

**Baboon Lake  
(480-697200-12300-01)  
01607BABL**

**SECONDARY LAKE INVENTORY  
1997 STUDIES**

**Ministry of Environment, Lands and Parks  
Project No. IVBVS622 (FRBC)**

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**APRIL 1998**

## COVER PAGE

**Lake Name:** Baboon Lake

**Alias:** -

**Watershed Code:** 480-697200-12300-01

**Waterbody Identifier:** 01607BABL

**Survey Date:** September 24, 1997

**Project Code:** IVBVS622

**Survey Objectives:** to conduct secondary lake inventories in the southern portions of the Morice and Lakes Forest Districts (Prince Rupert Forest Region)

**Survey Type:** Secondary Lakes Inventory

**Survey Agency:** CO60

**Proponent:** MELP

**Inventory Program:** FRBC

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- Appendix A Bathymetry (E-line Trace)
- Appendix B Lake Outline Map
- Appendix C Air Photo Plate
- Appendix D Lake Survey Form
- Appendix E Fish Collection Form
- Appendix F Photograph Contact Sheets

## 1.0 LAKE INVENTORY DATA

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### 1.1 WATERBODY

Type:	Small lake (<400 ha)
Lake Name:	Baboon Lake
Watershed Code:	480-697200-12300-01
Waterbody Identifier:	01607BABL
Map Reference:	093L.069 (1993), 093L.079 (1993)
Air photo Reference:	30BCC 93057 No.158
Surface Area: 138 ha	Source: MELP
Elevation: 989 m	Source: TRIM
Biogeoclimatic Zone:	Sub-Boreal Spruce (SBS)

The lake is shown in Plates 1 and 2.

### 1.2 ACCESS

The lake was accessed by floatplane from Burns Lake. Flying time was approximately 25-30 minutes northwest of Burns Lake. A road (Mitchell Road FSR) runs along the east side of the lake; however, trails leading to the lake were not evident in air photos.

### 1.3 TERRAIN

The lake appears to be a glacial lake (GL), with a southwest aspect. It is situated on the valley floor (VF), and exhibits no signs of hillside coupling (DC). Land in the immediate vicinity of the lake currently does not show evidence of use. Forest Development Plan Maps do not indicate logging plans within approximately 1000 m of the lake.

### 1.4 SHORELINE

The shoreline is comprised of 65% rocky substrate and 35% marsh. Large and small cobbles were observed throughout the entire shoreline, with gravel intermittently present. Gravel in some areas of the lake may provide potential.

**Plate 1 Aerial view of lake looking west.**

spawning habitat. Shoreline vegetative cover is sparse and consists primarily of grass. There was a dock with one boat, observed at the east end of the lake. No other recreational features (i.e. resorts, campsites, boat launches) were identified.

## 1.5 BATHYMETRY

An E-line survey was completed along the long axis of the lake using a Lowrance X-16 unit (equipped with continuous paper trace sounder rolls). The maximum recorded depth was 1.5 m. Based on the E-line survey, the estimated littoral area (% lake < 6 m) is 100%. The maximum high water mark was observed at 0.25 m.

## 1.6 INLETS/OUTLETS

One permanent inlet, one ephemeral inlet and one outlet have been identified for this lake. Both inlets were previously mapped on the 1:20,000 TRIM map. One of the inlets did not have an existing watershed code; an interim locational point (ILP) was used to identify that stream.

Inlet (permanent)

*W/s: 480-697200-12300-82522*

This inlet has a distinct channel connecting a marsh area. The channel width is approximately 1.5 – 2.0 m at the lake. The substrate consists primarily of sand and silt; however, there appears to be a small amount of gravel and cobble. Few macrophytes were observed at the mouth of the inlet. Potential rearing habitat exists in this inlet.

Inlet (ephemeral)

*ILP # 97*

The channel of this inlet is not distinct, however it also drains a marsh/wetland area. Water was present but not flowing. The substrate consists of sand and silt. Fry were observed at this inlet and may indicate the channel is currently being used as rearing habitat.

Outlet

*w/s code: 180-374000-95200-49100-02*

The outlet has a distinct channel, with an approximate width of 1.5 m at the lake. The stream meanders through an extensive marsh area. The substrate is composed of gravel, large/small cobble, and sand and silt, and offers potential spawning habitat. Numerous fry were observed at the outlet and may indicate the channel is currently being used as rearing habitat.

## **1.7 AQUATIC FLORA**

At the time of the survey, small areas of the lake contained emergent vegetation (<10%) and submergent vegetation (10%). Submergent species included *Potamogeton perfoliatus* and *Myriophyllum spp.*; emergent vegetation included *Nuphar lutea* (yellow pond-lily) and *Potamogeton natans* (floating-leaved pondweed). Floating algae were not observed.

