Veronica F. Frans



Center for Systems Integration and Sustainability Dept. Fisheries and Wildlife, Michigan State University East Lansing, MI 48823, USA VeroFrans[at]gmail.com https://www.canr.msu.edu/people/veronica-frans

···· ONE-PAGE HIGHLIGHTS ····

I aim to use my international experience, cultural awareness, and quantitative background to develop conservation management tools and advance ecological theory for global sustainability.

KEYWORDS

Quantitative Ecology · Conservation Biology · Spatial Ecology · Theoretical Ecology · Species Distribution Modeling · Human Impacts · Sustainable Development · Local Ecological Knowledge · Community Engagement · Career Mentoring · Science Communication · Environmental Ethics

EDUCATION

Dual PhD (expected May 2024): Ecology, Evolution, & Behavior Fisheries & Wildlife Michigan State University Master of Science: International Nature Conservation Georg-August University Göttingen, Germany Lincoln University, New Zealand Bachelor of Science: Environmental Science Bachelor of Arts: French Messiah University

LANGUAGES

English • French • Spanish • Brazilian Portuguese • Japanese • German

KEY REGIONS OF STUDY OR WORK

Alaska • Belize • Ecuador • Falkland Islands • France • Guadeloupe • Germany • Hong Kong • India • Japan • Michigan • New Zealand

KEY SKILLS

Ecological and social system modeling • Statistics • GIS • R • Big data management • Data visualization • Cloud and Hyper Computing • Theoretical ecology • Science communication • Teaching

AWARDS

NSF GRFP • Harvey Fellow • MSU Enrichment • Modelling Complex Ecological Dynamics • Outstanding Publication in Env. Sci. & Public Policy

LEADERSHIP

Vice President, Christian Women in Science Representative, Council of Graduate Students Workshop Co-organizer, R-Ladies East Lansing

TV/NEWS COVERAGE

CNN • Falkland Islands TV • New York Times • Otago Daily Times • Natur • Merco Press • Penguin News • Tagesspiegel • Smithsonian Magazine • Washington Post

KEY EXPERIENCES

Assistant Professor, Au Sable Institute of Environmental StudiesJun 2021 - Sep 2022Conservation Consultant, New Zealand Department of ConservationFeb 2019 - Oct 2021NOAA National Marine Fisheries Service Observer, Saltwater, Inc.Apr 2009 - Dec 2017Marine Spatial Planning Researcher, South Atlantic Environmental Research InstituteAug 2015 - Jun 2016

SCI-COMM

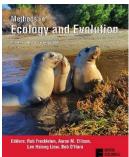
Journalism: When endangered species recover, humans may need to make room for them – and it's not always easy. <u>The Conversation</u> (2022).

Invited Speaker: What local ecological knowledge can tell us about whales in the Falkland Islands. ARU (2020). Panel Discussion: Are humans above nature? <u>BioLogos Creation Care Summit</u> (2021).

Interview: New Zealand's Sea Lions Are Back, and Crashing Golf Courses and Soccer Matches. <u>New York Times</u>. Science, Trilobites. (2021).

SELECT PUBLICATIONS

- Frans VF, Augé AA, Fyfe J, Zhang Y, McNally N, Edelhoff H, Balkenhol N, Engler JO (2022). Integrated SDM database: enhancing the relevance and utility of species distribution models in conservation management. *Methods in Ecology and Evolution* 13:243-261.
- Frans VF, Augé AA, Edelhoff H, Erasmi S, Balkenhol N, Engler JO (2018). Quantifying apart what belongs together: a multi-state species distribution modelling framework for species using distinct habitats. *Methods in Ecology and Evolution* 9:98-108.
- Frans VF, Augé AA (2016). Use of local ecological knowledge to investigate endangered baleen whale recovery in the Falkland Islands. *Biological Conservation* 202:217-137.



