The Henslow's Sparrow (Activity and Location at Fermilab)

By Sarah Starks

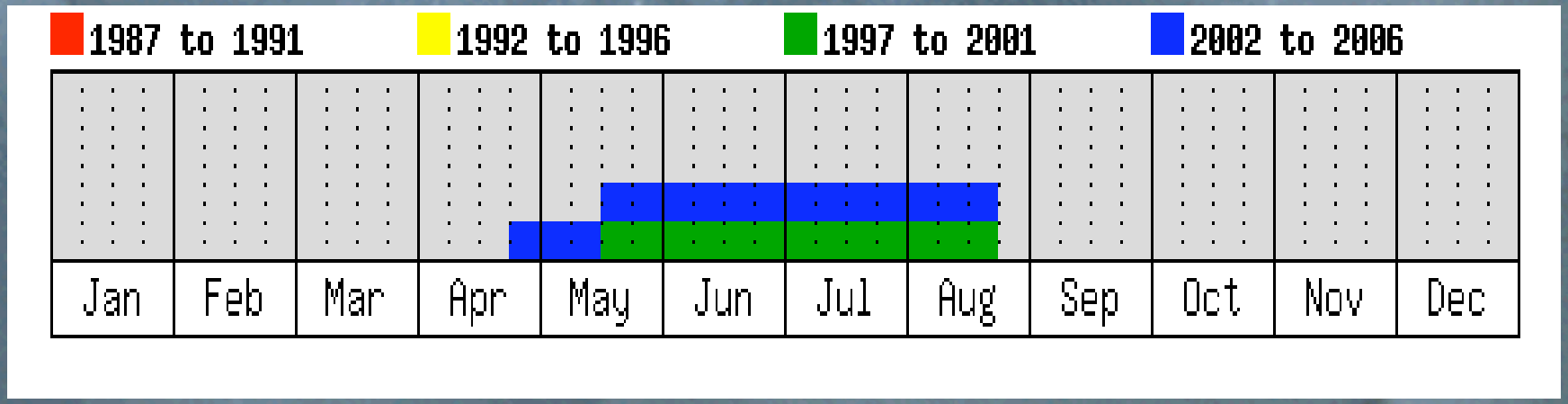

Introduction

Why is the Henslow's sparrow so important?

- Has declined 91% rangewide
- Used to be one of the most abundant bird species in Illinois
- State endangered species
- Breeding has not been confirmed until recently.

Henslow's Sparrow at Fermilab

- Until recently, breeding was not confirmed on site
- Sightings in1978 and then not reported again until 2000
- Now seem to be quite abundant and breeding in Dusaf Pond, North and South Eola grasslands, and Main Ring -not confirmed in Main Ring



Identifying Tips

- Song (tse-lick)
- http://www.enature.com/
- Has an olive green, flat head
- Has a short tail
- Very small, but chubby

What was the purpose of this study?

- To identify the areas in which the Henslow's sparrow was most abundant
- To discover which type of vegetation(bushes, prairie grasses, forbs, or vetch) the male Henslow's sparrow prefers to perch on
- To confirm the breeding of Henslow's sparrow on the site

Materials and Methods

What were considered the most important variables?

