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# Conservation Marketing Virtual Conference 2021 #ConsMark2021

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# Conservation Marketing Virtual Conference 2021 #ConsMark2021

# MEETING AND EVENT CODE OF CONDUCT POLICY

The Society for Conservation Biology (SCB) works to promote an inclusive environment at its meetings and events that is welcoming, safe, collaborative, supportive, and productive for all attendees, including volunteers, exhibitors, and service providers, and that values the diversity of views, expertise, opinions, backgrounds, and experiences reflected among these attendees. To that end, we expect meeting attendees to abide by the following Meeting and Event Code of Conduct:

## **Expected Behavior**

•Treat everyone with respect and consideration.

•Communicate openly and thoughtfully with others and be considerate of the multitude of views and opinions that are different than your own. •Be respectful in your discussion and critique of ideas.

•Be mindful of your surroundings and of your fellow participants. Alert SCB staff if you notice a potentially troubling or dangerous situation, someone in distress and/or unacceptable behavior.\*

•Respect the rules, policies, and requests of the Society and all venues associated with the meeting.

•Uphold and support SCB's commitment and actions to improve the events environmental and social impacts and promote equity, inclusion and diversity.

## Unacceptable Behavior\*

•Criminal offenses.

•Participation or promotion of harassment, intimidation, or discriminatory behaviors in-person or on SCB or ICCB social media platforms and the event's mobile app during meetings/events or other associated activities organized by SCB.

•Overt, subtle, physical, verbal, or non-verbal abuse of any attendee, speaker, volunteer, sponsor, exhibitor, SCB staff member, service provider or other meeting or event guest.

•Disruption of talks at the meeting/event or other associated activities organized by SCB.

\*Examples of unacceptable behavior include, but are not limited to inappropriate comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, or breastfeeding; inappropriate use of nudity and/or sexual images in public spaces or presentations; inappropriate sexual advances or touching; threatening, bullying, harassment (sexual or otherwise), discrimination or stalking of any attendee, speaker, volunteer, sponsor, exhibitor, SCB staff member or service provider.

## Consequences

•Anyone requested to stop unacceptable behavior is expected to comply immediately.

•SCB or security may take any action deemed necessary and appropriate, including immediate removal from the meeting without warning or refund.

•SCB will report criminal offenses to local authorities and reserves the right to report a possible criminal offense where appropriate.

•SCB reserves the right to prohibit attendance at any future meeting and/or revoke membership.

## Process for Reporting Unacceptable Behavior

If you are the subject of unacceptable behavior or have witnessed any such behavior, please immediately follow these steps:

1. Remove yourself from the situation and find a safe space. In the case of a medical or criminal emergency, contact event security and/or local emergency response authorities.

2.In non-emergency situations, you also have the right to report a criminal (or possible criminal) offense to event security and/or local authorities. 3.Email <u>safemeeting@conbio.org</u> to report an incidence of unacceptable behavior. Provide your name, contact information and a brief description of the concern. This message will be immediately forwarded to SCB Safety Officer who is trained to handle code of conduct concerns with professionalism, sensitivity and confidentiality.

4.All concerns relating to unacceptable behavior will be treated seriously and addressed promptly. Complainants will remain in control of the process and the SCB Safety Officer will outline options available to deal with the situation promptly, effectively, and in a manner that the complainant finds most suitable.

5.Depending on the nature of the issue, additional information, security, or local police may be needed to address the situation appropriately.

ConsMark is dedicated to ensuring a safe, welcoming (virtual) environment for all. If you have any questions or concerns, please email us at <u>ConsMark@conbio.org</u>

# Conservation Marketing Virtual Conference 2021 #ConsMark2021

# Conference Theme CHANGING BEHAVIOR CHANGING CLIMATE

	CHANGING CLIMATE				
Date	11.00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM 4:00 PM 5:00 PM 6:00 PM
Wednesday October 27	WORKSHOP Discovering diver pathways to inspire conservation behavior change Facilitators: Lily Maynard, Ph.D., Jen Torchalski			Break	WORKSHOP Getting your Message Across: Tools for Effective Communication for Conservation Professionals Facilitators: Lisa Yeager and Karen Strong
Thursday October 28	Getting to Know Conservation Marketing	Leveraging Creative Conservation	Getting the Messenger	Break	WORKSHOP Advancing the Narrative for Shark Conservation Facilitator: Paul Cox Director   The Shark Trust
	Unlocking the Power of Online Engagement	Marketing	Right		
Friday October 29	Harnessing the Power of Social Norms	Cocktail Party	Art and Digital Marketing	Break	<b>RESEARCH SESSION</b> What does conservation mean to non-members of SCB? Scheduled 30-minute interviews to help the Disciplinary Inclusion Task Force make the Society more relevant to you.
	Expanding our Reach				
Saturday October 30	Behavioral Insights	Conservation Marketing and Psychology	Getting Creative with Conservation	Break	
		Ocean Futures	Marketing		
Concurrent Session A     Concurrent Session B     Keynote     Workshop/Resear ch Session     Socials					



# WORKSHOPS & RESEARCH SESSION



### 11:00 AM - 1:00 PM | EST

Discovering diver pathways to inspire conservation behavior change

Facilitators: Lily Maynard, Ph.D., Jen Torchalski

As active conservationists wanting to inspire your teams, audiences, and communities to reduce threats to the environment, this workshop will provide you resources and skills to jumpstart and increase your conservation impact. We will facilitate discussions and individual applications of social science tools to refine and amplify your engagement strategies using a framework to explore diverse paths to motivate conservation action. We will train participants in the spectrum of messaging techniques using a Pathfinder Scale of integrated conservation psychology theories, designed by the Cincinnati conservation psychology theories, designed by the Cincinnati Zoo & amp; Botanical Garden and Disney Conservation teams. This workshop will provide new lenses to frame your communications and new resources to mobilize your audiences, as well as next steps for your program evaluation to monitor progress and find opportunities to adapt along the way. By the end of the workshop, participants will have a draft strategic engagement plan to mobilize their

have a draft strategic engagement plan to mobilize their audiences.

