



Lafarge Biodiversity Programs in North Saskatchewan River Basin

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Lafarge's Biodiversity Programs

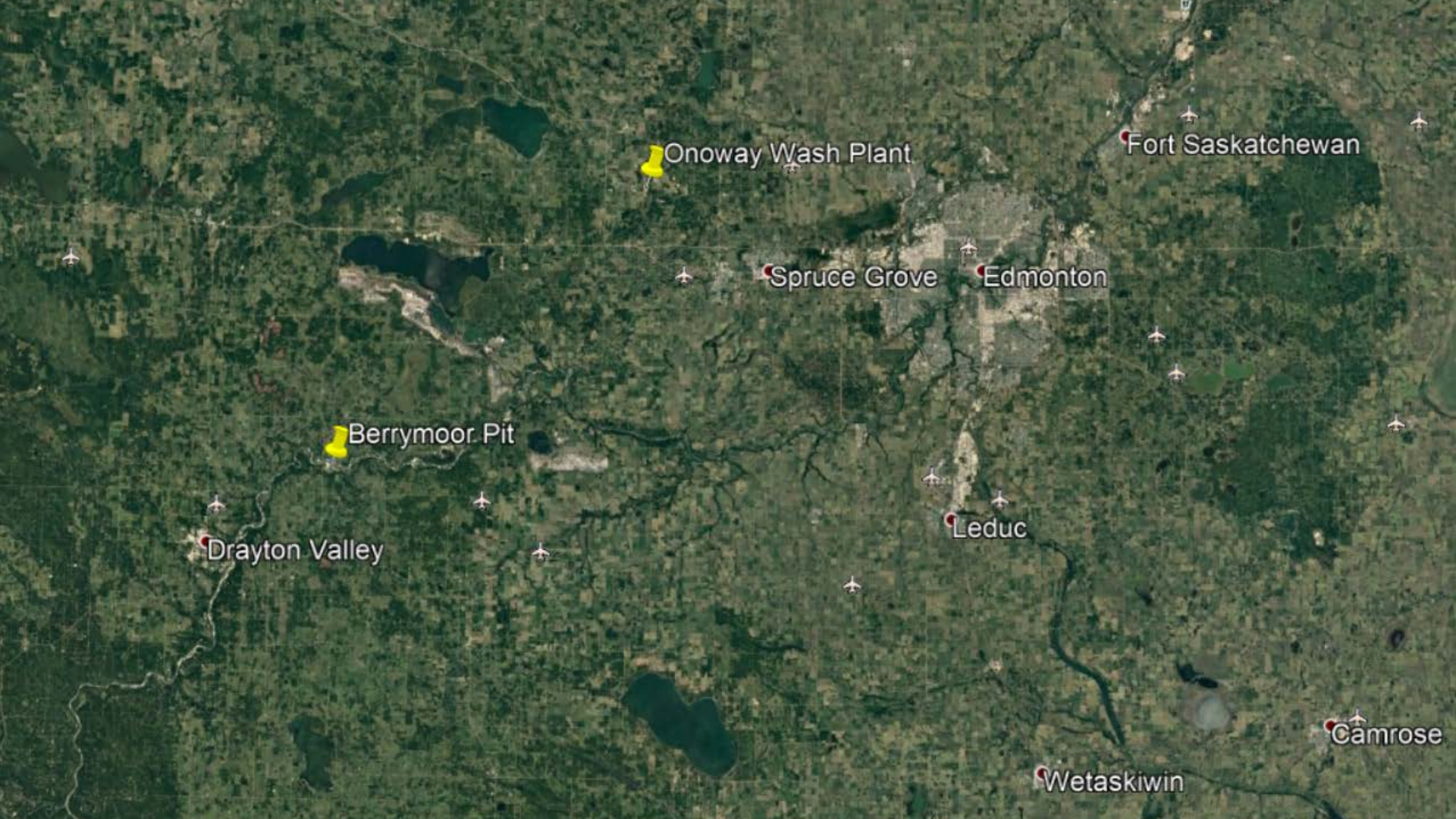
- Voluntary - Over and Above any Regulatory Requirement
- Participation / Involvement with :
 - Employees
 - Jr Forest Wardens
 - Public Schools
 - Conservation Associations
 - Public



Projects

- Sand and Gravel Operation / Wash Plant
- Duration : 2009 – 2020
- Wildlife Habitat Council WHC Certification





