

HABITAT-BASED GOALS AND OBJECTIVES

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Manejo de humedales para técnicos en México II

LAGUNA MEXICANOS CHIHUAHUA

Club Raramuri

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MAJOR ENERGETIC EVENTS

SPRING MIGRATION

BREEDING

MOLT

FALL MIGRATION

MOLT

Annual Cycle Events

Migration

Reproduction (Pre-Laying, Egg Laying, Incubation,
Brood Rearing)

Molt

Postbreeding Dispersal

Staging

Migration

Pairing

Molt

Reserve Deposition

Nutritional Requirements of Female Mallards (Heitmeyer and Fredrickson 1989)

	PreA Molt	Fall Alt	Winter Paired	PreBas Molt	Pre - Depart
Protein	+++		++	+++	++
Lipid	+	+++	++	+	+++
Mineral	++			++	+++
Vitamin	++			++	+++

Relative Abundance of Key Waterfowl Foods to Demonstrate “Crunch” Periods

	Inverts	Seeds/ Mast	Tubers	SAV
Spring	++	+	+	
Summer	+++		+	+++
Fall	++	+++	+++	++
Winter	+	++	++	

FALL STAGING AND MOLT

FALL MIGRATION AND MOLT

**FEMALE
AND**

PAIR FORMATION

OFFSPRING

MOLT

SURVIVE

RESERVE DEPOSITION

FEMALE

SPRING MIGRATION

SURVIVES

EGG LAYING

INCUBATION

SUCCESSFUL

UNSUCCESSFUL

LINKING HABITAT WITH SPECIES RESOURCE NEEDS

- WETLAND COMPLEXES WITHIN AND AMONG AREAS PROVIDE IMPORTANT HABITAT FEATURES TO MAXIMIZE USE
- NO SINGLE WETLAND PROVIDES ALL THE RESOURCES REQUIRED FOR A SPECIES
- LIFE CYCLE EVENTS DICTATE THE NEED FOR DIFFERENT WETLAND TYPES AND CONDITIONS ACROSS SMALL AND LARGE SCALES

DEVELOP HABITAT-BASED GOALS AND OBJECTIVES

- **RECOGNIZE SCALE**
 - **SPATIAL**
 - **TEMPORAL**
 - **TAXONOMIC**

DEVELOP HABITAT-BASED GOALS AND OBJECTIVES

- **RECOGNIZE SPATIAL SCALE**
 - **CONTINENTAL**
 - **MIGRATION CORRIDOR/FLYWAY**
 - **STATE**
 - **REGION/MDC**
 - **AREA**

DEVELOP HABITAT-BASED GOALS AND OBJECTIVES

- **LIFE HISTORY EVENTS ARE CRITICAL**
 - **TIMING**
 - **DURATION**
 - **FOODS AND ENERGETIC NEEDS**
 - **HABITAT NEEDS**

DEVELOP HABITAT-BASED GOALS AND OBJECTIVES

- **FORM SMALL GROUPS**
- **ASSIGNED TO GROUPS**
- **INFORMATION ON SELECTED SPECIES**
- **FOCUS ON TWO OR THREE SPECIES**

DEVELOP HABITAT-BASED GOALS AND OBJECTIVES

- **FILL OUT FORM**
- **ENTER IN ELECTRONIC
FORMAT**
- **ARTICULATE AN OBJECTIVE**

PROVIDE BREEDING
HABITAT TO PRODUCE 1500
WATERFOWL

PROVIDE FOOD RESOURCES
FOR 200,000 WINTERING
WATERFOWL

MAXIMIZE SHALLOW (4 INCHES)
WATER AREA ON 40% OF
MOIST-SOIL IMPOUNDMENTS
FOLLOWING ICE-OUT FOR
FORAGING MIGRANT DABBING
DUCKS AND EARLY MIGRANT
MARSHBIRDS, BREEDING
AMPHIBIANS, AND TO
STIMULATE CONDITIONS FOR
EARLY GERMINATING ANNUALS

INITIATE SLOW
DRAWDOWN ON 60% OF
BACKSWAMP HABITAT FOR
EARLY MIGRANT
SHOREBIRDS,
POSTBREEDING HERONS,
AND TO STIMULATE
GERMINATION OF LATE
SEASON MOIST-SOIL

ADMINISTRATIVE OBJECTIVES

- NEED FOR EDUCATION
- NEED FOR MENTORING
- NEED FOR COMMUNICATION
- NEED FOR EFFECTIVE USE OF RESOURCES
 - PERSONNEL
 - EQUIPMENT
 - FUNDING

PARTICIPATION

- EVERYONES IDEAS ARE RELEVANT
- PERSPECTIVE FROM DIFFERENT EXPERTS IS CRITICAL