#### 3:00 PM - 6:00PM | EST

Getting your Message Across: Tools for Effective Communication for Conservation Professionals

In this three-hour workshop, we will use an experiential learning approach using activities that will engage participants in the principles of listening, empathy, and building shared values to



11:00 AM - 1:00 PM | EST

# Advancing the Narrative for Shark Conservation

Director | The Shark Trust

- Participants of this workshop will

  Learn about the current state of shark and ray conservation and messaging
  Learn about positive framing and how it is being applied to
- Participate in critical assessment and testing of prototype messaging toolkit Develop new skills and appreciation in developing effective



3:00 PM - 6:00 PMI EST

Research Session: What does conservation mean to nonmembers of SCB? Scheduled 30-minute interviews to help the Disciplinary Inclusion Task Force make the Society more relevant to you.

understandings of the complex interaction between ecological and human systems. Including and integrating disparate disciplines in conservation offers an opportunity to gain these crucial understandings. In 2020, the Society for Conservation Biology (SCB) established the Disciplinary Inclusion Task Force (DITF) to explore and promote disciplinary diversity within the Society. The DITF is conducting wide-ranging evaluations of SCB, including potential members, to understand disciplinary inclusion and engagement.

that participants will share details of their connection to conservation to inform our efforts to be more representative of everyone contributing to the field.

achieve its mission to sustain biodiversity for today and tomorrow by cultivating a more diverse and inclusive global community, through a better understanding of the barriers to membership across disciplines, and recommendations on how to



## 28 October 2021 | Thursday 11:00 AM - 12: 00 PM, EST

# **CONCURRENT SESSION: Getting to Know Conservation Marketing**

DAY

2

<sup>1</sup> Past-President, Society for Conservation Biology's Conservation Marketing Working Group, Washington DC., USA; marinebrit@gmail.com
 <sup>2</sup> George Mason University, Fairfax, VA, USA
 <sup>3</sup> University of Wisconsin-Madison, The Nelson Institute for Environmental Studies; Winklershcor@wisc.edu

Fortunately for conservation practitioners, the environment is stunning and theoretically should be able to sell itself-from sun-drenched tropical beaches dotted with coconut palms to snow-covered alpine peaks, the natural world regularly inspires a feeling of awe and desire. However, conservationists fail to "sell" the environment, and instead ask people to save it. Much like saving for retirement, saving the environment is less exciting than envisioning yourself frolicking in an expansive savannah with giraffes and elephants. But conservation marketing has the power to do just that—it integrates psychological theory with proven marketing techniques to sell people a lifestyle in which they view nature and skips to buying into an appealing lifestyle. Looking towards advertising tactics used by insurance companies to promote their products, conservationists must "rebrand" both ourselves and our efforts. Engaging with interdisciplinary tools effectively captivate and motivate the general public. Drawing from various conservation social science fields, we can unobtrusively work our way into the lives of the public through successfully influencing people's actions to benefit

<sup>1</sup> Colorado State University
 <sup>2</sup> University of Wisconsin-Madison
 <sup>3</sup> National Atmospheric and Administration Association Pacific Islands Fisheries Science Center

Conservation efforts for charismatic megafauna like sea turtles have benefitted from a burgeoning global wildlife tourism industry. In Hawai'i, this intersection is particularly evident on the North Shore of Oahu where dozens of green sea turtles forage and swim near shore reef habitats and often rest (bask) on beaches. This unique basking behavior makes turtles very accessible to tourists seeking up-close encounters and photos or video. As the volume of tourists increases, managers have sought to find sustainable solutions that protect sea turtles from harassment while also preserving tourism opportunities. Although educational signage and social marketing has not yet been applied. Therefore, we developed and tested a campaign based in the social marketing framework to encourage greater compliance with the 10-foot viewing distance guidance set by federal and state agencies in Hawai'i. Our social marketing approach promoted a replacement behavior and focused on making the desired behavior seem easy, more enjoyable, popular, and in alignment with their identity, while still allowing tourists a unique experience. We used a quasi-experimental design with interactions with basking sea turtles at a beach. When the new campaign was in place, 12.7% more people complied with the 10-foot viewing distance for basking sea turtles compared to a treatment condition with the current regulatory signs set up on the beach. Compared to the existing conditions entry points, 29.3% more people complied when the new campaign was in place. Data are considered preliminary since Covid-19 restrictions cut implementation short. However, we can conclude that leveraging social marketing-based messages and tactics have greater potential for encouraging compliance with wildlife viewing distance guidelines over

#### <sup>1</sup> South African Association for Marine Biological Research

This presentation will report on the impact of an innovative conservation action campaign called Penguin Promises implemented at uShaka Sea World in Durban, South Africa. Communication tools included interpretive signage, exhibits interactions, along with a specially designed postcard, on which visitors could write a promise (pledge) to make a change in their daily lives to become more environmentally responsible. Visitors who completed a card were contacted a year or more after their visit and asked about the outcomes of their promise. The results (N=316) showed that 49.4% of respondents could give an example of something positive they had done for the environment that they attributed to the campaign. The on-going nature of the project meant that it was possible to do a similar analysis on a different set of visitors over two years after the study, recommendations are provided for the design of effective visitor conservation action campaigns. Recommendations for the design of effective visitor conservation action campaigns include: Encourage visitors to connect emotionally with the animals. Focus on specific pro-environmental behaviours and provide suggestions on how to undertake them. Provide opportunities for participants to reflect. Consider visitors' motivations for conservation action. Encourage visitors to commit their behavioural 'promises' to paper and provide post-visit resources to support behaviour change at home. Use iconic, live animals as the focus for the conservation action campaign and design interpretive experiences that help visitors make connections between their visit and their daily life.



