ARCH 546, 2 units, Fall 2023
Topics in Landscape Architecture Practice

**TEST PLOT**
Establishing native ecologies and their stewardship at the Wrigley Marine Science Center on Catalina Island

View of the Wrigley Marine Science Center near Two Harbors on Catalina Island

Location: WAH B1 & at the Wrigley Marine Science Center, Catalina Island
Standard Class Time: Tuesdays 10-11:50PM
Recommended Catalina Trip Times: **Friday, 9/9 ~8-2PM & Tuesday, 11/7, ~8-5PM**
These trips could possibly be conducted independently of the class.
An optional overnight option may be offered: 11/6-11/7
Instructor: Alexander Robinson, Associate Professor, USC School of Architecture, MLA+U
Contact Info: alexander.robinson@usc.edu
Cell (for field trips): 747.234.8222
Keywords: Community-based land care, landscape maintenance, tended wilderness, models of reciprocity, disturbance ecology, non-equilibrium theory of ecosystem stability, ruderal aesthetics, novel landscapes, regenerative landscapes, projective ecologies, design activism, subversive stewardship.* (see below for definitions)
Office Hours: Tuesdays 4-5PM PST and by appointment

*Not including travel time from USC campus to San Pedro boat dock*
“Our California landscapes [...] both natural and cultural, bear the indelible imprint of a medley of management techniques.”

—M. Kat Anderson, from Tending the Wild: Native American Knowledge and the Management of California’s Natural Resources

“From the modern ecological perspective, the apparent stability of current plant associations is an illusion; the only certainty is that things will be substantially different within fifty years.”


Course Description

This hands-on elective is organized around the design and installation of a Test Plot* on Catalina Island in the USC Wrigley Marine Science Center’s “Green Ravine” on Catalina Island, near Two Harbors. Students will begin by researching the site’s environmental conditions and regulations, community and ecology, its history and contemporary status, as well as look at visions for the campus. Students will undertake a process of research, interviews, site studies and site preparation, with a reconnaissance site visit. This will culminate in planting in late Fall. To do so the class will design a restoration strategy, propose a native planting palette, and implement it. It will also develop and implement a communication and stewardship strategy and propose methods of monitoring the planting from various disciplinary standpoints. The Test Plot will be monitored the following year by two Test Plot Interns and maintained by a model established in the class. The class seeks to be multidisciplinary and welcomes undergraduate and graduate students in and out of the School of Architecture. Through its hands-on applied approach, the class combines multiple subjects, including the project site itself, practices of ecological restoration and monitoring, stewardship and labor, and planning and executing community-engaged sustainable projects.

Last year the class helped establish a successful 5000 sf native planting on the long-neglected Elephant Hill Open Space in Northeast Los Angeles in collaboration with the local community. In the previous two years, the class established similar Test Plots at Rio de Los Angeles State Park and Baldwin Hills Scenic Overlook.

*What is a Test Plot?

A Test Plot is a place for restoration, learning and community building. It is an area, approximately 5,000sf, that is often overrun with invasives and in need of care and attention. We establish new successional species, deplete the weed seed bank, build back soil health, and test and monitor what works long term. We build partnerships between scientists, designers, students, residents, and land managers creating a model for hands-on experiential learning as well as capacity building and stewardship.

https://testplot.info/

What is the Test Plot network?

Test Plot is an actively expanding network located in urban parks that attract an incredibly diverse user group. The sites range in size, but are often composed of multiple smaller plots specific to the aspect, slope, soils, and microclimate of each location. There are currently over a half dozen Test Plots in Southern California, most of which are in public parks or land. There are two test plots on USC’s main campus, planted by USC Landscape Architecture + Urbanism graduate students in collaboration with USC Facilities Planning and Management (FPM), among others, around the USC School of Architecture. With each site, we have
developed an agreement with the local agency to support the very real, underfunded demands of public space maintenance. We do this by building upon existing community stewards, recruiting new people to the mix, and training them through classes, workshops, engaging botanical programs, and weekend plant events. The model is hyper-local and deliberately agile to meet the site and community where it is at. Test Plot, in sum, is a place-based model of ecological and social infrastructure.

