

Informing Habitat Management for Shorebirds in Louisiana

When & Why



Jason Olszak

Past Shorebird Survey Effort in LA

Lowry (1974)- Statewide

LMVJV assessment (~2000)-Volunteers

Wildlife Area Surveys (2001-2008)- LDWF personnel

E-Bird, CBC

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
KILLDEER	*											
PIPING PLOVER												
SNOWY PLOVER												
AMERICAN GOLDEN PLOVER												
BLACK-BELLIED PLOVER												
HUDSONIAN GODWIT												
MARLED GODWIT												
ESKIMO CURLEW												
WHIMBREL												
LONG-BILLED CURLEW												
UPLAND SANDPIPER												
GREATER YELLOWLEGS												
LESSER YELLOWLEGS												
SOLITARY SANDPIPER												
WILLET												
SPOTTED SANDPIPER												
RUDDY TURNSTONE												
WILSON'S PHALAROPE												
NORTHERN PHALAROPE												
RED PHALAROPE												
AMERICAN WOODCOCK												
COMMON SNIPES												
SHORT-BILLED BOWTIE												
LONG-BILLED BOWTIE												
RED KNOT												
SANDERLING												



Lower Mississippi Valley Joint Venture
Shorebird Monitoring Program

Thank you!

Please print a copy of the event summary for your records.
Corrections to your submitted data may be made within 10 days of the initial posting. To make corrections after that time, you must contact the Joint Ventures Office.

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Username: jernst Activity ID: 1827
Site: Sherburne Southfarm

Common Name	Total Count	Banded Count	Band Desc
Killdeer	28	0	
Solitary Sandpiper	1	0	
Semipalmated Sandpiper	42	0	
Lesser Yellowlegs	11	0	
Least Sandpiper	5	0	
Spotted Sandpiper	1	0	

Make corrections to this report

The Lower Mississippi Valley Joint Venture Shorebird Monitoring Program is designed to assist in validating the biological model upon which shorebird foraging habitat objectives are derived, as well as provide much needed data in terms of migration chronology and pathways in the Mississippi Alluvial Valley and West Gulf Coastal Plain Bird Conservation Regions.

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2007 SHOREBIRD SURVEY
SHERBURNE WMA, SOUTH FARM
August 27, 2007

Undetermined sandpipers	100
Black-necked stilt	84
Western Sandpiper	42
Semi-palmated Sandpiper	30
White Ibis	28
Yellow-legs sp.	28
Dark Ibis sp.	22
Killdeer	21
peeps	9
Great Blue Heron	7
Snowy Egret	6
Pectoral Sandpiper	4
Green Heron	4
Black-crowned Night Heron	3
Little Blue Heron	1

Downfalls & Obstacles

1. Survey Timing

- ❖ What is best time/technique to survey ?
- ❖ Habitat not Persistent

2. Detection Bias

- ❖ Rapid Veg. Establishment

3. Observer Bias

- ❖ Unfamiliar & Infrequent

4. Economic

- ❖ Time counting few/no birds

5. Habitat Management

- ❖ Waterfowl Priority

- * Supplying the necessary mix of water depth and vegetative structure at the appropriate times is the most important management issue in this region (McKnight 2000).

* Migration Phenology

- * Northbound: Gone early May
- * Southward birds arrive late July

* Long Growing Season

- * March → Oct.

Regional Conservation Plans

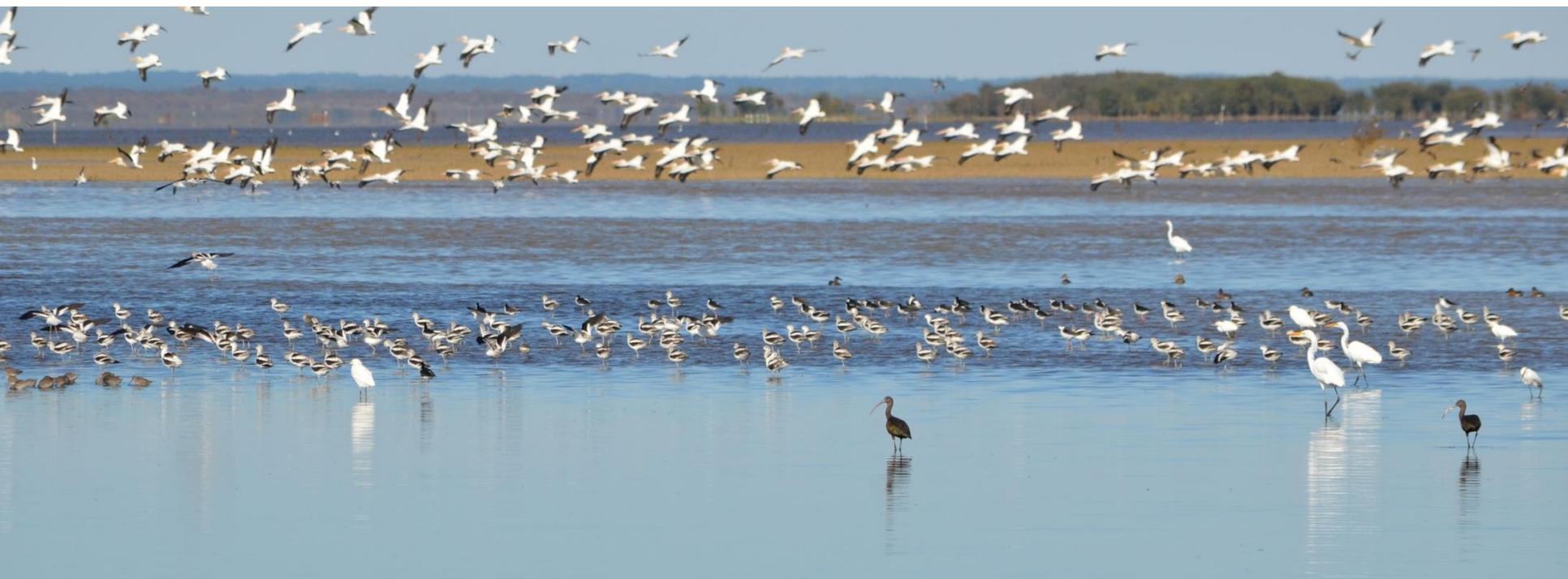
- * LA Wildlife Action Plan
 - * SGCN
 - * Tier I - SNPL, WIPL, AMOY, **PIPL**, REKN
 - * Tier II – **UPSA**, LBCU, HUGO, **MAGO**, **BBSA**, SBDO, AMWO
 - * Tier III - **DUNL**
 - * WAP Priority Shorebird Conservation Actions
 - * Identify, conserve, and monitor shorebird **stopover and wintering** locations.
 - * Partner with LCCs, JVs, USFWS, NRCS, and other interested groups to encourage landowners to **manage water levels to provide habitat** for shorebirds during migration.
 - * Continue to **manage moist soil units on WMAs and refuges** to provide suitable stopover habitat where appropriate.
- * LMV/WGP Regional Shorebird Plan
 - * Highly Imperiled – **PIPL**
 - * High Concern – **AMGP**, **RUTU**, AMWO, REKN, **BBSA**, **MAGO**, **WIPH**
 - * Moderate Concern – **KILL**, **BBPL**, **LESA**, SBDO, **SESA**, **DUNL**, **STSA**, **WESA**, **COSN**, **GRYE**, **SOSA**, **WILL**, **AMAV**

