Fish Research on Lake of Two Rivers

Over the next two years (2017-2019) the to contribute to our Harkness Laboratory of Fisheries Research is conducting an in-depth population assessment and monitoring of fish movement in Lake of Two Rivers.

In May 2017, fisheries researchers caught 20 Lake Trout and 10 Smallmouth Bass and surgically implanted them with acoustic transmitters. The transmitter (about the size of one AAA battery) emits a unique sound frequency every 5 to 10 minutes. The sound from the transmitter is picked up by acoustic receivers in the lake, which are installed one metre below the surface of the water. With 49 receivers in the lake, the exact location and depth of each fish with a transmitter will be accurately determined. This study is anticipated to yield detailed information about habitat use.

If you happen to be fishing on Lake of Two Rivers, keep an eye out for fish with a small, red tag near the fin on the back. If you do catch one, please release it, so it may continue

understanding of its species. If it cannot be released, please return the transmitter to a Park Office. Keep in mind the fishing regulations prohibit the harvest



If you catch a fish with a red tag, please release it. of Lake Trout from Lake of Two Rivers with a total length between 40-55cm.

This valuable research helps improve our understanding of Lake Trout and Smallmouth Bass by producing accurate population estimates and determining where and when fish use specific habitat. The results of this study will help inform future fisheries management planning and resource management decisions, not only for Lake of Two Rivers, but all of Algonquin.

For more information see the bulletin boards or park office.





Lake Opeongo Ice-out Dates Since 1964 Showing Trend



Compiled by Ontario Ministry of Natural Resources and Forestry: Algonquin Fisheries Assessment Unit

Reminders while fishing in Algonquin:

- No live baitfish are permitted.
- No fishing is permitted within 100 m of a water control dam.
- No fishing within 300 metres downstream of Lake Opeongo's Annie Bay dam.
- Daily catch and possession limit for Lake Trout is 2 per person
- (1 per person with a Conservation Licence).
- Daily catch and possession limit for trout is 5 per person, no more than two of which can be Lake Trout (2 per person with not more than one Lake Trout, with a Conservation Licence).
- Be aware some lakes have slot limits. Check the Algonguin Information Guide for a list.
- Worms are not native to Algonquin and remaining worms should be taken home or thrown in the trash-not on the ground!

Refer to the Ontario Recreational Fishing Regulations Summary for complete details



Algonquin

LIVE BAIT-FISH Possession Prohibit

The 1.3 km trail with outdoor exhibits is available vear-round.

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The Bee Tree: Out of Sight and Out of Mind? by Justin Peter

One of the things that probably inspires many of us about Algonquin is the sense of perpetual novelty we can gain from being here. Even if one visits the same trail repeatedly, no two visits are quite alike, and the vagaries of the seasons, changed perspectives and chance sightings keep our senses and minds refreshed. Sometimes these experiences remind us that we have much vet to learn about the Algonquin environment. This experience can apply as much to Park staff and researchers who may regularly ply the same waters and course the



same trails as it may to less frequent visitors. We were reminded of this reality in 2015 soon following the release of the latest edition of the well-known publication, Trees of Algonquin Provincial Park. Although we had updated the book with information reflecting our best knowledge of the Park's trees at the time, we realized within a couple of months of the book's release that a complete picture of one particular tree species - the American Basswood – was yet to be fully formed.

We grant that the Basswood is possibly a tree many of our readers haven't seen before let alone heard of. Basswood is a widespread and fairly common companion to the Sugar Maple in hardwoods throughout the southern part of Ontario. It's perhaps most familiar by name to wood carvers, who appreciate the light and easily worked wood. For such purposes Basswood and its close relatives in the linden family have been trees of economic and cultural significance for several centuries. It is also of some importance to beekeepers for the fine honey that domestic honeybees produce from its fragrant and abundant blossoms borne in July. To the casual onlooker, the most distinctive part of the Basswood's anatomy is its leaf: a heartshaped affair whose size can approach the spread of an adult's hand. While we know that Algonquin Park's extensive "West Side" hardwood forests share many important characteristics with hardwoods beyond our boundaries, we believed nonetheless that Basswood had at best a negligible presence here. As evidence, the Park had in its extensive

A towering American Basswood in full bloom can stand out in colour from surrounding trees (below). natural history records* just a handful of mentions of Basswoods along the Highway 60 corridor, and isolated specimens at that. It was simply not to be seen along any of the many trails through apparently suitable habitat along Highway 60.

