



# Habitat, Hydrology, and Reproduction: Implications for the Conservation of the Florida Snail Kite and Everglades Restoration

CL Zweig and WM Kitchens

# Snail kite in Florida



Food specialist

Wetland dependent

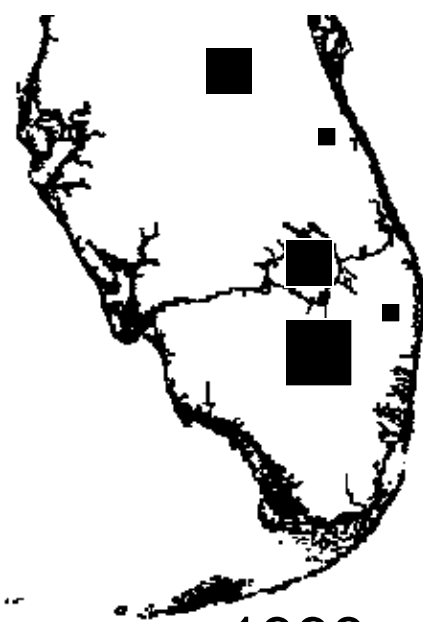
Closed population

Endangered species

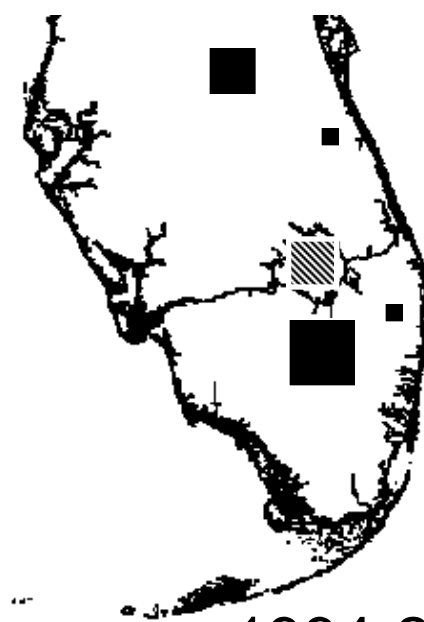
Confined to S. FL



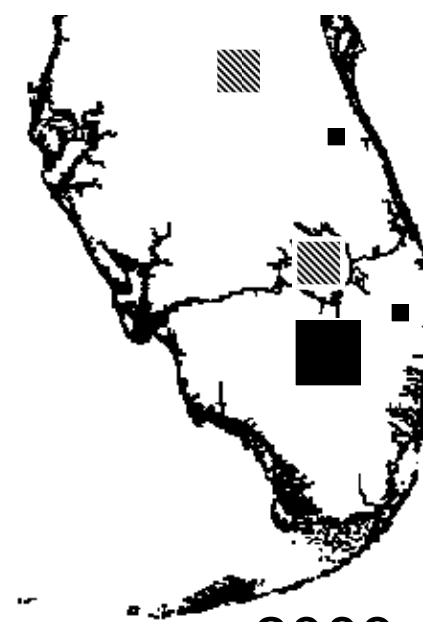
Population is in a critically vulnerable state



