FULL SCHEDULE

November 16: The Los Angeles Biodiversity Index

3-3:15pm **Introduction**
Councilman Paul Koretz

3:15-
4:15pm **LASAN's Biodiversity Update**
Dr. Mas Dojiri

An overview of what the Biodiversity Program has been doing and an introduction to the new LA Biodiversity Index and Ecotopes Concept, which will be presented by Michelle Barton and Dr. Isaac Brown, respectively. This presentation will provide an update and expand on their collaborations with Los Angeles agencies such as CSUN, on the Pollinator Pockets; California Department of Fish and Wildlife; Healthy Soils Program; CALeDNA; and Community Forestry Advisory Committee among others.

Los Angeles City Biodiversity Index - Achieving the City's No-Net-Loss Goal
Michelle Barton

In 2017, the LA Sanitation & Environment (LASAN) Biodiversity Team convened a transdisciplinary group of scholars, practitioners, and City staff to measure the biodiversity within the City of LA using the established Singapore Index on Cities' Biodiversity. LASAN used the measurement process as a starting point for creating a customized Index for Los Angeles. The resulting LA City Biodiversity Index includes eight indicators that account for three core biodiversity performance areas:

1) Urban biodiversity and conservation of native biodiversity;
2) Social aspects of biodiversity, with a focus on equity and access to nature;
3) Governance and stewardship activities.

The LA Biodiversity Index has been designed to monitor progress toward the 2035 "no-net loss of biodiversity" target and other City targets for access to parks and nature. It is intended to be institutionalized within municipal environmental management practices, and a central tool in implementing a future LA Biodiversity Policy.


Esperanza Elementary Schoolyard Habitat. Photo by Michelle Barton

4:15-5:15pm **Los Angeles Ecotopes – A Framework for Managing Cities as Urban Ecosystems**
Dr. Isaac Brown

Los Angeles has been partitioned into twenty-seven ecotopes, or subregions, based on environmental conditions. Ecotopes combine landform, microclimate, and biotic characteristics, which are the key building blocks of biodiversity, and provide a framework to guide environmental stewardship from site to regional scales. They also serve as units for measuring the Los Angeles Biodiversity Index. This presentation will address the ecotopes framework and methodology, the associated database of environmental layers that can help guide site-environmental optimization, case study applications, and implications for the future of urban ecosystem stewardship in the City.

Marine Blue Butterfly. Photo by Isaac Brown.

November 17: Urban Wildlife

3-4 pm **Connecting to Urban Nature Through Community Science**
Lila Higgins

Community science—getting the general public involved in answering real-world questions—is a longstanding practice at the Natural History Museum of Los Angeles County. But in the midst of a global pandemic, biodiversity and climate crises, and a social justice uprising--where does community science fit and how is it changing? We'll cover the basics of community science related to documenting biodiversity in urban areas like Los Angeles. From iNaturalist and documenting species through photography, to large-scale, global events like the City Nature Challenge. How has community science changed during the pandemic, how can we keep communities involved, and what will engagement look like in a post-pandemic world?

Community Science Superproject Training. Photo by Gina Cholick.

4-5 pm **The Importance of the Urban Forest to our Regional Bird Life**
Dr. Eric Wood

Dr. Wood, together with his lab students, conducts biodiversity research within urban ecosystems, focusing on how birds utilize urban forests. His research addresses the role of street trees in providing habitat for feeding birds, as well as an in-depth view of bird diversity patterns throughout Greater LA. This presentation will also focus on new research regarding bird distribution patterns in urban parks and emerging methodologies to help identify biodiversity hotspots within the LA urban ecosystem. He will conclude with recommendations for urban forest management that benefits birds and biodiversity.

Allen's female. Photo by Carol Bornstein.

November 18: Wildlife and Plant Community Interconnectivity

3-4 pm **Enhancing Wildlife Connectivity in Los Angeles**
Kat Superfisky

From trailing waterways to scenic mountains, Los Angeles has a diversity of natural communities and open spaces where plants and animals thrive. Recognizing the importance of these key resources, the City of Los Angeles Department of City Planning is developing a Wildlife Ordinance to help maintain habitat and connectivity within these special areas. Planning is currently focusing on a portion of the Santa Monica Mountains that is a mix of low-density residential lots and large undeveloped open space and natural areas to test regulations that will support the City's ecological goals of conserving and enhancing habitat and connectivity, while balancing future development.

Los Angeles Chaparral. Photo by Leesa Martling.

4-5 pm **Designing Gardens in Harmony with Nature**
Carol Bornstein

Landscape professionals and home gardeners have the power to make a difference in conserving or restoring biodiversity by creating habitat for wildlife in urban areas. Residential, commercial, and public spaces are increasingly dedicated to this rewarding and vital endeavor to support birds, beneficial insects, and other wild creatures whose natural habitats are threatened by development, pollution, toxic chemicals, and the unchecked spread of invasive species. This presentation features some of the best California native plants for the Los Angeles region along with equally important ideas for sustainably designing and tending these spaces.

Carpenter Bee on Chilopsis. Photo by Carol Bornstein.

November 19: Urban Resilience

3-4 pm **CSUN Pollinator Pockets: Reimagining a New, Green San Fernando Valley**
Dr. Natale A. Zappia & Don Larson

To address declining habitats of North American pollinators, CSUN seeks to convert underutilized, neglected corners of the city into safe havens for bees, hummingbirds and other pollinators that are critical to growing the region's food supply. These areas, dubbed "pollinator pockets," will include plants and beehives to attract pollinators and will be built in unused and vacant lots. These locations throughout the city will help support the populations of pollinators. Our ultimate goal is to interweave natural habitats within the urban landscape by utilizing a university-municipal-community sustainable partnership.

Pollinator Meadow. Photo by Carol Bornstein.

4-5 pm **How Did the Lizard Cross the 10 Freeway? Genomics and Conservation Across the LA Basin**
Drs. Brad Shaffer, Joscha Beninde & Erin Toffelmier

A fundamental question in urban biodiversity is how plants and animals navigate our built environments. Why are some species ubiquitous in urban landscapes, while other, ecologically similar taxa are absent. Given that a key goal of urban ecology and conservation is to maintain high levels of biodiversity, understanding how organisms move through the built environment is critical for effective urban planning. In this talk, we review our progress assembling samples and sequencing the genomes of 22 species of plants, small vertebrates, insects, spiders, and slugs to identify pathways of low resistance, and major barriers to dispersal, across the LA Basin.

November 20: Regenerate

3-4 pm **Building Resilience Through Biodiversity: The City as a Solution**
Dr. Eric G. Strauss

Urban ecosystems are surprisingly rich environments for plant and animal biodiversity. Historically, cities were viewed as an imposition on the landscape or as a necessary concession for human occupation. However, there is extraordinary biological synergy and enhancement of ecosystem services that can be achieved with the appropriate management of the green infrastructure of urban landscapes. From hummingbirds and coyotes to green roofs and kelp forests, urban ecosystems are being transformed to accelerate human and community wellness.

Duskywing on Encelia. Photo by Carol Bornstein.

4-5 pm **A Panel Discussion: Taking Action to Protect and Restore Biodiversity in Los Angeles.**

Panel Members:

Dr. Eric Strauss

Carol Bornstein

Kat Superfisky

Dr. Isaac Brown

Garden by garden, park by park, we can take the steps to change the narrative of environmental degradation.