



# Fisheries Management



2005

# Baseline Monitoring Lake Survey

## Cloverleaf Chain



# Survey Objectives

- Determine Species Composition and Relative Abundance
- Collect Size Distribution, Age, Growth and Mortality

# Methods

- Summer Mini-Fyke and Seining
- Fall Boomshocking



# Boomshocking

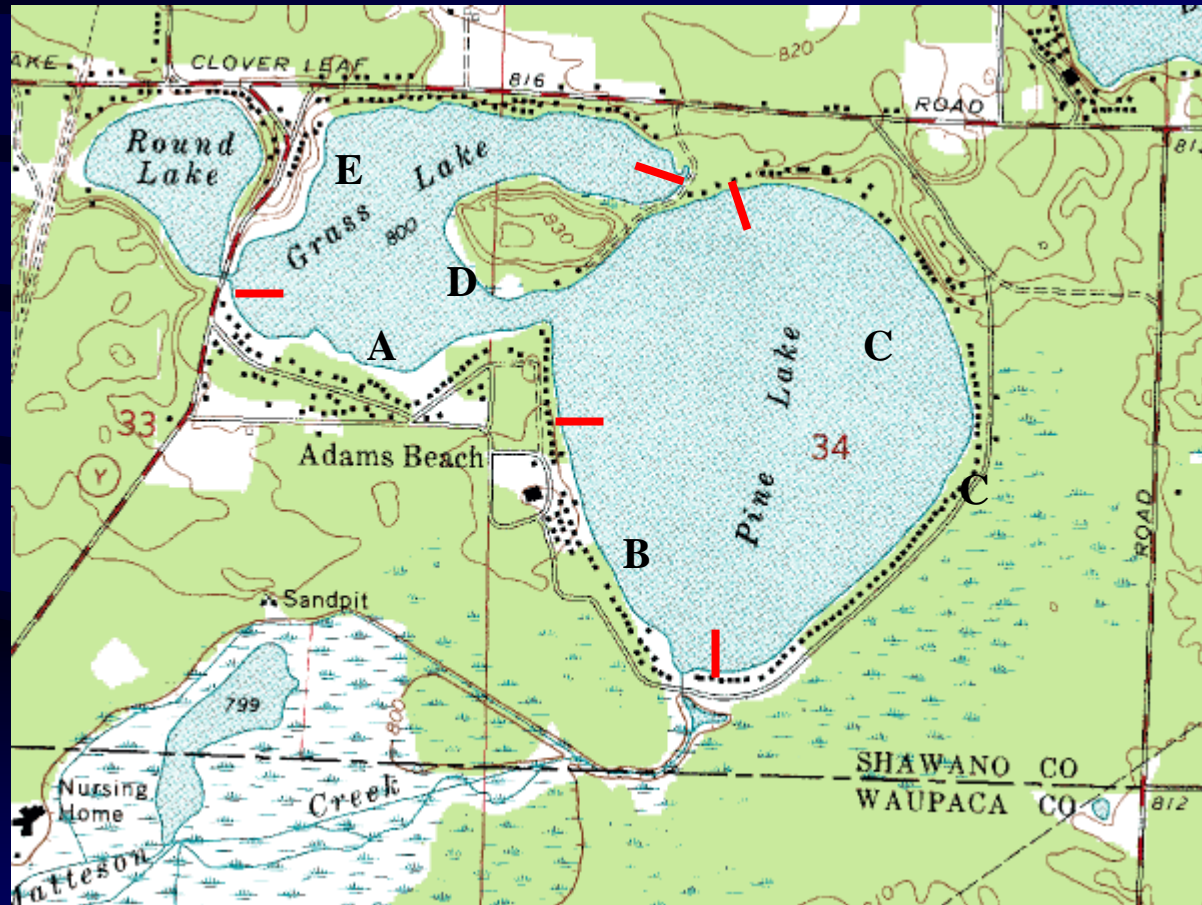


OCT 26 2005



# Boomshocking Transects

Cloverleaf Chain - 2005



A photograph showing a fish being measured on a wooden board. A person wearing black gloves is holding the fish. To the left is a white bucket with a scale on top. A pair of pliers and a bottle are also visible on the wooden board.