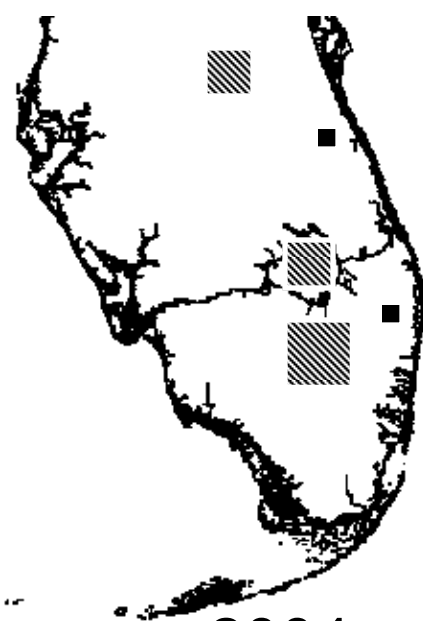
1993



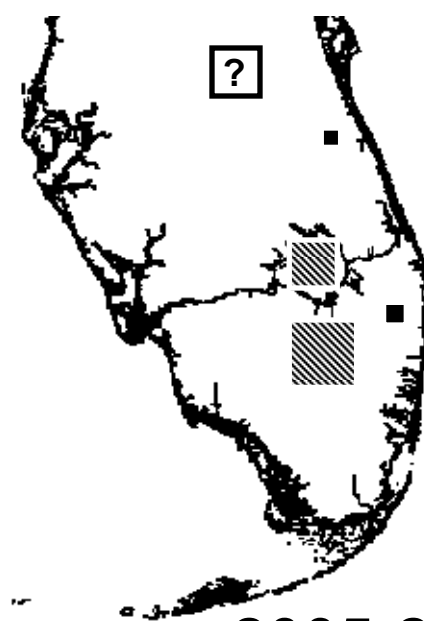
1994-2002



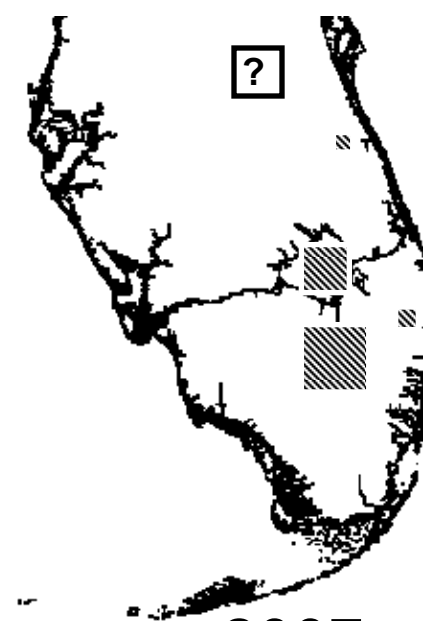
2003



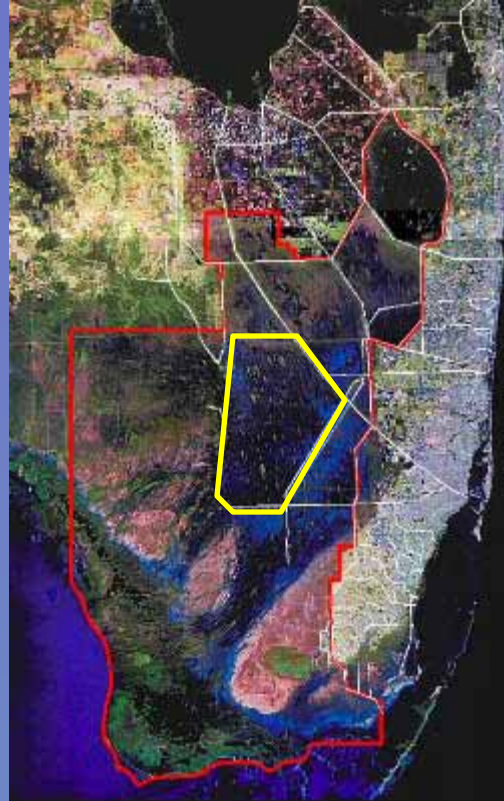
2004



2005-2006



2007



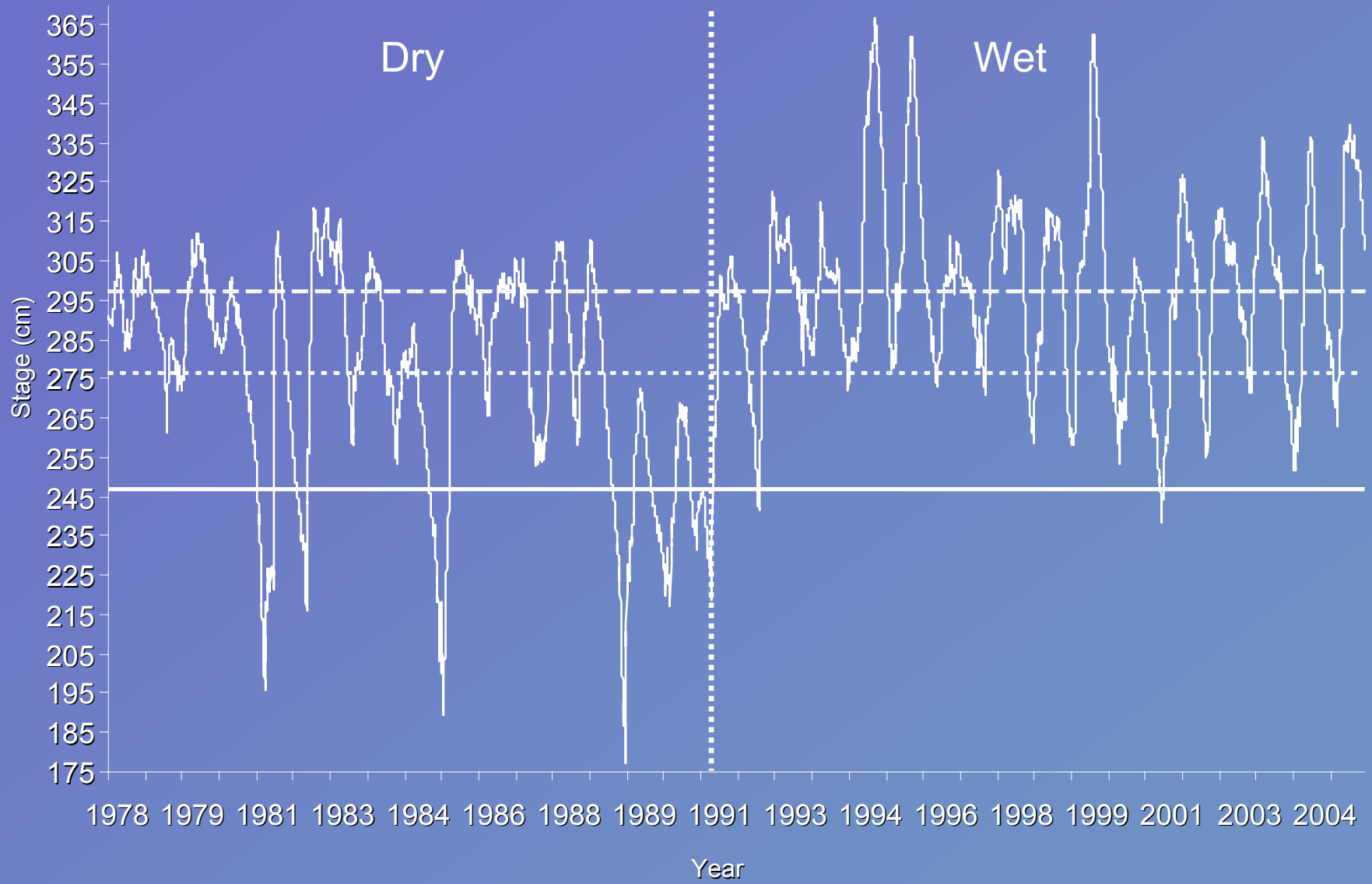
## Reported Habitat Shifts Throughout Conservation Areas

