

Evidence of Partial Migration, Encounters of Northern Saw-whet Owls from Banding Stations in Alberta and Saskatchewan



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Introduction

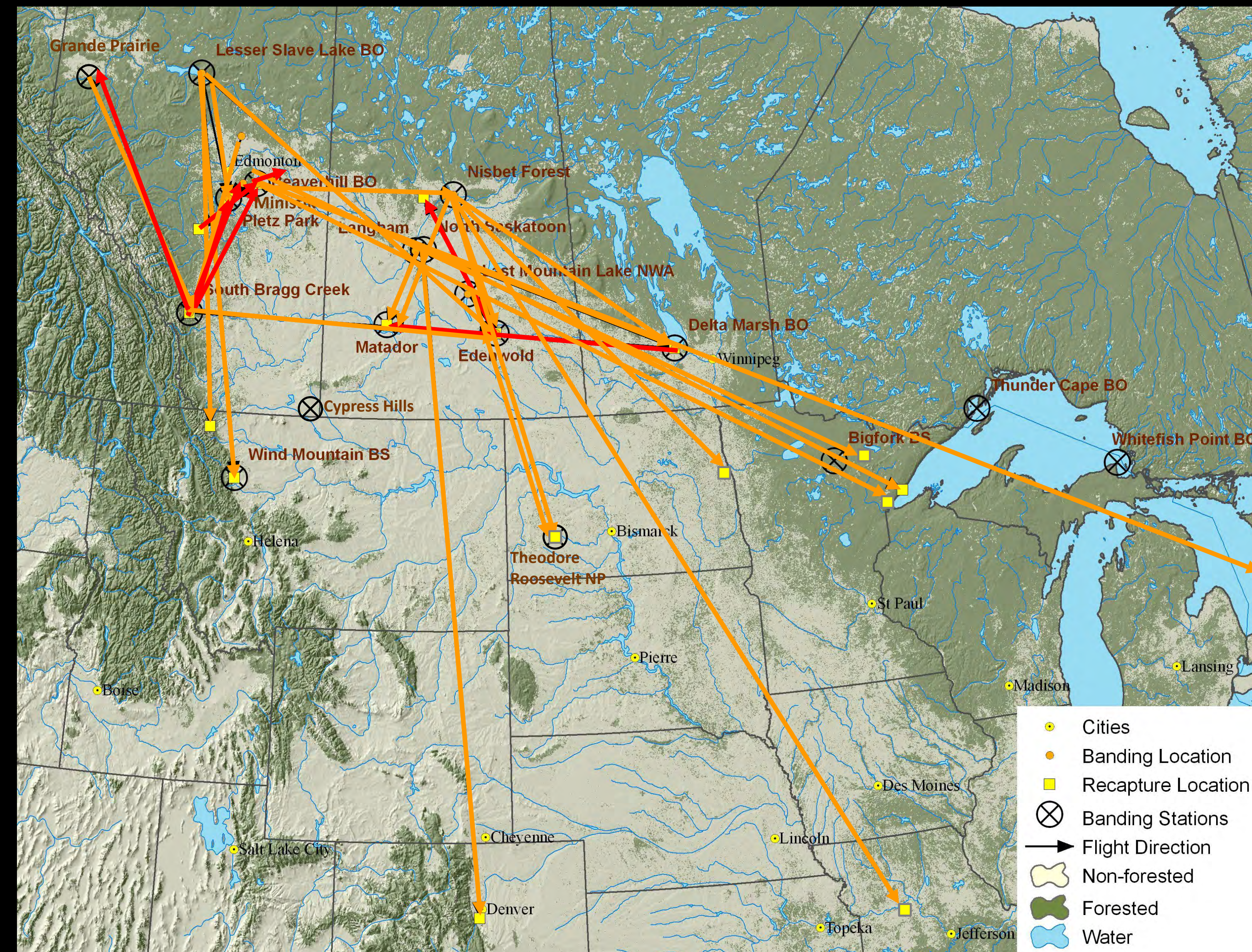
- Movements of banded Northern Saw-whet Owls (*Aegolius acadicus*) have been monitored extensively during spring and autumn in eastern North America
- Re-encounter data indicates that Saw-whet Owls migrate in a north-south direction in the east
- Since 2002, researchers have established 13 Saw-whet Owl monitoring stations in Alberta and Saskatchewan
- Researchers banded more than 10,000 Saw-whet Owls during autumn between 2002 and 2015

