heather Tonneson, Hannah Nevins, Scott Hall, Leilani Fowlke, Megan Dalton, Daniela Casillas, Eric VanderWerf		
1400	Coffee Break		
	Conservation Biology	Tracking and Distribution	
1415	ACOUSTIC MONITORING OF HAWAIIAN PETRELS AND DISCOVERY OF A BAND-RUMPED STORM-PETREL POPULATION ON THE ISLAND OF LĀNA'I Rachel Sprague, Matthew McKown, Jennifer Rothe, Scott Driskill, Jeff Schlueter, Andre Raine	CHANGES IN LATE WINTER DISTRIBUTION OF SPECTACLED EIDERS IN ASSOCIATION WITH SEA ICE RETREAT IN THE BERING SEA Daniel Rizzolo, Kate Martin, Neesha Stellrecht, Matthew Sexson, Bryan Daniels, Maria Spriggs, Gwen Myers	
1430	EFFECT OF MARINE ANTHROPOGENIC ACTIVITIES ON THE BEHAVIOUR OF SPHENISCUS HUMBOLDTI DURING THE NON-BREEDING SEASON IN PERU Cinthia Irigoin-Lovera*, Maite Arangüena - Proaño, Diego Gonzales-DelCarpio, Carlos Zavalaga	MIGRATION AND WINTER HABITAT USE OF GLAUCOUS-WINGED GULLS FROM TRIANGLE ISLAND, BRITISH COLUMBIA Alice Domalik, Sarah Hudson (Trefry), Kenneth Wright, Mark Maftei, Mark Hipfner	

Wednesday 24 February 2021 (cont.)			
1445	POST-COLLISION IMPACTS AND SEARCH BIASES IN A STUDY OF ENDANGERED SEABIRD POWER LINE COLLISIONS Marc Travers, Scott Driskill, Angela Stemen, Theresa Geelhoed, David Golden, Shiho Koike, Amy Shipley, Hannah Moon, Tracy Anderson, Molly Bache, Andre Raine	DIVERGENT POSTBREEDING SPATIAL PATTERNS OF SYMPATRIC ALBATROSS SPECIES IN THE NORTH PACIFIC Dallas Jordan*, Scott Shaffer, Melinda Conners, Lesley Thorne	
1500-1700	Workshop (Track 1) Implicit Bias, Privilege, and DEI - What does Seabird Research Need to Know?		
1700	STUDENT MENTORING RECEPTION		Scenes from the Field: Seabirds of Midway Atoll - Jon Plissner
1730			Scenes from the Field: Field Work on Aiktak Island, Alaska - Dan Rapp and Sarah Youngren
1800	Build Your Own Happy Hour on WHOVA!		

Thursday 25 February 2021			
	Track 1	Track 2	Track 3
830	Scenes from the Field: Markham's storm petrel in the Atacama desert, Chile Benjamin Gallardo (Track 3)		
900	PLENARY 2: Dr. Anant Pande, Early Achievements in Research and Science Communications (EARS) Plenary (Track 1) COMMUNICATING IN A POST-PANDEMIC WORLD: STRATEGIES FROM ACROSS THE GLOBE FOR SEABIRD RESEARCHERS		
	Foraging Ecology	Non-breeding biology	
930	SEASONAL CHANGES IN THE SPATIOTEMPORAL EXTENT OF OCEANOGRAPHIC DATA COLLECTED BY CORMORANTS Rachael Orben, Dylan Winters, Adam Peck-Richardson, Dorukhan Ardağ, Tuba Özkan-Haller, Donald Lyons, Greg Wilson, James Lerczak	EARLIER AND MORE FREQUENT NON-BREEDING COLONY ATTENDANCE INCREASES BREEDING SUCCESS IN COMMON MURRES Sophie Bennett*, Mike P. Harris, Sarah Wanless, Jonathan A. Green, Mark A. Newell, Kate Searle, Francis Daunt	
945	REPRODUCTIVE INDICES OF COMMON MURRES AND MARBLED MURRELETS IN OREGON INDICATE MURRELETS ARE MORE RESILIENT DURING POOR YEARS Craig Strong, Adam Duarte	SHORT-TAILED SHEARWATER TIMING AND MOVEMENT THROUGH ALASKA'S SEAS, BASED ON AT-SEA SURVEYS, 2007-2019 Kathy Kuletz, Daniel Cushing, Elizabeth Labunski	
1000		NON-BREEDING SPATIAL OVERLAP AND ACTIVITY BUDGETS OF THREE NORTH ATLANTIC ALCID SPECIES Emily Runnells*, Gail Davoren	
		Breeding Biology	
1015	ATLANTIC PUFFIN DIET REFLECTS HADDOCK AND REDFISH ABUNDANCE IN THE GULF OF MAINE Katelyn Depot, Lauren Scopel, Stephen Kress, Paula Shannon, Antony Diamond, Kyle H. Elliott	COMPARATIVE EGG ATTENDANCE PATTERNS OF INCUBATING POLAR PETRELS Scott Shaffer, Pierre Blevin, Christophe Barbraud, Olivier Chastel, Henri Weimerskirch	
1030	EVALUATING THE INFLUENCE OF FLUCTUATING OCEAN CONDITIONS ON FORAGING ECOLOGY AND BREEDING ACTIVITY OF A THREATENED SEABIRD Lindsay Adrean, Jonathon J. Valente, Jennifer Guerrero, Kim Nelson, Daniel Roby, Ethan Woodis, Matthew G. Betts, Jim Rivers	PHOTOGRAMMETRIC MONITORING OF DOUBLE CRESTED CORMORANT NESTING SITES ON IRONWORKERS MEMORIAL BRIDGE IN VANCOUVER Macus Ong*, Ruth Joy, Marine Randon, Gregory McClelland, Jenna Cragg, Trudy Chatwin	
1045	SHIFTING PREY BIOMASS INFLUENCES FORAGING BEHAVIOR AND BODY CONDITION OF CHICK-REARING RAZORBILLS IN COASTAL NEWFOUNDLAND Lauren Lescure*, Julia Gulka, Gail Davoren	PREDATION PRESSURE DISRUPTS COMMON MURRE BREEDING SUCCESS IN KACHEMAK BAY, ALASKA FOLLOWING THE NORTH PACIFIC MARINE HEATWAVE Caitlin Marsteller, Sarah Schoen, Yumi Arimitsu, John Piatt	
1100	PSG Members Meeting (Track #3)		