# DAY 2

## 28 October 2021 | Thursday 11:00 AM - 12: 00 PM, EST

# **CONCURRENT SESSION: Unlocking the Power of Online Engagement**

- <sup>1</sup> Department of Environmental Science and Policy, George

- <sup>2</sup> Lee Kong Chian Natural History Museum, National University of Singapore <sup>3</sup> The Straits Times, Singapore Press Holdings <sup>4</sup> Department of Biological Sciences, National University of

Biodiversity awareness days are awareness-raising interventions of increasing popularity. We sought to determine if species or taxa awareness days led to awareness proxied by engagement for information, if some awareness reasons for success, and if awareness days led to positive conservation action. Google Trends and Wikipedia page views of the subject of biodiversity awareness days with a history of at least five years were analyzed. For 16 awareness days examined there was an average of 3.07% increase in Google searches and 34.0% increase in Wikipedia page views. Awareness days 25% of taxa (including pangolin, polar bear, tiger) had significant increases in both metrics, and 43.8% of taxa had success in at least one metric. Over half of taxonomic groups, which include species considered charismatic and appealing, saw no clear increase in information-seeking behavior. Tweets containing a call to action had a positive relationship with the number of retweets. Some awareness days appeared to correspond to an increase in conservation fund-raising for advocacy groups and charities that participated in the event. Overall, the results might be better allocated to less popular threatened species, and that advocacy groups and charities may want to consider optimizing their messages and participation to maximize benefits of these events.

<sup>1</sup> Antioch University New England <sup>2</sup> Painted Dog Research Trust <sup>3</sup> S.P.E.C.I.E.S Management University of Rwanda

thoughts through words and images. This includes human interactions with both domestic and wild animals. Human-wildlife interactions have been documented to have negative effects on wildlife, with potential additional implications for species classified as threatened or endangered. Here we use social media and a content analysis framework to identify general locations of a specific human-endangered wildlife interaction: human activity at painted dog den sites. Two hundred twenty images and captions relating to den visits by humans occurred in seven of 14 countries where painted dogs are known to be present. This information provides a starting point for further investigation into the impacts of this activity on painted dogs, which is valuable to the effective management of human-caused disturbances (e.g., reducing potential anthropogenic Allee effects) for this species.

<sup>1</sup> US Holocaust Memorial Museum <sup>2</sup> Lemur Conservation Network

Climate change and biodiversity loss are scary topics. How do we engage online audiences in difficult topics without scaring them away? There is much that conservation marketers can learn about digital strategies from other fields that also engage audiences in difficult content.

The US Holocaust Memorial Museum (USHMM)'s Digital Media division are experts in engaging audiences with content that can leave people feeling sad, angry, and hopeless. Despite this difficult content, the Museum's websites reach over 8 million people annually with about 30 million pageviews. They continually monitor and improve this online presence, working with audiences to learn motivations, test ideas, find solutions, and increase engagement.

What can the conservation community adapt from these strategies to engage people in environmental crises online? Lynne Venart, the Museum's senior user experience designer engaging audiences online. Methods will be applied to conservation through examples from the Lemur Conservation Network, where she also serves as the Digital Communications Manager. We will learn how people read online, what they are looking for, and where they find inspiration in a frightening search engines, making content accessible, and adapting your content for your users.



## 28 October 2021 | Thursday 12:00 PM - 1: 00 PM, EST

# **CONCURRENT SESSION: Leveraging Creative Conservation Marketing**

Endangered Species Condoms: a social marketing tool for starting conversations about population and its connection to conservation Sarah Baillie <sup>1</sup> and Kelley Dennings <sup>1</sup>

<sup>1</sup> Center for Biological Diversity

DAY

2

According to researchers, the most impactful action to reduce individual carbon footprints is to have one fewer child. Population growth increases pressure on habitat, water and other limited natural resources. But population, sex and family planning can be challenging topics. This presentation discusses creative strategies to integrate these critical issues into other topics using an inclusive, rights-based approach.

The Endangered Species Condoms project was launched 10 years ago to bring the discussion of human population growth back into the environmental movement with a focus on human rights and reproductive justice. In that time, more than 1 million condoms have been distributed by thousands of volunteers. The principles of social marketing are used through the Endangered Species Condoms project to create a national discourse around the population issue and activate personal conversations between couples about desired family size. The condoms are introduced in both formal teaching settings as well as informal settings to reach a broad, diverse audience.

The Center recognizes the right of everyone to choose if and when to have children, yet underrepresented communities often lack access to reproductive health education and services. Through the use of our campaigns we draw the connection between reproductive justice and environmental justice, empowering women across all communities to make family planning decisions with their health, community and the planet in mind.

## Lessons in Conservation Messaging: Testing different design strategles to find top performers for conservation behavior change

<sup>1</sup> The Walt Disney Company

As a graphic designer on the Disney Conservation team, Jen Torchalski aims to maximize the impact of conservation messaging with compelling visuals. In a case study, we'll present how one idea of a poster redesign turned into an experiment of understanding what visuals perform the best for audiences - and what may be overrated.

### /ear of the Right Whale: Lessons Learned in a Campaign Arnidst the Coronavirus

Cynthia B McInnis <sup>1</sup>and Jennifer L Kennedy <sup>1</sup>

<sup>1</sup> Blue Ocean Society for Marine Conservation

The Year of the Right Whale project began in 2018 to protect the North Atlantic right whale through celebration, education and action. The project includes several key components, including a Booth in a Box, curricula and social media encouraging people to learn about and speak up for right whales. The campaign centers around the year 2020, as an auspicious year to protect the species. The project got off to a quick start, with the development of a web site, social media platforms, and an automated "speak up" feature that allowed web visitors to contact their representatives to speak up for right whales. The Booth in a Box, an interactive, educational booth with all the tools borrowers need to teach about right whales, was launched and distributed to six locations for a pilot test. Materials were ordered for 20-30 more boxes that would be distributed to locations around the US and Canada. Then, the coronavirus pandemic hit. Project coordinators quickly shifted gears from an in-person focus to a virtual one. Taking advantage of scientists working from home, the project coordinators interviewed right whale researchers, created videos, and also created a series of online activities that could be done from home during distance learning. Flexibility has been key in this project and demonstrates the need to communicate rapidly and remain fluid in sometimes changing conditions. During this talk, we'll report on the project's progress so far, lessons learned and ways to get involved.



