



# Habitat Use and Stopover Ecology of the Rusty Blackbird in the Western Lake Erie Basin

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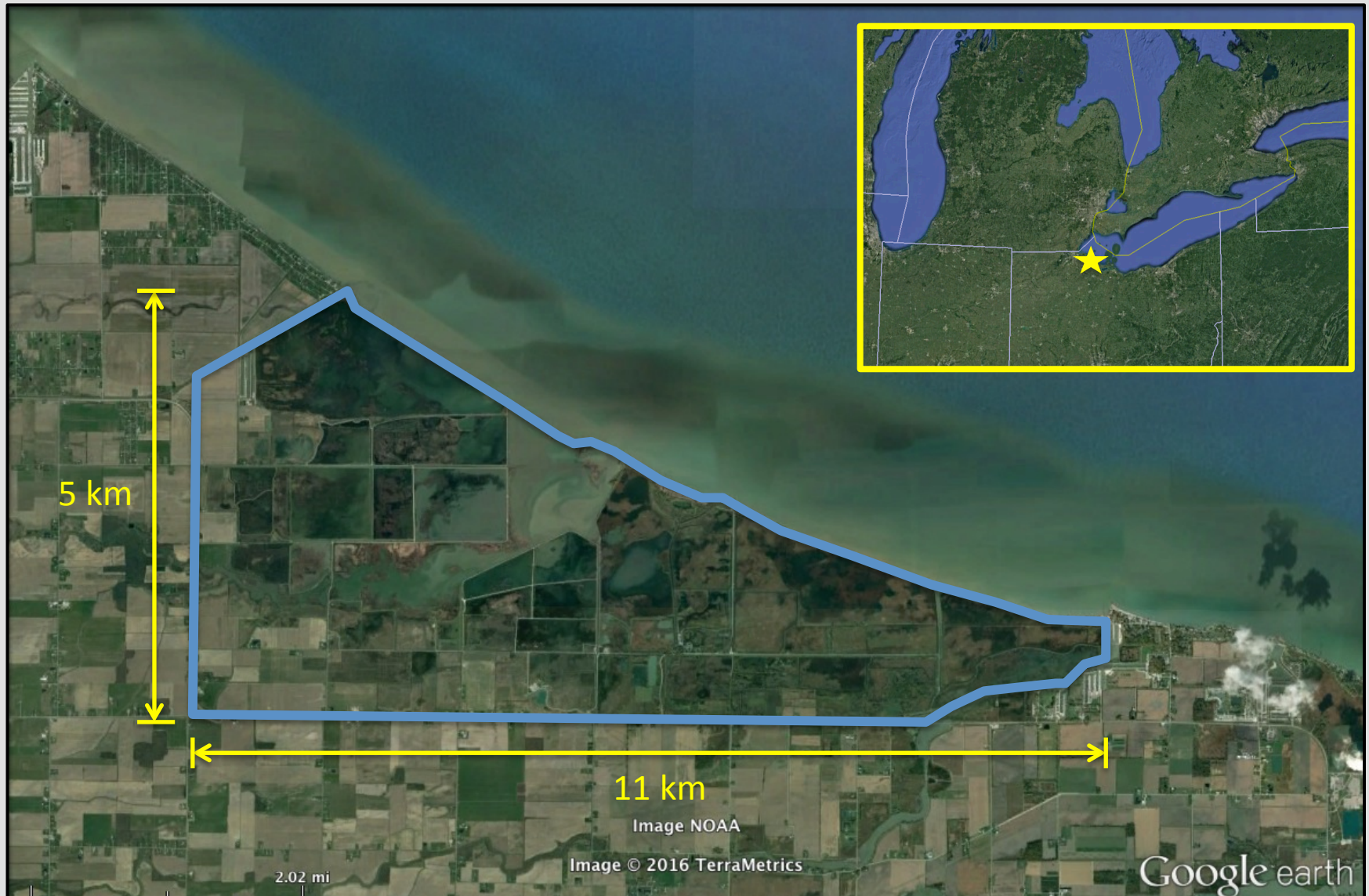
Dr. Christopher Tonra, The Ohio State University

# Objectives

- Identify habitat selection between patches and within a patch
- Determine duration of stopover and fidelity to stopover site over multiple seasons
- Track landscape movements during and immediately following stopover event
- Connectivity of local migrants



