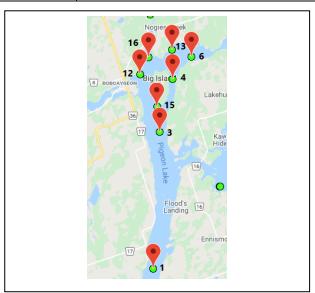


Pigeon Lake

Lake Morphology				
Coordinates	44°27'18.6"N			
	78°29'12.5"W			
Lake Surface Area	53.4 hectares			
Maximum Depth	17.4 metres			
Average Depth	3.0 metres			

Fish Species					
Fish Species	Sighted by MNRF	Sighted by the Public			
Brook Trout					
Brown Bullhead	х				
Brown Trout					
Burbot	Х				
Lake Trout					
Lake Whitefish					
Largemouth Bass	Х	Х			
Muskellunge	х	Х			
Northern Pike					
Pumpkinseed	х	Х			
Rainbow Trout					
Rock Bass	х	Х			
Round Whitefish					
Smallmouth Bass	Х	Х			
Walleye	Х	Х			
Yellow Perch	Х	Х			

Municipal and Association Facts			
Municipality	Trent Lakes, Selwyn, City of Kawartha Lakes		
Watershed	Kawartha Lakes		
Lake	Pigeon Lake Cottage Association Inc. Conc. 17,		
Association	North Pigeon Lake Association, Nogies Creek		
	Drive Cottagers' Association, Alpine Village		
	Property Owners' Association		
Conservation	Kawartha Conservation / Otonabee		
Authority	Conservation		



Monitoring and Management				
Currently monitored through the Lake Partner Program	Yes			
Source Water Protection Region	Trent Conservation Coalition			
Fisheries Management Zone	17			
Lake Trout Managed Lake	No			

Please see the introduction for information regarding data sources, limitations, and disclaimers.

Lake Partner Program Data – Total Phosphorus (ug/L)					
Site	Target	Average 2002-	Average 2006-	Average 2010-	Average 2014-
		2005	2009	2013	2017
1	< 20	19.5	23.8	NA	NA
3	< 20	14.3	16.3	17.1	15.1
4	< 20	18.0	NA	NA	NA
6	< 20	25.7	NA	NA	NA
12	< 20	15.8	17.2	20.7	17.4
13	< 20	15.7	14.4	15.3	16.1
15	< 20	17.0	17.4	18.8	16.2
16	< 20	16.5	17.0	28.6	16.9
All Sites Avg.	< 20	16.4	16.4	19.9	16.2

The Ontario Provincial Water Quality Objectives states: "To avoid nuisance concentrations of algae in lakes, average total phosphorus concentrations for the ice-free period should not exceed 20 μ g/L. A high level of protection against aesthetic deterioration will be provided by a total phosphorus concentration for the ice-free period of 10 μ g/L or less. This should apply to all lakes naturally below this value."

Lake Partner Program Data – Secchi Depth (m)					
Site	Target	Avg. 2002-2005	Avg. 2006-2009	Avg. 2010-2013	Avg. 2014-2017
1	> 1.2	0.6	NA	NA	NA
3	> 1.2	3.2	3.0	3.0	3.0
4	> 1.2	4.4	NA	NA	NA
6	> 1.2	4.0	NA	NA	NA
12	> 1.2	4.5	3.3	2.2	3.2
13	> 1.2	3.4	3.0	3.0	3.0
15	> 1.2	3.6	3.5	3.0	3.0
16	> 1.2	4.3	3.4	2.3	3.3
All Sites Avg.	> 1.2	3.7	3.3	2.8	3.1

Typical Secchi depths by lake trophic status

Oligotrophic: **2-4m** Mesotrophic: **1-2m** Eutrophic: **less than 1m**

Lake Partner Program Data – Calcium (mg/L)					
Site	Target	Average 2002-	Average 2006-	Average 2010-	Average 2014-
		2005	2009	2013	2017
1	> 2	NA	50.4	NA	NA
3	> 2	NA	30.6	30.4	31.4
4	> 2	NA	NA	NA	NA
6	> 2	NA	NA	NA	NA
12	> 2	NA	29.5	31.4	31.6
13	> 2	NA	30.3	30.9	31.1
15	> 2	NA	31.6	30.5	31.0
16	> 2	NA	30.5	31.4	32.6
All Sites Average	> 2	NA	31.6	30.9	31.5

Laboratory experiments have shown that the reproduction of most Daphnia species (a species of zooplankton that are a primary food source for many fish species) is jeopardized at lake calcium concentrations below 1.5-2.0 mg/L.

For more information on other citizen science initiatives that you can get involved with, as well as more detailed information about water quality monitoring, check out <u>FOCA's Citizen Science Guide</u>.

For more information on aquatic invasive species, check out <u>www.invadingspecies.com</u>

Levels of contaminants in fish flesh (e.g., mercury, PCB's, mirex, organochlorine pesticides, and other organic chemicals) are reported in: <u>The Guide to Eating Ontario Sport Fish</u>.