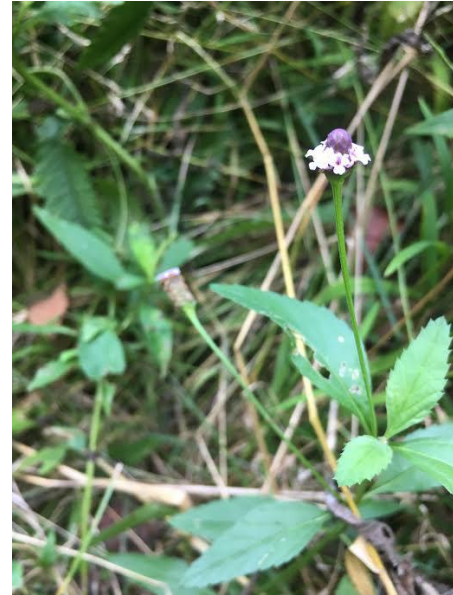




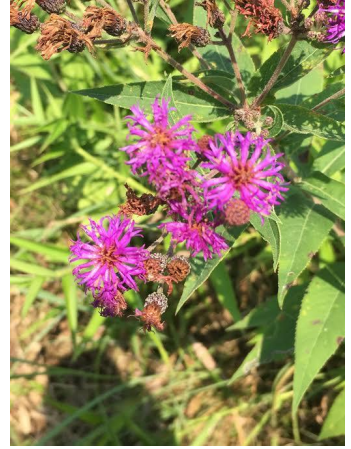
Edge Effects on Nesting Success of Ground-nesting Prairie Birds

By Hannah Merwin



Introduction

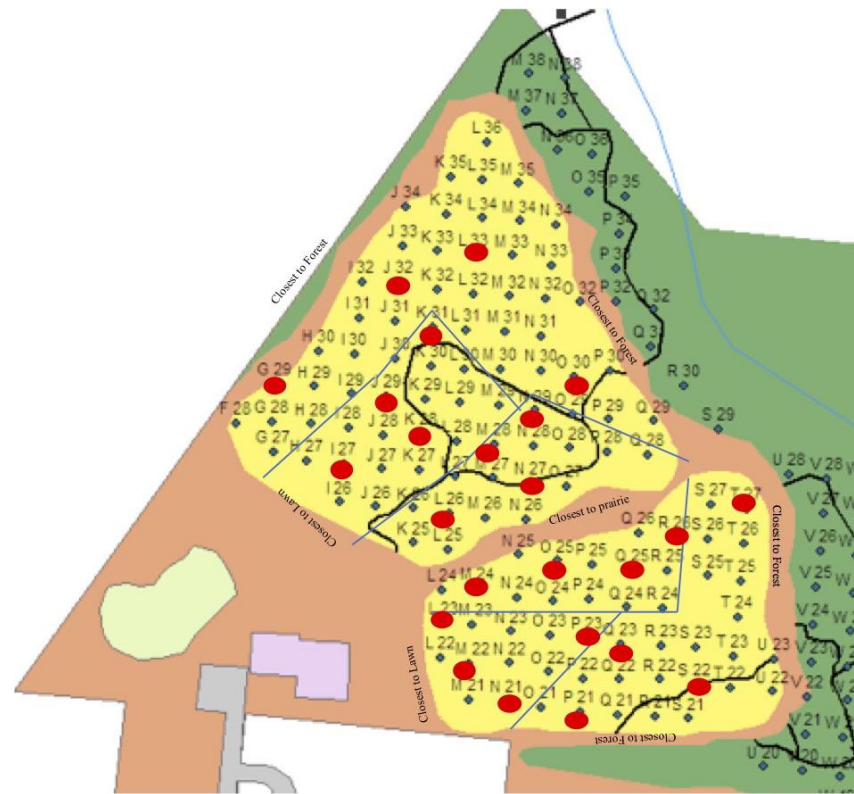
- OBSS hypothesis
 - Small sites can matter
- Edge effects
- Woodland edge effects negatively impact neotropical migrants' reproductive success
 - Predation and parasitism
- Prairies understudied but negative effects have been found
- Nests near another prairie will have significantly different predation than nests near woodlands or lawn



Methods

- LREC North and South Prairies used
- Prairies divided into three treatments
 - Edged with Lawn
 - Edged with Woodland
 - Edged with Prairie
- Used a random number table to pick which of the plot points in each treatment would have nests
- Nests made by wrapping grass over egg in imitation of Northern Bobwhite nests
- 24 eggs placed
 - 12 in each prairie
 - 4 in each treatment in each prairie
- Left alone for 1 week then checked
- Checked again at 12 day mark ending period out in prairie
- Recorded which nests had eggs missing or damaged

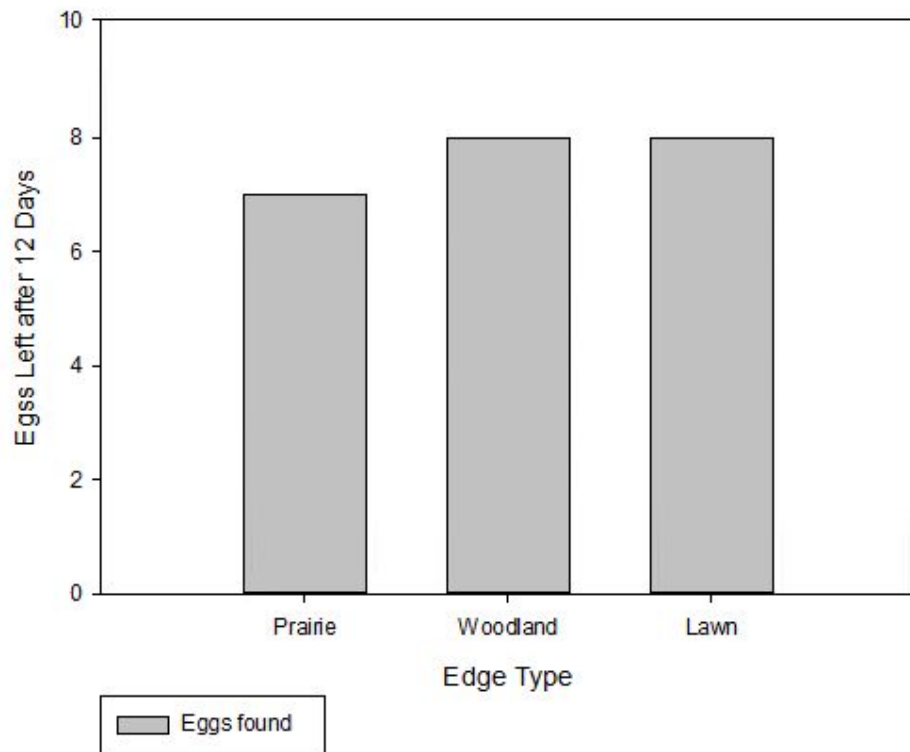




The One Egg



Results



Discussion

- Nothing was found for edge effects
 - Does not mean they do not exist
- Issues
 - Hot weather
 - Nesting period
 - Predator cues nonexistent
 - Egg type
- LREC still important with or without edge effects
 - Education
 - Islands as corridors
 - natives



Further Research

- Some studies suggested a gradient of eggs to determine where the edge effects stop
- In the late spring/early summer track actual nests and reproductive success
- Vary clutch sizes
- Redo this experiment with quail eggs or non-processed chicken eggs to maintain a more realistic scent on the eggs





Thank you to the LREC staff for ‘funding’ this project and for the use of their site for research.



