

# Wetland Assessment Procedure Test

## August 2004

# Results



# Test Goals:

- Assess consistency of scores
- Attain overall opinions on methods
- Refine field sheet

- All wetlands assessed within the period May 2 to May 22 period
- 21 participants
- Brief training

# Cypress Creek Wellfield (4 sites)

- Cypress G (W-56)
- Marsh D (W-16)
- W-11
- W-41

# Morris Bridge Wellfield (6 sites)

- X-3 Marsh
- Well Marsh (MBR-42)
- X-4 Cypress (MBR-89)
- Clay Gully Cypress (MBR-88)
- Trout Creek Marsh
- South Cypress Marsh (MBR-29)

# Observed “Apparent Errors”

- Species misidentification or missing significant species
- Mistakes in assigning wetland status
- Percentages – wide variability
- Inconsistent application of Assessment Area – 10 meters versus field of view

# Observed “Apparent Errors”

- Problems dealing with some species, including slash pine, wax myrtle, sabal palm, and maidencane
- Confusion on stressed plants
- General lack of comments

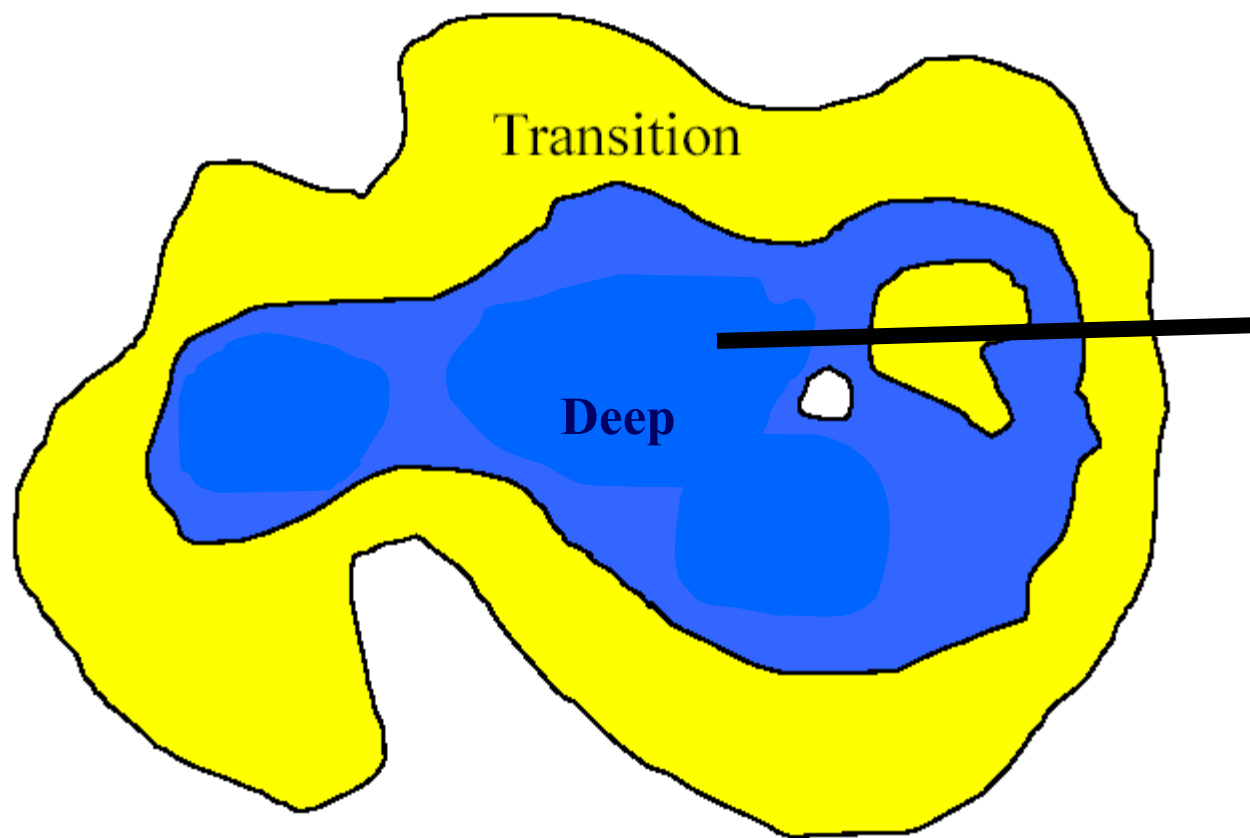
# Observed “Apparent Errors”

- Hummocks – don’t list species, but include in comments
- There should be no palmetto in the transition zone (for the test sites)
- “Islands” - Mistakes in assigning zones – not all of area in wetland interior is deep zone – this is difficult!

