Lake Fact Sheet – Parry Sound District

Ahmic Lake

Location

Official Name: ..... Ahmic Lake	*Local Names:* .....
County/District: ..... Parry Sound	*Geographic Twp:* ..... Croft, Spence, Chapman, Ryerson
Municipality: ..... Municipality of Magnetawan ..... Township of Ryerson	*MNR Admin. Area:* ..... Parry Sound
Lat./Long: ..... 45.629 N 79.694 W	*UTM (NAD83):* 17 598910 5056503
Topographic Map (1:50,000): 31E12	*Drainage Basin:* ..... Magnetawan River

Physical Features

Surface Area (ha): 1567	*Maximum Depth (m):* 27	*Mean Depth (m):* 8
Elevation (m asl): 275	*Perimeter (km):* 70	*Island Shoreline (km):* 9.8
Volume (10^4 m^3): 12536	*Watershed (km^2):* ..... 1780 (excludes area of lake)	*Water Clarity (m):* 2.8

Land Use and Development

Crown Land (%): ..... 5 *Provincial Parks:* ..... none

Shoreline Development: ..... moderate; shoreline residential, commercial, urban

Access: ..... public; launches located in Village of Magnetawan and on Hwy 124;
..... locks in Magnetawan allow navigation to and from Cecebe Lake

Water Level Management: ..... regulated; water level is controlled by MNR-owned and operated dam

Fish Species

Major Fish Species: ..... lake whitefish, northern pike, smallmouth bass, walleye (S), yellow perch, black crappie (I 2002)
..... sauger (I 2014)

Other Fish Species: ..... cisco, white sucker, brown bullhead, burbot, pumpkinseed, rock bass, smelt (I)
..... emerald shiner, mottled Sculpin, spoonhead sculpin, trout-perch

Other Species: ..... spiny water flea (I, 1998), zebra mussels (I, 1998)

Notes: E: extirpated, I: introduced – intentional or accidental, O: occasional, R: remnant, S: currently stocked, ?: status uncertain, 2009: year of first record or introduction if known, blank: presumed native

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Fisheries Management

Fisheries Management Zone: 15

Designation for Lake Trout Management: ..... not designated

Fishing Regulation Exceptions ..... no lake-specific exceptions

Current Stocking: ..... walleye (supplemental stocking with fry is done periodically by the Almaguin Fish Improvement Association)

Historic Stocking (last year stocked): ..... smallmouth bass (1960), rainbow trout (1964), lake trout (1930)

Contaminants (species tested): ..... walleye, smallmouth bass, yellow perch, lake whitefish, white sucker

Summary of Fisheries Studies\Reports

2014 Broad-scale Monitoring

Ahmic Lake was sampled in 2014 as a 'variable' or 'status' lake for Cycle 2 of the provincial Broad-scale Monitoring program. Results will be reported through that program. Four species not previously documented were captured; emerald shiner, spoonhead sculpin, sauger and trout-perch. All are presumed to be native.

2010 Fish Community Assessment Using North American Large Mesh Nets

Large mesh nets used in the Broad-scale Monitoring program were used to assess the composition and abundance of the large fish community. Walleye abundance was relatively high, compared to other lakes in the District (specific diagnostic values are currently being developed for this methodology). The population was comprised of many year classes indicating mortality is within acceptable limits. Year class strength was highly variable, with one age group currently dominating the population; possibly a result of predation by non-native smelt.

McIntyre, E. 2003. An Assessment of the Almaguin Fish Improvement Association's (AFIA) Community Fisheries Involvement Project (CFIP) – Walleye Egg Collection, Culture and stocking of Ahmic Lake, 1987 – 2003. 16 p.

An assessment of the Almaguin Fish Improvement Association's (AFIA) walleye egg collection, culture and stocking program was conducted using field data collected in eight years over the course of the study period (1987 – 2003). Using size-class criteria (total length); we did correlation analysis of year-class strength and recruitment with AFIA stocking events. Although there was some evidence of positive correlation in one survey year, the over-all correlation was very weak. We did however find evidence of good recruitment for year-classes when stocking did not occur. The data suggests that AFIA stocking events have made little contribution to years-class recruitment in years that stocking occurred. Also, natural recruitment and good year-class strength when stocking did not occur were persuasive indicators that this healthy walleye spawning population is maintaining itself on a natural, self-sustaining basis. We recommend that plantings be discontinued but encourage the AFIA to continue long-term monitoring of this walleye spawning population, which could in the future contribute substantially to understanding walleye population dynamics at both a local and regional level.

McIntyre, E. 2003. 2003 Annual CFIP report for the Almaguin Fish Improvement Association – Index walleye spawners and egg culture program report for Ahmic Lake, Cecebe Lake and Poverty Bay on the Magnetawan River. 6 p.

- 432 walleye captured in three successive night of fishing effort using an 8' trapnet
- Mean length of male walleye – 55.8 cm; females – 67.0 cm.

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- 188,100 fry planted into Ahmic Lake

McIntyre, E. 2002. 2002 Annual CFIP report for Almaguin Fish Improvement Association – Index walleye spawners and egg culture program – Magnetawan River (Ahmic Lake, Cecebe Lake and Poverty Bay) 6p.

