

MNR will stock Round Lake this fall with 5,800 lake trout

By Terry Fleurie
Staff Writer

Killaloe -- Resident and visiting anglers who regularly wet their lines in the waters of Round Lake will be the benefactors of a new Ministry of Natural Resources stocking project scheduled to begin this fall.

At the July 17 meeting of Killaloe, Hagarty and Richards Township council, Darwin Rosien, the senior fish and wildlife technician at the Pembroke district of the MNR, revealed a three-year plan for Round Lake has been developed that includes the stocking of 5,800 lake trout later this year.

Mr. Rosien's visit was prompted by Rob Norris, the president of the Round Lake Property Owners Association (RLPOA) who explained he had been invited to an economic development committee meeting of the township in June where the subject of fish stocking in Round Lake came up.

"I saw it really as an economic development situation," Mr. Norris explained of the fish stocking.

Mr. Norris said the premier, minister of Natural Resources and the minister of Tourism are constantly talking about economic development through recreation and tourism.

Councillor Isabel O'Reilly asked him to collect more information (about stocking) and bring it back to full council.

Mr. Rosien's presentation focused on the MNR's plan to do a rehabilitative stocking of the native strain of lake trout currently found in Round Lake. He noted the lake was the premier lake in the township and the MNR had been pressured in recent years to consider stocking walleye there. However, the characteristics of Round Lake do not meet the basic early life stage requirements of walleye, but do for lake trout, he explained.

Mr. Rosien said Round Lake is in the upper one-third of the Bonnechere River watershed and it gets its waters from Algonquin Park.

"The runoff is from the Canadian Shield, it's pristine, unlike going through sedimentary rocks or clay belt regions where there's a lot of particulates, nutrients in the water. So it's pristine, clear water entering Round Lake, which is a requirement for lake trout."

He chronicled the studies the MNR has been conducting on Round Lake since 2005 adding a report completed in conjunction with Renfrew Power Generation in 2010 provided more detail on many of the activities. The studies included habitat mapping, a spawning assessment in 2006 and 2007 with an egg search conducted by divers to determine where the fish were laying their eggs in relation to water levels, a Summer Profundal Index Netting (SPIN) survey to determine populations, DNA results and an egg incubation study. As well, a dissolved oxygen analysis of the lake, was undertaken with very positive results.

"Basically, Round Lake has pretty much the best water quality in the district and will support lake trout in all the life stages," he noted.

The DNA study revealed the fish in Round Lake are "genetically unique", Mr. Rosien noted.

"There are isolated populations of lake trout that have their own strain of genetic codes and that is extremely valuable in terms of biodiversity to maintain those genetics."

Mr. Rosien said a lot of the data from the studies is used in the development of the Bonnechere River Water Management Plan.

He stressed the stocking had nothing to do with water levels on the lake and the proposed stocking would not result in any changes or implications to the plan.

"It just kind of feeds into it," he noted.

Valuable Resource

Mr. Rosien said the residents of Ontario are somewhat privileged to have the resources of lake trout they currently have.

"Even though we have 250,000 lakes in the province, lake trout lakes are quite rare. We only have 2,200 across the province and in the southern region of Algonquin Park we have about one-third of them".

"But we do have 24 lake trout lakes in our district," he added. "Twelve of these are managed self-sustaining populations and 12 are managed as Put, Grow and Take (PGT) fisheries."

The lake trout population in Ontario is 20 to 25 per cent of the global population of these fish, which is very significant.

"And at the MNR, we have the huge responsibility of managing that resource, both in terms of how we manage the species but also individual populations to preserve those genetics" he stated. "Once they're gone, they're gone."

Lake trout are native to North America, he said, and native stocks are found only on the Canadian Shield.

"They've been isolated since the last glaciation, so each of these particular lakes has a unique population," he stressed. "Lake trout are an important part of our heritage, both socially and economically."

"And I don't have to tell you that they contribute immensely to local economies through fishing, recreation, and that's why it's so important that these fish are maintained," he added.

Lake trout are the only top predators that thrive in a cold-water habitat, he explained, adding by cold water he was talking about during the summer when the water stratified and there was a thermal separation between the warmer surface water and the colder water below. He re-iterated all of their life processes including eating, growing and reproduction are related to the cold water environment.