Thursday 25 February 2021 (cont.)			
1200	LUNCH/ Networking Time		
1300	PLENARY 3: Dr. Stephanie Borrelle; Special Invitation (Track 1) SEABIRD WISDOM		
	Track 1	Track 2	Track 3
	Foraging Ecology	Contaminants and Marine Debris	Discussion Session
1330	DOES PRE-LAYING DIET INFLUENCE NESTING PROPENSITY AND SUCCESS IN ALEUTIAN TERNS? Jill Tengeres*, Robin Corcoran, Donald Lyons	WHO IS SUSCEPTIBLE AND WHO IS SAFE? AT-SEA DENSITY AND OCEAN CIRCULATION MODELLING TO ASSESS VULNERABILITY OF MARINE BIRDS Julia Parrish, Timothy Jones , Parker MacCready	Banding together: Reflections on a Century of USGS Bird Banding Lab and Seabird Research
1345	INDIVIDUAL VARIATION IN SPATIAL FORAGING BEHAVIOR IN BLACK-LEGGED KITTIWAKES Jenna Schlener*, Kyle Elliott, Mélanie Guigueno, Scott Hatch	HOW TO MEASURE IMPACT? NEW METHODS FOR DESCRIBING THE VISIBLE AND HIDDEN IMPACTS OF PLASTIC POLLUTION Peter Puskie*	
1400	ENVIRONMENTAL STRESSES EXPERIENCED BY SHORT-TAILED SHEARWATERS WINTERING IN SEPARATE AREAS Yutaka Watanuki, Nodoka Yamada, Sarara Azumi, Bungo Nishizawa, Haruka Hayashi, Takashi Yamamoto, Tohru Mukai	MARINE DEBRIS INGESTION BY PACIFIC SEABIRDS AND POTENTIAL POPULATION IMPACTS: QUANTIFYING THAT WHICH YOU CANNOT COUNT Lauren Roman, Denise Hardesty	
1415	FORAGING, DIET AND BREEDING OF RHINOCEROS AUKLETS AT TWO COLONIES IN DIFFERENT CURRENT SYSTEMS Jumpei Okado*, Kentaro Kazama, Akiko Shoji, Motohiro Ito, Yutaka Watanuki	ELEMENTAL CONCENTRATIONS IN THE FEATHERS OF BONIN PETRELS (PTERODROMA HYPOLEUCA) FROM MIDWAY ATOLL Katherine Shaw, Lauren Fraser, Natasha Sawickij, Jing Liu, George Cobb, Jennifer Lynch, David Klein, David Hyrenbach	
1430	DIET FROM DEEP-SEA UTILIZATION OF MESOPELAGIC MICRONECTON BY BLACK-TAILED GULL Motohiro Ito, Hiroki Suwa, Hikari Ozawa, Nobuhiko Sato	LINKING MERCURY CONCENTRATIONS WITH AT-SEA AREAS IN THREE SPECIES OF AUKS, BREEDING ACROSS THE PACIFIC AND ATLANTIC OCEANS Chinatsu Nakajima*, Kyle H. Elliott, Shannon Whelan, Annette L. Fayet, Yasuaki Niizuma, Jumpei Okado, Scott Hatch, Akiko Shoji	
1445	ACROSS THE NORTH PACIFIC, DIETARY-INDUCED STRESS OF BREEDING RHINOCEROS AUKLETS INCREASES WITH HIGH SUMMER PDO INDEX Ui Shimabukuro*, Akinori Takahashi, Jumpei Okado, Nobuo Kokubun, J.B. Thiebot, Alexis Will, Yutaka Watanuki, BriAnne Addison, Scott Hatch, Mark Hipfner, Alexander Kitaysky		
1500		BREAK - Poster Pre-Perusal Period	

Thursday 25 February 2021 (cont.)			
1600	LIVE Poster Session		
1700		Take a BREAK!	
1800			Scenes from the Field: Japanese Murrelts in Kaminoseki, Japan – Midori Takashima
1830			Scenes from the Field: Tubbataha Reefs Natural Park, Philippines - Angelique Songco
1900	Build Your Own Happy Hour on WHOVA!		

Friday 26 February 2021			
	Track 1	Track 2	Track 3
800	"Seabird Sessions" with Grant Humphries, David Grémillet, and Marianna Chimienti		
830			Scenes from the Field: Natividad Island & Espíritu Santo, Mexico - Cecilia Soldatini, Javier Acalá, Maximiliano Quintero and Yuri Albores
900	PLENARY 4, Lifetime Achievement Award, Dr. William Montevecchi (Track 1) THERE'S AN OCEAN OF INFORMATION OUT THERE AND IT'S CHANGING RAPIDLY		
	Population Biology	Climate Change	
945	YEAR-ROUND NICHE SEGREGATION OF THREE SYMPATRIC HYDROBATES STORM-PETRELS FROM NORTHWEST MÉXICO, EASTERN PACIFIC Yuliana Bedolla Guzmán, Juan F Masello, Alfonso Aguirre Muñoz, Bertha E Lavaniego, Christian C Voigt, Jaime Gómez Gutiérrez, Laura Sánchez Velasco, Carlos J Robinson, Petra Quillfeldt	ENVIRONMENTAL CONDITIONS EFFECT ON HORMONE LEVELS IN WESTERN GULLS (LARUS OCCIDENTALIS) Yuri Vladimir Albores-Barajas, Carolina Álvarez-Delgado, Cecilia Soldatini, Gonzalo I. Flores-Acosta, Virginie Canoine	
1000	POPULATION GROWTH AND LONG-DISTANCE VAGRANCY LEADS TO COLONIZATION OF EUROPE BY ELEGANT TERNS (THALASSEUS ELEGANS) Richard Veit, Enriqueta Velarde, Michael Horn	EFFECTS OF SEA LEVEL RISE ON NESTING POPULATIONS OF COLONIAL BIRDS IN BARNEGAT BAY: 1976 TO 2018 Joanna Burger, Michael Gochfeld	
1015		Coffee Break	
	Population Biology Chair:	Tools & Techniques Chair:	Special Sessions
1030	COLONIZATION OF NORTH AMERICA BY VAGRANT LESSER BLACK-BACKED GULLS (LARUS FUSCUS) IS LINKED TO POPULATION TRENDS IN GREENLAND Lucinda Zawadzki*, Gunnar Hallgrimsson, Richard Veit, Lars Rasmussen, David Boertmann, Tim Guilford	SEABIRDAWARE: A TOOL FOR COMMUNITY SCIENCE BASED SEABIRD MONITORING Julie Howar, Dan Robinette, Jamie Miller	COVID-19 Hot Topics Lightning Round (45 minutes)
1045	GENETIC DIVERSITY AND POPULATION STRUCTURE OF ALEUTIAN TERNS IN ALASKA: A PRELIMINARY ASSESSMENT Patricia Szczys, Robin Corcoran, Heather Renner, Susan Oehlers, Jill Tengeres, Don Lyons	REMOTE TRAP MONITORING: SO MANY TRAPS, SO LITTLE TIME Christina Pisani, Zane de la Cruz, Rachel Sprague	

Friday 26 February 2021 (cont.)

1100		TIME-LAPSE CAMERAS AS RELIABLE AND ACCURATE TOOLS FOR BIOLOGICAL MONITORING OF PERUVIAN BOOBIES ON THE GUANO ISLANDS OF PERU Carlos Zavalaga, Diego Ardiles-Espino, Cristina Burga-Domínguez, Alexia Robilliard-Alva, Daniela Cabrera, Diego Gonzales-DelCarpio, Cinthia Irigoín-Lovera, Sebastián Lozano-Sanllehi	COVID-19 Hot Topics Lightning Round (45 minutes)
1115		CORMORANT OCEANOGRAPHY PROJECT - 2020 UPDATE Adam Peck-Richardson, Rachael Orben, Dylan Winters, Dorukhan Ardağ, Tuba Özkan-Haller, Donald Lyons, Greg Wilson, Sabir Bin Muzaffar, James Lerczak	
1130	PERIODS OF HIGH RECRUITMENT BUFFER AGAINST POPULATION DECLINE OF CASSIN'S AUKLETS ON SOUTHEAST FARALLON ISLAND Michael Johns, Pete Warzybok, Jaime Jahncke, Pat Doak, Mark Lindberg, Greg Breed		EARLY CAREER SCIENTIST PANEL
1145	IMPROVING THE REPORTING OF MASS MORTALITY (WRECK) EVENTS OF SEABIRDS Jacqueline Glencross*, Jennifer Lavers, Eric Woehler		
1200	PAST CHAIRS LUNCH	LUNCH	
1300	PLENARY 5, Heather Renner (Track 1) TO THE EDGE OF THE WORLD AND BACK AGAIN; THE ONCE AND FUTURE DATA		
	Track 1	Track 2	Track 3
	Behavior	Management, Policy, Planning	
1330	REDUCED FLEXIBILITY DURING INCUBATION DRIVES REPRODUCTIVE FAILURE FOR INEXPERIENCED CASSIN'S AUKLET PAIRS Chris Tyson, Amy Miles, Mike Johns, Pete Warzybok, Josh Hull	NONRANDOM SPATIAL DISTRIBUTION OF NEOTROPIC CORMORANTS (PHALACROCORAX BRASILIANUS) ALONG A COASTAL HIGHWAY IN LIMA, PERU Sebastián Lozano-Sanllehi*, Carlos Zavalaga	
1345	LIGHTING ADJUSTMENTS TO MITIGATE AGAINST DECK STRIKES/VESSEL IMPACTS Ariel Heswall*	IS MITIGATION TRANSLOCATION AN EFFECTIVE METHOD FOR REDUCING LAYSAN ALBATROSS-MILITARY AIRCRAFT COLLISIONS? Brian Washburn, Katherine Rubiano, William Bukowski, Darrin Phelps	
1400	EXPERIMENTAL EVIDENCE THAT SOCIAL INFORMATION AFFECTS HABITAT SELECTION IN MARBLED MURRELETS Jonathon Valente, Kim Nelson, Jim Rivers, Daniel Roby, Matthew G. Betts	EFFECTS OF OPERATING AND PROPOSED OFFSHORE WIND FARMS ON COMMON MURRES (URIA AALGE) IN THE SOUTHERN NORTH SEA Verena Peschko, Bettina Mendel, Sabine Müller, Nele Markones, Moritz Mercker, Henriette Schwemmer, Kai Borkenhagen, Stefan Garthe	