**Course Themes**

The course is intended to engage students in a design/build project over the course of one semester. Through this process, the course will introduce students to themes such as theories of ecological restoration (or the illusion of restoration), design as a practice through management/maintenance practices, as well as community-based stewardship and other models based in reciprocity.

**Partnerships**

We will be working with:

- Jen Toy, Assistant Adjunct Professor, and de facto director of the Test Plot organization. jtoy@usc.edu
- USC Wrigley Marine Science Center
  Lauren Czarnecki Oudin, who is organizing the “green ravine” project, would be the primary liaison and collaborator with WMC. lauren.czarnecki@usc.edu
- Catalina Island Conservancy
  The Conservancy is a non-profit established in 1972 to protect and restore Catalina Island for future generations to experience and enjoy.
- Two “Test Plot” interns (an ongoing paid position) from the Master of Landscape Architecture + Urbanism Program would help coordinate monitoring and maintenance following the end of the semester.
- Additional USC Faculty would advise on monitoring and other aspects.

**Course Structure**

We will meet both in class and in the field, **including at least two trips to the USC Wrigley Marine Science Center, on Catalina Island**. See weekly schedule. To participate in the Catalina Island visits and labor students must have some flexibility to visit the island on a weekday or weekend and for some physical exertion and mobility (e.g., walking up a hillside; navigating unpaved terrain; digging and plant handling). Complimentary boat trips on the USC Miss Christie are M-Thurs from 8-5PM and on Friday 8-2pm, not including transportation to and from San Pedro. Trips will most likely be scheduled on Friday to reduce overall time commitment, though independent visit make up days on other days are possible. Accommodations for weekend day visits are possible as well.

Fieldwork will include a process of site inventory, analysis, preparation, culminating in the installation of the Test Plot in November on Catalina Island. Students should be prepared to hike through grasses, pull weeds and perform other duties related to planting and site preparation in potentially hot weather. Classwork will include reading discussions, conversations with invited guests, and introduction to topics such as how to conduct interviews, measure landscape, design basics, and **fieldwork**.

**Wrigley Green Ravine Test Plot Proposal**
We propose to work with Wrigley staff and this class to initiate a Test Plot at the Wrigley Marine Science Center (WMSC) on Catalina Island in the “Green Ravine” that integrates native planting and stewardship with achieving water quality goals and conducting sustainable practices and science. We would develop an experiment design, planting design, a monitoring strategy, maintenance, and stewardship strategy and then conduct a planting in the late Fall with students (you) and volunteers. This Test Plot would also focus on integrating monitoring and environmental features, as developed by the class and class partners.

Goals and Outcomes

- Test the suitability and performance of various species of native plants for the Green Ravine, in multiple terms, including availability, plant establishment, growth, and habitat, habitat creation, erosion control, stormwater treatment, soil biome, etc.
- Test plant viability and establishment in various hydraulic conditions, including within or adjacent to stormwater best management practices
- Explore and establish ways of monitoring plant success and the green ravine in general including both qualitative and quantitative data
- Help introduce USC and Wrigley community to drought tolerant plants and spur a native restoration plan for the Green Ravine by demonstrating viable strategies and a “proof of concept”
- Explore and test a reasonable stewardship model for Wrigley and FPM for native plants. Professor Robinson is currently working with FPM on maintenance practices for the existing Test Plots on campus.

Learning Objectives and Outcomes

Assigned research, discussions, interviews, field trips and field work in this course are designed to support the following goals:

1. Research: Demonstrate ability to gather relevant information from online resources and conduct primary research through interviews and fieldwork. Raise clear, precise critical questions, consider diverse points of view, and work collaboratively with classmates to form cogent lines of inquiry.

2. Analysis: Demonstrate ability to assess, edit, and comparatively evaluate relevant information in order to support your proposal.

1. Design Innovation:
   A. Design effective planting, soil, and work plans that address existing adjacencies, biodiversity goals, and practicalities such as soil conditions, plant availability and labor.
   B. Demonstrate ability to create a management framework that is adaptive and address future paradigms yet are understandable and can be used by non-designers.

