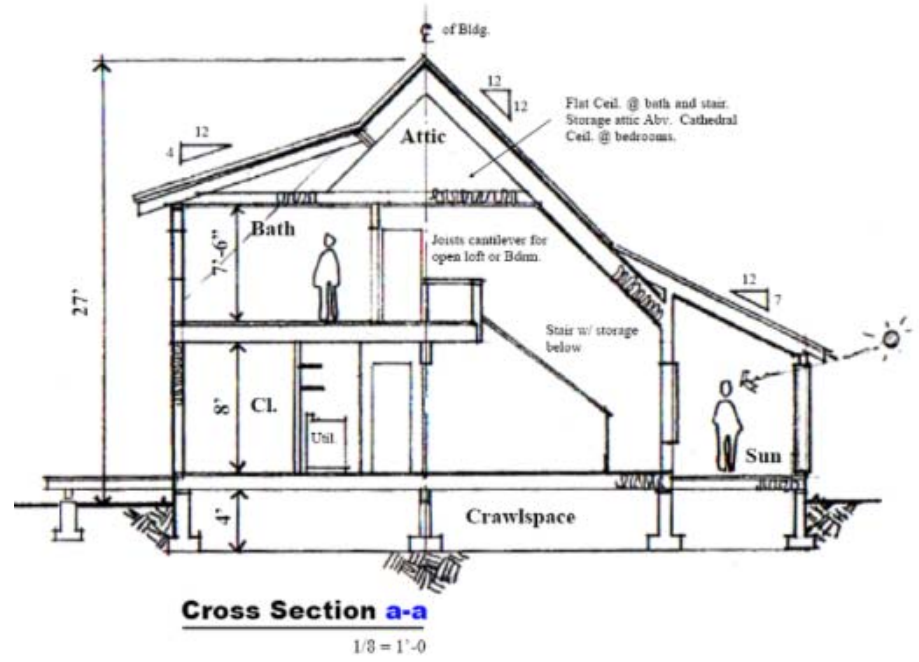
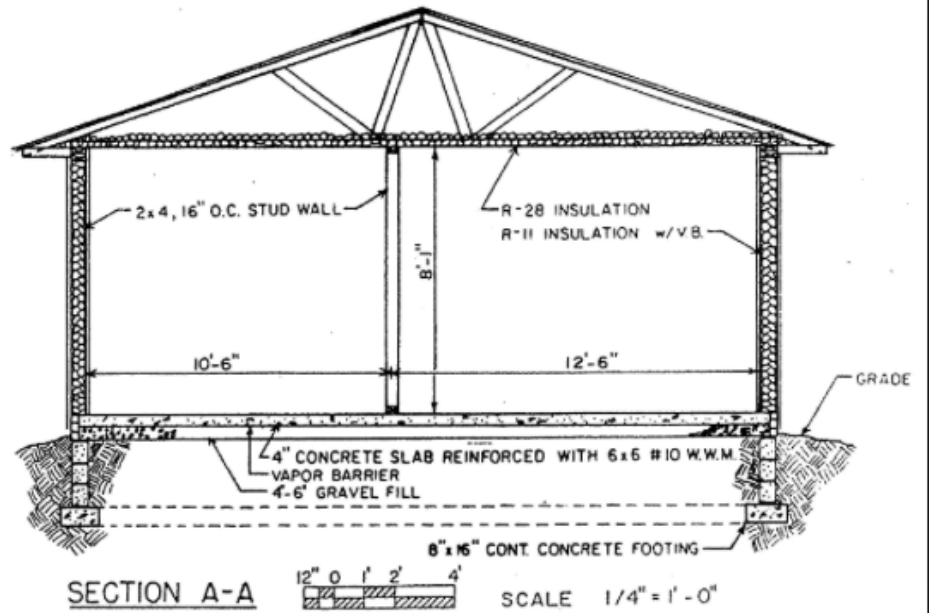
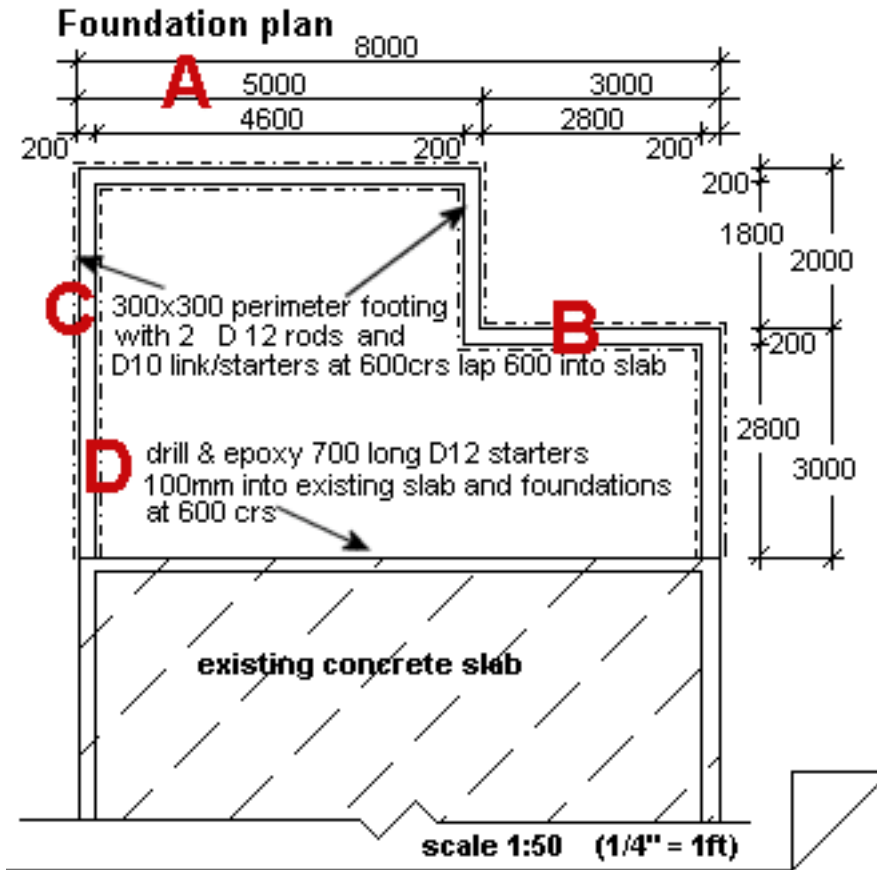
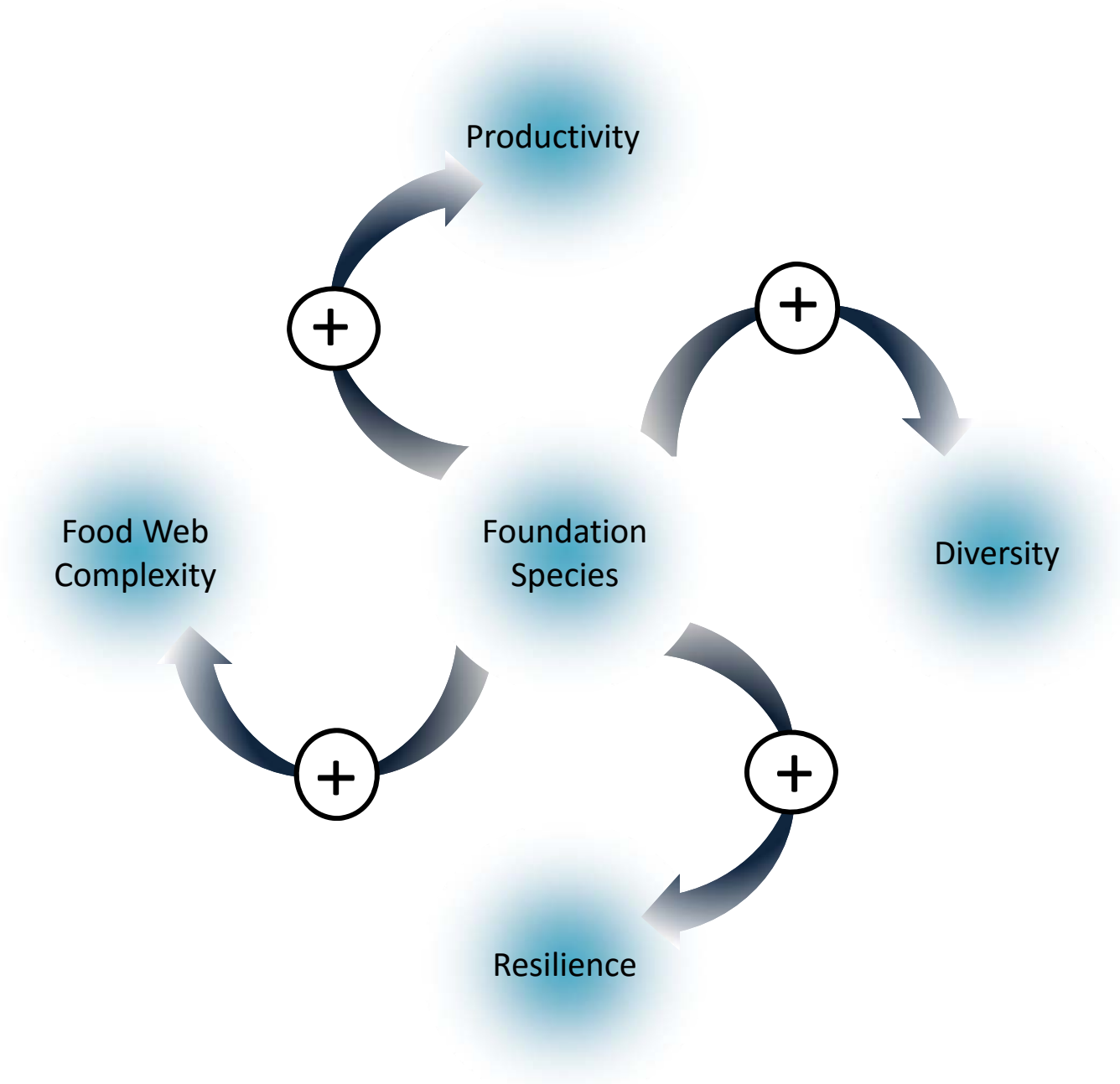