Friday 26 February 2021 (cont.)			
1415	FORAGING AREA SELECTION OF RHINOCEROS AUKLET BREEDING ON BENTEN ISLAND, JAPAN, IN THE TSUGARU STRAIT Hikari Ozawa*, Motohiro Ito		Field Fails (45 minutes)
1430			
1445			
1500	Coffee Break		
	Track 1	Track 2	Track 3
1530			Scenes from the Field: Hawaiian Petrels in Kaua'i Hawai'i, USA- Andre Raine
1600			Scenes from the Field: Winter Birding in Newport, OR, USA - Steve & Rachel Holzman
1630	CLOSING CEREMONY (Track 1)		
1700			
1730-1830	* Closing HAPPY HOUR: See you in 2022!*		

POSTERS

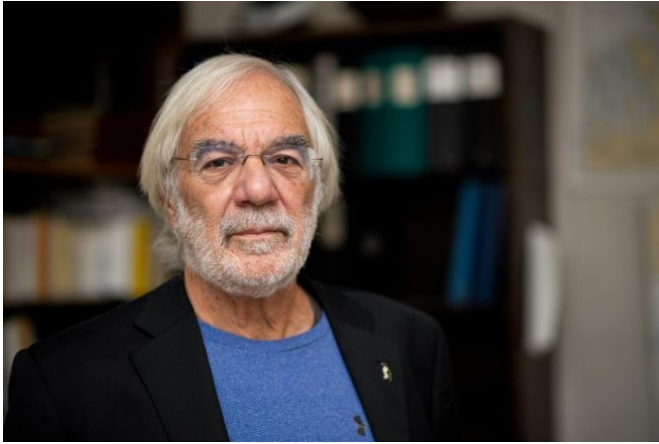
*Note: **bold** indicates presenting author, * indicates student presenter*

Poster #	Poster Title	Topic
1	FORAGING OF BLACK-TAILED GULLS DETERMINED BY GPS POSITION AND BODY ACCELERATION Rui Ma , Kentaro Kazama, Yogi Yasutake, Mami Kazama, Yutaka Watanuki	Behavior
2	BREEDING SUCCESS OF A MIGRATORY SEABIRD FOLLOWING EXTREME WEATHER CONDITIONS Jacqueline Glencross* , Jennifer Lavers, Eric Woehler	Breeding Biology
3	COMMON MURRE BREEDING ATTEMPTS STYMIED BY BALD EAGLE DISTURBANCES DESPITE FAVORABLE FORAGING CONDITIONS IN 2020 Jessica Porquez , Cheryl Horton, James Lawonn, Rachael Orben	Breeding Biology
4	EFFECTS OF ENVIRONMENTAL STOCHASTICITY ON BODY CONDITION AND WING LENGTH OF BLACK-VENTED SHEARWATERS (PUFFINUS OPISTHOMELAS) Giulia Bambini* , Martha Patricia Rosas Hernandez, Yuri V. Albores-Barajas, Cecilia Soldatini, Adrian Munguia-Vega, Giacomo Dell'Omo	Climate Change
5	RETURN OF BREEDING WEDGE-TAILED SHEARWATERS FURTHER DEFINES SUCCESS OF FALLOUT RECOVERY EFFORT IN MAUI NUI Cecelia Frisinger , Jenni Learned, Jay Penniman, Martin Frye	Conservation Biology
6	BIOLOGICAL TRAITS OF SEABIRDS PREDICT EXTINCTION RISK AND VULNERABILITY TO ANTHROPOGENIC THREATS Cerren Richards* , Robert Cooke, Amanda Bates	Conservation Biology
7	ASSESSMENT OF THE HEALTH STATUS OF FOUR SPECIES OF SEABIRDS IN RELATION TO POLLUTANTS Eleonora Favilli* , Vanessa Labrada-Martagón, Yuri V. Albores-Barajas, Cecilia Soldatini, Maximiliano Quintero-Vidales	Contaminants and Marine Debris
8	COMPARISON OF MERCURY LEVELS IN FEATHERS OF OSPREY IN THE NORTHEAST REGION OF JAPAN Sakura Lauhoff* , Yasuaki Niizuma, Mitsuyoshi Kato, Yoshiatsu Ota, Nobuyuki Shoji, Akiko Shoji	Contaminants and Marine Debris
9	BIRDS AND DEBRIS: COLLATING DATA ON ENTANGLEMENT AND NEST INCORPORATION OF ANTHROPOGENIC DEBRIS Nina O'Hanlon , Alexander Bond, Elizabeth Masden, Neil James	Contaminants and Marine Debris
10	Poster retired	
11	THE SEABIRD OBSERVER NOTES: 26-YEAR OVERVIEW OF SEABIRD RELATED OBSERVATIONS INCLUDING VESSEL STRIKES IN ALASKA FISHERIES Elizabeth Labunski , Shannon Fitzgerald, Jennifer Ferdinand	Fisheries
12	PROVISIONING BEHAVIOR AND KLEPTOPARASITISM RISK IN RHINOCEROS AUKLETS Kyra Madunich* , Jessie Beck, Rozy Bathrick, Nina Karnovsky	Foraging Ecology
13	ASSESSING INTERANNUAL VARIATION IN PERUVIAN BOOBY (SULA VARIEGATA) FORAGING USING GPS TRACKING AND STABLE ISOTOPE ANALYSIS Sara Wang* , Carlos Zavalaga, Michael Polito	Foraging Ecology
14	ANIMAL-BORNE VIDEO LOGGERS OFFER A NEW LOOK AT THE UNDERWATER FORAGING BEHAVIORS OF ADÉLIE PENGUINS IN ANTARCTICA'S ROSS SEA Suzanne Winquist* , Katie Stoner, Megan Elrod, Annie Schmidt, J.B. Thiebot, Virginia Morandini, Grant Ballard, Arvind Varsani, Rachael Orben	Foraging Ecology
15	THE PARALLEL ADVENTURES OF SHORT-TAILED SHEARWATERS AND A CROSS-HEMISPHERIC ART PROJECT IN THE YEAR OF COVID-19 Kathy Kuletz , Lindy Yeates	Increasing Public Participation and Engagement in Seabird Science
16	#BARFYSCIENCE: ALBATROSS AS AMBASSADORS FOR CLEAN OCEANS Ilana Nimz , Michelle Hester, K. David Hyrenbach, Jennifer Stock, Andy Collins, Meghan Marrero, Cynthia Vanderlip	Increasing Public Participation and Engagement in Seabird Science
17	OCCURANCE OF PINK-FOOTED SHEARWATER AS BYCATCH IN PACIFIC FISHERIES Andrea Sanchez Davidson	Increasing Public Participation and Engagement in Seabird Science
18	PRINCE WILLIAM SOUND MARINE BIRD POPULATION TRENDS: 1989-2018 Robert Kaler	Population Biology
19	FIRST IN SITU REHABILITATION OF AN 'UA'U (HAWAIIAN PETREL, PTERODROMA SANDWICHENSIS) CHICK ON LĀNA'I, HAWAII Christina Donehower , Rachel Sprague, Juan Carlos Guerra, Robby Kohley, Linda Elliott	Tools and Techniques

20	A NEW OPTION FOR AT-SEA SURVEY DATA COLLECTION AND PROCESSING: SEALOG & QAQSEA Gary Drew , Heather Coletti, Kathy Kuletz, Robert Kaler, Elizabeth Labunski, Yumi Arimitsu, John Piatt, Christopher Swingley	Tools and Techniques
21	THE USE OF THERMAL IMAGING FOR THE CENSUSING OF COLONIAL SEABIRDS IN THE GULF OF ALASKA: IMPLICATIONS FOR MANAGEMENT AND CONSERVATION Emmylou Kidder*	Tools and Techniques
22	A SPATIAL MODEL TO PREDICT WINDMILL COLLISION RISK FOR TWO GULL SPECIES Katsura Mikami , Kentaro Kazama, Mami Kazama, Yutaka Watanuki	Tracking & Distribution
23	ALEUTIAN TERN NEST ATTENDANCE RATES Kitrick Miller , Jill E. Tengeres, Donald Lyons, Robin Corcoran	Breeding Biology

PSG 2021 LIFETIME ACHIEVEMENT AWARD RECIPIENT

William (Bill) Montevecchi



For decades, William (Bill) Montevecchi has signed off his emails with the phrase “keep looking up.” More than just an amusing ornithological memorandum, however, this simple, unassuming phrase neatly captures his indomitable optimism and an insatiable curiosity—his entire outlook on life!

