

Conducting Wildlife Surveys



Why perform wildlife surveys?

- **Species Management**
- **Monitoring Management Activities**
- **Longterm trends**
- **Is all this effort working?**



Why perform wildlife surveys?

Will help you determine if your management is working

May help you identify population declines / habitat problems

Important for responsible harvest of selected game species

Provides a picture of the health and diversity of the property

What is your Target Species?

- Migratory birds
- Resident birds
- Game animals
- Carnivores
- Prey species
 - Rodents
 - Insects
 - Reptiles



Tie surveys into your objectives



Keep Good Records!!!

- Maps
- Flexible survey forms
- Reports and summaries
- Date, time, observer

Don't ever throw them away!

Before you begin....

A total count (census) is impossible to obtain

No survey method is 100% accurate 100% of the time

Always repeat surveys several times and compare the results

Surveys must be repeatable and standardized

Types of Surveys

Large Mammals

Stand counts

Spotlight surveys

Camera surveys

Harvest Data

Birds

Point counts

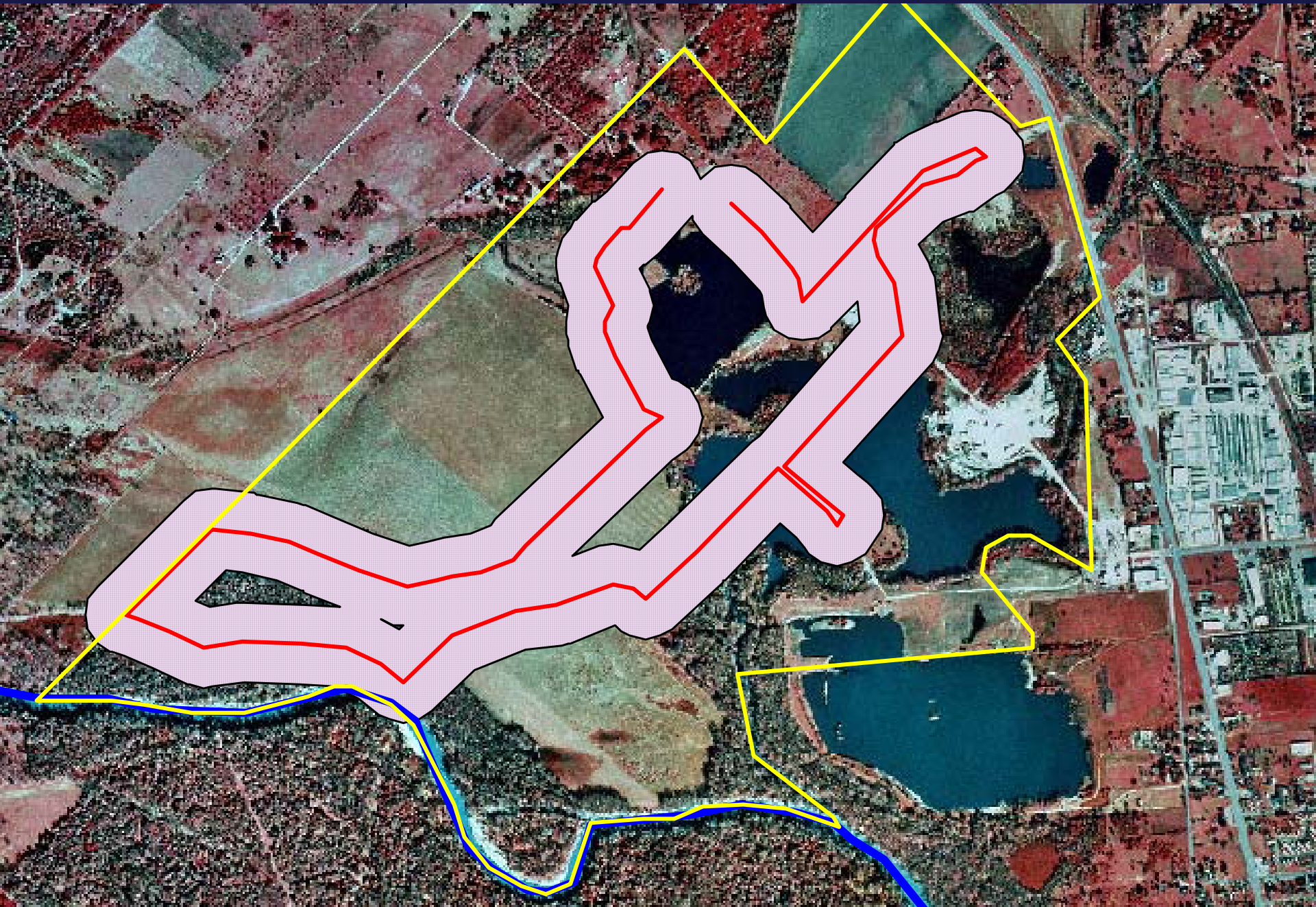
Feeder counts

Nest box logs

Vegetation

Plant list

Photo Points



Spotlight Surveys

Requires a pickup truck, 1 driver, 2 observers, and spotlights



Do not deviate from route

Drive 5 -8 mph

Do not identify sex or age



Stand counts

A single observer sits quietly in a deer stand or blind during the early morning or late evening hours and records wildlife species coming to a pre-placed wildlife feeder

1 stand / 100 acres

All observers sit simultaneously

Repeat 3 times



Harvest Data

TPWD can supply standard or custom forms

Record age, weight, and
antler characteristics

FOR EVERY INDIVIDUAL
HARVESTED



Camera Surveys

Uses trail cameras on feeders, trails, water, etc.