LMV Habitat Conservation Goals

State	Hectares
Arkansas	520
Illinois	70
Kentucky	35
Louisiana	520
Mississippi	600
Missouri	70
Tennessee	185
Total	2000

Information Needs

1. Shorebird Phenology
2. Species Specific Occurrence, Abundance, & Phenology
3. Importance of Stopover Sites
4. Beneficial Management Techniques



Catahoula Lake

Shreveport

Jackson Mis

- * RAMSAR & IBA
- * Planned drawdown each summer
- * Well documented use by shorebirds
- * Gradual Slope
 - * Always some shorebird habitat
 - * Shallow water/mudflat/bare ground/low veg.

Louisiana

Baton Rouge

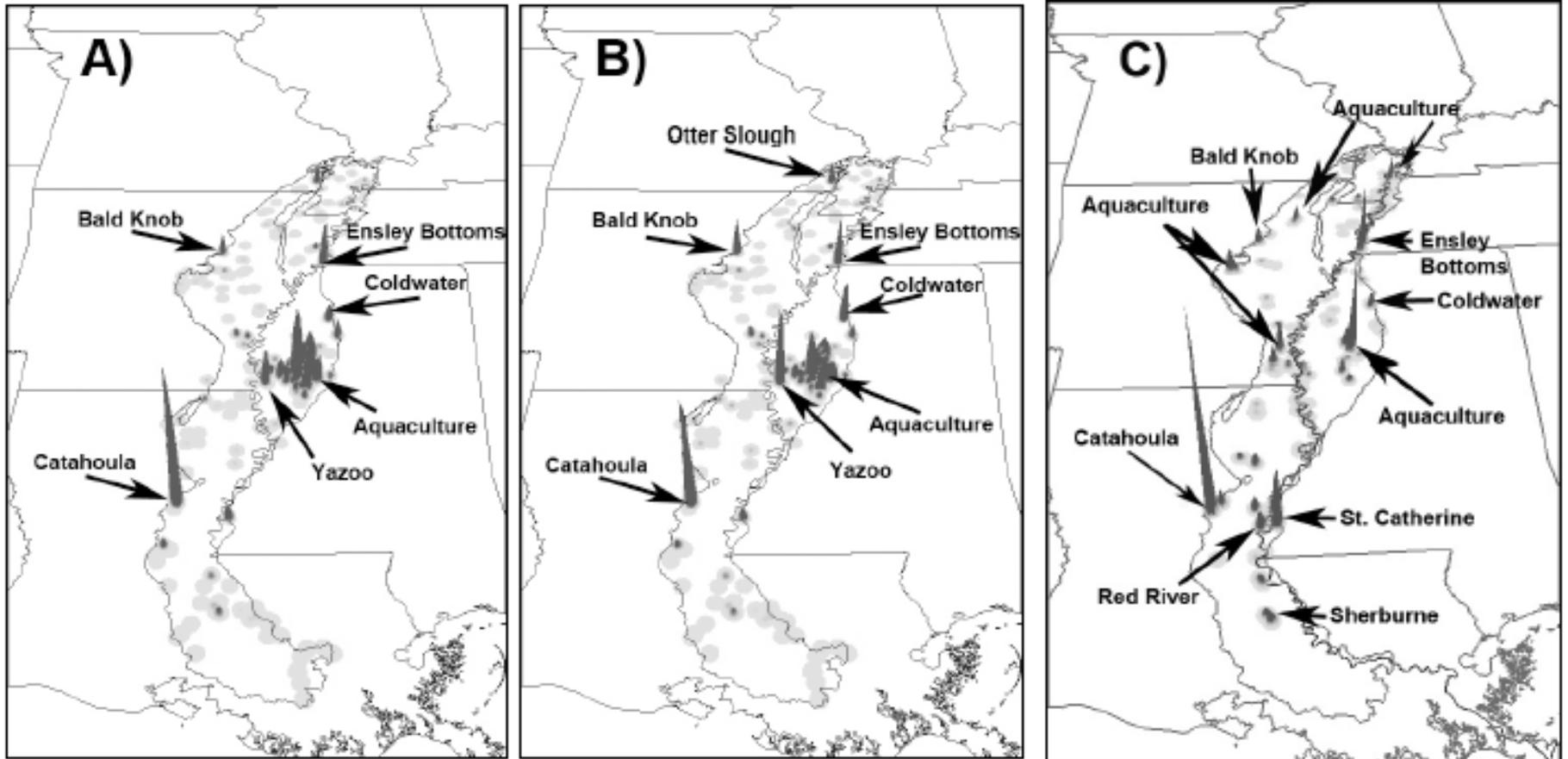
New Orleans

Cat

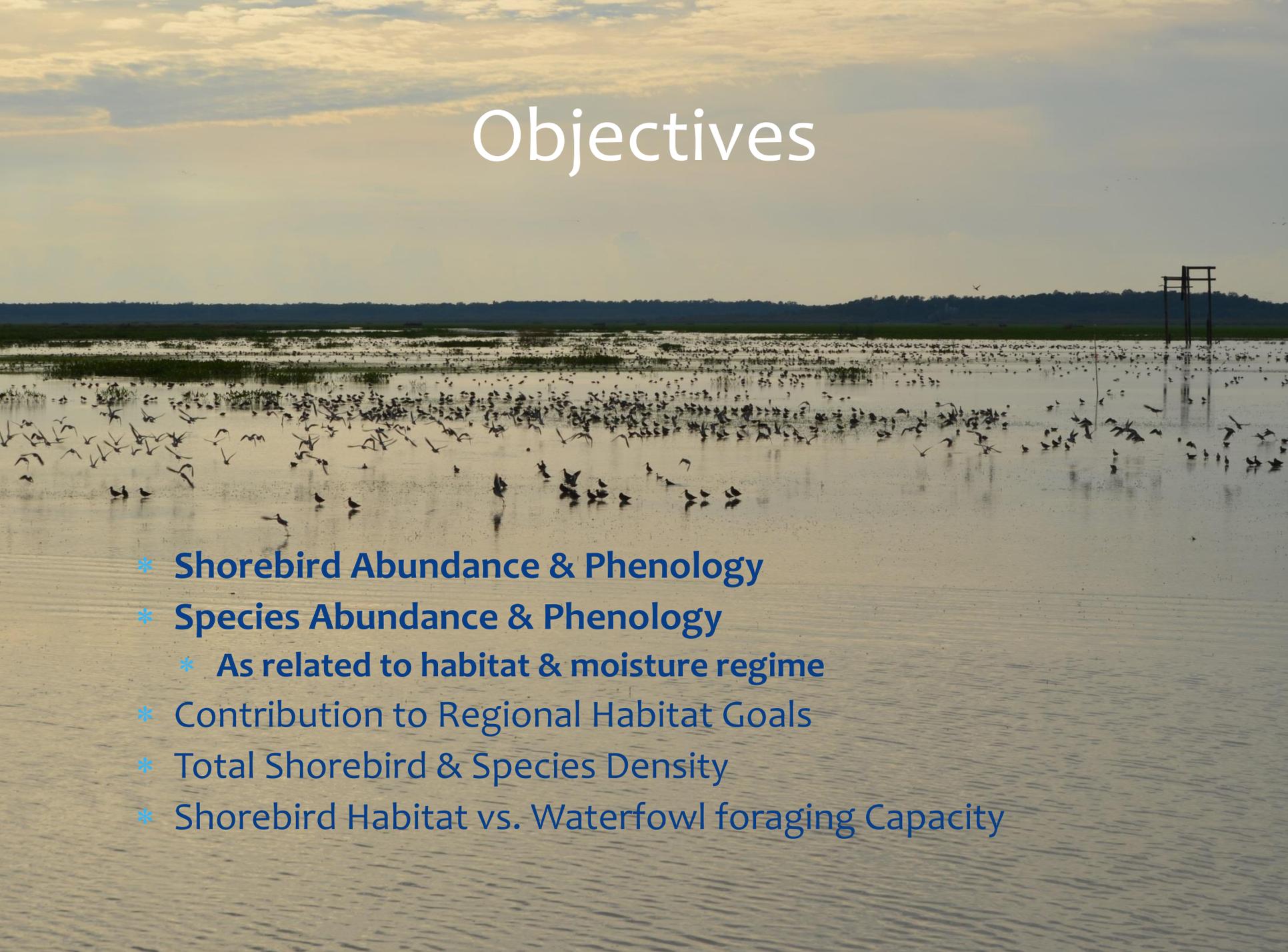


LMV Important Stopover Sites

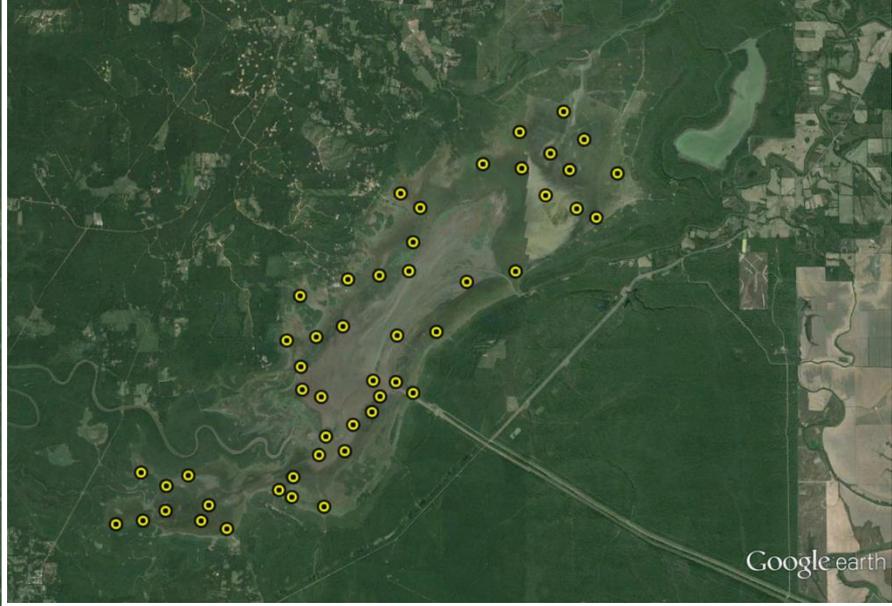
Lehnen & Kremetz 2005



Objectives

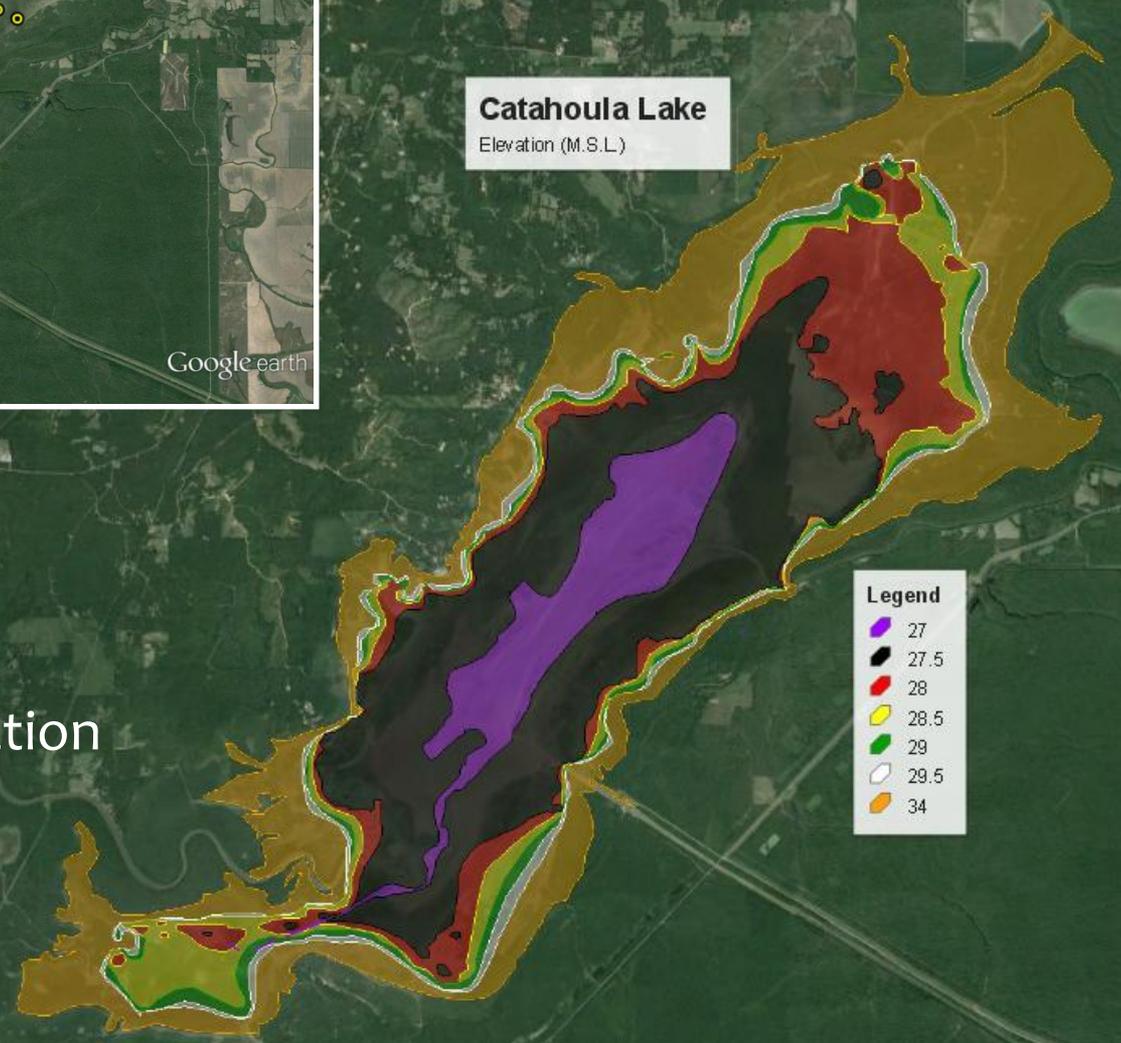
A wide-angle photograph of a vast wetland or marsh at sunset. The sky is filled with soft, golden light and scattered clouds. The water is calm, reflecting the sky. In the foreground and middle ground, hundreds of shorebirds, likely sandpipers or similar species, are scattered across the water and mudflats. Some are standing, while others are in flight. In the far distance, a dark line of trees marks the horizon. On the right side, a wooden structure, possibly a bird banding station, is visible.

