

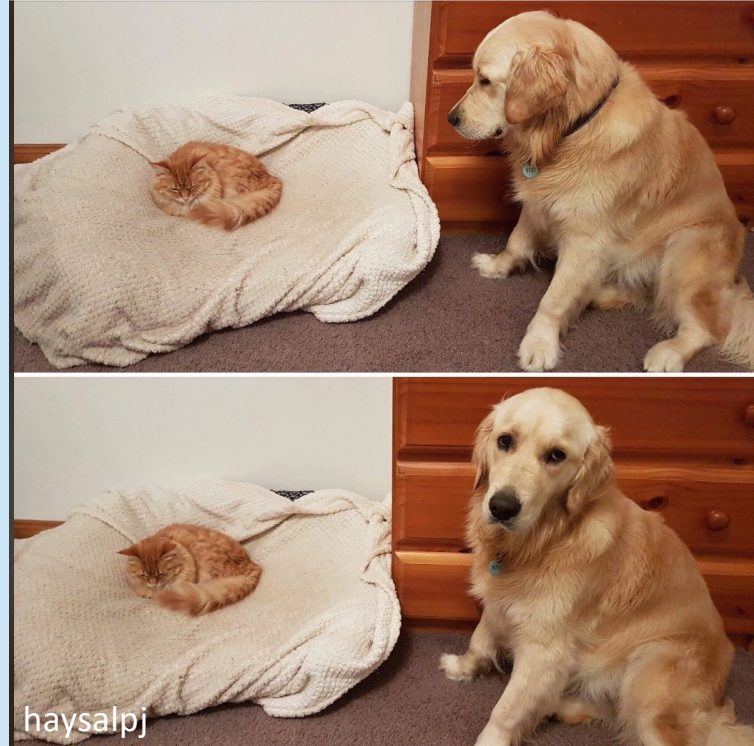
Sources: National Invasive Species Council; U.S. Department of Agriculture; National Park Service; U.S. Fish and Wildlife Service; Rodgers, L. South Florida Water Management District; Department of Primary Industries, State of Victoria, Australia; and GAO. | GAO-16-49

Evaluating intraspecific variation to restore climate-resilient populations

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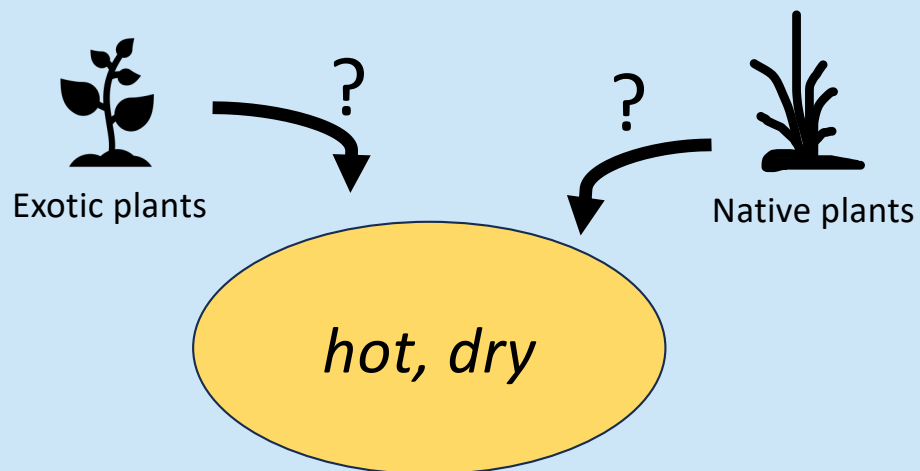
Prevention

- Competitive exclusion
 - one species fills a niche → prevents another species from invading that niche

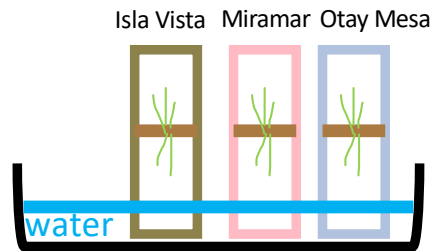


Prevention

- Competitive exclusion
 - one species fills a niche → prevents another species from invading that niche



