Building Bridges for Bats
*Infrastructure, Novelty and a Wildly Integrated Future*

By accident or by design, urban infrastructure is poised with significant habitat potential. Through an open examination of the Nature that we desire and the Nature that exists within the systems of our cities wild opportunities are exposed. This session will examine case studies, found and designed, that hold the potential for a transformed set of natural relationships in the 21st century– the role of infrastructure as adapted for interspecies success.

By evaluating our personal and social values through rigorous and creative research an expanded idea of habitat is clearly revealed and productively engineered.

Revealing the gaps, niches, perches and platforms species opportunistically occupy, presents an outline for an optimistic and opportunistically active system of ecological management and structural adaptation. Through the design of structural elements for a more diverse and higher functioning future nostalgic notions of Nature are challenged and a contemporary relationship to the natural world is revealed. From the Harbor Seals of Children’s Beach in La Jolla, to the bats of the Congress Ave Bridge in Austin, to the mollusk driven Oyster-ecture of New York City’s harbor, this session will review and present an optimistically active system of productively engineered biological and ecological management, found and designed. We will explore the collisions of infrastructure and the natural world and the latent opportunities that emerge.

- Discuss expanded opportunities for biological diversity in the urban fabric
- Discuss the structural considerations and adaptive techniques
- Discuss the opportunities and challenges of a more biologically diverse infrastructure
- Build a working knowledge of existing cases and proposed projects
Presentation Outline

Building Bridges for Bats: *infrastructure, novelty and a wildly integrated future*

1. **Building Bridges for Bats: Introduction**
   a. The challenges to biodiversity as presented by urban and suburbanization
      i. The scale of the problem
   b. By accident or by design
      i. Infrastructure of our cities is poised with significant habitat potential.
      ii. Hard and soft
   c. Urban Infrastructure and Novel Ecologies
      i. Infrastructural potential
      ii. Connectedness- the patches and corridors between it all
      iii. Challenges of use and movement
   d. Personal and social values
      i. Expanded definitions and ideas of habitat

2. **The Nature that we desire and the Nature that exists**
   a. The Yellowstone Aldo with a twist of Thoreau hangover
      i. Contextualizing Nature
      ii. The power of the image of nature- verbal and visual
   b. The Call of the wild
      i. Wildness and wilderness and the deep connections of both ideas
      ii. Authenticity in the 21st century
      iii. NIMBYism- the hate of corpulent possums and the parrots roosting out your window
   c. Feralness and resilience
      i. Feral cats of Rome
      ii. Darwin’s Garden

3. **Wildly Opportunistic: Found Cases** the resilience and opportunism of the natural world is very clear and can be seen in many places; not as anomalies but as very real examples of an optimistic and wildly integrated future
   a. Collisions of infrastructure and the natural world
      i. Congress Ave bridge, Austin, TX
      ii. Children’s Beach in La Jolla, CA
      iii. Sutro Sam and the Sutro Baths, San Francisco, CA
      iv. WPA swimming pool, Balmorhea TX,
      v. Carp in Effluent, Los Angeles, CA
      vi. Fritz Haeg: Animal Estates

4. **Connecting to the Wilds: CASE STUDY— Safari 7**
   a. Context and Site
   b. People and Place
      i. The Nature of the city and the nature of the city
   c. Urban Ecology and Habitat Opportunity
      i. Connections of Infrastructure
      ii. Adaptable for interspecies success
   d. Productively engineered– unintentional success
      i. Structural support
ii. Hard and soft systems
iii. Found Habitat
   1. Urban adaptations in idea and process
e. Recognizing Opportunity and Scaling Habitat Potential
   i. People and Place
   ii. Biodiversity and Adaptability

5. Building It: CASE STUDY– Mollusks and Infrastructure
   a. Context and Site
      i. Challenges now and on the horizon
      ii. Water Quality
      iii. Sea level rise / Climate Change
   b. Harbor and Infrastructure
      i. Scale and Opportunity
      ii. Structural Potential
   c. Biotic process and Hydrologic function
      i. Systems of management and control– active and natural
   d. Mollusks as infrastructure
      i. Systems
      ii. Deployment
      iii. Testing
   e. Interspecies Support and opportunity
      i. Biodiversity and
      ii. Food web support
   f. Cost and efficiency
      i. Measurements and performance
      ii. Resilience
      iii. Inputs + Outputs
   g. Details and structural strategies
      i. Physical systems
      ii. Technology
      iii. Innovation
   h. Testing and results
      i. Limitations
      ii. Conflicts
      iii. Opportunities
      iv. Next steps

6. The wildly integrated future: conclusions, lessons and opportunities
   a. Here, There, Everywhere
      i. Opportunities at every intersection
   b. Designing for opportunity
   c. The wild future
Andrew Wilcox is an Assistant Professor of Landscape Architecture at California State Polytechnic University, Pomona. At Cal Poly Pomona he is the undergraduate program coordinator and teaches design studios at all levels with an emphasis on interdisciplinary practice and urbanism. Andy has current interest in the found conditions of wilderness within the vast infrastructure of Los Angeles and is working on a project about fly-fishing the LA River. In addition to teaching and creative work, Andrew is active in the ASLA most recently serving on the 2012 student awards jury.

Andy is a licensed Landscape Architect in California. He holds a BSLA from Cal Poly Pomona and a MLA from the University of Southern California.

Kate Orff (ASLA, CLARB) is an Assistant Professor at the Columbia University Graduate School of Architecture, Planning and Preservation, where she teaches graduate design studios and interdisciplinary seminars focused on sustainable development, biodiversity, and community-based change. Her work has been cited in numerous publications exhibited widely. Kate is a registered landscape architect and the founding principal of SCAPE, a landscape architecture and urban design office based in Manhattan. Through her creative leadership of the firm, she explores the cultural and physical complexity of urban landscapes and their unique textures, ecologies, programs and publics. Kate has an undergraduate degree from the University of Virginia with Distinction and earned a Master in Landscape Architecture from the Graduate School of Design at Harvard.

Distinction Named United States Artist Fellow, 2012; Inducted into the National Academy, 2013


Education Session REFERENCES:

Articles and Essays:


Books:

• Emma Marris. “Rambunctious Garden; Saving Nature in a Post-Wild World.” Bloomsbury USA; Reprint edition, 2013

Websites:

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http://www.nextnature.net

• Animal Architecture
http://www.animalarchitecture.org

• Bat Conservation International
http://batcon.org

• Urban landscape Lab
http://urbanlandscapelab.org

• Safari 7
http://safari7.org

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