# DAY 28 October 2021 | Thursday 1:00 PM - 2: 00 PM, EST

# **KEYNOTE: Getting the Messenger Right**

In our first keynote presentation, you will hear from ConsMark Board President Chelsea Gray about ConsMark activities and the exciting conference we have planned.

Our first keynote speaker, Jake Kheel, is a sustainability innovator who has worked on social and environmental challenges in the tourism industry since 2005. His presentation will be followed by a moderated Q&A.

About Jake Kheel: Jake Kheel is a sustainability innovator, author, and awardwinning documentary filmmaker. Since 2005 he has confronted social and environmental challenges in the tourism industry as Vice President of Sustainability for Grupo Puntacana in the Dominican Republic. Under his leadership, Grupo Puntacana has received prestigious awards for its sustainability programs, including awards by World Tourism and Travel Council, Conde Nast Traveler, Travel & Leisure, and National Geographic Traveler.

His book, Waking the Sleeping Giant: Unlocking the Hidden Power of Business to Save Our Planet, uses examples from his vast experience in Punta Cana to demonstrate how companies can drive breakthroughs in sustainability.

Jake co-directed and produced the award-winning documentary film Death by a Thousand Cuts, which explores Dominican-Haitian deforestation and escalating human conflict on the border. He is currently producing a hosted documentary series, Island Naturalist, to be released in 2022.

Jake is on the Board of the Center for Responsible Tourism (CREST) and former President of the National Association of Businesses for Environmental Protection (ECORED) in the Dominican Republic, an association of nearly 100 prominent companies committed to sustainability.



# DAY 3

## 29 October 2021 | Friday 11:00 AM - 12:00 PM, EST

# **CONCURRENT SESSION: Harnessing the Power of Social Norms**

### Using People's Motivation to Comply and Group Identification to Understand Social Influences on Water Protection Donation Behaviors

Laura A. Warner <sup>1</sup>, Alexa J. Lamm <sup>2</sup>, Savanna L Turner <sup>1</sup>, Kristin E. Gibson <sup>2</sup>

#### <sup>1</sup> University of Florida <sup>2</sup> University of Georgia

Social norms have been identified as an important component in the marketing of behaviors that protect water resources. Digging deeper, concepts of injunctive and descriptive norms (what others approve of and do, respectively) deserve much more attention than has been given. The value-laden constructs of motivation to comply and group identification may be used to understand how important others influence conservation behaviors even further.

The objectives of this work were to 1) examine whether motivation to comply strengthened the predictive power of injunctive norms on individuals' donation behaviors and to 2) examine whether group identification strengthened the predictive power of descriptive norms on individuals' donation behaviors. This presentation will describe survey research targeting Florida residents to evaluate how these constructs related to respondents' personal likelihood of donating money to an organization that protects water.

We found motivation to comply with perceived approval (e.g., from others in the U.S.) improved the predictive power of perceptions of approval (injunctive norms) for donating money on individuals' donation behaviors. Further, incorporating the desire to be like people who are important to them (group identification) weakened the relationship between perceptions that important others were also engaged in the behavior (descriptive norms) and individuals' donation behaviors.

These findings imply an understanding of people's motivation to comply can increase conservation practitioners' understanding of water protection through donation behaviors beyond that which is explained by social norms alone, but incorporating group identification had the opposite effect. It is possible that motivation to comply with expectations can be a tool to encourage conservation donations. The presentation will explore possible marketing strategies for water stewardship behaviors through encouraging financial donations.

## Experimenting with plastic avoidance media

im Roral

#### <sup>1</sup> BehaviourWorks Australia, Monash Sustainable Development Institute, Monash University

Plastic pollution is a global problem linked to climate change, biodiversity loss, and poor human health. However, many single-use plastics are avoidable if people change their behaviour. Perceptions about social norms (the unwritten social rules about how we should and should not behave) can influence single-use plastic avoidance. These perceptions are shaped through exposure to different types of environmental cues, including mass and social media. Given that media coverage of plastic pollution has been high in recent years, this raises the question – is media promoting plastic avoidance or plastic use as the norm? An online experiment was undertaken involving a survey of 1,001 participants. Respondents were asked about their perceptions and behaviours regarding four single-use items: plastic bags, plastic straws, disposable coffee cups, and plastic take-away containers. They were then shown a 2-minute video clip from one of four documentaries about plastic pollution (or a control clip about the process of making plastic). Two clips emphasised the 'scale of the problem' (potentially promoting the undesirable descriptive norm), while two clips focused on the 'environmental impact' of plastic pollution (potentially promoting the benefits of avoidance). Respondents were asked again about their perceptions and behaviours immediately after the clip and again one month later. This presentation will report on the differences in perceptions and intentions between respondents who were exposed to the different video clips. Insights from this experiment will be of value to those interested in encouraging plastic avoidance using media communication.

### Effects of Goal-Framed and Dynamic Norm Messages on National Park Campers' Intentions to Comply with Wildlife Attractant Storage Guidelines Jordan M. Gorostiza<sup>1</sup> and Katie M. Abrams<sup>1</sup>

<sup>1</sup>Department of Journalism and Media Communication, Colorado State University

Wildlife habituation and conditioning have posed persistent issues for managers of U.S. national parks and protected areas. The tendency for park campers to unintentionally feed wildlife by improperly storing known attractants contributes to these issues. There are park regulations requiring campers to properly store wildlife attractants, however these regulations are often not followed. While there are many strategies to mitigate noncompliance with regulations, there is a noted management preference for achieving voluntary compliance through indirect methods such as communication. In light of Covid-19, first-time campers are predicted to make up a larger portion of campers in 2021 across the U.S., so preventing unintentional wildlife feeding among this more diverse audience is a unique challenge. Recent research examining the effectiveness of specific audience-centered messaging approaches for increasing compliance with park regulations has demonstrated promise. Previous research suggests that goal-framed and dynamic norm message frames may be effective at fostering behavioral antecedents and intentions to engage in pro-environmental behaviors such as proper attractant storage. This presentation will provide an overview of an online experiment that uses a 3 (goal-framed messages: promotion versus prevention versus neither)  $\times 2$  (dynamic norm message frames on increasing camper intentions to properly store their wildlife attractants. A sample of likely park campers will be recruited to participate in the study via Prime Panels in July 2021. Results will shed light on the processes by which these message frames work as well as their utility to park managers.