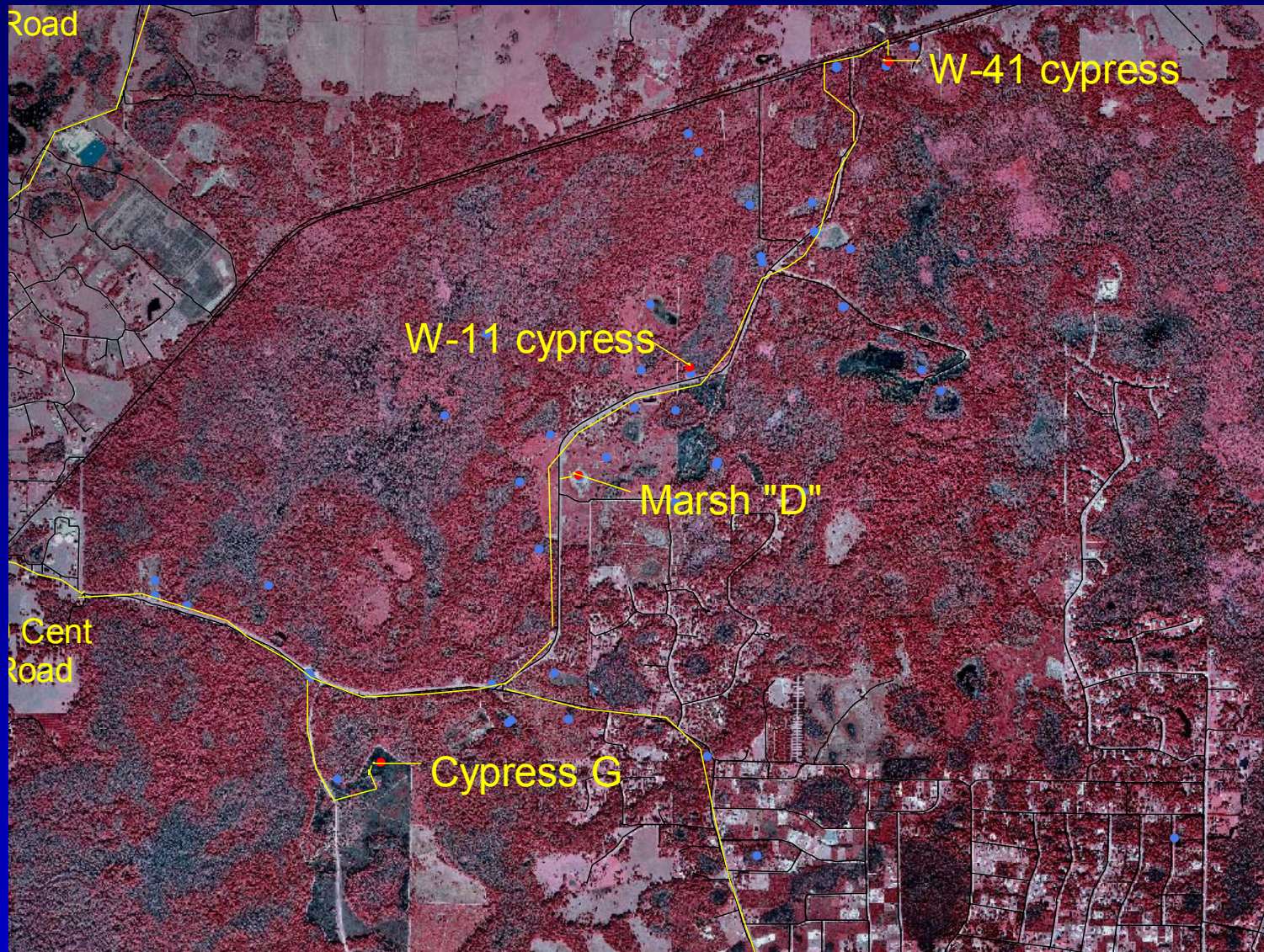








**Theoretical Wetland**







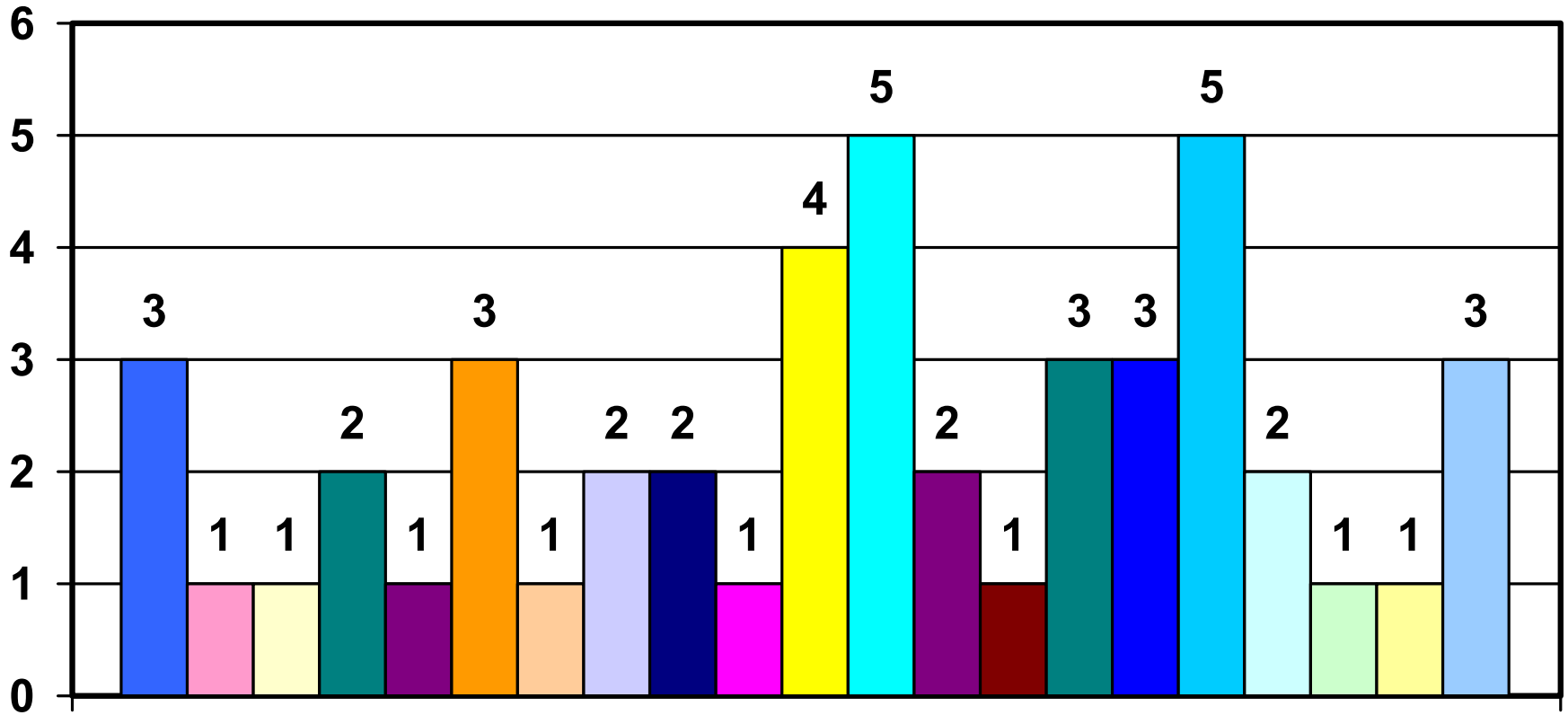






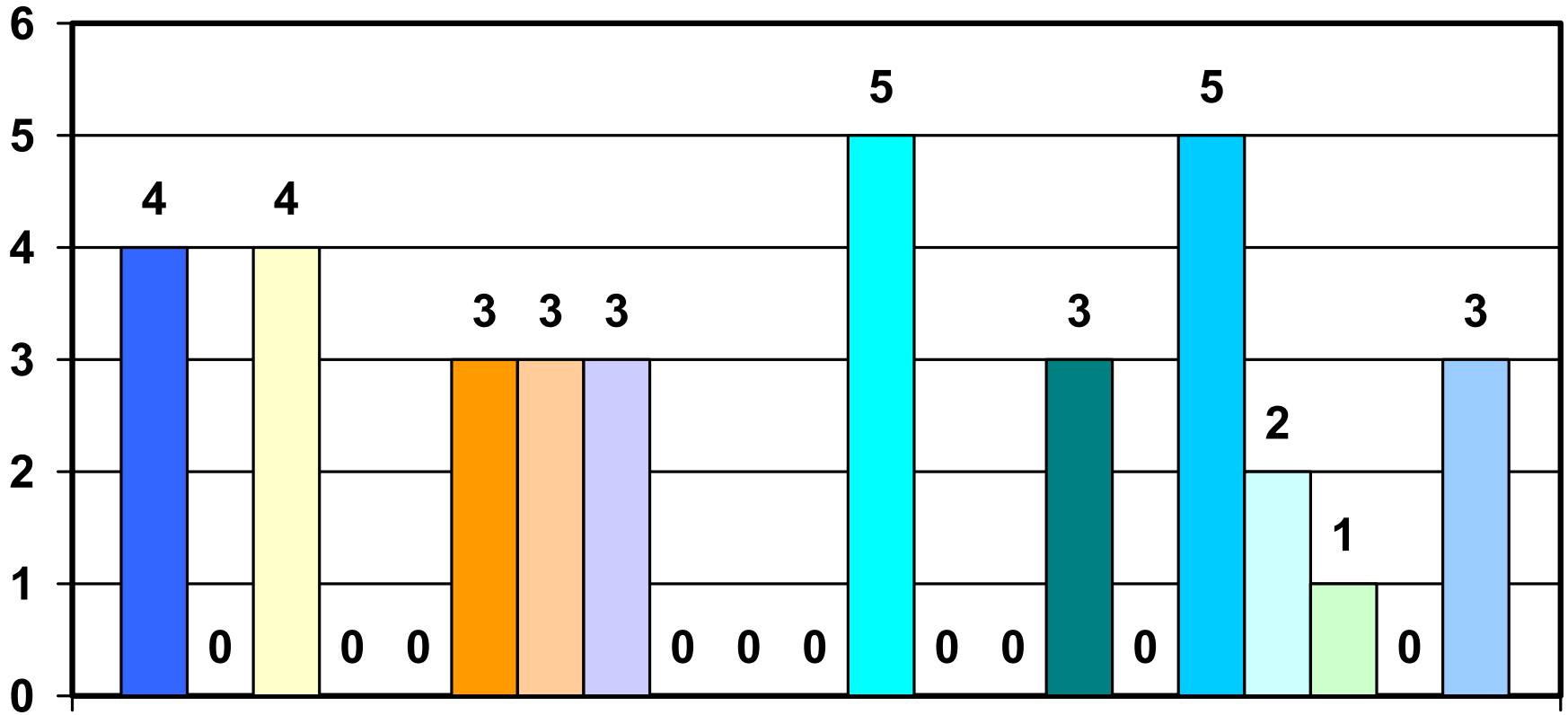


# Marsh D



Groundcover Zonation

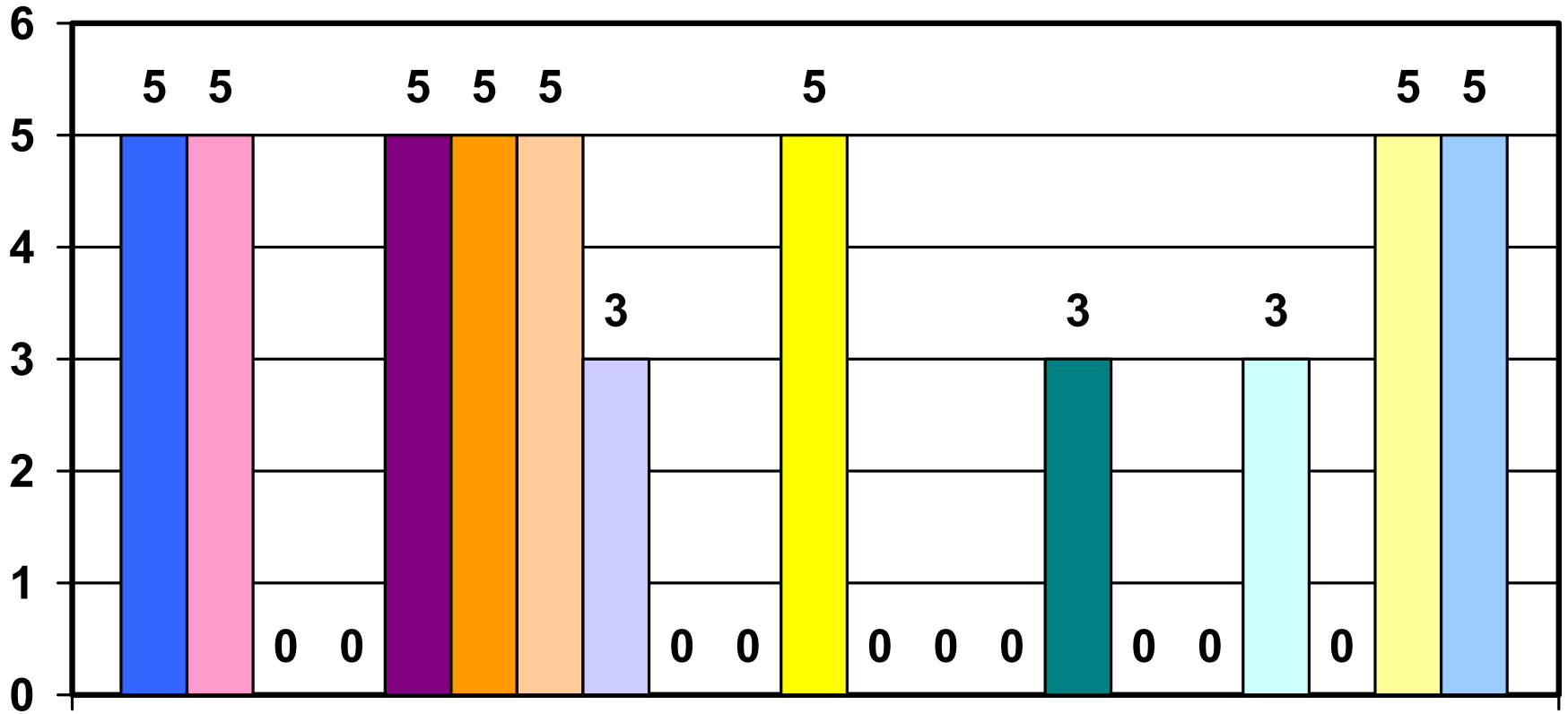
# Marsh D



Shrub and Small Tree Zonation