# Study Site – Ottawa NWR/Magee Marsh



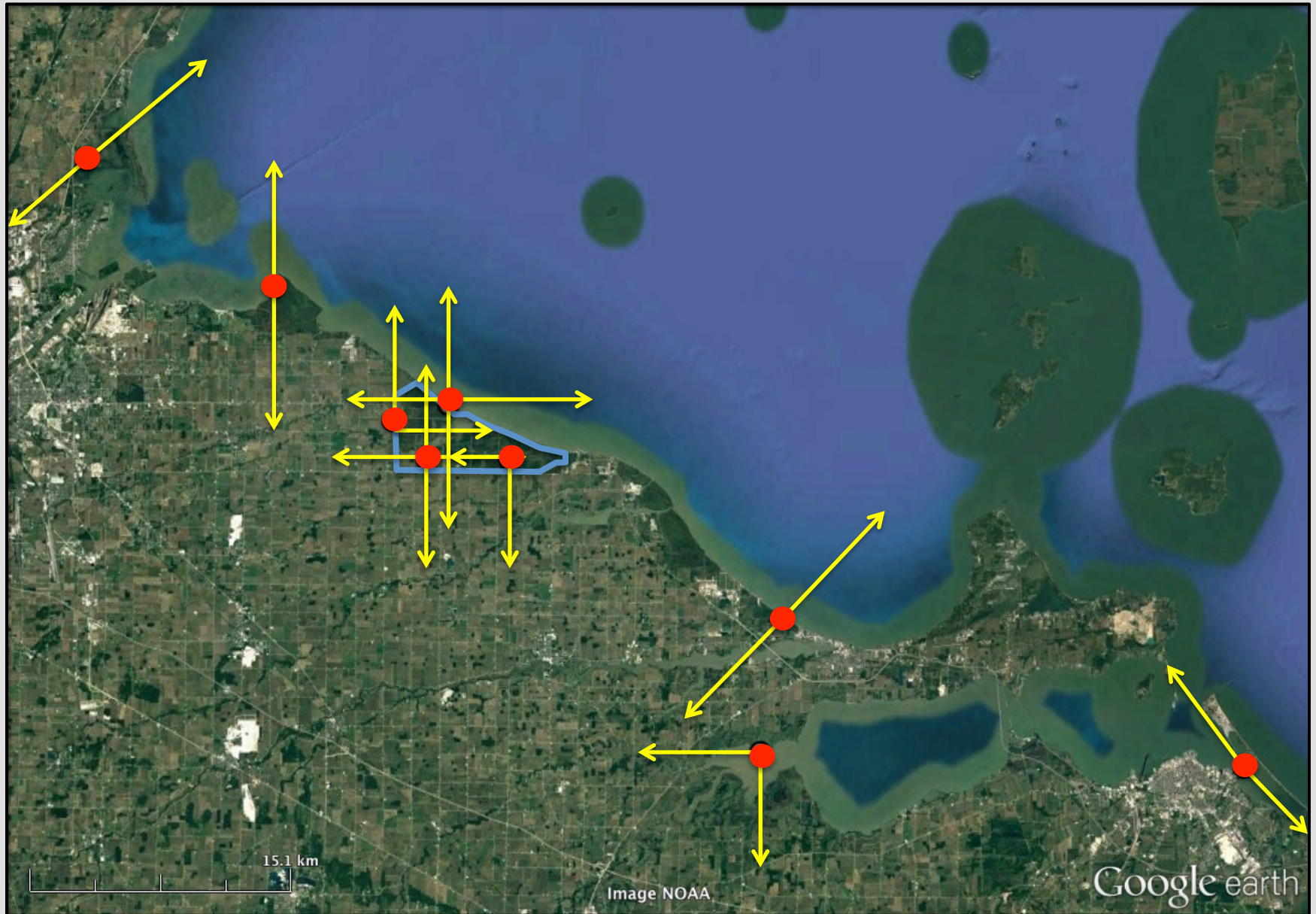


# Coded Nanotag transmitters





# Greater Stopover Landscape – Western Lake Erie Basin



# Two Field Seasons

- Fall 2015: 23 October – 28 November
  - 5 tags deployed and tracked
  - 55 RUBL captured, samples collected
- Spring 2016: 15 March – 16 May
  - 29 tags deployed
  - 56 RUBL captured, 1 recapture, samples collected
  - 1 GHOW predation, 1 “disappearance”
  - 27 birds successfully tracked until departure



# Habitat Selection

- Hand-tracking tagged birds
  - 467 diurnal foraging locations
  - 58 nocturnal roost locations
  - 129 perch or flight locations
- Habitat Surveys
  - 50 foraging points
  - 50 paired random points
  - 12 roost points
  - Remote-sensed data





