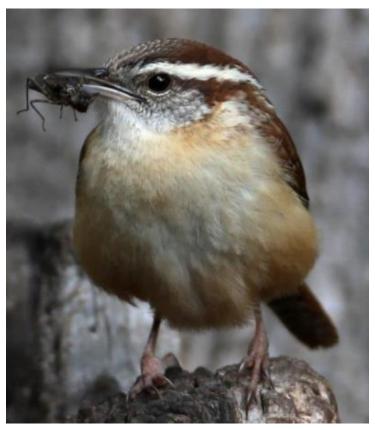
Carolina Wren Sampling

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- 2. Tyson Research Center, Washington University in St. Louis, Eureka, Missouri, 63025



Carolina Wren (Thryothorus ludovicianus)

Carolina Wren Life-history

A small bird with rusty upperparts, cinnamon underparts, a distinct white eyestripe

Males and females identical in plumage, but males are slightly heavier and have longer bills, wings, and legs

Year-round resident (non-migratory)

Strongly philopatric - maintains territories and pair bonds year-round





Carolina Wren Life-history

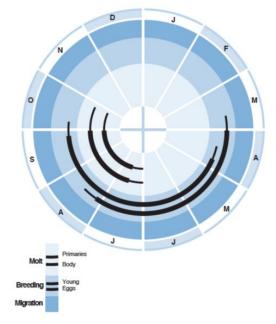
<u>Pair Formation</u> – can occur in fall of hatching year and before male acquires territory. Pair maintained year-round until mate dies or is possibly displaced then new pair bond is formed.

<u>Nest Construction</u> – by both male and female

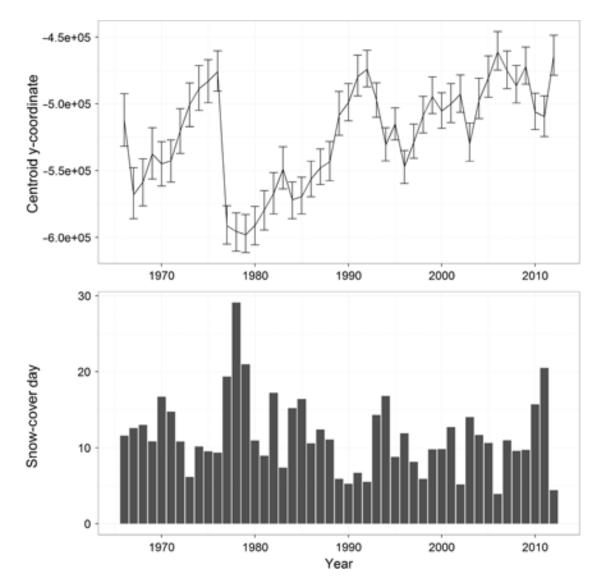
<u>Clutch Size</u> - typically 4 eggs; only female incubates (15 days)

<u>Young birds</u> – altricial, males and females feed; young leave nests after 13 – 14 days





Population Regulation Annual Survival & Snow Cover / Winter temps



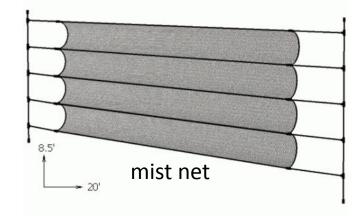
Huang, Q., Sauer, J.R., Swatantran, A., Dubayah, R., 2016. A centroid model of species distribution with applications to the Carolina wren *Thryothorus ludovicianus* and house finch *Haemorhous mexicanus* in the United States. Ecography (Cop.). 39, 54–66. doi:10.1111/ecog.01447

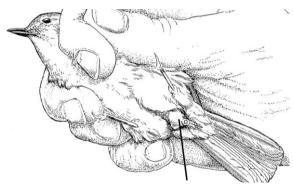
Carolina Wren Sampling Methods

Territorial birds captured June – July using playback recordings and mist nets

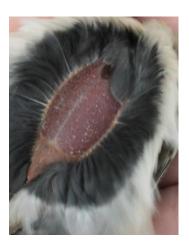
Sexes identified by the presence of a cloacal protuberance (male) or brood patch (female)

Age determined by tail feather coverts





cloacal protuberance (male)



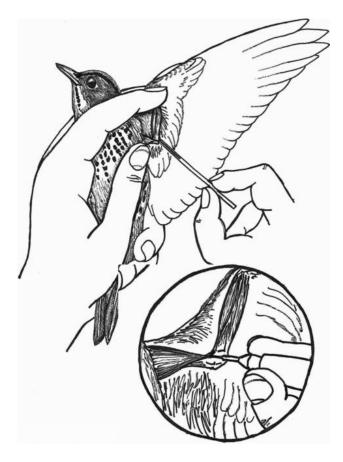
brood patch (female)

