

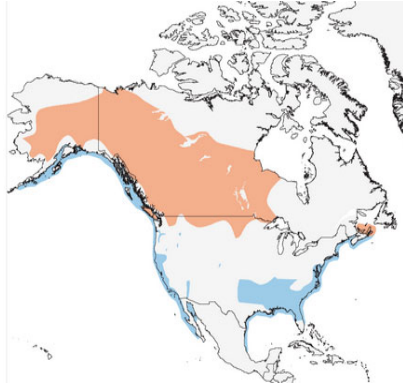
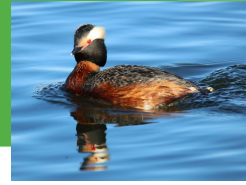
CWS Program Update – Horned Grebes

WRRB Meeting May 27-28, 2025

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Distribution in NA



- Prairies are important breeding area
- Importance of Boreal not well known
- Winter on Pacific and Atlantic coasts



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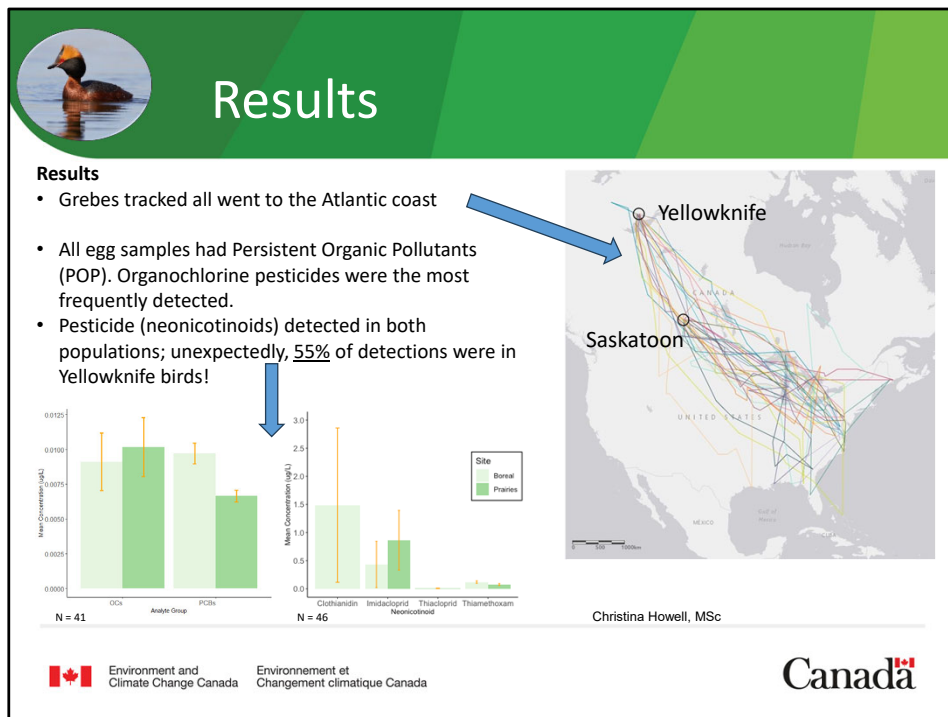
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Pink areas are used during breeding
Blue areas are used during winter



Captured and put data loggers / trackers on adult Horned grebes
Collected eggs and blood to measure contaminant levels in the birds



Deployed a total of 100 geolocators. Retrieved 18 (10 from NT, 8 from SK).

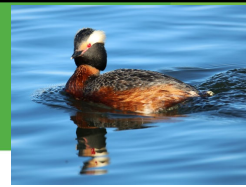
Birds breeding in NT appear to follow a southeast migratory pathway, and use both marine and freshwater non-breeding areas including the Gulf of Mexico, Atlantic coast, Great Lakes, and other terrestrial freshwater habitats. Also, the Great Lakes may be an important stop over site.

Combined with geocator tracks, stable isotope analyses appear to confirm that migratory connectivity of HOCR breeding in Canada is weak (i.e., NT and SK birds mix on wintering areas, and do not use population specific areas).

All egg samples had detections of at least one POP. OCs, and PCBs were the most frequently detected in both populations, however, concentrations are generally low.

Both populations had detections of neonicotinoids in plasma. Surprisingly, 55% of detections were in NT sampled birds. Clothianidin was detected only in NT birds, Thiacloprid was detected only in SK birds.

2025 Proposed study



- This 2021-23 study showed that eggs are a good marker of contaminants in the environment
- There are still questions about the presence of contaminants in the area:
 - Arsenic (pre- and post-fire)
 - Heavy metals (e.g. mercury)
- We propose to collect along Yellowknife Highway 3:
 - 10 Horned grebe eggs (1 per nest)
 - 10 Red-necked grebe eggs (1 per nest)
- The same number of eggs will be collected in Saskatchewan for comparison with an agricultural area
- Eggs will be analyzed for contaminants



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We will take 1 egg per nest

Disturbance will be kept to a minimum: use a small kayak to find nests on ponds, take one egg and leave. The adults will not be caught or otherwise handled

Do you have information to share or questions?



We are requesting your support for this work. If you support it, please sign and return the recommendation form attached to our GNWT permit application. If you do not support the study, we would like to hear your concerns
Thank you!