Deer surveys based entirely on identifying bucks

Can determine does & fawns by counting ratio

Can be used for predators



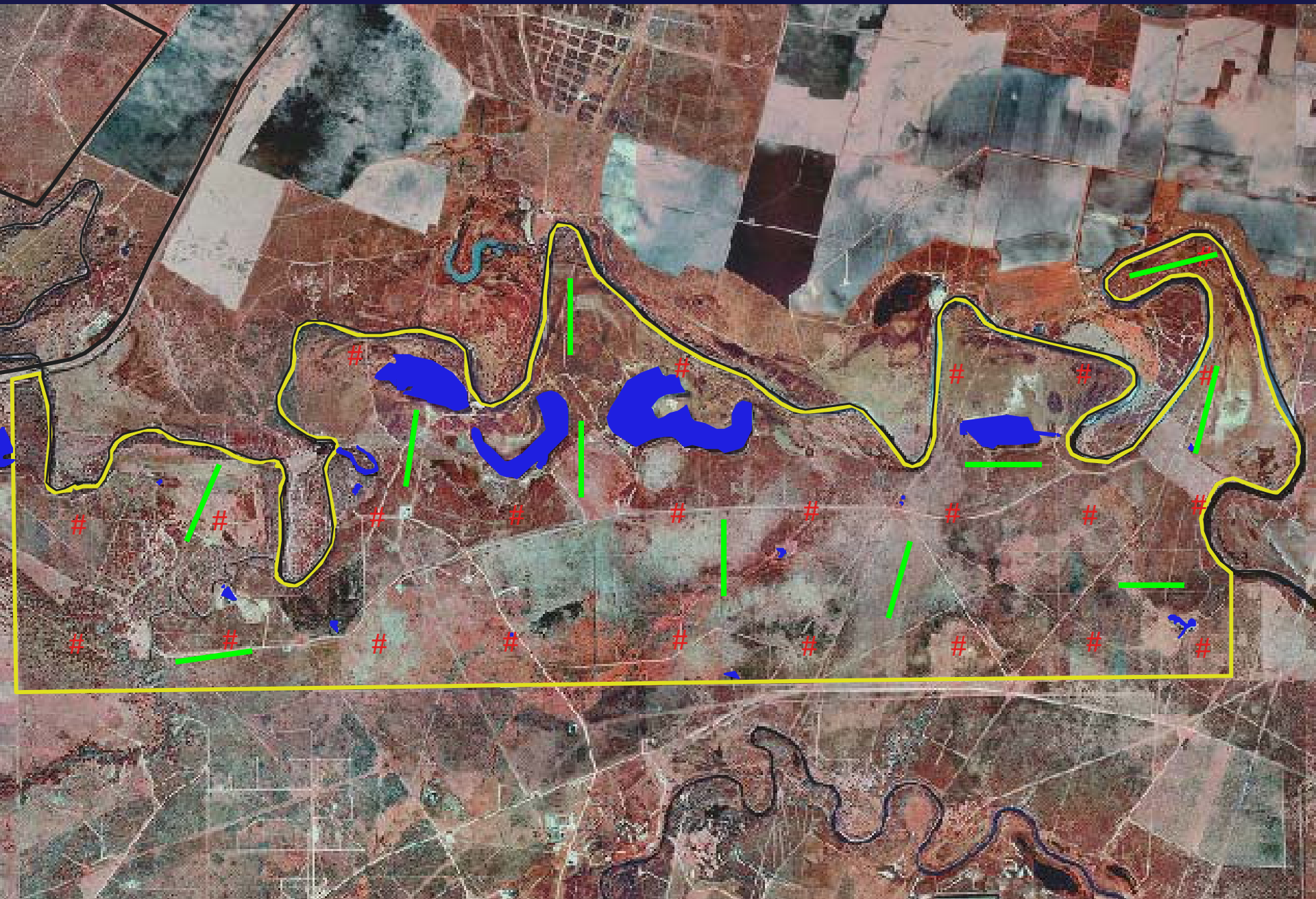
Birds

Point counts

Transect counts
(provides limited info)

Nest box logs





Point counts

An observer stands quietly for a set timeframe and records all birds seen within 200 yards

Number of point counts depends on ranch size and habitat

Should survey all habitat types (i.e. brush, riparian, open pasture, etc.)

Conducted in peak of activity (Target)



Transect counts

Transects

- Fixed route
- Performed annually or seasonally
- Provides relative index
- Keep good records