# 29 October 2021 | Friday 11:00 AM - 12: 00 PM, EST

# **CONCURRENT SESSION: Expanding Our Reach**

#### <sup>1</sup> Johns Hopkins University <sup>2</sup> Rare

Many people seek to increase practitioners' use of research evidence in decision making. Two common strategies are dissemination and interaction. Dissemination can reach a wide audience at once, yet interaction. Dissemination can reach a wide audience at once, yet interactive strategies can be beneficial because they entail back-and-forth conversations to clarify how research evidence applies in a particular context. To date, however, we lack much direct evidence of the impact of interaction beyond dissemination. Partnering with Rare, an international conservation NGO, we conducted a field experiment to test the impact of an interactive strategy (i.e., a single conversation) on conservation practitioners' use of research evidence in a pending decision for their social marketing campaign. We find that the conversation had a substantial impact on research use relative to only receiving disseminated materials, which likely was due to increased selfefficacy. We also provide practical guidance on how researchers and conservation practitioners can apply this finding close to home by strengthening linkages with local decision makers.

# <sup>1</sup> School of Earth and Environmental Science, University of

*Queensland University of Technology* <sup>3</sup> Moore Center for Science, Conservation International <sup>4</sup> Faculty of Natural Sciences, Centre for Environmental Policy, Imperial College London

Conservation initiatives rarely achieve the scale required to respond to ongoing biodiversity loss. Understanding what drives the adoption of conservation initiatives provides key insights into how initiatives expand to a scale necessary for effective that influenced the adoption of extensive Wildlife Management Units (UMAs) in Mexico. We interviewed 22 experts to gather their perceptions about the factors driving the adoption and spread of UMAs, and their interactions. We used Diffusion of theory of change based on the experts' perceptions that illustrates what led landholders to adopt UMAs. We found that: 1) the adoption of UMAs depended on the landholders' ability to learn about, register, and implement them; 2) alignment with adoption, reflecting the likelihood and ease of participation respectively; and 3) observability of benefits and the availability of technical advice were key to adoption, influencing the speed of adoption by facilitating learning. Our empirically derived theory of change describing the adoption of UMAs revealed focused and clear hypotheses that can be further tested

<sup>1</sup> Tufts University & The Jackson Laboratory

In digital spaces, the presence of alt-text in web content has been used as a litmus test for the attitudes of content creators towards disability accommodation and accessibility. Disabled researchers are a persistently underrepresented group in the sciences. Despite nearly 26% of adults in the US living with a disability, the proportion of full-time disabled faculty members are estimated to be as low as 1.5%. Fields like environmental science and ecology have been criticized for lack of accessibility and inclusivity to disabled students and scientists, particularly in fieldwork-heavy subdisciplines. Additionally, national-scale reports suggest that disabled academics are half as likely to have jobs in STEM fields compared with non-disabled peers and are twice as likely to work only part-time and are more likely than their able-bodied colleagues to be unemployed. Increasingly, academic jobs are advertised and publicized on Twitter and include images that contain the job description or directions to apply. Information contained in images are not accessible to users that utilize screen readers and who are blind or visually description of an image or visual content that describes an image to users unable to see the image. Despite the relative ease of adding alt-text to Twitter images, the feature remains underutilized. To determine the extent to which academic twitter job postings include image alt text, I queried the Twitter API for all environmental science and ecology job postings over the past 10 years and determined whether any associated images included alt-text. I evaluated whether there were subfield, institutional type, or job role type differences in the usage of alt-text.







# DAY 3 29 October 2021 | Friday 1:00 PM - 2: 00 PM, EST

# **KEYNOTE: Art and Digital Marketing**

In this keynote session, Dr. Diogo Veríssimo and Dr. Sarah Papworth will speak about the intersections of art, digital marketing, and conservation outreach.

"Advancing conservation marketing through digital tools" by Diogo Verissimo

About Diage Verfssimo: Diogo Verfssimo is a Research Fellow at the University of Oxford and the Head of Impact and Measurement at On the Edge Conservation. His work focuses on the use of social marketing principles to design and evaluate behaviour change interventions that improve biodiversity conservation outcomes. Diogo works across a number of geographies, such as China, India, Portugal and the Democratic Republic of Congo, as well as across a number of digital channels, including mobile games, social media, and documentaries. He is a board member of the European Social Marketing Association and the International Social Marketing Association.

## "Image isn't everything - what Imaginary animals can tell us about marketing flagship species for conservation" by Sarah Papworth

About Sarah Papwoth. Sarah Papworth works as a Senior Lecturer in the School of Biology at Royal Holloway University of London, where she teaches Conservation Science. She has broad research interests, but currently conducts research on human perceptions of the natural environment and Amazonian primate behaviour. Her approach to conservation science examines human decisions and behaviour as part of a complex ecosystem, thus most of her work is interdisciplinary and combines approaches and theory from ecology, anthropology and psychology. She started her career by studying a BA (Hons) in Anthropology at the University of Durham, before completing an MSc in Ecology, Evolution and Conservation and a PhD in conservation behaviour at Imperial College London. After a post-doc at the National University of Singapore, she joined the faculty at Royal Holloway. More information on her research can be found at www.conservationbehaviour.com.