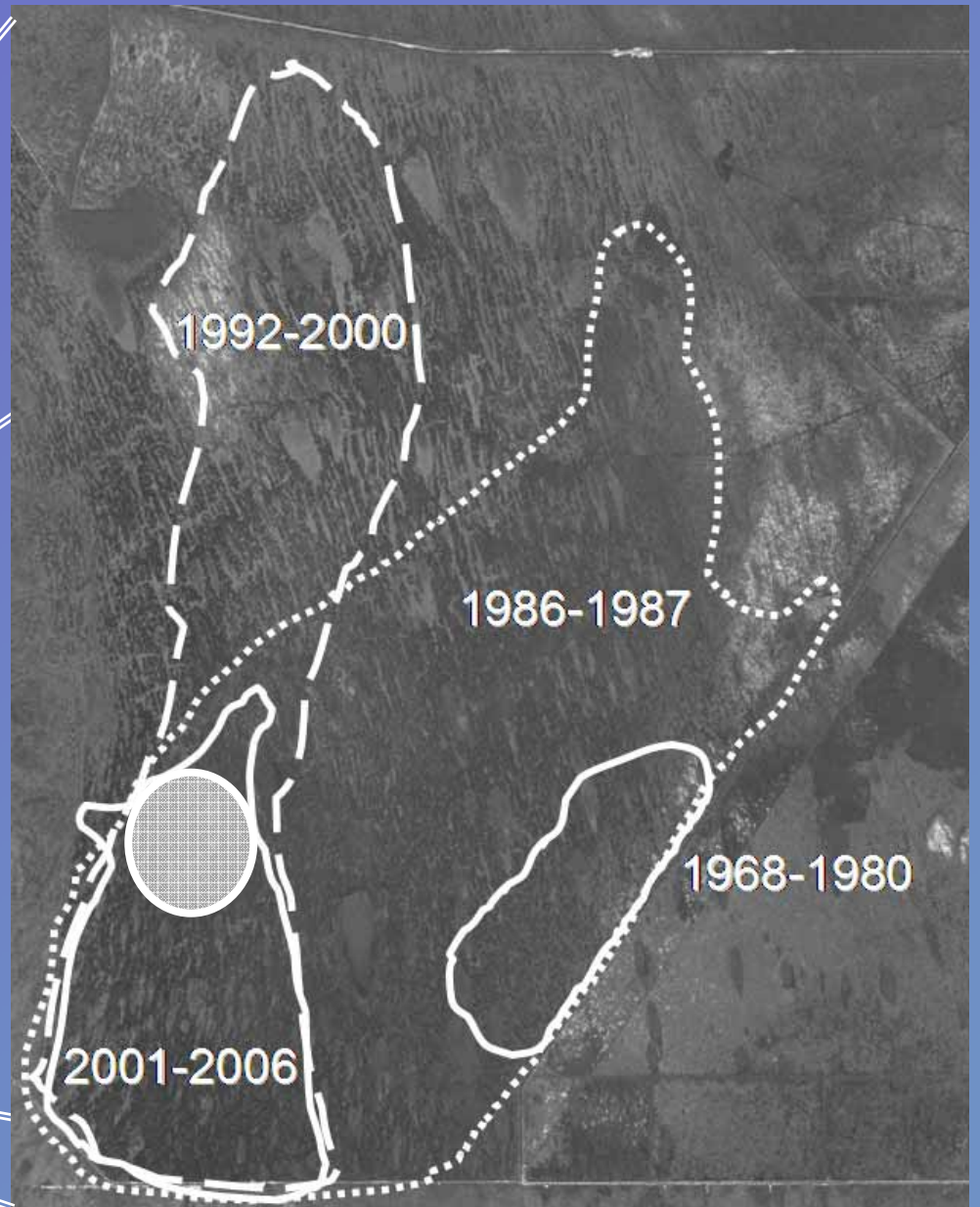
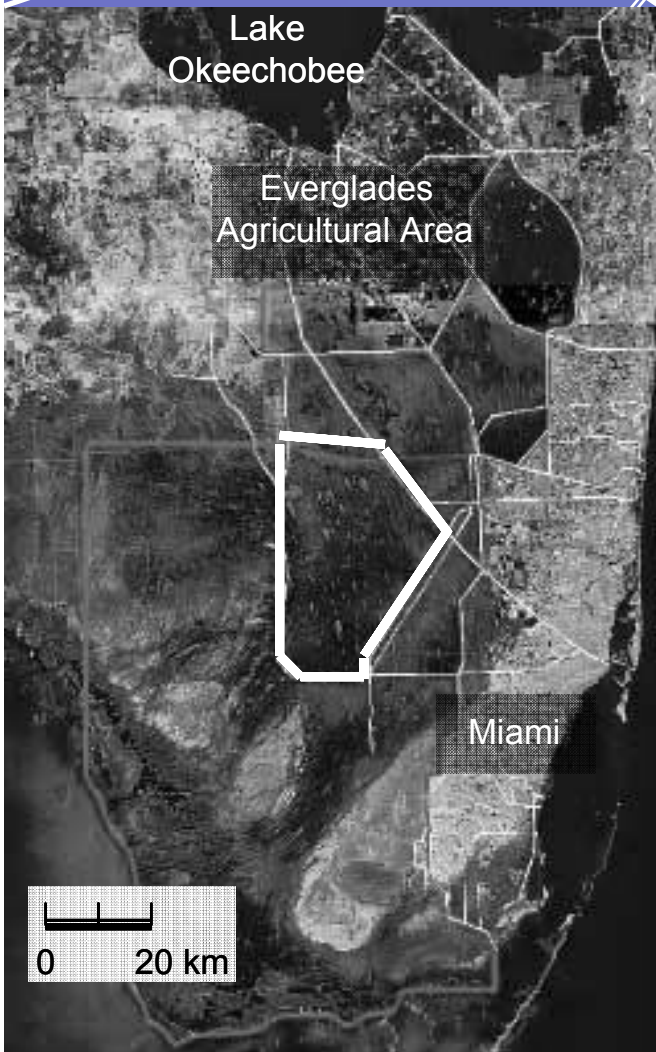
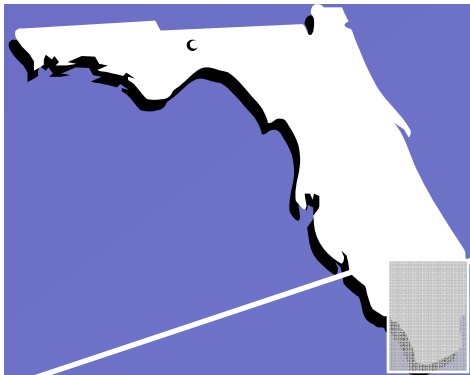