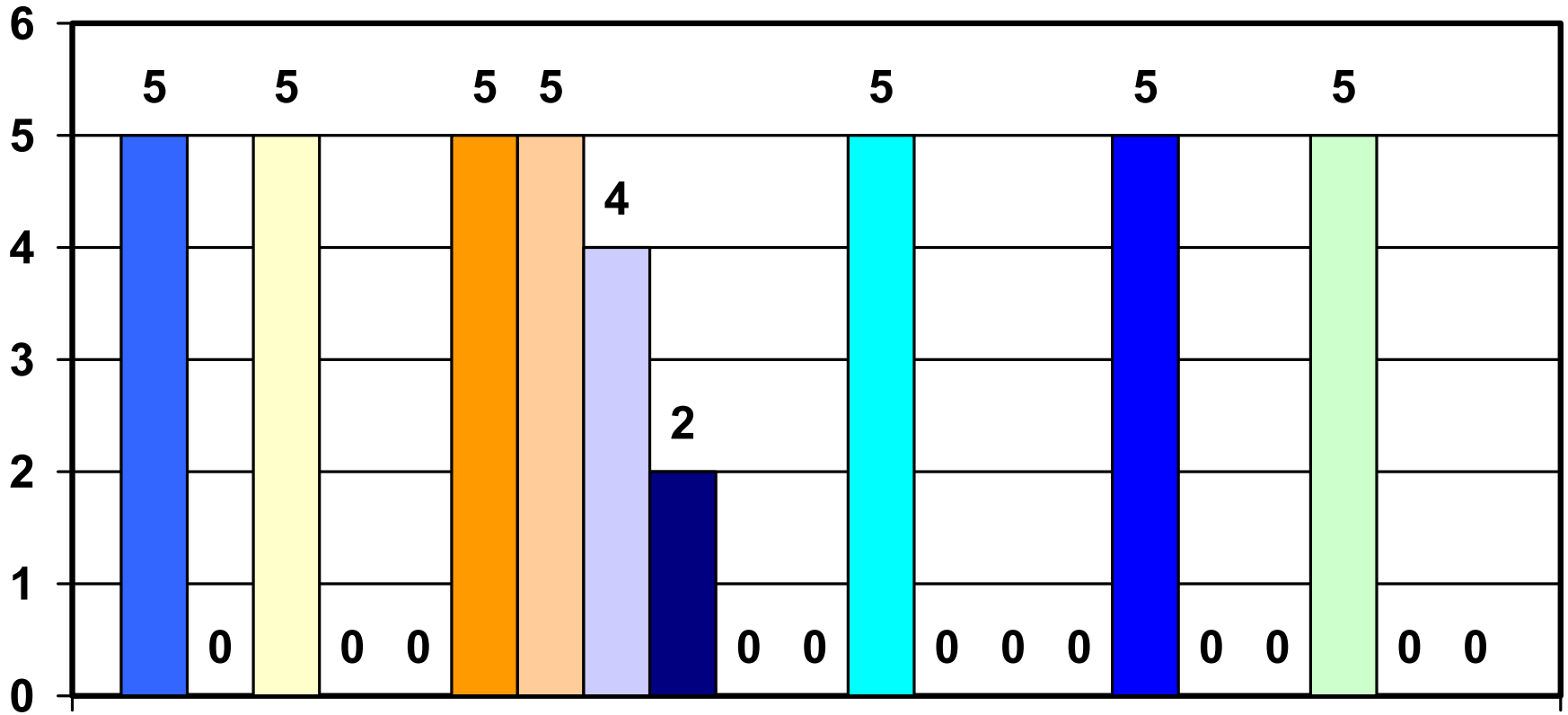


# Marsh D



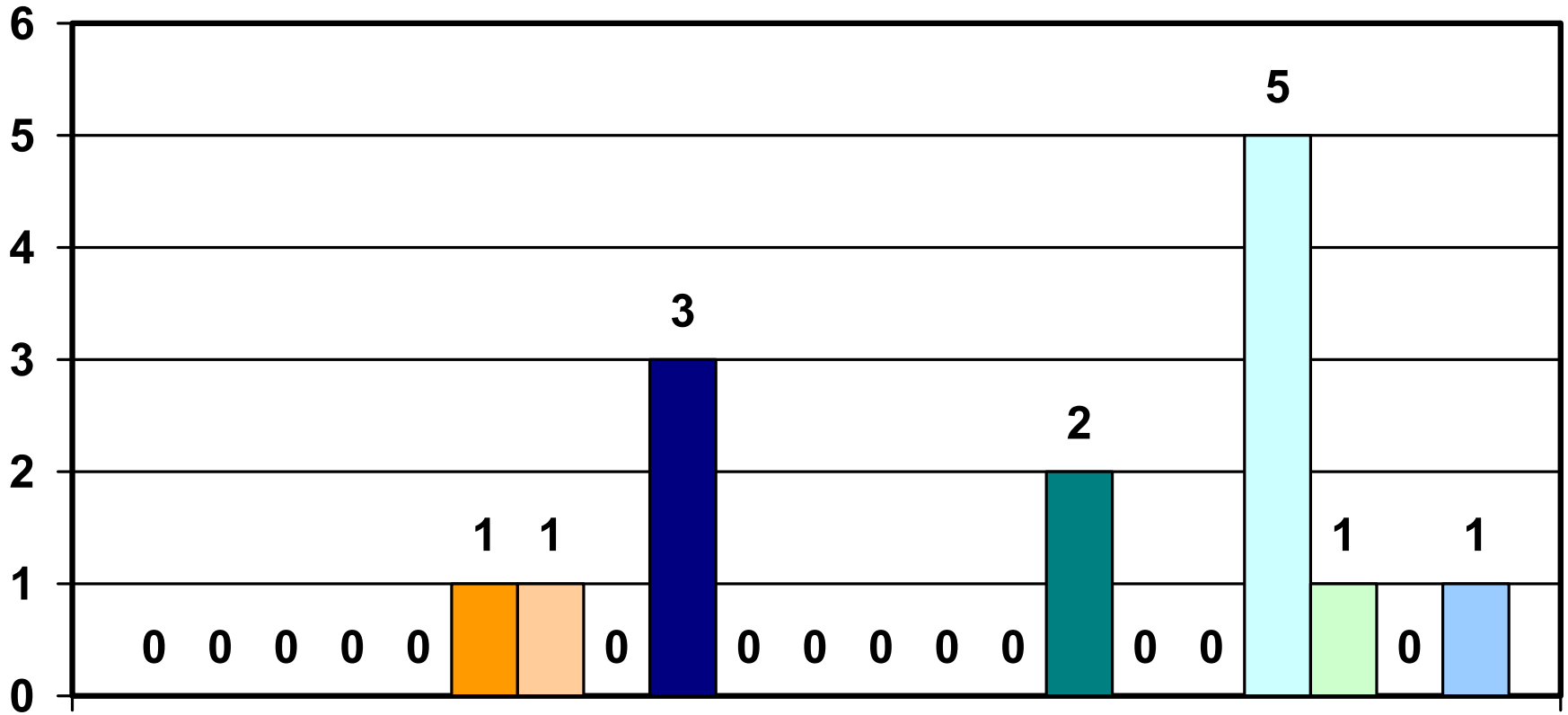
Tree Zonation

# Marsh D



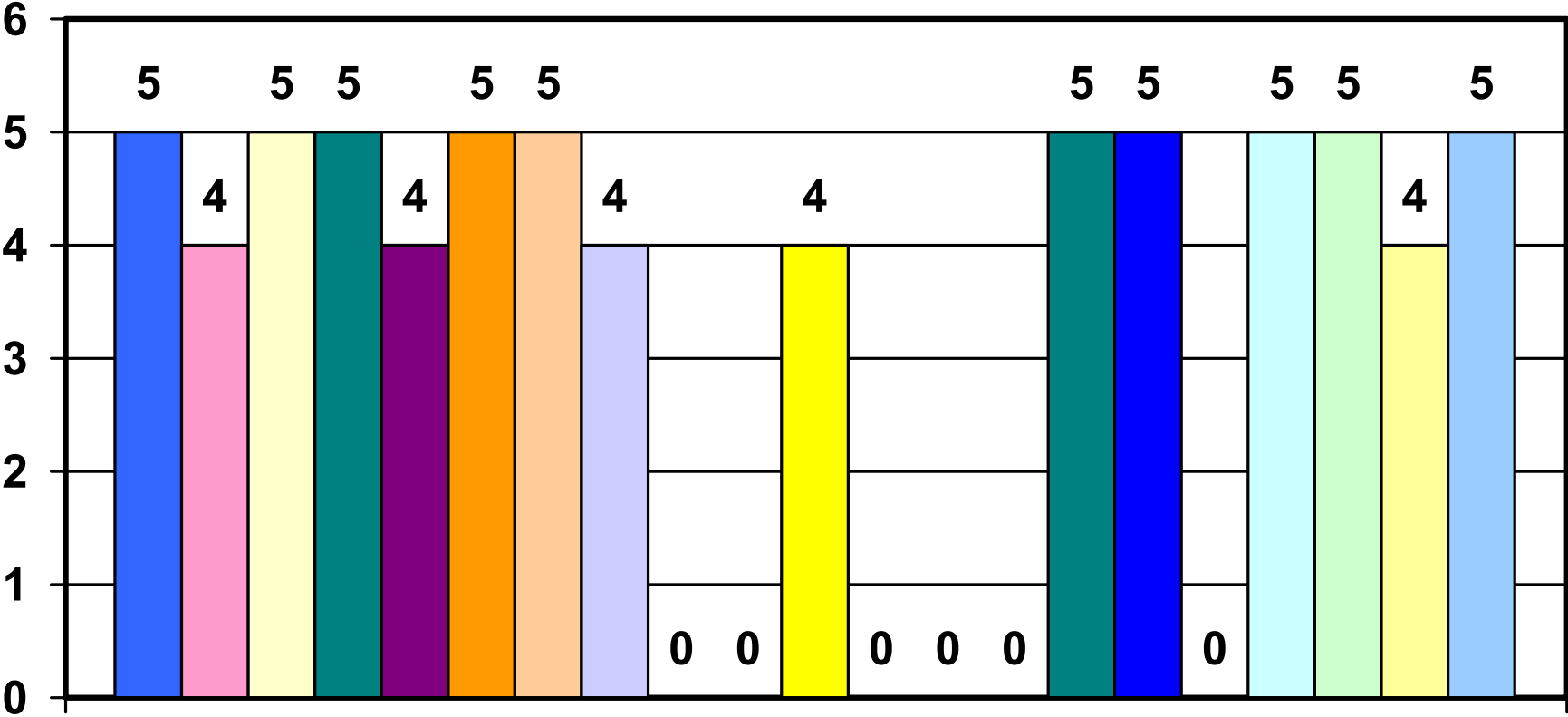
Stress of Appropriate Shrubs and Small Trees

## Marsh D



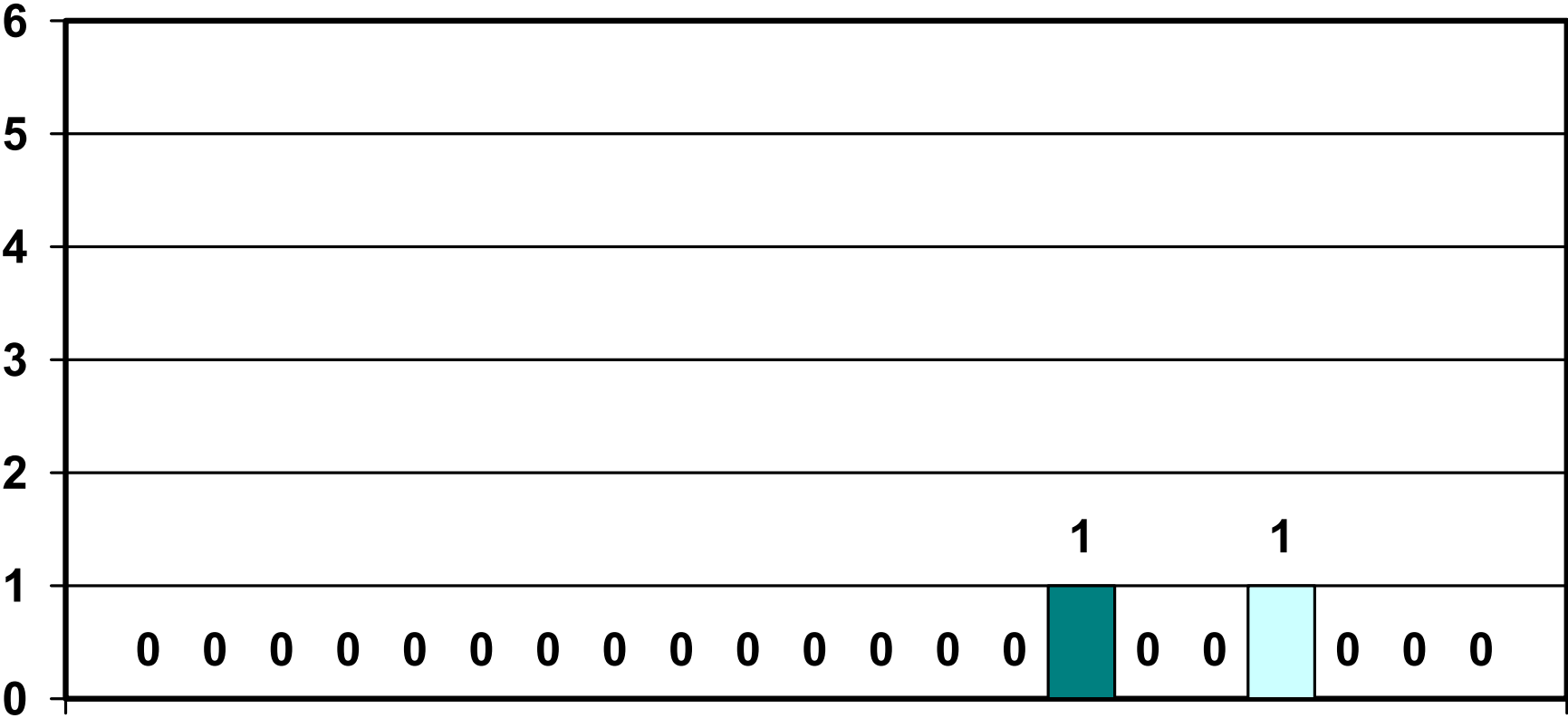
Stress of Inappropriate Shrubs and Small Trees