Conducted Mar/Apr & October



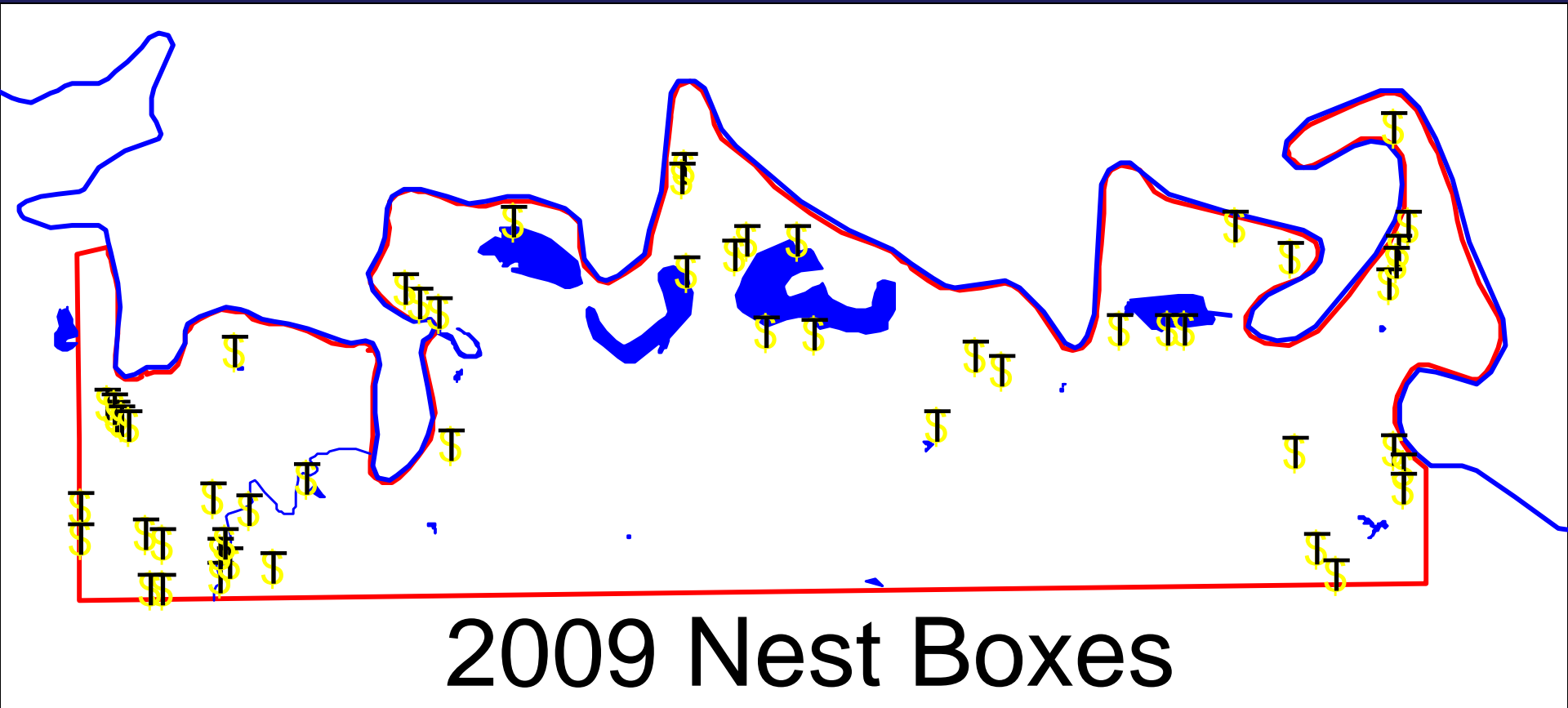
Nest box logs

Check nest boxes at least weekly

- 1) Species using the box
- 2) Number of eggs
- 3) Number of fledged young
- 4) Presence of predators