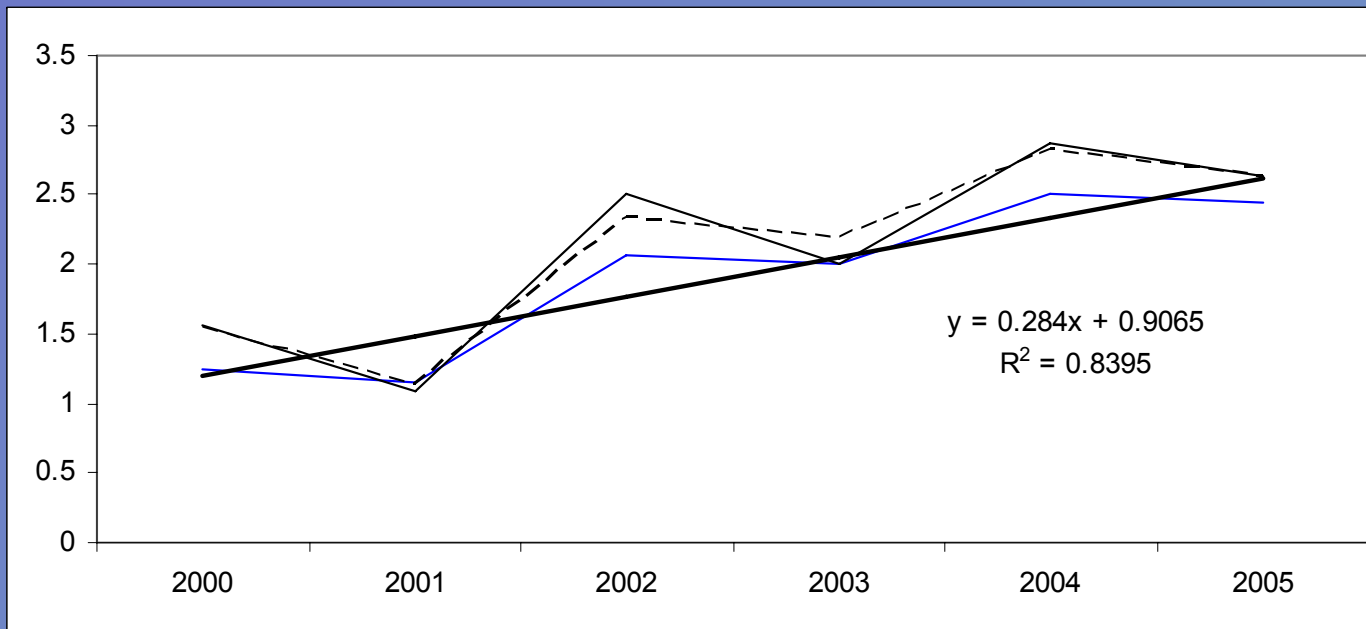
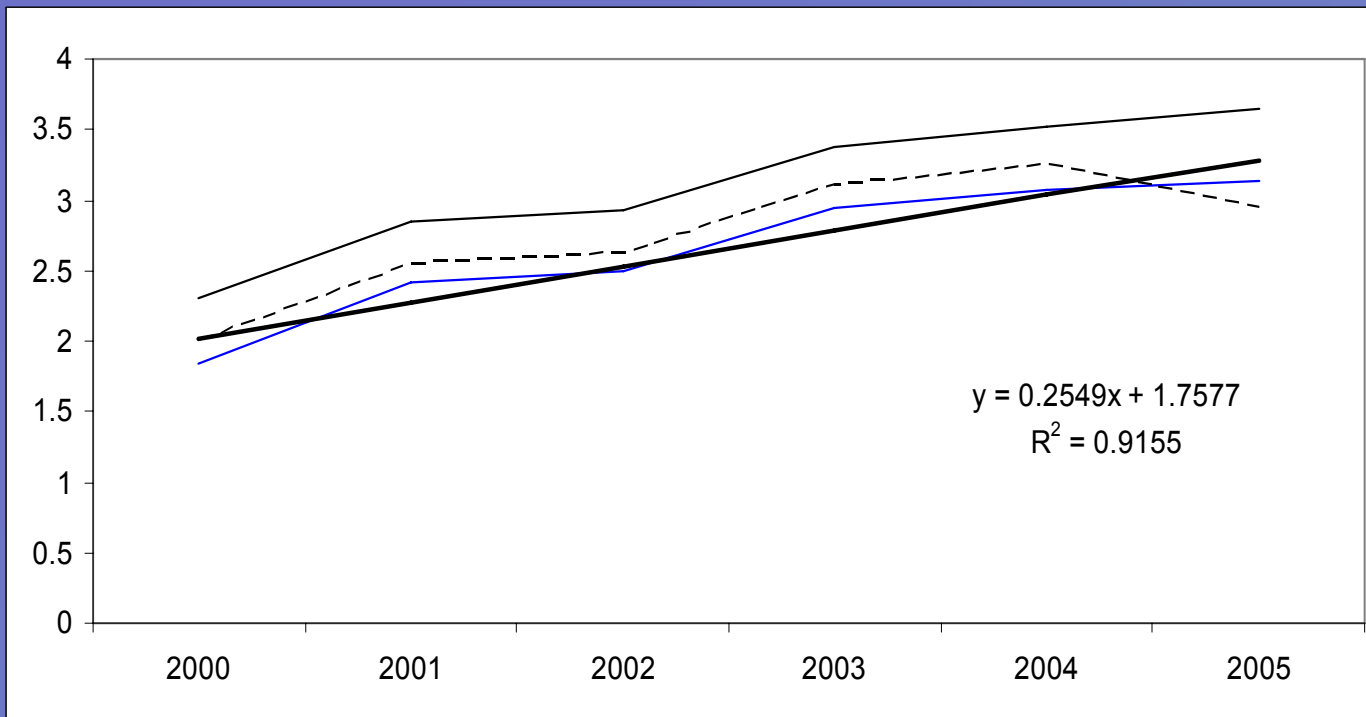
Wet Prairie



