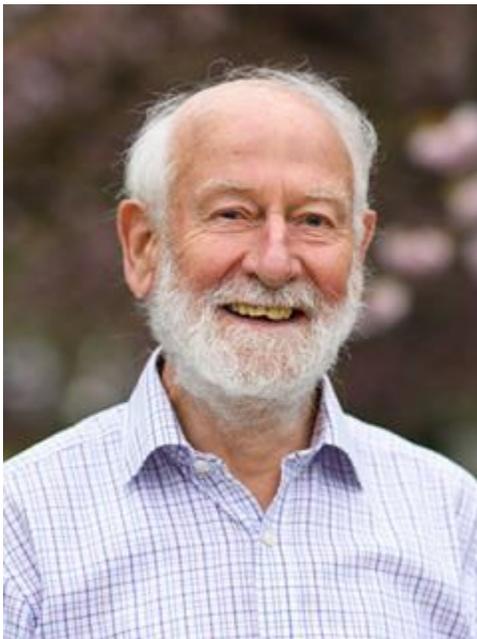


HBC Program Descriptions 2021 – 2022

Please use the ‘contact us’ menu option to request a zoom link to join us for our meetings!

Monday, September 13, 2021 6:30 PM
Monthly Meeting, Virtual
Peter & Rosemary Grant, Princeton University
“40 Years of Evolution in Darwin’s Finches”



Renowned evolutionary biologists Peter and Rosemary Grant have produced landmark studies of the Galápagos finches first made famous by Charles Darwin. In *How and Why Species Multiply*, they offered a complete evolutionary history of Darwin’s finches since their origin almost 3 million years ago. Now, the Grants have turned their attention to events taking place on a contemporary scale. By continuously tracking finch populations over a period of four decades, they uncover the causes and consequences of significant events leading to evolutionary changes in species.

The Grants used a vast and unparalleled range of ecological, behavioral, and genetic data – including song recordings, DNA analysis, and feeding a breeding behavior – to measure changes in finch populations on the small island of Daphne Major in the Galápagos archipelago.

They find that natural selection happens repeatedly, that finches hybridize and exchange genes rarely, and that they compete for scarce food in times of drought, with the remarkable result that the finch populations today differ significantly in average beak size and shape from those of forty years ago. The Grants' most spectacular discovery is the initiation and establishment of a new lineage that now behaves as a new species, differing from others in size, song, and other characteristics. The Grants emphasize the immeasurable value of continuous long-term studies of natural populations and of critical opportunities for detecting and understanding rare but significant events.

By following the fates of finches for several generations, the Grants will expound unparalleled insights into ecological and evolutionary changes in natural environments.

Peter Grant

Class of 1877 Professor of Zoology Emeritus, Professor of EEB Evolutionary Biology

<https://eeb.princeton.edu/people/peter-grant>

“I am interested in ecology, evolution and behavior. I seek an understanding of the origin of new species, their ecological interactions, their persistence in different communities and their ultimate extinction. In this broad area I chose Darwin's Finches on the Galápagos Islands for intensive investigation more than 40 years ago because some unique features, including their tameness and simplicity of their undisturbed habitats, make them unusually suitable for field research into questions of evolution. Although I retired in 2008, and no longer supervise graduate students, I continue research on the finches, and carry it out in several collaborations, with my wife Rosemary Grant, molecular geneticist Leif Andersson, and other scientists. Our current focus is on the evolutionary importance of hybridization. We are attempting to discover how an exchange of genes between species affects fitness-related traits, and how hybridization may have contributed to the origin and proliferation of species.”

B. Rosemary Grant

Senior Research Biologist, Emeritus, Evolutionary Biology

<https://eeb.princeton.edu/people/b-rosemary-grant>

“My research focuses on the maintenance of phenotypic variation and the process of speciation in natural environments.”

“Together with my husband Peter Grant I have been studying Darwin's finches on the Galápagos islands since 1973. Our work combines ecology and behavior with genetics and more recently genomics. Intensive fieldwork on Genovesa Island for ten years and on the small island of Daphne Major for 40 years has revealed how natural selection results in evolutionary change when finch populations are subjected to severe droughts and shortage of food. We have discovered how an exchange of genes through hybridization can lead to a collapse of two species into one under some circumstances, and to the formation of a new species under other conditions. Since these two island environments are entirely natural, never having been disturbed by humans, the study provides a model of evolution in contemporary time that helps to understand biological diversification over geological time. Some of the outstanding questions we

are pursuing with our collaborators are concerned with the effects of introgressive hybridization on the underlying genetic composition of known changes in beak morphology and body size.”

