



Microhabitat Selection of Brood-rearing Sites by Greater Sage-grouse

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Food & Cover

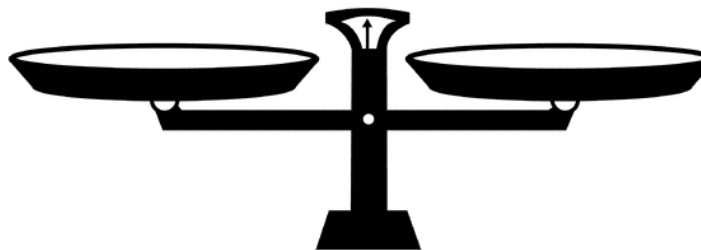
Eating

- New chicks eat high protein insects
- Chicks transition to eating forbs later in the summer



Hiding

- Vegetation provides cover from predation
- Vegetation provides cover from weather



Objectives

1. Determine food and cover resources associated with selection of microsites
2. Estimate how varying resource characteristics (e.g., increasing forb cover) might affect relative probability of selection



Field Methods

- GPS transmitters
 - 30 grams
 - 50 females
 - 6-8 locations / day





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500 m

Used vs. **Available**



50 m

250 m



Field Methods: Vegetation

1. Canopy Cover (%)

- Daubenmire frame

2. Height (cm)

3. Sagebrush density

- Point-centered-quarter method

4. Visual obstruction (cm)

- Modified Robel pole



Field Methods: Insects



Analytical Methods

Food Models

- Insects
- Forbs



Cover Models

- Canopy cover
- Height
- Sagebrush density
- Visual obstruction



Top Food + Top Cover = Best Overall Model

Results

- 105 used sites
- 315 paired-random sites
- 3-4 sites / female / year





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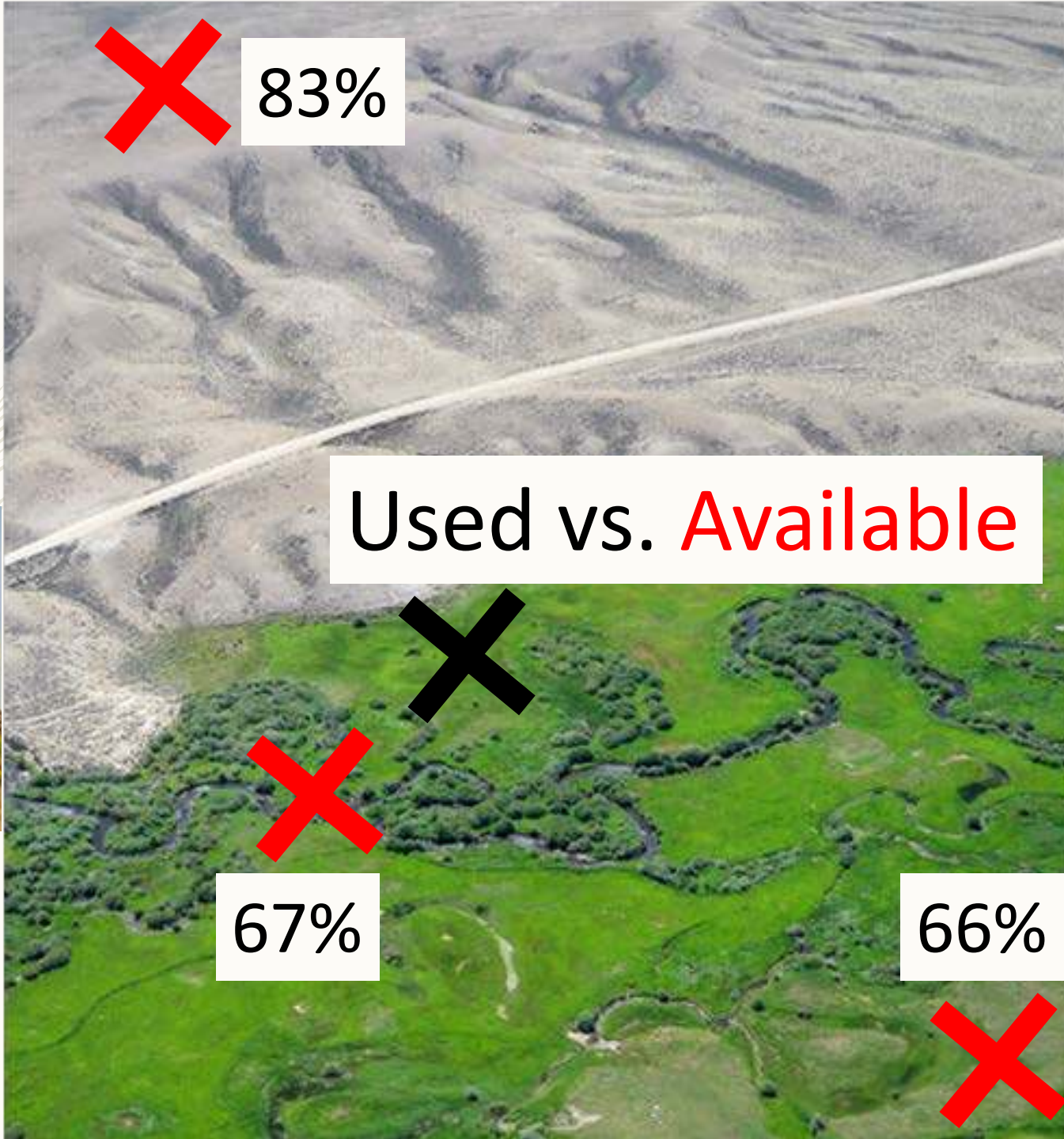
83%