Slough

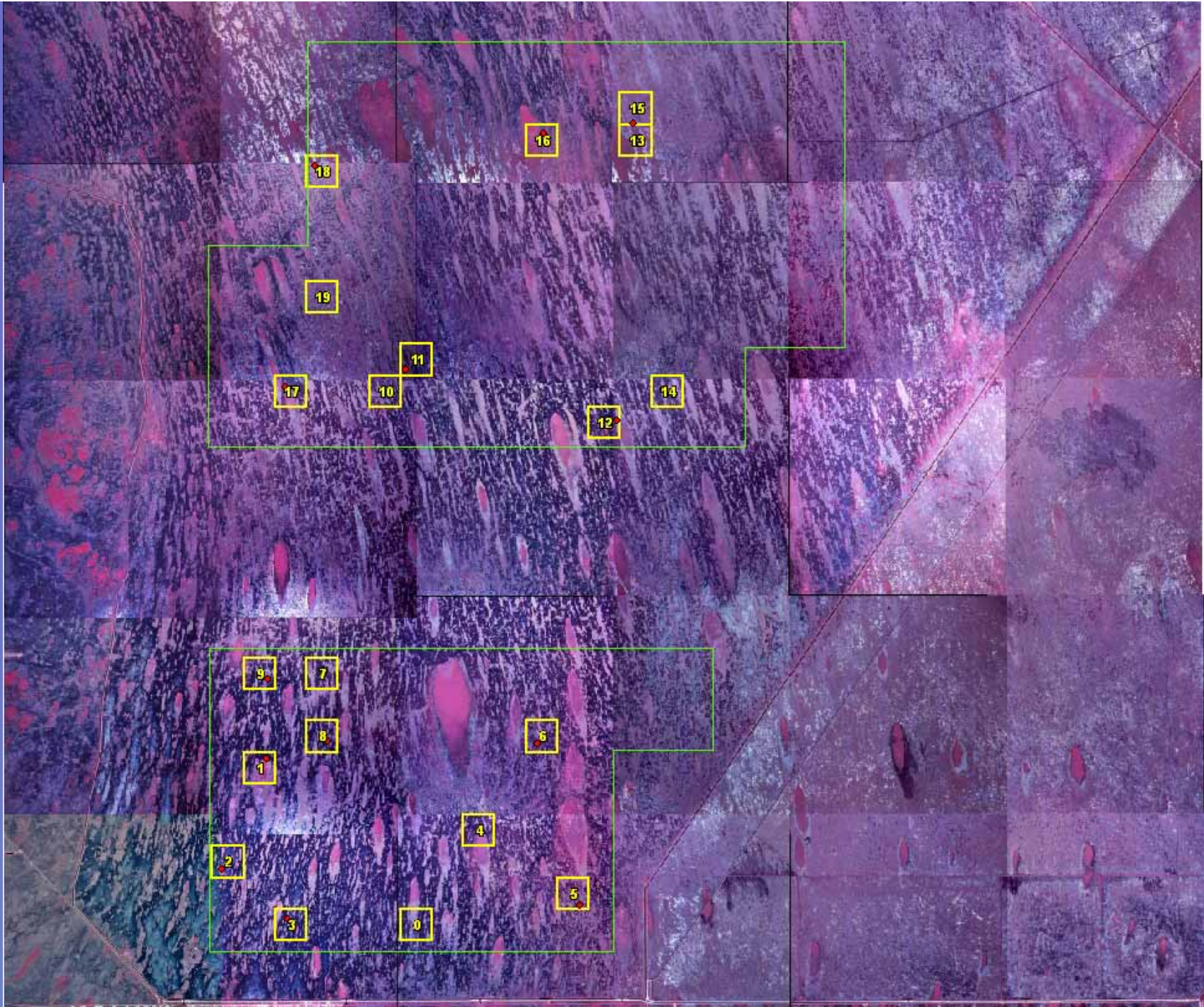


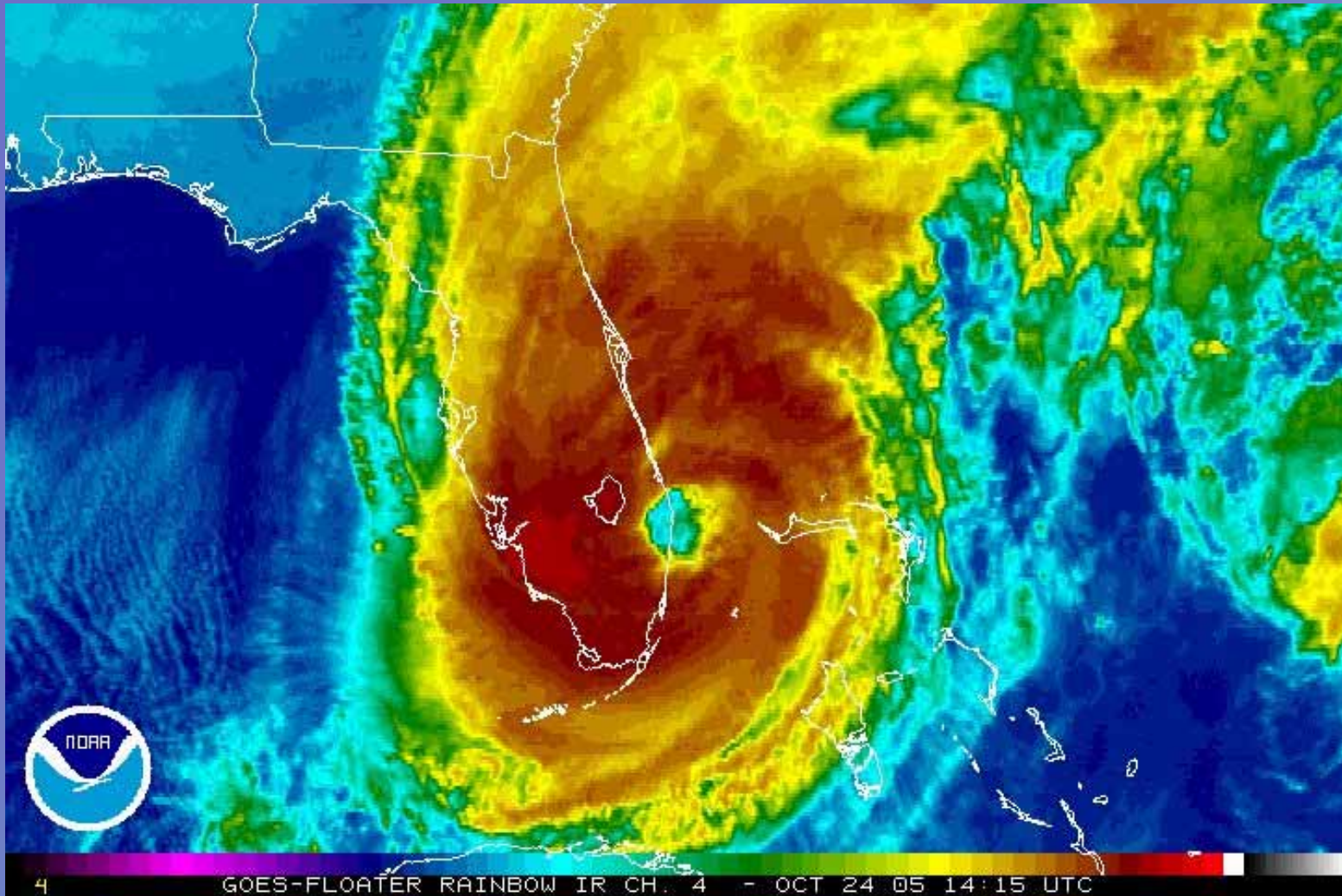


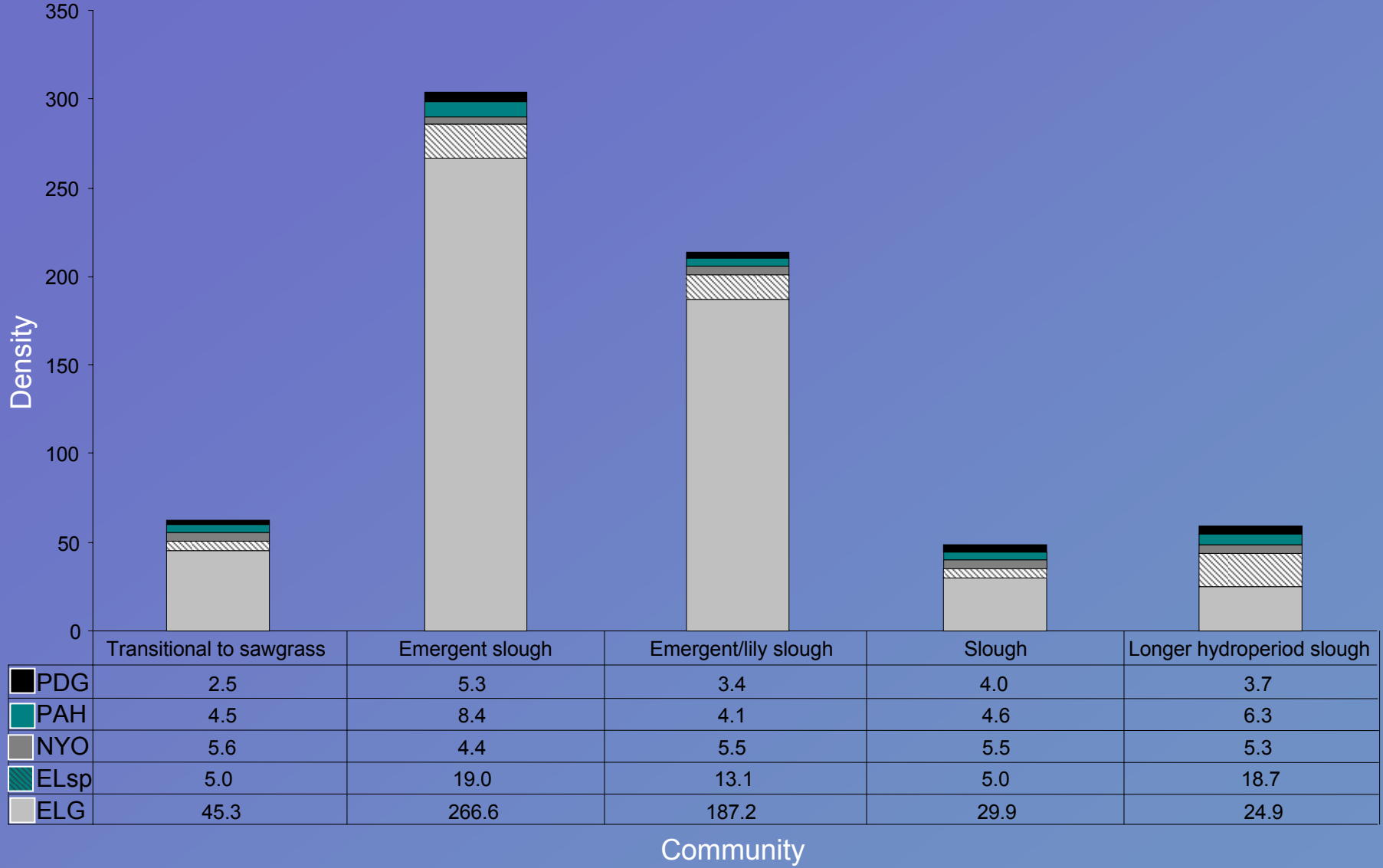




Year	Above average wetting rate?	Above average drying rate?
1993		
1994		
1995	Yes	Yes
1996		Yes
1997		
1998		
1999	Yes	
2000		Yes
2001		
2002	Yes	Yes
2003		
2004	Yes	Yes
2005	Yes	Yes
2006		Yes

