

# Hand-removal method impacts on labor effort, Sahara mustard and native species: To bag or not to bag?

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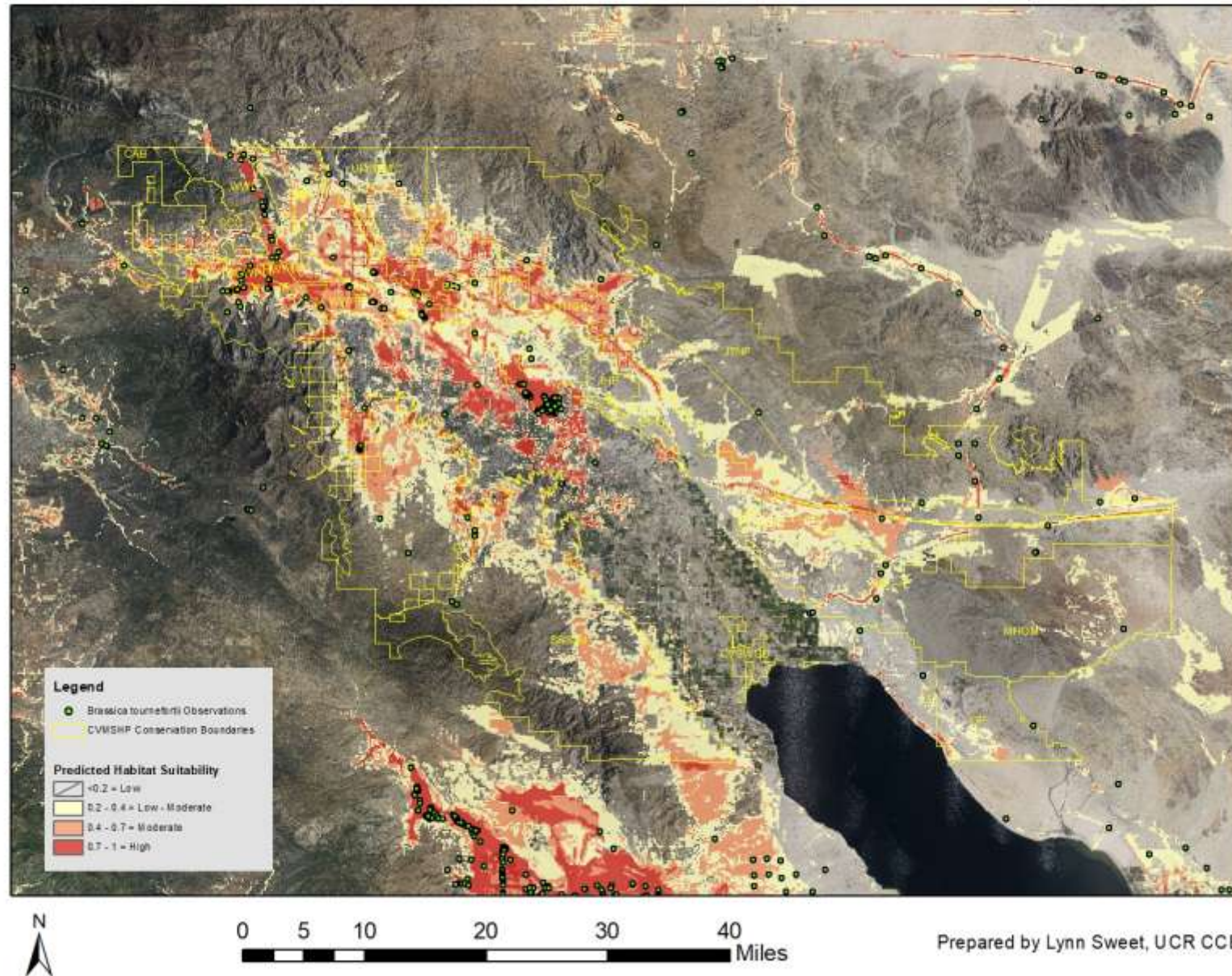
<sup>2</sup>Friends of the Desert Mountains

