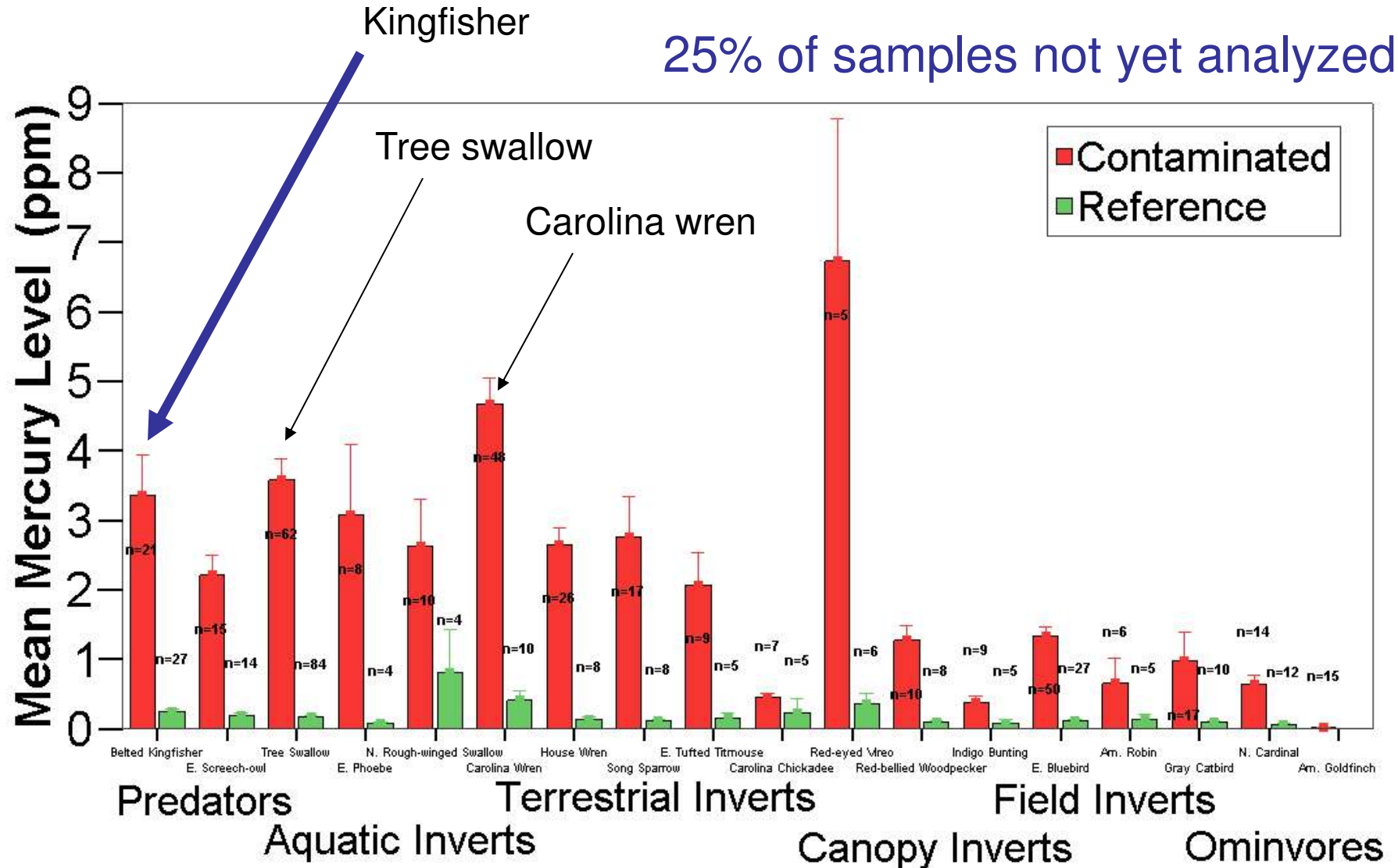


Bird Study: Year 2

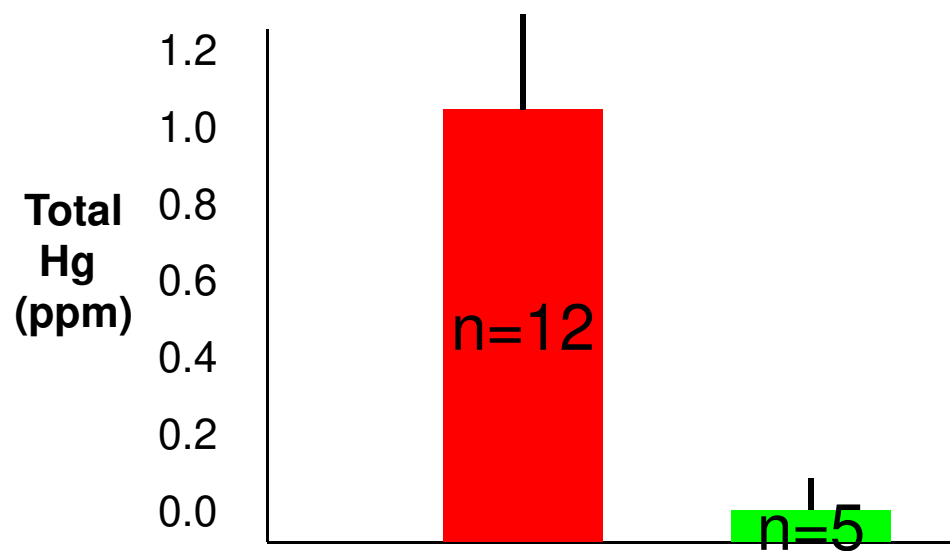


25% of samples not yet analyzed





Total blood Hg in Mallard



Contaminated: Reference:

•Basic Park

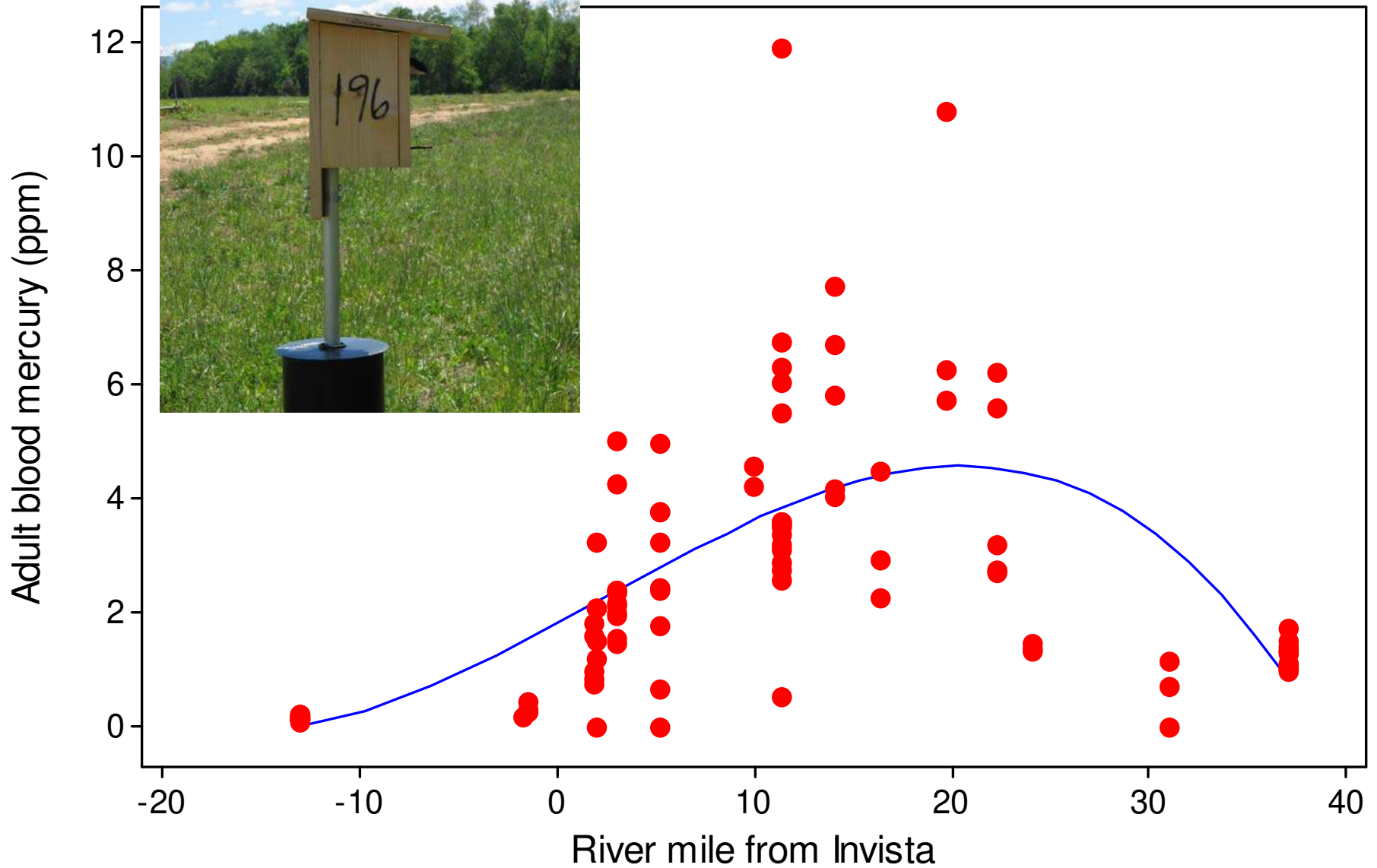
•Middle

•Dooms

•North

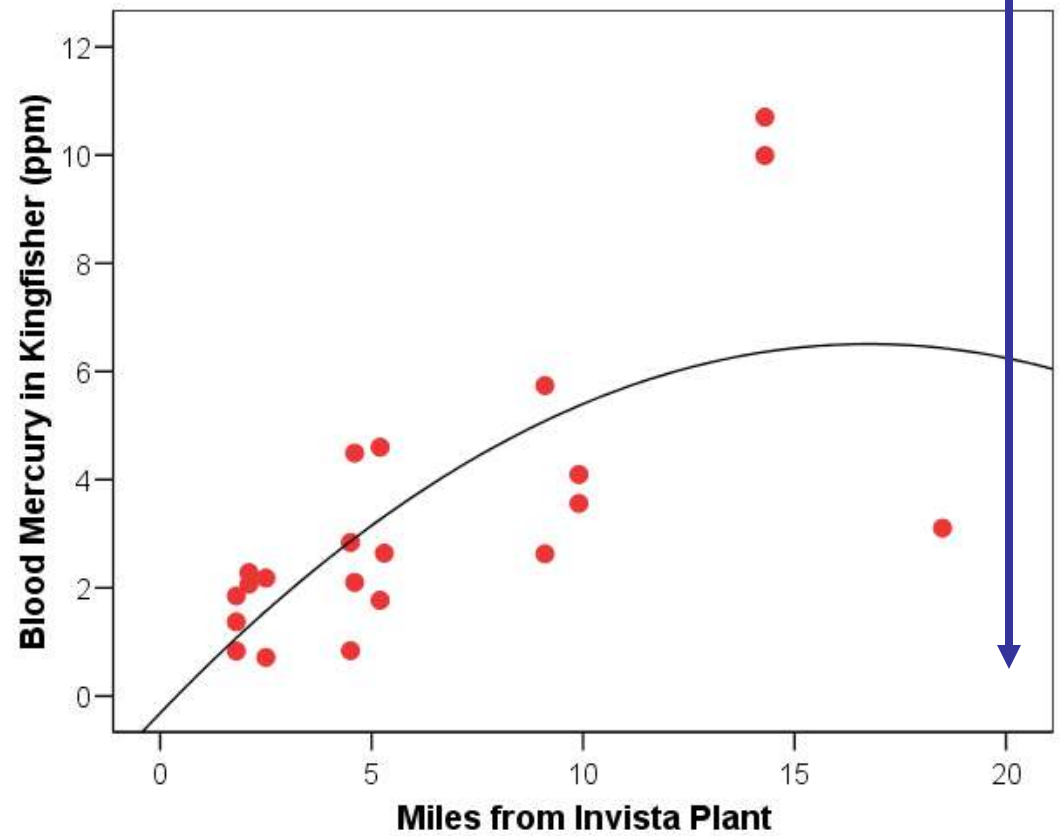