**Marsh D**



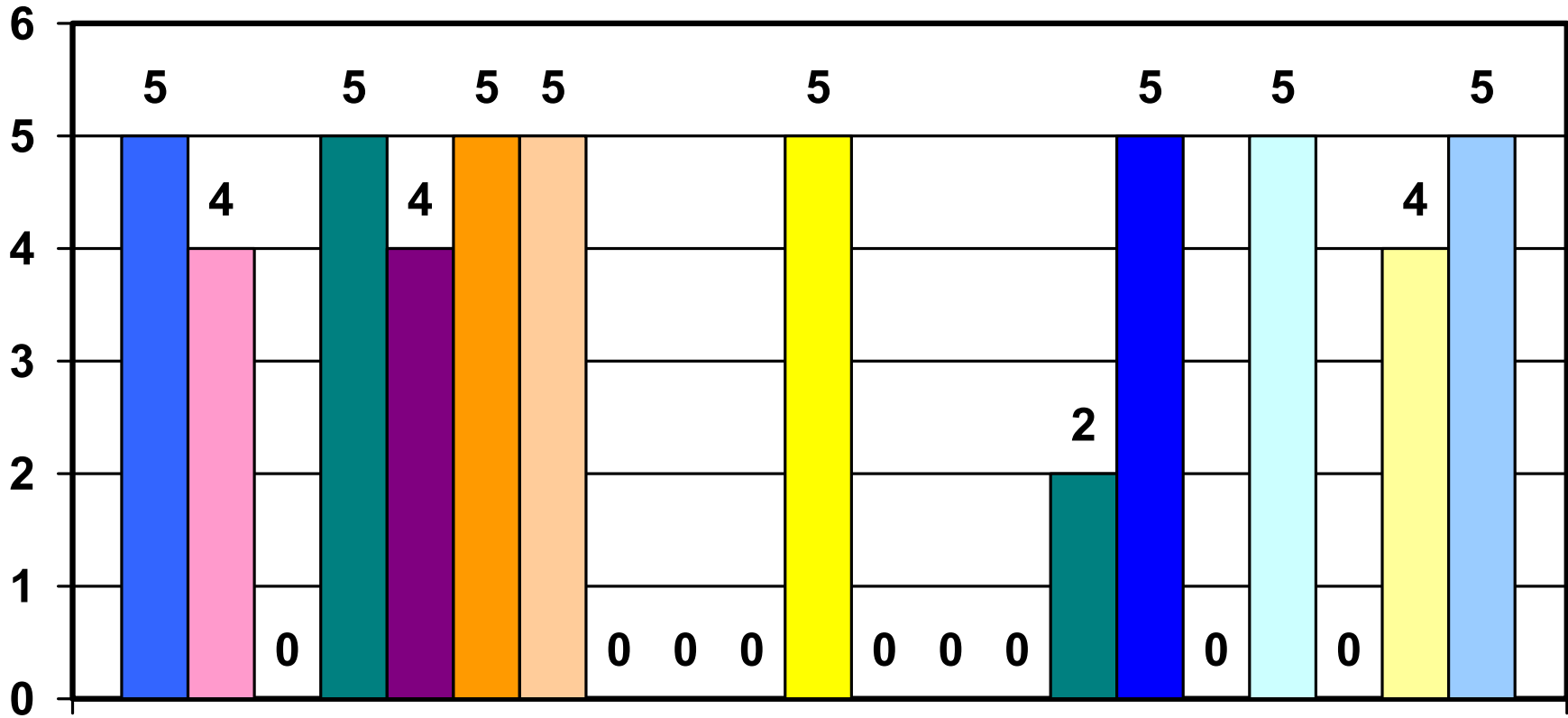
**Canopy Stress of Appropriate Trees**

Marsh D



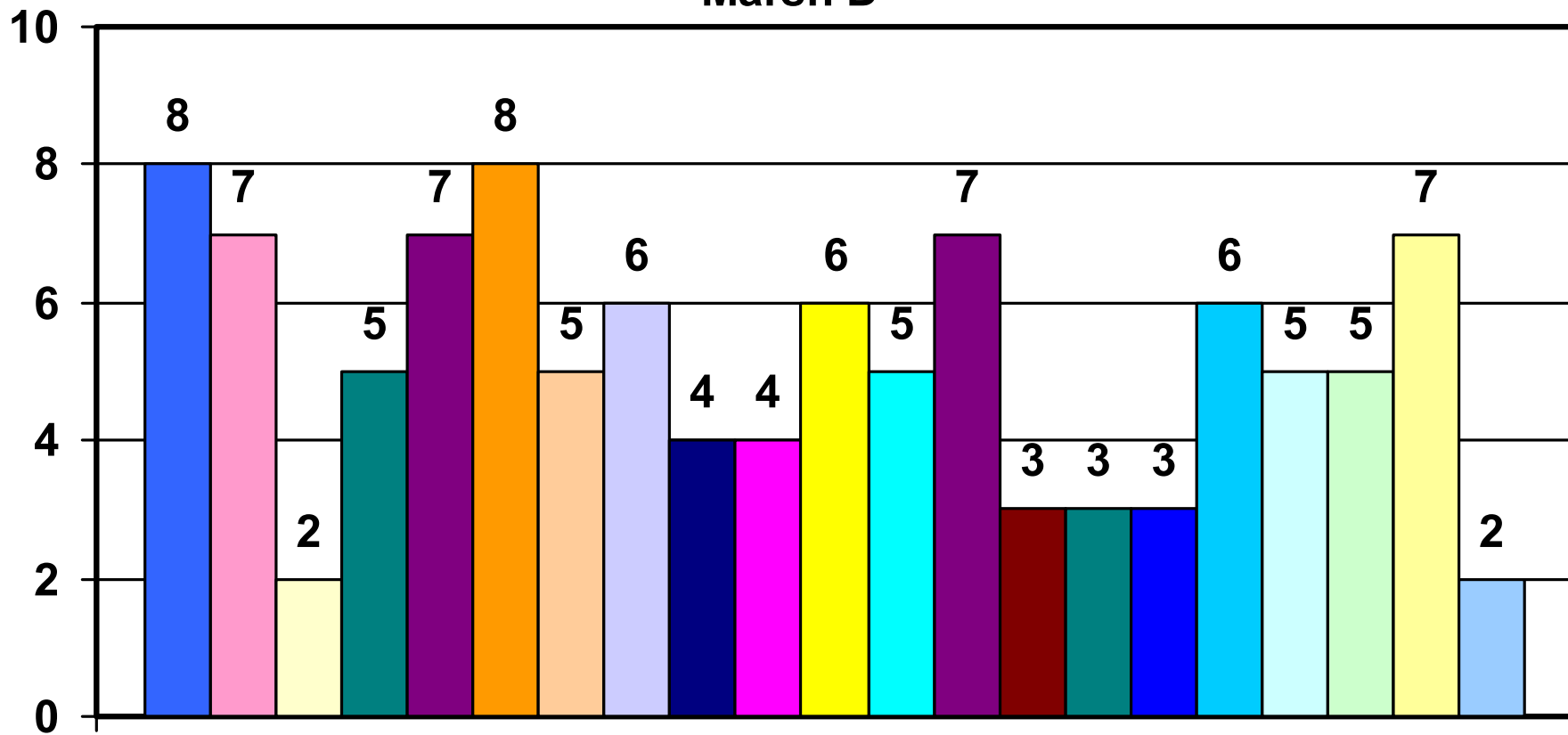
Canopy Stress of Inappropriate Trees

Marsh D



Leaning or Dead Tree Species

# Marsh D



Overall Health of Wetland