- 150 walleye captured in two successive nights of fishing effort using an 8' trapnet
- 3 black crappie captured (first conclusive documentation of species presence)
- Fry planting 657,700 Ahmic and Cecebe Lakes

2001. 2001 Annual C.F.I.P. Report for the Almaguin Fish Improvement Association – Walleye Index Spawners and Culture Program, Magnetawan River (Ahmic Lake, Cecebe Lake and Poverty Bay)

- 385 walleye captured in two successive nights of fishing effort using an 8' trapnet
- Mean length of male walleye – 55 cm; females – 66 cm.
- Fry planting locations & number: Ahmic Lake – 100,000 fry; Cecebe – 100,000; Poverty Bay – 100,000

McIntyre, E. 2000. Annual C.F.I.P. Report for the Almaguin Fish Improvement Association – Walleye Culture Program – Magnetawan River (Ahmic, Cecebe and Poverty Bay) 4 p. + addendum and maps

- 715 walleye captured in three successive night of fishing effort using an 8' trapnet
- Mean length of male walleye: - 53.4 cm.; females – 64.1 cm.
- Approximately 1.5 million fry planted at 28 locations in Ahmic Lake, Cecebe Lake and Poverty Bay.

McIntyre, E 1998. Ahmic Lake Walleye Spawning Population Assessment

- **Conducted at the Village of Magnetawan during the Spring of 1998**
- Walleye C.U.E. – 206 per net night
- Note: Age class gap observed in years 2 – 6 (1992 – 1996)

OMNR, 1993. Unreported by analyzed data (Creesys Summary) for presumed random, roving creel survey conducted on Ahmic Lake during the summer of 1993.

- Observed (surveyed) fishing effort: 1,507 angler hours
- Estimated total fishing effort: 12,458 angler hours (7.9 angler hours / hectare; moderate pressure)
- Estimated Catch: walleye – 40, n. pike – 306, smallmouth bass – 3,040, largemouth bass – 367, perch – 1507, brown bullhead – 54, rock bass – 1468, pumpkinseed – 239, yellow.
- Estimated Harvest: walleye – 33, n pike – 33, smallmouth bass – 811, largemouth bass – 130, yellow perch – 889.

Summary of raw data relating to walleye index spawners program at the Village of Magnetawan

- 1993 – Effort: 1 net night (8' trapnet) ; Catch: 553 walleye
- 1992 – Effort: 2 " ; Catch: 1,163 walleye
- 1991 – Effort: 1 " ; Catch: 643 walleye
- 1990 – Effort: 1 " ; Catch: 190 walleye
- 1989 – Effort: 6 " ; Catch: 55 walleye
- 1988 – Effort: 1 " ; Catch: 525 walleye
- 1987 – Effort: 6 " ; Catch: 799 walleye

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Sober, L.L. 1988. Trap net survey of the Ahmic Lake Fish Community conducted June 30 – July 22, 1987.

- Walleye C.U.E. 6.6 fish per net night (49 - 8' trapnet sets) (abundance slightly above average)
- Walleye year class structure showed variable recruitment
- Presence of smelt may be constraining walleye production
- Smallmouth bass C.U.E. – 3.7 fish per net night (8' trapnet) (abundance slightly below average)

Paus, R.M. 1984. 1983 Inland Lake Fishery Assessment Program: Trap and Gill Netting Results from Ahmic Lake, June 13 – June 30.

- Walleye C.U.E. – 5.6 per net night (8' trapnets) (abundance – average)
- Smallmouth bass C.U.E. – 2.8 per net night (abundance – below average)
- Catch composition of all trap nets by weight: walleye – 64.1%, northern pike – 6.1%, smallmouth bass – 11.9%, common white sucker – 9.2%, other – less than 9%.
- Mean age of walleye – 7.8 yrs.; sample size: 187
- Mean age of smallmouth bass – 5.9 yrs; sample size: 157

MacMillan, M.A. 1985. The 1983 Summer Creel Census on Ahmic Lake, Neighick and Crawford Lakes, Parry Sound District.

- Creel period: May 21 – Sept. 30, 1983
- Estimated 30,935 rod hours of total angler effort expended. 44% occurred in July.
- Smallmouth bass E.U.C. 1.7 angler hours E.U.H.5.6 angler hours
- Walleye E.U.C. 75.0 angler hoursE.U.H. 131.3 angler hours
- Pike E.U.C. 18.3 angler hoursE.U.H.

(E.U.C. – "Effort per unit Catch"; E.U.H. – "Effort per unit Harvest (Kept))

- Estimated harvest:3575 smallmouth bass (1598 kg.)

162 walleye (228 kg.)
545 northern pike (436 kg.)
1821 yellow perch (191 kg.)
951 'other' species

Kujala, K.H. 1980. Renovation of Magnetawan Village Pickerel Spawning Areas – Parry Sound District.

- Spawning bed enhancement work conducted at Magnetawan dam by Junior Rangers during the summer of 1979.

OMNR, 1971. Creel census 1971 (found on Ahmic Lake file).

- Creel period: June – Sept. 1971.
- 911.5 walleye angler hours surveyed – 47 walleye caught for E.U.C. of 19.4 angler hours per walleye.
- 465.0 'bass' angler hours surveyed – 159 'bass' caught for E.U.C. of 2.9 angler hours per 'bass'.
- 515.5 'other' angler hours surveyed – 80 'other' fish species caught for E.U.C. of 6.4 angler hours per 'other' species caught.

Walden, F.A. 1949. Management of the Fishery of the Magnetawan River System – Limnology and Fisheries Management of Ahmic Lake. Parry Sound Forest District Biological Studies Number 2. 49 p.

- This report is too extensive to be adequately summarized here. Contents include Introduction, Geography, Physiography and Geology, Biological survey, Biological Characteristics and Fishery. Report available at Parry Sound District Office, Parry Sound Area fisheries files – Binder "A" – Fish Survey reports.

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Updated: 2018

Refer to Lake Fact Background Information document for explanation of content.

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