**Latitude affects dominance by  
secondary foundation species on  
red mangrove (*Rhizophora mangle*)  
prop roots**

By Jessene Aquino-Thomas and C. Edward Proffitt

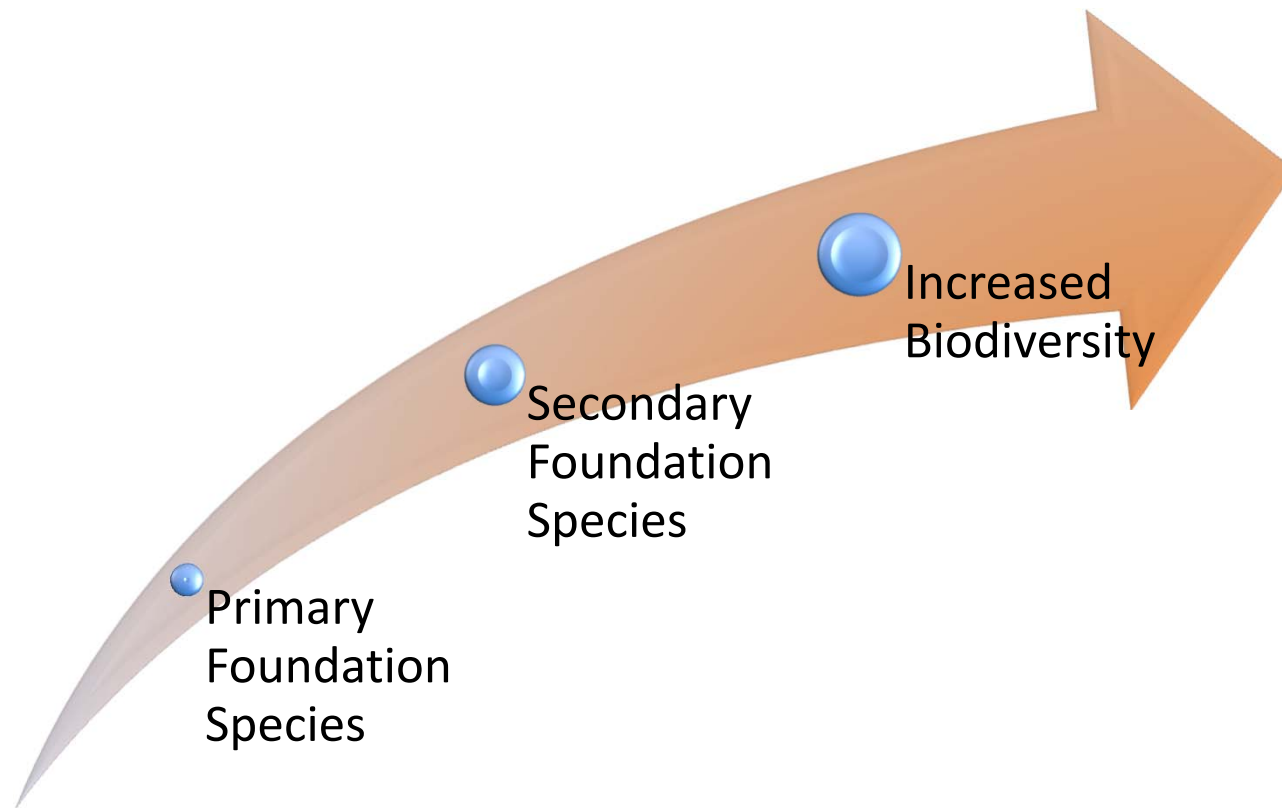






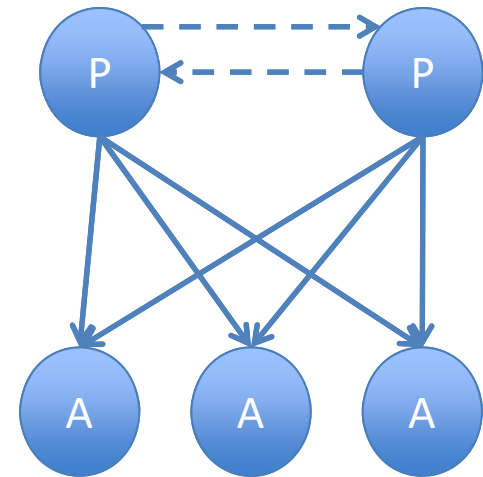
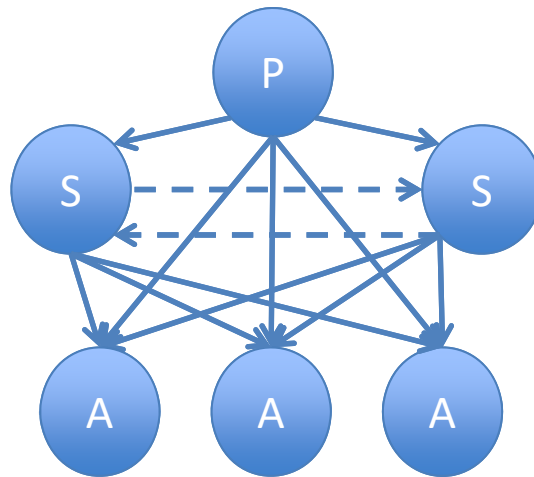
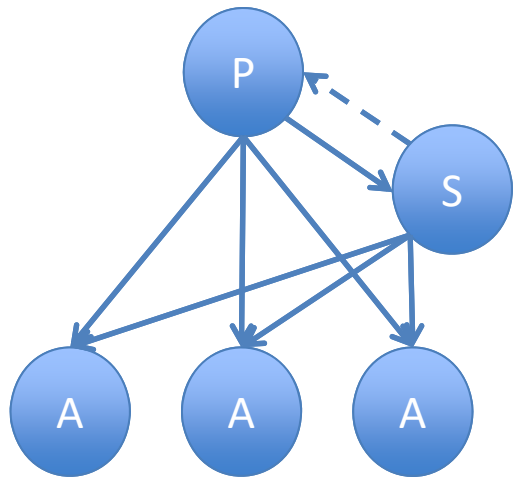
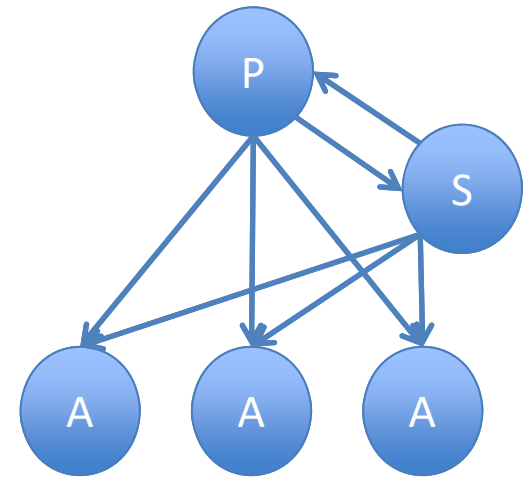
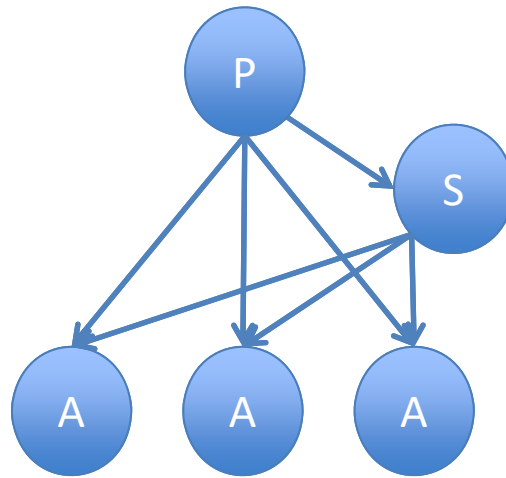
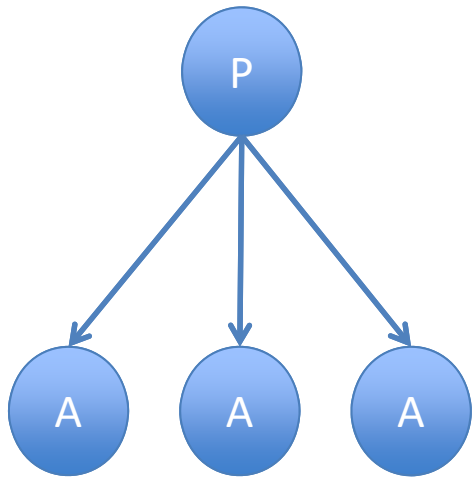
# Foundation Species – Biodiversity