Methods

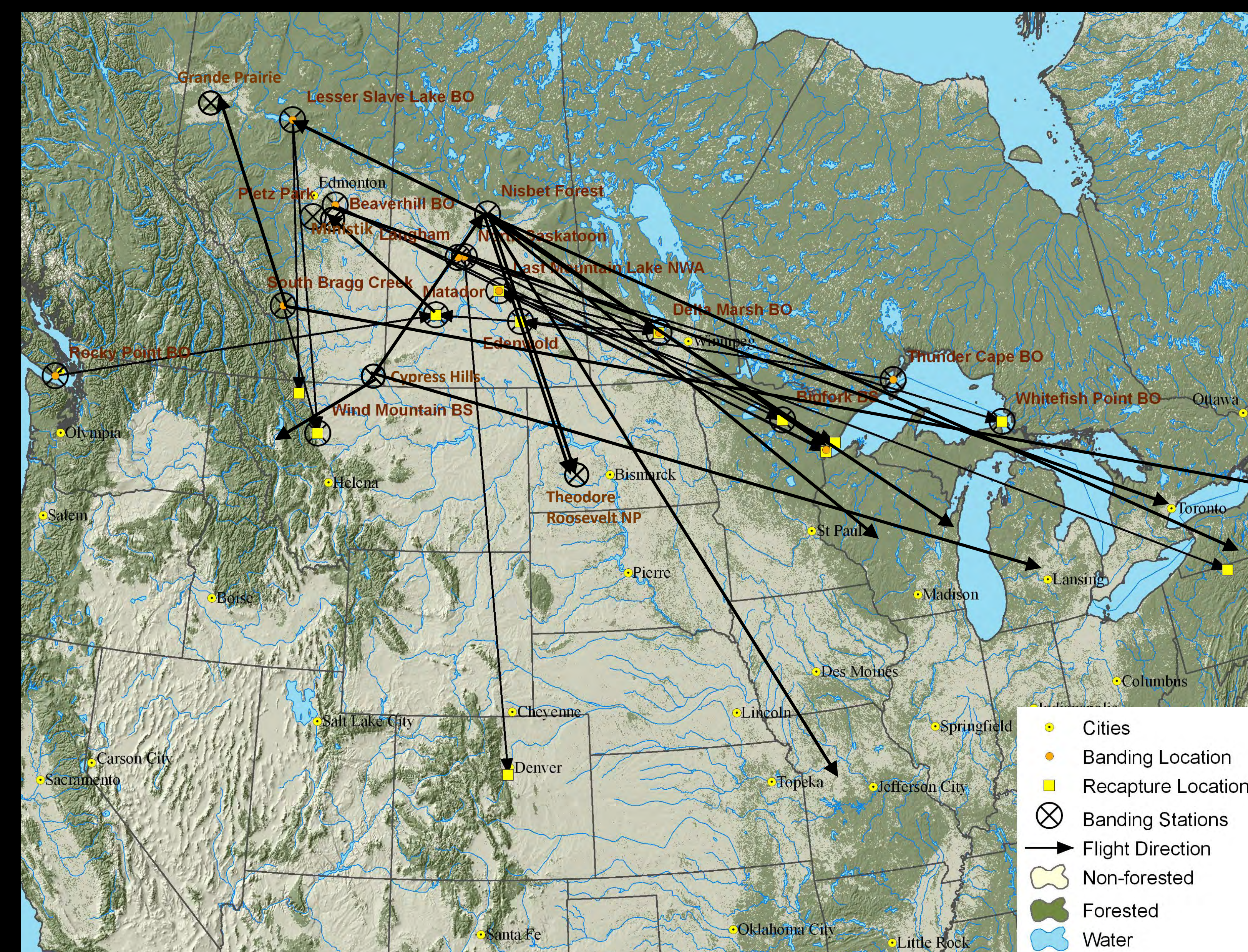
- Banders used mist nets and an audiolure to attract and capture Saw-whet Owls; we banded, measured, aged and sexed owls
- We analyzed encounter data between 2002 and 2015
- We mapped all encounter locations away from original banding sites and overlaid forest cover and mountains

Results and Discussion

- Documented movements occurred among banding stations, between banding stations, and other locations
- We compiled 109 Saw-whet encounters (to date) away from the location of banding; 36 were within season
- The furthest encounter distance was Bragg Creek (Calgary Bird Banding Society) to Prospect Harbour, Maine, 3508 km east
- The furthest within season encounter was Nisbet Forest SK to Marshall, Missouri, 1839 km southeast in 46 days (average 40 km/night)
- Most encounters were east/southeast (58%), followed by south/southwest (26%), and northeast/north/northwest (16%)
- Direction of movement is likely influenced by the presence of suitable habitat; the Saw-whet is dependent on forests
- Only one Saw-whet encounter crossed the Rocky Mountains
- 7 Saw-whets banded at Bragg Creek were re-encountered at the same location in a subsequent year, indicating some owls may use the same movement routes
- Most band encounters in North America suggest that Saw-whets are primarily migratory, other owls summer and winter in same locale
- Northern Saw-whet Owls from Alberta and Saskatchewan are partial migrants showing true migration of variable distances, regional residency, and nomadism



Locations of within-season Saw-whet Owl encounters 2002-2015.



Locations of long distance Saw-whet Owl encounters 2002-2015.



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