- * **Shorebird Abundance & Phenology**
- * **Species Abundance & Phenology**
 - * **As related to habitat & moisture regime**
- * **Contribution to Regional Habitat Goals**
- * **Total Shorebird & Species Density**
- * **Shorebird Habitat vs. Waterfowl foraging Capacity**



Catahoula Lake

Elevation (M.S.L)



- * 3 years (+ 1)
- * Point & Transect
- * Cluster counts
- * Distance & Direction
- * July-Nov.
- * 1.5 day survey
- * 10-day interval

Results

- * 351,067 birds 3yrs.
 - * 117,000 birds/year
- * 22-26 Species
- * Top 5 Species = 78%

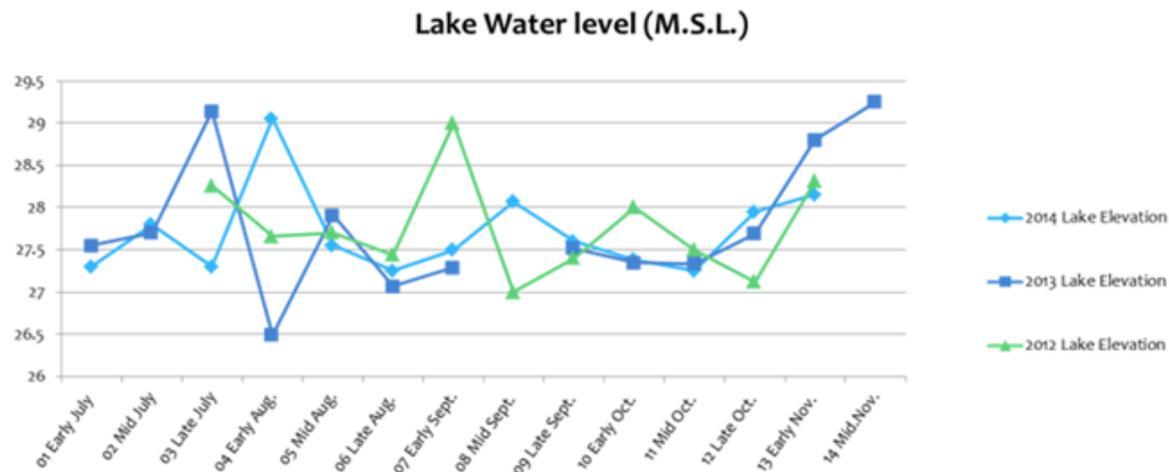


Species	Total
SBDO/LBDO	86345
Peeps	63718
BNST	39181
LEYE	37880
STSA	33220
LESA	12917
PESA	5635
GRYE	3678
LEYE/GRYE	3582
DUNL	3216
AMAV	2529
KILL	2195
WISN	1381
WESA	1131
SESA	701
BBPL	444
SEPL	443
SPSA	94
WILL	27
UPSA	26
BBSA	22
PIPL	16
MAGO	13
AMGP	11
WIPH	10
RUTU	9
LBDO	5
WHIM	2
SAND	1
Medium shorebirds	52306
Unk. Shorebird	329
Total	351067

Annual Variation

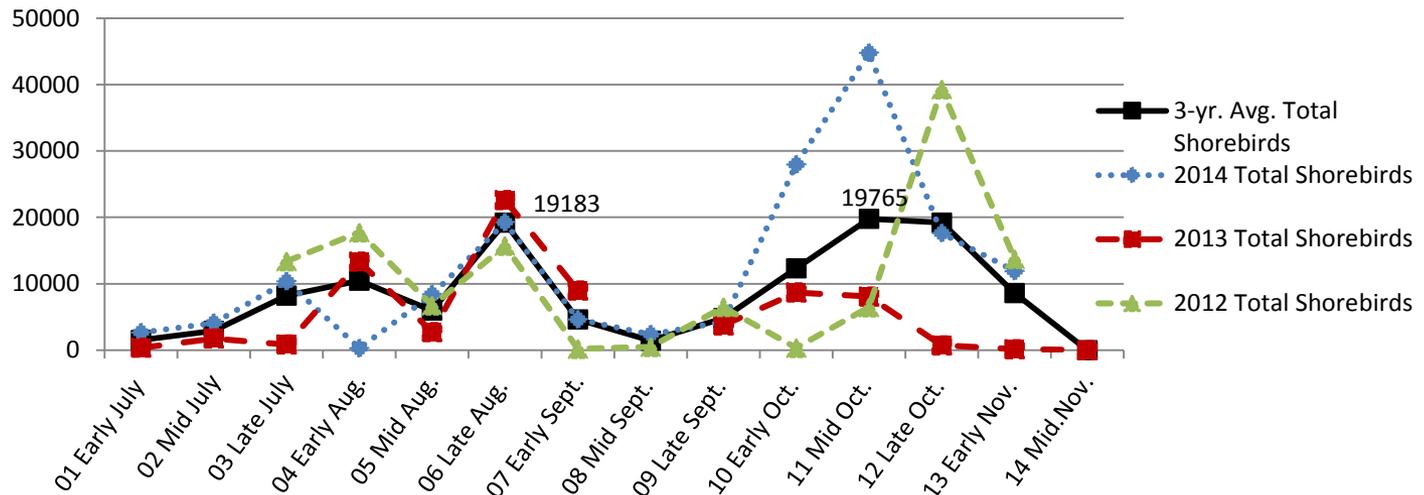
	2012	2013	2014
No. Surveys	11	13	13
Survey Dates	7/27 - 11/13	7/8 - 11/12	7/7 - 11/9
No. Species	26	22	24
Total No. Birds	120,531	71,998	158,538
<i>No. Birds (pt. count)</i>	80,628	40,590	113,535
<i>No. Birds (transect)</i>	39,903	31,408	45,003
Avg. Water Depth	27.7855	27.7765	27.704
#1 species/group	LBDO/SBDO (31,483)	peeps (14,342)	LBDO/SBDO (43,174)
#2 species/group	med. Shorebird (24,706)	BNST (12,158)	peeps (31,016)