Juncus bufonius
toad rush

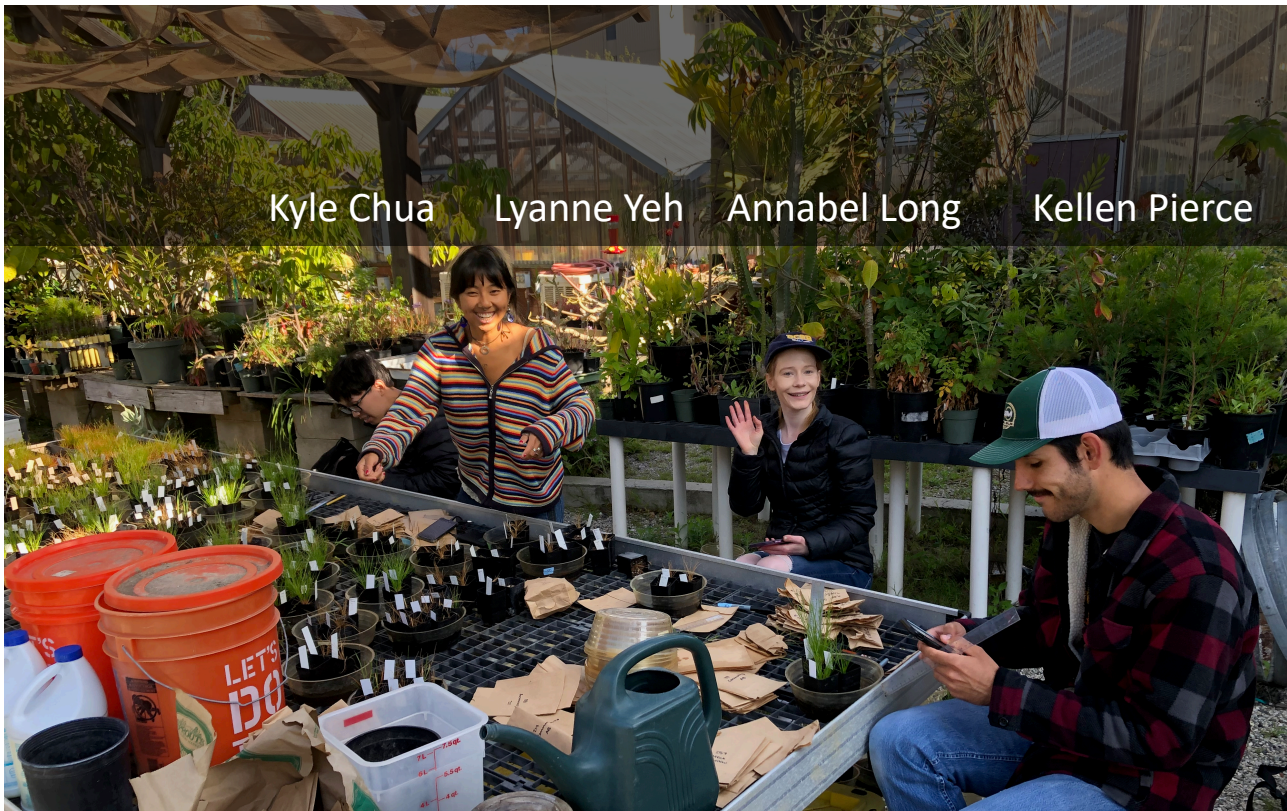


x28 End-season drought
+
x28 Mid-season drought

Metrics:

