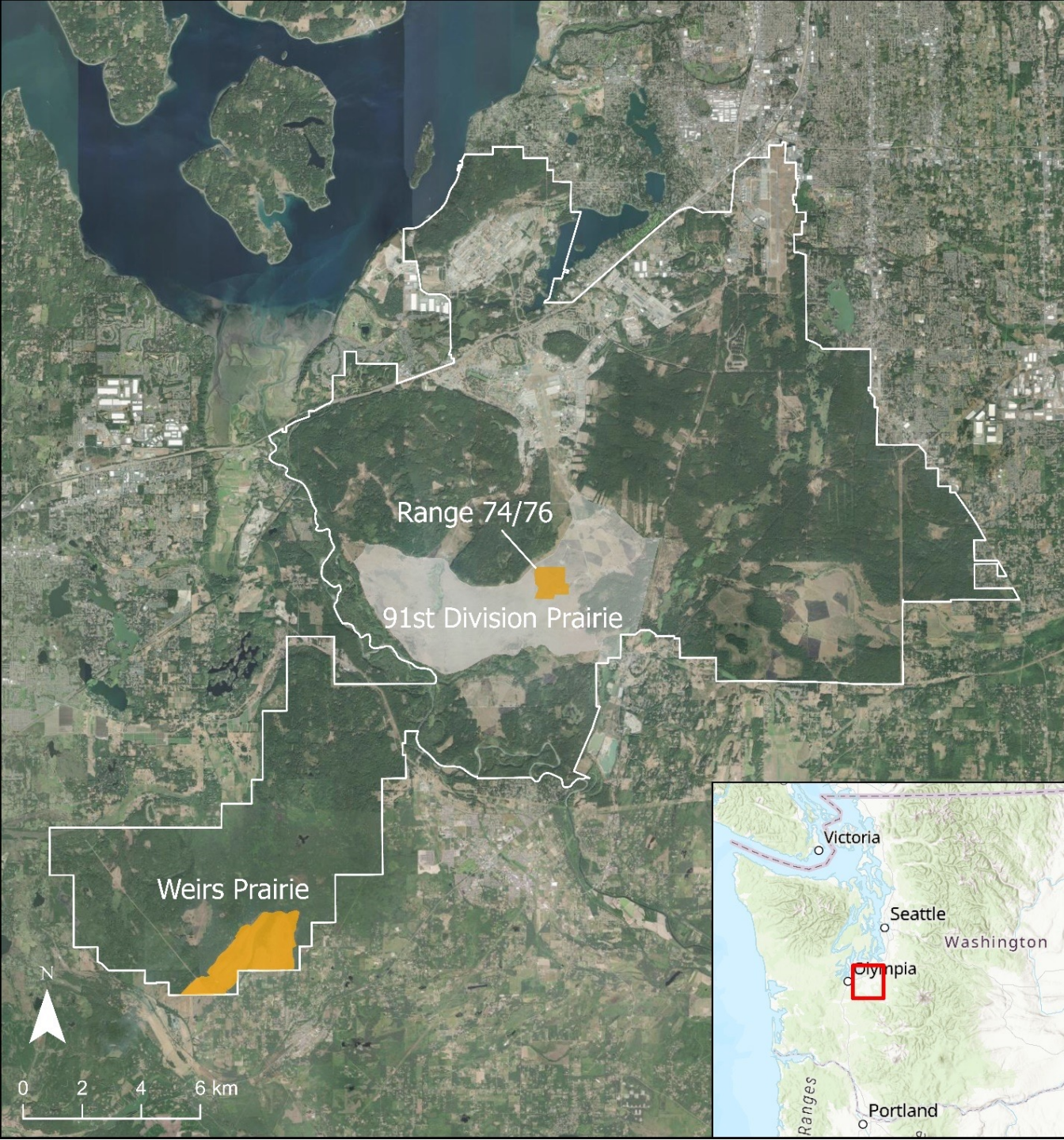


Demographic monitoring of Oregon Vesper Sparrows on Joint Base Lewis-McChord





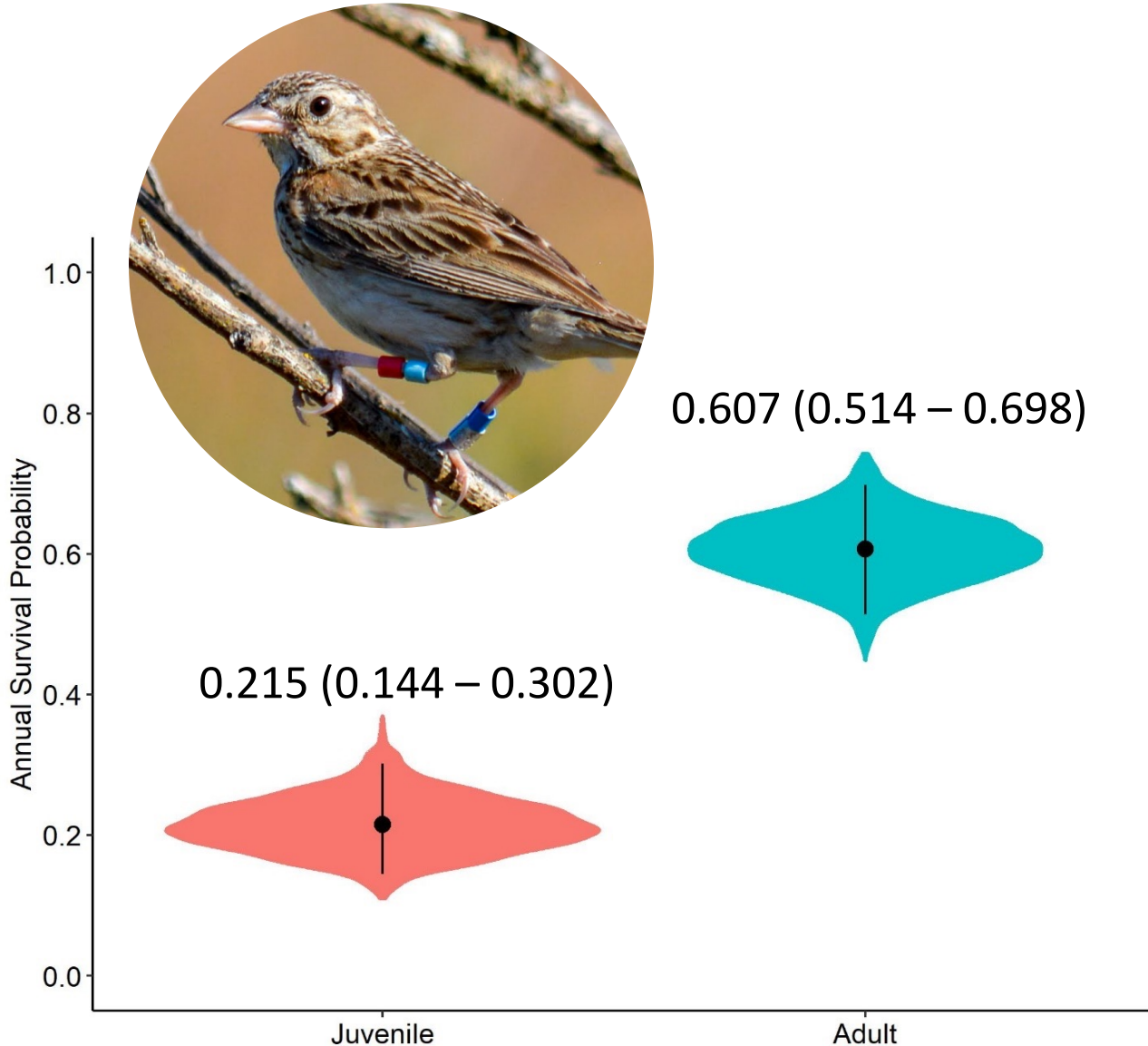


- Apparent nest success (uncorrected): 51.4%
- # fledged per nest attempt: 1.6
- Modeled 2023 nest success in the Weirs: 0.401 (95% CRI 0.154 – 0.6891)
- Multi-year analysis of nest survival and factors influencing productivity forthcoming
- BANAs implemented 2022 - present

