

Appendix 1. Male Kirtland's Warbler ages 2008-2019

Fig. A1.1. Proportion of male Kirtland's warblers observed in Adams County each year (2008-2019), in 6 different age classes. Ages were estimated at the time of banding based on plumage and morphological characteristics or based on returns of locally produced individuals banded as nestlings (known-age birds). In a given year, any males that had never been observed in Adams County previously were considered to be 'New Males'. Many of these new males were captured and given uniquely identifiable combinations of color bands. Many new males were aged to after-second year (not hatched the previous year; ASY) or second year (hatched the previous year; SY). Some males had a mix of characteristics, making them only ageable to an after-hatch-year (an adult, not hatched the current year; AHY). Some males were never captured or banded, and remained of unknown age (New Male, age unknown). Many males returned to Adams County in multiple years. In the year they were captured they were classified as a new male, but in any successive year they returned they were classified as 'Male banded locally as adult, \geq ASY'. These males are all after-second year (ASY). In several years we had individuals banded as nestlings, that returned to their natal site for their first breeding season (Male locally hatched, SY). Total number of observed males in each year are noted above the bars.