Keep Good Records



Plant lists

Buy field guides and keep them at home
AND in your bag/truck

Collect 1 of each kind and scan it in or press
it



Plant Press

Press or scan the plant immediately

Be sure to display seeds, flowers, and roots

Plant Name: _____

Scientific Name: _____

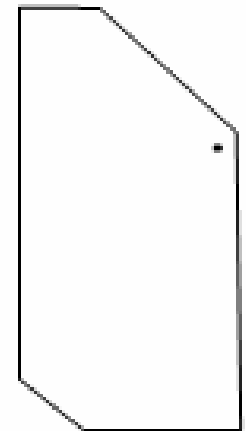
Collection Date: _____

Location: Shooting Star Ranch

Medina County, Texas 3.2 miles south of Castroville,
Texas

Collector: _____

Preparer: _____



Sample label

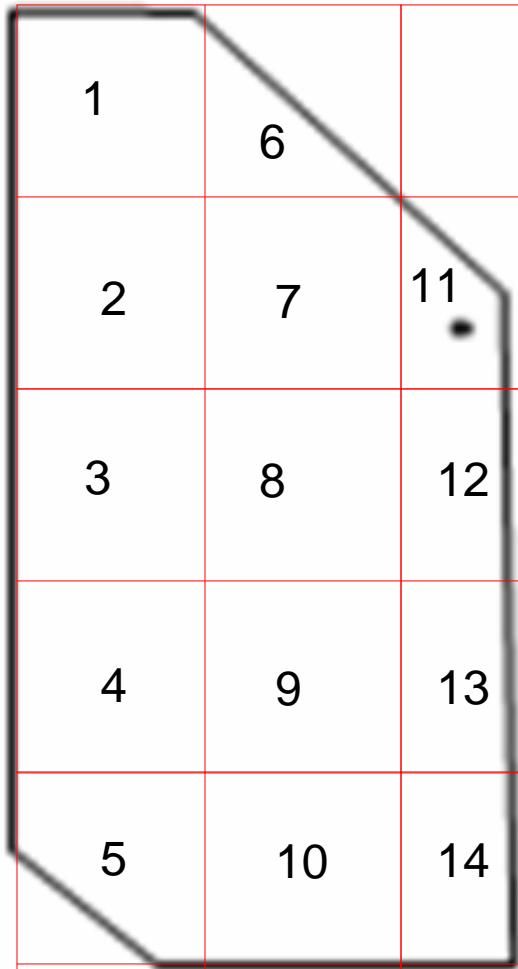
Other Surveys

Be creative!

You can conduct surveys for reptiles, insects (ants, butterflies), rodents, raptors, etc.

Be sure to tie it to your objectives and target species!

Other Surveys



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ANT SURVEY DATASHEET Shooting Star Ranch Medina Co, TX

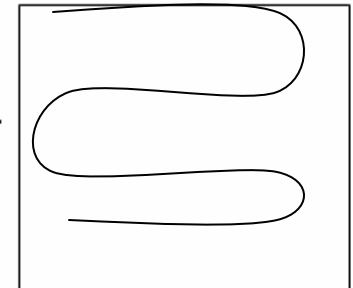
DATE _____

OBSERVERS _____

Trail Route and Mound Locations

N

W



S

- Harvester Ant Mound
- X LeafCutter Ant Mound
- Fire Ant Mound
- ⊘ Fire Ant Mound, Treatment applied

Mound Count

Total

Harvester Ants _____

Leaf Cutter Ants _____

Fire Ants _____

Harvester Ant Mound Sizes (m)

1. _____ 6. _____ 11. _____

2. _____ 7. _____ 12. _____

3. _____ 8. _____ 13. _____

4. _____ 9. _____ 14. _____

5. _____ 10. _____ 15. _____

Other Surveys



Mitchell Lake Audubon

Season/Year _____

Small Mammal Survey

Transect Name _____ # Traps _____

Habitat Type Grassland Bird Pond Upland ??????

Principal Investigator: _____ Email Address: _____