Onoway Wash Plant

Fort Saskatchewan

Spruce Grove

Edmonton

Berrymoor Pit

Drayton Valley

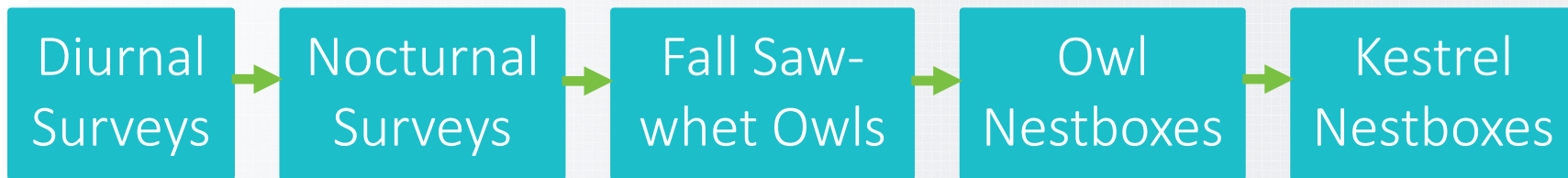
Leduc

Wetaskiwin

Camrose

Project Pathway: Slow Steady Build

Berrymoor Gravel Pit: Bald Eagle



Onoway Wash Plant: Bats



Berrymoor Gravel Pit



Onoway Washplant



Initiatives



Wildlife
Monitoring
& Research

Habitat
Enhancement

Community
Engagement

Raptor Pole (2009)



Raptor Nest Surveys (2010)



Diurnal Surveys (2010)



Nocturnal Surveys (2010)



Autumn and Summer Northern Saw-whet Owl Netting (2010)

