

EVENT PROGRAM

Welcoming Remarks

Academic Senate Chair David Brundage

Opening Remarks

Chancellor Cynthia K. Larive

Introduction

Associate Professor of Ecology and
Evolutionary Biology Rita S. Mehta

Faculty Research Lecture

Professor Terrie M. Williams

Audience Q&A

Moderated by Associate Professor Rita
S. Mehta

A reception will be held following the program



Sponsored By:

UC Santa Cruz Academic Senate
UCSC Chancellor's Office
Physical & Biological Sciences Division
Ecology & Evolutionary Biology Department

PAST FACULTY RESEARCH LECTURERS

2019 Lise Getoor
2018 Carl Walsh
2017 Sandra Chung
2016 Susan Strome
2015 Craig Haney
2014 Howard Haber and Abraham Seiden
2013 Gail Hershatler
2012 Steve Vogt
2011 Paul Whitworth
2010 Daniel Friedman
2009 Patricia Zavella
2008 Stanford E. Woosley
2007 Geoffrey K. Pullum
2006 Nathaniel Mackey
2005 Mary Silver
2004 Barbara Rogoff
2003 Jonathan Beecher
2002 David Haussler
2001 James Clifford
2000 David S. Klinger
1999 David Cope
1998 Adrienne Zihlman
1997 Donald E. Osterbrock
1996 Donna J. Haraway
1995 Harry F. Noller
1994 G. William Domhoff
1993 Jack Zajac
1992 Audrey Stanley
1991 Harry Berger, Jr
1990 Sandra M. Faber
1989 Thomas F. Pettigrew
1988 Gerhard Ringel
1987 Jean H. Langenheim
1986 Richard A. Wasserstrom
1985 Kenneth S. Norris
1984 Hayden White
1983 Frank X. Barron
1982 Robert E. Garrison
1981 Robert P. Kraft
1980 John A. Marcum
1979 C. L. Barber
1978 Norman O. Brown
1977 Harry Beevers
1976 M. Brewster Smith
1975 Joseph F. Bunnnett
1974 Albert Hofstadter
1973 Aaron C. Waters
1972 Theodore R. Sarbin
1971 Joseph H. Silverman
1970 Kenneth V. Thimann
1969 Page Smith
1968 Albert Edward Whitford
1967 Maurice Alexander Natanson

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54TH ANNUAL
FACULTY RESEARCH LECTURE

Professor Terrie M. Williams

Touching Extinction: A Wildlife Conservation *Love Story*

The lifelong journey of two wildlife
biologists trying to save the kingdom
of carnivorous mammals and ourselves

May 22, 2022 • 2:30 PM
COWELL RANCH HAY BARN

Professor Terrie M. Williams

Terrie M. Williams is a professor in the Ecology & Evolutionary Biology Department at UC Santa Cruz. Her research is at the forefront of understanding the physiology of exercise and energetics in large mammals, with recent projects focused on the comparative physiology of animals including African lions, wolves, polar bears and marine mammals. She has identified energetic vulnerabilities in these animals, studied resource limitations in apex predators, explored the effects of noise on diving seals and dolphins, and uncovered how changes in ice have impacted polar marine mammals such as narwhals.

Professor Williams has been published in top-rated physiology journals and broadinterest journals such as Science. She has written several award-winning books, including *The Hunter's Breath*, detailing her research of the Weddell seal in Antarctica, and *The Odyssey of KP2: An Orphan Seal*, a Marine Biologist, and the *Fight to Save a Species*, about her conservation work with the Hawaiian monk seal. Two of her proudest honors were related to "scientific grit": a USGS Antarctic Site Designation, Terrie Bluff, Antarctica, honoring her Weddell seal fieldwork, and Medal finisher in the 2011 Coeur d'Alene, ID Ironman Triathlon where she learned firsthand about Exercise Physiology for her students.

She is a recipient of the August Krogh Award in Physiology by the American Physiological Society. She has been invited to give numerous guest lectures, including the Bidder Plenary Lecture by the Society of Experimental Biology in London, the Society of Integrative and Comparative Biology, and the International Mammalogy Congress in Australia.

For the past 25 years, Professor Williams' lab has been a focal point for educational tours for campus visitors from Betty White to Make a Wish and the UC President.

She received her PhD and MS from Rutgers University, and was a NIH Postdoctoral Fellow at the Scripps Institute of Oceanography and a Kaiser Environmental Fellow at the San Diego Zoological Society.



Touching Extinction: A Wildlife Conservation Love Story

The pace of animal extinctions has accelerated in recent years, such that the calculated average rate of vertebrate species loss over the last century is 72-100 times greater than expected from natural causes. Big, fierce mammals have been especially impacted, with African lions, Alaskan

sea otters, Greenlandic narwhals, Coastal killer whales, Hawaiian monk seals and many more disappearing before our eyes. Twenty-five years ago, my husband, Jim Estes, and I decided that we had to do something to stop the downward trajectory of wildlife. As field biologists



working on opposite ends of the globe, we had independently witnessed the underlying forces driving a sixth mass extinction during our scientific lifetimes. The realization of what was about to be lost devastated us. We wondered, what would happen if we combined our scientific careers and expertise to try to save the kingdom of carnivorous mammals?

This lecture is our wildlife conservation story. It crosses the globe and scientific disciplines to explore how large carnivorous mammals are uniquely built, and how a rapidly changing world due to anthropogenic pressures now threatens the survival of the world's most iconic species. Most importantly, our discoveries directly connect you to the wilderness, not just because our daily lives impact wild animals, but because wild animals hold the secret to our own survival.

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