Bill is a John Lewis Paton Distinguished University Professor at Memorial University of Newfoundland (MUN) where he has led research on seabirds for more than 40 years. At the nexus of the Psychology, Biology, and Ocean Sciences departments at MUN,

Bill initiated a long-term interdisciplinary ecosystem research program focused on the behavioural ecology of seabirds, marine food webs, and biological oceanography.

Seabird research has been an integral part of his life since the 1970s when he conducted PhD studies of Laughing Gull nesting success in the tidal marshes of southern New Jersey. The powerful, life-supporting integration of animals with their habitat remains his lifelong research focus. He believes how animals cope with environmental uncertainty and change and the implications of those changes are ever more compelling as we ratchet increasing pressure on coastal and oceanic systems.

Throughout his career, Bill has guided new generations of seabird researchers, and his enormous influence reaches far—from the Atlantic to the Pacific, and around the globe. In his own words, Bill has been “privileged to work with an incredibly powerful group of graduate students, post-docs, and now colleagues who continue to raise the bar on key ecological and environmental questions.” Most of his students have gone on to become well-positioned, internationally recognized marine scientists in their own right in Canada, the U.S., Europe, South America, and beyond. As well as hundreds of peer-reviewed publications, he and his colleagues have produced the longest dietary databases for Northern Gannets and Common Murres in the Northwest Atlantic, and their trailblazing tracking research provides state-of-the-art risk analysis on a global scale.

Bill embodies all that we as scientists aspire to be. He has a razor-sharp mind and deep-rooted integrity. He is an inspirational and effusive advocate. His work always pushes the boundaries of technology, gaining critical insights into the lives of seabirds that we could not discover any other way and could barely even imagine just a few years before. He is highly collaborative in nature and works closely with scientists from many other fields to tackle complex and intriguing questions. At his core, he believes conservation is a vital shared concern (how could it be otherwise), and has used seabird research to support evidence-based decision-making in environmental assessments of ocean developmental proposals, and influenced real-world issues, such as mitigating seabird bycatch in gillnets.

For his exemplary, long-term contributions to seabird science, conservation, and education in all forms, the Pacific Seabird Group honors William A. Montevecchi with a Lifetime Achievement Award.

PLENARY SPEAKER

Dr. Scott V. Edwards

Alexander Agassiz Professor of Zoology
Curator of Ornithology
Museum of Comparative Zoology
Harvard University

Wednesday, February 24
09:15–09:45



Scott Edwards is Alexander Agassiz Professor of Zoology and Curator of Ornithology in the Museum of Comparative Zoology at Harvard University. Scott is an evolutionary biologist, with diverse interests in molecular evolution, phylogenetics, comparative genomics and population genetics. He uses birds as model systems, focusing on their evolutionary history and genetics. He did postdoctoral work at the University of Florida to study interactions of birds and infectious diseases, and was at the University of Washington from 1995-2003. Scott has served as President of the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Genetic Association, as well as on the Advisory Boards of the National Museum of Natural History (Smithsonian) and the Cornell Lab of Ornithology. From 2013-2015 Scott served as Division Director of the Division of Biological Infrastructure at the US National Science Foundation, where he facilitated funding in areas such as undergraduate, graduate and postdoctoral research experiences, supporting biological collections and major infrastructure and bioinformatics. He has a long-standing interest in increasing the diversity of undergraduates, graduate students and faculty in evolutionary biology and biodiversity science.

MOLECULAR ECOLOGY OF TUBENOSED SEABIRDS (Procellariiformes): MATING SYSTEMS, CONSERVATION AND EVOLUTION

The tubenosed seabirds (Procellariiformes), including petrels and albatrosses, are core members of many marine ecosystems. Their long-distance foraging bouts, unique chemical sensing abilities and extraordinary life histories make them excellent models for genetic analysis. We have been conducting studies of molecular ecology of storm petrels and albatrosses, using genomic techniques to provide insight into their remarkable life histories, sensory biology and behavior. In collaboration with Gabrielle Nevitt (UC Davis), we have investigated patterns of mate choice and olfactory potential in Leach's Storm Petrels on Bon Portage Island, Nova Scotia. These birds exhibit intriguing signatures of inbreeding, which likely arose as a result of an ancient bottleneck rather than their largely monogamous mating system. We have also examined the conservation genetics and phylogeny of the four species of North Pacific albatrosses (*Phoebastria*), uncovering subtle patterns of genome differentiation and hybridization. Throughout, I will revisit my first encounters with these amazing birds decades ago in the Leeward Hawaiian Islands, and highlight how the Friends of Midway Atoll NWR (FOMA) have recently brought me back, remotely, during the Covid crisis.

PLENARY SPEAKER - EARLY ADVANCEMENTS IN RESEARCH AND SCIENCE COMMUNICATION

Dr. Anant Pande

Project Scientist
Wildlife Institute of India

Thursday, February 25
09:00-09:30



Dr. Anant Pande received his B.Sc. and M.Sc. degree in Zoology (with specialisations in Fishery Biology and Oceanography) from the University of Mumbai, India. Later, he completed a Ph.D. in Wildlife Science from the Wildlife Institute of India, Dehradun, India. His doctoral research, the first of its kind from the Indian Antarctic Program, focused on understanding the nesting ecology and population genetics of the snow petrel, a climate-dependent Antarctic seabird, in east Antarctica. Dr. Pande has been active in the field of wildlife conservation for the last 13 years associated with premier research institutes such as the National Institute of Oceanography, National Centre for Polar and Ocean Research and the Wildlife Institute of India. As a trained biologist, he has the privilege of working on fauna ranging from Antarctic Krill, tigers, dugongs, seabirds and baleen whales. He has been involved in national research programs including five Indian Scientific Expeditions to Antarctica and with the National Dugong Recovery Program. He was instrumental in preparation of India's 5th National Report to the Convention on Biological Diversity and revision of the National Biodiversity Action Plan. His work on breeding seabird populations has helped establish a foundation for long-term ecological work in east Antarctica especially around the Indian Research Stations. Dr. Pande has received several awards/grants for his work on marine conservation notably the Ravi Sankaran Fellowship for Field Biology, Ecology and Conservation (2012) and the J.C. Daniel Young Conservation Leader Award (2019). Presently, he is involved in establishing the Indian Seabird Network to improve coordination between seabird researchers working in India and abroad.

COMMUNICATING IN A POST-PANDEMIC WORLD: STRATEGIES FROM ACROSS THE GLOBE FOR SEABIRD RESEARCHERS

Science communication is critical for seabird research and addressing gaps in developing mechanisms for their conservation. Inadequate communication between seabird scientists, policy makers and the general public hinders efforts and implementation of effective strategies for seabird conservation. The ongoing COVID-19 pandemic has left a deep impact on science communication especially in the case of field biologists. Though impacts varied with how different countries dealt with the pandemic, it has several lessons for the aspiring seabird researchers around the globe. Effective science communication and its dissemination through widely accessible platforms is the need of the hour. In times of restrained travel and organising large gatherings, social media outlets have come to the rescue of scientists to broadcast their findings to audiences at large. Gaps in communication and misinformation can have unwarranted consequences for early career researchers with implications on their long-term career growth. In this talk, I will outline the approaches to encourage science communication for seabird researchers especially in the developing countries. I will provide examples from my own experiences with popularising science in India and draw inferences for developing oneself as an active science communicator. Lastly, I will highlight the role of social media platforms and our efforts to establish the Indian Seabird Network to boost seabird conservation efforts in the Indian Ocean region.