101 nests monitored 2017 – 2023



Modeled annual survival at the Weirs Prairies

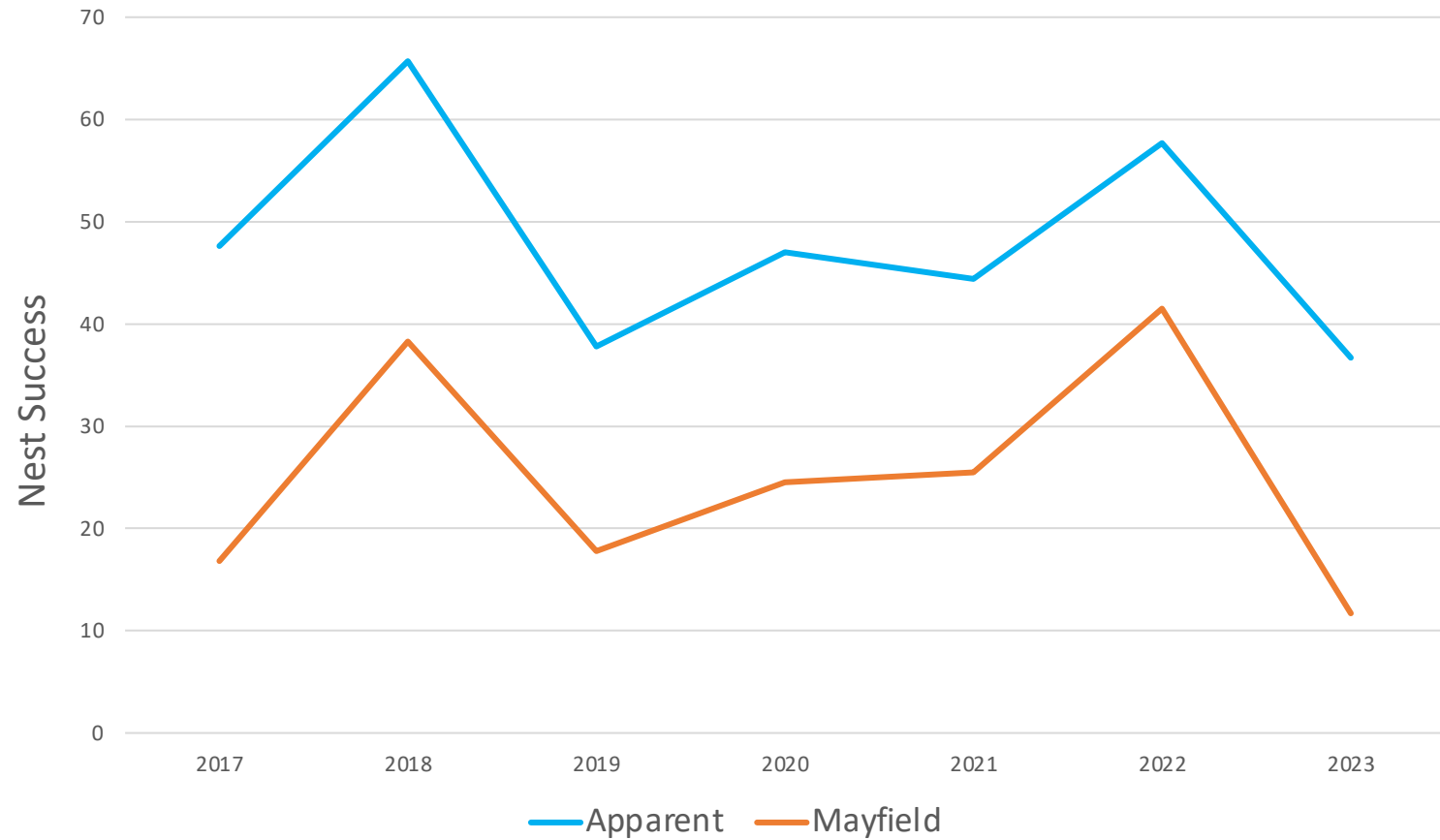


- From 2016-2022, 156 birds banded
 - 105 nestlings, 13 independent juveniles, 38 adults
- Insufficient band/resight effort in the AIA to include in analysis
- No recorded dispersal between sites