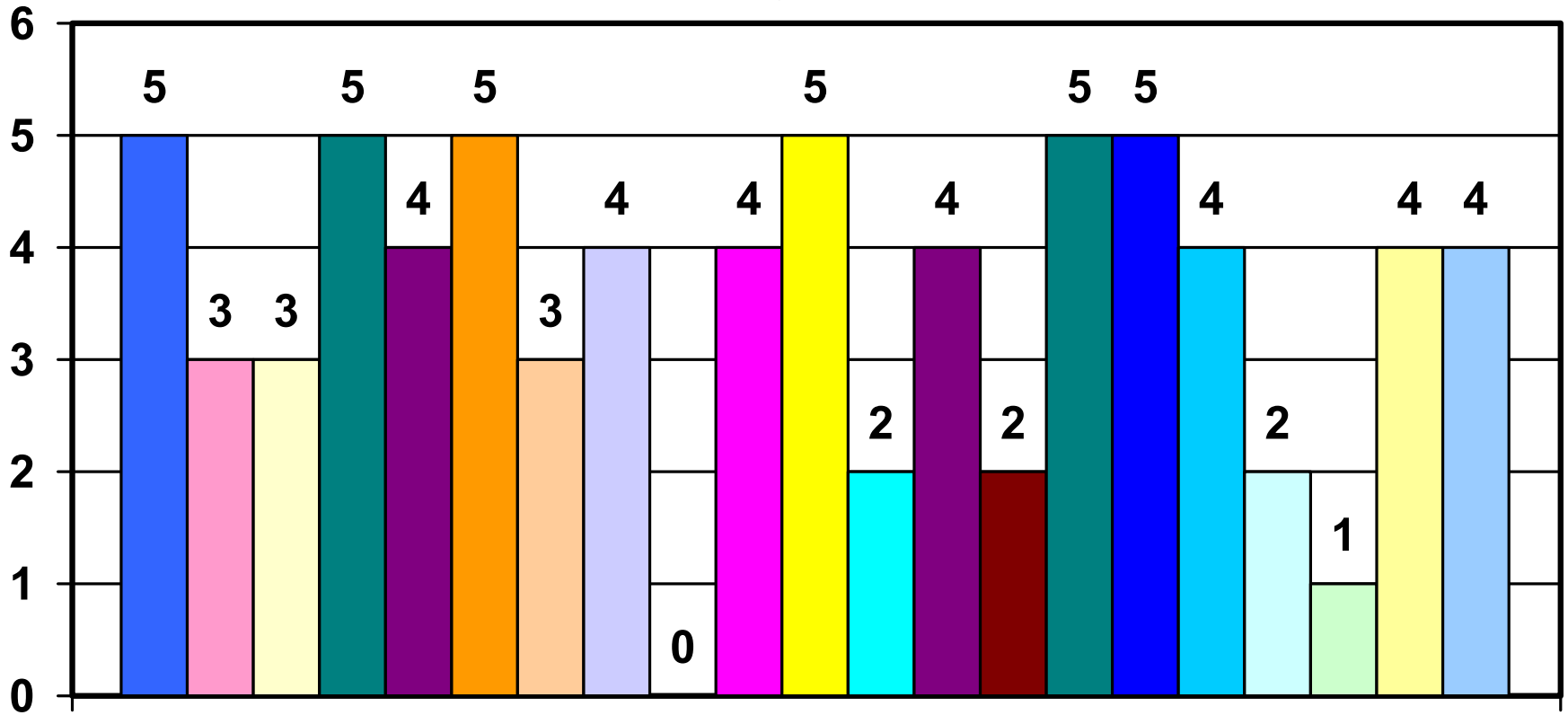






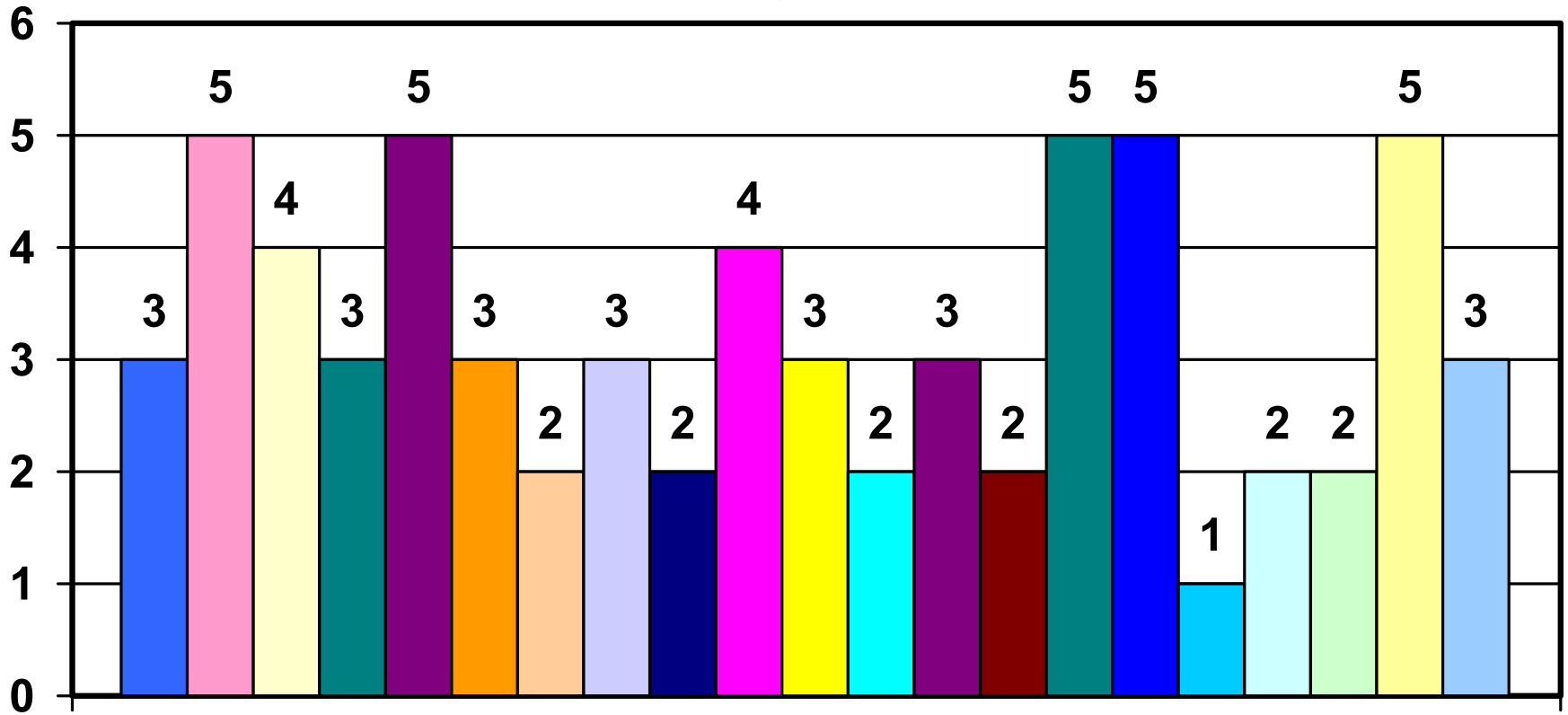


# W-11 Cypress



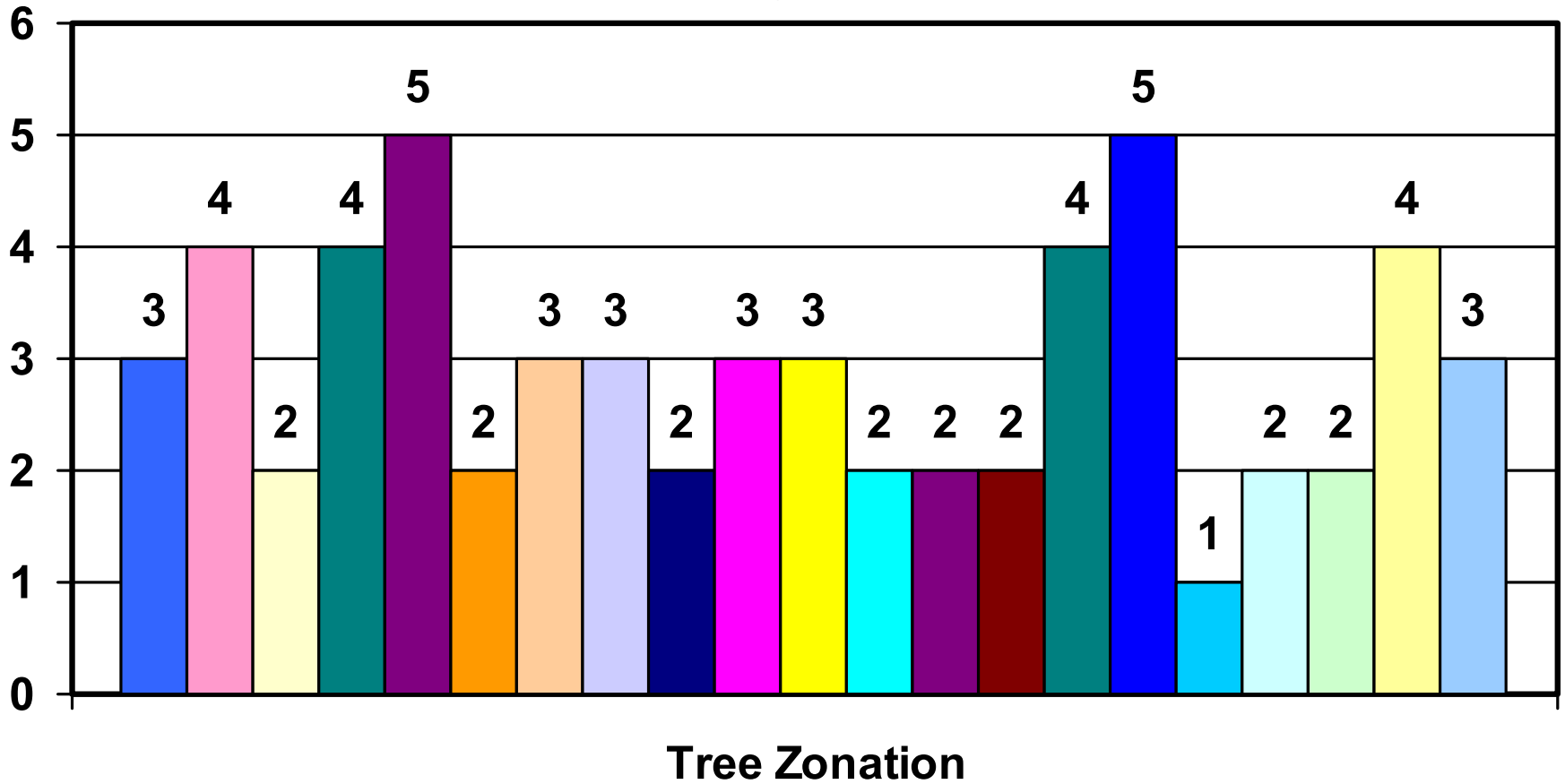
Groundcover Zonation

## W-11 Cypress

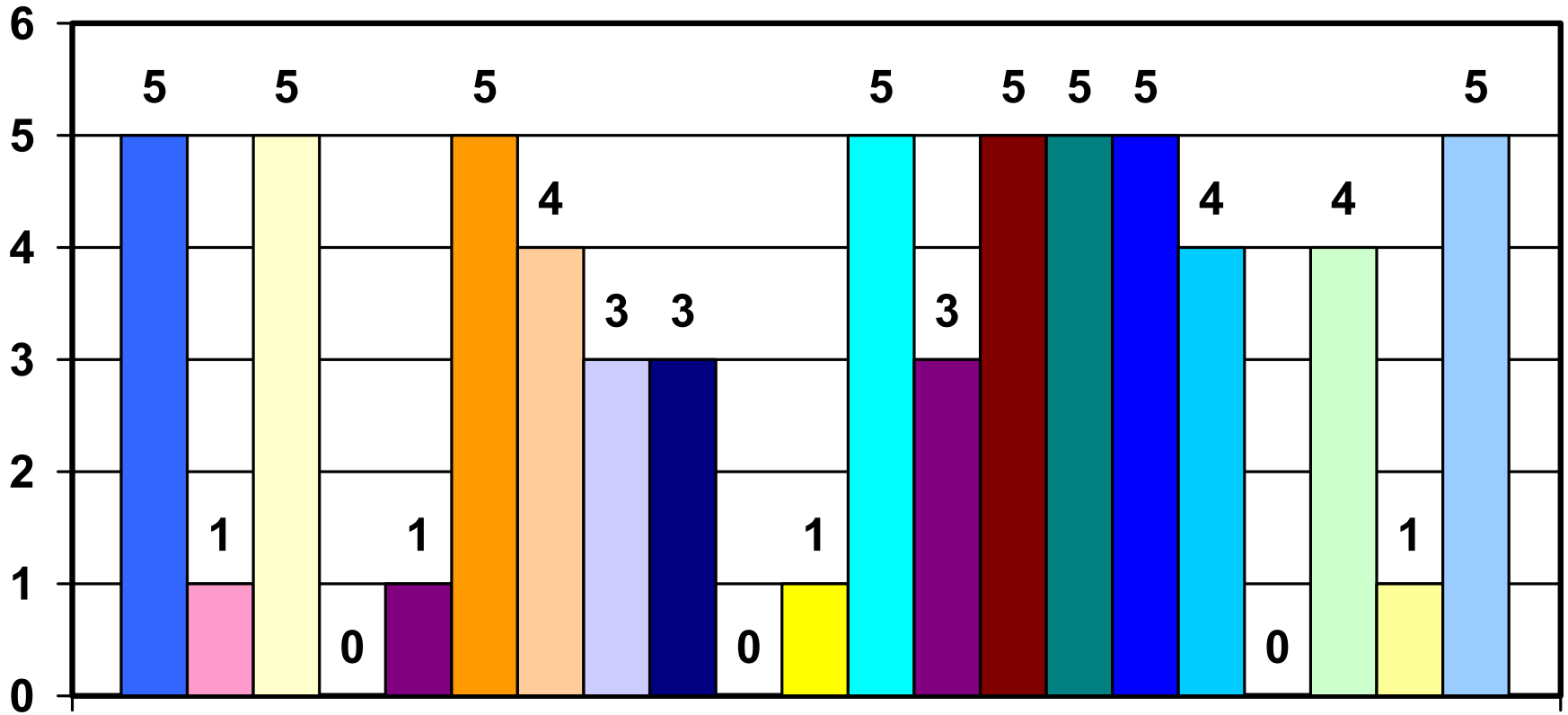


Shrub and Small Tree Zonation