Annual Variation



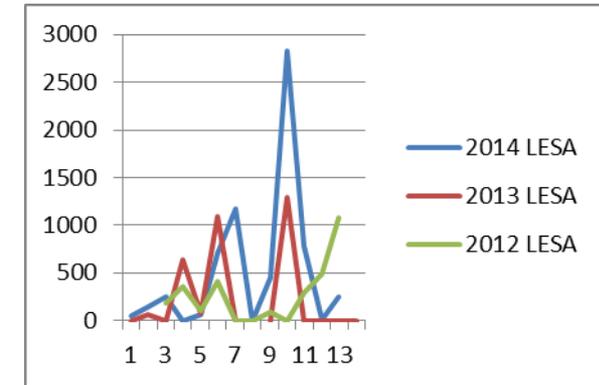
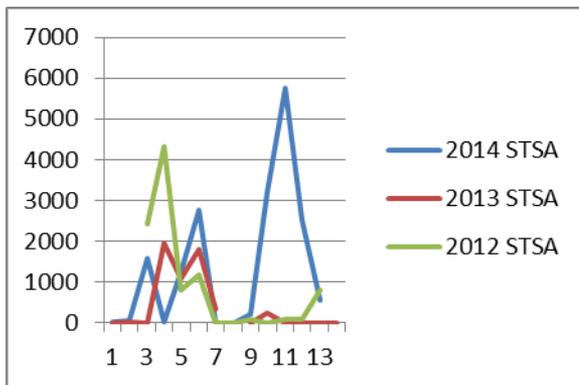
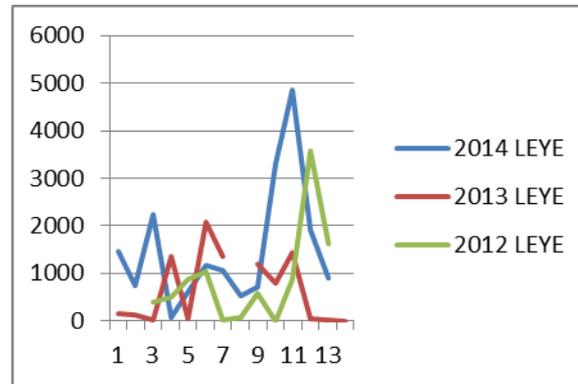
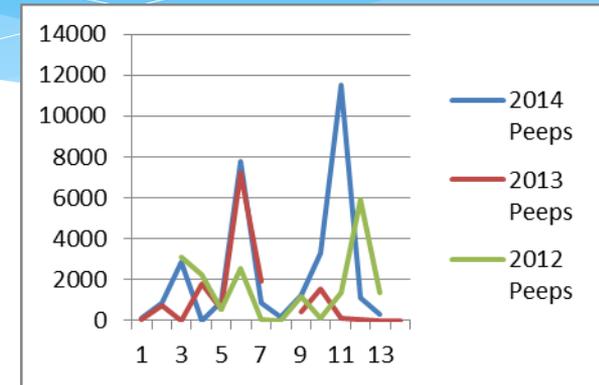
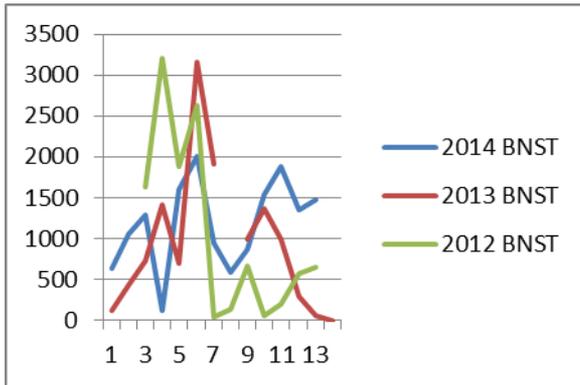
Shorebird Phenology in LMV

Total Shorebirds Counted (Points + Transects)