Monday, October 4, 2021 @ 6:30 PM
Hoffmann Bird Club Monthly Meeting – Virtual
Jacob Drucker, University of Chicago & Chicago Field Museum
"The Past, Present, and Future of Hawaii's Avifauna"



Jacob Drucker

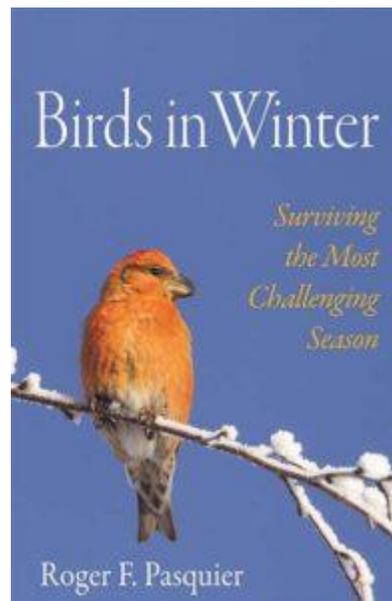
The Hawaiian Islands are an archipelago of superlatives, home to the world's most isolated island chain, largest mountain, and steepest rainfall gradient. Their isolation has resulted in the evolution of plants, animals, and cultures like no other on earth, yet the islands are now known as the "Extinction Capital of the World". This talk will explore the history of the archipelago through the lens of its birds, and look towards its future in a brave new world.

Jacob Drucker is a PhD Candidate in the Committee on Evolutionary Biology at the University of Chicago and the Field Museum. His ties to the Aloha state are linked to stints working for the State on bird conservation projects on Kauai and the Big Island, and as a guide for Victor Emanuel Nature Tours. His doctoral work focuses on how birds are adapted to tropical climates.



'iwi (*Drepanis coccinea*) Photo taken at Pua Akala Tract, Hakalau Forest National Wildlife Refuge, Big Island, Hawaii; March 19, 2019 - © Jacob Drucker

Monday, November 1, 2021 @ 6:30 PM
Hoffmann Bird Club Monthly Meeting - Virtual
Roger Pasquier, American Museum of Natural History
“Birds in Winter: Surviving the Most Challenging Season”

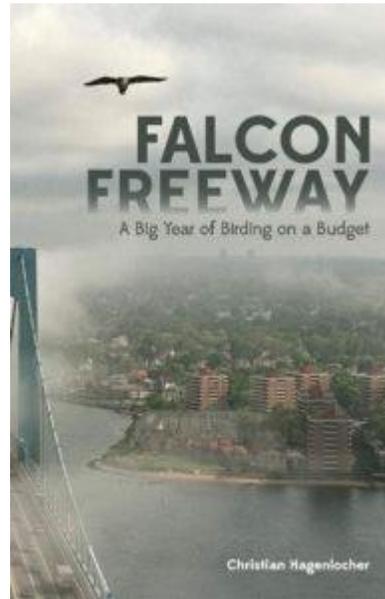


Roger Pasquier will discuss the ecological and behavioral adaptations that birds have evolved to survive winter, a season that affects not only the birds that remain in regions where it becomes

cold each year, but also the migrants that go far to avoid the effects of cold, as well as the resident species with which they share habitat at their destinations. Winter in fact affects birds' lives all through the year, from late summer, when some birds begin storing food to retrieve months later and others form the social groups in which they will remain until spring. Winter also has distinctive conservation challenges. Many birds winter in latitudes and habitats occupied more densely by people, reducing the available natural habitat and exposing them to pollutants, invasive species, and hunting pressures they do not encounter the rest of the year. Finally, global warming is altering the nature of winter itself, shortening the season, changing or eliminating some vital winter habitats, shifting food sources, and throwing off the sense of timing that triggers birds to arrive at both their breeding and winter destinations at the optimal moment.

