

Veronica F. Frans

National Science Foundation Graduate Research Fellow
Center for Systems Integration and Sustainability
Michigan State University

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

KEY WORDS: Quantitative Ecology · Conservation · Data Science · Meta-Synthesis · Theoretical Ecology · Human Impacts · Sustainability · Community Engagement · Science Communication · Environmental Ethics

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**; international, marine, and harsh climates, and remote, isolated communities.
- **Excellent interpersonal skills**, gained through relations with key stakeholders and decision-makers, international research collaborations, and interviews to elicit knowledge.

DEGREES

- **Dual Ph.D.: Fisheries & Wildlife · Ecology, Evolution, & Behavior**
Michigan State University (MSU), *expected Jun. 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)**
Messiah University, May 2007, Mechanicsburg, PA; GPA 3.64/4.0
- **Bachelor of Arts: French**
Messiah University, May 2007, Mechanicsburg, PA; GPA 3.64/4.0

CERTIFICATES

Community Engagement, Graduate Certification, University Outreach & Engagement, MSU, *expected Jun. 2024*
Environmental & Social System Modeling, Graduate Certification, College of Social Sciences, MSU, Dec. 2020
Spatial Ecology, Graduate Certification, College of Natural Resources, MSU, Dec. 2019
Environmental Analyst, Au Sable Institute of Environmental Studies, Aug. 2008

COMPUTER SKILLS

Geographic Information Systems (ArcGIS Pro, 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 Pro, Python, Mathematica, BioRender, Adobe InDesign, Inkscape); **Cloud and Hyper Computing** (Microsoft Azure, MSU High Performance Computing Center)

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, Strasbourg, France, Jan. - May 2005; GPA 3.94/4.0

LANGUAGES

Proficient in **English** (native), **Spanish** (DELE-B2), and **French** (DELFB2) · Advanced **Brazilian Portuguese** · Intermediate in **Japanese** (JLPT-N4) and **German**

WORK EXPERIENCE



ASSISTANT PROFESSOR

AU SABLE INSTITUTE OF ENVIRONMENTAL STUDIES

Mancelona, Michigan

Jun. - Jul. 2021; Jun - Jul. 2022

- 4-credit intensive summer Geographic Information Systems (GIS) instructor for *Land & Water Resources*, an accredited undergraduate-level course offered to students attending private Christian colleges and universities across the US and Canada.
- Introduced students to GIS, global positioning systems, and spatial data analysis and visualization, using custom-designed lab assignments in ESRI ArcGIS Pro.



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>



Saltwater Inc.

NOAA FISHERIES OBSERVER (NATIONAL MARINE FISHERIES SERVICE)

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 Area for sei whales**.
- 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

SUN MOUNTAIN INTERNATIONAL (SMTN)

Quito, Ecuador

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)





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



MESSIAH UNIVERSITY BIOLOGY DEPARTMENT

Mechanicsburg, PA, USA

Sep. - Dec. 2004

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

MESSIAH UNIVERSITY BIOLOGY DEPARTMENT

Mechanicsburg, PA, USA

Jan. - May; Sep. - Dec. 2004

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



UNIVERSITY OF BELIZE INSTITUTE OF MARINE STUDIES

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.

PROFESSIONAL WORKING GROUPS

Merging Statistical Theory and Analyses at the Interface of Microbial and 'Macrobia' Ecology

National Science Foundation. Mathew Leibold, Pedro Peres-Neto, Elisa Thébault.

Aug. 2022 - present

FELLOWSHIPS

George H. Lauff Scholarship

Kellogg Biological Station, Michigan State University

Sep. 2022

\$800 USD

Academic Achievement Graduate Assistantship

The Graduate School, Michigan State University

Aug. 2022

\$20,000 USD

Kellogg Biological Station Graduate Student Research Fellowship

Kellogg Biological Station, Michigan State University

Apr. 2022

\$800 USD

Harvey Fellowship

The 28twelve Foundation

Mar. 2022

\$32,000 USD

Ecology, Evolution, & Behavior Summer Fellowship

Ecology, Evolution, & Behavior Program, Michigan State University

Mar. 2022

\$7,500 USD

Vera M. Wallach Graduate Fellowship

Dept. Fisheries & Wildlife, Michigan State University

Mar. 2022

\$3,000 USD

Cloud Computing Fellowship

Institute for Cyber-Enabled Research, Michigan State University

Aug. 2021

\$200 USD

Kellogg Biological Station Long Term Ecological Research (LTER) Fellowship

Kellogg Biological Station, Michigan State University

Apr. 2020

\$6,500 USD

Au Sable Graduate Research Fellowship

Au Sable Institute of Environmental Studies

Apr. 2020

\$200 USD

Michigan State University (MSU) Enrichment Fellowship May 2018
The Graduate School, Michigan State University \$73,600 USD