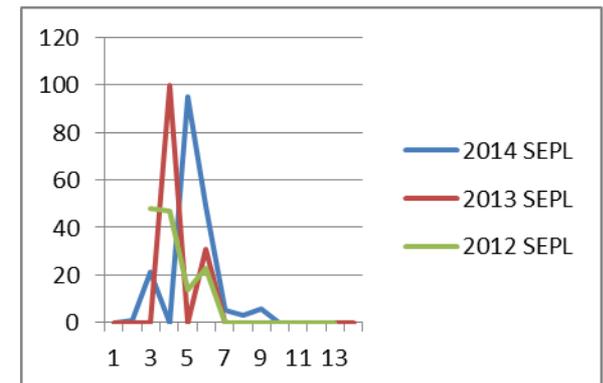
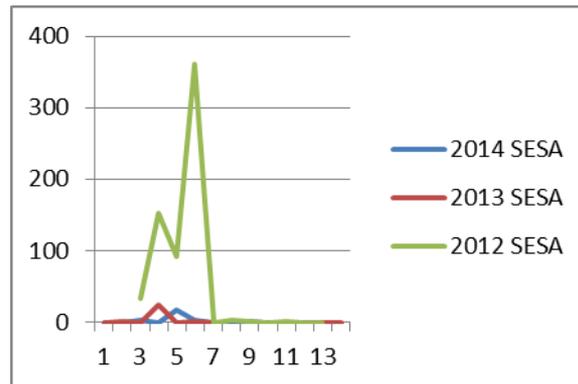
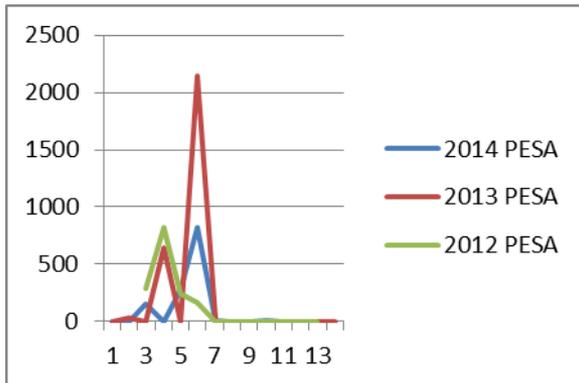
Species Phenology in LMV

Persistent Species

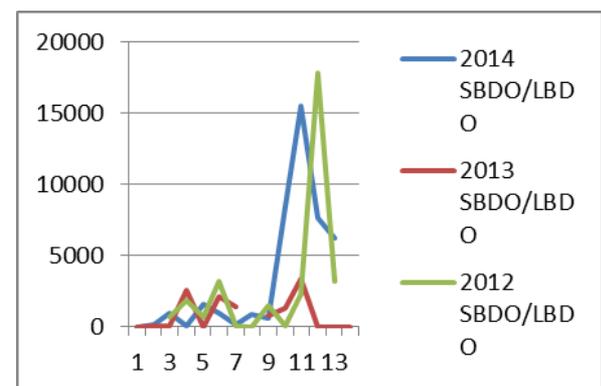
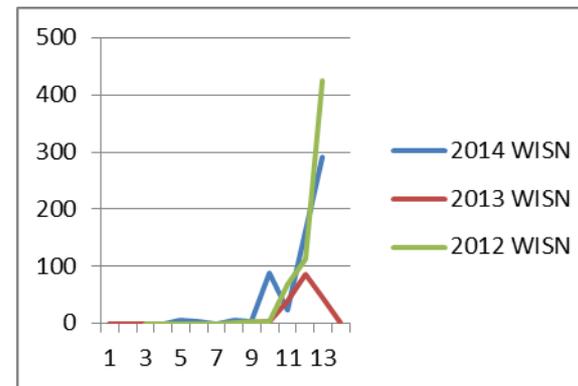
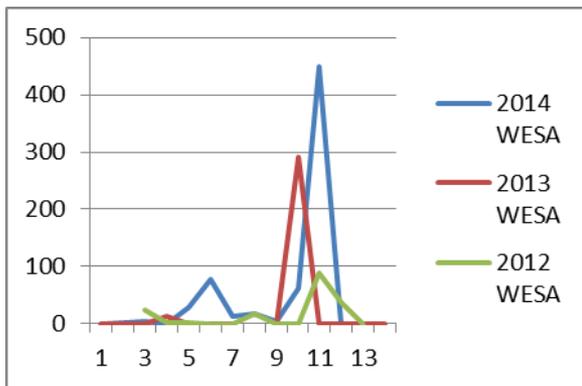
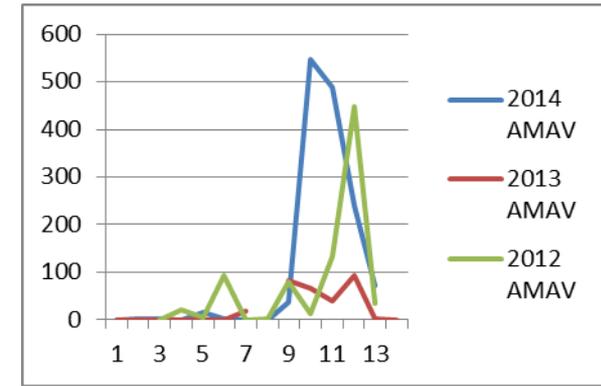
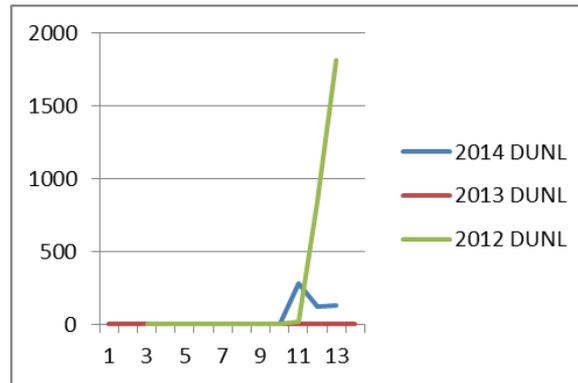
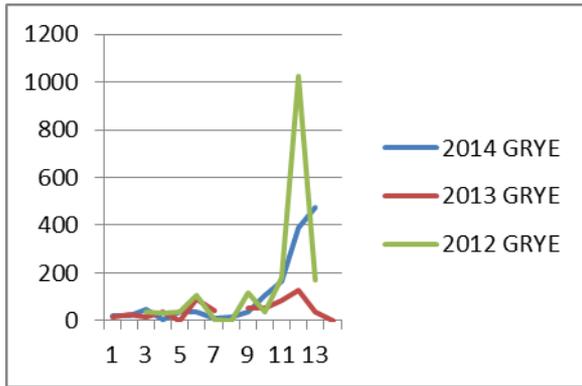


Early Migrants

← Early Sept.