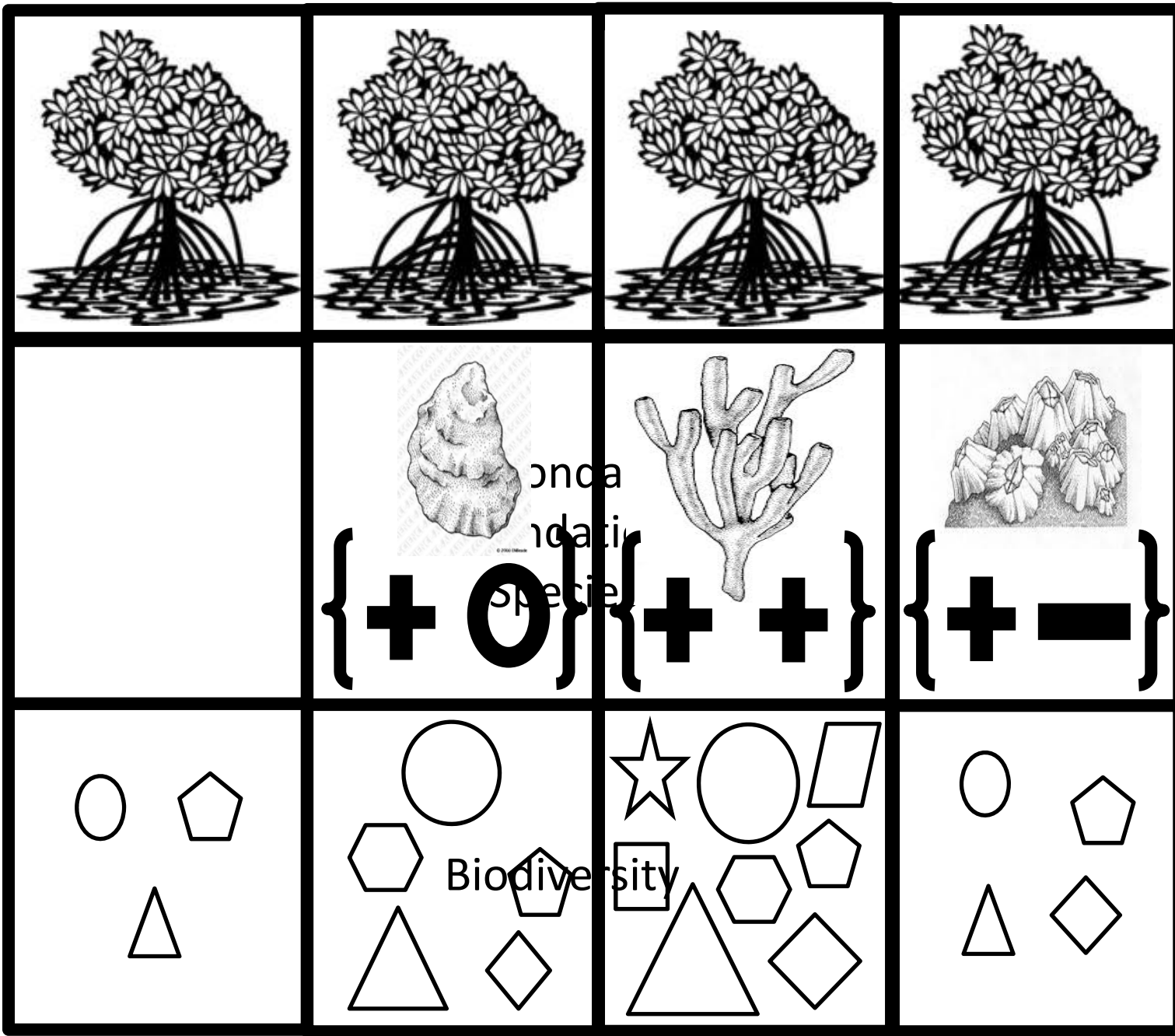
## facilitation cascade



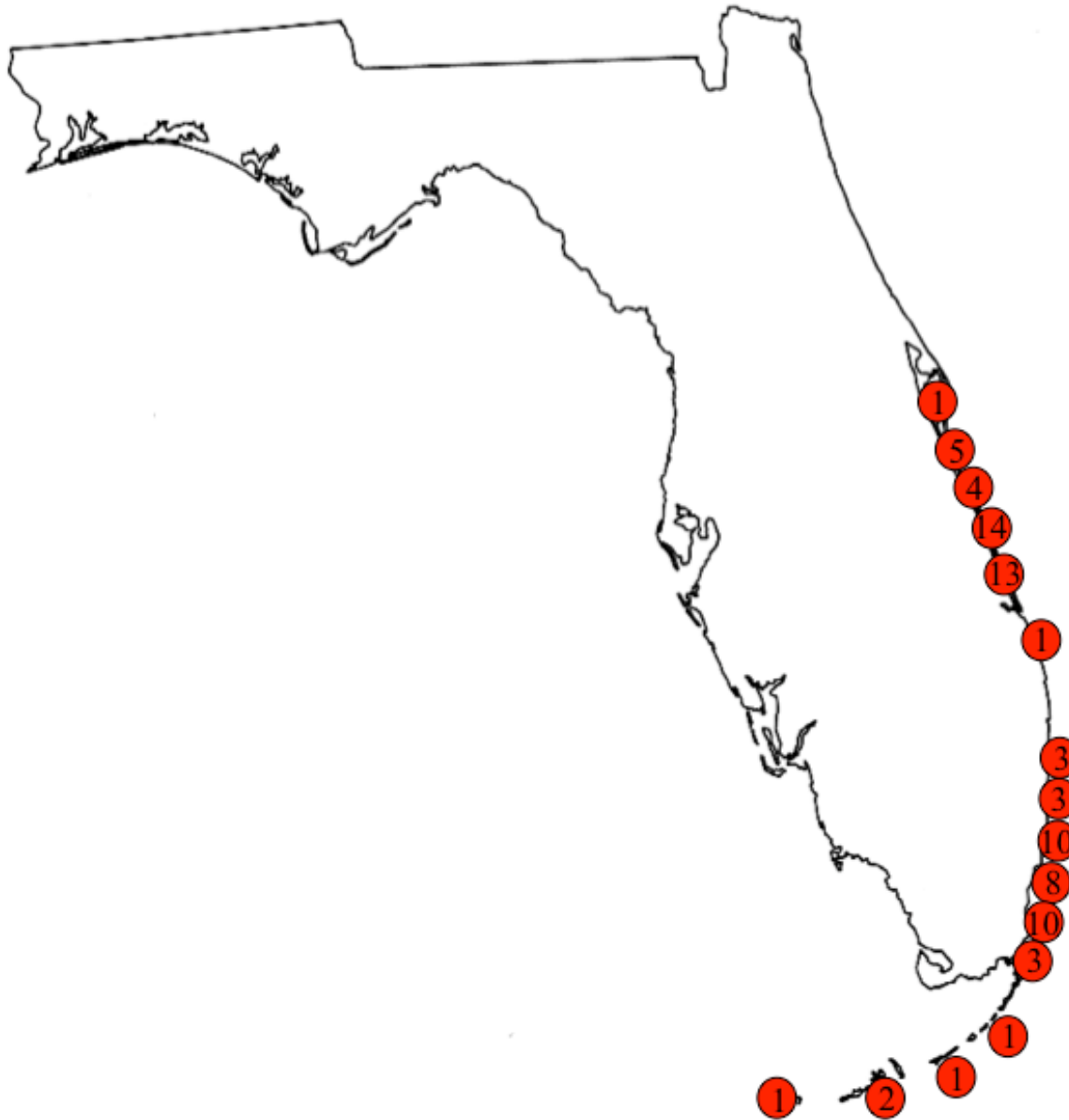
Angelini C, Silliman B (2014). Secondary foundation species as drivers of trophic and functional diversity: evidence from a tree-epiphyte system. *Ecology* 95(1):185-196