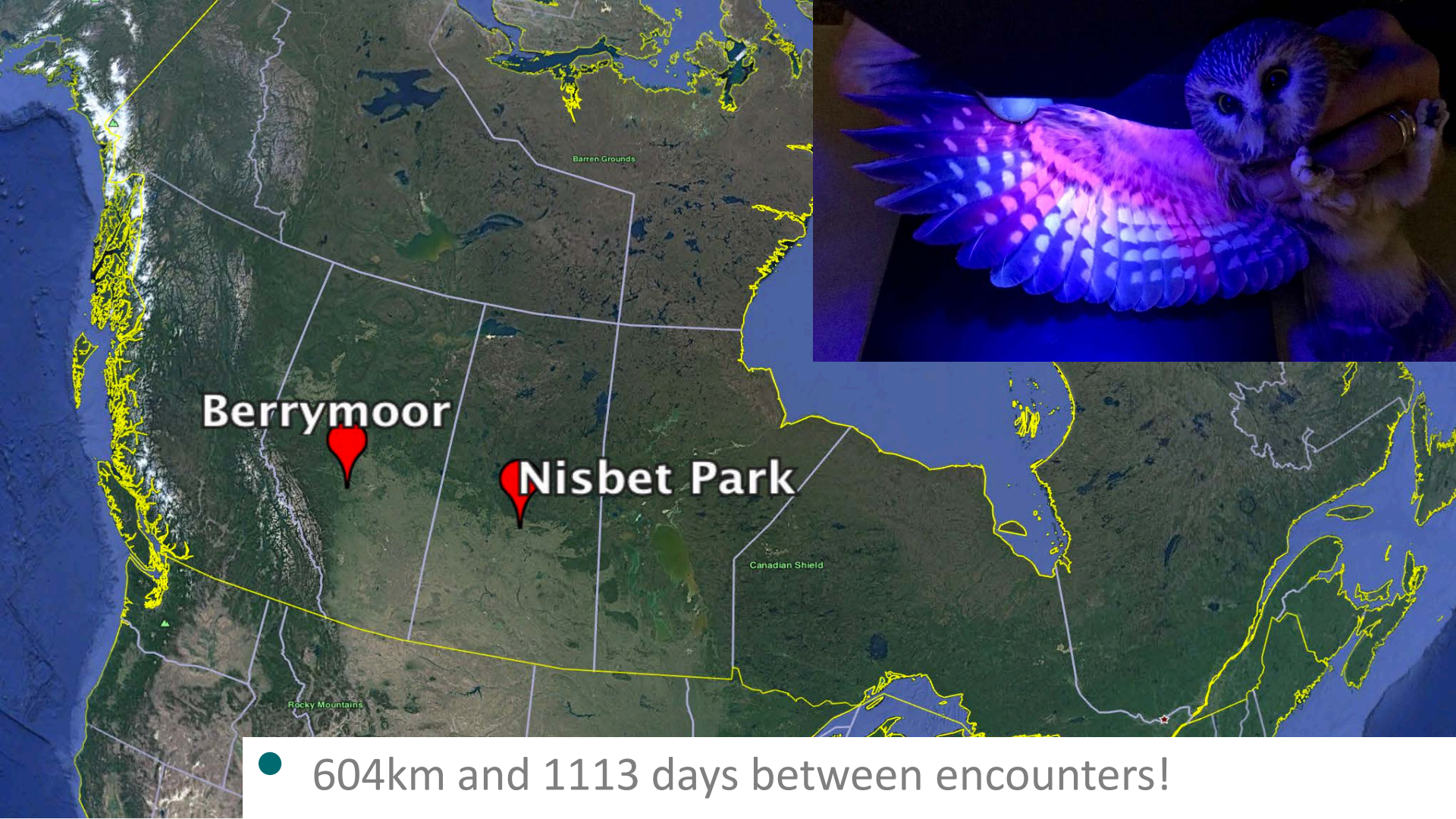


Relatable Concepts



Relatable Concepts





Berrymoor

Nisbet Park

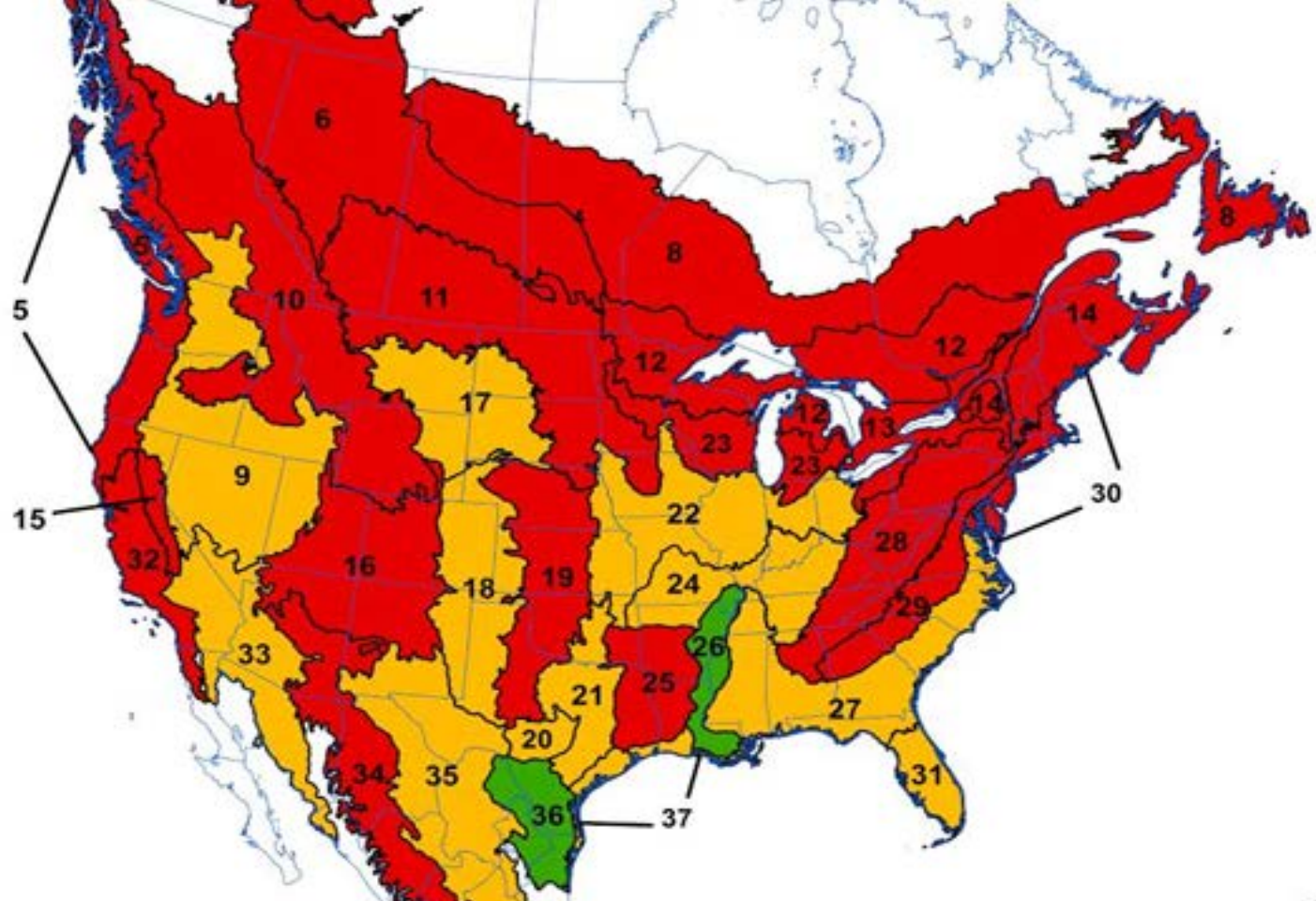
- 604km and 1113 days between encounters!