Sahara Mustard  
*Brassica tournefortii*





# Maxent model for *Brassica tournefortii* in the Coachella Valley





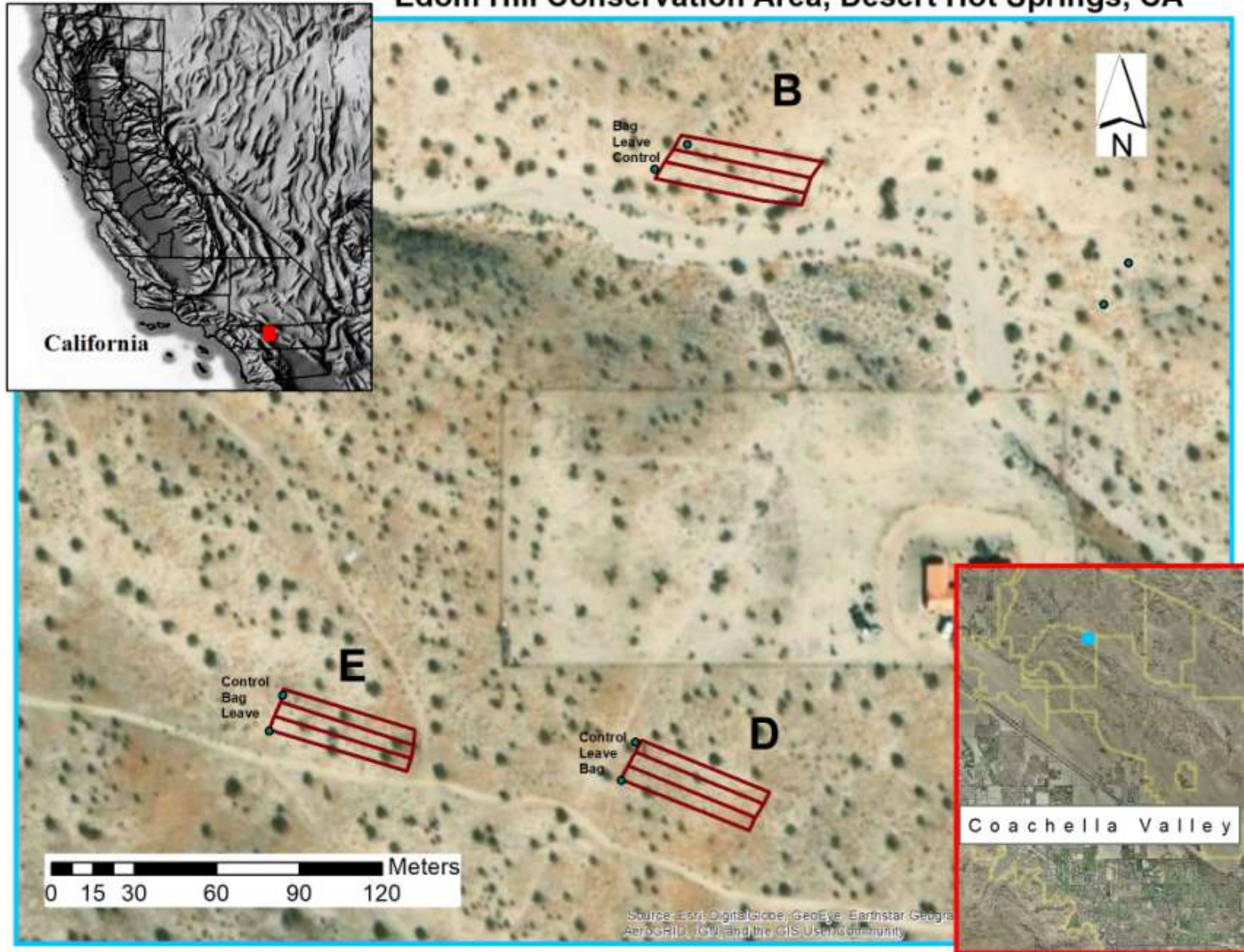