SOUTH RIVER ADULT TREE SWALLOW



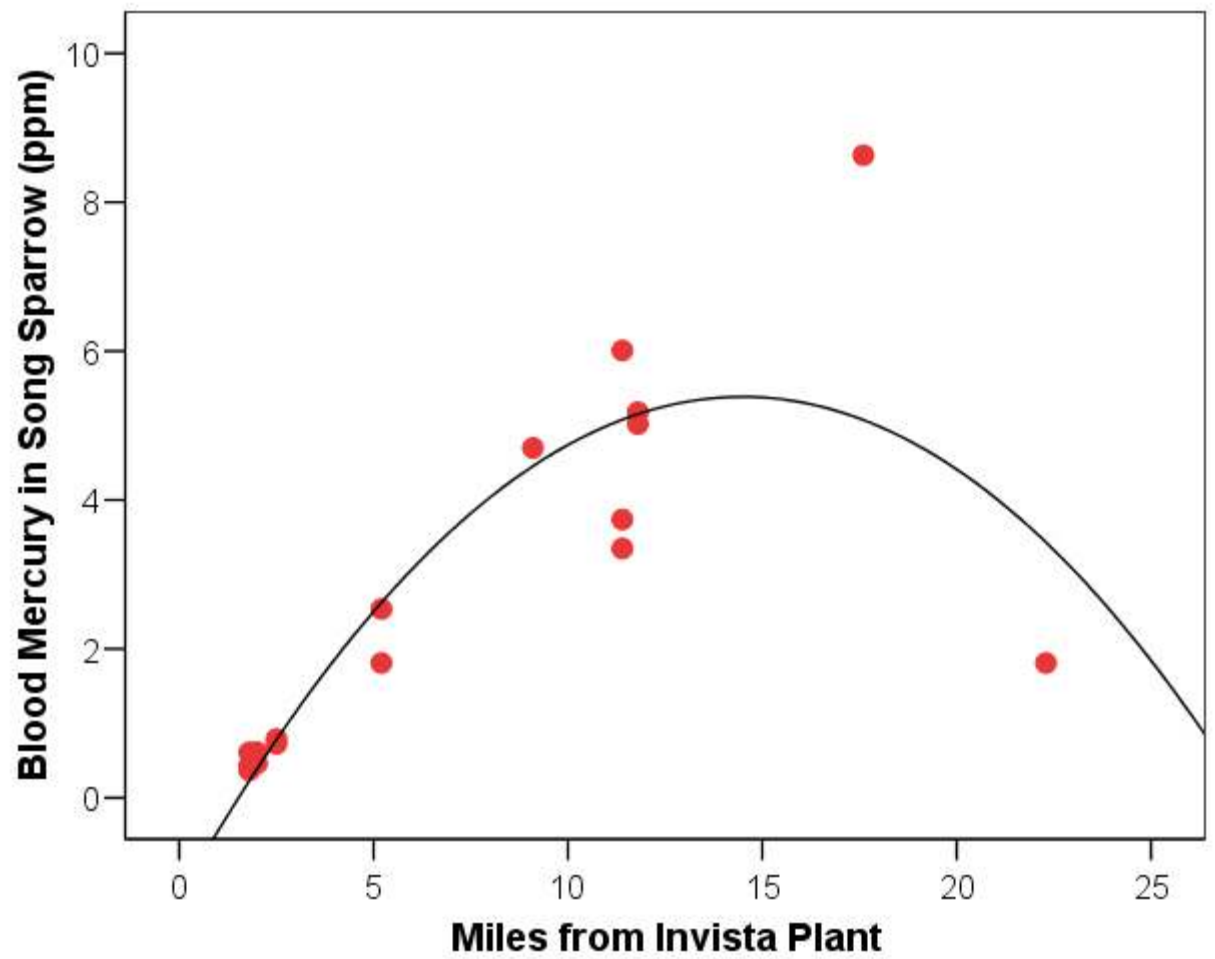


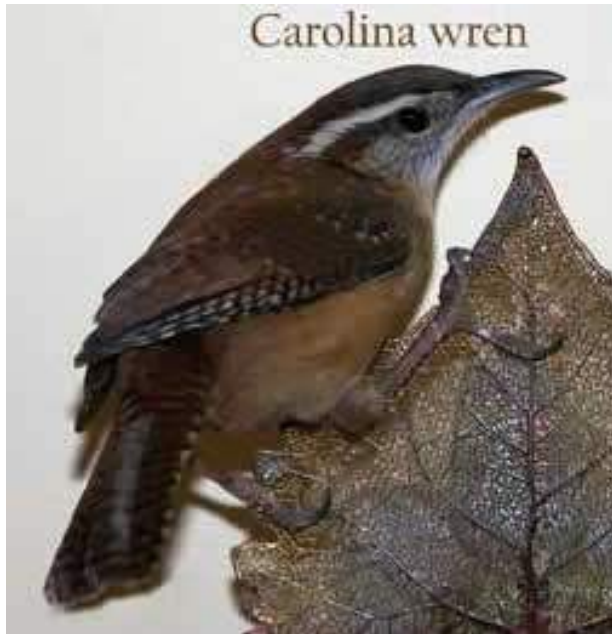