# W-11 Cypress

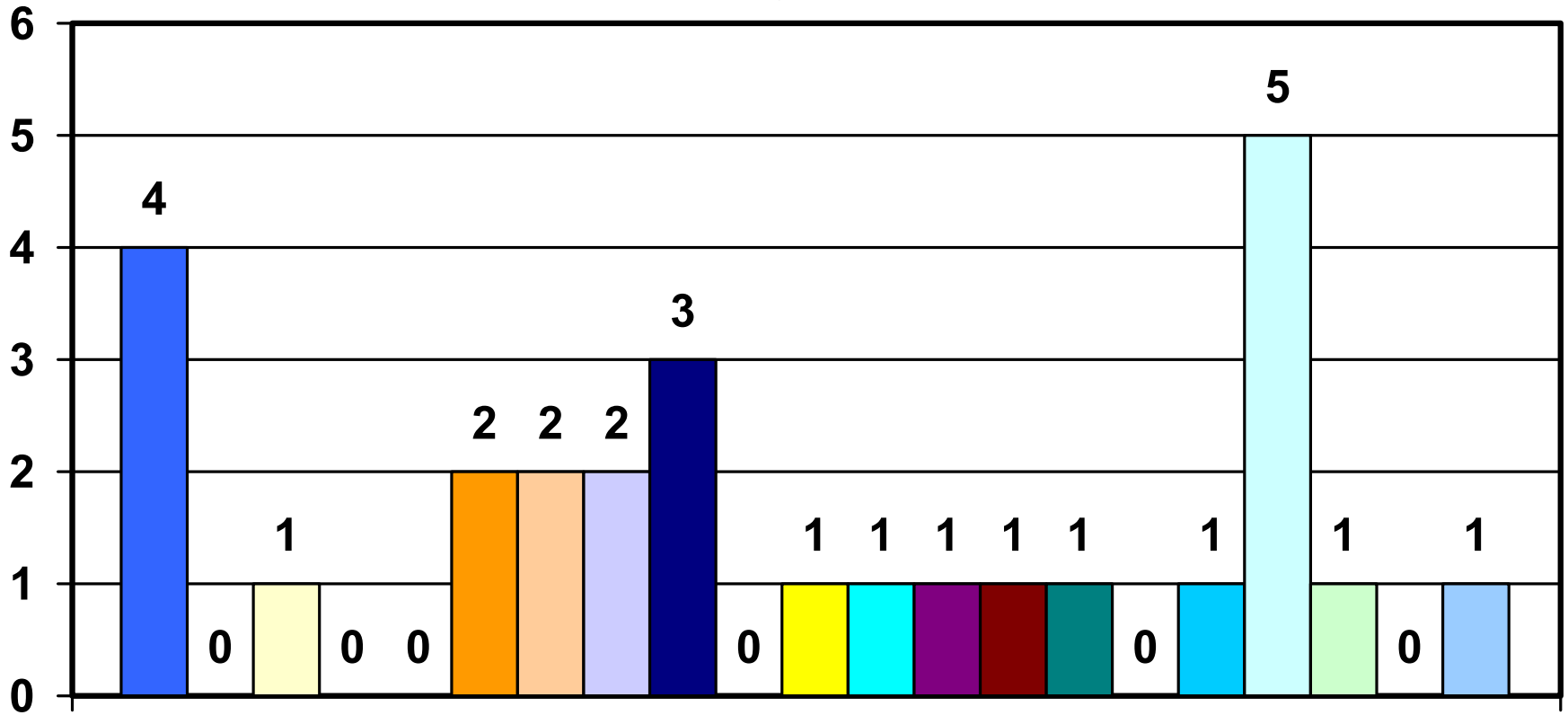


## W-11 Cypress



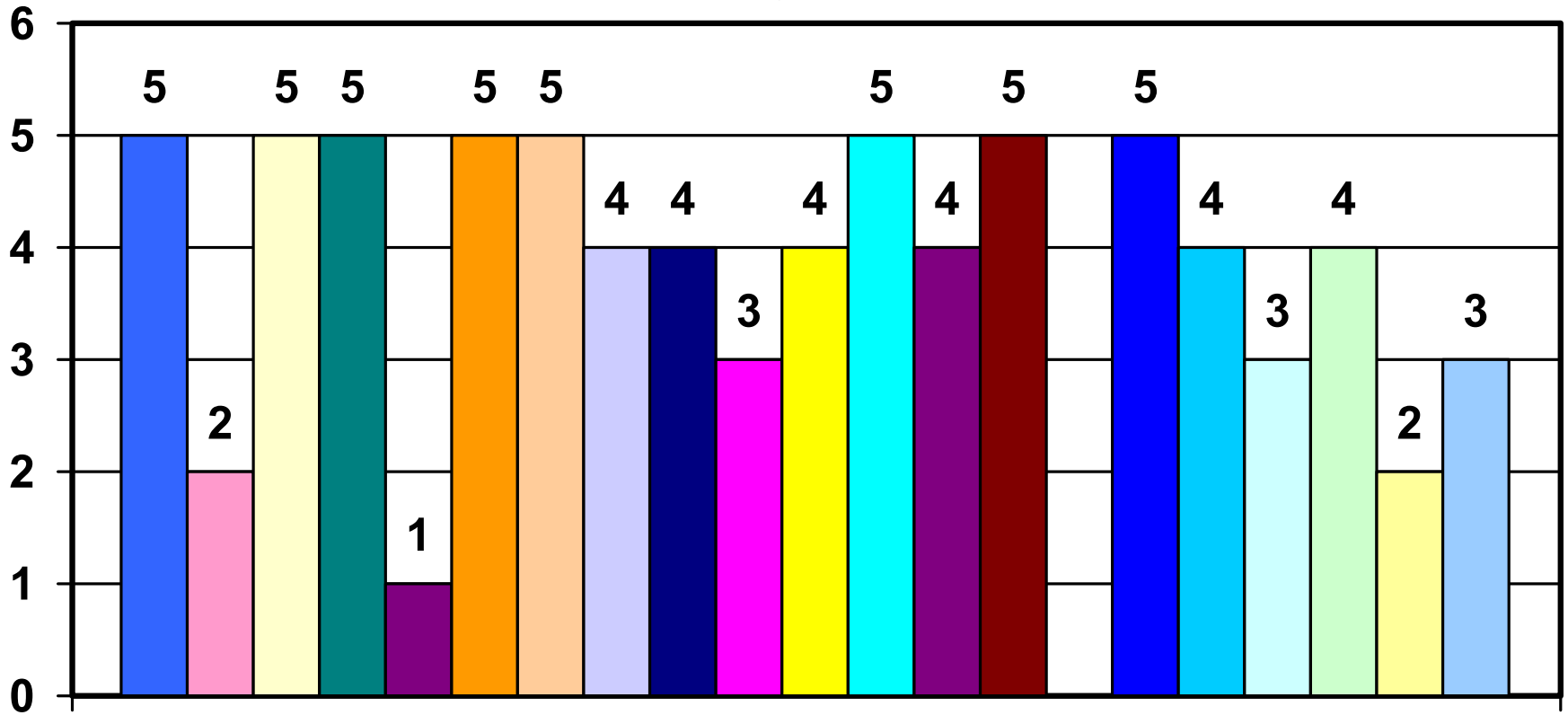
Stress of Appropriate Shrubs and Small Trees

## W-11 Cypress



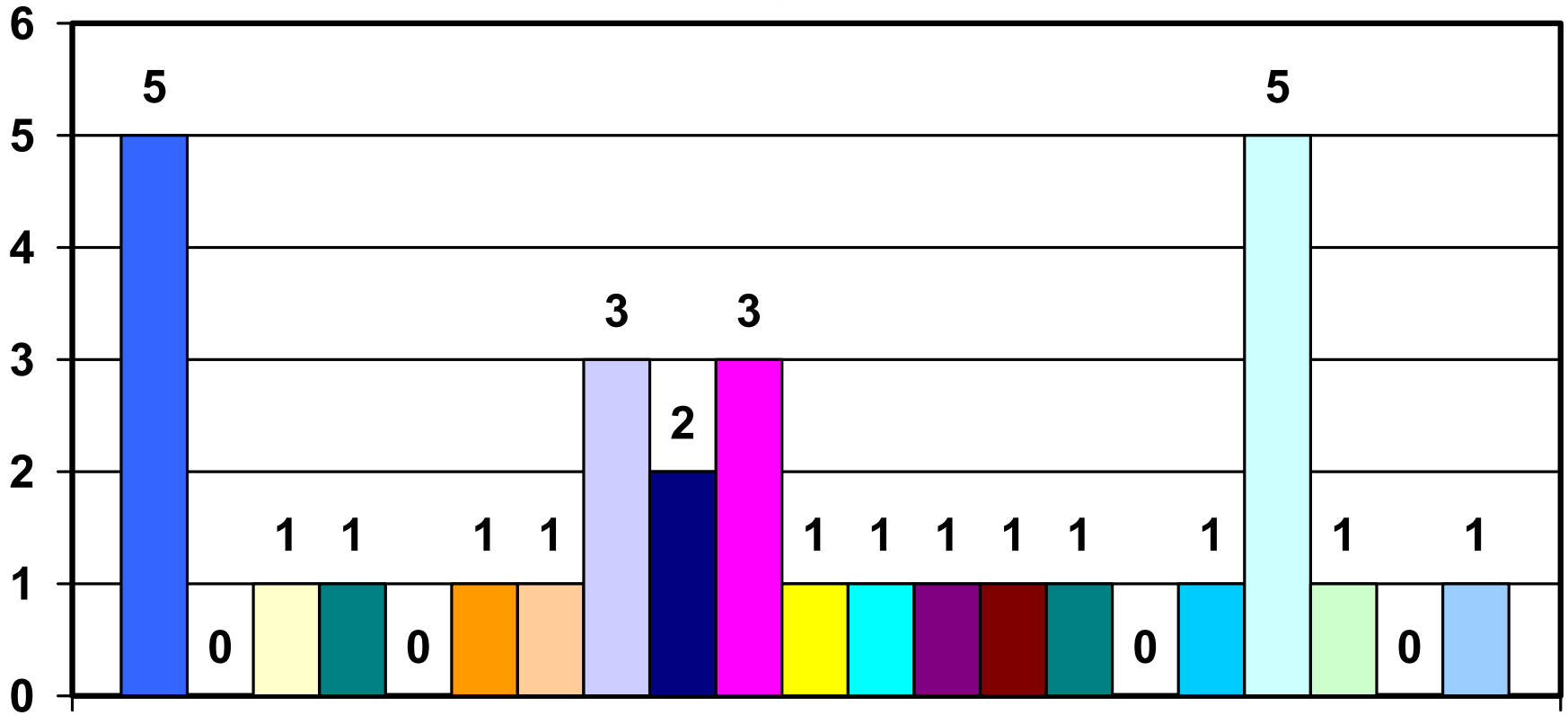
Stress of Inappropriate Shrubs and Small Trees