2. Labor:
   A. Participate in build component through the physical work of site preparation as well as the planting and installation of the Test Plot.
   B. Develop effective project management methods to design and install a project within one semester by organizing items like plant procurement, material sourcing, labor management, volunteer organization, and community consultation.
Schedule

Find Schedule here:
https://docs.google.com/spreadsheets/d/1wfTf3mFA0CGLh5JUv2ZC8jPGkAAGaoq3nV4mA6tYOlE/edit?usp=sharing

Currently, the schedule proposes to visit Catalina Island on Friday, 9.9 (shorter trip for site visit) and Tuesday, 11.7 (longer trip for install day). If students are interested in spending a night at Catalina Island, we might be able to arrange a Monday night accommodation on 11.6, before the install day (with the assumption you would help prep the site). This would be encouraged and is highly recommended.

Both trips are critical to the class, particularly the second one. However, if necessary, either one could be conducted independently.

Schedule subject to change based on boat availability and student needs. These trip times can be negotiated. The faculty will help students secure excused absences from their other classes to the best of their ability.

Travel to Catalina Island & Contact Hours

Travel to Catalina Island from San Pedro Harbor to the Wrigley Marine Science Center by Two Harbors is complementary via the USC Miss Christie boat, which conducts round trips daily during the week. Weekend trips are possibly via Catalina Island’s commercial operator.

We will attempt to conduct our first trip on Friday, as they are the shortest, ~8-12:30PM, not including transport to San Pedro. The boat trip takes ~90 minutes. The Friday class time on the island will be from 9:30-12:30 (including lunch). Trips Monday-Thursday are from ~8-3:30PM. The Tuesday (install day) trip will be from 9:30-3:30PM (including lunch). Driving from main USC Campus to the SCMI dock generally takes 30 minutes to an hour. There is a cafeteria on the island and lunch will likely be provided free of charge.

More information about the boat and transportation here:
https://dornsife-wrigley.usc.edu/research/wmsc/visit-us/boating-transportation/boat-passenger-information/
https://dornsife-wrigley.usc.edu/research/wmsc/visit-us/

No Tuesday class will be held on the week we visit Catalina Island on a Friday and furthermore, the Tuesday class following the field trips will be canceled to maintain reasonable contact hours.

Field Materials + Site Conditions

The studio will provide you with the necessary equipment to do the fieldwork. These items include gloves, hoses, and tools. Please ensure you are protected by wearing closed toe sturdy shoes (preferably boots), long pants (there are prickly grasses), a sun hat, sunscreen, sunglasses and bring plenty of cold water and snacks for yourself.

Description and Assessment of Assignments

Requirements for each of your assignments will be handed out in writing in advance. Full completion of assignments is expected and required for success in this course. Your assignments will be evaluated based on the following criteria:

Research: You will be evaluated based on the ability to conduct proper, cited research.

Process: You will be evaluated on the iterative process of making. You are expected to take risks and engage in design exploration. Your project must develop over time and respond to critique.
Intent: You will be evaluated based on the ability to articulate your rationale in all aspects of your work including the following: verbal, visual, digital, technical, and construction.

Craft: You will be evaluated on the quality of your drawings, verbal presentation, and fieldwork.

Collaboration: You will be evaluated on your ability to work together with your peers, to take ownership over your role and responsibilities such that the work is evenly distributed, speak up when there is an issue and find an equitable resolution when needed.

Participation: Weekly participation in field work and class discussions is required for success in this course.

Grading Breakdown

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Class participation and preparation for weekly discussions / Interviews</td>
<td>10%</td>
</tr>
<tr>
<td>01: Photomontage</td>
<td>20%</td>
</tr>
<tr>
<td>02: Design: drawing the site</td>
<td>20%</td>
</tr>
<tr>
<td>03: Reflections: stewardship recommendations (possible PANDO PRESENTATION)</td>
<td>20%</td>
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<tr>
<td>04: Fieldwork (participation in site visits)</td>
<td>30%</td>
</tr>
</tbody>
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Assignment Submission

Please use MIRO to collaborate and share ideas with your classmates when working collaboratively. Materials to be reviewed for share outs should be uploaded to MIRO prior to the start of class. For final submissions, upload high resolution files in the appropriate format (jpeg, pdf, etc.), working files (InDesign, Illustrator, Photoshop, etc), to the Google Drive folder for the course.

