Session Co-Chairs
—
Nalini M. Nadkarni,
University of Utah
& Doug Levey.

ECOLOGY ON THE RUNWAY

// Eco-Fashion Show //</doc>
Through fashion, people express who they are, where they belong, and what they care about.

We convey our passion for ecology by wearing clothing printed with biologically accurate images of the plants, animals, microbes, and landscapes that we study.

Our goal is to inspire public audiences to understand the biota of our planet by sharing our ecological enthusiasm in unconventional ways.

Think about the many ways that you can show others that...ecology is everywhere.

Nalini M. Nadkarni
Co-Organizer

Doug Levey
Co-Organizer
Brenda Van der Wiel

Brenda is part of the design faculty for the University of Utah Theatre Department and serves as Head of the Performing Arts Design Program. She designs regularly for that department as well as for Pioneer Theatre, Salt Lake Acting Company and The Alabama Shakespeare Festival. Recent works in Utah include Blue Stockings and the Avenue Q puppets for the Babcock Theatre, and Alabama Story for Pioneer Theatre Company. Some favorite designs for the Alabama Shakespeare Festival include The Little Mermaid, Macbeth, Much Ado About Nothing, and The Count of Monte Cristo. She has also worked at the Seattle Opera, the Santa Fe Opera, and the Utah Shakespeare Festival.

Eugene Tachinini

Born in Shiprock, New Mexico, Eugene is a fashion professional who crafts custom clothes and costumes for a diverse array of academic, theatrical, and business applications. He received his BFA, MFA, and MAT from the University of Utah. He is a photographer, designer, and uncle. He has worked in a variety of costume shops, including Pioneer Memorial Theater, Utah Shakespearean, and the Santa Fe Opera. He has designed and constructed costumes for Riri Woodbury Repertory Dance Theater, and Charlotte Boyce Christensen in Utah. Eugene worked closely with research images of participating ecologists, and was responsible for assisting with the design, tailoring, and finishing of the Eco-fashion clothing.

Doug Levey

Doug Levey is a permanent Program Officer at the world, where he helps with the review and award process for proposals that focus on population and community ecology. He's also involved with the Dimensions of Biodiversity program. Before coming to NSF, he was on the faculty at the University of Florida. His interests there included tropical ecology, seed dispersal, production and consumption of wild fruit, efficacy of habitat corridors, migration of birds in South America, and why chili peppers are hot. He led a GK-12 project, which trained graduate students in techniques of inquiry-based learning and placed them into disadvantaged middle schools, and he was also involved in several programs that united STEM faculty and featured outreach.

Dr. Nalini Nadkarni both carries out research in forest ecology and public engagement of science in non-traditional venues. She is a Professor of Biology at the University of Utah. Her forest ecology research focuses on the plants and animals in forest canopies in rainforests of Costa Rica and in Washington State. She has documented the ecological roles of canopy organisms on whole forests: enhancing interception and retention of nutrients from atmospheric sources, increasing of forest structural complexity, and providing food and habitat resources for arboreal birds and mammals. Her work has also established that canopy communities are vulnerable to disturbance from forest fragmentation and climate change. Nadkarni has published 110 scientific articles and three scholarly books.
Carol Brewer’s research has embraced two distinct but complementary themes: plant physiological ecology and ecology education. She’s especially interested in how dew on leaves impacts photosynthesis and the intriguing variety of ways through which leaves minimize those impacts.

Carol is modeling her handsome jacket, which highlights wet leaves. As an ecologist and fiber artist, she hopes that by showing the beauty of wet leaves through fashion she might open a conversation about the intriguing physiology, morphology, and ecology of how plants deal with dew.

Charlie Nilon studies the impact of urbanization on wildlife. Most of his work has addressed issues of wildlife management in inner cities and has explicitly included the human element of wildlife in definitively non-wild places.

Charlie’s classic hoodie delineates trees and graffiti – a reminder that people and nature are juxtaposed in cities. Public engagement is important because his work takes place on someone else’s turf. “The stories that people tell about the birds in their yard, the foxes under the porch, and how they planted a tree 40 years ago informs the work that we do.”
**DAVID INOYUE**

David Inouye is the past president of the ESA and has worked at the Rocky Mountain Biological Laboratory since 1971, studying flowering phenology, plant demography, and plant-animal mutualisms. His long-term data provide an unusually detailed look at impacts of climate change on phenology and species interactions.

David is illustrating a fabric of mutualism – a pollinating hummingbird from his study site. He hopes that you’ll take advantage of the diversity of opportunities in your life for engaging the public in what you do. Everyone will benefit – a frequently overlooked mutualism, itself.

**HEATHER LYNCH**

Heather Lynch integrates statistics, satellite imagery analysis, and field work to understand the dynamics of ecological change on the Antarctic Peninsula. Much of her work hinges on a long-term biodiversity monitoring program called the Antarctic Site Inventory, which keeps her and her students counting penguins in Antarctica 5 months of the year.