# Foundation Species Interaction – Biodiversity



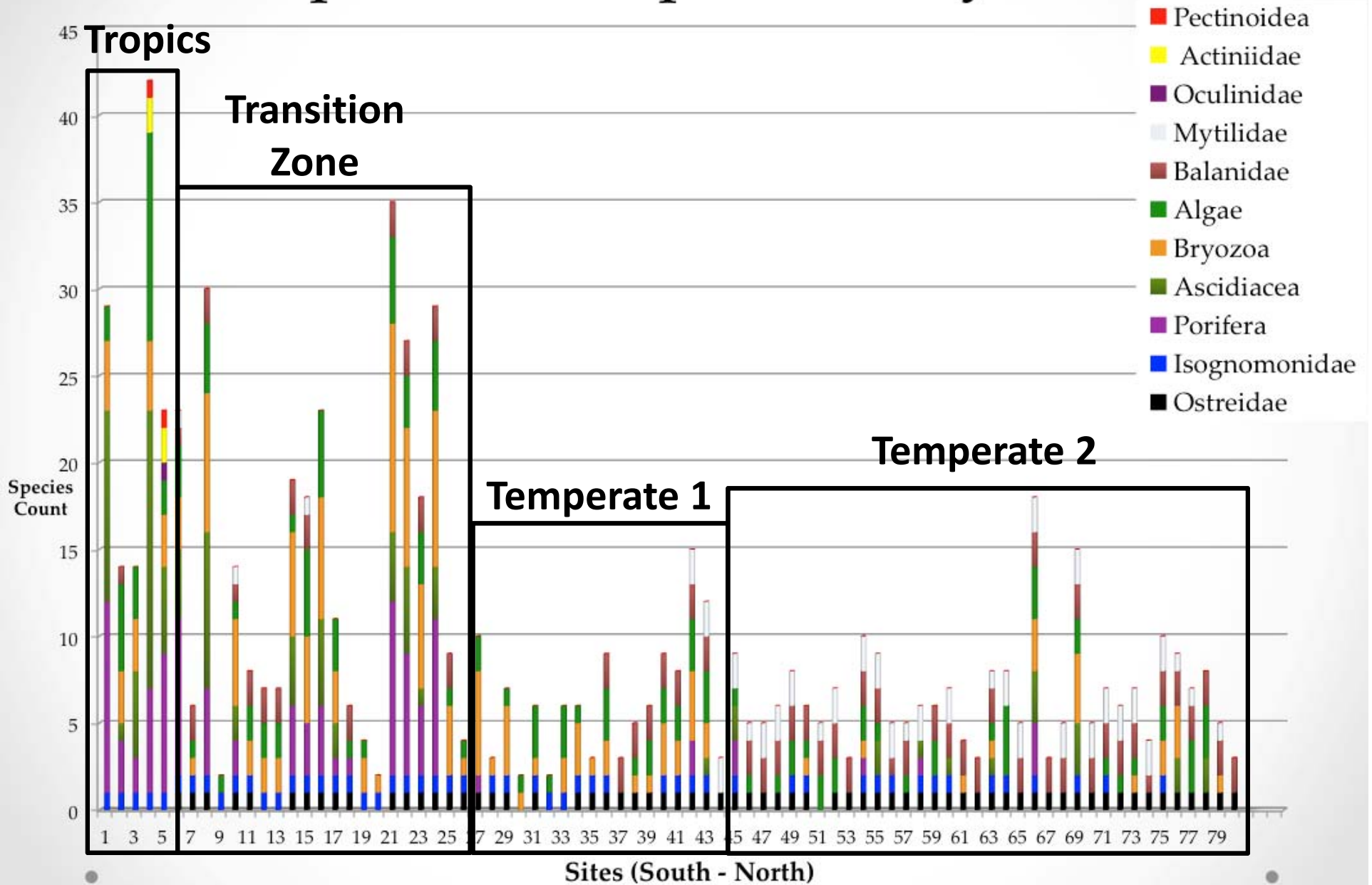


# Sessile Species Survey Sites





# Species Composition by Site



# Latitudinal Zones

- 4 Zones
- 3 sites per zone
- 10 trees per site

## Latitudinal Range of Zones

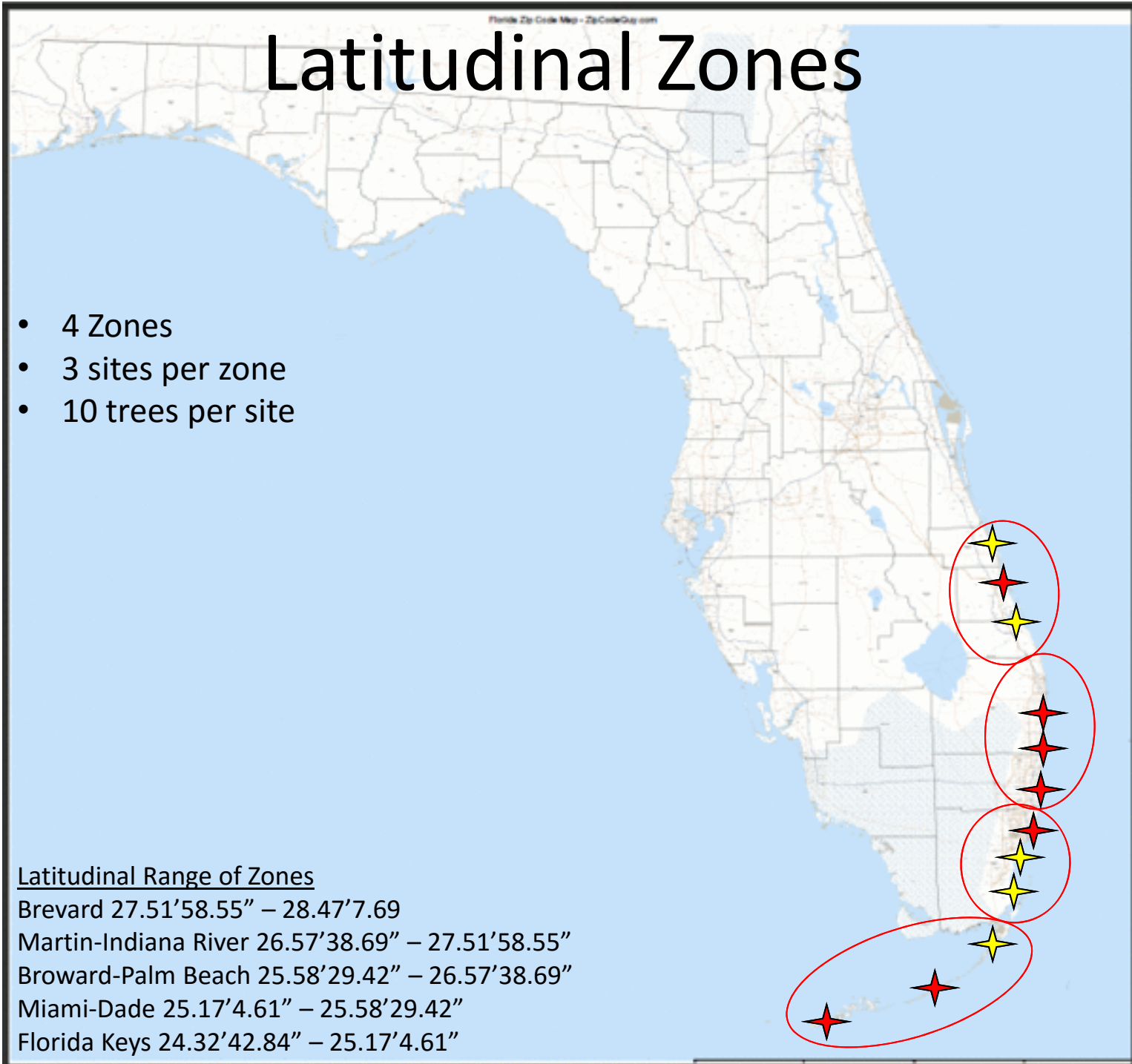