## Data Collection

- Species
- Length
- Weight
- Total Counts
- Age Structures



## Age Samples

- Scales
- Spines
- Fin Rays

# Age and Growth

13+ years



Cross-Section Flathead Catfish Pectoral Spine

# Data Analysis



# Mini Fyke-net Catch

## Cloverleaf Chain - Summer 2005

SPECIES	Net Number								Total Catch
	1	2	3	4	5	6	7	8	
BLUEGILL YOY	6	9	25	17	45	3	6	13	124
LARGEMOUTH BASS YOY	11	9	9	1	17	4	4	10	65
BLUEGILL	10	2	39	1	3			2	57
BLUNTNOSE MINNOW		13	21		5	1			40
ROCK BASS	2		1	1	2		12	5	23
PUMPKINSEED	2	3	1	5	5			2	18
ROCK BASS YOY	1	2	1	2	6				12
BLACKCHIN SHINER	6		3						9
RUSTY CRAYFISH					4			3	7
COMMON SHINER					3	1			4
MIMIC SHINER						4			4
YELLOW PERCH YOY		2							2
BANDED KILLIFISH			1						1
IOWA DARTER					1				1
NORTHERN PIKE				1					1
TADPOLE MADTOM					1				1
YELLOW BULLHEAD						1			1
YELLOW BULLHEAD YOY								1	1
Grand Total	38	40	101	28	92	14	22	36	371

# Boomshocking Catch

## Cloverleaf Chain - Fall 2005

Species	GAME A	GAME C	GAME E	INDEX B	INDEX D	Total Catch	No Per Hour	No Per Mile
BLUEGILL				106	185	291	563.2	291
LARGEMOUTH BASS	10	11	2	1	6	30	13.5	7
NORTHERN PIKE	5	7	3	3	1	19	7.7	4
PUMPKINSEED					9	9	17.4	9
ROCK BASS				1	7	8	15.4	8
BLACK CRAPPIE					7	7	13.5	7
YELLOW PERCH				2	3	5	9.7	5
BROOK SILVERSIDE				1	3	4	7.7	4
MUSKELLUNGE	1	2		1		4	1.9	1
COMMON CARP					3	3	5.8	3
WALLEYE		1		1		2	1.9	1
BROWN BULLHEAD					1	1	1.9	1
RIVER SHINER					1	1	1.9	1
TADPOLE MADTOM					1	1	1.9	1
YELLOW BULLHEAD					1	1	1.9	1
<b>Grand Total</b>	<b>16</b>	<b>21</b>	<b>5</b>	<b>116</b>	<b>228</b>	<b>386</b>		

