Call of the Wetland: Season 2 Update

Two seasons down and one to go Calgary! In 2018, 131 users downloaded the Call of the Wetland App (384 to date). This season, April 15-August 31, 2018, over 100 of you completed 284 amphibian surveys! Special thanks to all whom have contributed to Call of the Wetland, including our super awesome partners Alberta Conservation Association, the Calgary Zoo and the City of Calgary.

What did we find in 2018?

Three species of amphibian were reported in Calgary, identified by call and visual surveys. 98 reports were of boreal chorus frog, 17 of wood frog, and 9 of tiger salamander. Amphibians were reported at 30 of the 49 survey sites, that means 61% of wetlands surveyed had amphibians. The majority of amphibians were identified by their call (72% of reports were calls). A special note – when participants reported they were not confident on identification, and we were unable to verify, we did not include these observations in analysis. We noted these wetlands to further investigate next year. Thanks for flagging when you’re unsure!

<table>
<thead>
<tr>
<th>Species</th>
<th>Call</th>
<th>Egg</th>
<th>Tadpole</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boreal chorus frog</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wood frog</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Tiger salamander</td>
<td>NA</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Where do we need to improve?

We would like each wetland to be visited eight times during the amphibian season so that we have a chance to observe the full life cycle—mating (calls), eggs, tadpoles and adults. Our biggest challenge is covering all 8 survey times periods; on average each wetland was visited 5.3 times. Our goal is to have 100% of survey time periods covered for all survey site wetlands. The graph to the left show us that we need more wetlands surveyed in April (survey time frame 1-3), beginning of May (4) and August (8). The less times a wetland is visited the greater the risk we missed something. Hope it is warmer in April 2019!
Survey Sites vs. Opportunistic Sites

While we aim to focus participant effort on the survey site wetlands, we are still interested in capturing opportunistic reports of amphibians. 50 of the 63 opportunistic reports reported amphibian presence, a good sign! We will use this information to supplement analysis at the end of season 3.

Tiger Salamander

The tiger salamander is a nocturnal, burrowing species that does not produce a call. Because of this, they are harder to detect than frogs and toads (the majority of amphibian observations were identified by call). In the 2018 season, we installed plywood cover boards, to check for salamander that may burrow underneath on their way to or from the wetlands during mating season. If you see any at a wetland, please leave them in place as disturbing them can reduce the chance of salamander use. Although we did not find tiger salamander under the boards, we did find boreal chorus frogs. We hope next year will yield better results once the boards settle into the environment.

What’s next? Only one more season!

We will continue the program in 2019, with amphibian surveys beginning April 15. After a third season of data collection, we will begin to implement results to inform wetland management and restoration. Thank you to the Call of the Wetland citizen scientists for your hard work this season! We hope you join us next year. Please send Call of the Wetland photos, stories, or questions to: info@callofthewetland.ca