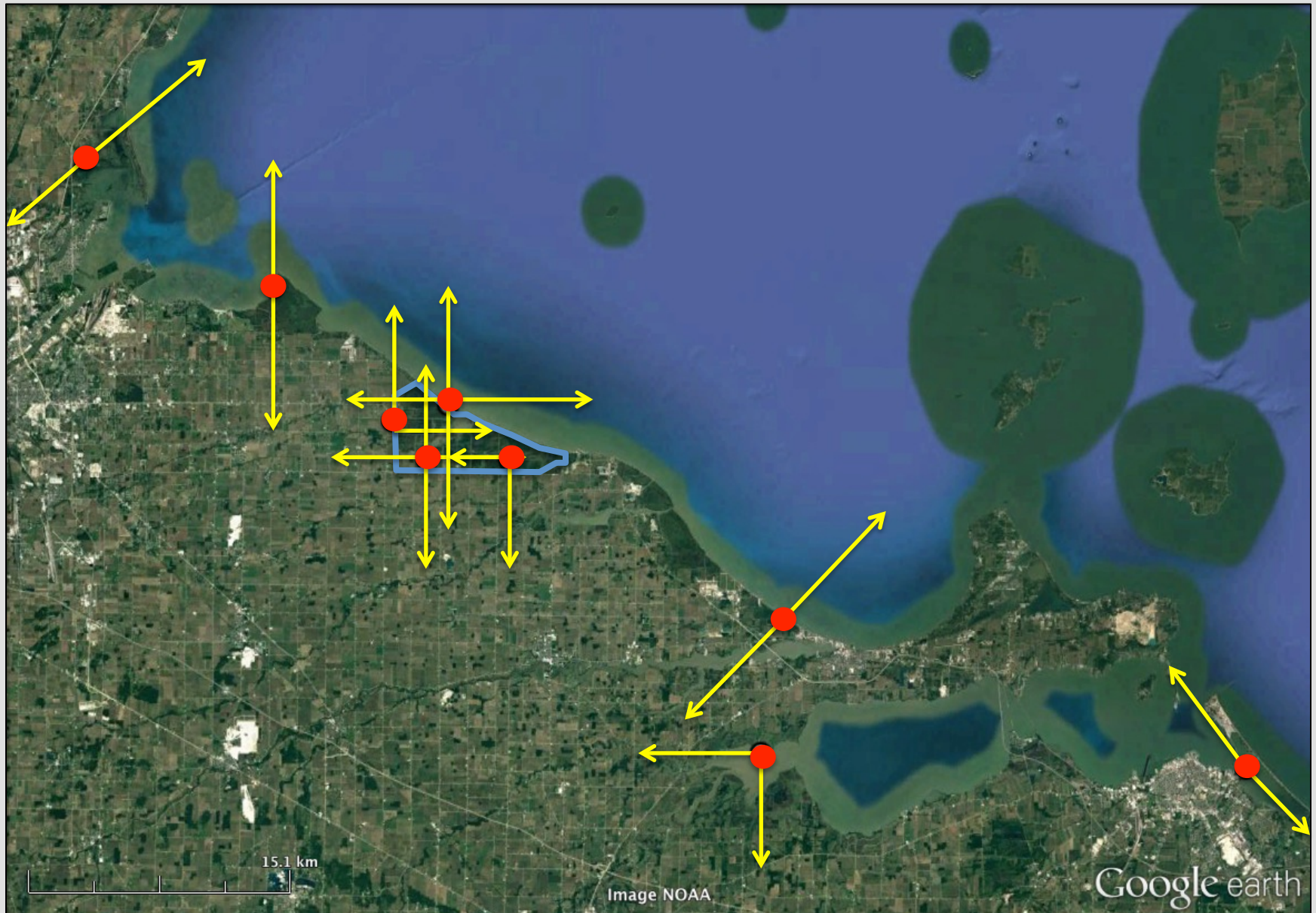
# Habitat Selection – Early Results

- Fall 2015
  - Dogwood (*Cornus* sp.)
  - Emergent marsh roosts
- Spring 2016
  - Flooded dogwood, hardwoods, fields
  - Emergent marsh (*Phragmites*, *Typha* sp.)



