



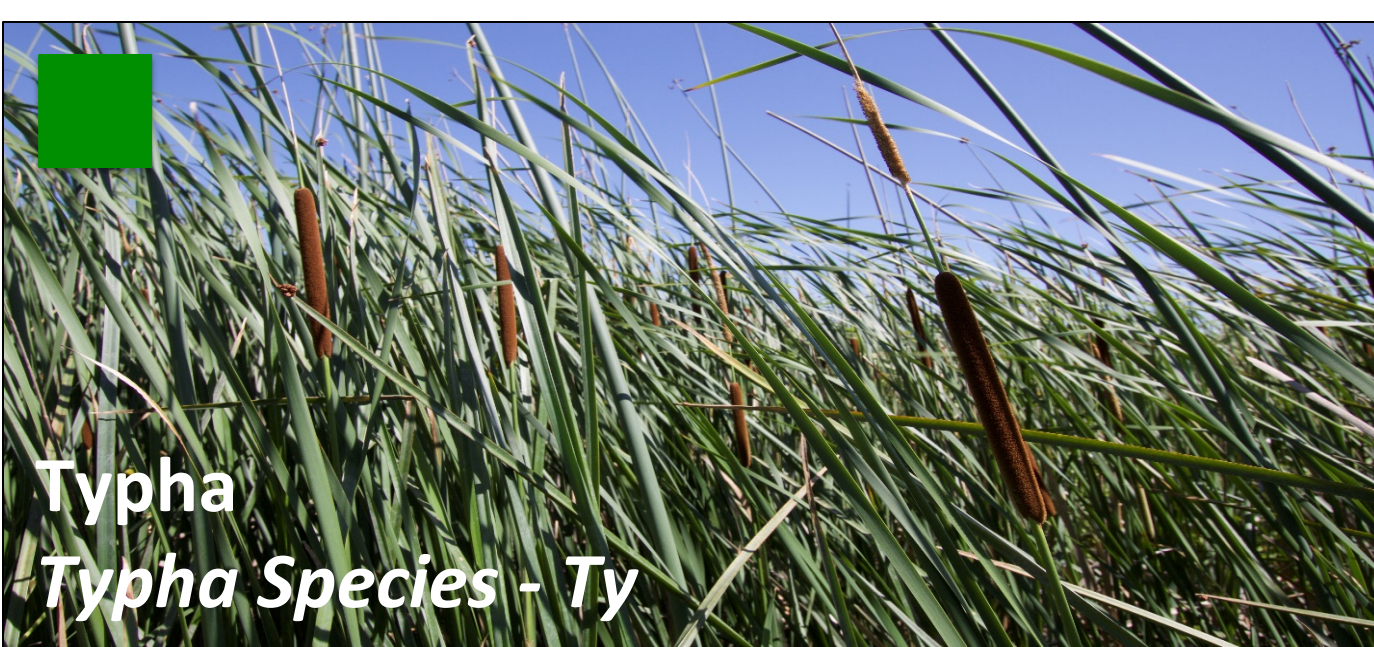
Novel Insights into the Diet of the Salt Marsh Harvest Mouse

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Introduction

The endangered salt marsh harvest mouse (*Reithrodontomys raviventris*, SMHM) is endemic to the marshes of the San Francisco Bay-Estuary. The diet of this species has never been comprehensively examined, but it was believed to be limited primarily to pickleweed. This diet study was designed to determine what plants, other than pickleweed, the SMHM prefers to eat when offered.



Typha
Typha Species - Ty



Rabbit's Foot Grass
Polygonum monspeliensis - POMO



Pickleweed
Sarcocornia pacifica - SAPA



Fat Hen
Atriplex prostrata - ATPR



Common Reed
Phragmites australis - PHAU



Pepperweed
Lepidium latifolium - LELA

Native Vegetation Species

Non-Native Vegetation Species

Naturalized Vegetation Species

Invasive Vegetation Species

Objective

Assess diet preferences of SMHM for native and non-native plants growing seasonally in tidal and managed wetlands in Suisun Marsh.

Methods



Capture mice in live traps, remove all bait, and allow mice to fast 2 hours

Place mice in feeding arena provisioned with food for 2 hours



Record proportion of time spent feeding on each food item.

