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Bird Study: Year 3 proposal



Effects on Swallows



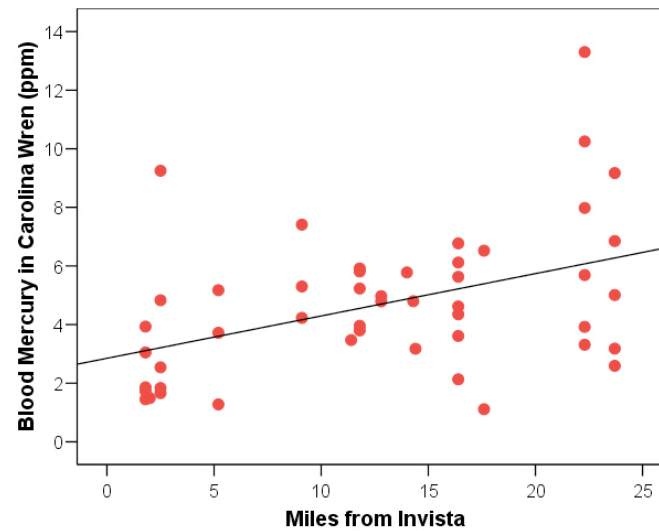
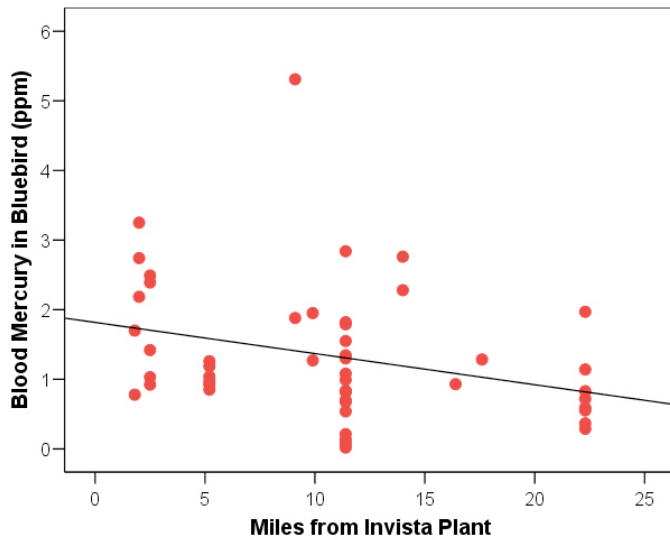
Role of Diet

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Update on what we know now:

- Hg elevated in almost all species of birds to date
- Young South River tree swallows produce one less chick
- Spatial pattern of Hg availability not consistent
- Songbird diets superficially similar despite differing Hg
- Young bluebirds remain below adult levels

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Spatial pattern of Hg availability not consistent