Used vs. Available

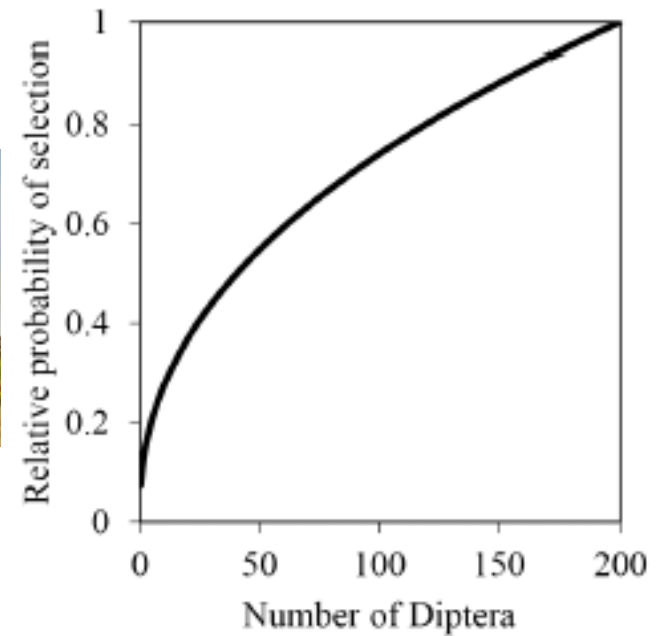
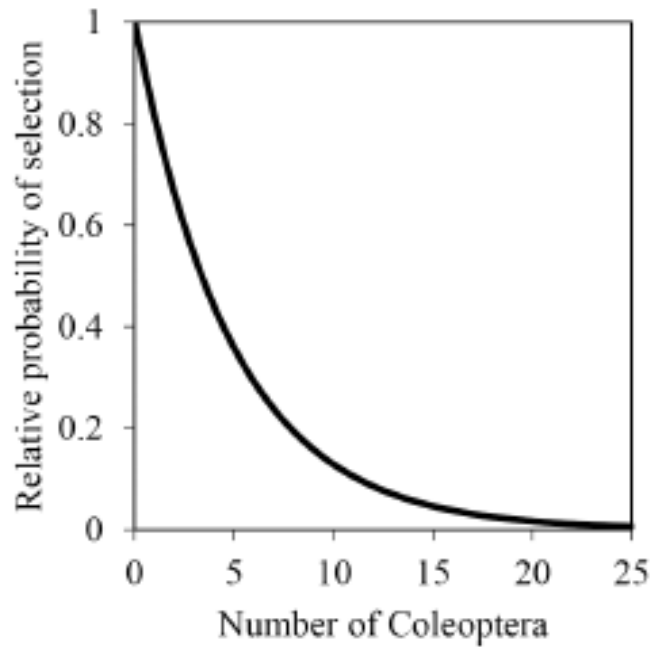