Adult kingfisher



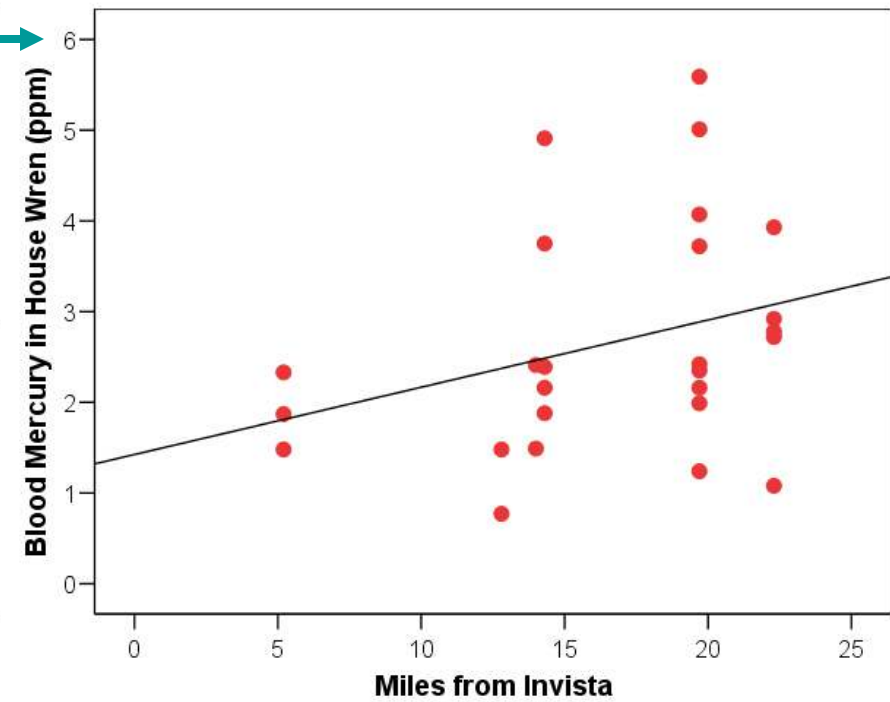
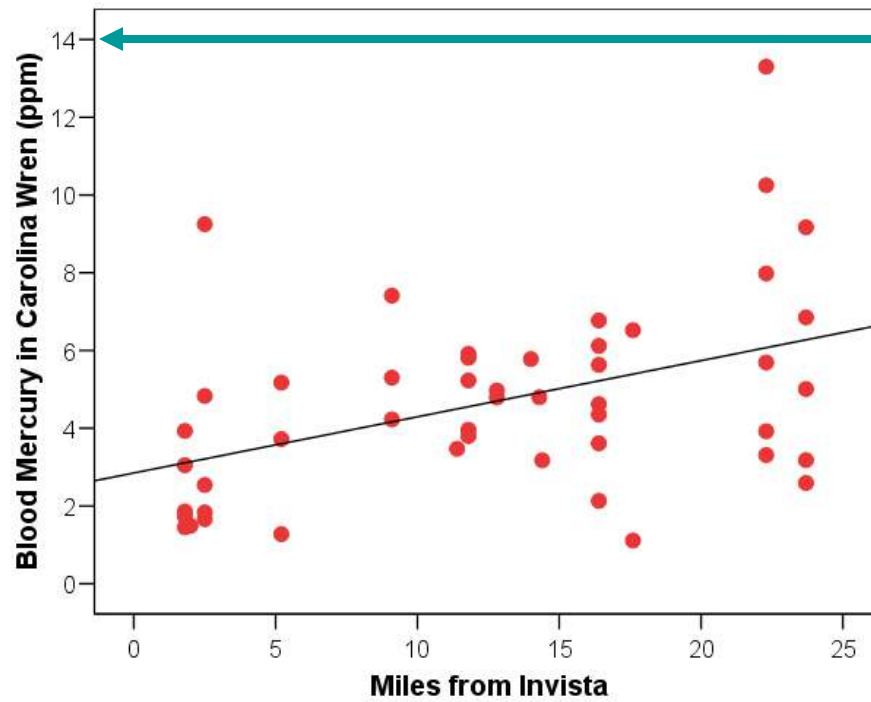