Willamette Valley



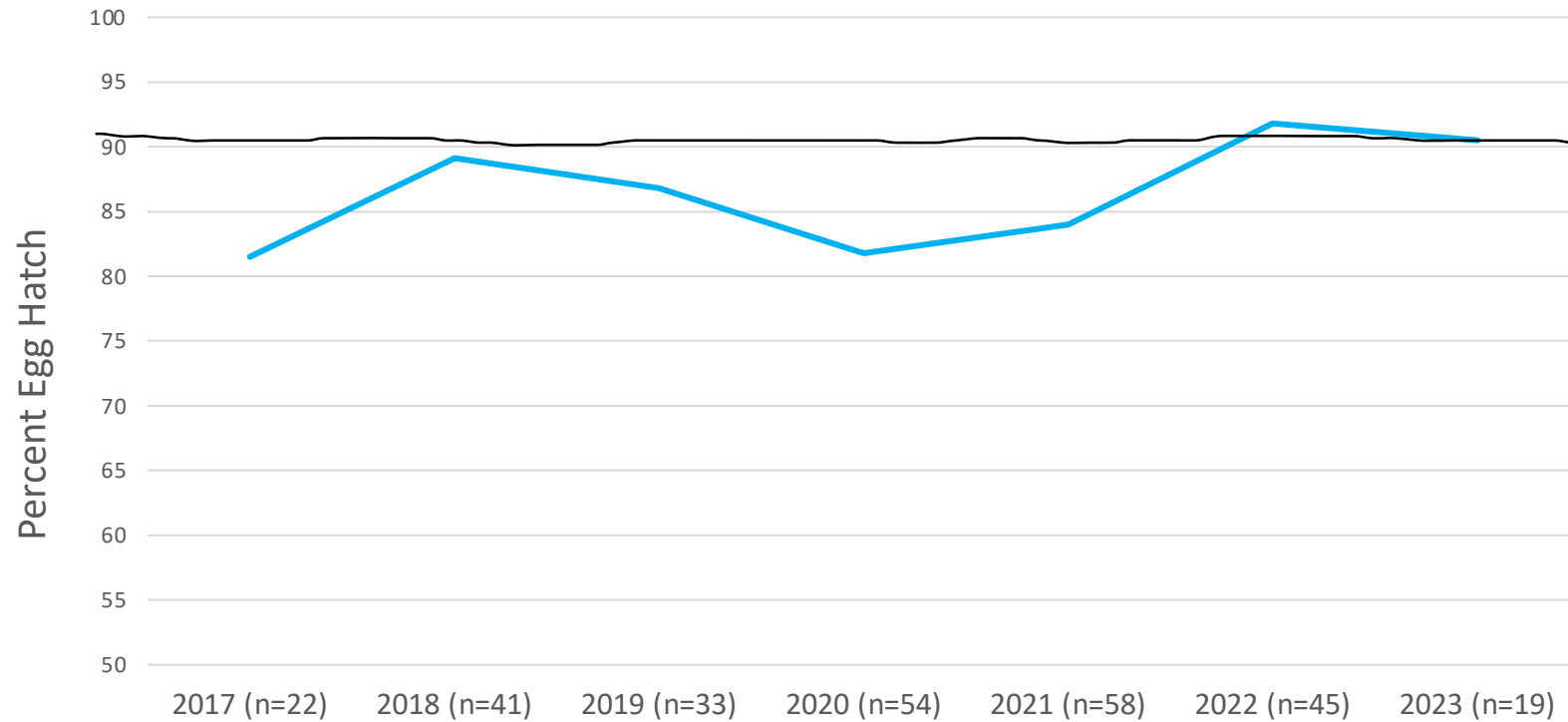
Nest Success



Cumulative Mean:
Apparent 47.7%
Mayfield 25.6%
True 33.3% (n=48)

Savannah Sparrow
Apparent 40.8%
Mayfield 22.2%

Egg Hatch Rate



Cumulative Mean = 86.1%

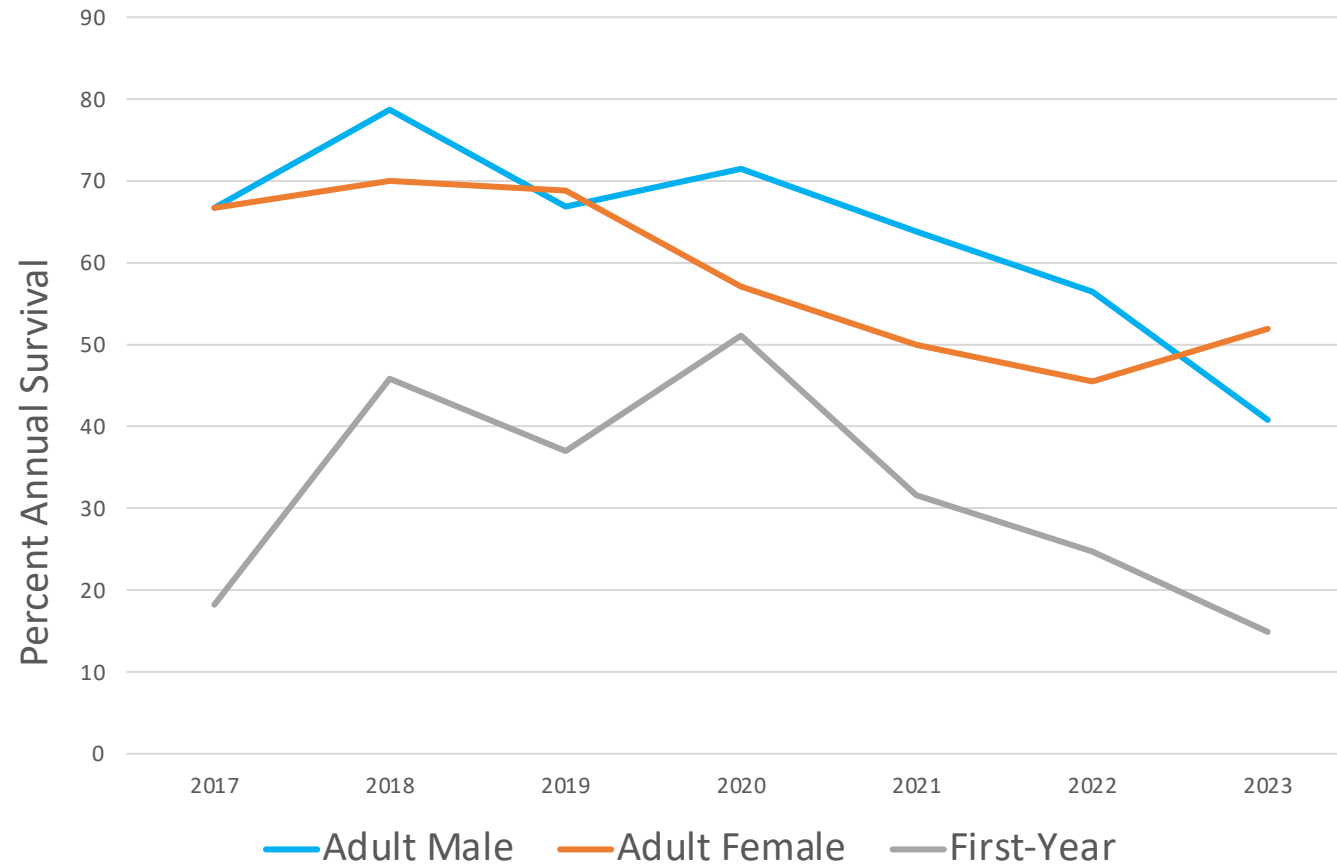
Nests with at least 1 unhatched egg = 30.2%

Add nests found at nestling stage = 83.0% and 41.2% with at least 1 unhatched egg

