SAR Native Plant Nursery

2022 Final Presentation



Our Team



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Why are native plants important?



Biodiversity

Supports other native organisms, like pollinators



Resilience

Supports habitats that adapt to changing conditions



Water

Well-suited to climatic conditions and require minimal irrigation



Soil

Longer roots retain water and prevent erosion







Purpose

Our goal is to increase biodiversity by laying a foundation for a native plant nursery on campus.



Methods

Plant growth trial and interview methodology

Plant Trial

The team monitored 4 species of Native Plants through spring quarter.

Methods:

- Acquired the following local seeds from The Theodore Payne Foundation: Salvia leucophylla - Purple Sage, Salvia mellifera - Black Sage, Asclepias fascicularis -Narrowleaf Milkweed, California Poppy
- Scheduled daily check in's
- Gathered data on soil conditions, daily temperature, weather conditions.
- Measured plant growth in (cm)



Interviews

The purpose of our informal interviews was to gain a better scope on the best practices in regards to the implementation of the native nursery

Methods

- Presented similar questions regarding seeds vs cuttings
- Discussed best practices for care of native plants
- Discussed how to incorporate EDI and programing in the native nursery space



Results

Plant growth trial data and interview overview

Trial Results

Date	Time	Dupli cate	CA Poppy Height (cm)	Narrowleaf Milkweed Height (cm)	Purple Sage Height (cm)	Black Sage Height (cm)	Temperature	Weather	Soil Conditions	Other Observations
4/11	1:37 PM	1	2.54 cm cell 4	3.81 cm cell 2	3.81 Cell 6	3.81 cm Cell 5	64 degrees F	Partially cloudy	Moist	N/A
		2	7.62 cm cell 1	2.54 cm cell 3	3.81 cell 6	2.54 cm Cell 2				
		3	3.81 cm cell 3	2 cm Cell 5	1.27 cm cell 2	2 Cell 3				
		4		Null Cell 6		3 cm cell 6				
4/13	2:08 PM		Cell 1: 5.5cm	Cell 1: 1.5cm	Cell 1:0	Cell 1: 0	82 degrees F	Sunny	Moist	Did not water
		-	Cell 2: 0	Cell 2: 2.5cm	Cell 2: 1.5cm	Cell 2: 1.75cm				
			Cell 3: 0	Cell 3: 2cm	Cell 3: 0	Cell 3: 2cm				
			Cell 4: 5.0cm	Cell 4: 0	Cell 4: 0	Cell 4: 0.5cm				
				Cell 5: 0.5cm	Cell 5: 3.0cm	Cell 5: 2.5cm				
					Cell 6: 3.0cm	Cell 6: 1.75cm				
4/15	12-12:30 PM		Cell 1: 3 cm	Cell 1: 1.5 cm	Cell 1: 1cm	Cell 1: 0	~64 degrees F	Sunny	Moist	Did not water
			Cell 2: 0	Cell 2: 3 cm	Cell 2: 2.5 cm	Cell 2: 2 cm	g			
			Cell 3: 0	Cell 3: 3 cm	Cell 3: 0	Cell 3: 2 cm				
			Cell 4: 6.1 cm	Cell 4: 0	Cell 4: 0	Cell 4: 0.8 cm				
			Cell 5: 0	Cell 5: 0	Cell 5: 1.5 cm	Cell 5: 2.5 cm				
			Cell 6: 0	Cell 6: 0	Cell 6: 3.3 cm	Cell 6: 1.5 cm				
04/18	12:34 PM		Cell 1- 4cm	Cell 1- 1 1/2 cm	Cell 1 - 1cm	Null	68 degrees F	Mostly sunny	Moist	N/a
			Cell 4 -8cm	Cell 2- 3cm	Cell 2- 2cm	2 cm				
			Cell 3- no more	Cell 3- 2 1/2 cm	Cell 3 null	2.5 cm				
				Cell4- null	Cell 4- 1/2 cm	1 cm				
				Cell 5- 1/2 cm	Cell 5- 1.75 cm	2.5 cm				

Observation Spreadsheet

Trial Results



Trial Photos



April 8th, 2022



April 22nd, 2022



May 13th, 2022

Interview Results



Seeds vs. Cuttings

Determining suitability for the trial & actual nursery.



Plant selection

Overlapping species suggestions that we used to run growth trials.



Programming

Community planning that is equitable, diverse and inclusive.



Best practices

Sterility, irrigation and other issues to be mindful of.

Deliverable

Final suggestions for the nursery

Deliverable Outline

Location Comparison of two potential locations.

Maintenance

Suggestions for nursery care.



Potential Locations



Near Chancellor's Residence



Facilities Yard

- Currently houses potted plants, which would make the transition easier.
- Developed space could be used differently.
- Limited student access.





Near Chancellor's Residence

- Otherwise unused space.
- Undeveloped land allows for catered designs but has administrative hoops.
- Private, but easier access.

Nursery Setup

Long Beach







Trinity County

- The ideal setup includes a canopied area with tables and pots.
- At the Chancellor's Residence, the setup would be terraced.
- At both locations, a shed for seed storage and preparation is suggested.

Maintenance

- Hybrid effort between Facilities Management and student volunteers/organizations
- Appoint a faculty member and/or student representative to be responsible for taking care of the plants
- Consistent schedule for plant care
- Rotation cycles for planting



Next Phase

Recommendations for future Native Plant Nursery Teams

Main Goals

Goal 1: Growth Trials

- Seeds vs cuttings
- Standardization of future growth trials
- Seed purchasing and collection

Goal 2: Indigenous Connections

 Forming and maintaining connections and partnerships with indigenous plant experts

Goal 3: Target Audience + Usage

- How we use the native plants and where
- Developing a trade system in the local native plant community?

Project's Significance

The native plant nursery...

- Will mobilize the UCLA student-body, faculty and staff, and surrounding LA community
- Will **promote** ecological and social sustainability in UCLA's green spaces
- Will enhance habitat for endemic wildlife and foster biodiversity
- Will offer opportunities for outdoor **hands-on** learning
- Will **encourage** community growth and engagement



Thank you stakeholders, SAR directors, Facilities Management staff, and interviewees!

Any questions?