67%

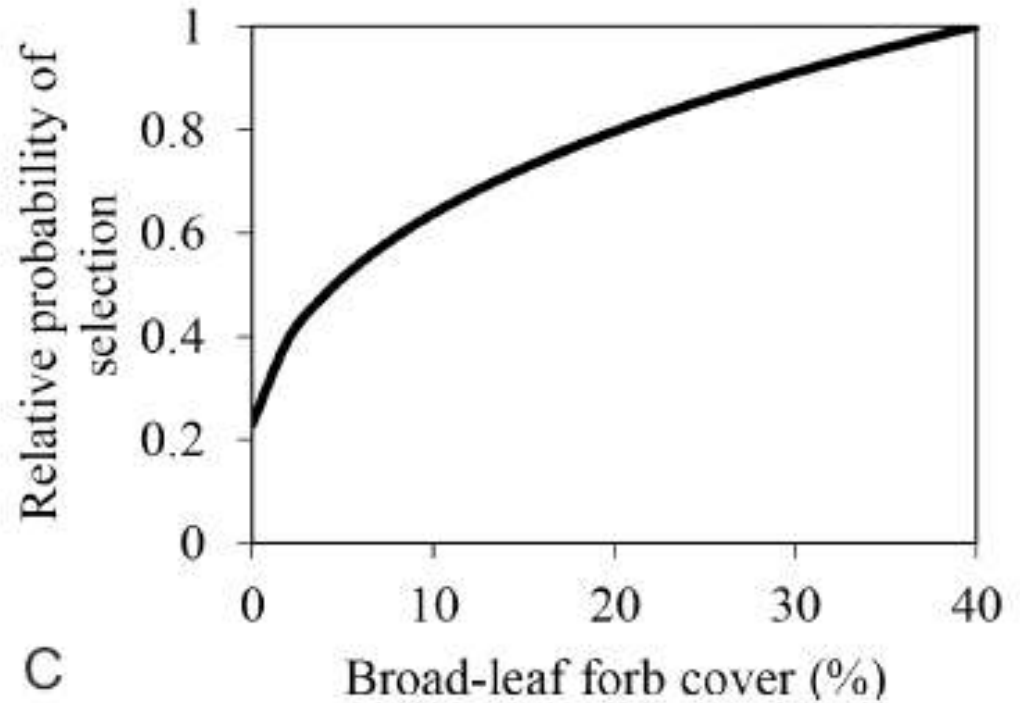
66%



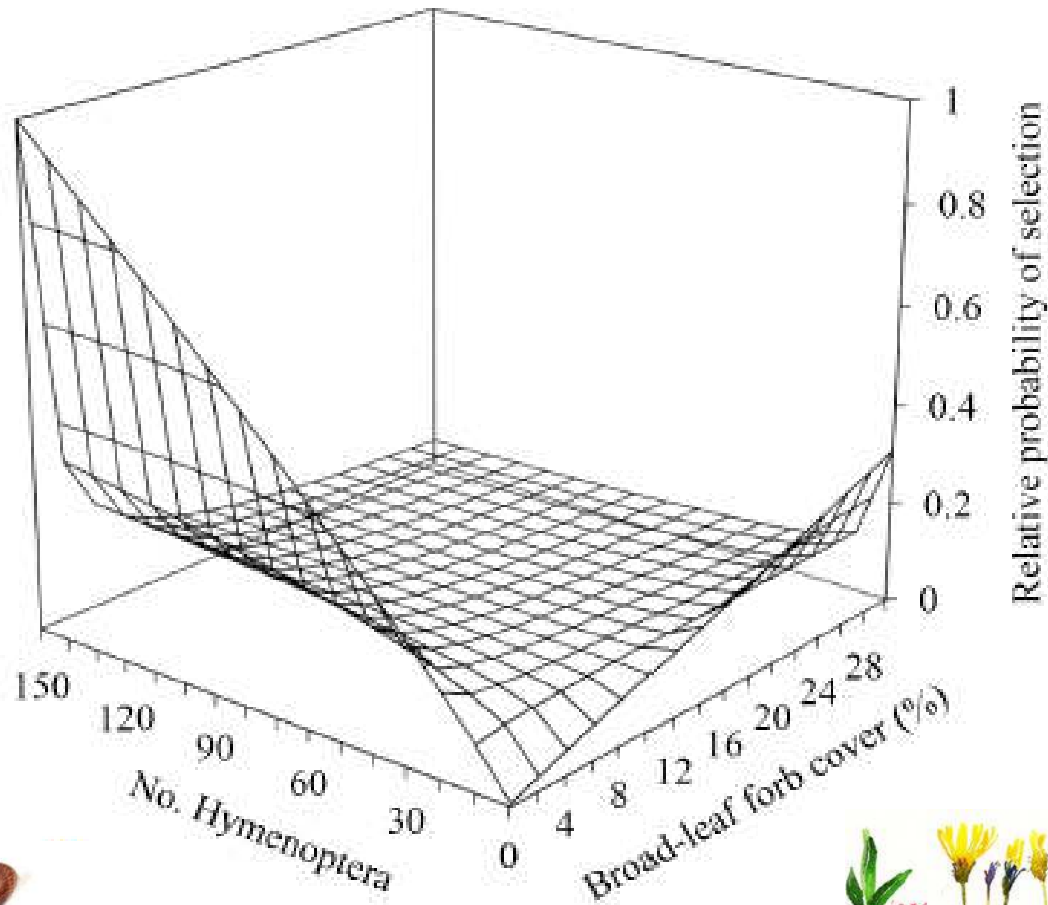
Food Results



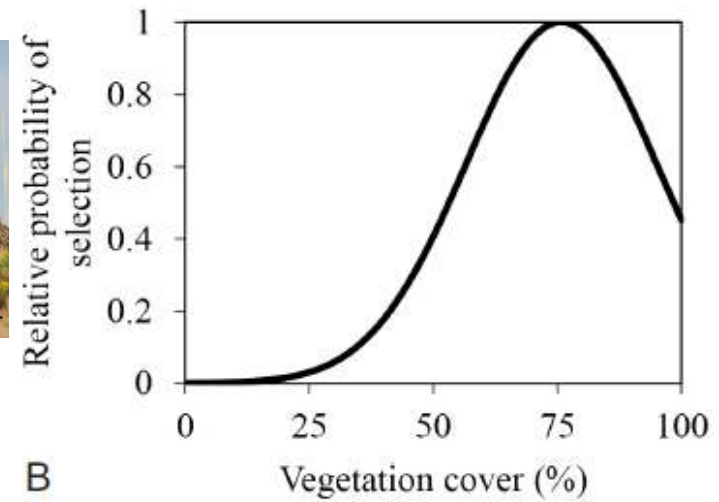
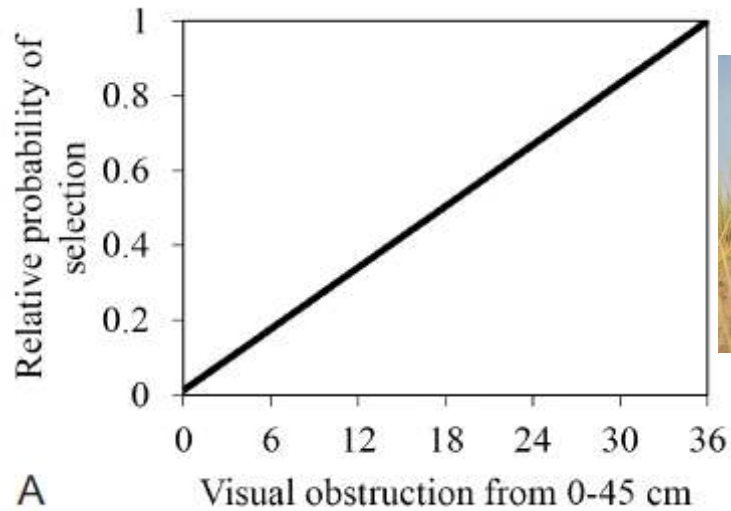
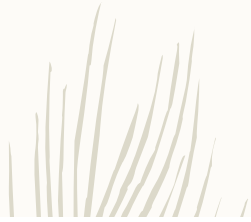
Food Results cont.



Food Results cont.



Cover Results





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Acknowledgements



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