Savannah Sparrow Cumulative Mean = 99%

Effect on Lambda

Annual Adult and First-Year Apparent Survival



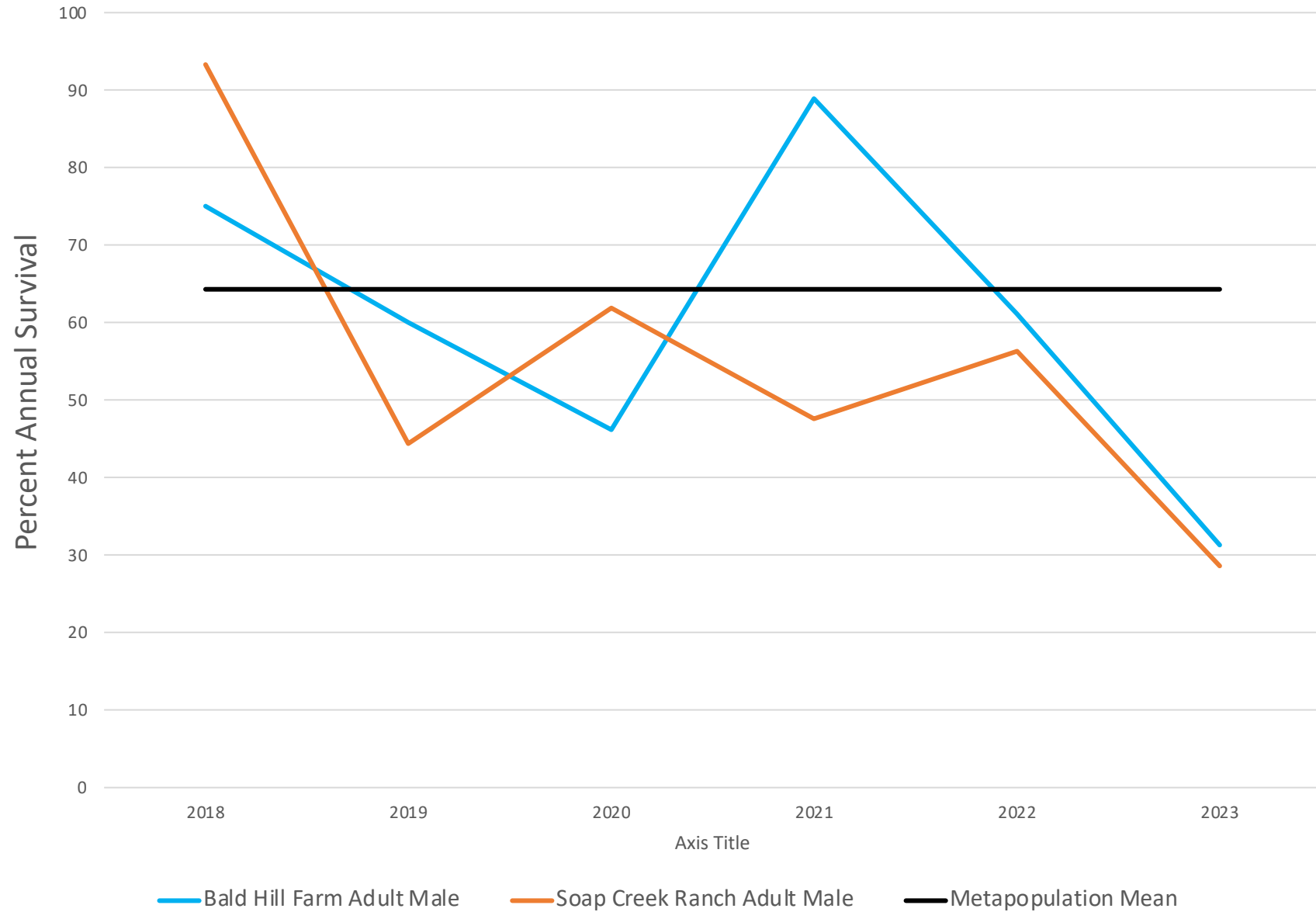
Cumulative Mean:

Adult Male 64.3%

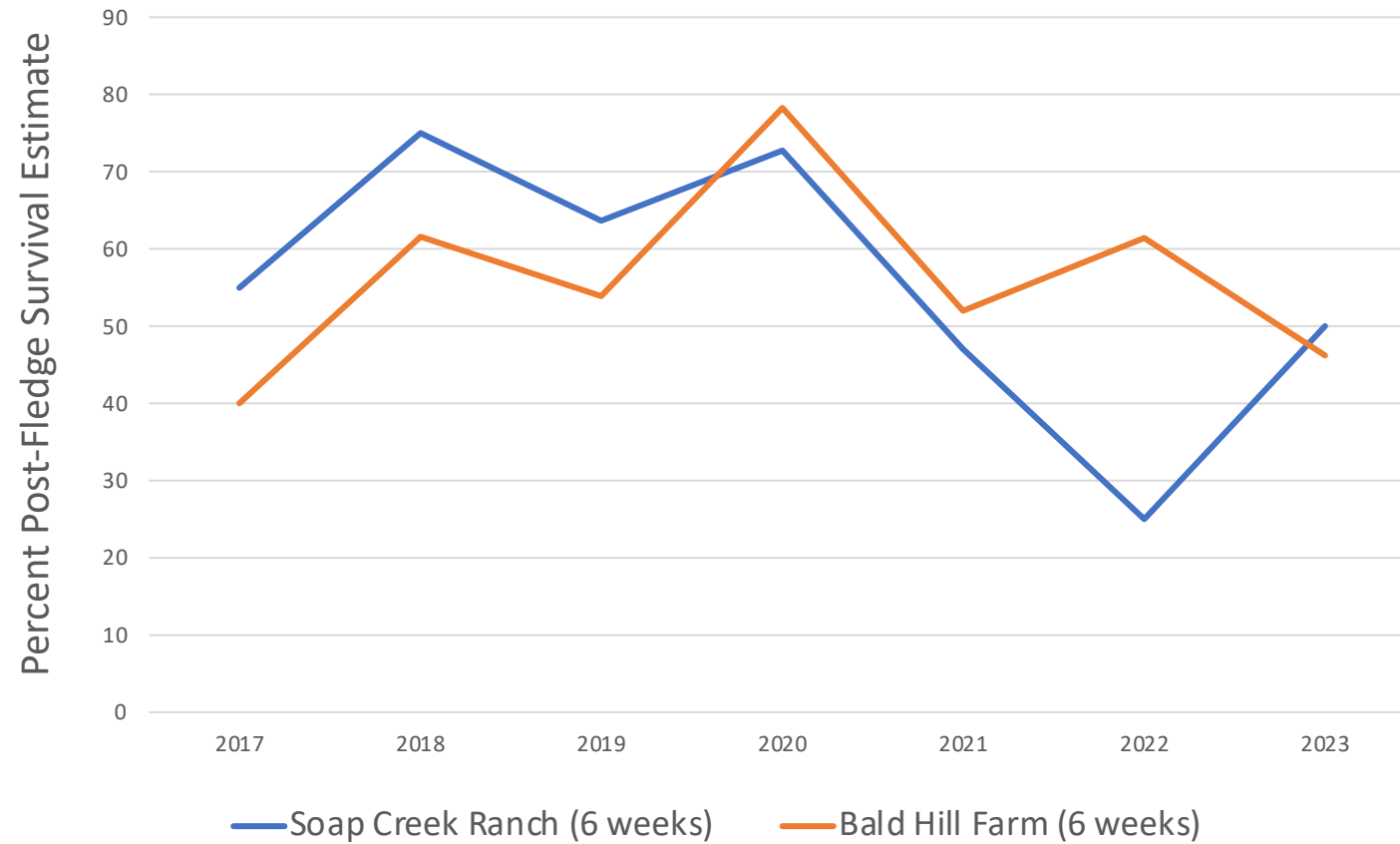
Adult Female 56.1%

First-Year 33.7%

Annual Adult Male Apparent Survival



Annual Post-Fledge Apparent Survival



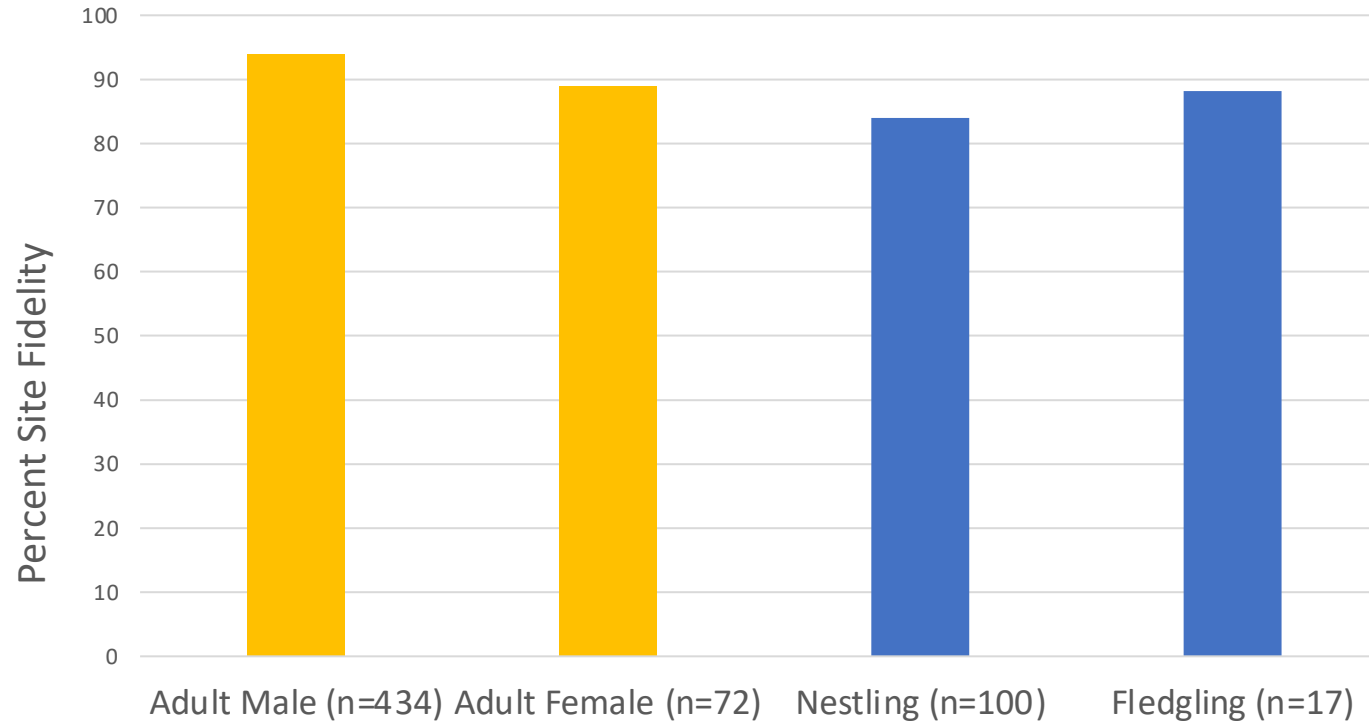
Cumulative Means

0-3 weeks 65.0%