## W-11 Cypress



Canopy Stress of Appropriate Trees

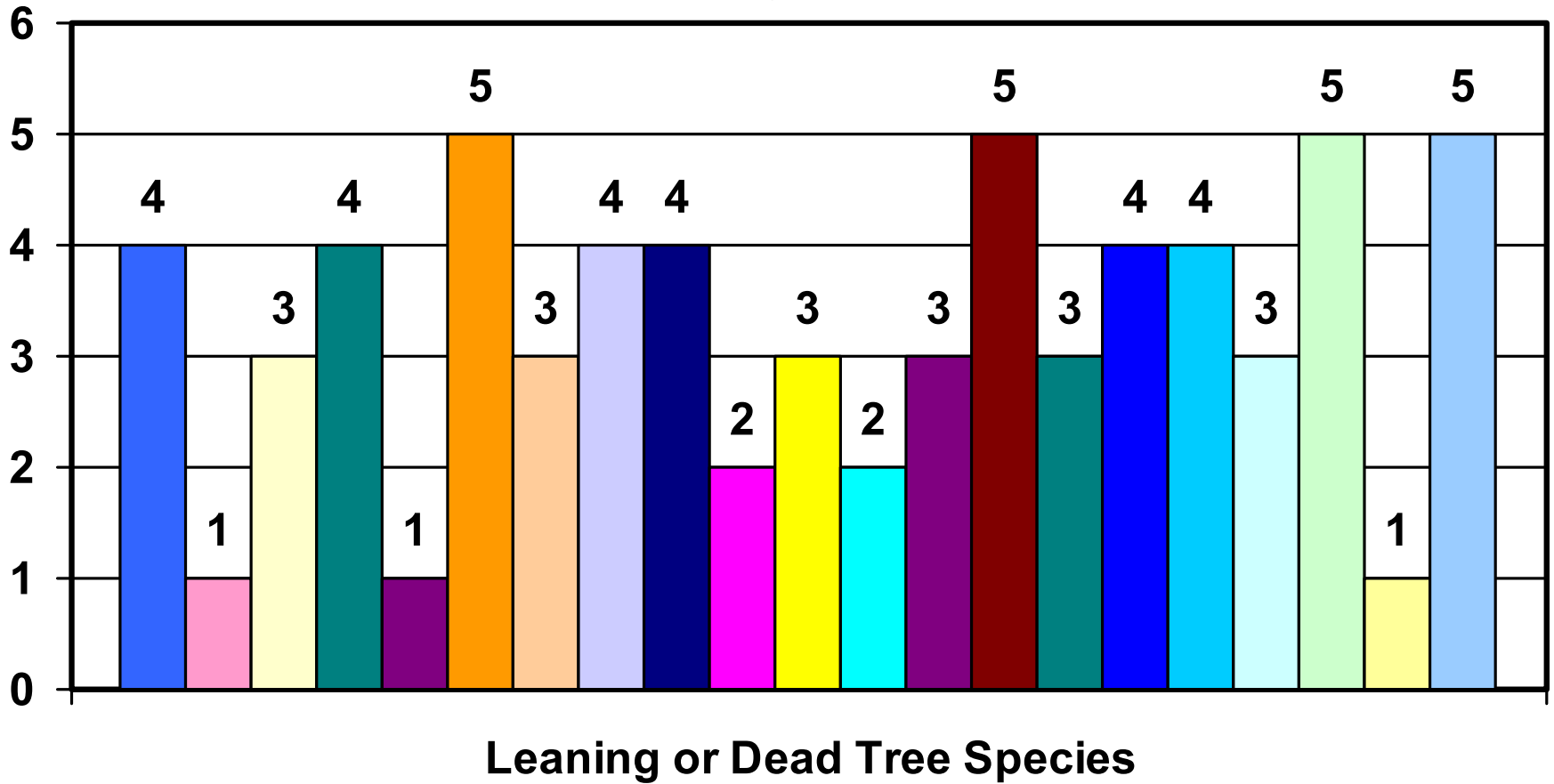
## W-11 Cypress



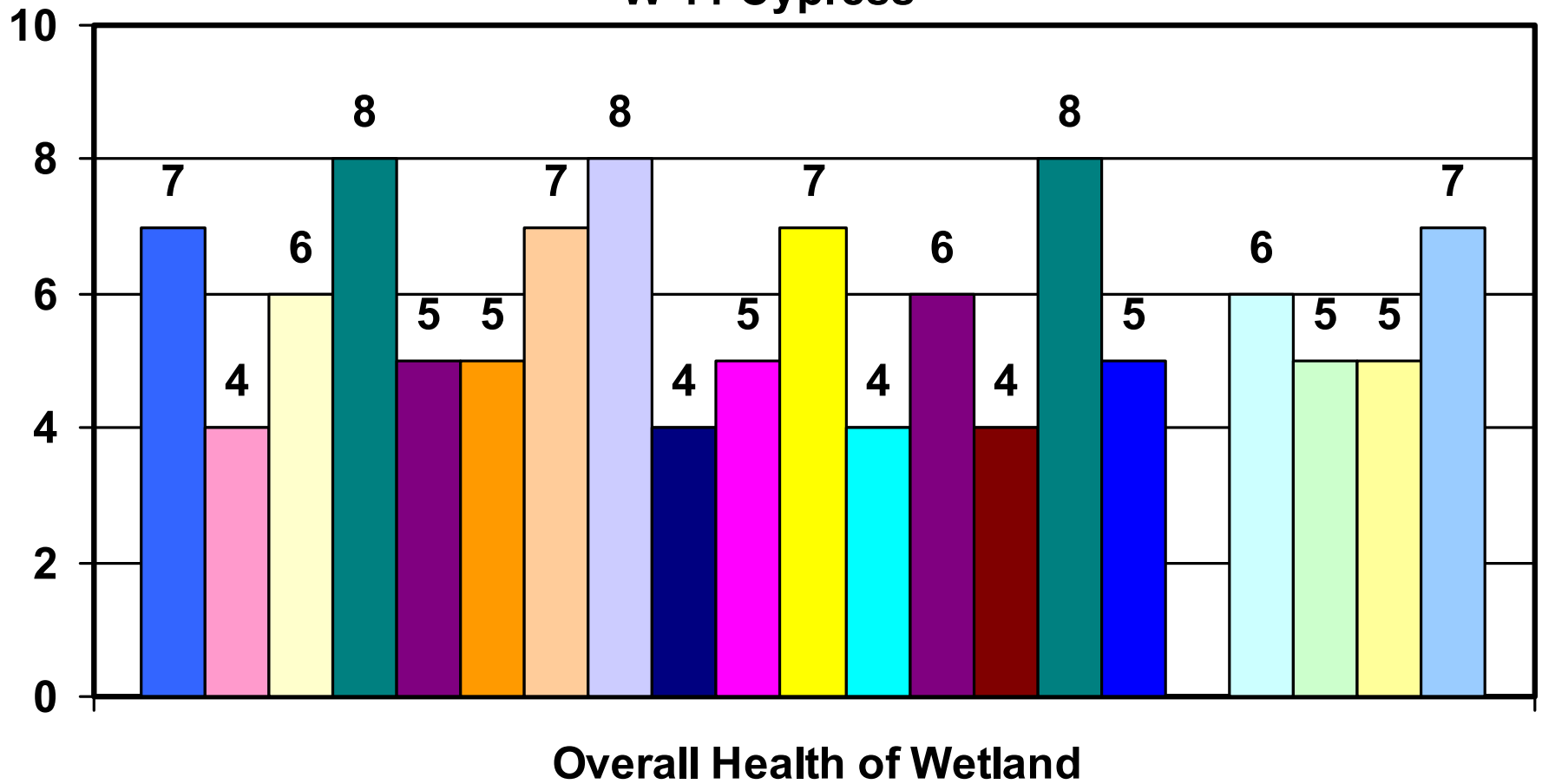
Canopy Stress of Inappropriate Trees



## W-11 Cypress



## W-11 Cypress



# Analyses Performed

- Manual review and comparison of scores, species, comments
- Correlation assessments using time, scores, experience, etc.
- Categorical assessments
- Field checks

# Conclusions

- We're not ready to adopt the new method yet
- The process needs to be simplified
- Training is critical, including plant identification training and training on the methodology
- Zonation scoring needs work to deal with variation situations, including recovering systems
- We need to work closely to keep things consistent (central databases, training, networking, increased quality control)

# Wetlands subcommittee

- Met twice in July, will meet again in August
- Developed a list of WAP issues to resolve

# **Wetlands subcommittee agreed so far to...**

- Work together on surveying (database, meet professional requirements)
- Normal pool and wetland edge method
- Soil monitoring by a soil scientist will be dropped, and research will be pursued
- WAP monitoring proposed to be once a year, rather than twice

# Wetlands subcommittee agreed so far to...

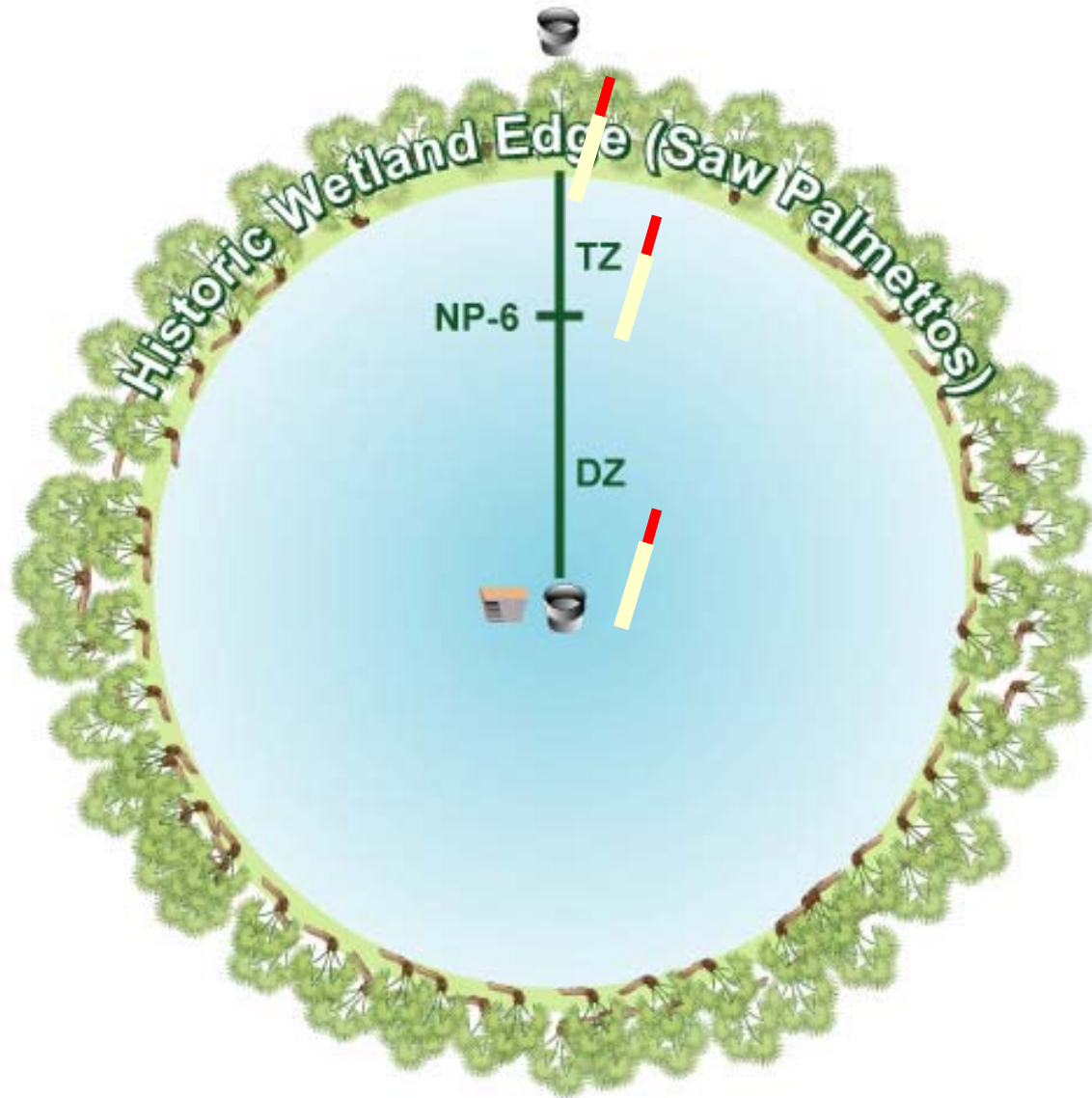
- Flow systems will be assessed by a different methods, for now
- Work continues on a new zonation method.....