## Edom Hill Conservation Area, Desert Hot Springs, CA





# 2016 Edom Hill Plot Installation and Treatment

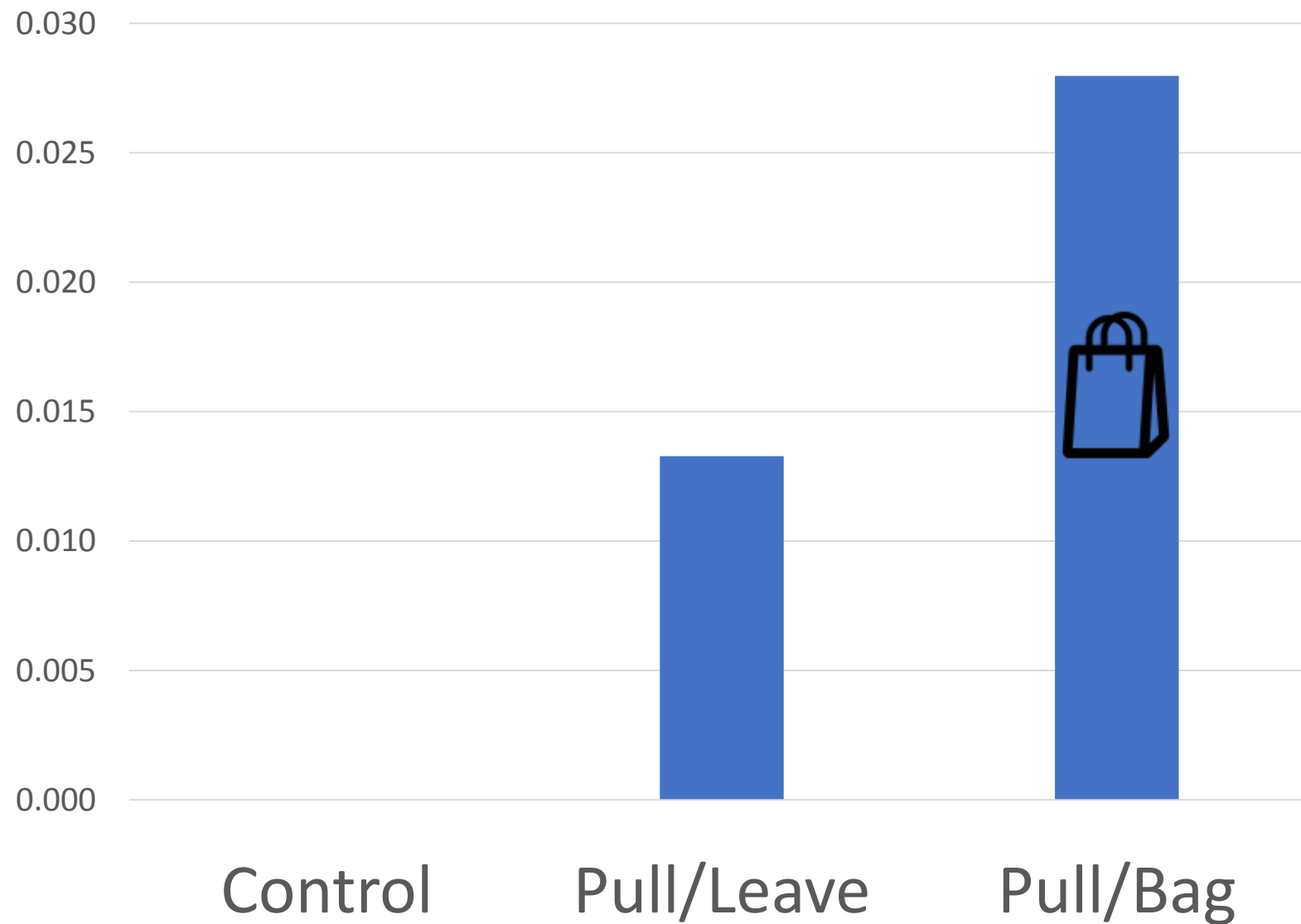
- 1) Pull and bag*
- 2) Pull and leave*
- 3) Control*