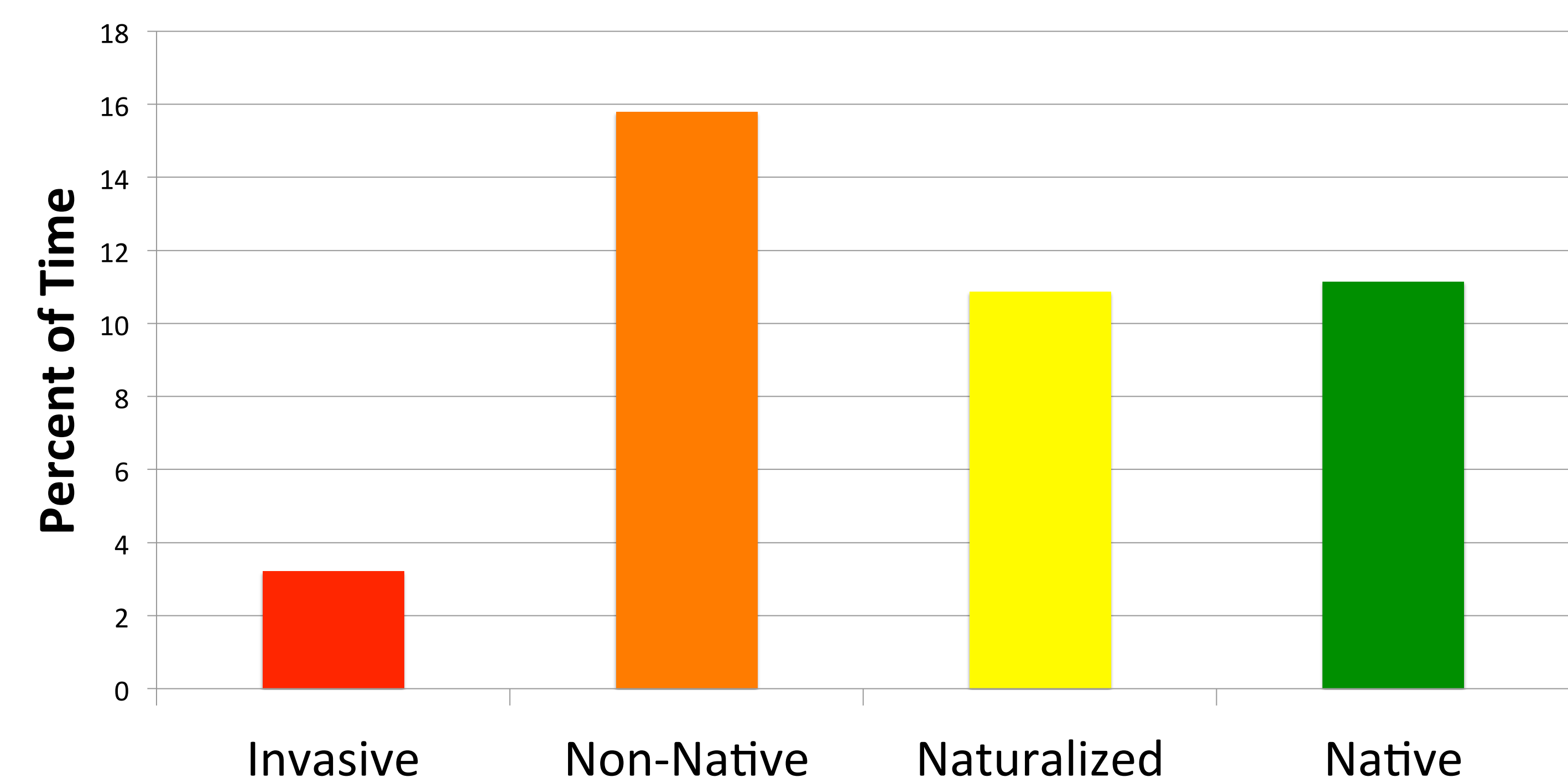
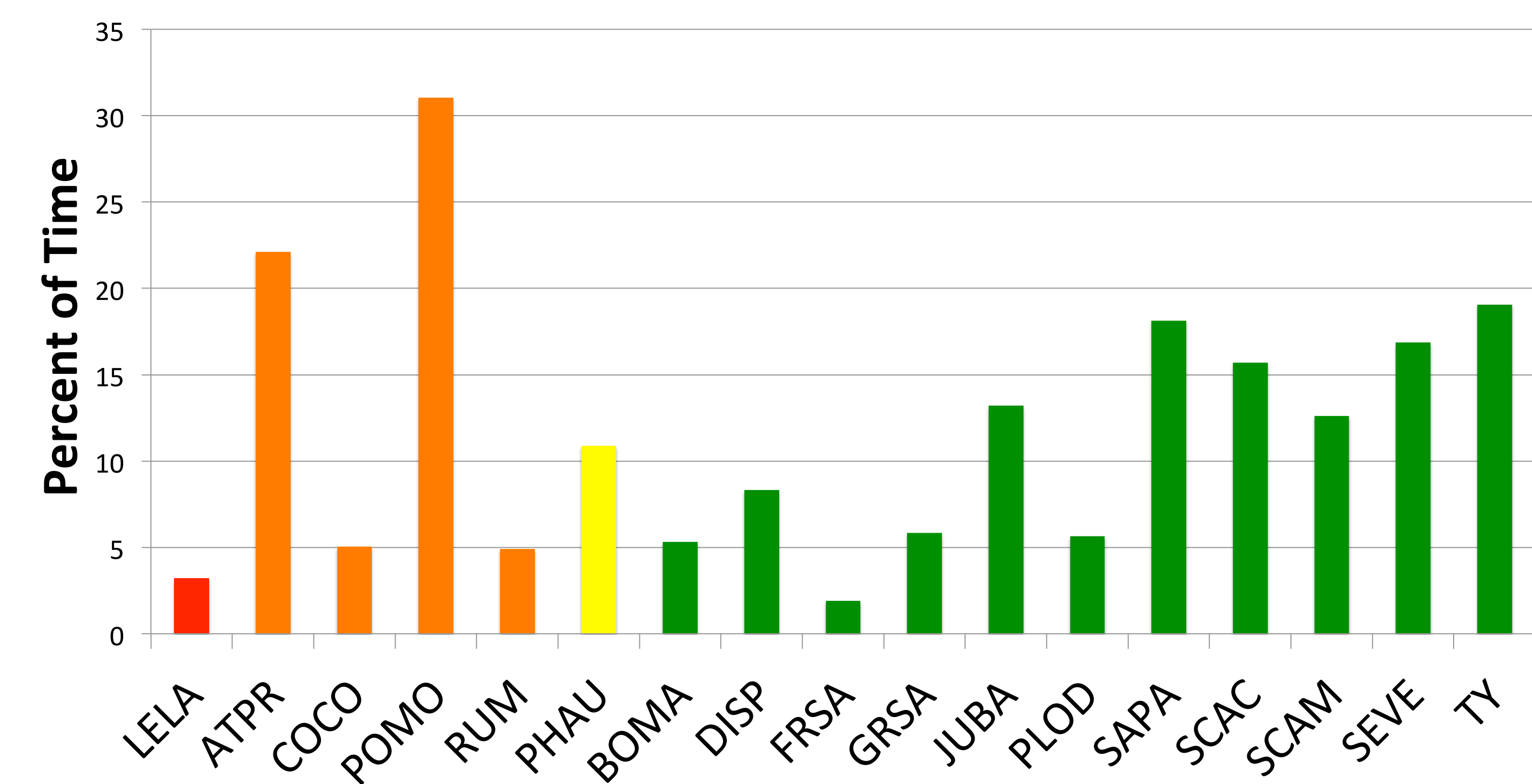


Results of Preliminary Data

Even though native plant species were offered most often, when averaged, the mice spent the most time eating non-native plant species.



Percent of Time Spent Eating When Offered



Conclusion

While our results pertain only to SMHM diet preference, they indicate that the diet of SMHM is much more flexible than previously believed. This indicates that habitats other than pickleweed dominated wetlands provide food year round for the SMHM and may have high value in conservation of this species.