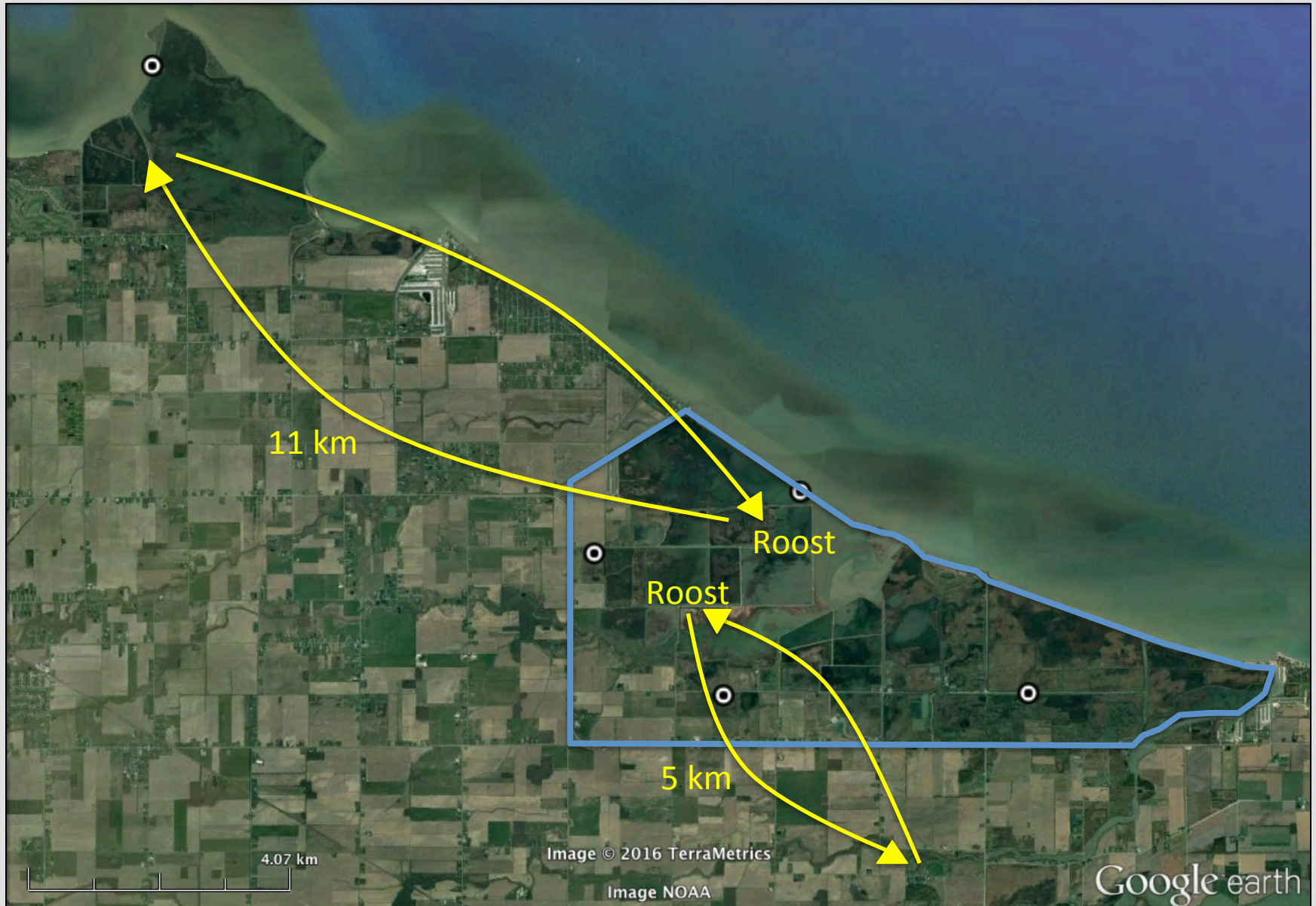


# Greater Stopover Landscape – Western Lake Erie Basin





# Daily Diurnal Movements







# Stopover Landscape Relocations



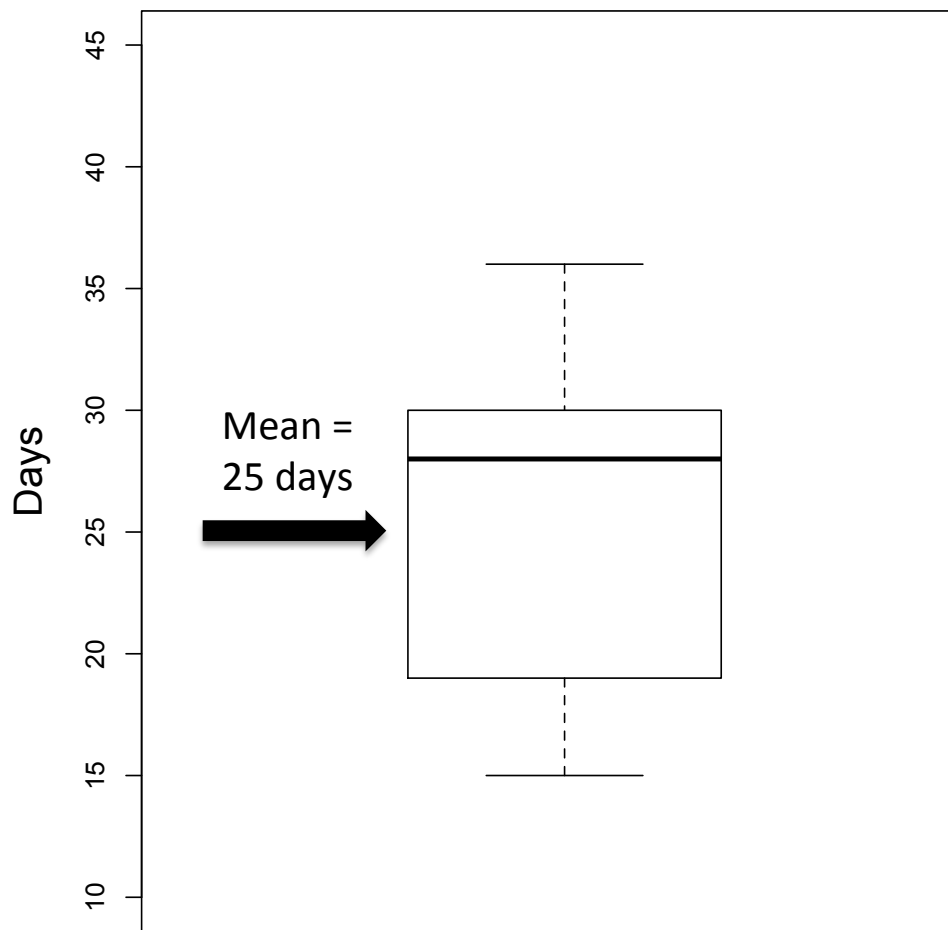
# Nocturnal Migratory Flights

- BNA account: “Apparently migrates diurnally...”
- 21 birds  True migratory departures at night
- 7 birds  Diurnal “departures” – probable landscape movements/relocations
- All landscape movements occurred diurnally
- Recognizable difference between true migratory departures and landscape movements