- **Vegetation**
- **Abundance of bird**
- **Breeding confirmation**

Categories of Vegetation

- **Vetch**
- **Bushes**
- **Prairie grasses**
- **Forbs**

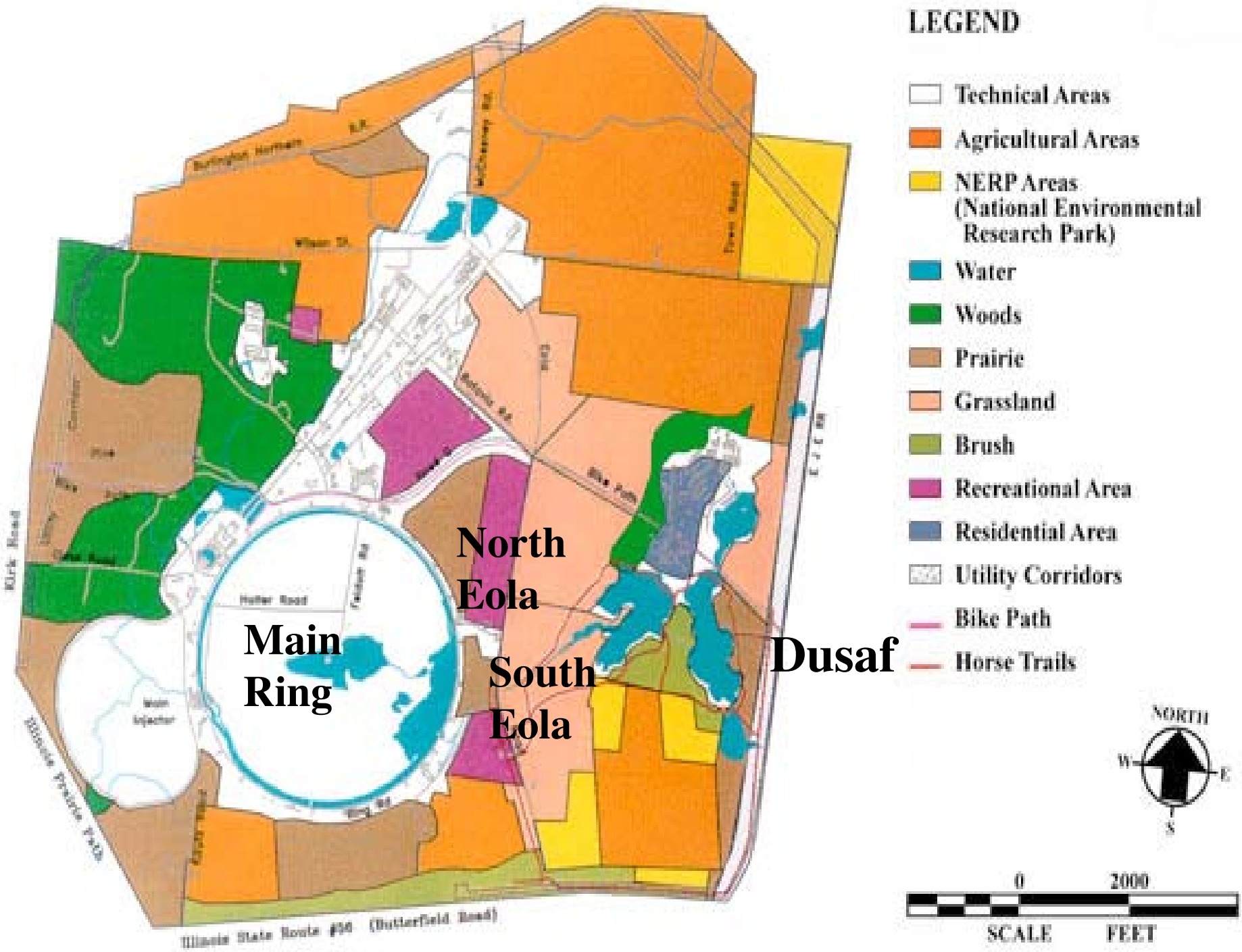
What is considered breeding confirmation?

- **Finding nest (obviously)**
- **Birds with not all marks yet**
- **Birds with food in mouth**
- **Interaction between two birds (sometimes)**
- **Carrying materials for nest**

Sections of Prairie

- **Dusaf Pond**
- **North Eola grasslands**
- **South Eola grasslands**
- **Main Ring**

Each section of prairie was visited once each week to lower data error.


LEGEND
Technical Areas
Agricultural Areas
NERP Areas
(National Environmental
Research Park)
Water
Woods
Prairie
Grassland
Brush
Recreational Area
Residential Area
Utility Corridors
Bike Path
Horse Trails
North
Eola
Main
Ring
South
Eola
Dusaf
Illinois State Route #56 (Butterfield Road)
Kirk Road
Hutter Road
NORTH
W
E
S
0
2000
SCALE
FEET

What did I do in the field?

I went to the selected field for that day and went on a pre-determined path for an hour. Every time I heard or saw a Henslow's sparrow I would record it on the GPS. It was also a goal of mine to get some good pictures of the Henslow's sparrow on site. I also recorded how long the sparrow was in sight and what kind of vegetation it was perched on. I noted if there was any type of breeding confirmation with the seen bird.

What next?

Once back from the field, I would use Microsoft Word to write in my Henslow's sparrow journal the sightings for that day. Vegetation and breeding notes were highlighted. Data was then analyzed at the end of collection.