National Science Foundation (NSF) Graduate Research Fellowship Apr. 2018
National Science Foundation Graduate Research Fellowship Program \$138,000 USD

GRANTS

Falkland Islands Government Environmental Studies Budget Oct. 2015
Predicting baleen whale distributions for management using species distribution modelling £3,860 FKP

PROFESSIONAL AWARDS

Outstanding Publication on New Zealand Ecology Oct. 2023
New Zealand Ecological Society

Wildlife Publication Award - Student Paper Shortlist May 2022
2022 Annual Publication Awards, The Wildlife Society

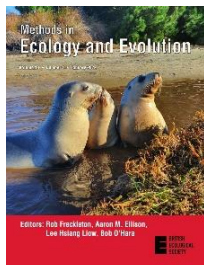
Outstanding Publication in Environmental Science and Policy Apr. 2022
Environmental Science and Policy Program, Michigan State University

Modelling Complex Ecological Dynamics (MCED) Award (1st Prize) Dec. 2017
GfÖ, The Ecological Society of Germany, Austria and Switzerland

NASA-MSU Professional Enhancement Award Feb. 2016
US International Association of Landscape Ecology

JOURNAL ARTICLES

----Lead Author----



[Journal cover feature](#)

- **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. [18 citations; 76 news stories, [New York Times](#), [Washington Post](#), [Tagesspiegel](#), [CNN](#) - **top 1%**]

- **Awards:**

- **2023 Outstanding Publication on New Zealand Ecology**
- **2022 Outstanding Publication in Environmental Science and Policy**
- **2022 The Wildlife Society Wildlife Publication Award (Student Paper Shortlist)**
- **2022 Wiley Top Downloaded Article in Methods in Ecology and Evolution**

- **Also in:** *Key Themes in Ecology – A Cross-Journal Virtual Special Issue in Support of the British Ecological Society 2022 Annual Meeting.* [Ecology and Evolution](#).

- **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. [33 citations; 21 news stories - [Altmetrics](#): **top 1%**]

- **Awards:**

- **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. [Biological Conservation](#) 202:217-137. [32 citations; 21 news stories, [Popular Science](#) - [Altmetrics](#): **top 1%**]

----Coauthor----

- Cai M, Li Y, Colbry D, **Frans VF**, Zhang Y (2024). Seesus: a social, environmental, and economic sustainability classifier for Python. [Journal of Open Source Software](#) 9(96), 6244.
- D'Andrea R, Khattar G, Koffel T, **Frans VF**, Bittleston L, Cuellar-Gempeler C (2024). Reciprocal inhibition and competitive hierarchy cause negative biodiversity-ecosystem function relationships. [Ecology Letters](#) 27:e14356.



- Li Y, **Frans VF**, Song Y, Cai M, Zhang Y, Liu J (2023). SDGdetector: an R-based text mining tool for quantifying efforts toward Sustainable Development Goals. [Journal of Open Source Software](#) 8(84):5124. [3 citations]
- Kapsar K, **Frans VF**, Brigham L, Liu J (2022). The metacoupled Arctic: Human-nature interactions across local to global scales as drivers of sustainability. [Ambio](#) 51:2061-2078. [8 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. [Ecosystem Services](#) 45:101129. [17 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. [Science of the Total Environment](#) 676:595-612. [29 citations]
- Augé AA, Otlely H, Rendell N, **Frans VF** (2018). Spatial distribution of cetacean strandings in the Falkland Islands to define monitoring opportunities. [Journal of Cetacean Research and Management](#) 19:1-7. [5 citations]

---In Progress---

- **Frans VF**, Liu J (*accepted*). Gaps and opportunities in modeling human influence on species distributions in the Anthropocene. **Nature Ecology and Evolution**.
- **Frans VF** (*in review*). It takes a village to raise a science communicator. **Journal of Higher Education Outreach and Engagement**.