Roger Pasquier is an associate in the Department of Ornithology at the American Museum of Natural History. His career has been in ornithology and conservation, at the American Museum, the U.S. National Museum, the International Council for Bird Preservation (now BirdLife), World Wildlife Fund, Environmental Defense Fund, and National Audubon Society. In addition to *Birds in Winter: Surviving the Most Challenging Season* (Princeton University Press, 2019), some of his other books are *Watching Birds: An Introduction to Ornithology* and *Masterpieces of Bird Art: 700 Years of Ornithological Illustration*.

Monday, January 3, 2022 @ 6:30 PM
Hoffmann Bird Club Monthly Meeting – Virtual
Christian Hagenlocher
“A Big Year of Birding on a Budget”



Follow Christian in his approach to Big Year birding—an all-out quest to cover North America on a budget. Join him as he shows how he economized by living out of his Subaru Outback and

cutting corners to save money in his search for birds in the remotest corners of the continent. This journey spans North America, from the remote island of Attu, Alaska, to Florida's Dry Tortugas, as Christian shared his encounters with birds and interviews with birders, in an effort to engage, preserve, inspire, and connect people. A teacher by profession, Christian will share his amazing journey through photos, videos, maps, and interviews, teaching you something new about the amazing continent we share with an incredibly diverse cast of feathered friends.

Christian Hagenlocker's passion for birds began at an early age, when he saw a pair of Peregrine Falcons nesting on a building in downtown Seattle. Since then, he's read every library book and field guide he could get his hands on, and his passion for birds and education has only grown! Passionate about the education of people of all ages, he entered the teaching profession after completing a B.S. in biology in 2011. As a high school science teacher and licensed falconer, Christian has integrated birds into school curricula in unique ways, exposing students to the ancient sport of falconry and leading international science-focused trips to Belize, Costa Rica, Israel, Colombia, and Peru. In 2016, Christian became the youngest person to break the 700 mark in an ABA Big Year. His book, *Falcon Freeway: A Big Year of Birding on a Budget*, describes his adventures and lessons learned while living on the road, birding in the 21st century.

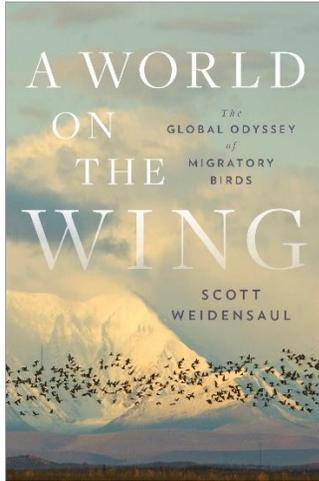
Monday, February 7, 2022 @ 6:30 PM
Hoffmann Bird Club Monthly Meeting - Virtual
Scott Weidensaul, Best Selling Author
"A World of Wings: Migratory Birds on a Changing Planet"



Even as scientists make astounding discoveries about the navigational and physiological feats that enable migratory birds to cross immense oceans or fly above the highest mountains, go weeks without sleep or remain in unbroken flight for months at a stretch, humans have brought many migrants to the brink. Based on his newest book "A World on the Wing," author and researcher Scott Weidensaul takes you around the globe -- with researchers in the lab probing the limits of what migrating birds can do, to the shores of the Yellow Sea in China, the remote mountains of northeastern India where tribal villages saved the greatest gathering of falcons on the planet, and the Mediterranean, where activists and police are battle bird poachers -- to learn how people are fighting to understand and save the world's great bird migrations.

Scott Weidensaul is the author of more than two dozen books on natural history, including the Pulitzer Prize finalist "Living on the Wind" and his latest, the New York Times bestseller "A World on the Wing." Weidensaul is a contributing editor for Audubon, a columnist for Bird Watcher's Digest and writes for a variety of other publications, including Living Bird. He is a Fellow of the American Ornithological Society and an active field researcher, studying saw-whet owl migration for more than two decades, as well as winter hummingbirds, bird migration in

Alaska, and the winter movements of snowy owls through Project SNOWstorm, which he co-founded. Find more information at <http://www.scottweidensaul.com/>



A New York Times Bestseller and Editor's Pick

“Scott Weidensaul ranks among an elite group of writer-naturalists—Bruce Chatwin, John McPhee and David Quammen come to mind—whose straightforward eloquence elevates ecology to the level of philosophy.”

—*Los Angeles Times Book Review*

Note: Per Presenter’s preference, this presentation will be exclusively for Members in good standing of the Hoffmann Bird Club. The presentation will not be videotaped for our archives, nor will the program be open to non-members of the Hoffmann Bird Club.