## 2017 Measurements

- *Cover and ID of all plant species*

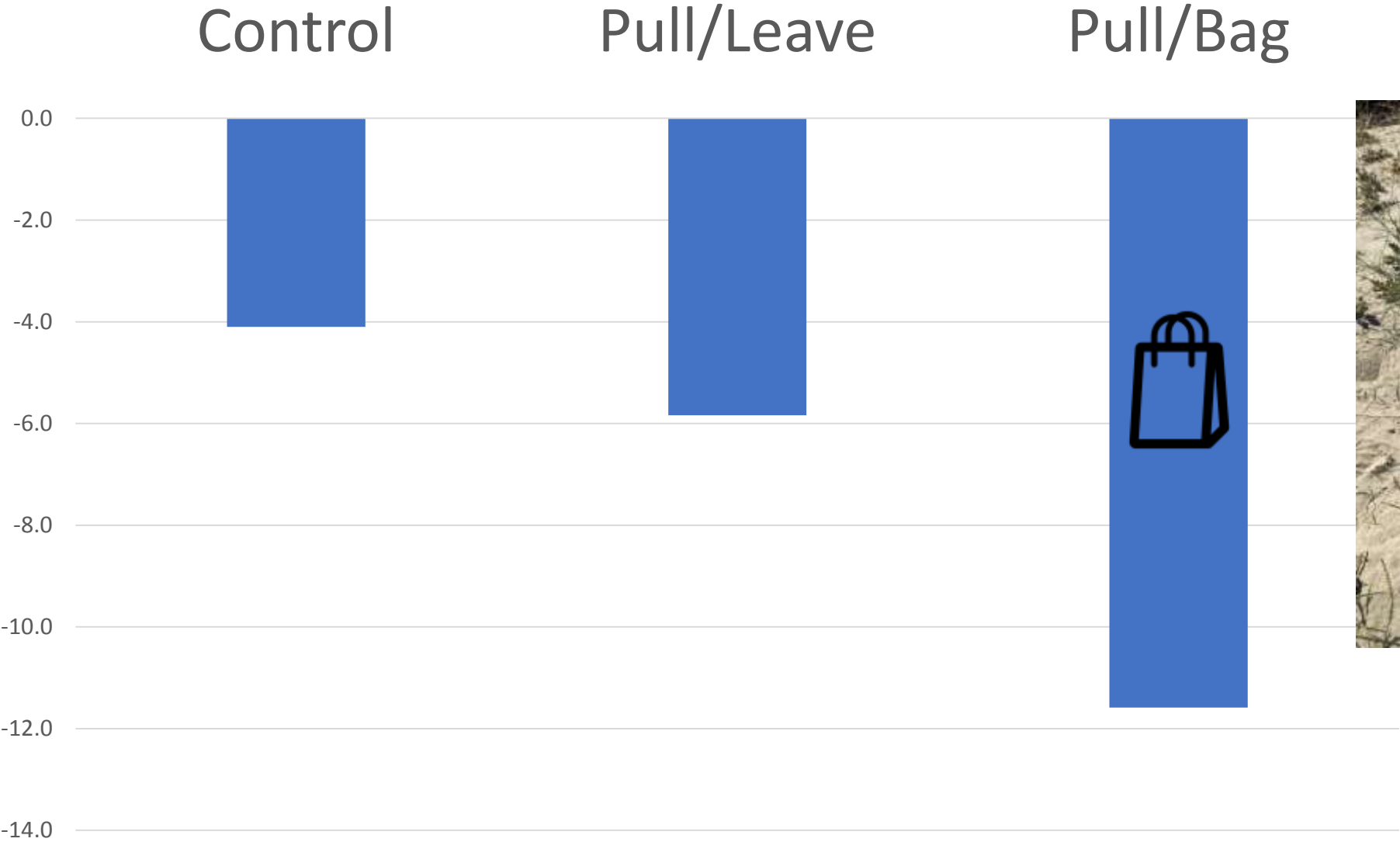


# Person-hours per square meter



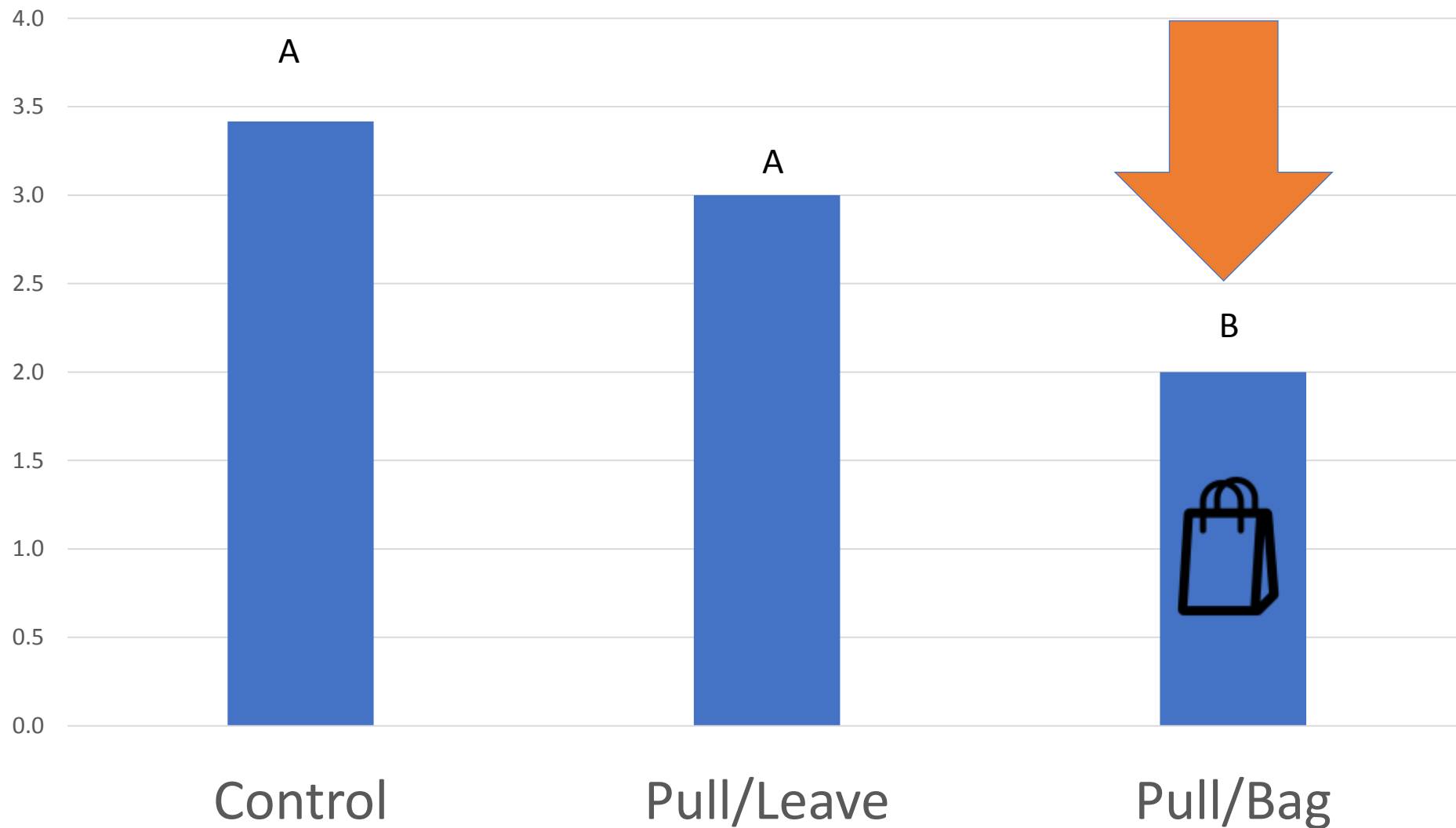


# Change in Sahara mustard cover





# Average native annual species richness





# To Bag or Not to Bag?

- *Bagging reduced native species richness*
- *Pulling and leaving the biomass is more efficient*
- *May protect native species richness better than bagging*





## Questions Remain



- *What is the mechanism for maintaining species richness?*



- *What is the best time to pull mustard?*



- *Are there any other negative effects from leaving the biomass?*



# Thanks and Funding

- Coachella Valley Conservation Commission
- Friends of the Desert Mountains
- Volunteers!



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