GOVERNMENT REPORTS

- **Frans VF** (2019). Suitable habitats for New Zealand sea lions: mapping and restoration. *Prepared for:* [New Zealand Department of Conservation](#), Wellington, New Zealand.
- **Frans VF**, Augé AA (2016). Marine Spatial Planning for the Falkland Islands: Predicting baleen whale distributions for management using species distribution modelling. *Prepared for:* [Falkland Islands Government Environmental Committee](#), Stanley, Falkland Islands.
- Augé AA, **Frans VF** (2016). Filling an important ecological gap for efficient planning: Investigating whale recovery and mapping whale distribution around the Falkland Islands using best available knowledge. *Prepared for:* [Falkland Islands Government Environmental Committee](#), Stanley, Falkland Islands.

JOURNALISM

- **Frans VF**, Liu J (2022). Protecting 30% of Earth's surface for nature means thinking about connections near and far. [The Conversation](#). Dec. 2, 2022.
- **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). Recuperación de las ballenas en las Falklands, y una explosión de avistamientos. [Merco Press](#). May 11, 2016.
- **Frans VF** (2016). Whale recovery in Falklands and an explosion of sightings. [Merco Press](#). May 4, 2016.
- **Frans VF** (2016). Whales returning indicates survey. [Penguin News](#) 27(42):7-7. Apr. 29, 2016.
- **Frans VF** (2015). Mapping historical whale sightings. [Penguin News](#) 27(6):8-8. Oct. 23, 2015.

THESIS AND DISSERTATION

- **Frans VF** (*in prep*). Advancing ecological niche theory for global sustainability: a coupled human and natural systems perspective. **PhD Dissertation**, Michigan State University, East Lansing, USA.
- **Frans VF** (2015). Recolonization of the New Zealand sea lion (*Phocarctos hookeri*): using predictive niche models to identify suitable breeding habitats for management. **MSc. Thesis**, Georg-August-Universität-Göttingen, Göttingen, Germany.

SOFTWARE

- Li Y, **Frans VF**, Song Y, Cai M, Zhang Y, Liu J (2023). SDGdetector: Detect SDGs and targets in text. [CRAN R-project](#). [3,180 downloads as of Apr. 8, 2024]
- Cai M, Li Y, Colbry D, **Frans VF**, Zhang Y (2024). seesus: a social, environmental, and economic sustainability classifier. [PyPI](#).

DATASETS

- **Frans VF** (2021). Predicted suitable sites for NZ sea lions. [New Zealand Department of Conservation](#).

- **Frans VF**, Augé AA (2016). Whale Sighting Distribution (1990-2015) in inshore waters of the Falkland Islands. [South Atlantic Environmental Research Institute](#).
- **Frans VF**, Augé AA (2016). Whale Sightings (1940-2015) in inshore waters of the Falkland Islands. [South Atlantic Environmental Research Institute](#).

TV/NEWS COVERAGE

- [The Chimes](#). New Zealand sea lion conservation: A Q&A with ecologist Veronica Frans. Feb. 19, 2024.
- [Root & Vine Magazine](#). Agape love for creation: an ecologist's call. Nov. 14, 2023.
- [Otago Daily Times](#). New tool to predict, plan for sea lion colony sites. Oct. 3, 2022.
- [The Conversation](#). Making room for wildlife: 4 essential reads. Jun. 6, 2022.
- [CNN](#). 'Babysitting' the next generation of New Zealand's endangered sea lions. *Travel*. May 3, 2022.
- [Tagesspiegel](#). Seelöwen-Kinderstube auf dem Golfplatz. *Wissen*. Dec. 9, 2021.
- [Little News Ears](#). Sea Lions and People Must Make Friends. *World Kidlines with Paxton*. Dec. 5, 2021.
- [Washington Post](#). 'Cheeky' sea lions are returning to New Zealand's shores — and locals are learning to share the coast. *World*. Nov. 13, 2021.
- [Smithsonian Magazine](#). After Being Hunted to Near-Extinction, New Zealand Sea Lions Are Reclaiming the Mainland. *Smart News*. Nov. 11, 2021.
- [Natur](#). Platz für die seltensten Seelöwen gesucht. *Umwelt+Natur*. Nov. 10, 2021.
- [New York Times](#). New Zealand's Sea Lions Are Back, and Crashing Golf Courses and Soccer Matches. *Science, Trilobites*. Nov. 9, 2021.
- [BioLogos](#). Veronica Frans: seeking answers around the world. Feb. 03, 2021.
- [Newsletter of the American Scientific Affiliation and Canadian Scientific and Christian Affiliation](#). Profile of transformation: Veronica Frans. Summer 2020, 62(2):6.
- [The Bridge](#). Traveling scientist pursues PhD. Summer 2018, 10(1):27.
- [Falkland Islands TV \(FITV\)](#). *Falklands in Focus*, Stanley, Falkland Islands. May 16, 2016. Television. Topic: washed up sei whale at Cape Dolphin.