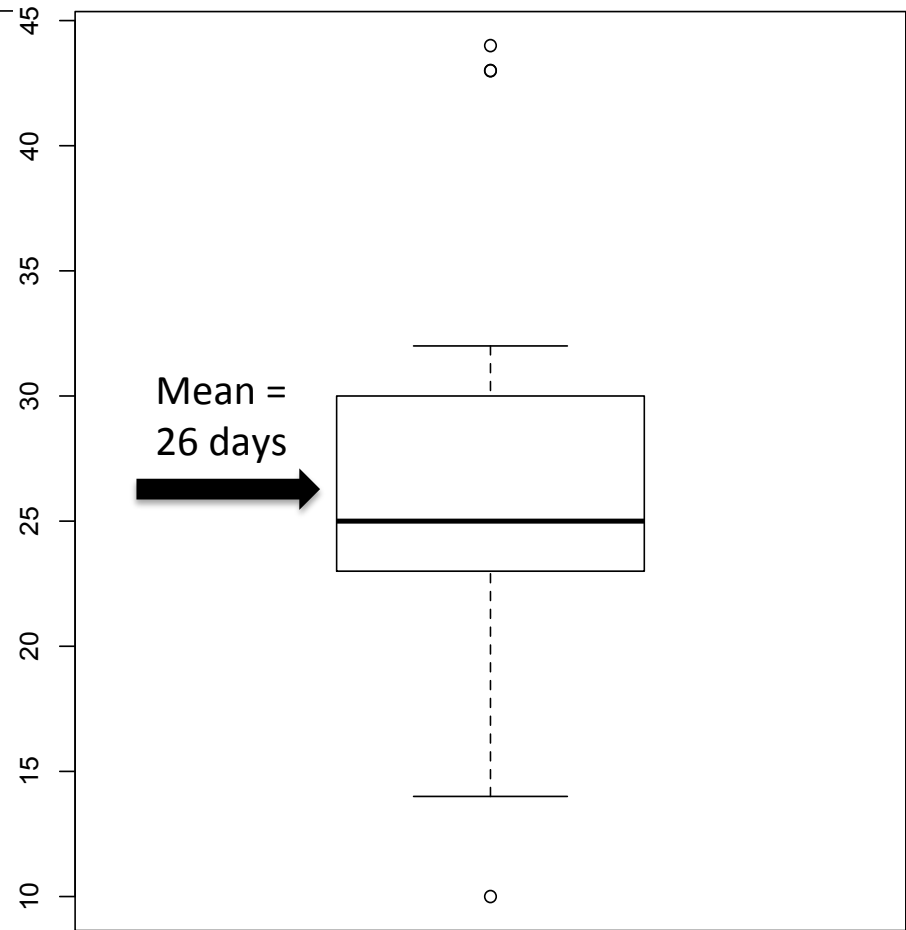
# Stopover Duration

Fall 2015 Minimum Stopover Duration



Tagged Birds (n = 5)

Spring 2016 Minimum Stopover Duration



Tagged Birds (n = 27)

Do Rusty Blackbirds have a third stationary period in their annual cycle??