Owl Nestboxes (2012)

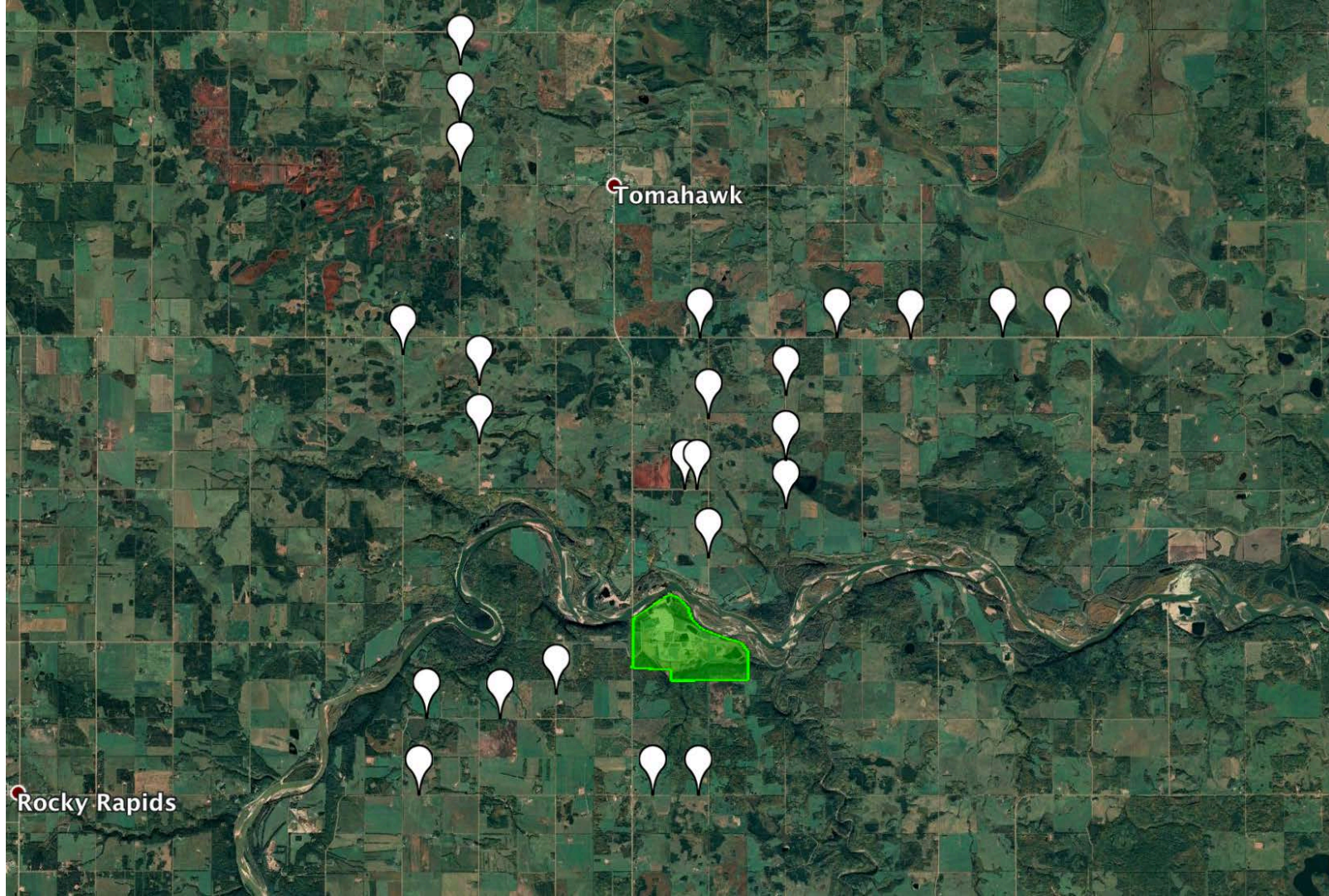


American Kestrel Nestboxes (2014)





Red = Decline; Orange = Uncertain; Green = Growth
The American Kestrel Partnership, The Peregrine Fund (2018)



American Kestrel Nestboxes (2014)