# Gamefish Data



# Largemouth Bass Population Density

## Relative Abundance

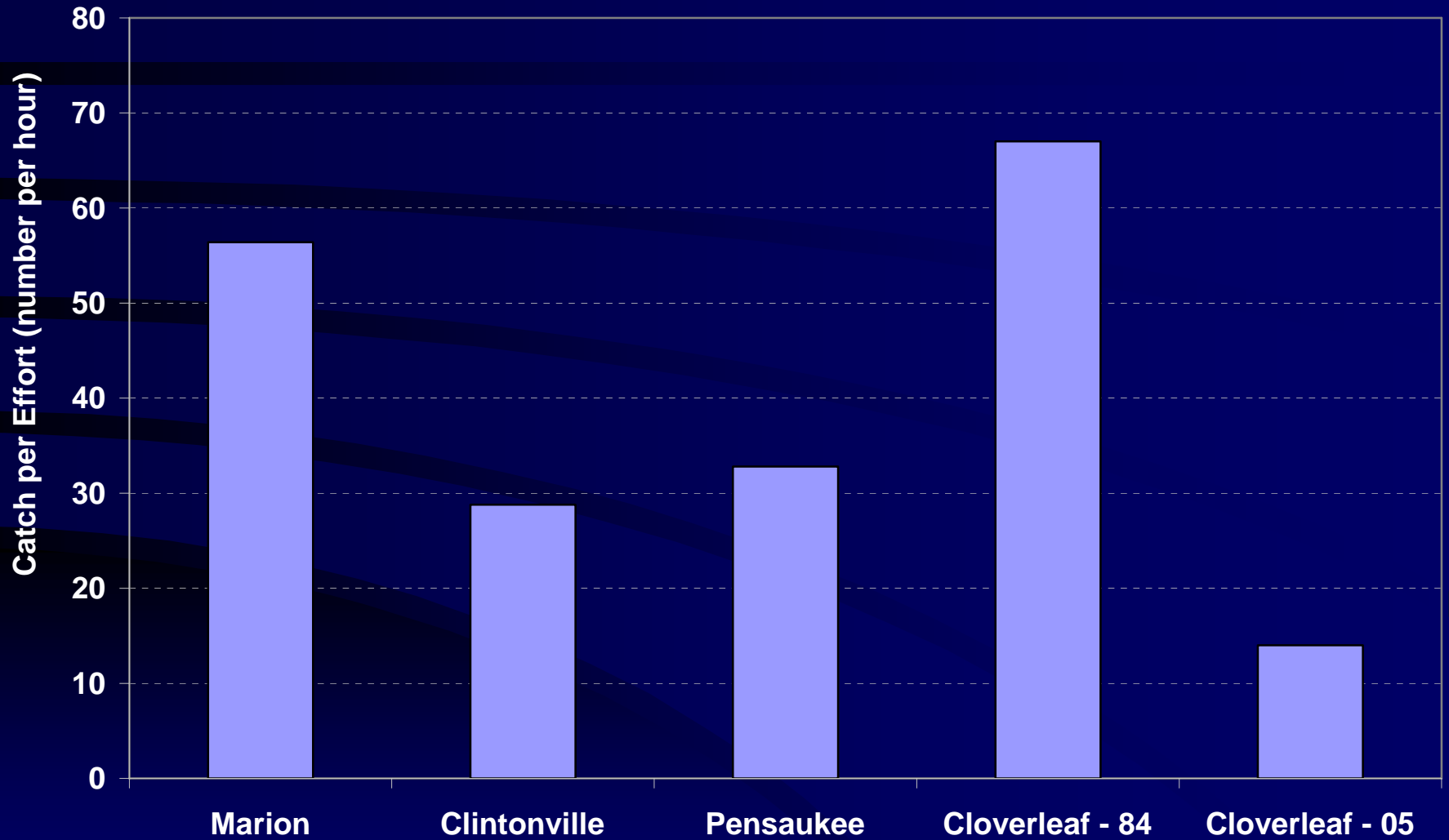
Fall Electrofishing