## **1.8 WILDLIFE**

During the survey, ducks and beaver lodges were observed.

## **1.9 LIMNOLOGICAL SAMPLING**

The limnological sampling site was located at the deepest recorded point (1.5 m). Dissolved oxygen (mg/l) and temperature (C) were measured with a YSI meter (model 85). No thermocline was evident. Oxygen levels were between 9 and 10 mg/l from surface to bottom (for profile results, refer to Appendix D). The Secchi disc was visible at 1.25 m; water was clear and colourless. pH was measured using a hand held Hanna pH meter. Surface and bottom pH was 8.0. No H<sub>2</sub>S was detected.

## **1.10 SURVEY COMMENTS**

### **1.10.1 Problems**

No field problems were encountered.

### **1.10.2 Fish Comments**

One reidside shiner (*Richardsonius balteatus*) was captured during gillnetting. One floating gillnet was set perpendicular to shore for approximately 2.5 hours. Small groups of fry (trout possibly), were observed at one of the inlets as well as the outlet.

### **1.10.3 Habitat Comments**

No inlet spawning habitat was observed, however, potential lake spawning habitat exists. Both inlets and the outlet appear to have good rearing habitat. Numerous fry were observed within the channels. The significant amounts of shoreline grasses may also provide fish cover.

**1.10.4 Rehabilitation/Enhancement Comments**

No rehabilitation/enhancement efforts are recommended.

**1.10.5 Follow-up Sampling**

No follow-up sampling is recommended.

**1.10.6 Other Concerns/Interest Points**

None.



## 2.0 PROJECT- SPECIFIC RESULTS DISCUSSION

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Fish sampling results show that redbreast shiner are present in this lake. Potential spawning habitat was not observed in inlets but was present in the lake and along the outlet channel. Potential rearing habitat was also observed at both inlets and in the outlet channel. Dissolved oxygen levels ranged between 9 and 10 mg/l. One dock was observed. At the time of the survey, there was one boat at the dock.

### 3.0 REFERENCES

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- McPhail, J.D., and R. Carveth. 1994. Field Key to the Freshwater Fishes of British Columbia. BC Ministry of Environment, Lands and Parks. Fisheries Branch. (Resources Inventory Committee Manual)

Scott, W.B., and E.J. Crossman. 1973. Freshwater Fishes of Canada.  
Fisheries Research Board of Canada, Ottawa. 966 p.

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**Plates**

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**Plate 1** Aerial view of lake looking west.



**Plate 2** View looking east from mouth of inlet ILP 97.



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## **Appendices**

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**Appendix A**

**Bathymetry (E-line Trace)**

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**Appendix B**

**Lake Outline Map**

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**Appendix C**

**Air Photo Plate**

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**Appendix D**

**Lake Survey Form**

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**Appendix E**

**Fish Collection Form**

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**Appendix F**

**Photograph Contact Sheets**

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**Photographic index for southern lakes secondary lake survey 1997.**

Lake	Watershed Code	Roll	Pic#	CD	Image	Neg	Dir.	Comment
M45	480-697200-12300-01	11	1	0820	101	9368	W	Overview of lake
M45	480-697200-12300-01	11	2	0820	102	9368	NW	Inlet 480-697200-12300-82522 and outlet
M45	480-697200-12300-01	11	3	0820	103	9368	NE	Outlet
M45	480-697200-12300-01	11	4	0820	104	9368	E	Inlet ILP 97
M45	480-697200-12300-01	11	5	0820	105	9368	Up	Outlet
M45	480-697200-12300-01	11	6	0820	106	9368	Dn	Outlet
M45	480-697200-12300-01	11	7	0820	107	9368	Dn	Inlet ILP 97
M45	480-697200-12300-01	11	8	0820	108	9368	Up	Inlet ILP 97
M45	480-697200-12300-01	11	9	0820	109	9368	NE	HWM=25cm
M45	480-697200-12300-01	11	10	0820	110	9368	SE	Dock with boat
M45	480-697200-12300-01	11	11	0820	111	9368	Dn	Inlet 480-697200-12300-82522
M45	480-697200-12300-01	11	12	0820	112	9368	Up	Inlet 480-697200-12300-82522
M45	480-697200-12300-01	11	13	0820	113	9368	NW	Panoramic view of lake at limnosite
M45	480-697200-12300-01	11	14	0820	114	9368	W	Panoramic view of lake at limnosite
M45	480-697200-12300-01	11	15	0820	115	9368	SW	Panoramic view of lake at limnosite
M45	480-697200-12300-01	11	16	0820	116	9368	E	View of lake at limnosite
M45	480-697200-12300-01	11	17	0820	117	9368	N/A	LKC