Basswood's distribution pattern in the west seemed to diverge markedly from Algonquin's "East Side" whence there were several records of it. Our own anecdotal observations of Basswoods in prominent "East Side" locations such as the Berm Lake Trail reinforced the notion that it was a common tree there. What could account for these differences between east and west? The "East Side" sits at a lower elevation and has a somewhat milder climate than the west; as a result, some had suggested that the "West Side's" colder climate could account for Basswood's rarity. Upon further

> With some effort Basswood blossoms may be visible to observers looking up from ground level (above).



Two large Basswoods (along with multiple sprouts) growing on the slopes overlooking Proulx Lake.

consideration, however, this idea was suspect. Basswood is common and conspicuous along roadsides in Whitney just to the east and in Oxtongue Lake just to the west of Algonquin Park's boundaries. Winters in Whitney and Oxtongue Lake are essentially as cold as they are in the Highway 60 Corridor, and summers are essentially the same too. Furthermore, the Basswood distribution map reveals that it is found in such places as southern Manitoba and Minnesota that share similar climate. In those places. Basswood can even constitute a numerically important component of hardwood stands. Last, there was a notable exception on the Parks' "West Side": there were records of Basswoods concentrated on the peninsula separating Lake Opeongo's North and East Arms (in and around the historic Dennison homestead of Sunnyside). We incidentally spotted several mature trees nearby and at other locations along Lake Opeongo during a late fall waterfowl survey in 2007. Therefore, the "cold climate" theory didn't seem to hold any weight. The story of Basswood in Algonquin would take a couple more turns yet.

In mid-July 2014 during the review period for the Trees of Algonauin Provincial Park. we undertook a Basswood survey by boat on Lake Opeongo. With practice, Basswood can be recognized at a distance owing to the distinctive growth form of mature trees - their leafy crowns are conspicuously pyramidal in form, and when on mature, forest-grown trees, the crown stands atop a long undivided trunk above the crowns of surrounding trees, somewhat in the fashion of the more familiar White Pine. We essentially identified as many mature trees as we could. Our visit surreptitiously coincided with the peak of Basswood's flowering period when the crowns are laden with creamy yellow blossoms and thus rendered much more conspicuous at a distance. We identified over 70 trees during a ride spanning the bottom of Opeongo's South Arm to the top of the North Arm. Clearly this was not a rare tree here!

Then in mid-July 2015, we visited Proulx Lake to investigate a towering Basswood that we had previously seen there during a paddling trip in late July of 2012. While we simply planned to visit that one tree, the

timing of our 2015 visit (during the peak of Basswood's flowering once again) allowed us to notice a number of other mature specimens on the slopes above the lake. We landed by canoe at the most central location and negotiated the dense shoreline vegetation to reach the bottom of a gentle ravine. We followed the slope uphill towards the location where we thought the largest concentration of trees stood. Already a short time after beginning our climb, we found several young Basswoods in the undergrowth sporting their distinctive leaves. Further up the slope we believed we had stumbled upon something of a "Basswood garden"! Here well above the shoreline stood several large Basswoods interspersed with mature Sugar Maples in a stand of widely spaced trees. While their crowns stood high overhead, the buzz of pollinating insects frequenting the blossoms would be audible to any sensitive ears! These trees were vigorous and stately and bore no evidence of simply "hanging on" for survival.

Publications

Trees of Algonquin Provincial Park

Trees are by far the largest living things in the Park. With a little practice, you can quickly become adept at identifying all of Algonquin's trees, and this will open the door to understanding the fascinating forest ecology of Algonquin.



Available at the Algonquin Visitor Centre Bookstore & Nature Shop, East Gate and West Gate, or online at

No: they seemed very much at home here in this spot atop the Algonquin Dome. Within this relatively small area one could count at least three dozen mature trees, and a more extensive survey would likely reveal more.

So is the climate of Park's higher elevation "West Side" too harsh for Basswood? The answer from the Proulx Lake findings appears to be a resounding 'no'. Are there more such Basswood stands to be found in this part of the Park? That will have to be the subject of future investigations...

*Park Museum staff maintains long-standing collections of biological specimens gleaned from the Park over several decades. The animal skins and pressed plant specimens (in the herbarium) constitute a record of the occurrence and distribution of species. In addition to a very modest number of physical specimens, an extensive roll of written records is kept on index cards, detailing exact locations of any and all sort of biological phenomena, including trees.





Fishing in Algonquin Provincial Park

Algonquin is renowned for some of the finest fishing in Ontario, with hundreds of clear, cold lakes which are ideal for trout. Many visitors come to the Park with little or no idea of how or where to fish, or even the kinds of fish that might be expected. This book is intended to give you the knowledge that may make the difference between success and failure.

algonquinpark.on.ca