PLENARY SPEAKER

Dr. Stephanie Borrelle

Marine and Pacific Regional Coordinator
BirdLife International

Thursday, February 25
13:00 - 13:30



Dr. Stephanie Borrelle, from Aotearoa New Zealand, is the Marine and Pacific Regional Coordinator for BirdLife International. In this role she works in collaboration with government, non-governmental organisations, and private industry to reduce seabird deaths in long-line fisheries, and with partner organisations to implement seabird conservation actions across the Pacific. Stephanie completed her PhD researching seabird island restoration and conservation ecology in Aotearoa, and has a penchant for procellariiformes and remote islands. She held the Society for Conservation Biology's David H. Smith Post-Doctoral Fellowship with a research focus on plastic pollution in the oceans. Her research interests include how anthropogenic activities impact seabirds and island ecosystems, the research-practitioner interface, and the decolonisation of the ecological & conservation sciences. [Google Scholar](#) & [@PetrelStation on twitter](#).

SEABIRD WISDOM

Aotearoa New Zealand is the seabird capital of the world. This rich diversity of species is a result of an archipelago of islands spanning the sub-tropics to the sub-Antarctic, in close proximity to rich foraging areas. I grew up at the beach, on the water and in the forests of Aotearoa, where I developed a deep sense of kaitiakitanga—that is, a concept or state of being embodying the guardianship of the environment, *Place, Ngā Manu (birds)* from the Māori world view (the indigenous peoples of Aotearoa). Toroa (albatross) and tītī (shearwaters) are important taonga (treasures) for Māori, and inhabit their genealogical journeys across the oceans - demonstrating the strong human connection to the land and oceans. This world view informed my academic journey into seabird ecology. But Ko Pākehā ahau, I am the descendant of colonisers, settlers who benefited from the dispossession and disconnection of 32 generations of Māori from their lands and culturally important species. Do I really have an entitlement to embody kaitiakitanga, am I just appropriating Māori principles for my own benefit? As much as I have learned about seabirds, they have taught me some of my most important life lessons, including what it means to be a conservationist with colonial privilege. Seabirds are teaching me how to re-learn my conservation practice, so that it is equitable, decolonial, and as diverse as the seabird fauna of Aotearoa.

PLENARY SPEAKER

Dr. William (Bill) A. Montevecchi

John Lewis Paton Distinguished University Professor
Memorial University of Newfoundland



Friday, February 26
09:00–09:45

Bill is also the PSG 2021 Lifetime Achievement Award Recipient, find his bio on page 30.

THERE'S AN OCEAN OF INFORMATION OUT THERE AND IT'S CHANGING RAPIDLY

Seabird research has exhibited many transitions in recent decades. Historical context, technological innovation and environmental change have shaped, enabled and compelled new research approaches and directions. The aim of this plenary is to overview and contextualize how these developments have modified the ways that we understand the roles of birds as marine animals, view the ocean and contribute to multidisciplinary marine science. That is - how we can address long-standing questions and ask new ones.

Seabirds are the most wide-ranging, most visible and most accessible of marine vertebrates. They exercise cognitive, behavioural, physical and physiological capability to accommodate quasi-predictable ocean contingencies over daily, seasonal and annual scales to meet the challenges of survival, mating, parenting and migration. Owing to their sensitivity and vulnerability to climatic and anthropogenic perturbation, seabirds provide the most obvious and rapid signals of marine pollution and food web shifts. Research on feeding ecology has been primarily colony-based and focused on forage fish complementing climate and fishery science. The miniaturization and technical sophistication of bird-borne data-logging and tracking devices have enhanced traditional vessel-based studies and provided insights into central place foraging, predator x prey x environmental interactions, and migratory behaviour. Ocean climate compels research on the physical and trophic processes through which gradual changes and abrupt shifts occur and the flexibility and tolerance of seabird responses. Conservation is a practical working mandate that requires continual focal attention. We are enthralled by seabirds and their ocean habitat - we always have been and always will be, and to better appreciate and understand them - information will always be our most important product.

PLENARY SPEAKER

Heather M Renner

Supervisory Wildlife Biologist
Alaska Maritime National Wildlife Refuge

Friday, February 26
13:00–13:30



Heather received a B.A. in Biology from Colorado College, and a M.S. in Wildlife Science from Cornell University. She is a lifelong Alaskan and has worked for U.S. Fish and Wildlife Service since she was 15, including high school and college summer jobs. Heather has been at Alaska Maritime NWR for 21 years, serving in a variety of roles, and has supervised the Refuge's biological program since 2011. A main focus of Heather's work is the Refuge's internationally recognized long-term seabird monitoring program. Heather's research interests include methods development on hard-to-study species, and using long-term data to answer broad ecological questions. Heather's management interests include efforts to make data secure, available and promptly used by multiple interest groups. In addition, she works to develop collaborations (interagency, public, national and international) towards geographically broad conservation goals and research topics. Heather remains the only female Supervisory Wildlife Biologist among Alaska's 16 National Wildlife Refuges.

TO THE EDGE OF THE WORLD AND BACK AGAIN; THE ONCE AND FUTURE DATA

The far-flung Alaska Maritime National Wildlife Refuge encompasses thousands of islands and is home to at least 80% of Alaska's 50 million seabirds. Our mission is a seemingly impossible one: to keep track of rare and common species, to identify conservation concerns, to restore habitat, and to use these top predators as sentinels of change in the ocean ecosystem. "Apart Together for Seabirds" embodies the Refuge in a normal year, irrespective of the COVID-19 pandemic. This mission is made more challenging with our relatively small staff, and the daunting logistics of visiting islands spread across five large marine ecosystems. We rely on snapshots from key sites and species to make broadscale inferences. We also depend on collaboration with those that live or work closer to the Refuge, or care about different species, to collect data and report concerns. Our strength is our commitment to long-term datasets and making them available, our relationships with partners and communities, and our vision for broad scale conservation that is not bounded by land ownership or high tide line. Our ace in the hole is our small but mighty research vessel that can go anywhere and serves as a platform for interdisciplinary collaboration. In this special place with such diversity in species and landscape, incorporating human diversity has not been a strength of our organization. Historically the Alaskan wildlife management field has struggled with diversity, equity and inclusion. However, more inclusive hiring and partnering will bring us needed novel ideas, broader perspectives, and powerful abilities to accomplish our daunting task.

SPECIAL EVENTS

SPECIAL PAPER SESSIONS AND SYMPOSIA

Studying Seabirds Using Wildlife Audio Recorders

Monday, February 22nd, 12:00-13:00

Convener: Wildlife Acoustics

Acoustic recorders provide a non-invasive and cost-effective technique to study vocal species. This is especially true for seabird research, where study sites may be difficult to access, and timing and conditions make traditional methods of monitoring challenging. This workshop will teach participants the basic principles of acoustics, features and set up of the Song Meter Mini recorder, how to create recording schedules, and more.

Murrelets and Megafires: increased challenges for Marbled Murrelets in an era of climate change

Wednesday, February 24, 13:00-14:00

Conveners: Becca White, Amelia Duvall

Panelists: Jonathan Felis, , Martin Raphael, Lisa Ellsworth, Steven Singer; Anne Poopatanapong; Scott Pearson, Adam Duarte, Phyllis Reed, Jonathon Valente

Climate change megafires are a new threat to the already threatened populations of Marbled murrelets along the Pacific coastline. These small seabirds rely on old growth forests for nesting habitat, and much of it has burned dramatically in the past years. We will hear from experts from WA, OR, and CA about what is being seen and what is being done about these unprecedented fires, and discuss what more could potentially be done. This session will discuss the directions that science and conservation need to go to protect these seabirds in the face of ever increasing habitat destruction.