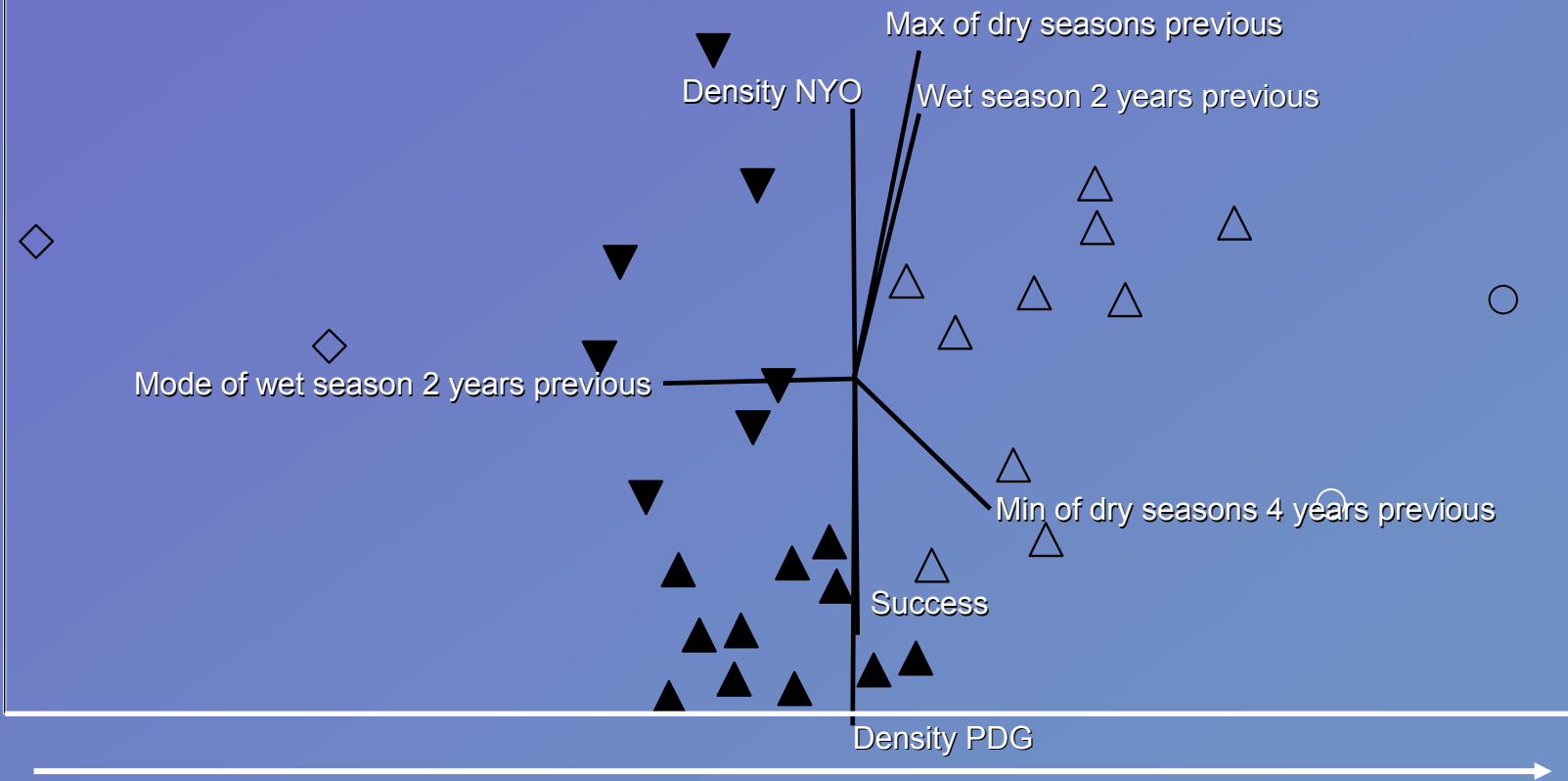




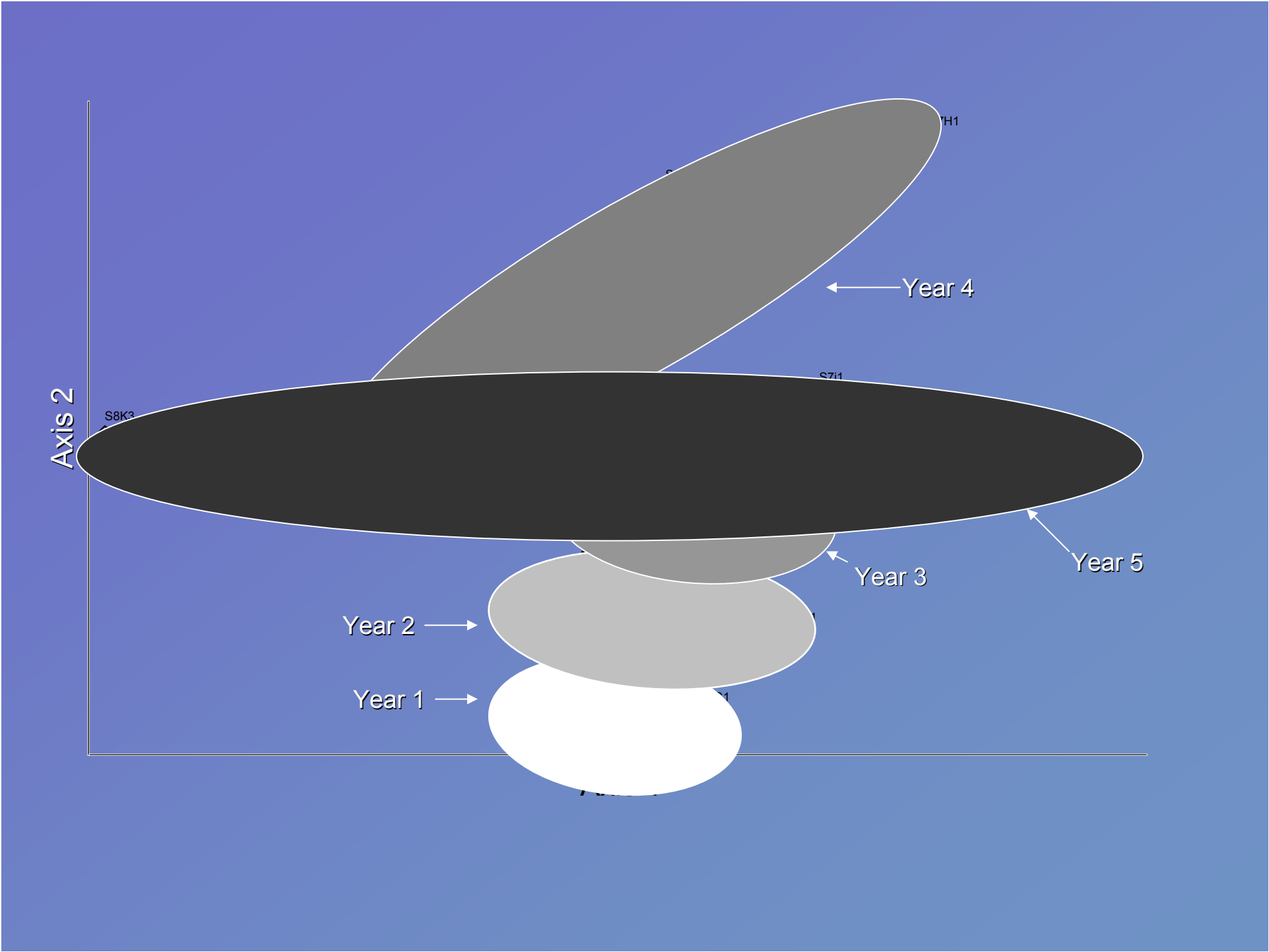


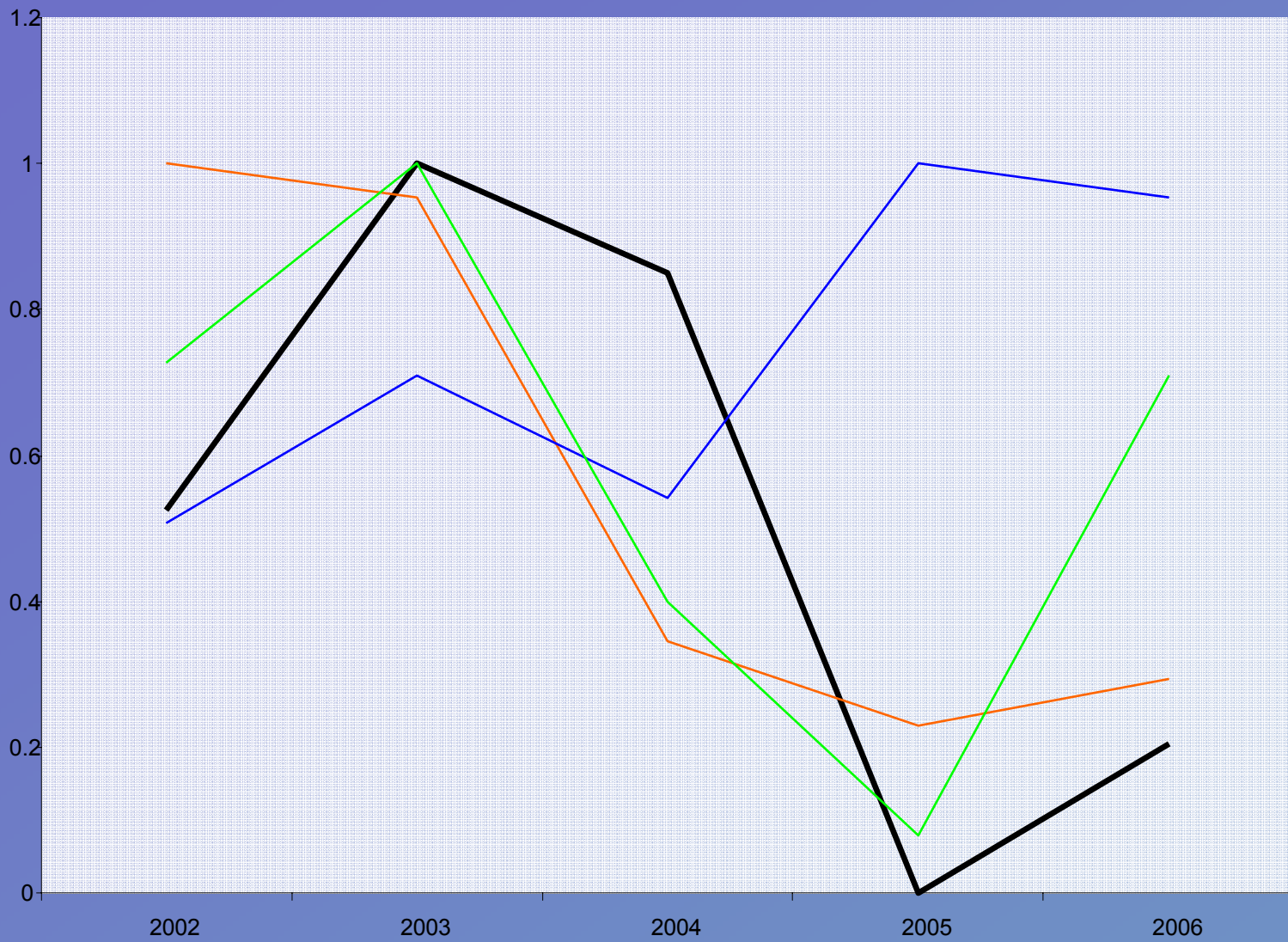
Axis 2--Increasing dry season maximum values