Brevard 27.51'58.55" – 28.47'7.69"

Martin-Indiana River 26.57'38.69" – 27.51'58.55"

Broward-Palm Beach 25.58'29.42" – 26.57'38.69"

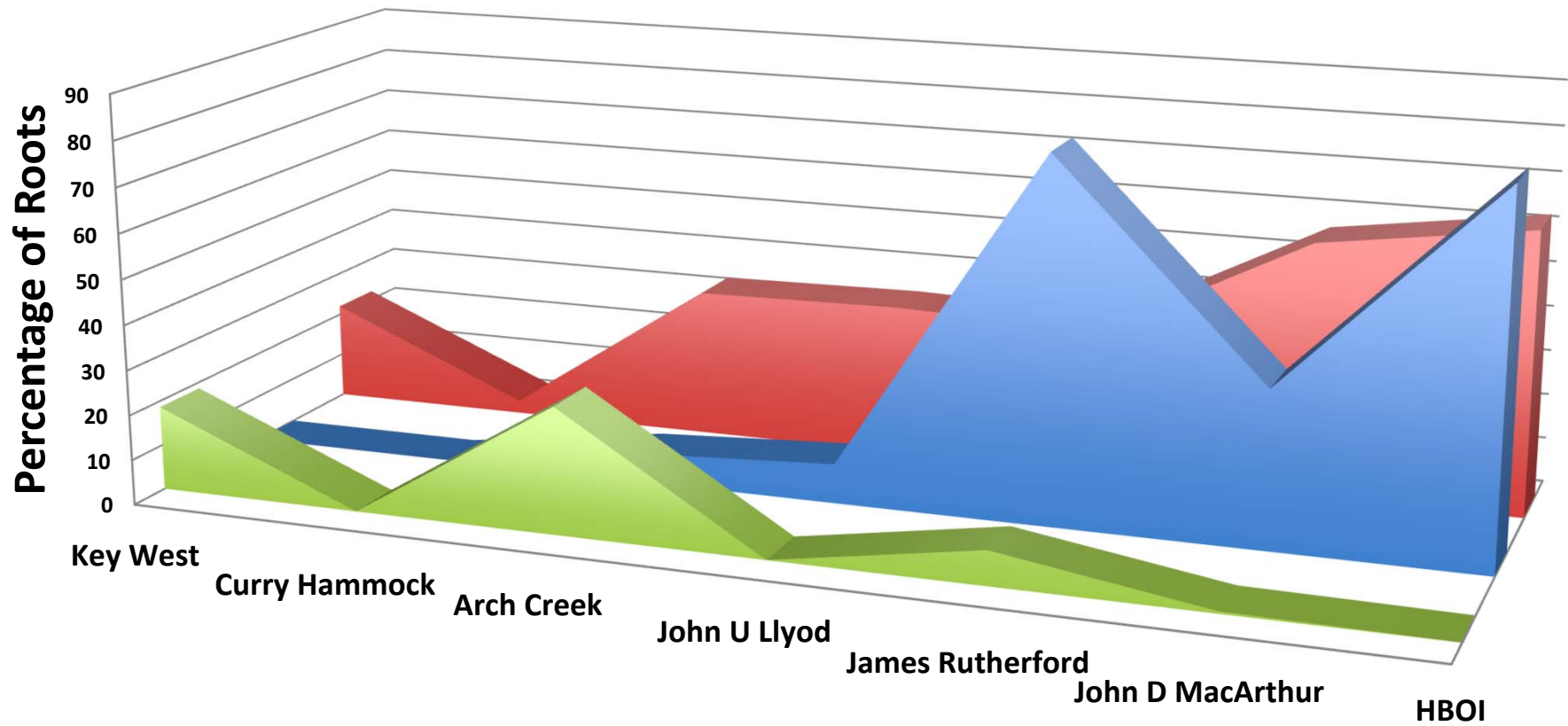
Miami-Dade 25.17'4.61" – 25.58'29.42"

Florida Keys 24.32'42.84" – 25.17'4.61"