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OBJECTIVE:	To use my international experience, cultural awareness, and quantitative background to develop conservation management tools and advance ecological theory for global sustainability.
QUALIFICATIONS:	 Quantitative ecologist with extensive training in spatial and statistical modeling (e.g., species distribution models, generalized linear mixed models, Bayesian hierarchical models, population models, system dynamics, time series, meta-analysis), expert opinion-based methods, data wrangling, text mining, and text analysis. Science communicator, speaking and writing publicly on biodiversity conservation. Worldwide experience in handling and identifying fish, birds, and marine mammals. Worked in various conditions, including international, marine, and harsh climates, and remote, isolated communities. Excellent interpersonal skills, gained through relations with key stakeholders and decision-makers, international collaborations, and interviews to elicit knowledge.
COMPUTER SKILLS:	Geographic Information Systems (ArcGIS, ArcPro, Python, R, QGIS, SAGA GIS); Data Management (R, Excel, ATLAS); Statistics (R, Python, C++, STATISTICA); Ecological/Social System Modeling (R, Maxent, STELLA, Python, Mathematica, JAGS, WinBUGS, NetLogo, RAMAS Metapop, HexSim); Agent-Based Modeling (Python, NetLogo); Data Visualization (R, ArcGIS, ArcPro, Python, Mathematica, BioRender, Adobe InDesign, Inkscape); Cloud and Hyper Computing (Microsoft Azure, MSU High Performance Computing Center)
DEGREES:	 Dual PhD: Fisheries & Wildlife · Ecology, Evolution, & Behavior Michigan State University (MSU), expected May 2024, East Lansing, MI; GPA 3.99/4.0 Dual Master of Science: International Nature Conservation Georg-August-Universität-Göttingen, Jan. 2015, Göttingen, Germany; GPA 4.0/4.0 Lincoln University, Jan. 2015, Christchurch, New Zealand; GPA 4.0/4.0 Bachelor of Science: Environmental Science (Spanish minor) · Bachelor of Arts: French Messiah University, May 2007, Mechanicsburg, PA; GPA 3.64/4.0
CERTIFICATES:	Community Engaged Scholarship, University Outreach & Engagement, MSU, May 2023 Environmental & Social System Modeling, College of Social Sciences, MSU, Dec. 2020 Spatial Ecology, College of Natural Resources, MSU, Dec. 2019 Environmental Analyst, Au Sable Institute of Environmental Studies, Aug. 2008
STUDY ABROAD:	NILS Japanese Language School, Fukuoka, Japan, Jan Mar. 2011; Feb Mar. 2012 Bishop Heber Au Sable Institute, Tiruchirappalli, India, Dec Jan. 2006; GPA 4.0/4.0 Universidad San Francisco de Quito, Quito, Ecuador, Aug Dec. 2005; GPA 3.80/4.0 Université Marc Bloch - Institut International d'Études Françaises, Strasbourg, France, Jan May 2005; GPA 3.94/4.0
LANGUAGES:	Proficient in English (native), Spanish (DELE-B2), and French (DELF-B2) Advanced Brazilian Portuguese Intermediate in Japanese (JLPT-N4) and German
WORKING GROUPS:	MeS AIMÉS: Merging Statistical Analyses at the Interface of Micro-macro Ecological Systems. NSF-Funded Special Working Group. Lead: Mathew Leibold. Aug 2022 - present

RELATED WORK EXPERIENCE:

Au Sable Institute

Department of

Conservation Te Papa Atawbai

ASSISTANT PROFESSOR

AU SABLE INSTITUTE OF ENVIRONMENTAL STUDIES

Mancelona, Michigan

Jun. 2021 - Sep. 2022

- Instructor for the GIS portion of Land & Water Resources, an accredited 4-credit summer intensive undergraduate-level course offered to students attending private Christian colleges and universities across the US and Canada.
- Introduced students to Geographic Information Systems, global positioning systems, and spatial data analysis and visualization, using ESRI ArcPro.

CONSERVATION CONSULTANT

NEW ZEALAND DEPARTMENT OF CONSERVATION

Wellington, New Zealand (remote)

Feb. 2019 - Jun. 2019

- Initiated and completed a project creating an integrated species distribution modeling database (iSDMdb) for decision-making and management of the New Zealand sea lion (Phocarctos hookeri).
- Interactive map posted here: https://www.doc.govt.nz/predicted-nz-sea-lions-sites

NATIONAL MARINE FISHERIES SERVICE (NMFS) OBSERVER

SALTWATER, INC.