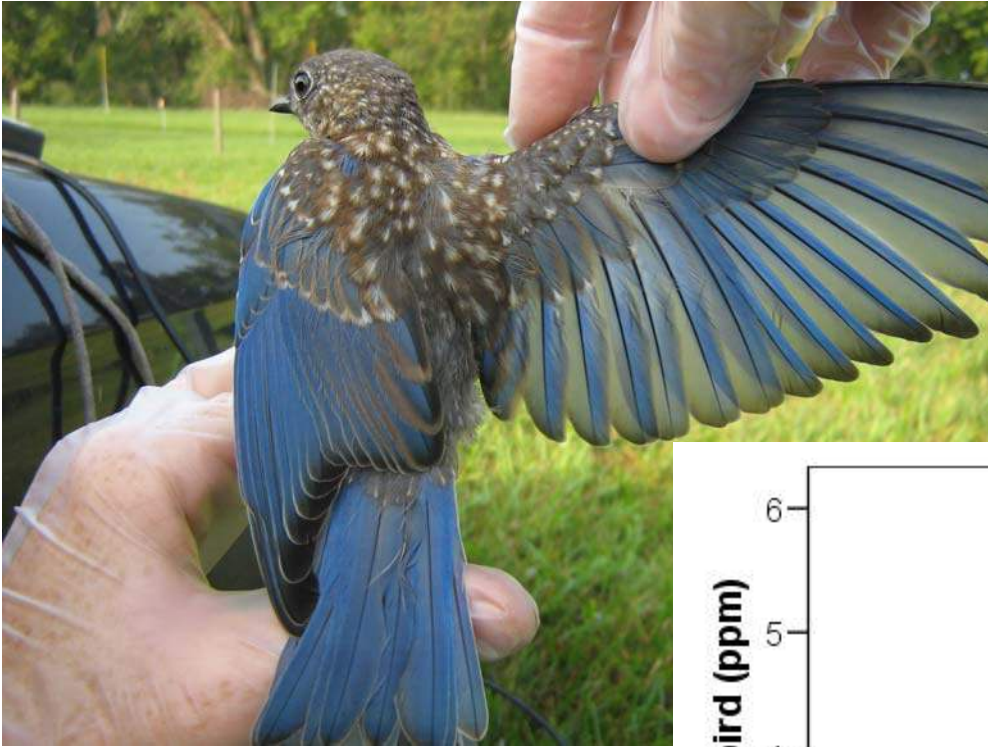
Adult Song Sparrow



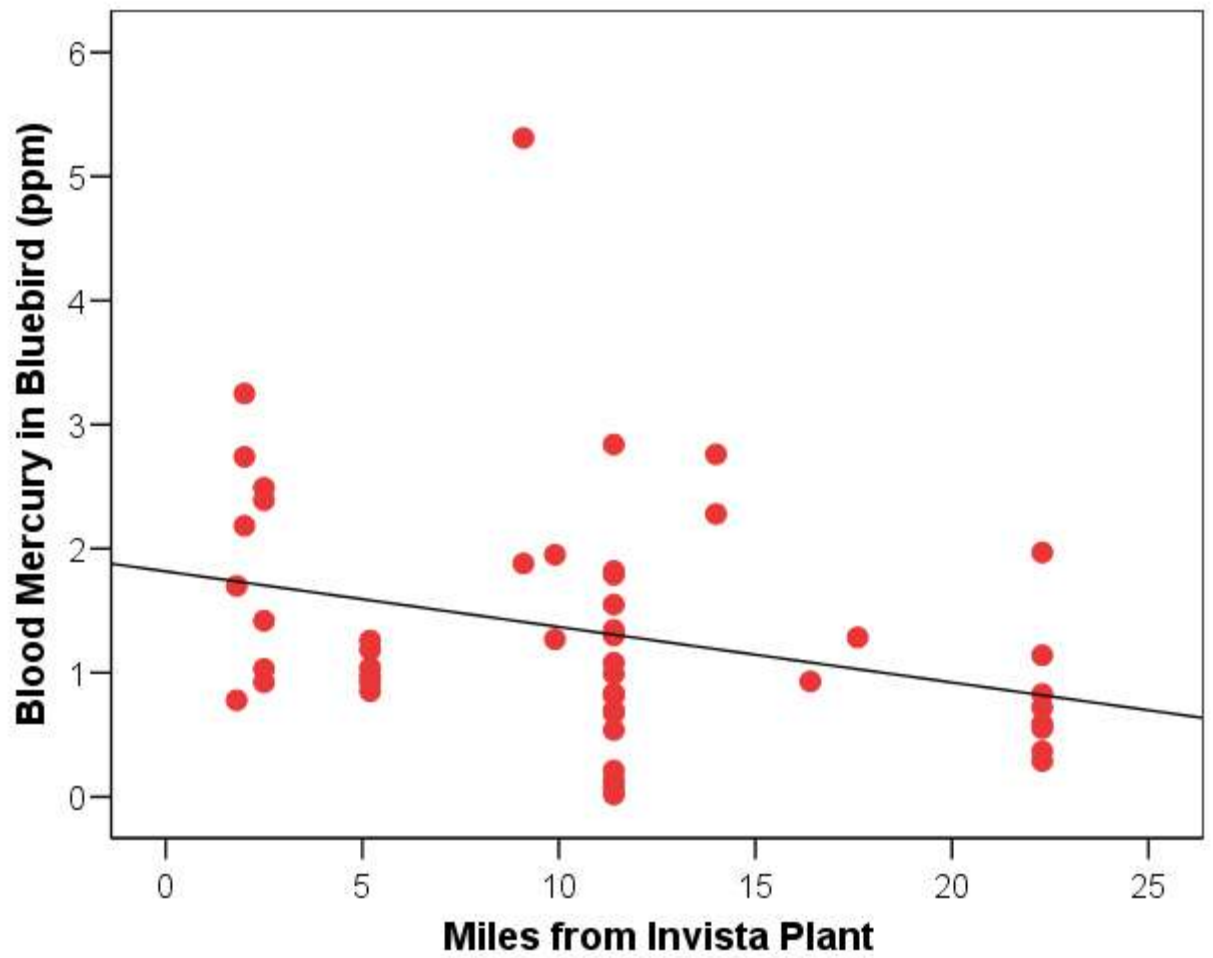


House wren



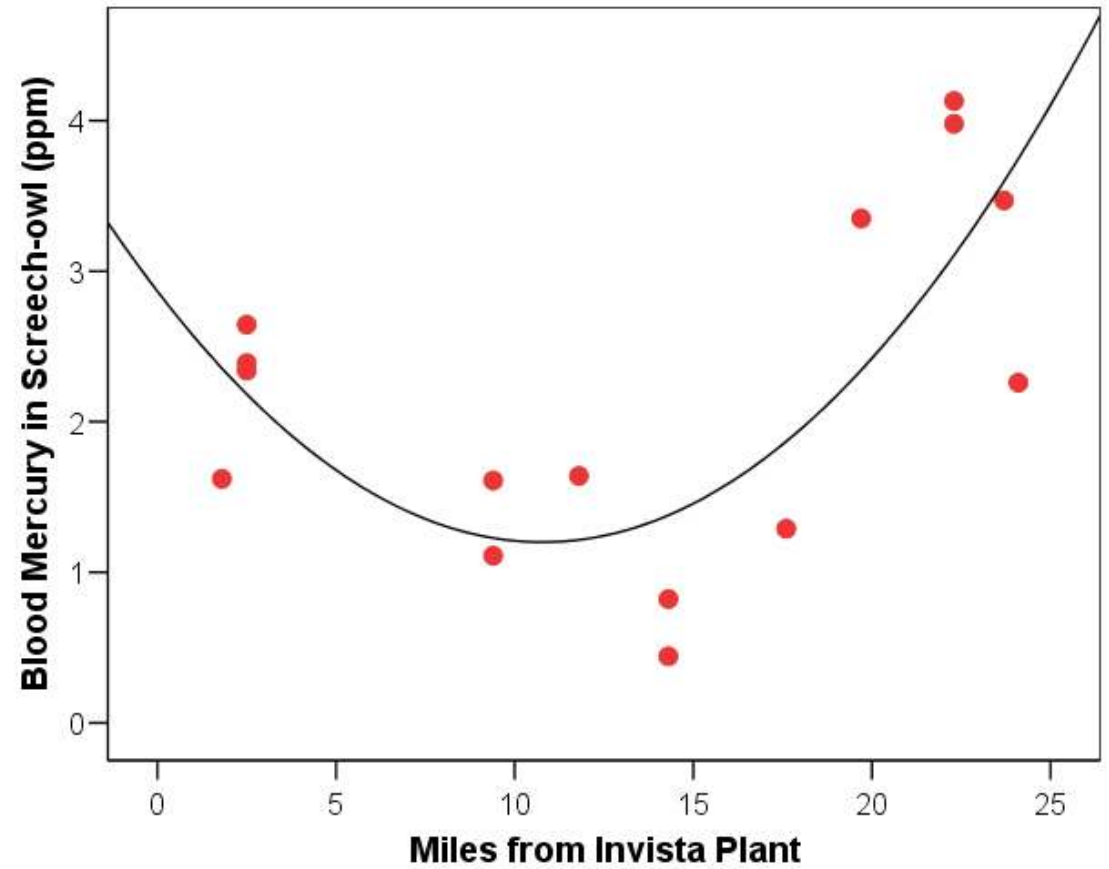


Adult Bluebird





Adult screech-owl



Tracking post-fledging bluebirds

Anne Condon, W&M Masters student





Rachel Fovargue
W&M Freshman



Maryse Leandre
Thomas Nelson Community College



Jack Reese
W&M Sophomore