Fall Elect. (catch/effort) =  
**14/hour or 7/mile**



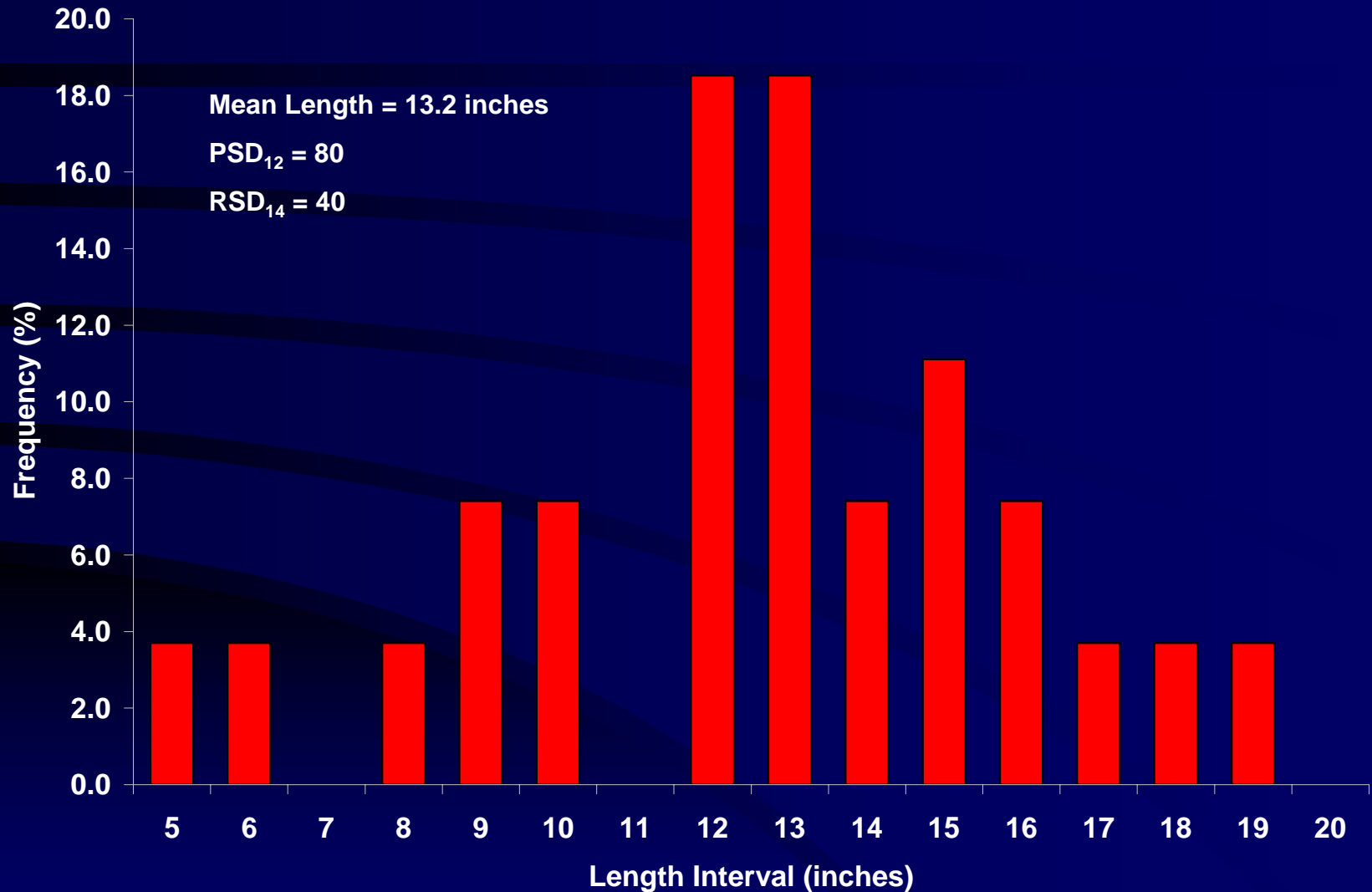
# Largemouth Bass Relative Abundance Comparisons