Anchorage, AK, USA Apr. 2009 - Nov. 2013; Apr. - Jun. 2015; Aug. 2016 - Dec. 2017

- Certified for sampling in the U.S. North Pacific Groundfish Fisheries Program.
- Sampled for species composition on commercial longline, trawl, pot, and factory vessels throughout the Gulf of Alaska and Bering Sea (> 800 sea days).
- Constructed sound sampling designs to sort, weigh and collect specimens for species of interest and estimate total catch, sending data via ATLAS for analysis.

MARINE SPATIAL PLANNING (MSP) RESEARCH ASSISTANT

SOUTH ATLANTIC ENVIRONMENTAL RESEARCH INSTITUTE

Stanley, Falkland Islands

Aug. 2015 - Jun. 2016

- Collated, mapped, and compared historical and contemporary occurrence data on baleen whales in the Falkland Islands' waters.
- Interviewed locals and marine users for anecdotal evidence on whale presence.
- Modeled baleen whale distribution for MSP and government decision-making.
- Mapped locations became the world's first Key Biodiversity Areas for sei whales.
- Wrote grant proposals and successfully received a grant for MSP research.
- Assisted in GPS-tagging and tracking of black-browed albatross, whale stranding data collection (necropsies), and writing and editing scientific manuscripts.

RESEARCH INTERN

HONG KONG DOLPHIN CONSERVATION SOCIETY

Hong Kong, SAR China

Nov. 2012 - Feb. 2013 • Conducted line-transect vessel surveys for distribution/abundance of the Indo-Pacific Humpback Dolphin (Sousa chinensis) and Finless Porpoise (Neophocaena phocaenoides), as well as acoustic surveys and land-based theodolite tracking.

- Recorded effort data and took photos for individual photo-identification.
- Submitted a weekly report of activities and maintained the internship blog website.

PROGRAM ASSOCIATE

Quito, Ecuador

SUN MOUNTAIN INTERNATIONAL (SMTN)

Aug. 2005 - Jan. 2006; Oct. 2006; Jun. 2007

• Prepared proposals, workshops on environmental impact assessments, meeting minutes and final reports for non-profit organizations (e.g., CARE, USAID/LAC, Save the Children, World Vision), and translated documents (Spanish-English).



Saltwater Inc.



SMTN

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MANAGER'S ASSISTANT

VERTE VALLÉE: LA GRIVELIÈRE Vieux-Habitants, Guadeloupe

Jan. 2007

- Assisted in ecotourism management and restaurant service on a coffee plantation.
- Translated for tours (French-English).



RESEARCH ASSISTANT

Mechanicsburg, PA, USA

MESSIAH UNIVERSITY BIOLOGY DEPARTMENT

Sep. - Dec. 2004

• Studied the effects of *Bt* corn pollen on lacewing (*Chrysoperla plorabunda*) reproduction rates.

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Mechanicsburg, PA, USA Jan. - May; Sep. - Dec. 2004

• Studied Panama golden frog (Atelopus zeteki) morphology and photo identification.



Calabash Caye and Belize City, Belize Jun. - Aug. 2004

• Collected, separated, and dried leaf litter of 3 mangrove species on 4 islands in Ambergris Caye, Belize for CARICOMP calculations.

FELLOWSHIPS:	George H. Lauff Scholarship	Sep. 2022
	Kellogg Biological Station, Michigan State University	\$800 USD
	Academic Achievement Graduate Assistantship	Aug. 2022
	The Graduate School, Michigan State University	\$20,000 USD
	Kellogg Biological Station Graduate Student Research Fellowship	Apr. 2022
	Kellogg Biological Station, Michigan State University	\$800 USD
	Harvey Fellowship	Mar. 2022
	The 28twelve Foundation	\$16,000 USD
	Ecology, Evolution, & Behavior Summer Fellowship	Mar. 2022
	Ecology, Evolution, & Behavior, Michigan State University	\$7,500 USD
	Vera M. Wallach Graduate Fellowship	Mar. 2022
	Dept. Fisheries & Wildlife, Michigan State University	\$3,000 USD
	Cloud Computing Fellowship	Aug. 2021
	Institute for Cyber-Enabled Research, Michigan State University	training + \$200 USD
	Kellogg Biological Station Long Term Ecological Research (LTER) Fell	owship Apr. 2020
	Kellogg Biological Station, Michigan State University	\$6,500 USD
	Au Sable Graduate Research Fellowship	Apr. 2020
	Au Sable Institute of Environmental Studies	\$800 USD in books
	National Science Foundation (NSF) Graduate Research Fellowship	Aug. 2018
	National Science Foundation Graduate Research Fellowship Program	\$138,000 USD
	Michigan State University (MSU) Enrichment Fellowship	May 2018
	The Graduate School, Michigan State University	\$73,600 USD