0-6 weeks 57.5%

0-9 weeks 50.0%

Between-Season Site Fidelity (Cumulative)



Dispersal:

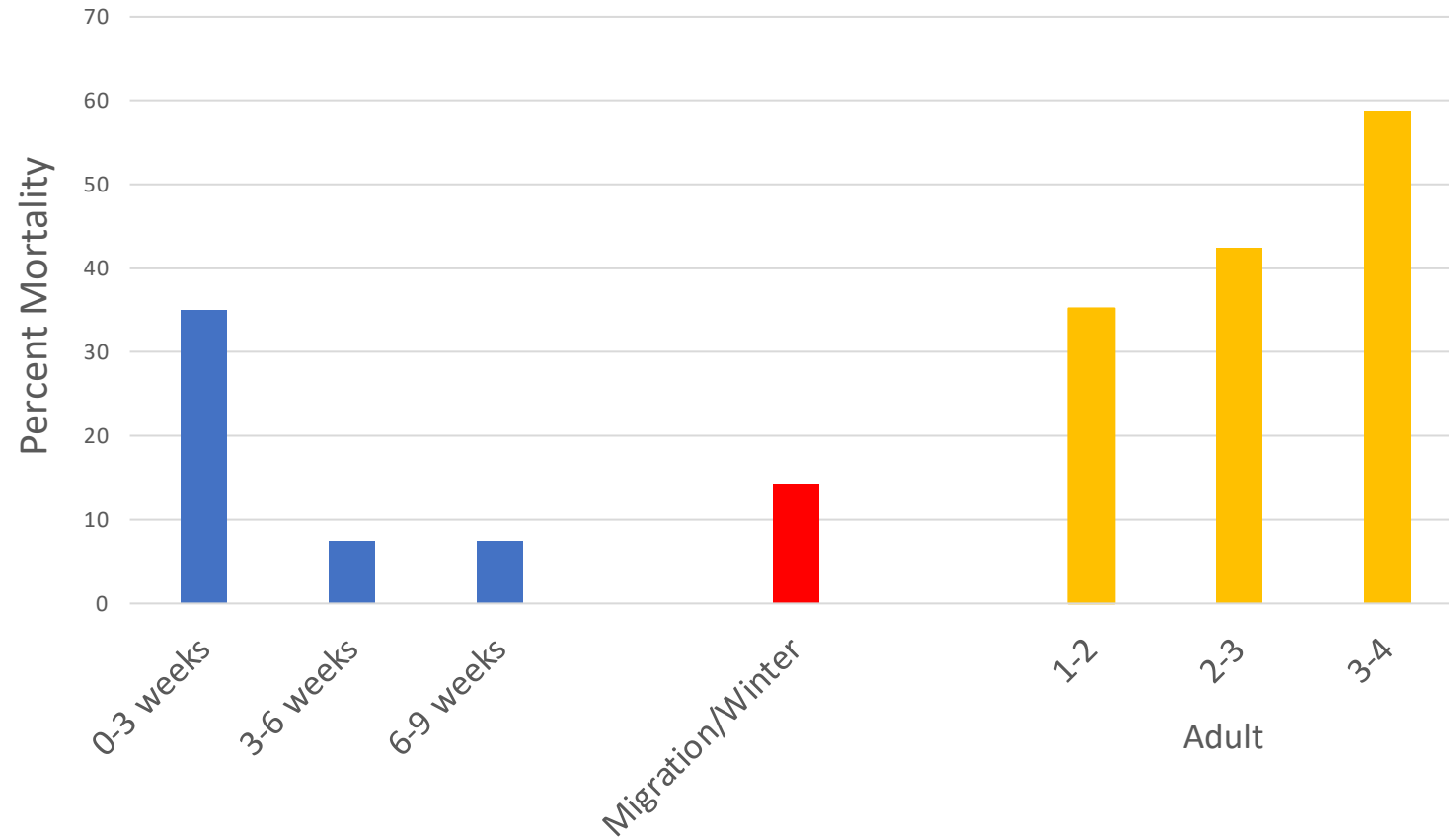
57 events, 25 of which are between-season

All categories between and within season; all 5 categories with example >10 miles