Heather’s skirt highlights the Gentoo penguin, which has flourished under climate change and is rapidly spreading throughout the Antarctic Peninsula – even as closely-related penguins are declining in abundance.
JILL BARON

// SENIOR RESEARCH ECOLOGIST //
Colorado State University

Jill Baron’s interests include applying ecosystem concepts to management of human-dominated regions, understanding the biogeochemical and ecological effects of climate change and atmospheric nitrogen deposition to mountain ecosystems.

She is wearing a fabric that depicts diatoms, biota that are invisible to the human eye but critical for ecosystem health. These speak to the importance of protected ecosystems, such as national parks. As global change becomes ever more pervasive, data from parks can reveal the impacts of shifting climate and altered geochemical cycles.

HENRY GHOlZ

// FORMER PROGRAM DIRECTOR //
National Science Foundation

Henry Gholz’s research career has focused on carbon, water and nutrient cycles in temperate and tropical forests. Forest canopies and leaf-area indices light up his life.

The color of Henry’s outfit reflects the trajectory of his career – from the green of canopy leaves to the green of research funding. His message to you is that “we should all look for opportunities to serve our scientific and educational communities, as well as our own careers.”
Mary Power studies the food webs of rivers, which start with algae and extend to lizards, birds, and other insect-eating animals on the land and in the air. Her collaborations with non-ecologists have revealed surprising connections between the ecosystems of rivers and those of watersheds and near-shore ocean communities.

Mary’s pashmina shawl features benthic diatoms. Although they fuel much of the food chain in rivers, benthic diatoms are often overlooked because they are eaten so quickly that their biomass is kept low. They are cryptic but important, perhaps controlling the number of animals found in and around rivers.

Monica Turner is the current president of ESA, recipient of ESA’s MacArthur Award, and a member of the National Academy of Sciences. Her research focuses on spatial patterns, especially those caused by natural disturbances such as fires. Her long-term studies of Yellowstone National Park demonstrate how, contrary to public perception, major fires do not “destroy” ecosystems but rejuvenate them.

Monica’s dress features this theme of fire across landscapes. Monica points out that long-term studies in National Parks provide irreplaceable opportunities for understanding consequences of global change.
NANCY GRIMM  // PROFESSOR //  Arizona State University

Nancy Grimm studies the interaction of climate variation and change, human activities, and ecosystems. Her interdisciplinary research in both urban and stream ecosystems has focused on disturbance, resilience, and biogeochemical processes.

Nancy is wearing a tunic showing a large flash flood similar to the ones at Sycamore Creek, a desert stream in central Arizona where she has worked for more than three decades. Most of the time, the stream is much smaller and can be very green with algae or large wetland plants. But floods remove these organisms, transport and deposit sediment, which changes the geomorphic structure of the stream, and bring nutrients into the system.

RODOLFO DIRZO  // PROFESSOR //  Stanford University

Rodolfo Dirzo is fascinated by the evolutionary ecology of plant-animal interactions and the consequences of their disruption by human activities. He is particularly interested in the effects of defaunation – the loss of large animals from natural communities.

Rodolfo is wearing a jacket that features a tapir – one of the large mammals frequently driven to local extinction by hunters. Rodolfo wants to convey that their extinction may generate far-reaching effects on plants whose seeds rely on animals for dispersal. Likewise, defaunation of herbivores and seed predators may result in all sorts of unanticipated ecosystem consequences.
Cary Institute of Ecosystem Studies

Steward Pickett started out as a botanist, and has been a member of the Ecological Society since 1972. His research focuses on the dynamics of biotic communities, ecological landscapes, and urban ecosystems. He has worked to broaden the theory of urban ecology and to connect it with urban design and planning.

Steward is modeling a decidedly urban outfit. As an ecologist wearing row houses, he can artfully deliver the message that cities, suburbs, exurbs, and the urban regions they encompass are ecosystems, too.

SONIA ORTEGA

National Science Foundation

Sonia Ortega’s work on oyster settlement and growth has helped reveal the environmental conditions needed to restore oyster populations in the Chesapeake Bay.

Sonia’s handsome jacket displays oysters. Sonia believes that public engagement is key to oyster restoration. Oyster gardening programs give people, especially school children, the opportunity to bring back this vital species, turning muddy waters productive.

STEWARD PICKETT

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Tim Kratz’s research examines ecosystem processes of a forested landscape in northern Wisconsin that’s rich in lakes.

Tim’s outfit reveals a bird’s-eye view of Wisconsin’s northern woods, bejeweled with lakes. His message is that these lakes are outcroppings of a vast body of groundwater that permeates the rubble of an ancient mountain range, demolished long ago by glaciers. Today, the water and woods are one fabric, woven by slow-moving flows of water.