GRANTS:	Falkland Islands Government Environmental Studies Budget Oct. 201 Predicting baleen whale distributions for management using species distribution		
	modelling	£3,860 FKP	
AWARDS:	Wildlife Publication Award - Student Paper Shortlist	May 2022	
	2022 Annual Publication Awards, The Wildlife Society		
	Outstanding Publication in Environmental Science and Public Policy	Apr. 2022	
	Environmental Science and Public Policy, Michigan State University	\$500 USD	
	Modelling Complex Ecological Dynamics (MCED) Award (1 st Prize)	Dec. 2017	
	2017 Ecology Across Borders Conference - Ecological Society of Germany	, Austria &	
	Switzerland (<u>http://www.mced-ecology.org/?page_id=1151</u>)	€250 EUR	
	NASA-MSU Professional Enhancement Award	Feb. 2016	
	2016 US International Association of Landscape Ecology Conference	\$800 USD	

PUBLICATIONS: JOURNAL ARTICLES

----Published (Lead Author)----



 Frans VF, Augé AA, Fyfe J, Zhang Y, McNally N, Edelhoff H, Balkenhol N, Engler JO (2022). Integrated SDM database: enhancing the relevance and utility of species distribution models in conservation management. <u>Methods in Ecology and Evolution</u> 13:243-261.
 [3 citations; 60 stories, <u>New York Times</u>, <u>Washington Post</u>, <u>Tagesspiegel</u>, <u>CNN</u> - <u>top 1%</u>]

• <u>Awards:</u> 2022 Outstanding Publication in Environmental Science and Public Policy 2022 The Wildlife Society Wildlife Publication Award (Student Paper Shortlist)

Frans VF, Augé AA, Edelhoff H, Erasmi S, Balkenhol N, Engler JO (2018). Quantifying apart what belongs together: a multi-state species distribution modelling framework for species using distinct habitats. <u>Methods in Ecology and Evolution</u> 9:98-108.
 [26 citations - <u>Altmetrics</u>: top 1%]

• <u>Awards:</u>

- 2017 Modelling Complex Ecological Dynamics (MCED) Award (1st Prize)
- Frans VF, Augé AA (2016). Use of local ecological knowledge to investigate endangered baleen whale recovery in the Falkland Islands. <u>Biological Conservation</u> 202:217-137. [27 citations; 21 news stories, <u>Popular Science</u> <u>Altmetrics</u>: <u>top 1%</u>]

----Published (Coauthor)----

- Kapsar K, Frans VF, Brigham L, Liu J (2022). The metacoupled Arctic: Human-nature interactions across local to global scales as drivers of sustainability. <u>Ambio</u> 51:2061-2078. [2 citations]
- Wang Z, Li X, Li Y, **Frans VF**, Yan J, Zhang L (2020). A network perspective for mapping freshwater service flows at the watershed scale. <u>Ecosystem Services</u> 45:101129. [7 citations]
- Wang J, Chen X, Liu Z, **Frans VF**, Xu Z, Qiu X, Xu F, Li Y (2019). Assessing the water and carbon footprint of hydropower stations at a national scale. <u>Science of the Total</u> <u>Environment</u> 676:595-612. [19 citations]
- Augé AA, Otley H, Rendell N, Frans VF (2018). Spatial distribution of cetacean strandings in the Falkland Islands to define monitoring opportunities. <u>Journal of Cetacean</u> <u>Research and Management</u> 19:1-7. [4 citations]

GOVERNMENT REPORTS

• Frans VF (2019). Suitable habitats for New Zealand sea lions: mapping and restoration. *Prepared for:* <u>New Zealand Department of Conservation</u>, Wellington, New Zealand.