American Kestrel 1 Week Old



Female



Male



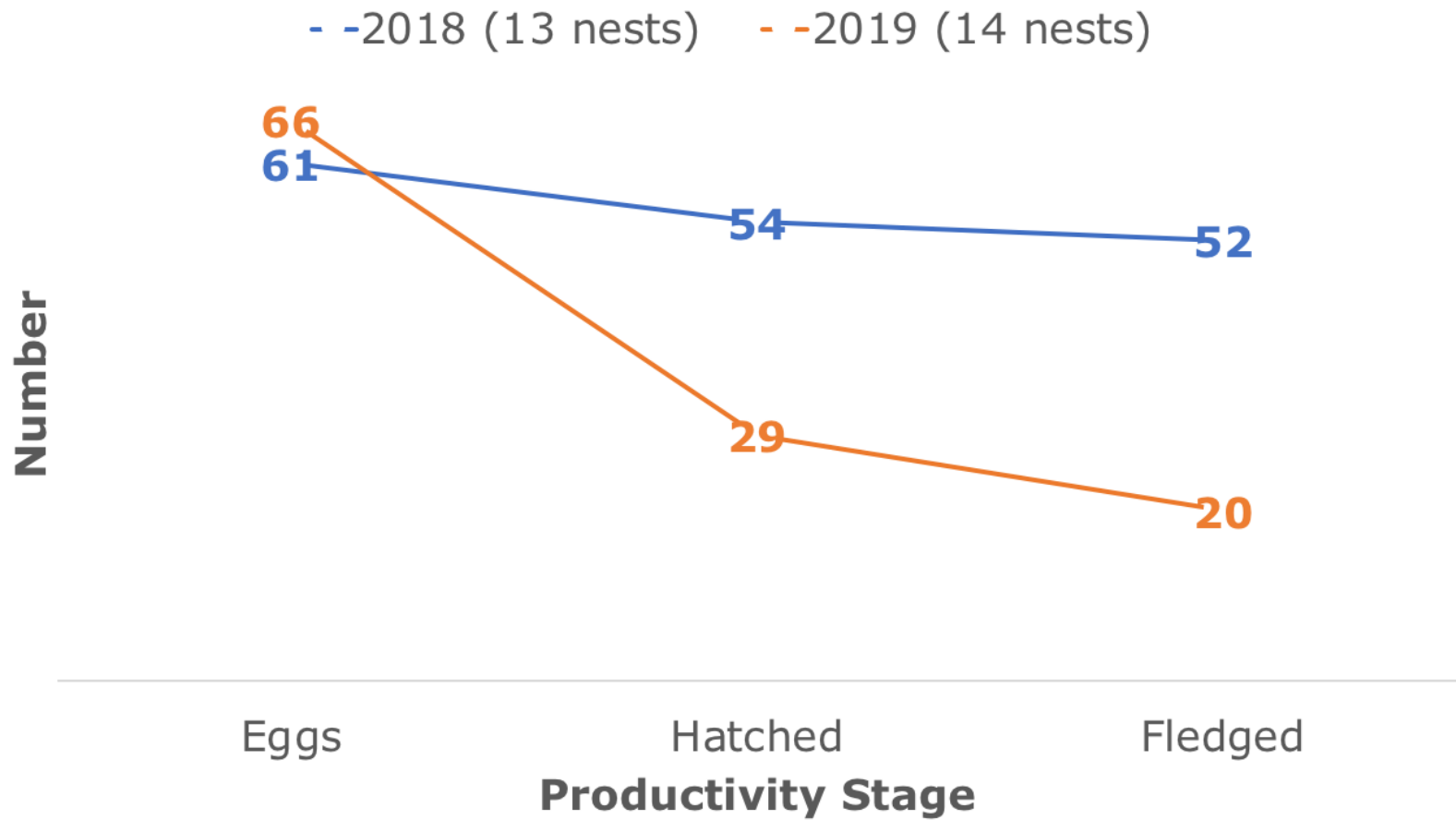


Fig. 1 Productivity among years of American Kestrel nests in central Alberta, Canada during 2018 and 2019.