Grading Scale

Course final grades will be determined using the following scale.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>A</td>
<td>95-100 Sustained level of superior performance</td>
</tr>
<tr>
<td>A-</td>
<td>90-94</td>
</tr>
<tr>
<td>B+</td>
<td>87-89 Consistent level of performance that is above average</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C+</td>
<td>77-79 Performance that is average with minimum requirements achieved</td>
</tr>
<tr>
<td>C</td>
<td>73-79</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>D+</td>
<td>67-69 Below average performance</td>
</tr>
<tr>
<td>D</td>
<td>63-66</td>
</tr>
<tr>
<td>D-</td>
<td>60-62</td>
</tr>
<tr>
<td>F</td>
<td>59 and below Accomplishment of the course requirements is not sufficient to receive a passing grade</td>
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Late Work
Late work will be penalized by a 10% deduction in the assignment grade every 24 hours late unless due to an emergency situation excused by the instructor. Email the instructor as soon as possible to discuss alternate arrangements due to an emergency.

Course Readings and Supplementary Materials

I’ve selected several important and provocative readings to set the foundation for your work. I have worked to edit these down and, in many cases, have chosen selections to target your efforts. There are many more interesting readings related to the course which we do not have time for, so I have included references in the resources document if you wish to explore an issue further. Readings and relevant links can be accessed via the Google Drive folder for this course.

Commentary on Course Terms

Community-based land care: grass roots efforts by residents to care for underfunded public lands, sometimes together with maintenance professionals and sometimes on their own.

Landscape maintenance: often understood and practiced as a series of mechanistic and rote actions, performed to maintain order and preserve the status quo.

Indigenous resource management: in contrast to the construct of unspoiled, raw, uninhabited, nature, indigenous communities have maintained, enhanced and in part created fertility across California for thousands of years.

Models of reciprocity: an indigenous idea that ecological restoration includes not just the restoration of plant relationships, but also the restoration of a relationship between the land and people.

Disturbance ecology: events and regimes that can be both natural (fire) and man-made (flooding, extreme heat). Due to climate change these events are increasing in intensity, frequency, and type. Designers and scientists must actively propose management policies that incorporate knowledge of disturbance ecology.

Non-equilibrium theory of ecosystem stability: In contrast to pre WWII notions of climax steady states, this theory suggests that ecosystems “are open systems with no steady states in which trends cannot be exactly predicted.” Related to the theory of patch dynamics, which views natural disturbances as an integral part of a variable and unpredictable succession process.

Globalization of the environment: an argument against traditional restoration ecology. The idea is that much like the globalization of our economy, we cannot reverse the globalization of our environment by only planting native ecologies.

Ruderal aesthetics: Ruderal species are those that are disturbance-adapted and are omnipresent in our urban environments from the green carpets over vacant lots to the spaces in between pavement. Rather than celebrated for their adaptability and resilience they are vilified and labeled as invasive, aggressive and non-native.

Novel landscapes: (alt: Novel ecologies) Landscapes altered by humans but not actively managed by humans. While celebrated for their resilience, Jacobs presents a critique that such a framing “overlooks how these landscapes exist as capitalist ruins among economic neglect and abandonment.” Instead she proposes

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the term “relational landscapes,” a framework that calls attention to the “uneven ways that human-dominated action has impacted historically overlooked landscapes.” In this way she “hopes we do not reproduce the same economic and political structures that initially produced the conditions for novel landscapes to emerge.”

Regenerative landscapes: emphasize soil health and carbon capture. Principles include: biodiversity, compost, no bare soil, and no soil disturbance.

Projective ecologies: the title of a book by Chris Reed and Nina-Marie Lister that synthesizes approaches that combine ecological and design thinking. For me, the term suggests that we need to adopt a design and management approach that assumes ecological systems are interconnected, self-organizing, relatively unpredictable, and constantly changing.

Design activism: An effort to expand the ways in which we practice landscape architecture that emphasizes social and environmental justice. In this course, I argue that labor needs and maintenance strategies need to be part of the design brief. I also argue that design schools need to provide more opportunities for hands-on learning.