Luke Powell

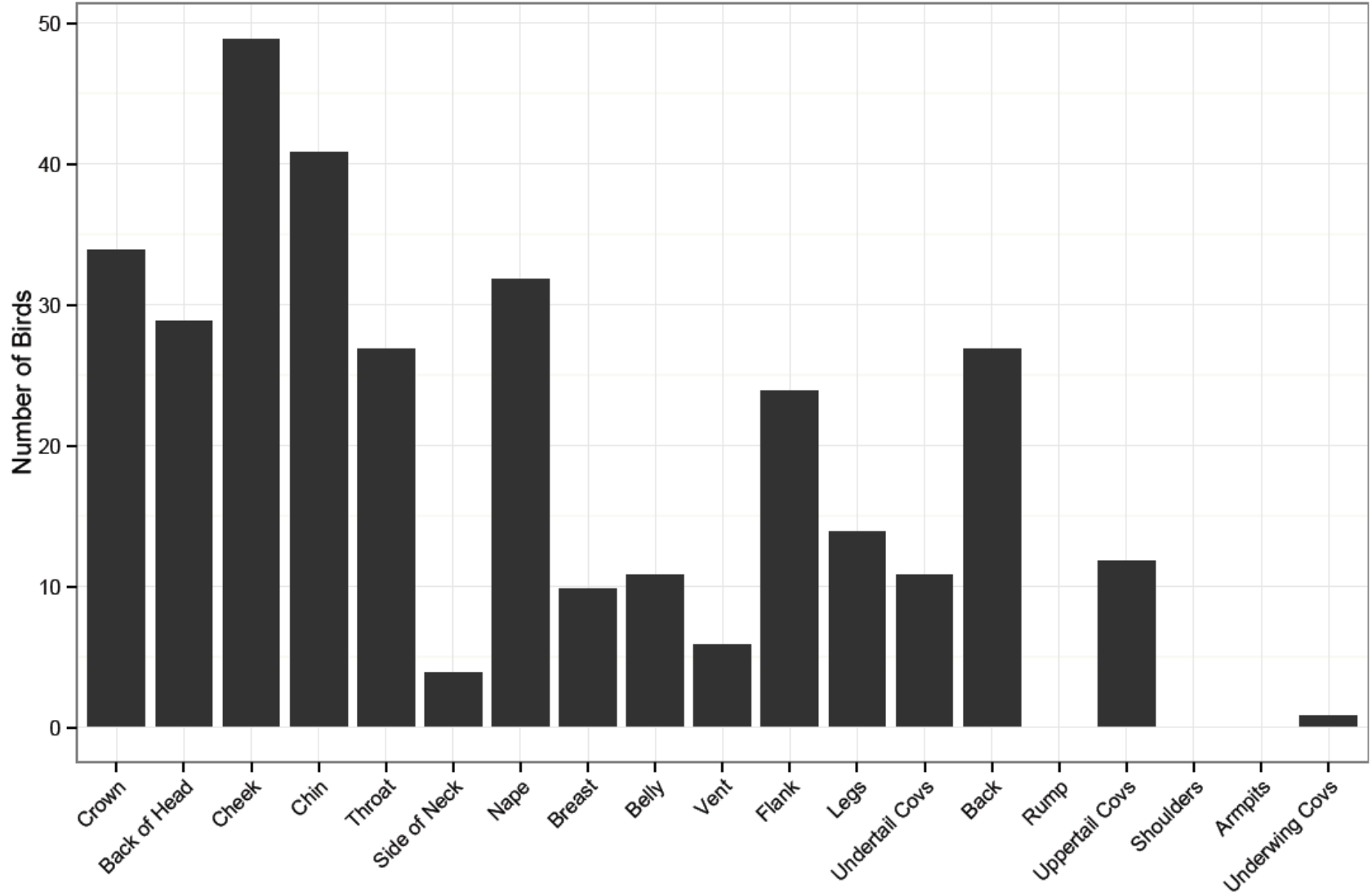


# Migration Molt



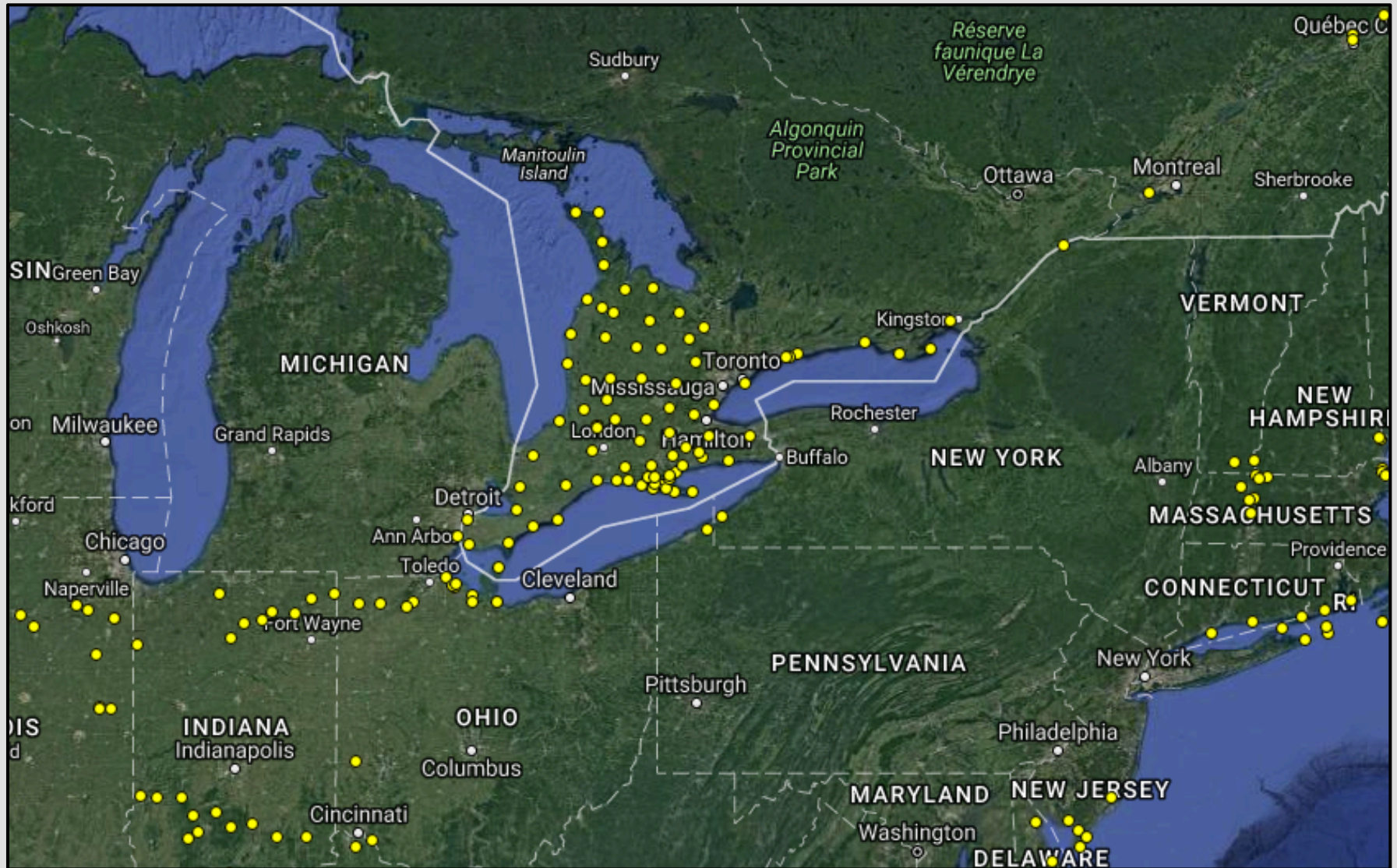
# Extent of Spring Molt

Feather Tracts in Molt