Returning Kestrels



Prey-use and Provisioning Rates



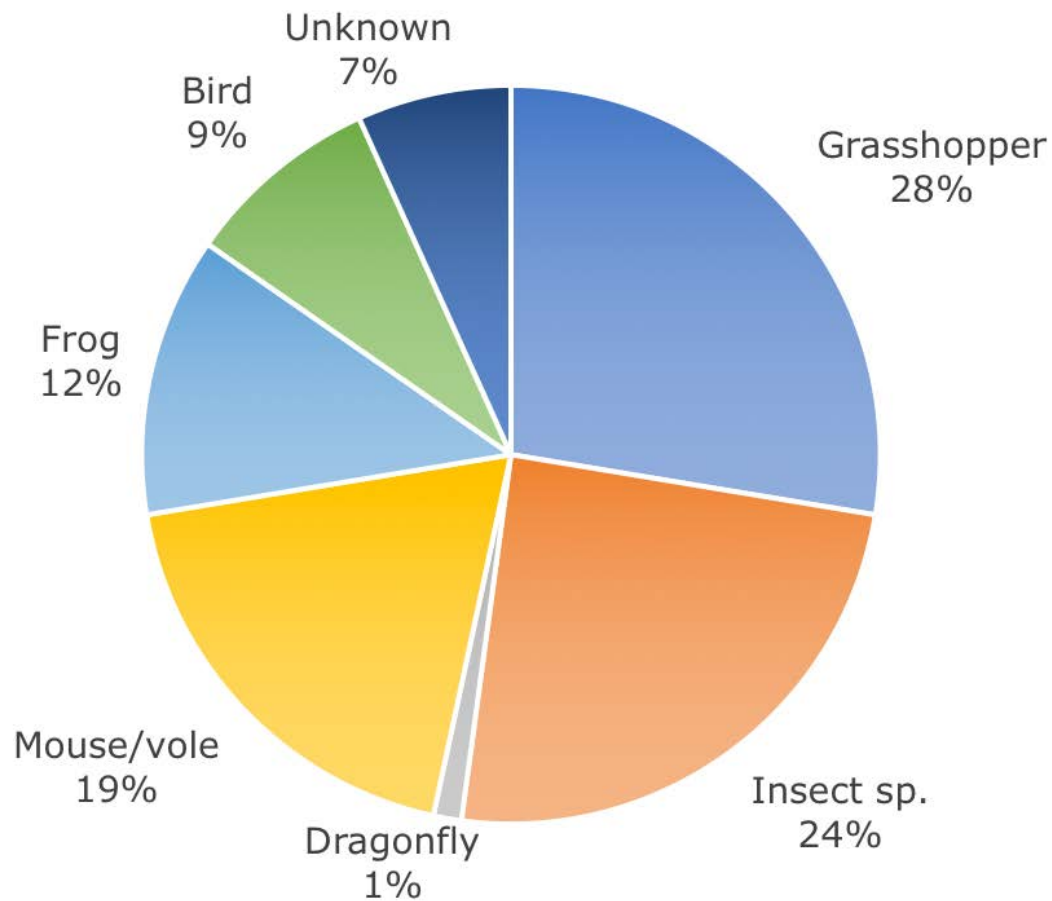


Fig. 2 Types of prey (n = 163) delivered to American Kestrel nests (n = 5) in central Alberta, Canada during 2019