## Shawano Area Lakes

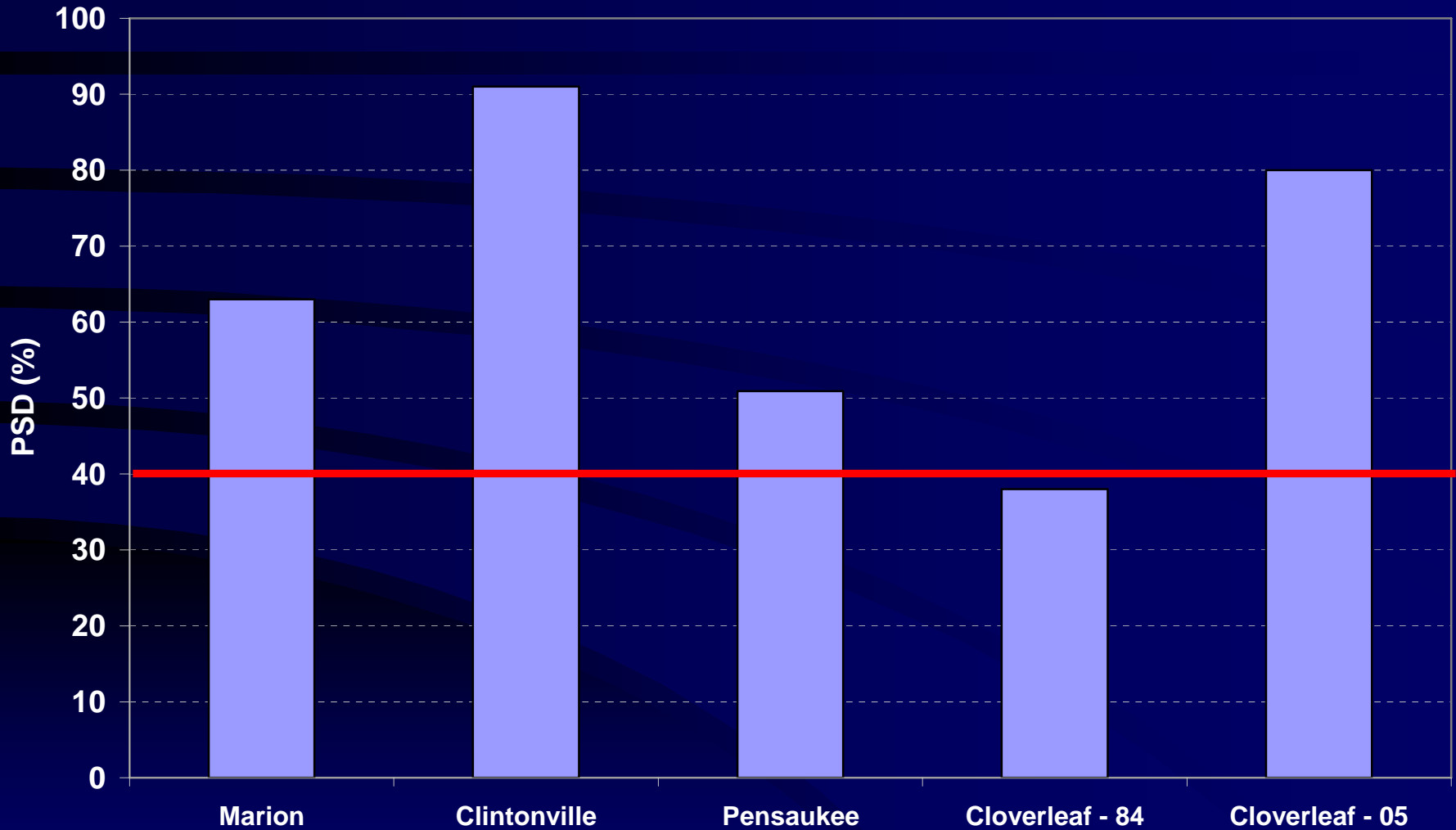


# Largemouth Bass Length Frequency

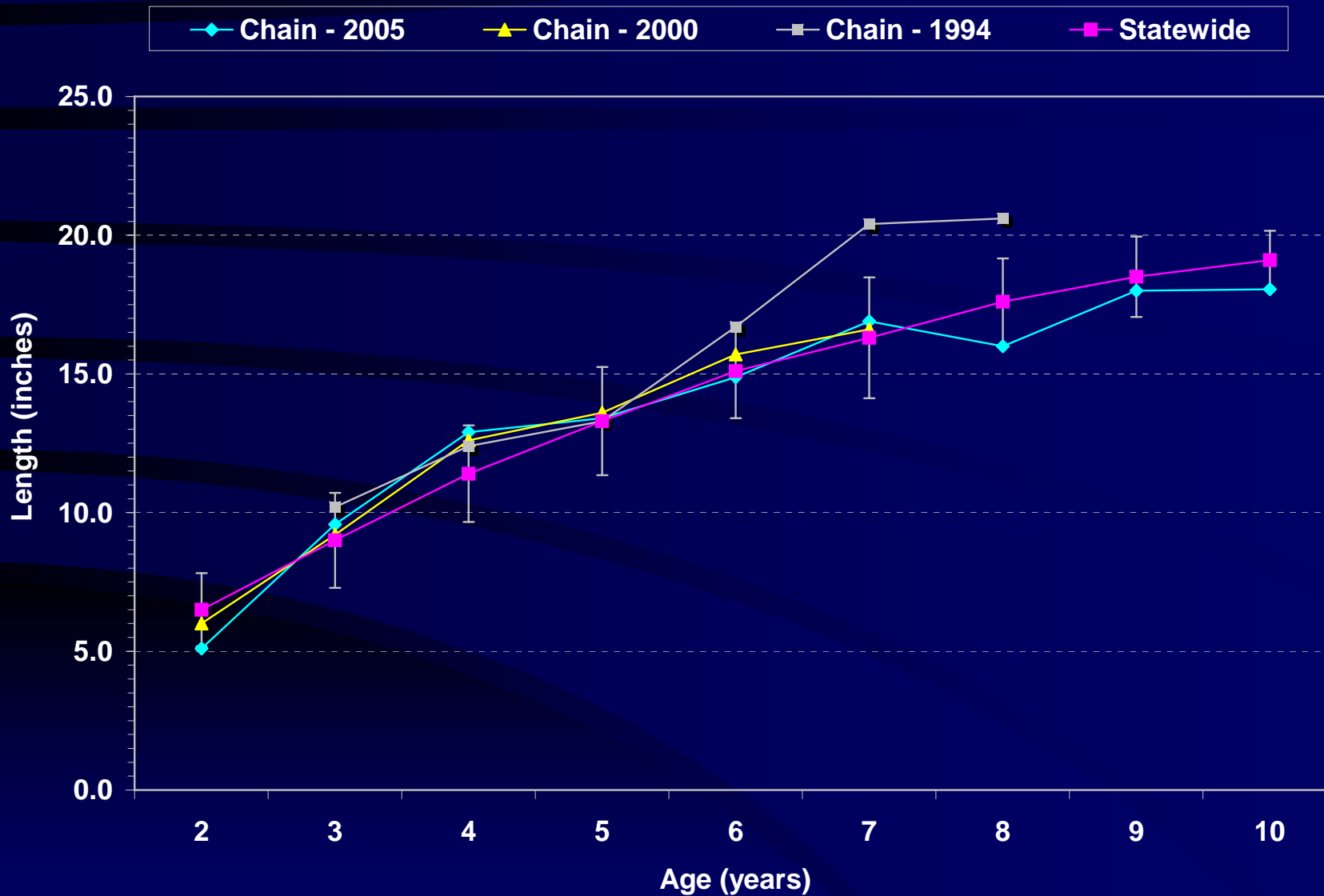
Cloverleaf Chain - 2005