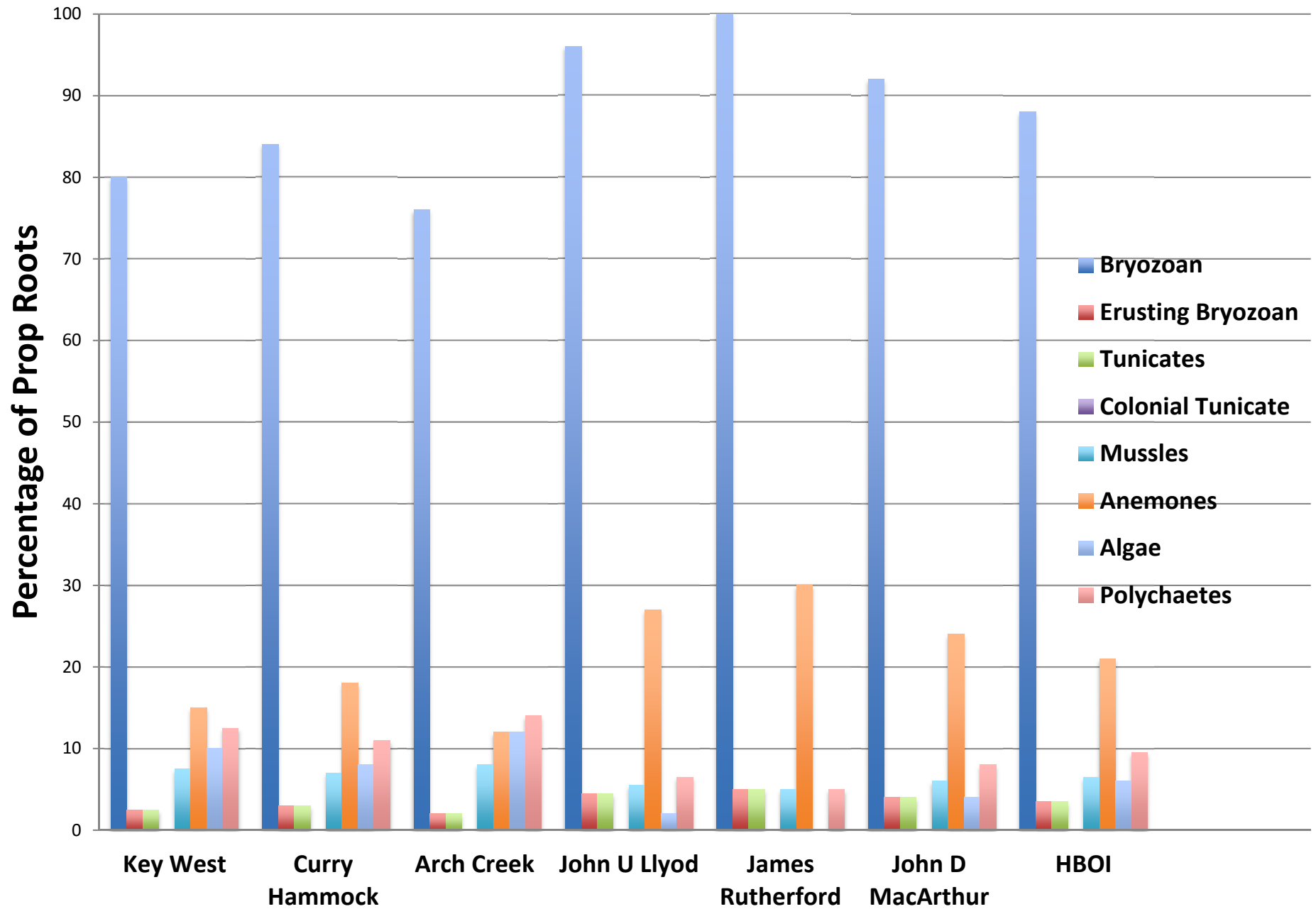


# Presence of Secondary Foundation Species

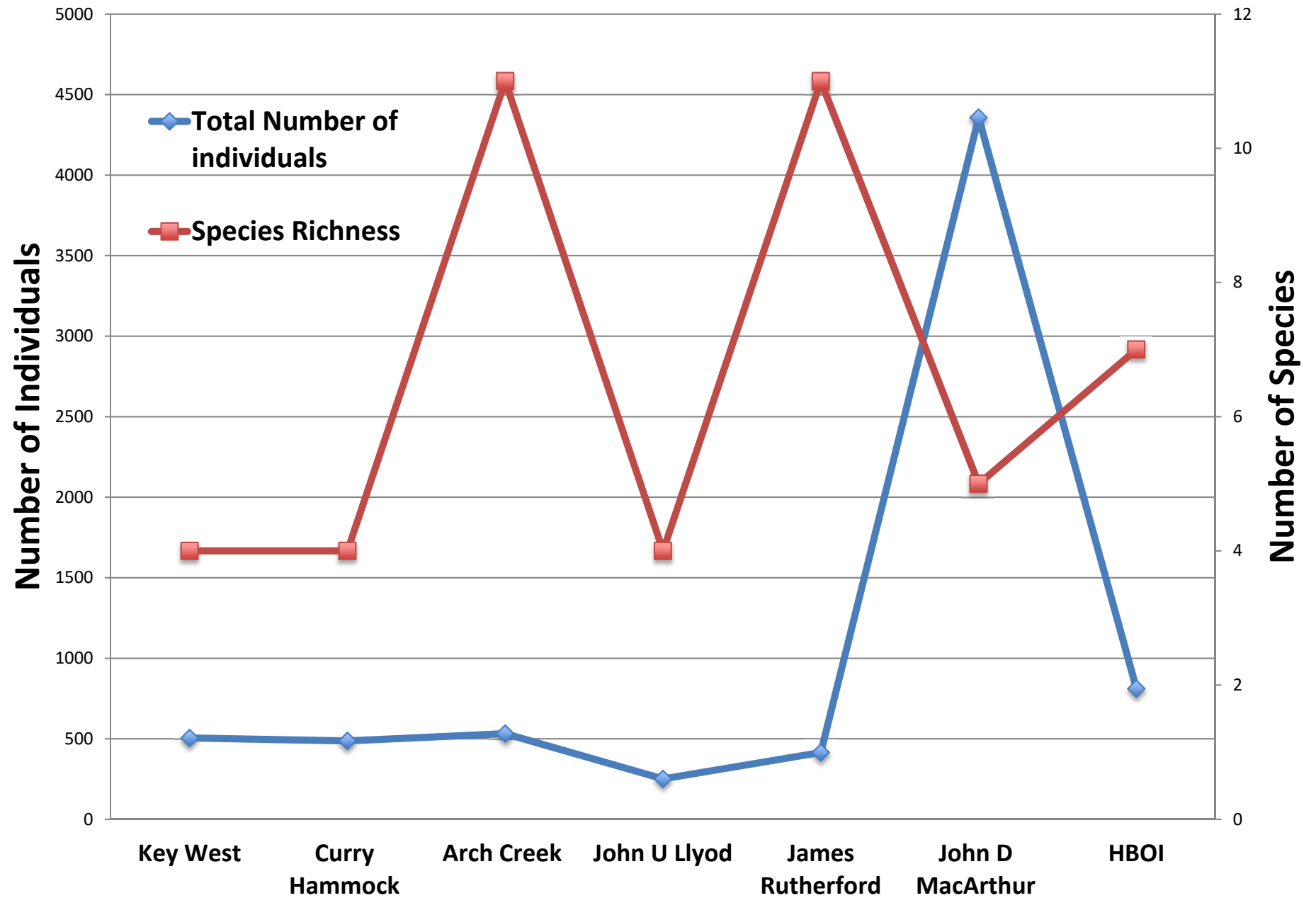
■ Sponge    ■ Oysters    ■ Barnacles



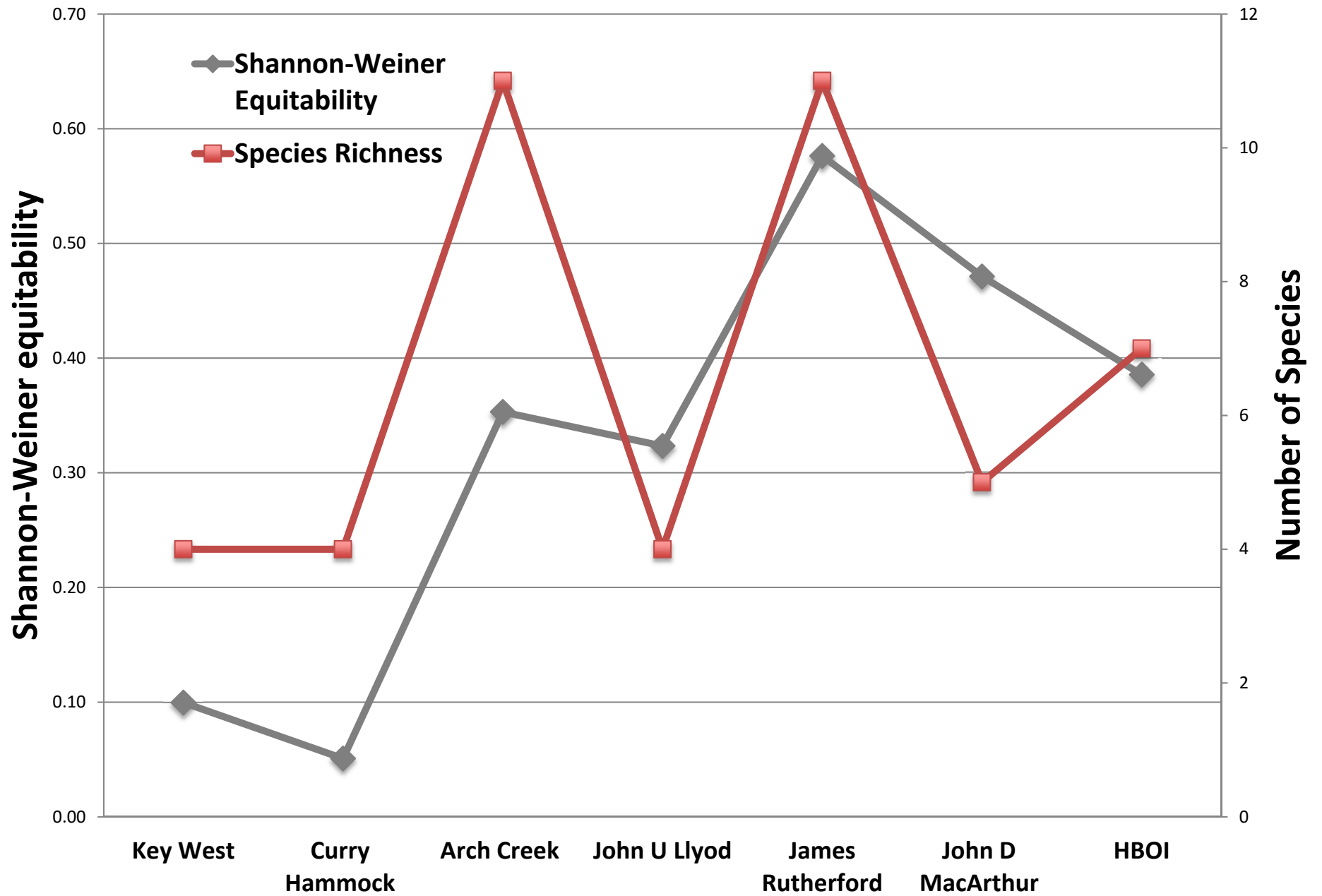
# Percentage of Prop Roots with Select Taxa