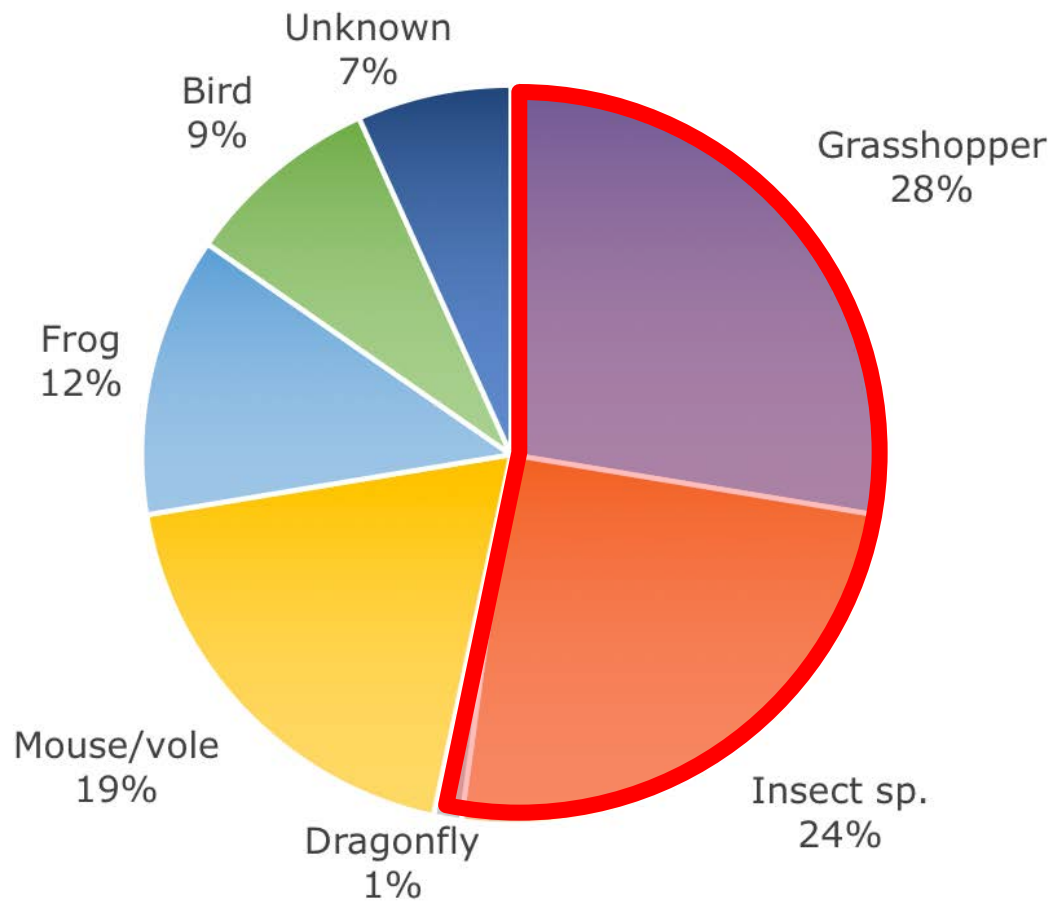


Fig. 2 Types of prey (n = 163) delivered to American Kestrel nests (n = 5) in central Alberta, Canada during 2019

Kestrel Feeding – Unexpected Results

Kestrel Food Provisioning



Future Kestrel Research

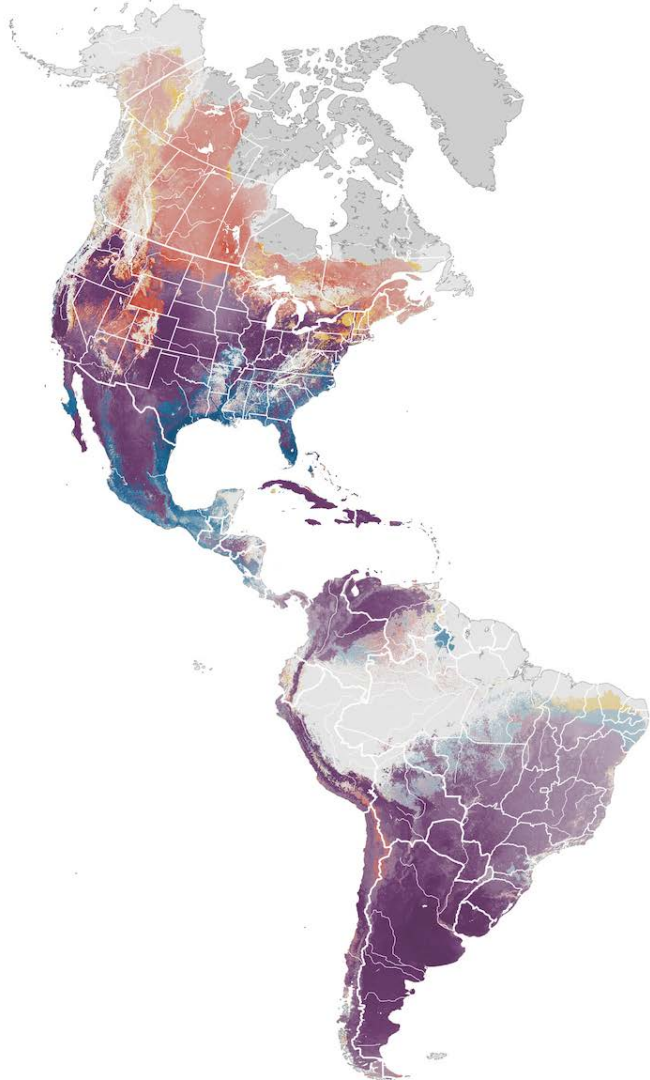


Future Kestrel Research



Alberta Conservation
Association

wildlife | fish | habitat



RELATIVE ABUNDANCE

Year-round

Breeding season May 17 - Aug 10

Non-breeding season Nov 16 - Feb 22

Pre-breeding migratory season Mar 1 - May 10

Post-breeding migratory season Aug 17 - Nov 9

0

0.29

14.09

Bat Habitat Enhancement (2011)