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MASTER THESIS

•	• Frans VF (2015). Recolonization of the New Zealand sea lion (Phocarctos hookeri): using
	predictive niche models to identify suitable breeding habitats for management. $\ensuremath{\textbf{MSc.}}$
	Thesis, Georg-August-Universität-Göttingen, Göttingen, Germany.

New tool to predict, plan for sea lion colony sites. <u>Otago Daily Times</u>. Oct. 3, 2022.
 'Babysitting' the next generation of New Zealand's endangered sea lions. <u>CNN</u>. *Travel*. May 3, 2022.
 Seelöwen-Kinderstube auf dem Golfplatz. <u>Tagesspiegel</u>. *Wissen*. Dec. 9, 2021.
 Sea Lions and People Must Make Friends. <u>Little News Ears</u>. *World Kidlines with Paxton*.

- Sea Lions and People Must Make Friends. <u>Little News Ears</u>. World Kidlines with Pax Dec. 5, 2021.
- 'Cheeky' sea lions are returning to New Zealand's shores and locals are learning to share the coast. <u>Washington Post</u>. World. Nov. 13, 2021.
- After Being Hunted to Near-Extinction, New Zealand Sea Lions Are Reclaiming the Mainland. <u>Smithsonian Magazine</u>. Smart News. Nov. 11, 2021.
- Platz für die seltensten Seelöwen gesucht. Natur. Umwelt+Natur. Nov. 10, 2021.
- New Zealand's Sea Lions Are Back, and Crashing Golf Courses and Soccer Matches. <u>New</u> <u>York Times</u>. Science, Trilobites. Nov. 9, 2021.
- Falklands in Focus, Falkland Islands TV (FITV), Stanley, Falkland Islands. May 16, 2016. Television. Topic: washed up sei whale at Cape Dolphin.

NEWS/NEWSLETTERS

- Making room for wildlife: 4 essential reads. The Conversation, Jun. 6, 2022.
- Veronica Frans: seeking answers around the world. **<u>BioLogos</u>**, Feb. 03, 2021.
- Profile of transformation: Veronica Frans. <u>Newsletter of the American Scientific</u> <u>Affiliation and Canadian Scientific and Christian Affiliation</u>, Summer 2020, 62(2):6.
- Traveling scientist pursues PhD. <u>The Bridge</u>, Summer 2018, 10(1):27.

YOUTUBE/PODCASTS

- Frans VF, Weitnauer C. Why Should Christians Care for Creation? <u>Uncommon Pursuit</u>, Jun. 14, 2022.
- Hoogerwerf C, Stump J, Bouma-Prediger S, Lindroth R, Frans VF, Wirzba N, Miller M, Roles S. Creation Groans | World of Wounds, <u>Language of God Podcast</u>, Jun. 16, 2022.

PANEL DISCUSSIONS

- Curry J, Best V, Billman L, Chappell D, Frans VF, Miller RD, Toronchuk J. Women in the American Scientific Affiliation: Past, Present, and Future. ASA 2022 Meeting, Christian Women in Science, San Diego, California, Jul. 31, 2022.
- Hayhoe K, Frans VF. Climate Change: Student Session. BioLogos Faith & Science 2022, Grand Rapids, Michigan. Apr. 11, 2022.
- Frans VF, Bouma-Prediger S, Stump J. Are humans above nature? <u>BioLogos Creation</u> <u>Care Summit</u>, Grand Rapids, Michigan. Oct. 9, 2021.

INVITED TALKS:

PUBLIC

INTERVIEWS:

- Frans VF (2022). Making space for sea lions: planning for coexistence in the strangest of places. Biological Sciences Seminar Series. Messiah University, Mechanicsburg, Pennsylvania.
- Frans VF (2021). Unexpected neighbors: biodiversity and us. BioLogos Creation Care Summit, Grand Rapids, Michigan.
- Frans VF (2020). What local ecological knowledge can tell us about whales in the Falkland Islands. Biology Seminar Series. Anglia Ruskin University, Cambridge, England.
- Frans VF (2020). Student Keynote. State of the ASA 2020, American Scientific Affiliation.
- Frans VF (2016). A whale of a tale: using local ecological knowledge to investigate baleen whale recovery and distribution around the Falkland Islands. University of Alaska Fairbanks, Fairbanks, Alaska.