- ◇ Transition to Sawgrass
- ▲ Emergent Slough
- ▼ Emergent/Lily Slough
- △ Slough
- Longer Hydroperiod Slough



Axis 1--Increasing dry season minimum values

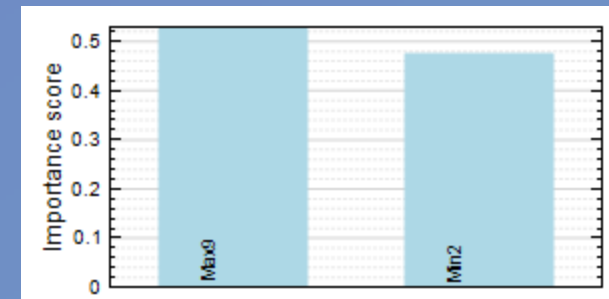
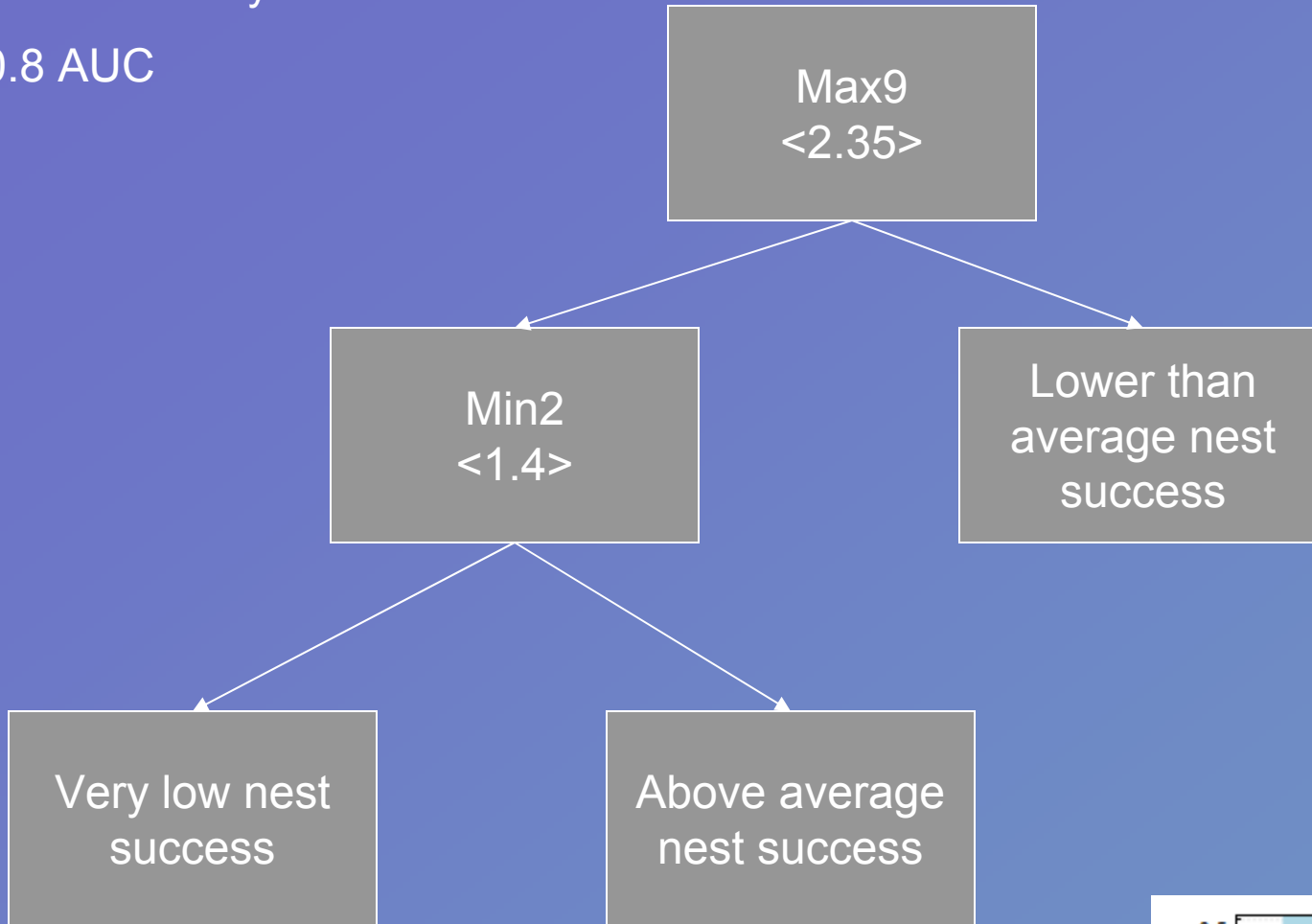




— Nest Success  
— PDG  
— NYO  
— Utric

80% accuracy

0.8 AUC











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