# DAY 4

# 30 October 2021 | Saturday 11:00 AM - 12: 00 PM, EST

# **CONCURRENT SESSION: Behavioral Insights**

<sup>1</sup> San Diego Zoo Wildlife Alliance\*

- <sup>4</sup> Center for Environment and Rural Development (CERD) <sup>5</sup> IESC Cordoba

The Vietnamese Government committed to closing all bear expressed concerns that ending the commercial farming of bears while demand for bear bile persists could lead to increased hunting pressure on wild bear populations. In this article, we use mixed methods of questionnaires, discrete current consumer demand for bear bile in Vietnam, with a specific aim of understanding the potential for consumers to seek out wild bear bile. We sampled at seven areas across the country of Vietnam (total respondents = 2,463). We found that when directly estimated, the use of farmed bear bile in the past twelve months was over 20% in only one lower than 5%. The same site had the highest level of wild bear bile use, at 5%; all other sites were lower. Despite widespread beliefs in farmed and wild bear bile's efficacy, we consumers that there was general aparty about the continued use of bear bile, with respondents saying that they would use another product once bear bile farms were fully gone. Coupled with a strong preference for using synthetic bear bile over wild and farmed bear bile found in the DCEs, we posit that bear bile consumers in Vietnam will be willing to use non-animal-based products, including bear

<sup>1</sup> School of Forest, Fisheries, and Geomatics Sciences, University <sup>2</sup> Department of Natural History, University of Florida, Gainesville, FL, USA
 <sup>3</sup> Department of Science and Education, Zoomarine, Algarve, <sup>4</sup> University of Oxford, Department of Zoology, 11a Mansfield Rd, Oxford OX1 3SZ, UK

Environmental organizations use photographic images to influence human attitudes and behaviors. However, few studies communicating conservation messages and promoting action. This presentation will share the results of two experiments that sought to answer this question. The first experiment took place at a marine park in Portugal and tested whether changing the images on an informational poster that was paired with a clear donation box would influence the amount of donations put in the box. The text on the poster was held constant, while four different image conditions were tested: dolphins, ocean wildlife, children, and people staring out from the poster (i.e., "watching eyes"). Each image condition was displayed for three days at a time and was on display for at least seven randomly assigned three-day periods over the course of 91 days. We did not find a statistically significant difference in mean donations in  ${\ensuremath{\in}}$  per visitor per 3-day period. The second experiment took place at the Florida Museum of Natural History and tested whether viewing a photography exhibit featuring images of the impacts of marine plastic pollution on oceans and ocean wildlife (negative valence) wildlife (positive valence) would result in more monetary donations to conservation and/or pledges to reduce personal consumption of single-use-plastics. We also tracked visitor behavior to understand the duration and frequency of engagement. We found that more visitors actively engaged with the negative exhibit than the positive. While few pledges were made overall (n = 38), the mean number of pledges per visitor was significantly higher for the negative exhibit than the positive exhibit than the positive the first experiment, there was not a implications of this research will be discussed.

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Coffee is grown in a variety of ways along a spectrum of intensities, from diverse agroecosystems supporting considerable biodiversity at one end to monoculture systems supporting little biodiversity at the other. Farmer's decisions around how to grow coffee is influenced by changing consumer demands and external market forces. Hence, it is amongst biodiverse agroecosystems by changing consumers' purchasing behaviour to demand coffee grown in these ways. Behaviour change interventions that promote biodiversity-friendly purchasing behaviours can shift consumer demands but require substantial market research to ensure their effectiveness. Melbourne is one of Australia's largest cities and a global hotspot for coffee culture and innovation in the coffee sector. We used an online questionnaire to understand both coffee consumption behaviours and consumers' awareness of biodiversity and other sustainability issues across elimination algorithm to select variables showing the highest correlation with stated willingness to purchase biodiversity-friendly coffee from 1142 coffee consumers. We found that consumers' environmental values and previous purchasing behaviour, as well as sustainability-related features of coffee products ranked as the most sustainability-related features of coffee products ranked as the most important variables for predicting willingness to purchase biodiversity-friendly coffee. We discuss how these insights could inform the design of a targeted behaviour change intervention to increase consumer demand for biodiversity-friendly coffee. This research highlights how understanding a target audience's previous behaviours and psychographics can be more important than demographics when designing interventions.



DAY 4

## 30 October 2021 | Saturday 12:00 FM - 1: 00 FM, EST

# **CONCURRENT SESSION: Conservation Marketing and Psychology**

## Building Better Theories of Change and Evaluation for Behavior Change Programs

Katie Williamson<sup>1</sup>

<sup>1</sup> Rare's Center for Behavior & the Environment

How can conservation changemakers leverage behavioral design to generate better outcomes on the ground? How might they develop and follow a sound theory of change while also adjusting the intervention based on the latest data on desired behavior adoption? Rare's Center for Behavior & the Environment (BE.Center) promotes two relevant frameworks for environmental practitioners: the Psycho-Social Theory of Change (PS-ToC) and dynamic programming.

We often find that typical theories of change tell us about what goals and activities are core to a program's outcomes, but not *why* the program works. A Psycho-Social Theory of Change links elements of a conservation program to psychological or social changes and clarifies how a practitioner's efforts lead to behavioral outputs - ultimately generating environmental and social outcomes. This method is critically important to program design. A PS-ToC articulates the logic of a program and how the activities lead to actual changes in awareness, attitudes, beliefs, and behavior. Without it, practitioners can lose sight of the individual steps required to reach the final targeted behavior adoption.

Yet, even with a PS-ToC in place, behavior change interventions still require monitoring of specific indicators to determine if the program is achieving targeted changes. Practitioners can measure these changes through indicators (behavior, social, and psychological) by utilizing dynamic programming. This method ensures their programs are delivering as expected by comparing against predicted changes to beliefs and behaviors from the theory of change.

In combination, using a PS-ToC and dynamic programming helps practitioners make informed, real-time program decisions to adaptively manage their programs and have a better chance at achieving their outcomes.