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CAROLINA WREN



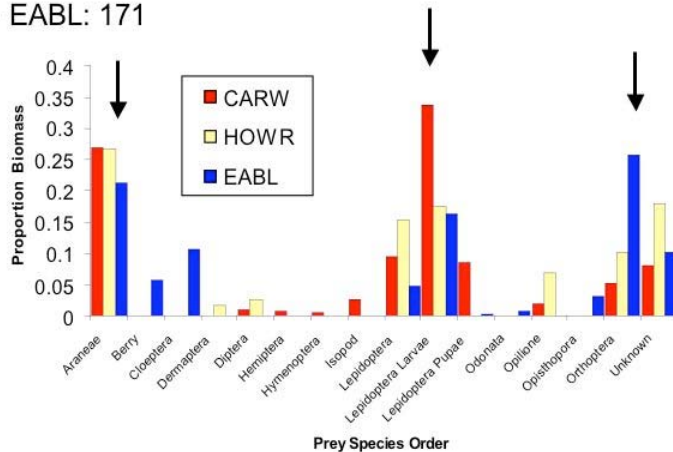
HOUSE WREN



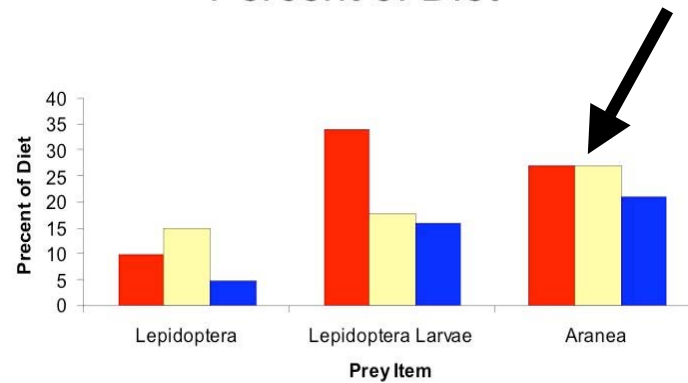
BLUEBIRD

Prey Items Collected

- CARW: 89
- HOWR: 150
- EABL: 171



Percent of Diet

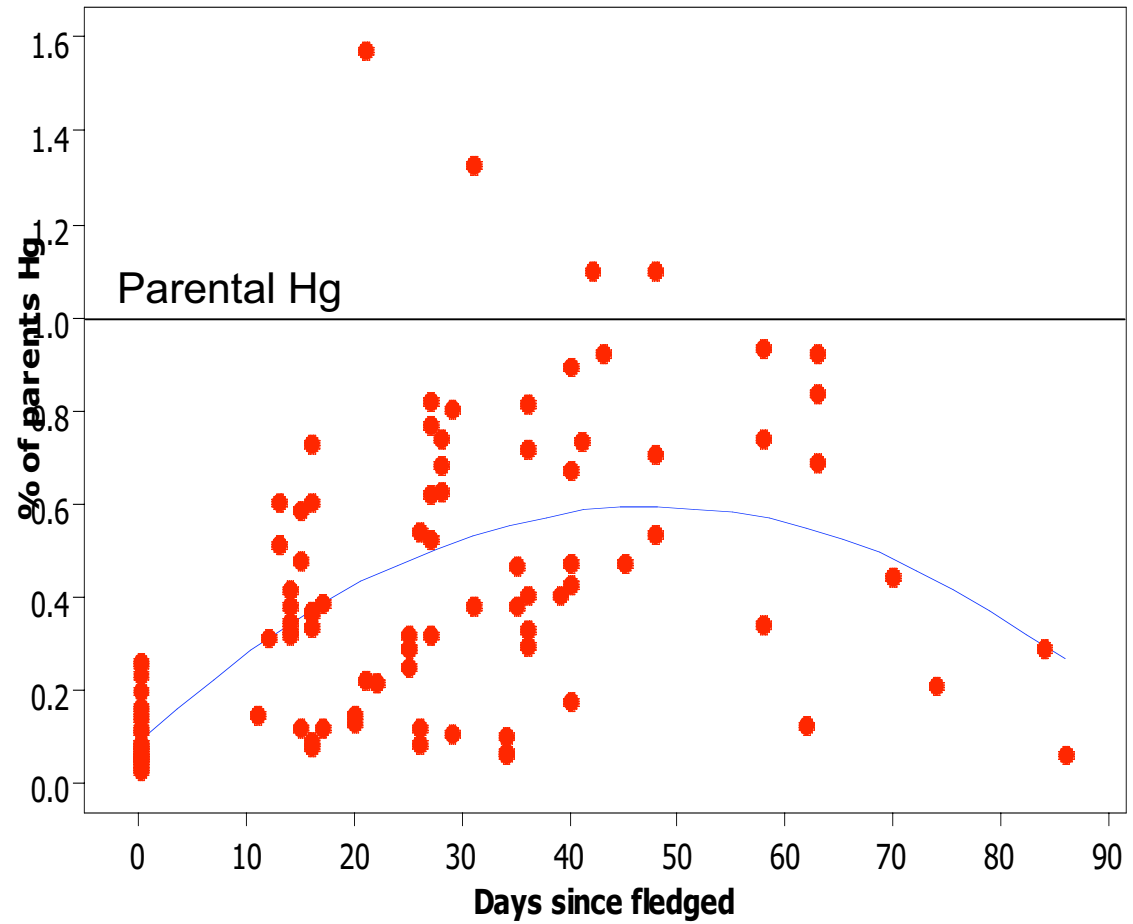


Songbird diets superficially similar despite differing Hg

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Young bluebirds remain below adult levels



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What's next:

- 2nd year of swallow survival rates
- 3rd year of swallow reproductive effects
- Fine-grained sampling of diets
 1. distance from river
 2. size of prey item
 3. trophic level of prey item

Also: Sub-lethal biomarkers:
e.g. immune suppression

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THANKS SRST!