- Weekly height, phenology
- Aboveground biomass & fruits @ senescence

Kyle Chua Lyanne Yeh Annabel Long Kellen Pierce



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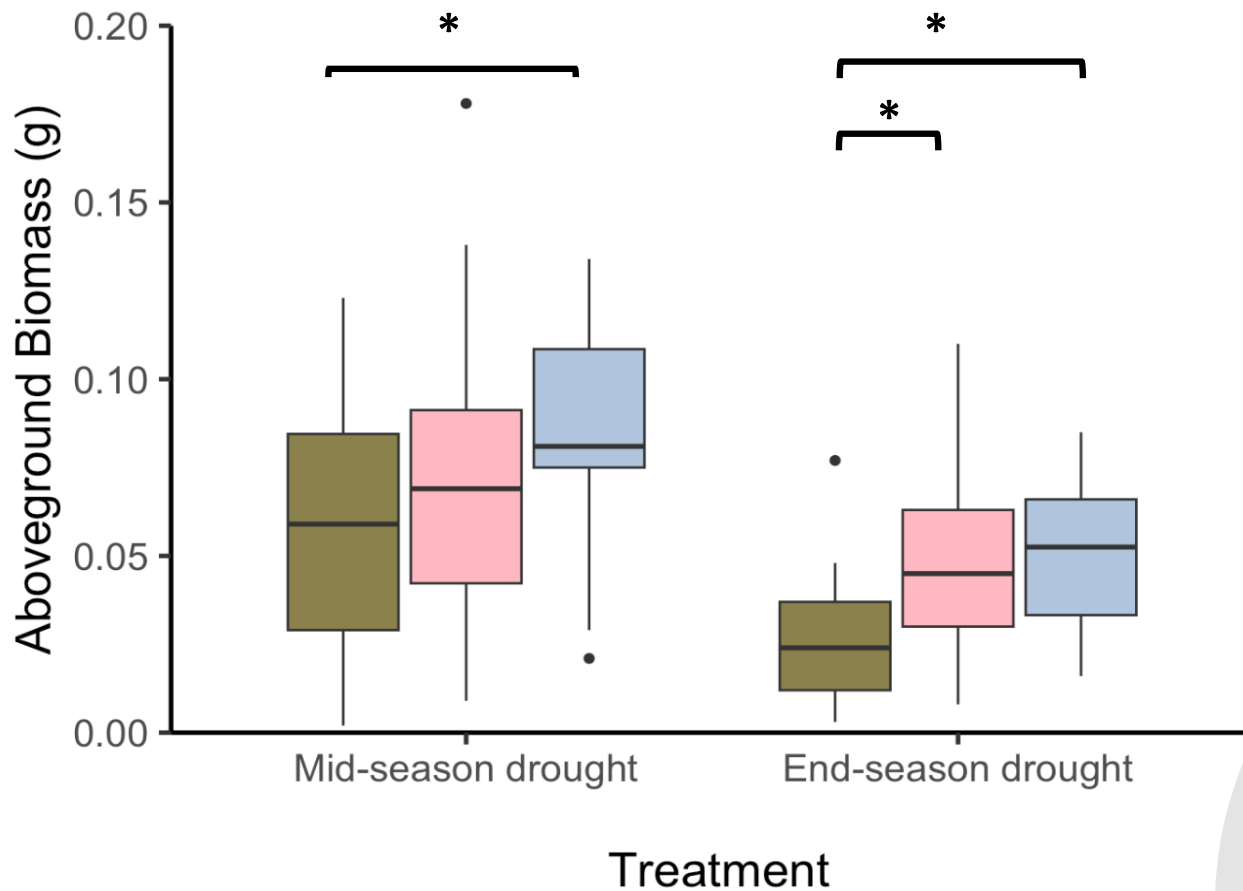
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CHEADLE CENTER FOR BIODIVERSITY
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UC SANTA BARBARA
Undergraduate Research
& Creative Activities

UCSB
EEMB

Research conducted on Chumash land

Faiaz Hasan	Albert Li
Abby Messe	Ricky Hettish
Ryan Langlo	Cameron Hannah-Bick
Nick Saglimbeni	& EEMB Greenhouse interns!



Populations exhibited intraspecific variation

Population

- Isla Vista
- Miramar
- Otay Mesa

Using populations with adaptations to future climate conditions may maximize establishment