Results

*Visual Results

*Quantitative Results (statistical analysis, etc.)

*Qualitative Results

Visual Results

My Pictures


07/22/2004


07/22/2004


07/22/2004

07/22/2004


07/22/2004

07/22/2004

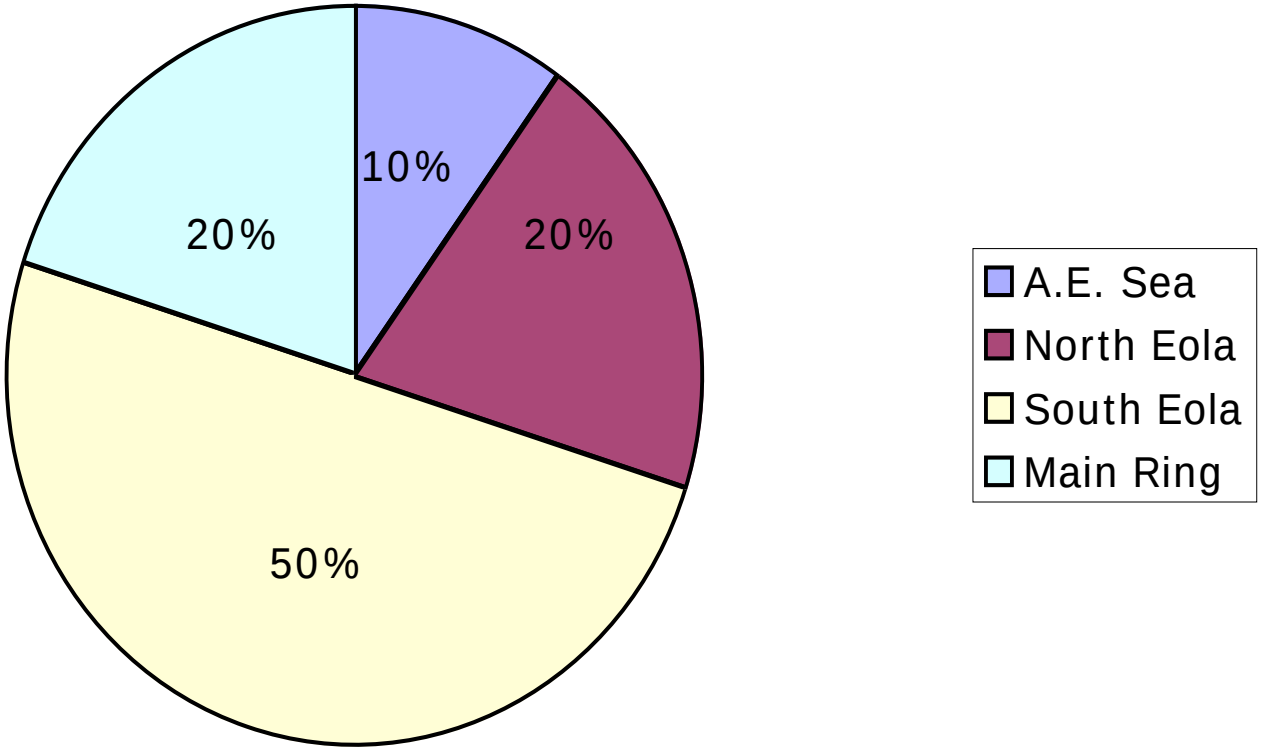
Quantitative Results

Statistical Analysis

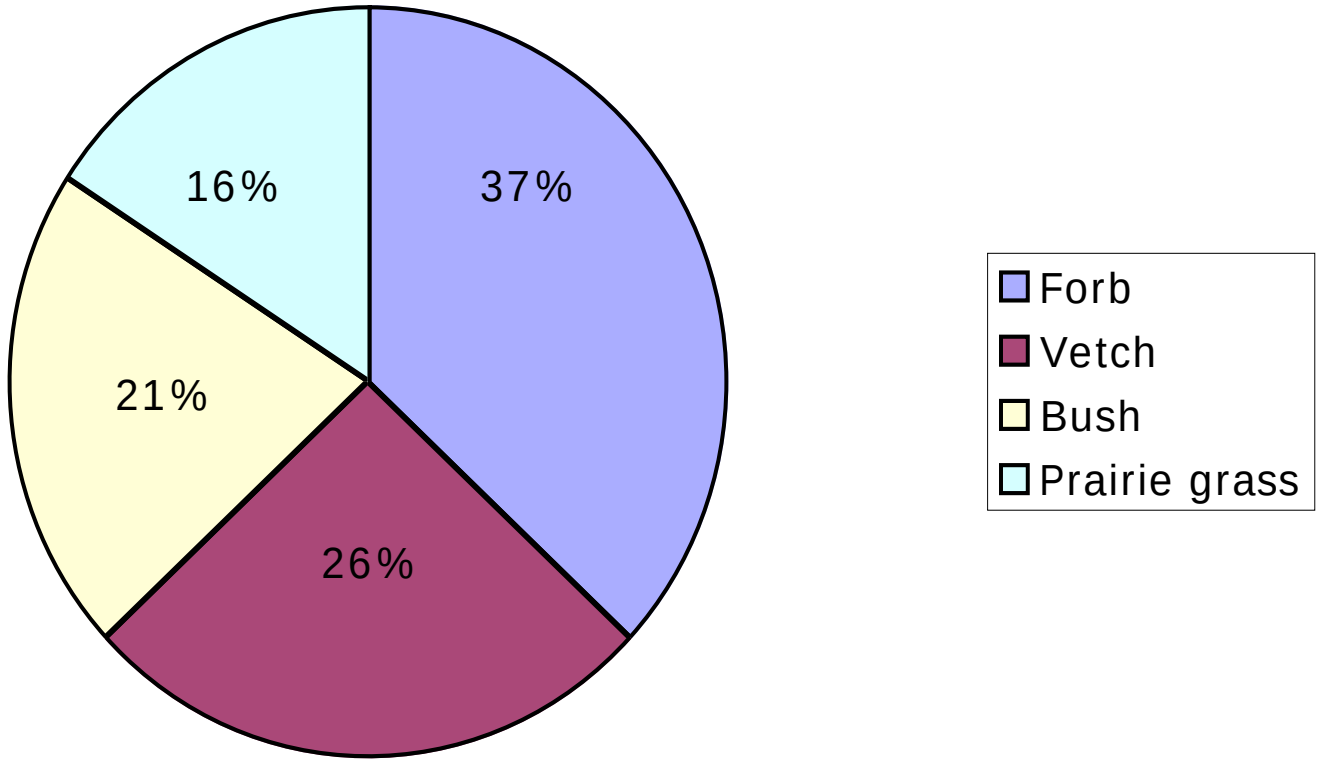
Warning

- Since I had to deal with a rare bird, the numbers that I therefore had to deal with were low as well. Thus, it was very difficult to do any kind of statistical analysis. There were only two areas in which this was possible at all.

Percentage of Bird Sightings in Prairie Areas



Percentage of Vegetation Perched On Overall



Qualitative Results

Ultimate Conclusions

Abundance of Bird

It can be concluded from this study that the area the bird was most abundant in was the South Eola area. This is based on observation throughout the data collection period only.

Vegetation

- According to this study, it is suggested that the Henslow's sparrow does not prefer a certain vegetation to perch on. It usually picks the most abundant vegetation in the area.

Breeding

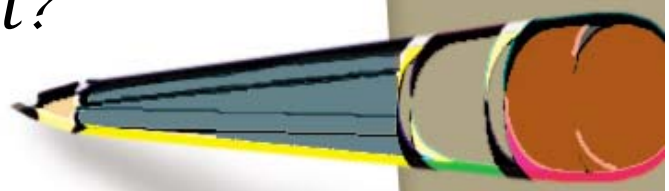
- Two confirmations were made in this study.
- 1.Dusaf Pond(bird with food in mouth.)
- 2.North Eola grasslands(pair seen)

Ultimate Conclusions

- Several points of interest were achieved in this study. It was suggested that Henslow's sparrows are most abundant in the South Eola grasslands. It can also be suggested that males do not prefer a certain vegetation to perch on. It is very exciting that two breeding confirmations were accomplished.

Future Work

What could be done next?



More data could be collected to prove if this study's conclusions are correct. Also a study could be done on how many breeding confirmations were done this year versus another year and why. Further work could include a study on the sightings of Henslow's related to the wind velocity on that day, since a small observation in

Acknowledgements

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