# Ontario Motus Array: Bird Studies Canada





# Post-departure Movements





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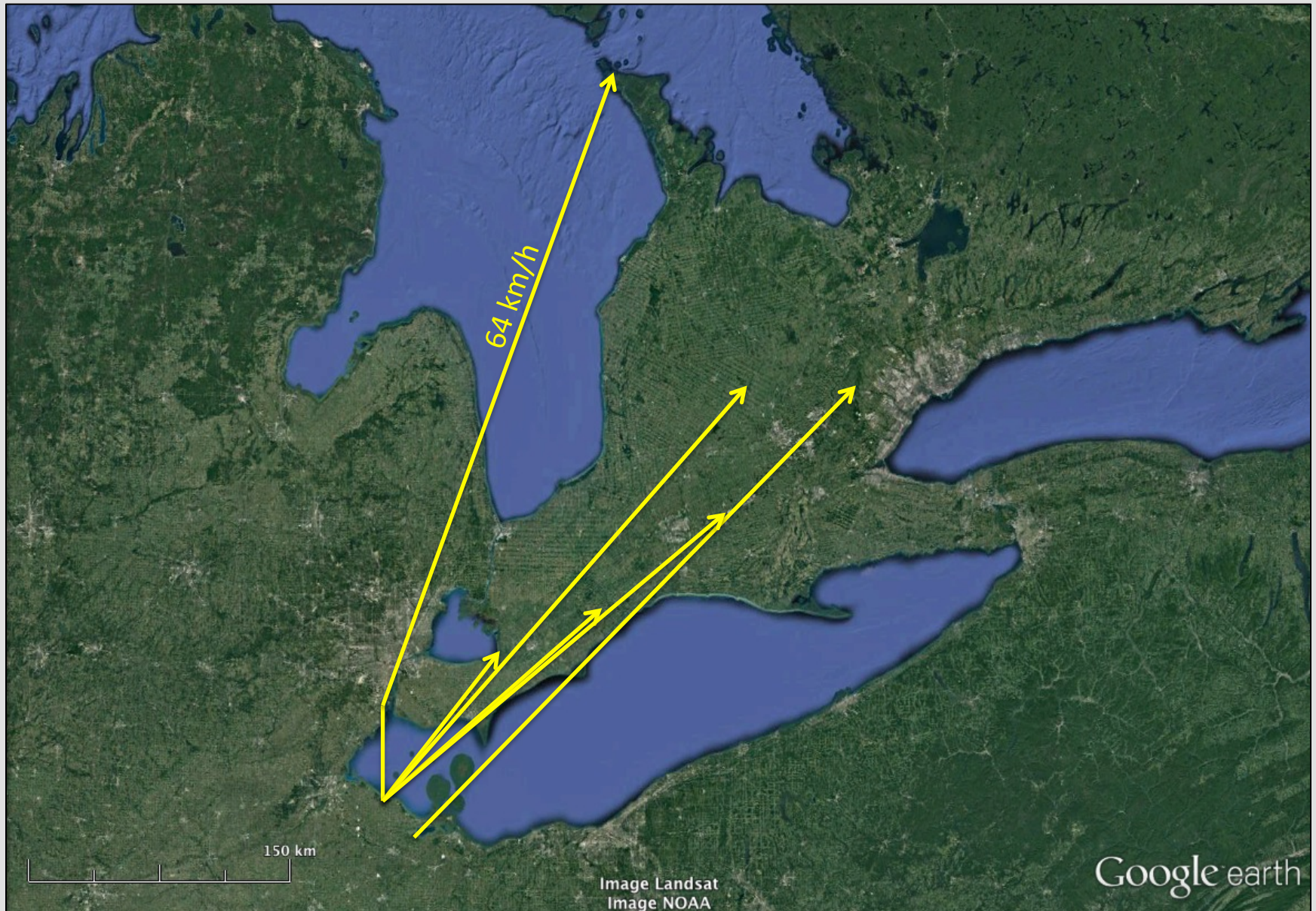