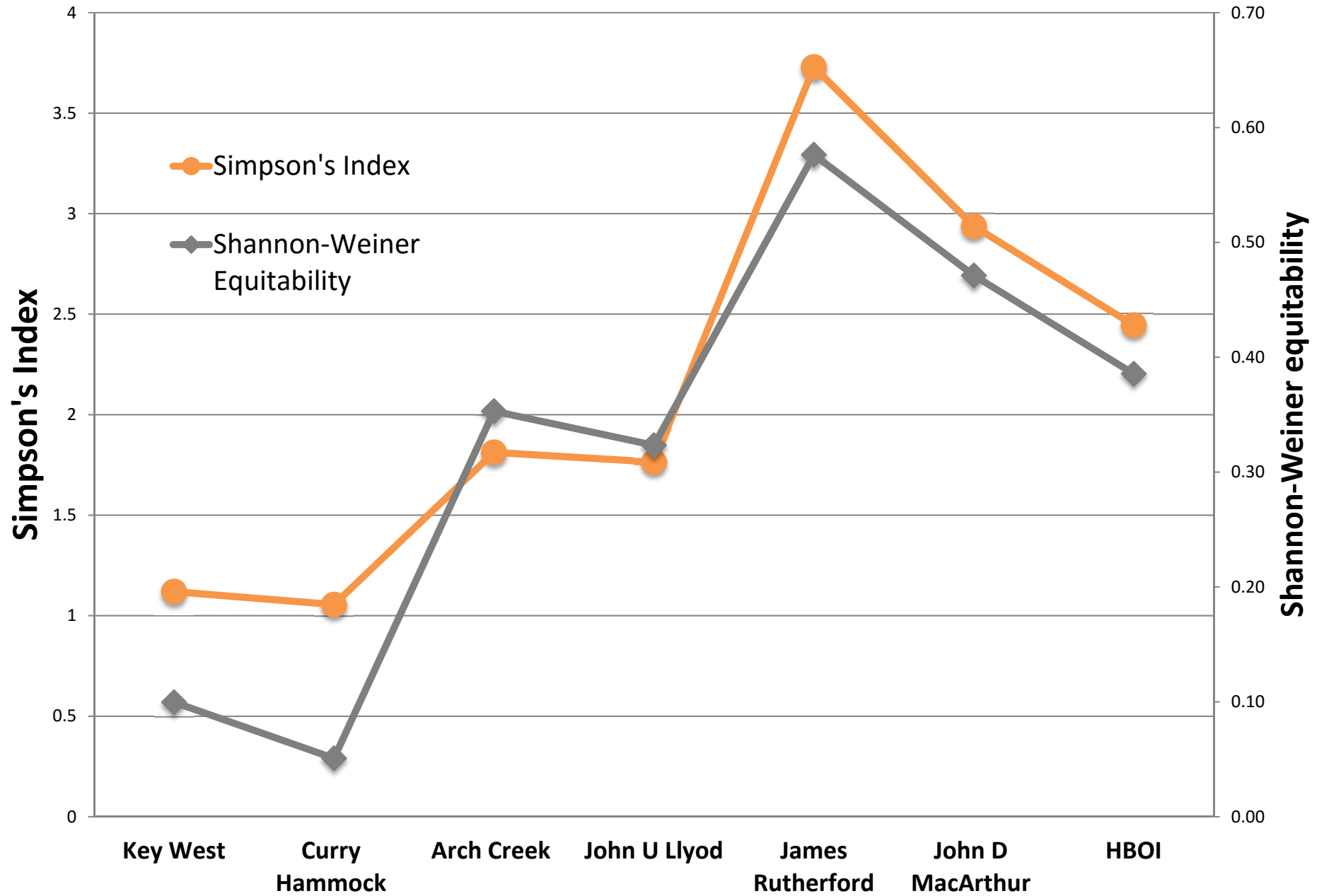
# Species Richness by Site



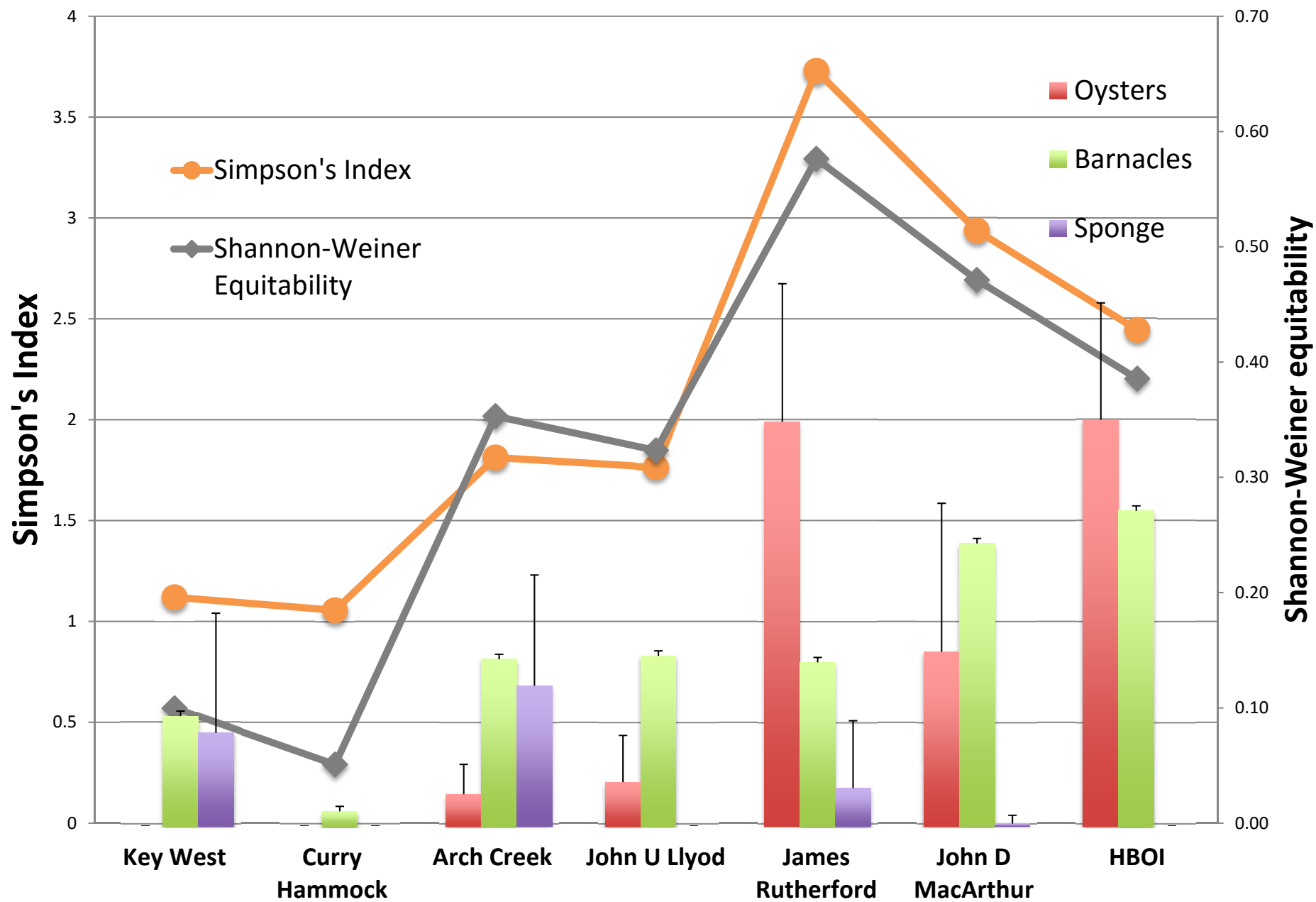
# Shannon-Weiner



# Biodiversity



# Biodiversity





# Acknowledgements

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Smithsonian Internship