### Identification of Arizona Conservation Mindset Tammy D. McLeod <sup>1</sup>

#### <sup>1</sup> The Flinn Foundation

Creating, maintaining, and increasing interest in conservation is critical for the sustainability of natural resources. An abundant body of research has explored innate and early childhood experiences known to cultivate conservation behaviors and attitudes. At the same time, forces of urbanization, technology, and poverty act as barriers towards children and adults getting access to nature. In the absence of these experiences, other approaches such as conservation marketing are necessary to increase awareness and activate conservation behaviors. This research examined the marketing messages of 14 Arizona conservation organizations. The messages, grouped around 19 separate topics, were tested for their effectiveness and as a result conservation mindsets were identified within each topic. These mindsets group individuals who react to different messages and whose membership transcends conventional demographics or psychographics. The studies were conducted amongst 1900 Arizona resident adults. The test method, conjoint measurement, is a wellknown approach embodied in a user-friendly, market research tool called Mind Genomics most often used in consumer food markets. Mind Genomics often surpasses traditional market research tools such as surveys and focus groups by eliminating researcher bias and uncovering intuitive, almost "gut reactions" to products, services, or events, and to cluster likeminded respondents into segments or mindsets. Mind Genomics was used via the free and accessible BiMiLeap app. The analysis revealed distinct conservation mindsets, for each of the 19 topics, that exhibit different, often opposing reactions to conservation messaging. Methodologically, it acts as a blueprint for a pragmatic approach which might be taken with other conservation projects.

### Communication strategies for the conservation of Whooping Cranes

Wayde Morse <sup>1</sup> and Elisabeth (Lizzie) Condon <sup>2</sup>

<sup>1</sup> School of Forestry and Wildlife Sciences, Auburn University <sup>2</sup> International Crane Foundation

The Whooping Crane (Grus Americana) has become a symbol of wildlife conservation success in North America. In the winter of 1941, just under 30 Whooping Cranes remained in the United States. Their decline was driven primarily by the destruction and alteration of wetland habitat, specimen collection, and hunting pressures. Today there are over 500 cranes in the wild primarily migrating from coastal Texas to northern Canada. An Eastern Migratory Population (EMP) has also been established to further conservation goals. However, shootings continue to affect the Whooping Crane populations today. Shootings account for 19% of known mortality in the EMP. We developed a framework for outreach interventions based on behavioral theory and issues specific to the conservation and poaching of Whooping Cranes. We combined theoretical elements of the cognitive hierarchy with factual knowledge and emotional disposition. To identify outreach needs and opportunities, we administered a survey to three Alabama populations; residents local to the Wheeler National Wildlife Refuge, licensed waterfowl hunters, and members of birding organizations. We identified the content that each group was most likely to be receptive to and the formats/sources where they were likely to see the communications. Social media was a preferred source for communication by all audiences. A follow-up study on Twitter examined the source (type of sender), content type (fact, emotional, normative), and impact (number of followers, number of Likes, retweets) of that format for conservation and poaching messaging. Results from both studies are presented as lessons for communication planning.



# DAY 4

# 30 October 2021 | Saturday 12:00 PM - 1: 00 PM, EST

# **CONCURRENT SESSION: Ocean Futures**

### Public perceptions of the ocean: lessons for marine conservation from a global review

Rebecca Jefferson <sup>1,2</sup>, Emma McKinley <sup>3</sup>, Holly Griffin, Alison Nimmo, Stephen Fletcher

#### <sup>1</sup> Human Nature

- <sup>2</sup> RSPB Centre for Conservation Science
- <sup>3</sup> School of Earth and Environment, Cardiff University
- <sup>4</sup> Centre for Blue Governance, University of Portsmouth

Insights into how public audiences perceive the ocean and coasts are pivotal to successful societal engagement into marine conservation. Perceptions research explores how people understand, value or engage with an environment, issue or management response. This insight has a vital role in contributing to the development, delivery and evaluation of marine conservation interventions. This review of 349 peer reviewed studies explores the current state of research into public perceptions of the oceans. We assessed what research has been done, the methods used, the gaps in current research activity, and make recommendations for maximising the impact of perceptions research in marine conservation. The major gaps identified include i) unequal geographic spread of research effort focused in the USA, Australia and Europe; ii) a bias towards explore the complexity of marine perceptions. However, evidence of a growing research effort gives optimism for realising the opportunities perceptions research offers to better connect audiences with the ocean. This review provides a stock-take of current public perceptions are stock-take of current public perceptions with the ocean in delivering effective marine conservation.

### Framing effects on attitudes and intention towards shark meat consumption in Peru

Daniella Biffi <sup>1</sup>, Adam S. Richards <sup>2</sup>, Molly Weinburgh <sup>1</sup>

#### <sup>1</sup> Andrews Institute of Mathematics & Science Education <sup>2</sup> Furman University

Peru has one of the major shark fisheries in the world. Moreover, shark meat consumption is popular and the main commercially exploited species are considered threatened. Recent studies have found high mislabeling rates and high concentrations of methylmercury in shark meat. The purpose of this study is to explore the effectiveness of different framing messages in persuading fish consumers to avoid shark meat consumption and promote sustainable fish ("popular fish") consumption. Specifically: To what extent do intrinsic and extrinsic risk messages differ in terms of deterring the intention to eat shark meat and promoting the consumption of popular fish, in the presence or absence of an efficacy message about mislabeling of shark meat? The three message frames were: intrinsic (sharks have mercury), extrinsic (sharks are threatened), and efficacy (sharks are mislabeled). The experiment had a factorial design of 2 x 2 x 2 (present vs. absent for each message). Peruvians (n = 285), surveyed through an online questionnaire, were assigned to one of eight experimental conditions. Participants then completed a survey regarding their intentions and attitudes towards shark meat and popular fish consumption. Attitudes and intentions towards consuming shark meat were discouraged in all experimental conditions. More research targeting different audiences is needed to determine the optimal approach for promoting sustainable seafood that is also healthy for consumers.