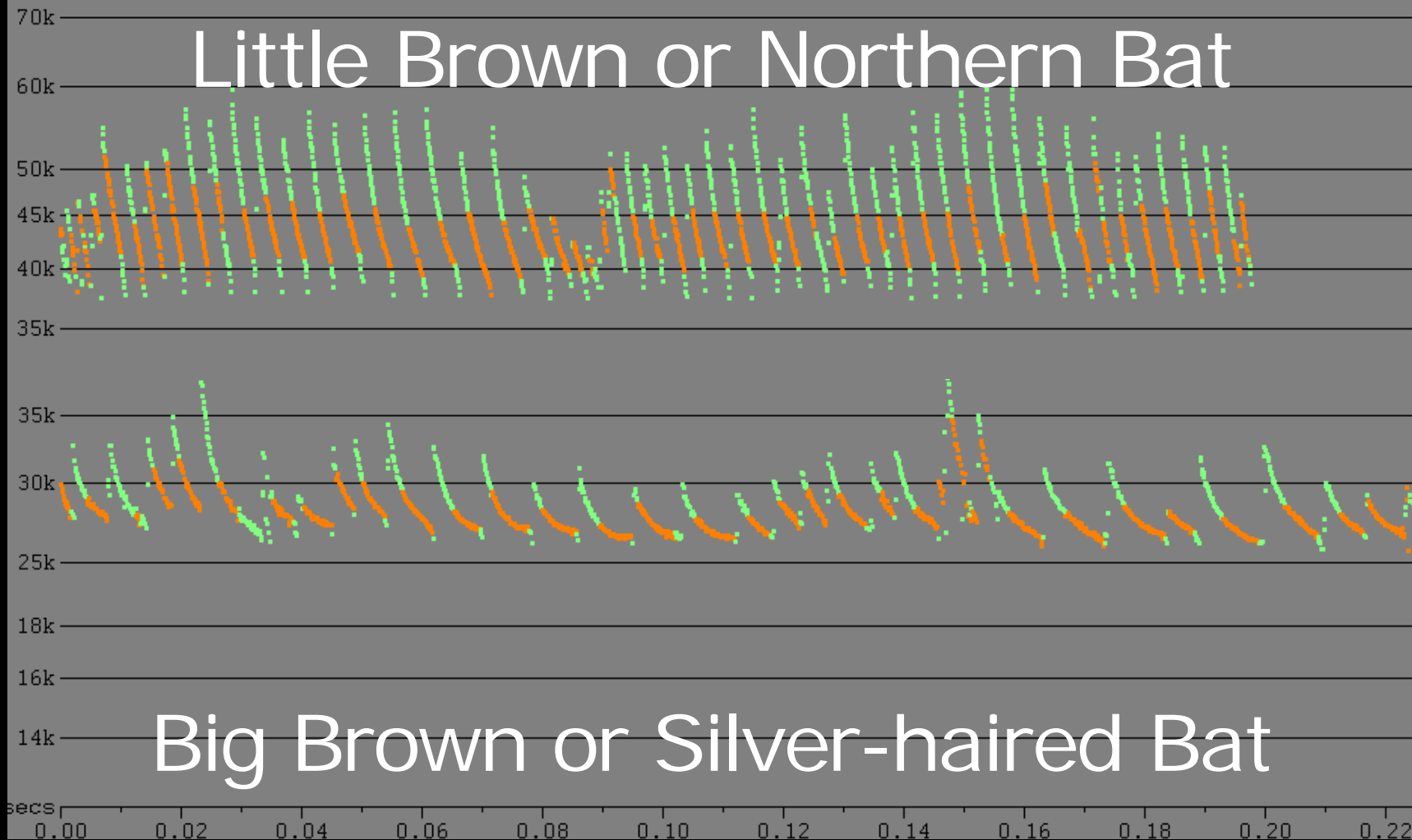
Bat Trapping Surveys (2011)



Bat Seasonal Movements (2012)



Little Brown or Northern Bat



Big Brown or Silver-haired Bat

Amphibians Surveys (2011)



Wildlife Cameras (2013)



A Year Along the North Saskatchewan River – Trail Camera Video

[Lafarge - Strix Trail Camera Video : Berrymoor Pit](#)



Community Engagement



School Groups



Into the Field





In Summary

- Biodiversity Program has operated for 11 years
- Industry can work in conjunction with Wildlife Protection / Wildlife Habitats
- Slow Gradual Build Expanding:
 - Wildlife Monitoring
 - Wildlife Enhancement
 - Wildlife Research
 - Direct hands-on experiences
 - Exchange of perspectives



Thank You!