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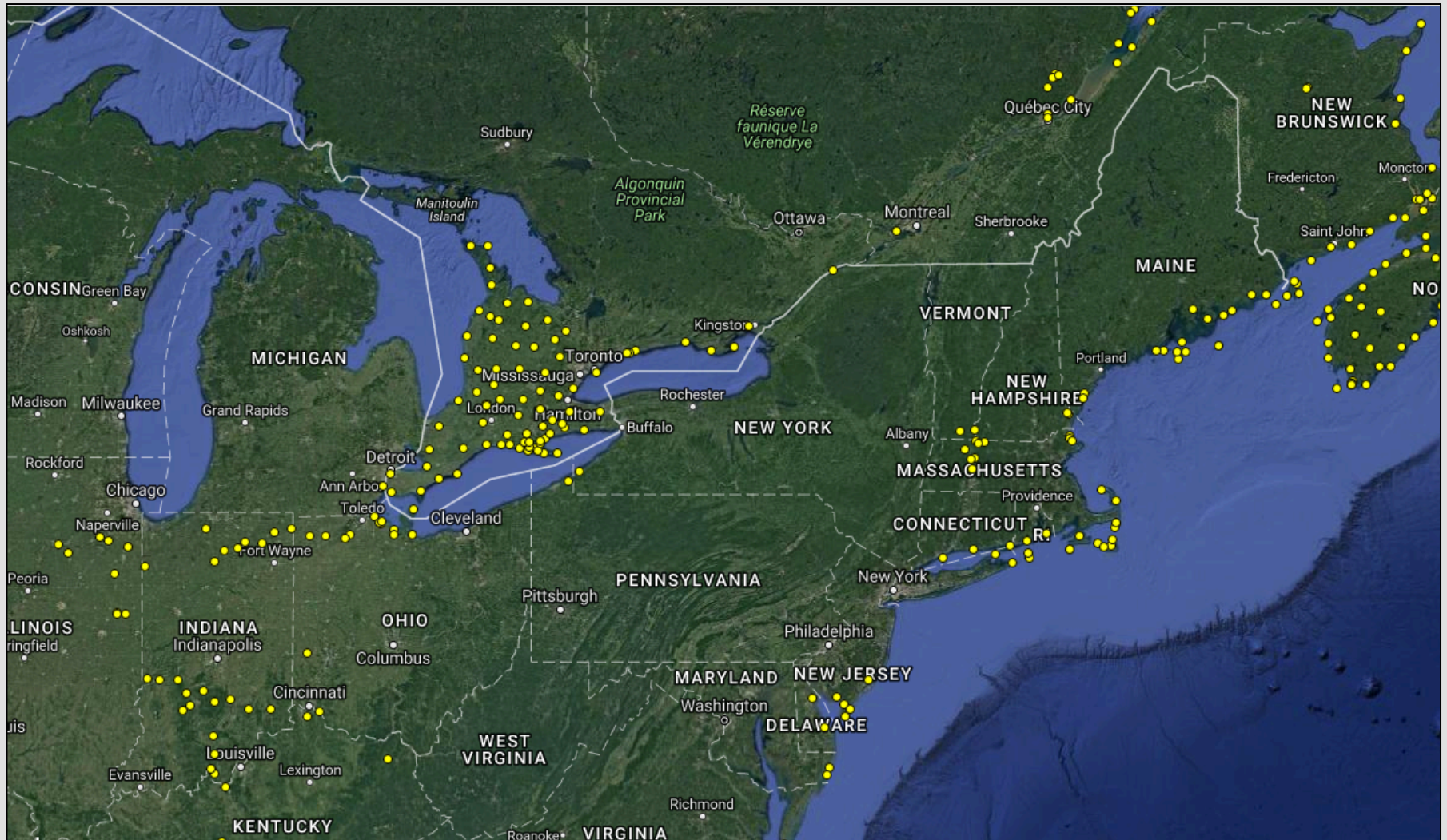


# Post-departure Movements





# International Motus Array: Bird Studies Canada



# Acknowledgements

- Field help: Kellene Collins, Elizabeth Ames, Kristie Stein, Alicia Brunner
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The American  
Ornithologists' Union



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