Mr. Rosien explained lake trout are cost effective to manage when they're managed in a self-sustaining way, adding they are a keystone indicator of ecosystem health.

Lake Trout Versus Walleye

When deciding whether to stock lake trout or walleye,

Mr. Rosien said it all comes down to the suitability of the water and Round Lake is definitely conducive to the lake trout versus the walleye.

Although it may sound kind of counterintuitive, he said the water in Round Lake is too "clean" to support the stocking of walleye fry.

"Walleye require fairly turbid, nutrient-rich waters and lake trout are basically the opposite," he noted.

While the walleye are fast growing and short-lived, the lake trout are slower growing but long lived which, he said, will help ensure the future of the resource for years to come.

"It all comes down to the basic life requirements of the 'fry' stage. For lake trout, the fry require deep, cold, infertile water to escape predation while walleye require turbid, warm, shallow areas with lots of vegetation and forage."

Stocking One Way To Manage Fisheries

Mr. Rosien said the actual stocking of lakes is one of several ways the MNR manages the fisheries. Other methods include protection through sanctuaries or moratoriums, rehabilitation of habitat, regulation of harvest with size and catch limits, control of invasive species, public education and research and assessment.

"We have tried a number of things and we are at the conclusion after these studies that we want to try rehabilitative stocking," he noted.

He explained two types of stocking, Rehabilitative and PGT, exist. Rehabilitative stocking, which will be used at Round Lake, is stocking of fish that originate from the same lake. PGT is used to provide stocking dependant fisheries that provide ample angling opportunities, while redirecting effort away from sensitive natural populations, he noted.

The MNR collected the eggs from the females last fall, mixed them with the milt from the males and has had them rearing in a private facility in Bancroft since last October. The Bancroft facility has a unique re-circulating system which allows the control of water temperature.

"Since the metabolic growth rate of fish is determined in part by water temperature, they're able to maximize the growth of fish by keeping the water at an optimal temperature," he noted. "The lake trout destined for Round Lake will be seven to eight inches by October."

In contrast, he added, the provincial hatchery which is fed by ground water doesn't have the ability to regulate water temperature and as a result it takes almost two years to raise the fry to that same size.

Funding In Place

MNR has signed a Memo of Understanding (MOU) with the hatchery in Bancroft to rear 5,000 of the Round Lake strain to the fall fingerling size over the next three years (5,000 fish each year) which will use up the \$15,000 he has secured for the program. However, he said since he supplied more eggs to the hatchery than what was needed the hatchery has 5,200 surplus above the 5,000 allocated in the MOU. If partners can be found, these surplus lake trout can be purchased at \$1.25 per fish to supplement the 5,000 the MNR will be stocking this fall. He announced the RLPOA has donated \$1,000 which means an additional 800 fish will be stocked this fall bringing the total to 5,800 at present. As part of their agreement, any fish not utilized by the MNR, will be used by the hatchery in their own local PGT stocking initiatives.

Mr. Rosien reminded council while the stocking is good news it will not result in an immediate fishery.

"Lake trout don't reach sexual maturity until they are six or seven years old," he explained. "So these fish cannot reproduce themselves for some time and contribute to the population.

"The intent is to restore sufficient numbers of lake trout to enable self-sustaining natural reproduction that doesn't require ongoing stocking," he added.

He said there is a "well established" number of rainbow smelts in the lake which are an invasive species to the lake. The smelt are a predator for the lake trout fry but are also a food item once the trout grow beyond the fry stage. By stocking the lake trout at the larger fingerling size, he is confident of a high survival rate and is hopeful the predator/prey balance of lake trout and smelt can be restored.

Mr. Rosien re-iterated that the hatchery has a surplus of 5,200 fish available should some additional funding be found. Mr. Norris suggested council consider partnering with the RLPOA in making a contribution so more fish can be added to this year's stocking project. He also suggested Mayor Janice Visneskie bring the request for a contribution to county council as it is also an economic development initiative for the entire area.



Mr. Rosien is shown doing a mark and re-capture study in 2009 that helps estimate population size of the fish in Round Lake.



Darwin Rosien, the senior fish and wildlife technician at the Pembroke district office of the MNR, told KHR council last week they will be stocking 5,800 lake trout fingerlings in Round Lake this fall as part of an ambitious three-year stocking program for the lake.