# PSD (% Largemouth > 12.0 inches)



# Largemouth Mean Length at Age





# Panfish Data

# Bluegill Population Density

Relative Abundance

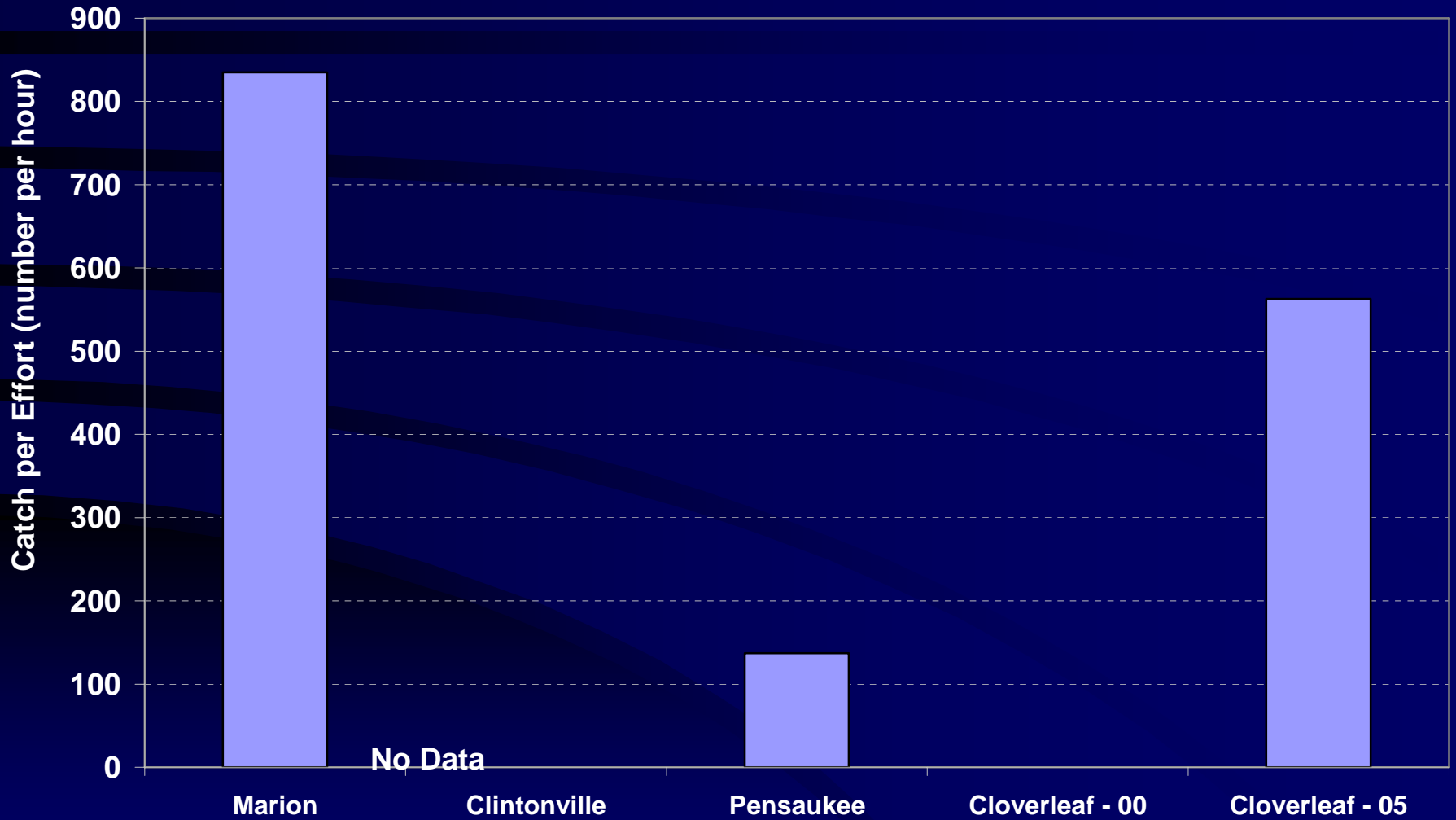
Electrofishing Catch

Fall (catch/effort) = **563/hour**



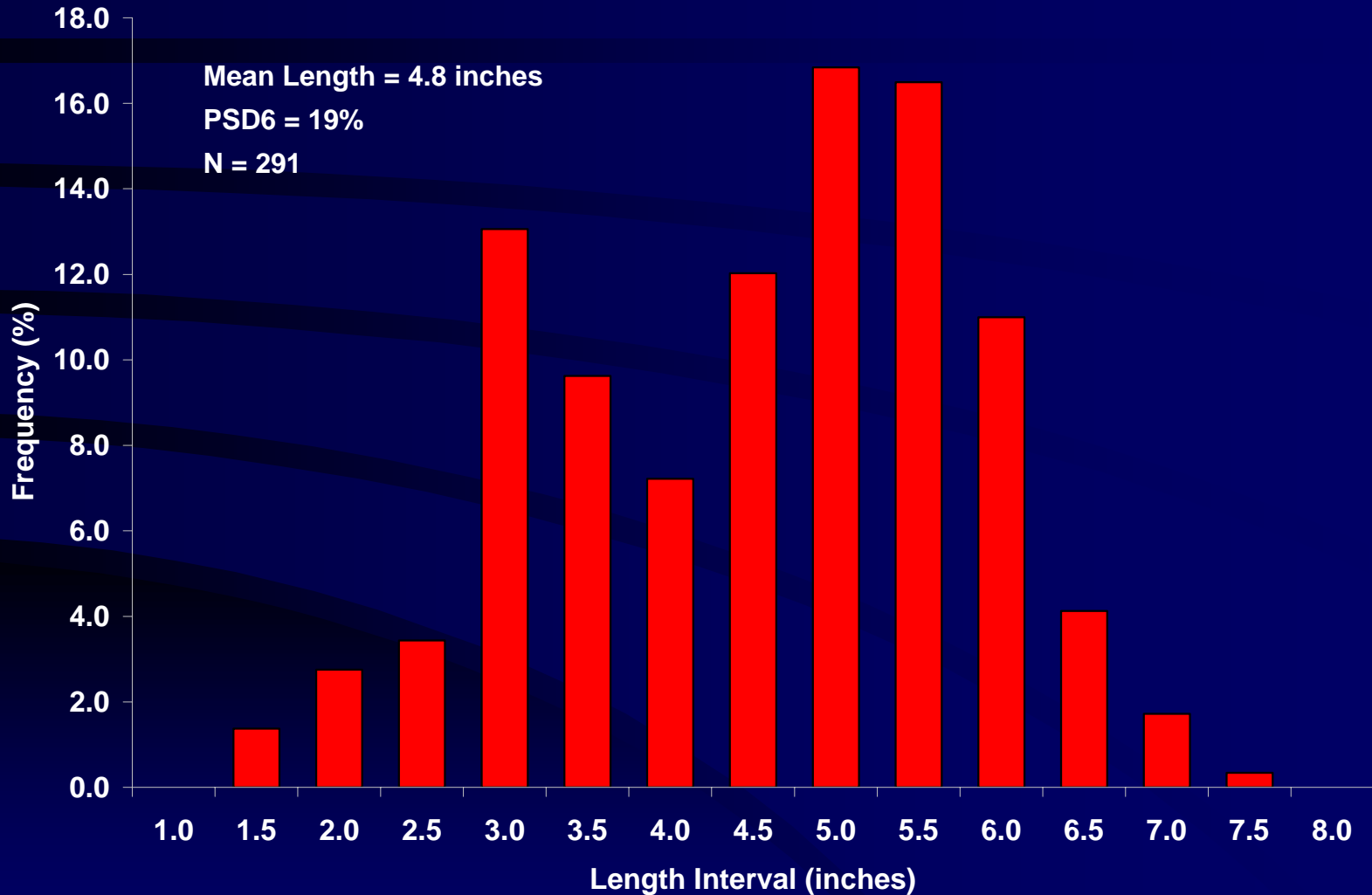
# Bluegill Relative Abundance Comparisons