All age classes and genders

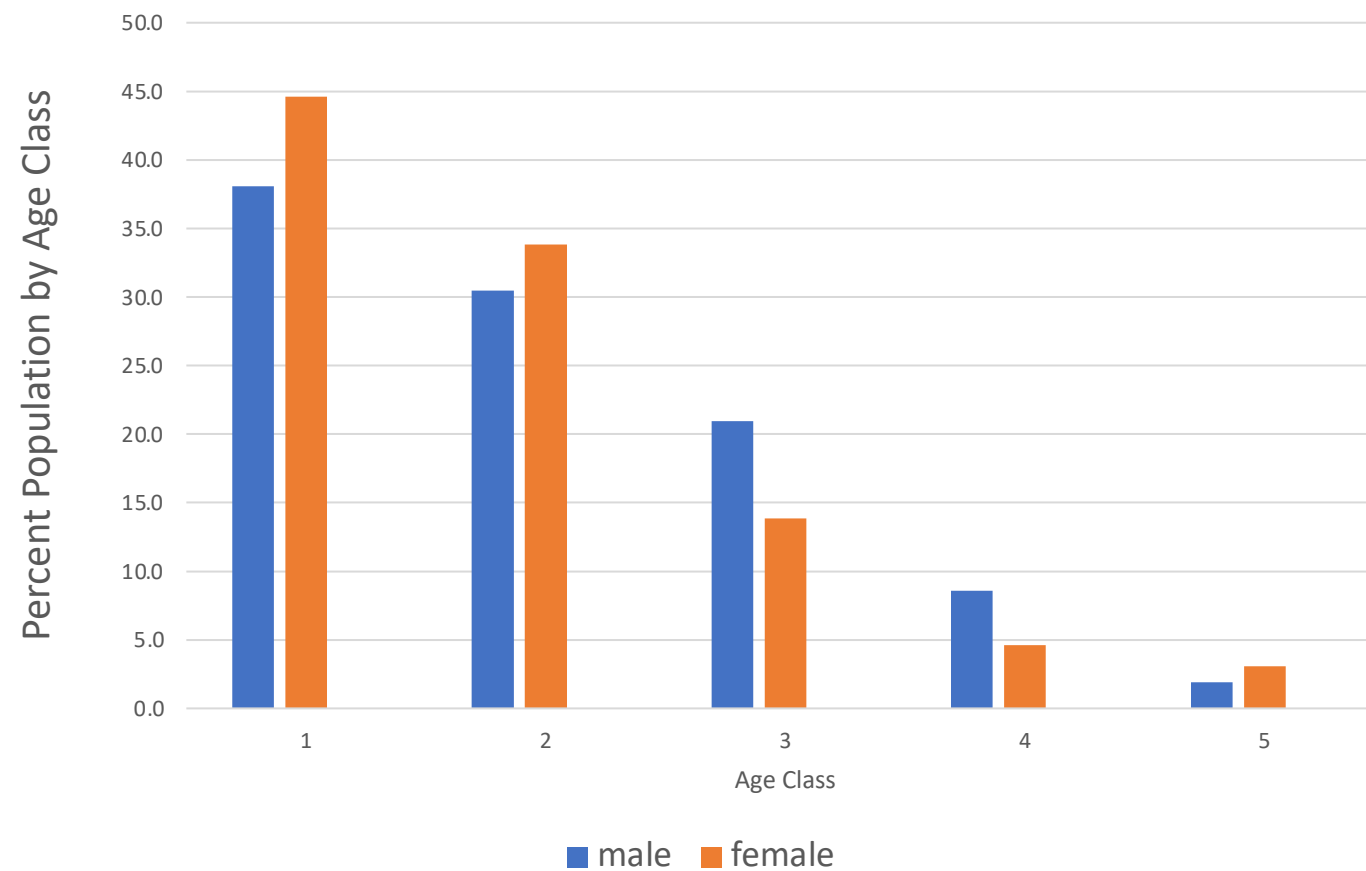
Seems like a contradiction but annually only 6.2% (4.9% adults and 12.0% first-year)

Mortality Rates by Age and Life Stage



Mortality = 50% post-fledge; 16.3% migration (first-year)

Population Age Structure

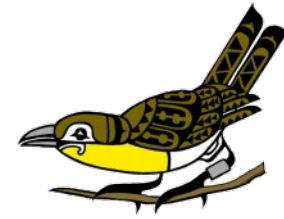


1-2 year olds = 70-75% of population

Klamath Mountains

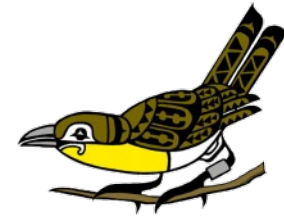






- Nest-building can start in early May
- Mean first egg date = May 31 (all nests, not just 1st attempts)
- Mean fledge date = June 24, 80% fledge by June 30, latest fledge so far is July 21
- We have not yet confirmed a double-brooding attempt
- 142 nests monitored
- Apparent nest success = 57.7%
- Mean # fledglings = 1.8
- 1 nest parasitized by BHCO
- Nest failures due to predation = 63.3%
- In some years, >35% of failed nests are due to late season snow/hail





- 458 birds banded (191 adults; 267 nestlings)
- Adult return rate = 50.5%
- First-year return rate = 8.0%
- Lack of dispersal between Lily Glen and Vesper Meadow

Questions?