CONFERENCE PRESENTATIONS:	 Frans VF (2020). New era, new niche, new theory: revising ecological niche theory to account for human influence in the Anthropocene. Kellogg Biological Station LTER Graduate Fellow Lightning Talks, KBS LTER, Hickory Corners, Michigan. Frans VF (2019). New Zealand sea lion habitat mapping: final report. Conservation Services Programme (CSP) and New Zealand sea lion Threat Management Plan (TMP) - Technical Working Group (October 2019), New Zealand Department of Conservation, Wellington, New Zealand. Frans VF (2019). Finding suitable habitats for the recolonizing New Zealand sea lion. CSP and New Zealand sea lion TMP - Technical Working Group (March 2019), New Zealand Department of Conservation, Wellington, New Zealand sea lion TMP - Technical Working Group (March 2019), New Zealand Department of Conservation, Wellington, New Zealand. Frans VF (2018). Kickstarting a literature review with R. R and Data Science Lightning Talks, R-Ladies East Lansing, East Lansing, Michigan. Frans VF, Augé AA, Engler JO, Edelhoff H (2016). A whale of a tale: using local knowledge to predict baleen whale distribution around the Falkland Islands. International Association for Landscape Ecology, Asheville, North Carolina. Frans VF, Augé AA, Engler JO, Edelhoff H, Chilvers BL, Erasmi S, Balkenhol N (2015). Recolonization of the New Zealand sea lion (<i>Phocarctos hookeri</i>): using Maxent to identify suitable breeding habitats for management. International Association for Landscape Ecology World Congress, Portland, Oregon.
HOSTED	DATA AND CODING IN R
HOSTED WORKSHOPS:	 Data viz 2.0, <u>R-Ladies East Lansing</u>, East Lansing, MI. Feb. 23, 2020. Data wrangling and visualization, <u>R-Ladies East Lansing</u>, East Lansing, MI. Oct. 21, 2019. Data visualization in R (intermediate), Social Science Data Analytics Initiative, East Lansing, MI, June 24, 2019. Introduction to data visualization: GGPLOT2, R-Ladies East Lansing, East Lansing, MI. Oct. 8, 2018. Introduction to tidy data with R, R-Ladies East Lansing, East Lansing, MI. Nov. 5, 2018. <i>CAREER MENTORSHIP</i> Flourishing as a person, ASA 2022 Meeting, Emerging Scholars Network, Jul. 2022. Growing in your vocation as a science professional, Online Student & Early Career Mini-Conference, American Scientific Affiliation & Emerging Scholars Network, Jul. 2020. Falling for God through your vocation. Christian Women in Science, Oct. 2020.
PUBLIC OUTREACH:	 ORAL PRESENTATIONS Stults F, Frans VF (2022). Science & Faith Panel: Picture a Scientist with BioLogos. Association of Christian Schools International Science Fair, Azusa Pacific University. Frans VF (2016). Return of the whales in the Falkland Islands' waters. Chamber of Commerce, Stanley, Falkland Islands. Frans VF (2015). From a big city to a big world: opportunities in science. Geospatial Data Visualization Workshop for High School Students, City University of New York. Frans VF (2012). アラスカの漁業 [Alaska Fishing]. Friends of Fukuoka. Fukuoka, Japan. NEWS ARTICLES Frans VF (2022). When endangered species recover, humans may need to make room for them – and it's not always easy. The Conversation. Jan. 6, 2022. Frans VF (2016). Recurrención de las ballenas en las Falklands y una explosión de

- Frans VF (2016). Recuperación de las ballenas en las Falklands, y una explosión de avistamientos. <u>Merco Press</u>. May 11, 2016.
- Frans VF (2016). Whale recovery in Falklands and an explosion of sightings. <u>Merco</u> <u>Press</u>. May 4, 2016.
- Frans VF (2016). Whales returning indicates survey. Penguin News 27(42):7-7.
- Frans VF (2015). Mapping historical whale sightings. Penguin News 27(6):8-8.

BLOGS

• Frans VF (2022). Be bold: a lesson from the gentle gentoos. <u>Emerging Scholars Network</u> .
Nov. 20, 2022.