Banding together: Reflections on a Century of USGS Bird Banding Lab and Seabird Research

Thursday, February 25, 13:30-15:00

Conveners: Amelia Duval and Becca White

Panelists: Tony Celis-Murillo, Matt Rogosky, Jennifer McKay, Jennifer Learned, William Kendall, Beth Flint, Patrick Keenan

This one-hour symposium will celebrate the 100-year anniversary of the Bird Banding Lab through short presentations and discussion about the role of bird banding to seabird science and conservation. A panel of biologists and researchers will describe the history and future of the USGS Bird Banding Lab, provide compelling examples of the valuable information gained through banding, and how banding has promoted seabird conservation through public outreach and engagement.

HOT TOPIC DISCUSSION

Conducting Seabird Science in the time of COVID-19

Friday, February 26, 10:30-11:30

Convener: Roberta Swift

These short lightning-round presentations are a chance to describe how COVID-19 affected your seabird science in 2020. Topics may include creative ways in which you were able to collect data in 2020, how field or other protocols were adapted to conform with COVID-19 safety guidelines, or how your study was altered in 2020 and ideas you have to make your study pandemic-proof in 2021.

SPECIAL EVENTS

SEABIRD SESSIONS

Paper discussions

Friday, February 26, 8:00-9:00

Seabird Sessions – with Grant Humphries, David Grémillet, and Marianna Chimienti. Our first Seabird Sessions at PSG! This will be a fun & lightweight discussion on cool seabird research. Our moderators will select two recent papers which attendees will discuss for one hour with the authors themselves.

EARLY CAREER PANELIST DISCUSSION

Friday, February 26, 11:30-13:00

If you are an early-career scientist or want to help facilitate the professional advancement of early-career scientists, this event is for you! Our definition of ECS mirrors that of other professional societies: a current student (associates, bachelors, masters, or PhD) or scientist who has received their highest degree within the last 5 years. This virtual panel is an informational, structured event where panelists will give a brief background of their own research and career path, and then answer questions about career development submitted by YOU!

The panel will consist of people with an intentional diversity of backgrounds and research interests, who are either transitioning out of being an ECS or are experienced in and regularly interested in hiring ECS. This year, in an effort to bring forward voices from underrepresented communities within PSG, we are hoping to recruit ECS panelists who are womxn or from LGBTQIA and BIPOC groups. Those with a special interest in topics related to these groups, please join us!

Questions for the panelists can be submitted anonymously prior to the event by e-mailing Kate Iaquinto (Kate_Iaquinto@fws.gov), but there will be opportunities for attendees to ask questions via the chatbox during the event, as well. Students and all other ECS are invited to attend!

SILENT AUCTION

Happening right now online! Ends February 26.

For the past decade, the silent auction has been held at each annual meeting to raise funds for Student Travel Awards. This has historically been a really successful event and has assisted more than 100 students in attending and presenting their work at the annual meeting! The Silent AUktion will run a little differently this year: we are using the website [Charity Auctions Today](#) as the platform to move the silent auction to an online format! Our goal is to raise at least \$2,500, and money raised at this year's Silent AUktion will go towards Student Travel Awards to attend PSG 2022 in San Diego, CA.

SPECIAL EVENTS

IMPLICIT BIAS, PRIVILEGE AND DEI - WHAT DOES SEABIRD RESEARCH NEED TO KNOW

Wednesday, February 24, 15:00-17:00

This event will be a facilitated workshop focused on teaching terminology and strategies to advance the seabird research field in a way that is equitable, representative, and inclusive. This session will include interactive opportunities such as small group discussions, polls, and large group chats. Participants will leave the workshop with a DEI Readiness Assessment worksheet, which will help evaluate their personal and organizational readiness for diversity, equity, and inclusion work, along with next steps for action.

The event will be led by Ku'ulani Keohokalole, organizational development consultant and owner of People Strategies Hawai'i LLC. Ku'ulani brings experience working in and with communities of color to organize for social change in institutions, as well as work in organizational development to help leaders achieve systemic transformation goals. Ku'ulani holds an M.A. from New York University in Education Leadership, Politics and Advocacy and a B.A. in Ethnic Studies from the University of Hawai'i at Mānoa.

*Please note that per the nature of this sensitive discussion, this session will not be recorded or shared. To participate, please attend the session at the scheduled time.

SOCIAL EVENTS

Welcome Happy Hour, Tuesday, 19:00–21:00

Catch up with friends and colleagues from near and far at the first of several virtual Happy Hours!

Student-Mentor Mixer, Wednesday, 17:00–18:00

We're excited to host the Student-Mentor Meet-Up once again at PSG 2021. The event will be an informal virtual evening gathering and an opportunity for students and early career scientists to connect with a mentor who has an established career in seabird research or conservation. We have matched a small group of 2-4 students to each mentor prior to the event, based on common research or career interests.

Build Your Own Happy Hour, Wednesday, 1800-1900: Start your own Happy Hour through the WHOVA app!

Poster Session, Thursday, 16:00–17:00

Grab a drink (from your kitchen!) and join our Poster authors to talk about their work! Virtual posters will be available throughout the conference, and you can leave your questions for the authors in the chat box anytime!

Build Your Own Happy Hour, Thursday 1900-2000

Seabird Field Fails Happy Hour, Friday, 1415-1500

Do you have a terrible, funny experience in the field, lab, or office when you thought everything was going right but then...it didn't!? Or NOTHING went as planned? If so, we want to hear all about it! Grab your favorite beverage and listen or share your story to this fun live storytelling session! Stories will be allowed a 3-min slot. To share a story, be sure to select the session in WHOVA and sign up to give a few details about your Field Fail here: <https://forms.gle/8TQNCvqboG8mwSWP8>.

Closing Happy Hour, Friday 17:30-18:30

MEETING LOGISTICS

REGISTRATION

The 2021 Annual Meeting of the Pacific Seabird Group will take place on Whova. To access the web app go to https://whova.com/portal/webapp/amops_202101/

If you need more guidance on how to use Whova to attend the event, please see the [Whova User Guides](#)

If you have any trouble with Whova or need assistance with uploading presentations and posters, please contact Jennifer Barrett at mail@jenbarrett.net or jen@connect.consulting

For any issues regarding the scientific program, please contact Roberta Swift at programchair@pacificseabirdgroup.org

TWITTER

We encourage anyone with a Twitter handle to share updates from the meeting using the hashtag **#PSG2021**. You can also follow and mention @PacificSeabirds. Presenters, if you would like to encourage mentions of your work, please include your Twitter handle on your opening (and closing) slides. Conversely, if you prefer that your presentation not be tweeted, please say so at the beginning of your talk. PSG's own designated Tweepers Bradley Wilkinson (@Pelican_Paths), Julia Gulka (@julia_gulka), and Jenny Howard (@jenny_howard9) will be tweeting live from the conference!

SUSTAINABILITY AT PSG2021

PSG members have expressed, loud and clear, the desire to make annual meetings more sustainable and less consumptive. This year gave us the opportunity to host our first ever virtual meeting which has substantially reduced the meeting's carbon emissions! One study has reported that "videoconferencing takes at most 7% of the energy/carbon of an in-person meeting."¹

¹ Ong D, Moors T, Sivaraman V (2014) Comparison of the energy, carbon and time costs of videoconferencing and in-person meetings. *Comput Commun* 50:86–94

FIELD TRIPS

This year we're excited to announce **Scenes from the Field** – virtual field trips on location around the world! We'll travel to seabird colonies and birding hotspots on both sides (and the middle!) of the Pacific through nine different tours that will include footage from the field and a live Q&A with the hosts. See below to learn about the trips we have planned!

Transcripts in Japanese and Spanish will be available for many of the Field Trips! They can be found in WHOVA at the event page.

フィールドトリップの和訳をご用意いたしました！これらは、イベントページのWHOVAでご覧いただけます。

¡Las transcripciones en español estarán disponibles para muchas de las excursiones! Se pueden encontrar en WHOVA en la página del evento.

The guano islands of Peru - Carlos Zavalaga *Wednesday, February 24th, 0830-0900*

Dive into the Humboldt Current ecosystem! Come see the anchovies, fisheries, guano islands, and protected marine areas that make up Peru's coastal waters. Carlos Zavalaga, Universidad Científica del Sur, and his team will explore the guano islands and highlight the monitoring, research, and management that takes place. They will show us what a trip to the guano islands look like; how they prepare for them, the landscapes, and the iconic species of the islands including penguins, Inca terns, gulls, cormorants, boobies, and pelicans.