Delores A. Auzenne Fellowship

Florida Atlantic University Graduate Diversity

Boca Raton Orchid Society Endowed Scholarship

## Field Assistants

Shalondria Sears

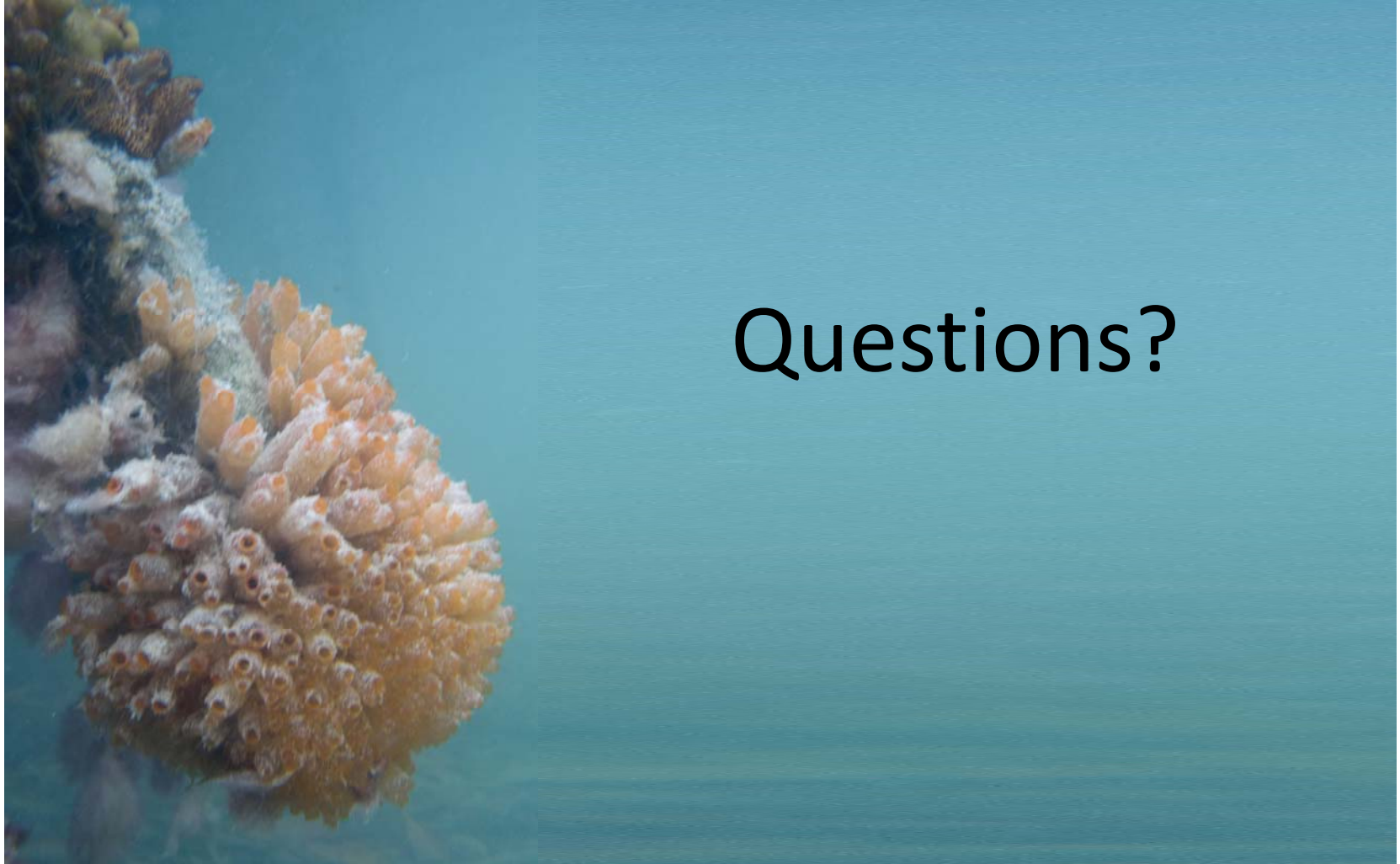
Eric España

Christopher Ray

Andrea Carmona

Rachel Shanker

Chelsea Bennice



Questions?