## Bluegill Relative Abundance – Area Lakes

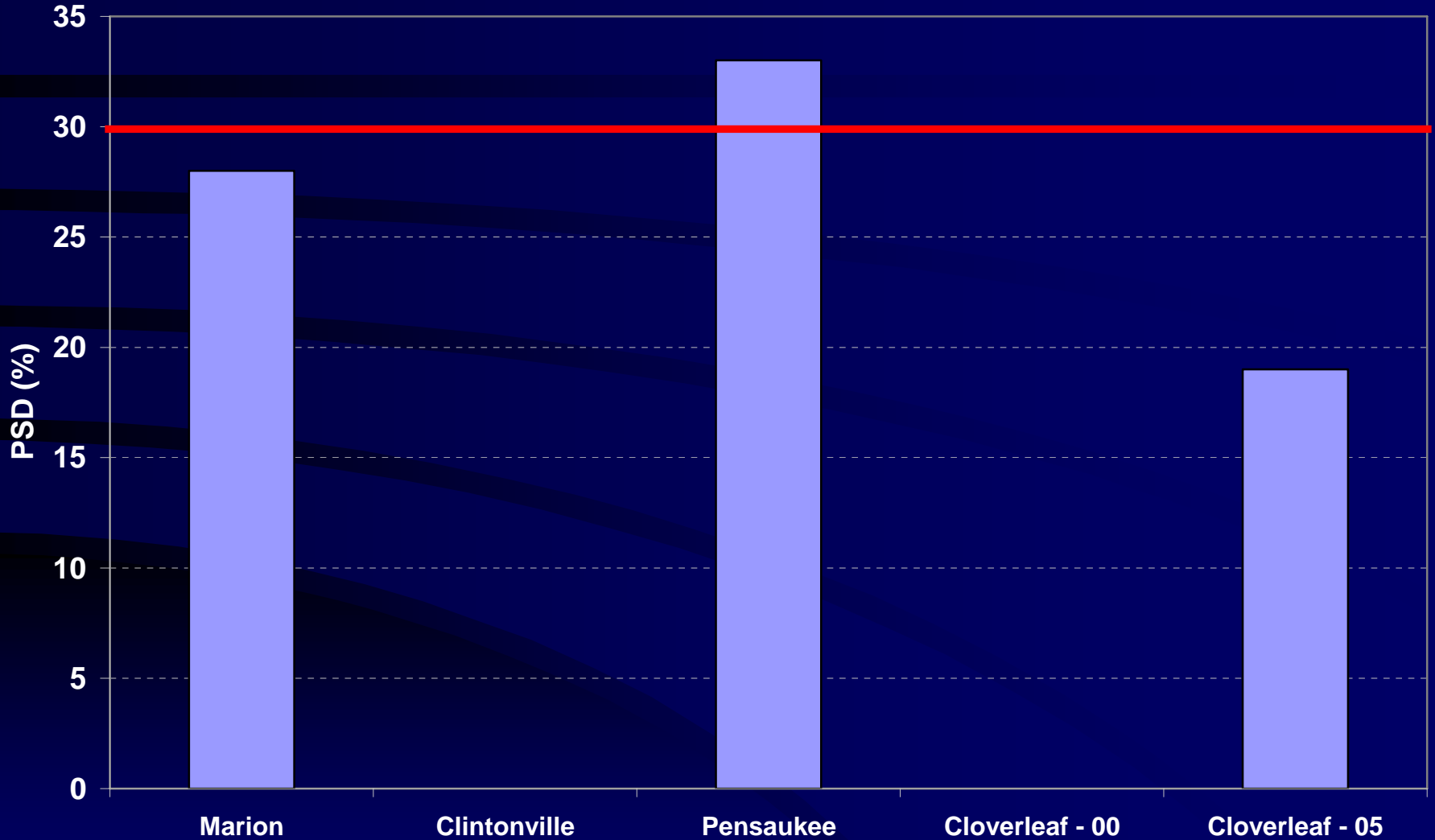


# Bluegill Length Frequency

## Cloverleaf Chain – Fall Boomshocking 2005



## Electrofishing PSD (% Bluegills > 6.0 inches)



# Bluegill Mean Length at Age