- Frans VF (2021). Let's get real: translating species distribution models into conservation practice. Methods Blog. Nov. 10, 2021
- Frans VF (2021). The unique behaviour of New Zealand sea lions. Conservation Blog. Department of Conservation. Nov. 9, 2021.
- Engler JO, Frans VF, Augé AA (2017). Multi-state species distribution models: what to do when species need multiple habitats. Methods Blog. Sep. 4, 2017.
- Frans VF (2016). Marine Spatial Planning: Mapping historical whale sightings to manage the future! SAERI Blog. May 3, 2016.
- Frans VF (2015). Marine Spatial Planning: Mapping historical whale sightings to help manage the future. SAERI Blog. Nov. 20, 2015.

MOTIVATIONAL SPEAKING

• Frans VF (2022). Be bold. American Scientific Affiliation. Nov. 20, 2022.

PEER REVIEW: Austral Ecology (1); Biodiversity and Conservation (2); Biological Conservation (2); Ecography (1); Ecological Applications (2); Environmental Management (1); Journal of Applied Ecology (2); Journal of Avian Biology (12); Methods in Ecology and Evolution (1)

American Association for the Advancement of Science (AAAS); American Scientific PROFESSIONAL Affiliation (ASA); Association for Women in Science (AWIS); British Ecological Society; **MEMBERSHIPS:** International Association for Landscape Ecology (IALE); International Biogeography Society (IBS); Society for Conservation Biology; The Wildlife Society (TWS)

PROFESSIONAL

DEVELOPMENT:

ATTENDED CONFERENCES

 BioLogos Faith & Science 2022; BioLogos Creation Care Summit 2021; ASA Summer Something Series 2020; ASA Meeting 2019; IALE 2016; IALE 2015

ATTENDED WORKSHOPS

• Bayesian additive regression tree (BART) species distribution models	Apr. 2021
The International Biogeography Society (virtual)	
 Broader impacts of research conference 	Mar. 2021
Michigan State University, Lansing, Michigan (virtual)	
 Spatial capture-recapture modeling (oSCR) 	Aug. 2020
USGS Patuxent Wildlife Research Center (virtual)	
 Introduction to Generalized Additive Models (GAM) with R and mgcv 	Jul. 2020
Institute of Environmental Change and Society, University of Regina (virtu	al)
 Summer Intensive on Community-Engaged Scholarship 	Jul. 2018
Michigan State University, Lansing, Michigan	
Model Data Preparation Workshop	Apr. 2016
US-IALE Conference 2016, Asheville, North Carolina	
 Introduction to HexSim Workshop 	Jul. 2015
Species Distribution Modeling (SDM) Workshop	
IALE World Congress 2015, Portland, Oregon	

GRADUATE-LEVEL COURSES IN MODELING AND STATISTICS

 Michigan State University 2018 - present Geosimulation (agent-based modeling in Python) · Introduction to meta-analysis in ecology · Modeling natural resource systems · Spatial data analysis · Spatial ecology · Statistical methods in ecology and evolution I & II · Theoretical population and community ecology · Modern statistical models in ecology · Statistical methods in temporal ecology · Bayesian inference Monte Carlo · Population & community ecology

	 Georg-August-University Göttingen Biodiversity and ecosystem functioning · Ecological modeling · Ecologic populations to networks 	2012 - 2015 al models - from
	• Lincoln University	2012 - 2015
	Advanced geographic information systems • Research methods in ecolo	рgy
LEADERSHIP	PROFESSIONAL SOCIETIES	
POSITIONS:	 Vice President, Christian Women in Science (ASA) 	2021 - present
	• Executive Director Search Committee, American Scientific Affiliation	2022 - 2022
	CAMPUS ACTIVITIES	
	 Fisheries & Wildlife Representative, Council of Graduate Students 	2019 - 2022
	 Associate, Social Science Data Analytics Initiative 	2019 - 2021
	 Workshop Co-organizer, R-Ladies East Lansing 	2018 - 2020
	• Director, Statistics in the Community	2019 - 2020
	COMMUNITY ENGAGEMENT & MINISTRY	
	 President, Every Nation @ MSU, East Lansing, MI 	2019 - 2021
	 Science Advisor, The Cross Impact, Lagos, Nigeria 	2019 - 2020
REFERENCES:	Upon request	