INTERVIEWS

YOUTUBE/PODCASTS

- **Frans VF**, Weitnauer C. Why Should Christians Care for Creation? [Uncommon Pursuit](#), 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, [Language of God Podcast](#), Jun. 16, 2022.

PANELS

- Strickland D, **Frans VF**, Early Career panel with 2018 Nobel Laureate Donna Strickland, **ASA/CSCA 2023 Meeting**, Toronto, Canada, Jul. 29, 2023.
- 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? [BioLogos 2021 Creation Care Summit](#), Grand Rapids, Michigan, Oct. 9, 2021.

INVITED TALKS

- **Frans VF** (2024). Sea lions crossing: planning for human-wildlife coexistence in the strangest of places. Biology and Geography Seminar Series. **Calvin University**, Grand Rapids, Michigan.
- **Frans VF** (2024). The state of species distribution modeling in a human-dominated world. Math and Statistics Seminar Series. **Calvin University**, Grand Rapids, Michigan.
- **Frans VF** (2023). Unexpected neighbors: biodiversity and us. [BioLogos 2023 Creation Care Summit](#), Grand Rapids, Michigan.
- **Frans VF** (2023). Science communication in a faith-based world. **Michigan State University STEM Ambassadors Program**. East Lansing, Michigan.

- **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 2021 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**, Liu J (2024). Modeling human influence on species distributions: gaps in theory, methods, and applications for the Anthropocene. **International Association for Landscape Ecology - North America**, Oklahoma City, Oklahoma.
- **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.
- **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 (*Phocarctos hookeri*): using Maxent to identify suitable breeding habitats for management. **International Association for Landscape Ecology World Congress**, Portland, Oregon.

HOSTED WORKSHOPS

DATA AND CODING IN R

- Data viz 2.0, [R-Ladies East Lansing](#), East Lansing, MI. Feb. 23, 2020.
- Data wrangling and visualization, [R-Ladies East Lansing](#), East Lansing, MI. Oct. 21, 2019.
- Data visualization in R (intermediate), **Social Science Data Analytics Initiative**, East Lansing, MI. Jun. 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.

CAREER MENTORSHIP

- Flourishing as a person, ASA 2022 Meeting, **Emerging Scholars Network**, San Diego, Jul. 2022.
- Growing in your vocation as a science professional, Online Student & Early Career Mini-Conference, **American Scientific Affiliation & Emerging Scholars Network**, Virtual, Jul. 2020.
- Falling for God through your vocation. **Christian Women in Science**, Virtual, Oct. 2020.

PUBLIC OUTREACH

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.

BLOGS

- **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.

POPULAR SCIENCE

MOTIVATIONAL SPEAKING

- **Frans VF** (2022). Be bold. [American Scientific Affiliation](#). Nov. 20, 2022.

CREATIVE WRITING

- **Frans VF** (2022). Be bold: a lesson from the gentle gentoos. [Emerging Scholars Network](#). Nov. 20, 2022.
- **Frans VF** (2022). Music album companion: Water to Wine. [Climate Vigil Songs Worship Guide](#). p. 24.

PEER REVIEW SERVICE

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)

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science (AAAS); *American Scientific Affiliation (ASA)*; *British Ecological Society*; *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 2021-2023; ASA Meeting 2019-2023; IALE 2016-2015, 2024; MSU Graduate Academic Conference 2019-2022

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 (virtual)
- **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
IALE World Congress 2015, Portland, Oregon

• **Species Distribution Modeling (SDM) Workshop**

Jul. 2015

IALE World Congress 2015, Portland, Oregon

GRADUATE-LEVEL COURSES IN MODELING AND STATISTICS

• **Michigan State University**

2018 - 2022

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

• **Georg-August-University Göttingen**

2012 - 2015

Biodiversity and ecosystem functioning · Ecological modeling · Ecological models - from populations to networks

• **Lincoln University**

2012 - 2015

Advanced geographic information systems · Research methods in ecology

LEADERSHIP POSITIONS

PROFESSIONAL SOCIETIES

• 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

• Voice, **BioLogos Speakers Bureau**, Grand Rapids, MI

2022 - present

• Science Advisor, **The Cross Impact**, Lagos, Nigeria

2019 - 2020