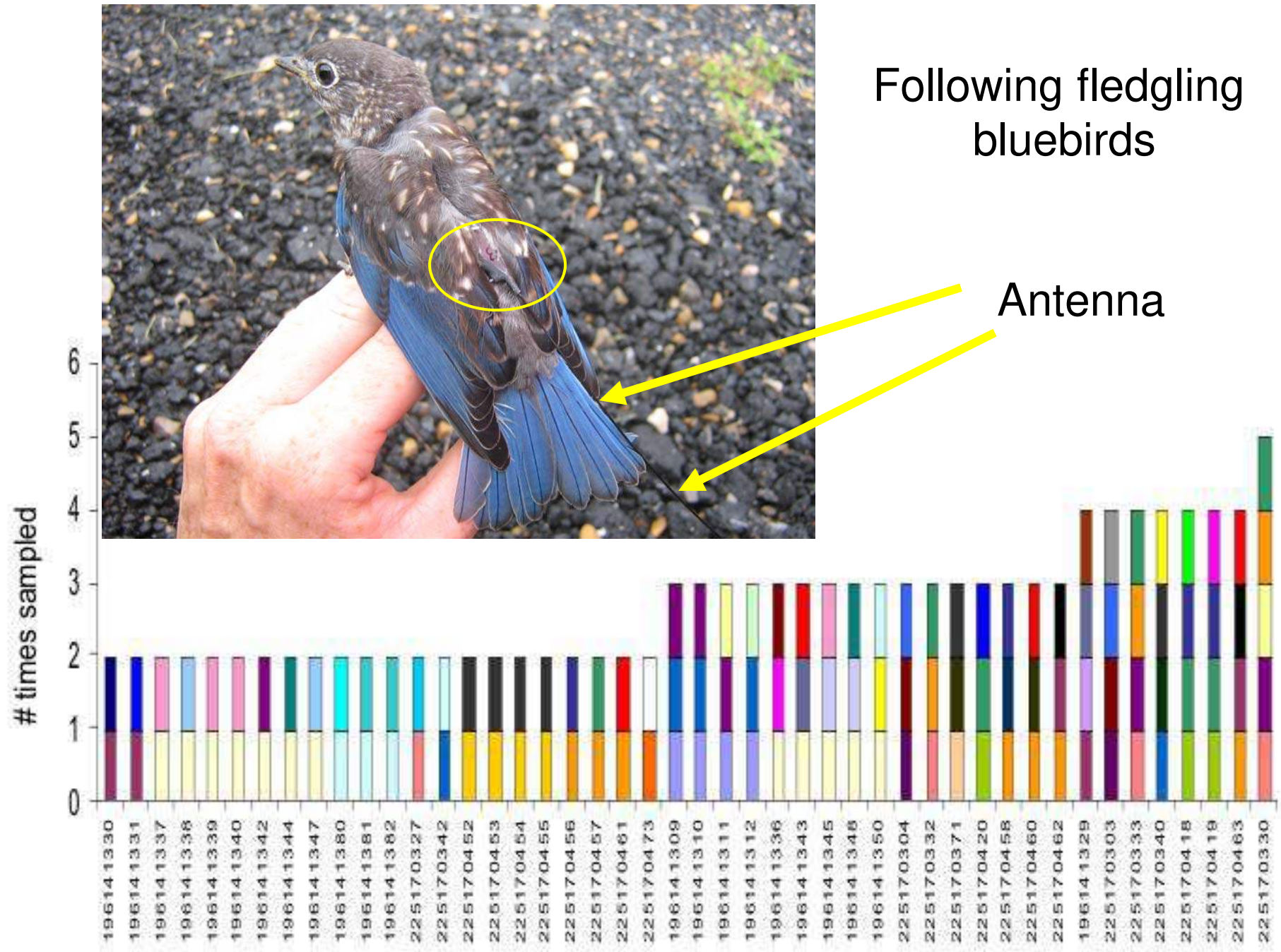
Adrian Monroe, W&M Junior



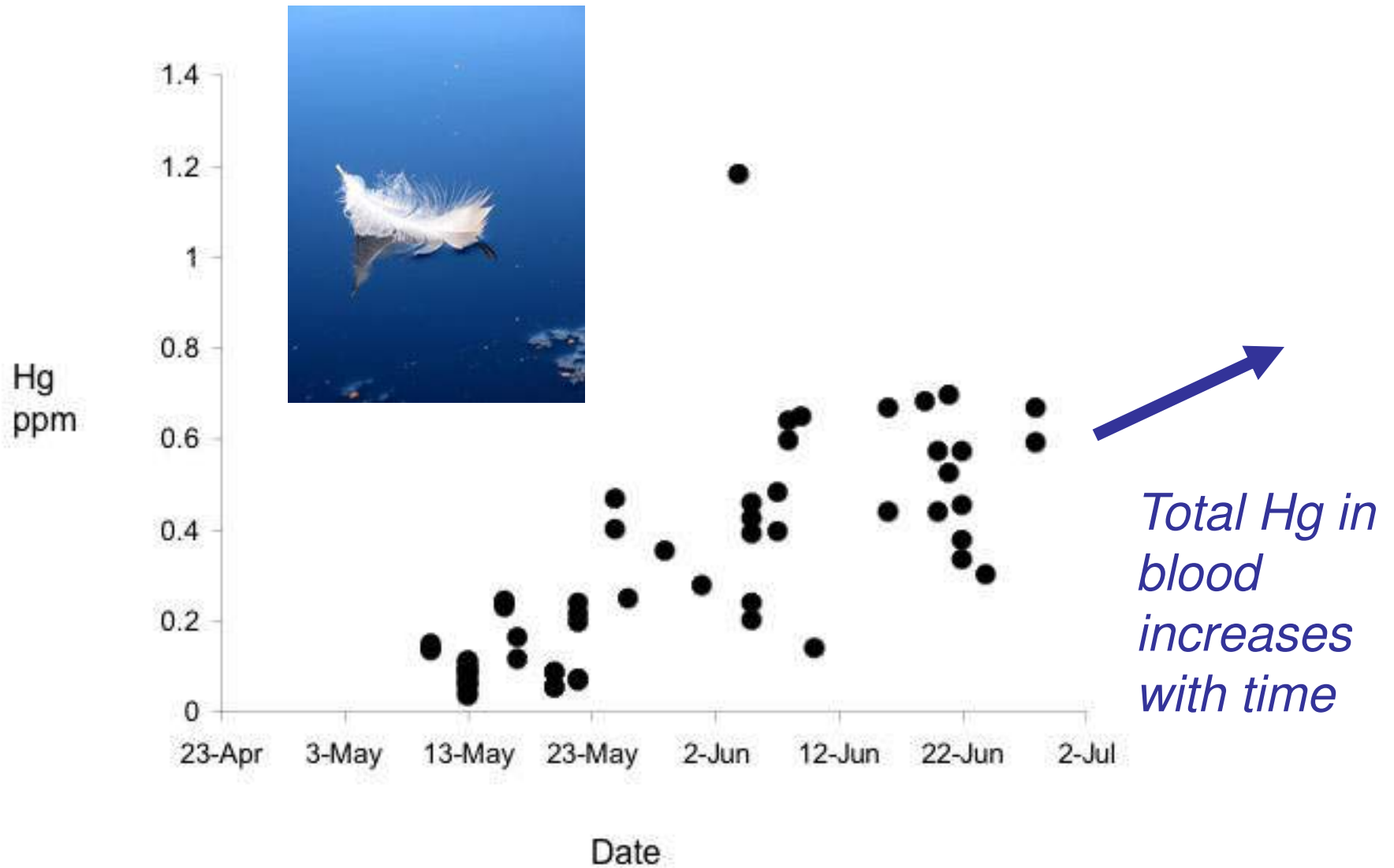
Kelly Hallinger, W&M Freshman

Following fledgling
bluebirds

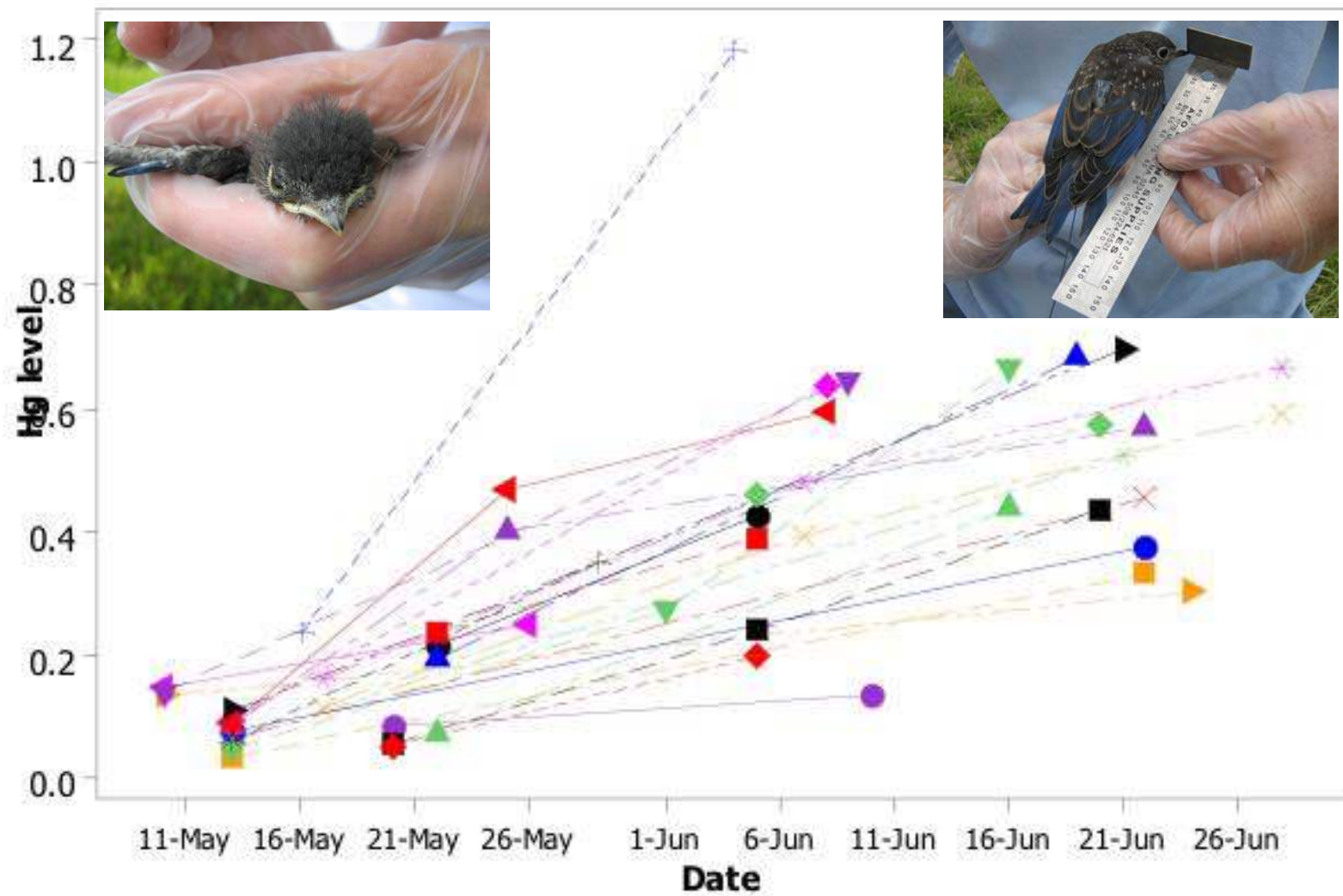
Antenna



Hg Levels of independent Eastern Bluebirds



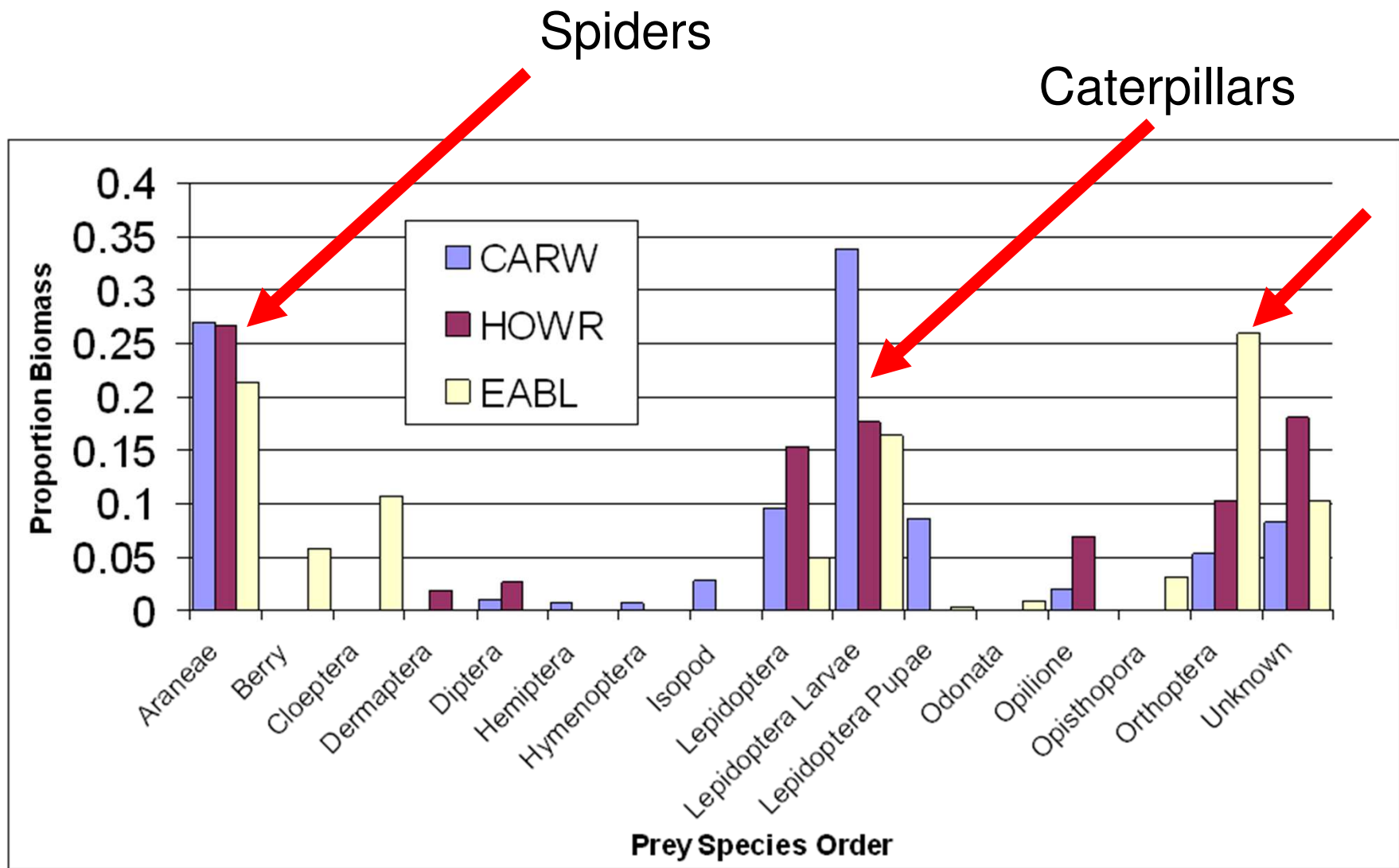
Blood mercury of individual fledgling bluebirds





DIET STUDY

Ligature samples:
Carolina wren = 90
House wren = 151
Bluebird = 171



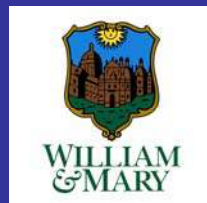
Food items taken from nestlings

Conclusions:

- Terrestrial songbirds are eating many spiders
- Nestling blood Hg increases with time since fledge
- Many non-targets have elevated blood Hg
- Hg present in several non-piscivorous food webs

e.g., mallard = bluebird = woodpecker

- Distribution of Hg availability differs by species



Anne Condon
Rebecca Brasso
Scott Friedman
Ariel White



Possible Future work:

- Distance contamination moves in bird prey
- Isotopic origins of food chains
- Relative reproductive success of wrens
- Swallow success and levels in third year of life
- Waterfowl on entire length of river
- Mallard prey items