Team Members: _____

Sherman Transect Data	Day 1	Day 2		Day 3	
	date:	Date:		Date:	
	<i>Species Count. Use Tally marks to denote each captured individual</i>				
Species Name	Unmarked	Unmarked	Marked	Unmarked	Marked
Cotton Rat (<i>Simodon hispidus</i>)					
N. Pygmy Mouse (<i>Baiomys taylori</i>)					
House Mouse (<i>Mus musculus</i>)					

Photo Points

Set T posts throughout the property

Photograph annually on the same day/time

Take a photo in each cardinal direction

Should be used with other
vegetation surveys



Keeping a Journal

- Keep a journal at the house, in the truck, and maybe at the gate
- Note any interesting observations
 - “Saw a bobcat and kitten at brushpile #2”
 - “1st robins of the year-approx 200” (w/ date)
 - “Saw quail covey near prickly pear. Why there?”
- Write down everything you do
 - “Dec 12: Attended wildlife workshop”
 - “Dec 12: _____ started new water feature near gate”
 - “Jan 20: _____ finished water feature”
 - “Sep 15: Conducted spotlight surveys, submitted to TPWD”

Keeping a Journal

- Keep receipts!
- Record results of surveys
- Use it to fill out your annual report

- Review your summaries every 5 years

- Some common mistakes
 - No dates
 - “I’ll remember that later”
 - “I’ll be able to figure that out”
 - “What bird sounds like “kee keeri kee” ?

Datasheet Tips

- Remember the date!
- Don't write w/ felt tip pen (use ballpoint pen or pencil)
- Recopy messy field datasheets, but keep original
- Guessing at ID is OK!!!!

Questions?



TEXAS
PARKS &
WILDLIFE