# New (?) idea – Zone approach

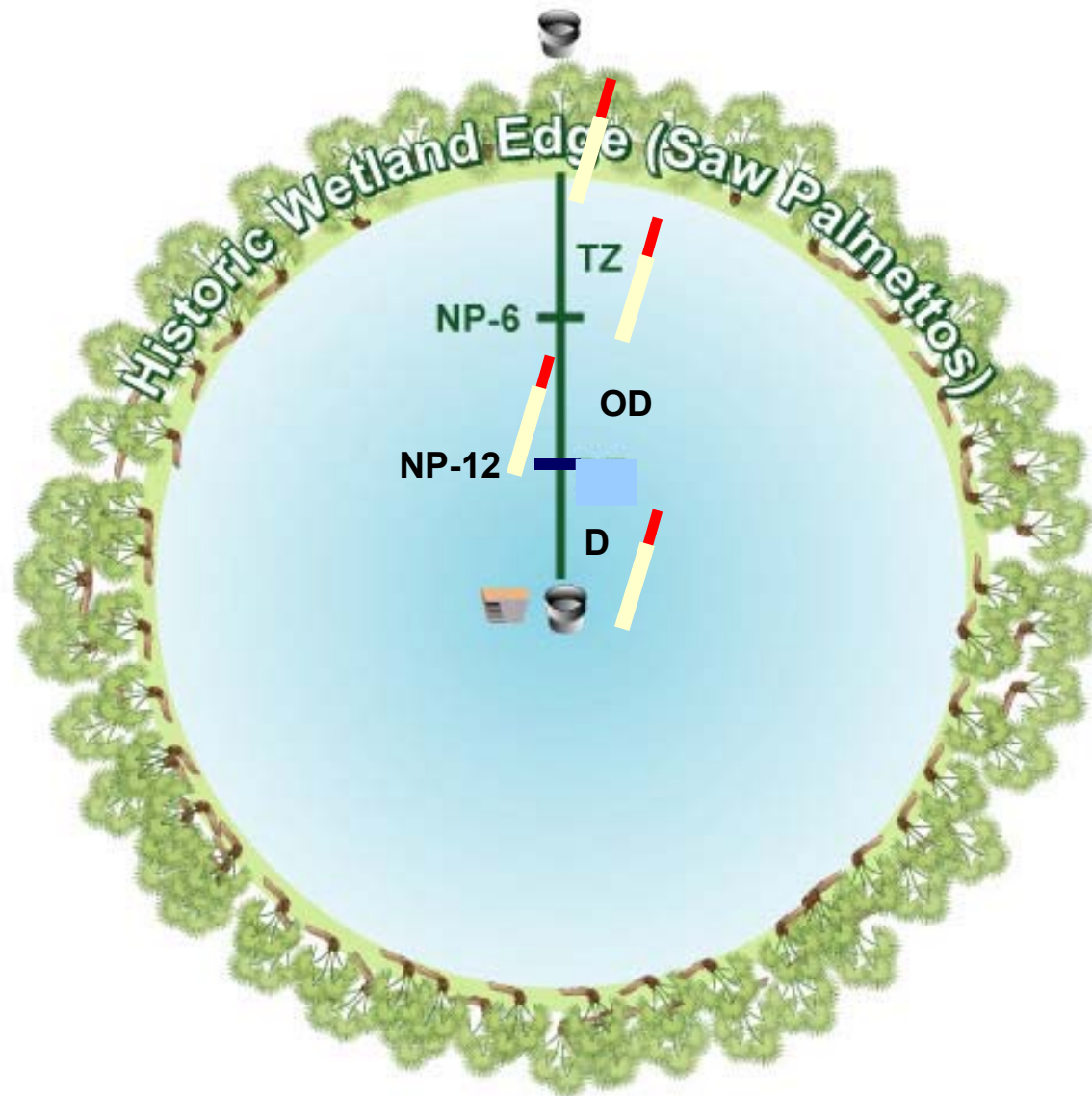
- Species list can be boiled down to a more workable size
- Divide the Deep zone in 2



# *Transect Set-up*



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# Divide all plants into a new “zone” classification

**Upland (U)** – Plant species that are designated as Upland by DEP, and are not expected to be seen in wetlands. It is possible that a few of these species may be found along wetland edges, but are not expected throughout the transition zone.

**Adaptive (AD)** – Plants species designated as FAC or Upland by DEP, but are commonly seen in the transition zone in limited numbers. When adaptive plants are found in the outer deep or deep zones, they should be treated the same as transition zone plants.

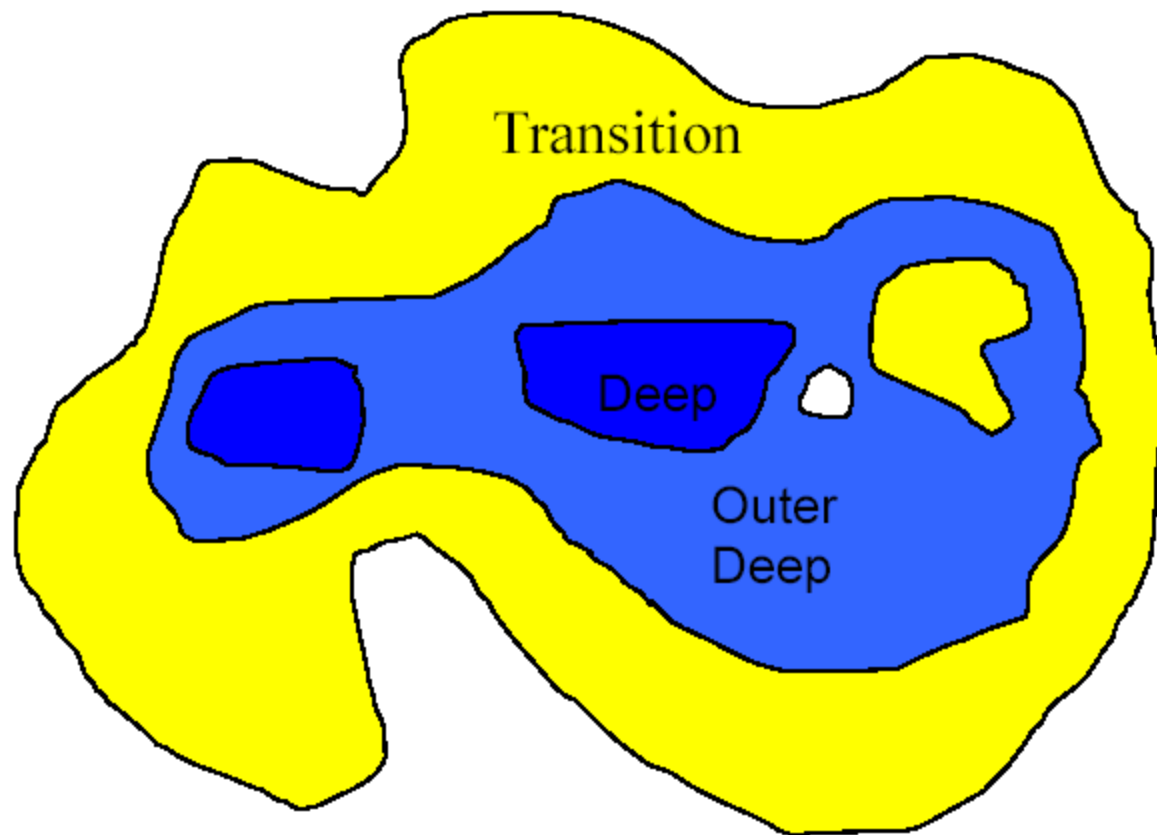
**Transition Zone (T)** – Plant species commonly found in the transition zone, and designated either FACW or OBL by DEP.

**Outer Deep (OD)** – Plant species commonly found in the outer deep zone, and designated either FACW or OBL by DEP.

**Deep (D)** - Plant species commonly found in the deep zone, and designated either FACW or OBL by DEP.

# New (?) idea – Zone approach

Species	DEP Wetland Status	Wetland Zone
<i>Acer rubrum</i>	FACW	OD
<i>Acer saccharinum</i>	OBL	T
<i>Alternanthera philoxeroides</i>	OBL	OD
<i>Amphicarpum muhlenbergianum</i>	FACW	T
<i>Andropogon glomeratus</i> (Campbell)	FACW	T
<i>Andropogon virginicus</i> (Campbell)	FAC	AD
<i>Aristida stricta</i>	FAC	AD
<i>Axonopus furcatus</i>	FAC	AD
<i>Baccharis halimifolia</i>	FAC	AD
<i>Bacopa caroliniana</i>	OBL	OD
<i>Berchemia scandens</i>		T
<i>Blechnum serrulatum</i>	FACW	OD
<i>Callicarpa americana</i>	U	U
<i>Carex gigantea</i>	OBL	OD
<i>Carex glaucescens</i>	FACW	T
<i>Carex longii</i>	FACW	T
<i>Carex lupulina</i>	FACW	T
<i>Carex</i> spp.		
<i>Carex verrucosa</i>	FACW	OD
<i>Carex walteriana</i>	OBL	T
<i>Celtis laevigata</i>	FACW	OD
<i>Cephalanthus occidentalis</i>	OBL	D
<i>Cirsium nuttallii</i>	FACW	T
<i>Cladium jamaicense</i>	OBL	D
<i>Conyza canadensis</i>	U	AD
<i>Cynodon</i> spp.	U	AD



**Theoretical Wetland**

# New (?) idea – Zone approach

1. Plants have moved in three zones in high numbers and distribution.
2. Plants have moved in two zones in high numbers and distribution, and/or some plants have moved in three zones.
3. Plants have moved in one zone in high numbers and distribution, and/or some plants have moved in two zones.
4. Plants have moved in one zone in enough numbers and distribution to be of concern, and/or adaptive plants are extensive in number and distribution in the transition zone.
5. Normal zonation. Some plants may have migrated inward one zone, but they are small in number and/or right along the zone edge. Adaptive plants in the transition zone are only considered abnormal if they are extensive in numbers and distribution.

N/A Not enough **groundcover** to make evaluation