Subversive stewardship: Geffel proposes subversive stewardship as an alternative to the typical conservation model, which focuses on exemplary natural or cultural landscapes. Instead subversive stewardship models focus on the care of ruderal, disturbed, or novel landscapes.

Alternative practice models: A model of practice that challenges the client service project delivery model centered on the construction contract that landscape architecture has adopted from the AEC community. Alternative practices (or “unruly” practices) may focus on community co-design, arts, design/build, etc., do not operate in a linear concept through construction model, and are often financed by multiple sources rather than a single client.

Classroom norms

We all need to actively work towards creating a supportive learning environment. The Center for Excellence in Teaching has put together a useful collection of classroom norms. Most of this is probably intuitive, but please do take a moment to read and reflect.

Communication

Students are encouraged to contact the instructor through Slack messaging (for short questions) or by USC email for longer questions. The instructor will reply to emails within 48 hours, 72 hours over a weekend, and the workday following a holiday.

To promote independence and critical thinking, students are encouraged to work through the following process for obtaining answers to course-related questions before contacting the instructor. First, consult the course syllabus. If you do not find the answer you need, next consult a classmate. Finally, after you have exhausted these methods, email the instructor. In your email, please indicate the steps you have gone through to seek the answer. Your question will be answered within 24 hours between 9am-5pm, but response may be delayed on the weekend or holidays. Please use USC email for all correspondence with the CA and instructor.

Communication Tools

USC Blackboard will be the official source for major announcements, the syllabus, assignment sheets, and readings.

[Blackboard help for students](#)

Miro will be our digital pin up space. You will be invited to a board, and this will make you a member. TIP: the standalone Miro application may be faster than the web application.

Slack is an important communication tool. You should regularly check the assigned class channel. Official announcements, assignment clarifications, scheduling changes, relevant links, and more will be communicated via Slack. Some assignments will employ Slack specifically. You may directly message the instructor on Slack. The platform will also be used as a semi-formal group chat space. You will be automatically added to the Slack channel dedicated to your class.

Course evaluation

Course evaluation occurs at the mid and end of the semester university wide. Students are encouraged to provide honest and constructive feedback.

Software, Tools, and Resources

Students will be required to use the Adobe Creative Suite (Photoshop, Illustrator, and InDesign) and optionally, the latest version of Rhino (Windows recommended)

[Software available to USC Campus](#)

Software Tutorials (USC provided): [https://www.linkedin.com/learning/](https://www.linkedin.com/learning/)

Bibliography

See assignment sheets.

Course Expenses

The instructor estimates that the cost for materials should be minimal.

Additional costs also include transportation costs to San Pedro Harbor for the trips to Catalina. Students can carpool with the instructor or other students.

Statement on Academic Conduct and Support Systems

Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” [policy.usc.edu/scampus-part-b](https://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, [policy.usc.edu/scientific-misconduct](https://policy.usc.edu/scientific-misconduct).
Support Systems

**Counseling and Mental Health** - (213) 740-9355 – 24/7 on call
studenthealth.usc.edu/counseling
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

**National Suicide Prevention Lifeline** - 1 (800) 273-8255 – 24/7 on call suicidepreventionlifeline.org
Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

**Relationship and Sexual Violence Prevention Services (RSVP)** - (213) 740-9355(WELL), press “0” after hours – 24/7 on call studenthealth.usc.edu/sexual-assault
Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

**Office of Equity and Diversity (OED)** - (213) 740-5086 | Title IX – (213) 821-8298 equity.usc.edu, titleix.usc.edu
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

**Reporting Incidents of Bias or Harassment** - (213) 740-5086 or (213) 821-8298 usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

**The Office of Disability Services and Programs** - (213) 740-0776 dsp.usc.edu
Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

**USC Campus Support and Intervention** - (213) 821-4710 campussupport.usc.edu
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

**Diversity at USC** - (213) 740-2101 diversity.usc.edu
Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

**USC Emergency** - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call dps.usc.edu, emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

**USC Department of Public Safety** - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call dps.usc.edu
Non-emergency assistance or information.