Seabirds of Midway Atoll, Hawai'i, USA – Jon Plissner

Wednesday, February 24th, 1700-1730

We welcome you to soar with us near the far northwestern end of the Hawaiian archipelago where we will land at Midway Atoll - one the oldest atoll formations in the world, where millions of seabirds thrive, including three species of marvelous albatross. On this tour, you'll discover some of the 22 species of seabirds that breed in the Papahānaumokuākea Marine National Monument, and learn about how they've adapted to the fascinating landscape of Midway Atoll, from the Bonin petrels that fill the night skies to the Laysan albatross whose nests dot the landscape, and include its shining star– Wisdom – the oldest confirmed wild bird in the world. Join us to get virtually up close to the spectacular seabird colonies that showcase why Midway Atoll National Wildlife Refuge and Battle of Midway National Memorial is a majestic place to rest and nest for the soaring masters of the Pacific.



Field work on Aiktak Island, Alaska, USA - Dan Rapp and Sarah Youngren

Wednesday, February 24th, 1730-1800

Join us for the field season most didn't get in 2020, and see what life looks like on Alaska Maritime NWR's remote seabird monitoring field camps. The field trip will feature summer fieldwork on Aiktak Island in the Eastern Aleutians, home of the Puffin Palace. Dan Rapp and Sarah Youngren have spent five summers as biotechs on Aiktak, and in those years captured their experiences on camera including their commute via the R/V Tiglax, the monitoring, and of course all the birds.



Markham's storm petrel in the Atacama desert, Chile – Benjamin Gallardo

Thursday, February 25th, 0830-0900

Storm petrels in the Atacama desert - need we say more? This trip joins the Red de Observadores de Aves y Vida Silvestre de Chile (ROC) from Santiago to Arica to visit the highest abundance of nesting Endangered Markham's storm petrels found to date. Rodrigo Silva, coordinator of the Seabird Program, and Ronny Peredo, field specialist, will also share their expertise as we learn about this incredible seabird colony (and hopefully get lucky with a view of nesting birds from the endoscopic cameras)!



Japanese Murrelets in the Kaminoseki area, Japan – Midori Takashima

Thursday, February 25th, 1800-1830

In this field trip, we are lucky to join Midori Takashima, who will take us to the beautiful Kaminoseki area of Japan! This area in the Seto Sea is known for Japanese murrelets (*Synthliboramphus wumizusume*) and the Streaked Shearwaters (*Calonectris leucomelas*), and this is the only known place where Japanese murrelets have been found in the breeding and non-breeding seasons! The Seto Sea finless porpoise (*Neophocaena asiaeorientalis*, currently listed on the IUCN Red List as vulnerable) is also found here...maybe we'll get a glimpse!



Tubbataha Reefs Natural Park, Philippines - Angelique Songco

Thursday, February 25th, 1830-1900

In this field trip we'll explore the Tubbataha Reefs Natural Park in the Philippines - incredible atolls that host an abundance of marine wildlife! In this tour we'll see the last intact seabird rookery in the country hosting more than 30,000 seabirds including great crested tern, sooty tern, red-footed booby, brown booby, brown noddy, masked booby and the endemic black noddy subspecies *worcesteri*!



Natividad Island & Espíritu Santo, México – Cecilia Soldatini, Javier Acalá, Maximiliano Quintero and Yuri Albores

Friday, February 26th, 0830-0900

Come discover the refuge of the black-vented shearwater and explore the world of frigatebirds in the archipelago! Join the Marine Aeroecology lab (Ensenada Center for Scientific Research and Higher Education at Universidad Autonoma de Baja California Sur (CICESE UABCS)) in exploring Natividad Island, where the endemic black-vented shearwater breeds. Learn about the efforts taking place since 2016 in uncovering the biology and population dynamics of the species. The CICESE UABCS and Max Planck researchers will take you through the largest frigatebird colony in the Espíritu Santo archipelago. Frigatebirds cannot be on water and rest during flight. Since 2016, they have been studying their flight trips and behavior in hopes of finding the best measures to protect them. Join in!



Hawaiian Petrels
in Kauaʻi, Hawaiʻi, USA - Andre Raine
Friday, February 26th, 1530-1600

Join the Kauaʻi Endangered Seabird Recovery Project as they head into the remote and rugged interior of Kauaʻi to check out a Hawaiian petrel colony. The tour will take you along the edge of the spectacular Kalalau Valley and into the heart of the beautiful Hono o Nā Pali Natural Area Reserve, where the KESRP team will show participants how they monitor these special endangered seabirds. Spoiler alert - there may even be a glimpse or two of a fuzzy petrel chick!



Winter Birding in Newport, Oregon, USA -
Steve & Rachel Holzman
Friday, February 26th, 1600-1630

Join Newport, Oregon local birders Steve & Rachel Holzman on a virtual field trip to a couple of hotspots in search of seabirds and waterfowl. We'll visit the South Jetty of Yaquina Bay and the Hatfield Marine Science Center grounds, looking for birds such as Eurasian wigeon, northern pintail, pelagic cormorant, surf scoter, harlequin ducks, and more.



INFORMATION FOR PRESENTERS, SESSION CHAIRS, AND JUDGES

POSTERS:

For all those who are presenting posters at the 2021 PSG Conference please see the following link for the poster guidelines: [PSG 2021 Poster Guidelines.pdf - Google Drive](#)

ORAL PRESENTATIONS:

For all those who have oral presentations at the 2021 PSG Conference please see the following link for the oral presentations guidelines: [PSG 2021 Oral Presentation Guidelines.pdf - Google Drive](#)

All presentations will be recorded and available online to meeting registrants for a limited time after the meeting.

For all oral presentations, if there are slides that you do not want shared online, please include a "no tweet" sign, such as shown below, on each slide that you do not want shared to clearly indicate that you do not want a picture of your slide posted online by anyone in the audience. This helps people moving between sessions to know your preference because they may miss an announcement at the beginning of the talk.



Session Hosts

Thank you for your willingness to help manage the scientific program. You have a critical job in keeping presenters within the time allotted to their talk. As a reminder, each oral presentation is scheduled for 15 minutes—12 minutes for the presentation and the remaining 3 minutes for questions. Please prepare to enter your assigned Zoom stream at least 10-minutes prior to your session start time (note that there may be a few occasions where the zoom room will not open until closer to the session start time if there aren't breaks between two sessions using the same Zoom stream). As speakers arrive to the session, be sure to remind them that they will be given 5- and 2-minute warnings near the end of their talk. At the scheduled start time for the Session, please welcome attendees and presenters and announce the Session's title (e.g., Conservation Biology, Discussion Session: Murrelets and Megafires, etc.). At the 7-minute mark, please display a 5-min warning card as a notice to the speaker that it's time to wrap up. At the 10-minute mark, it's time to communicate a more forceful warning by waving the 2-minute warning card. If the presentation goes over 12-minutes or there isn't enough time remaining to answer all questions, please remind attendees that they may post their additional questions in the Session listing on Whova. At the 15-minute mark, thank the speaker, and begin your introduction of the next speaker. In the event of a last-minute cancellation, do not move the other talks up a slot and finish early. Instead, leave the cancelled speaker's slot as time for discussion so that those in other sessions that have planned on attending specific talks later in the session do not get thrown off. If you have any questions, please ask Roberta Swift, Scientific Program Chair.