### Designing Sun Protection Behavioral Interventions to Protect Public Health and the Environment

Karen Akerlof<sup>1</sup>, Erin Sherman<sup>2</sup>, C. A. Downs<sup>3</sup>, Sara Melena<sup>4</sup>, Dianna Belman<sup>1</sup>, Octavio Medina<sup>2</sup>

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 <sup>4</sup> Natural Resource Stewardship & Science Directorate, National Park Service, Fort Collins, CO;

Common chemicals in sunscreen pose risks to corals and other aquatic species. To fulfill natural resource protection mandates, government agencies promote voluntary sun protection behaviors (SPBs) that protect human health while limiting chemical pollution. This presentation describes behavioral factors that agencies should consider in developing public sun protection programs to lower environmental impacts. Natural resource managers can increase the effectiveness of interventions by facilitating understanding of behavioral options, imparting ways social norms are changing, making it easier to determine which products to buy, and taking steps to increase the probability of behavioral spillover to other locations.



### 30 October 2021 | Saturday DAY 1:00 PM - 2: 00 PM, EST

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# **KEYNOTE: Getting Creative with Conservation Marketing**

In this keynote session, Dr. Michelle LaRue and conservation photographer Clay Bolt will talk about their efforts to engage public audiences in science and conservation.

About Dr. Michelle LaRue: Dr. Michelle LaRue is a marine ecologist and public speaker at the University of Canterbury, where she focuses on the biogeography and populations of penguins and seals in Antarctica and mountain lions in North America. Michelle started her research career as an undergraduate intern at Minnesota State University Mankato, graduating in 2005 and focused her master's research at Southern Illinois University Carbondale on the eastward range expansion of cougars in midwestern North America. Since 2007 Michelle has been doing research in Antarctica, and she gained her PhD in Conservation Biology in 2014 with a project that focused on using high-resolution satellite imagery to assess wildlife populations around the Antarctic coastline. She has co-authored more than three dozen peer-reviewed papers, spent 8 seasons leading Antarctic field teams, and as a passionate communicator, has given >50 invited presentations.

About Clay Bolt: Clay Bolt is a Natural History and Conservation Photographer specializing in the world's smaller creatures. Clay's work appears in publications such as National Geographic Magazine, The New York Times, and National Wildlife Magazine. He is a Fellow of the International League of Conservation Photographers (iLCP) and the Linnean Society of London, and a past president of the North American Nature Photography Association (NANPA). His work currently focuses on protecting North America's native bee species with a particular focus on threatened and endangered bumble bees. In 2017, he was a leading voice in the successful fight to protect the rusty-patched bumble bee under the Endangered Species Act-North America's first native bee to achieve this status. In 2019, Bolt became the first photographer to document a living Wallace's Giant Bee—the world's largest bee—as a part of a four-person exploration team to rediscover the species in the Indonesian islands of North Maluku.

# Conservation Marketing Virtual Conference 2021 #ConsMark2021

# MEETING AND EVENT CODE OF CONDUCT POLICY

The Society for Conservation Biology (SCB) works to promote an inclusive environment at its meetings and events that is welcoming, safe, collaborative, supportive, and productive for all attendees, including volunteers, exhibitors, and service providers, and that values the diversity of views, expertise, opinions, backgrounds, and experiences reflected among these attendees. To that end, we expect meeting attendees to abide by the following Meeting and Event Code of Conduct:

## **Expected Behavior**

•Treat everyone with respect and consideration.

•Communicate openly and thoughtfully with others and be considerate of the multitude of views and opinions that are different than your own. •Be respectful in your discussion and critique of ideas.

•Be mindful of your surroundings and of your fellow participants. Alert SCB staff if you notice a potentially troubling or dangerous situation, someone in distress and/or unacceptable behavior.\*

•Respect the rules, policies, and requests of the Society and all venues associated with the meeting.

•Uphold and support SCB's commitment and actions to improve the events environmental and social impacts and promote equity, inclusion and diversity.

## Unacceptable Behavior\*

•Criminal offenses.

•Participation or promotion of harassment, intimidation, or discriminatory behaviors in-person or on SCB or ICCB social media platforms and the event's mobile app during meetings/events or other associated activities organized by SCB.

•Overt, subtle, physical, verbal, or non-verbal abuse of any attendee, speaker, volunteer, sponsor, exhibitor, SCB staff member, service provider or other meeting or event guest.

•Disruption of talks at the meeting/event or other associated activities organized by SCB.

\*Examples of unacceptable behavior include, but are not limited to inappropriate comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, or breastfeeding; inappropriate use of nudity and/or sexual images in public spaces or presentations; inappropriate sexual advances or touching; threatening, bullying, harassment (sexual or otherwise), discrimination or stalking of any attendee, speaker, volunteer, sponsor, exhibitor, SCB staff member or service provider.

## Consequences

•Anyone requested to stop unacceptable behavior is expected to comply immediately.

•SCB or security may take any action deemed necessary and appropriate, including immediate removal from the meeting without warning or refund.

•SCB will report criminal offenses to local authorities and reserves the right to report a possible criminal offense where appropriate.

•SCB reserves the right to prohibit attendance at any future meeting and/or revoke membership.

## Process for Reporting Unacceptable Behavior

If you are the subject of unacceptable behavior or have witnessed any such behavior, please immediately follow these steps:

1. Remove yourself from the situation and find a safe space. In the case of a medical or criminal emergency, contact event security and/or local emergency response authorities.

2.In non-emergency situations, you also have the right to report a criminal (or possible criminal) offense to event security and/or local authorities. 3.Email <u>safemeeting@conbio.org</u> to report an incidence of unacceptable behavior. Provide your name, contact information and a brief description of the concern. This message will be immediately forwarded to SCB Safety Officer who is trained to handle code of conduct concerns with professionalism, sensitivity and confidentiality.

4.All concerns relating to unacceptable behavior will be treated seriously and addressed promptly. Complainants will remain in control of the process and the SCB Safety Officer will outline options available to deal with the situation promptly, effectively, and in a manner that the complainant finds most suitable.

5.Depending on the nature of the issue, additional information, security, or local police may be needed to address the situation appropriately.

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