Late Migrants October →



Summary

- * Arrival in Late July
- * Low Species Evenness
- * Annual variation in abundance and phenology
- * Few species of regional cons. concern
- * Habitat Deficit in Oct.-Nov.

- * “Management” for waterfowl AND shorebirds
- * Stagger units for habitat from Aug.-Nov.

- * ? Number of Shorebirds Migrating through LMV?

Impoundment Management for Fall Migrating Shorebirds on Louisiana WMAs

- * Drawdown & Flood Up
- * Regular disturbance to bare soil for shorebirds.
 - * ~~Perennials & Woodys~~
 - * More than mowing
 - * 2X Disk usually required.
- 1. What is initial Condition?
 - * Open Water or Emergent Veg.
- 2. Vegetative Response?
 - (Un)/Desired Vegetation.





04/29/2013

Summer Drawdown Strategies

- * 1. Open Water

- * Drawdown → mudflat → MS veg. → Final Flood

- * Drawdown → mudflat → undesirable MS veg. → disk & shallow flood → mudflat → MS veg. → Final Flood

- * Drawdown → mudflat → undesirable MS veg. → disk & Final Flood.

- * Timing based on shorebird objectives

Summer Drawdown Strategies

* 2. Robust Emergent Veg.

- * Drawdown → mow/spray then disk → shallow flood → MS veg. → Final Flood.
- * Drawdown → mow/spray then disk → shallow flood → undesirable MS veg. → disk & shallow flood → MS veg. → Final Flood.
- * Drawdown → mow/spray then disk → shallow flood → undesirable MS veg. → disk & shallow flood → Undesirable MS veg. → disk & shallow flood → Final Flood.
 - * Drawdown rate irrelevant if noxious veg.
 - * Timing based on shorebird objectives







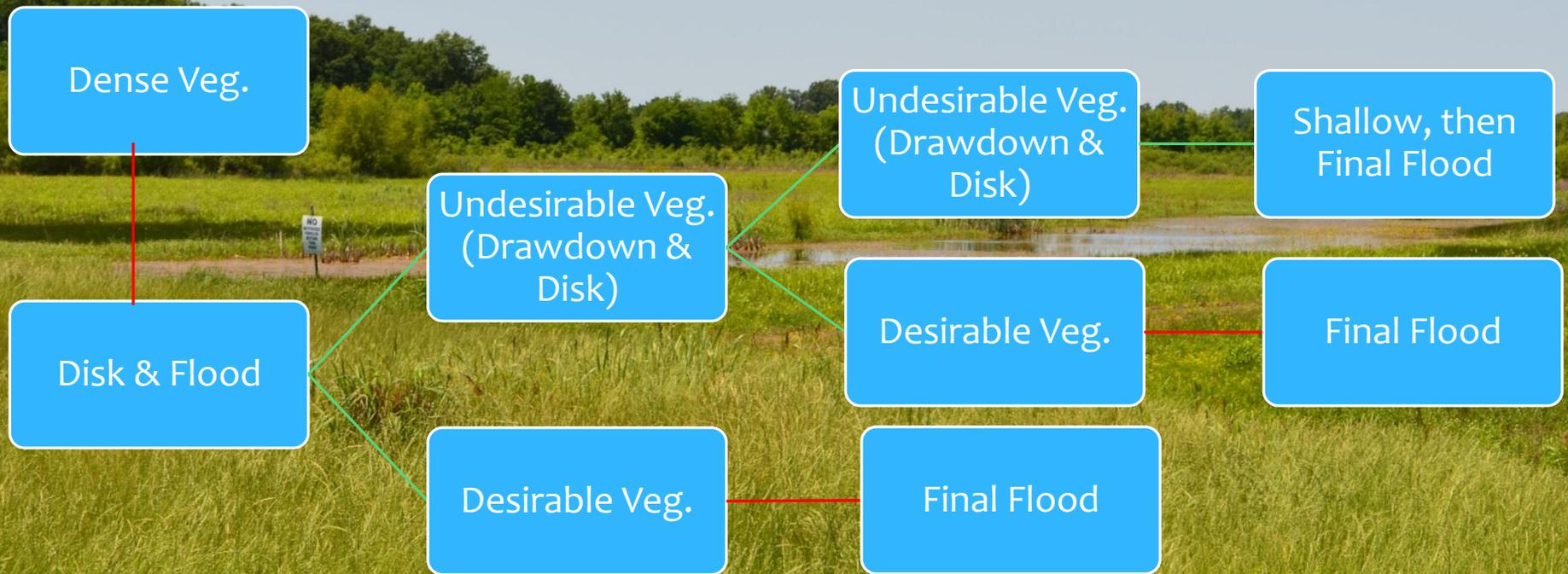






- * 8/22 Red River WMA
- * Mid-August: shorebirds
- * Mid- Sept: teal

Dense Emergent Vegetation



Open Water





Questions

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