Scott Weidensaul (far right) on a visit to the Williams College's Northern Saw-whet Owl Banding Station in 2008. L to R: Audrey Werner, Drew Jones (Photo by Matt Kelly)

Scott Weidensaul Bibliography:

- Living on the Wind: Across the Hemisphere With Migratory Birds* (2000)
The Raptor Almanac: A Comprehensive Guide to Eagles, Hawks, Falcons, and Vultures
(National Outdoor Book Award, Honorable Mention, Nature Guidebook, 2001)
The Ghost with Trembling Wings: Science, Wishful Thinking and the Search for Lost Species (2003)
Return to Wild America: A Yearlong Search for the Continent's Natural Soul (2006)
Of a Feather: A Brief History of American Birding (2008)
The First Frontier: The Forgotten History of Struggle, Savagery and Endurance in Early America (2012)
Peterson Reference Guide to Owls of North America and the Caribbean (2015)
Mountains of the Heart: A Natural History of the Appalachians (2016)
A World on the Wing: The Global Odyssey of Migratory Birds (2021)

Monday, March 7, 2022 @ 6:30 PM

Hoffmann Bird Club Monthly Meeting – Virtual
John Marzluff, Ph.D., University of Washington
“Rendezvous with the Raven: Exploring Connections Among the
Trickster, Wolves, and People in Yellowstone”



Ravens are known to scavenge from wolves and people, but the degree to which they exploit these and other sources of food has not been studied in detail. In 2019, John Marzluff and Matthias Loretto began tagging ravens in Yellowstone National Park with long-lasting satellite GSM transmitters. After tagging more than 60 ravens and relating their movements to those of people and wolves, they gained an appreciation of their reliance on both as providers of food. In his talk, Dr. Marzluff will describe how the movements of territorial and non-breeding ravens can be related to wolf and human-provisioned foods, focusing on how the exploits of individual birds demonstrate variability. We observed ravens using wolf kills, but their discovery appears more incidental than a result of following or purposeful search. As we begin to quantify the relationship between wolves and ravens we may learn more about their synchrony, but at present it appears to be weak, with discovery of kills occurring during the day rather than after communal roosting. Ravens made extensive use of anthropogenic resources, including direct handouts, waste water treatment ponds, dumps, agriculture, roadkills, and hunter offal. Territorial ravens have extensive knowledge of the Greater Yellowstone Ecosystem and exploit areas in excess of 6500 square miles to obtain their yearly needs.

John Marzluff is James W. Ridgeway Professor of Wildlife Science at the University of Washington. His graduate research (Northern Arizona University) and initial post-doctoral research (University of Vermont) focused on the social behavior and ecology of jays and ravens. He continues this work, investigating the intriguing behavior of crows, ravens, and jays and currently focuses on the interactions of ravens and wolves in Yellowstone. He teaches courses in ornithology, governance and conservation of rare species, field research in Yellowstone, and the natural and cultural history of Costa Rica.

Professor Marzluff has written six books and edited several others. *Welcome to Subirdia* (2014, Yale) shows that moderately settled lands host a splendid array of biological diversity and suggests ways in which people can steward these riches to benefit birds and themselves. His most recent book, *In Search of Meadowlarks*, (2020, Yale) connects our agriculture and diets to the conservation of birds and other wildlife.

Dr. Marzluff has mentored more than 40 graduate students and authored over 140 scientific papers on various aspects of bird behavior and wildlife management. He is a member of the U.S. Fish and Wildlife Service's recovery team for the critically endangered Mariana Crow; a former member of the Washington Biodiversity Council; a Fellow of the American Ornithologist's Union; and a National Geographic Explorer.

John Marzluff Bibliography:

The Pinyon Jay: Behavioral Ecology of a Colonial and Cooperative Corvid (1992)

Avian Conservation: Research And Management (1998)

In the Company of Crows and Ravens (2005)

Gifts of the Crow: How Perception, Emotion, and Thought Allow Smart Birds to Behave Like Humans (2013)

Dog Days, Raven Nights (2013)

Welcome to Subirdia: Sharing Our Neighborhoods with Wrens, Robins, Woodpeckers, and Other Wildlife (2014)

In Search of Meadowlarks: Birds, Farms, and Food in Harmony with the Land (2020)