Carolina Wren Sampling Methods

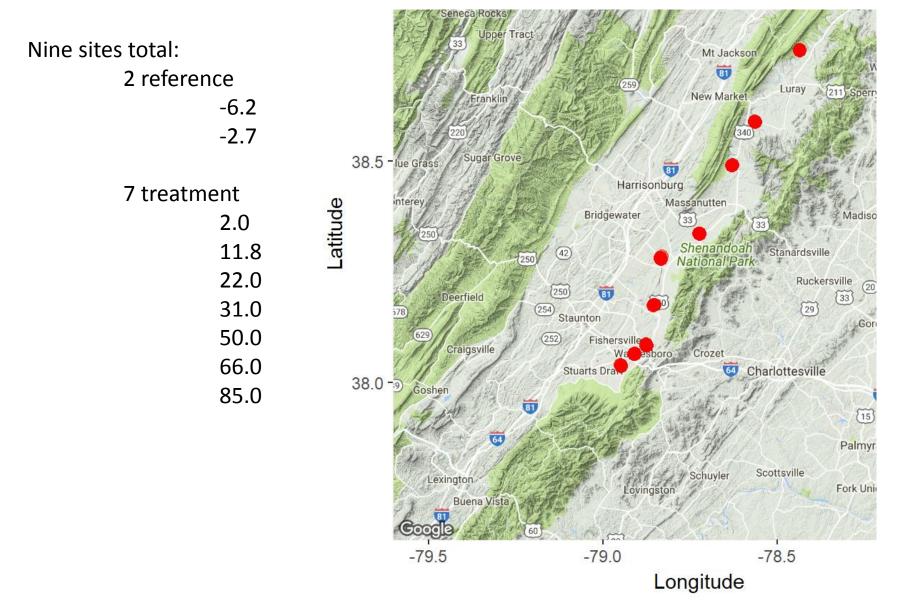
We used 26- to 28-gauge needles to puncture the cutaneous ulnar vein of the wing and collected blood in heparinized capillary tubes

Tubes were placed in 10-cm3 plastic tubes for protection and placed on ice in a cooler and they were frozen at –25°C within 6 h of collection

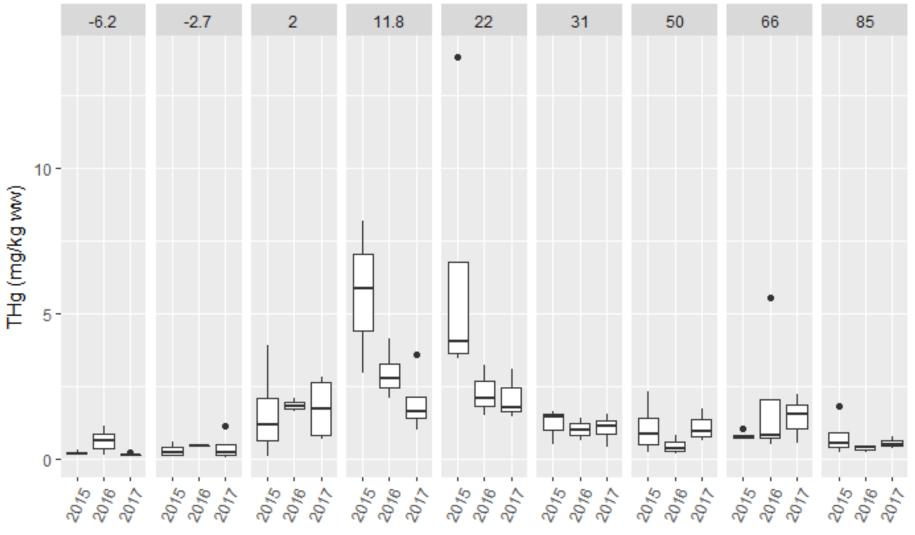
We banded wrens with a USFWS Band



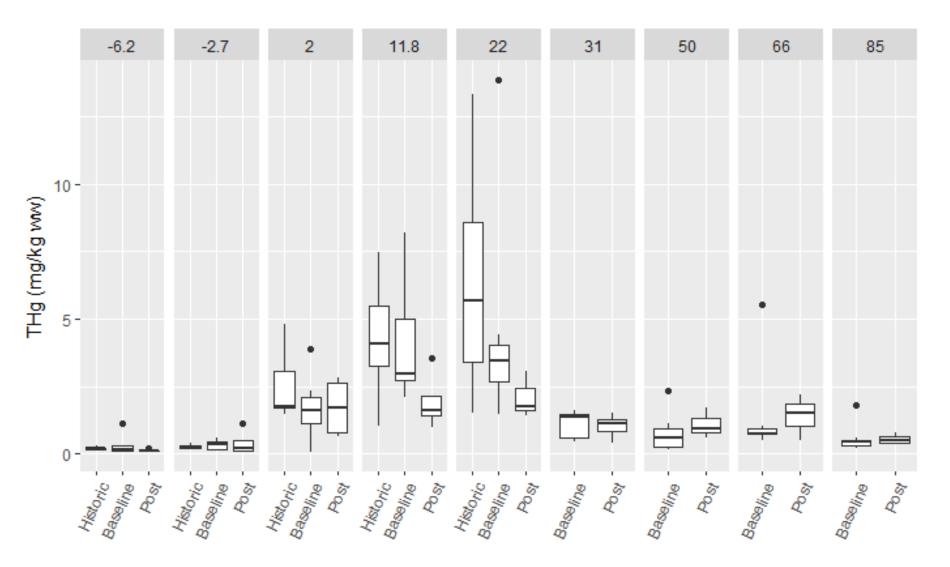
Carolina Wren Sampling Locations 2015 - 2017



Carolina Wren Blood Hg 2015 - 2017



Carolina Wren Blood Hg Historic / Baseline / Post IM





Thank you!



Acknowledgements

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Scott Gregory AECOM South River Science Team US Fish and Wildlife Service