Student Presentation Award Judges

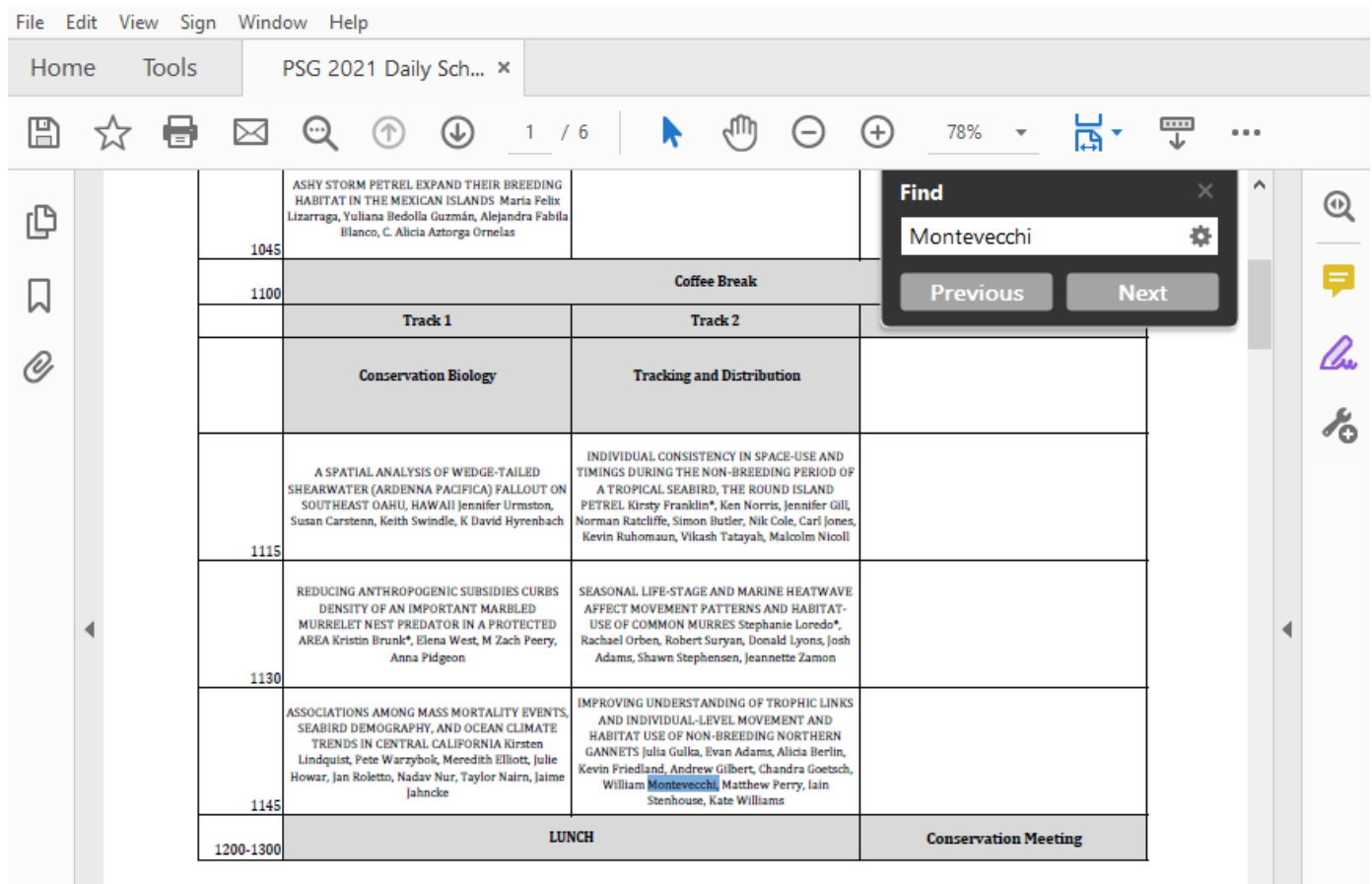
Thank you, judges, for volunteering to give valuable feedback to students as they develop their scientific communication skills. At the beginning of the conference, judges will meet to be assigned student talks and posters to evaluate. Judges will submit their scores electronically. Please submit scores as soon as possible after you score a talk or poster. Awards for the best oral and poster presentations will be presented at our closing ceremony, 16:30 to 17:30, Friday 26th February.

SEARCH FOR A PRESENTER

How to search for a presenter in a PDF

1. Press CTRL+F (Windows) or CMD+F (Mac).
2. In the text box, enter the name of the person you are looking for and press Enter
3. Press the Next or Previous buttons to navigate between the results.

You can also search for a specific phrase or species.



The screenshot shows a PDF viewer interface with a search bar at the top right. The search bar contains the text "Montevecchi". Below the search bar, there are "Previous" and "Next" buttons. The PDF content is a table with columns for time, title, and presenter. The presenter "Montevecchi" is highlighted in the search results.

Time	Track 1	Track 2
1045	ASHY STORM PETREL EXPAND THEIR BREEDING HABITAT IN THE MEXICAN ISLANDS Maria Felix Lizarraga, Yuliana Bedolla Guzmán, Alejandra Fabila Blanco, C. Alicia Azorga Ornelas	
1100	Coffee Break	
	Conservation Biology	Tracking and Distribution
1115	A SPATIAL ANALYSIS OF WEDGE-TAILED SHEARWATER (ARDENNA PACIFICA) FALLOUT ON SOUTHEAST OAHU, HAWAII Jennifer Urmston, Susan Carstenn, Keith Swindle, K David Hyrenbach	INDIVIDUAL CONSISTENCY IN SPACE-USE AND TIMINGS DURING THE NON-BREEDING PERIOD OF A TROPICAL SEABIRD, THE ROUND ISLAND PETREL Kirsty Franklin*, Ken Norris, Jennifer Gill, Norman Ratcliffe, Simon Butler, Nik Cole, Carl Jones, Kevin Ruhomaun, Vikash Tatayah, Malcolm Nicoll
1130	REDUCING ANTHROPOGENIC SUBSIDIES CURBS DENSITY OF AN IMPORTANT MARBLED MURRELET NEST PREDATOR IN A PROTECTED AREA Kristin Brunk*, Elena West, M Zach Peery, Anna Pidgion	SEASONAL LIFE-STAGE AND MARINE HEATWAVE AFFECT MOVEMENT PATTERNS AND HABITAT-USE OF COMMON MURRES Stephanie Loreda*, Rachael Orben, Robert Suryan, Donald Lyons, Josh Adams, Shawn Stephensen, Jeannette Zamon
1145	ASSOCIATIONS AMONG MASS MORTALITY EVENTS, SEABIRD DEMOGRAPHY, AND OCEAN CLIMATE TRENDS IN CENTRAL CALIFORNIA Kirsten Lindquist, Pete Warzybok, Meredith Elliott, Julie Howar, Jan Roletto, Nadav Nur, Taylor Nairn, Jaime Jahncke	IMPROVING UNDERSTANDING OF TROPHIC LINKS AND INDIVIDUAL-LEVEL MOVEMENT AND HABITAT USE OF NON-BREEDING NORTHERN GANNETS Julia Gulka, Evan Adams, Alicia Berlin, Kevin Friedland, Andrew Gilbert, Chandra Goetsch, William Montevecchi, Matthew Perry, Iain Stenhouse, Kate Williams
1200-1300	LUNCH	
		Conservation Meeting

How to search for a presenter in Whova

1. Go to the PSG 2021 Whova web app https://whova.com/portal/webapp/amops_202101/
2. On the left hand side panel press the Attendees panel
3. In the text box, enter the name of the person you are looking for and press Enter

The screenshot shows the Whova web app interface for the 2021 Annual Meeting of the Pacific Seabird Group, held from February 22 to 26, 2021. The interface is divided into a left sidebar and a main content area. The sidebar, titled 'MAIN NAVIGATION', includes links to Home, Agenda, Attendees (which is highlighted), Community, Posters, Messages (with a red notification badge), and a 'RESOURCES' section containing Session Q&A, Video Gallery, Polls, Twitter, Speakers, and Whova Guides. The main content area features a search bar at the top with the placeholder text 'Search name, affiliation, or location...'. Below the search bar, a list of attendees is displayed, starting with a section header '#'. The first attendee listed is Dayana Alva -Gutierrez, associated with Universidad Científica del Sur, with a yellow circular profile picture containing the letter 'D'. Below her name are buttons for 'Send Message' and 'View Profile'. A section header 'A' follows, under which two more attendees are listed: Josh Adams, associated with the US Geological Survey, Western Ecolo..., with a red circular profile picture containing the letter 'J'; and Lindsay Adrean, associated with Oregon State University, Dept. Forest ..., with a circular profile picture showing a person in an orange jacket. Both also have 'Send Message' and 'View Profile' buttons.