

Natural. Valued. Protected.

Lake Fact Sheet – Parry Sound District

Ahmic Lake

Location:

MNR District: Parry Sound
Geographic Township: Croft, Ryerson, Chapman and Spence
Municipal Township: Magnetawan
Watershed: Magnetawan River
Fisheries Mgmt Zone: 15

Basin and Terrain Characteristics:

Lake Survey Year: 1971
Surface Area: 1567 hectares (3917 acres)
Maximum Depth: 27.1 meters (89 feet)
Mean Depth: 8.1 meters (17 feet)
Perimeter: 69.7 km.
Island shoreline: 9.8 km.
Littoral Zone: 47% (zone of light penetration to bottom)
Access Points: 2 public; numerous private
Water Level: Inflow Regulated by OMNR dam/lock at village of Magnetawan and outflow regulated by OMNR dams – Feigen’s Dam and Kneofli Dam adjacent to Hwy 124
Crown Land: 5% of shoreline

Water Quality:

Secchi reading: 3.5 meters (1971 data); 2.2 – 3.8 metres (MOE, 1998)
Colour: Yellow/Brown
Alkalinity: 13.7 – 20.5 mg/l (1971); Level 3 – Moderately Sensitive (MOE, 1989)
pH: 6.0 – 6.5 (normal)
Total Phosphorus: 0.01 ± 0.005 mg/l (MOE “Lake Partner Program” 1998 data)

“Guide to eating fish”: Restrictions apply for walleye, bass and perch; but should be applied for all game fish. See consumption guidelines in the current *Guide to Eating Ontario Sport Fish*.

The guide is available electronically at www.ene.gov.on.ca.

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Fisheries:

Game Fish Species: Lake Whitefish, Northern Pike, Smallmouth Bass, Walleye, Yellow Perch.

Other species present: Cisco, White Sucker, Brown Bullhead, Burbot, Pumpkinseed, Rock Bass, Smelt.

Introduced Species: Zebra Mussel (viligers) and spiny water flea reported in 1998.
(Note: In 2001, Black Crappie reported present in Beaver and Crawford Lakes – connected to Ahmic Lake. Confirmed present in Ahmic Lake in 2002.)

Recent Stocking Record:

2005 - Walleye 935,000 fry (reported)

2003 - Walleye 188,000 fry

2002 - Walleye 288,000 fry

2001 - Walleye 100,000 fry

2000 - Walleye 550,000 fry

1991 - Walleye 12,243 summer fingerling

1990 - Walleye 22,895 summer fingerling

1988 - Walleye 13,270 summer fingerling

1987 - Walleye 2,338 summer fingerling

- 8,450 Smallmouth bass fingerlings stocked between 1922 and 1960. Unknown if these were introductory plantings or supplemental.
- 50,000 walleye fry and 950,000 walleye eyed eggs stocked between 1921 and 1954.
- Rainbow trout stocked between 1959 and 1964.
- Lake trout planted between 1924 and 1930. Unsuccessful introduction.

Summary of Fisheries Studies / Reports:

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.

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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.
- 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

McIntyre, E. 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)

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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

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 hours E.U.H. 131.3 angler hours

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- Pike E.U.C. 18.3 angler hours E.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.

Management Prescription:

This lake is being managed as a natural, self-sustaining warm and cool-water fishery for walleye, bass, and pike. Generic sport fishing regulations for FMZ-15 apply; there are no exception regulations.

Created: June 2000 (CD)

Revised: Oct. 2001, Apr. 2001, Mar. 2004, Mar. 2006 (EM)

Updated: January 2010

Refer to Lake Fact Sheet Interpretation document for explanation of content.

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