

Spring 2009

SParKLe

Society for the Protection of Kalamalka Lake Newsletter

Issue #1



In this Issue

- The Purpose
- The Action
- The Plan (so far)
- Why is it that color anyway?
- What lies below may surprise you.
- Kalamalka Stories: Linda Garrett
- Mary Jane Salmon Recognized
- SPKL Directors
- SPKL Contacts

The Purpose

The purpose of SPKL is to protect the quality and health of Kalamalka Lake Watershed for all future generations, so that all user groups may enjoy the lake in an environmentally sustainable manner.

SPKL was registered a Society with the BC Registrar of Companies on June 27th 2008.

Our group formed in response to a common desire to protect Kalamalka Lake, particularly in the light that it is our freshwater drinking reservoir. Historically many residents of Coldstream have expressed a similar desire; there was a Save Our Lake group and there is a Friends of Kal Park Group. Our group is inspired by the lessons learned by our founding member Christine Cookson with her experiences growing up in Switzerland and seeing first hand the results of environmental abuse on some Swiss Lakes. We want to use a fact-based approach for decision-making with regard to Kalamalka lake and its watershed. We would like to gather water quality data, monitor and identify problem areas. Then we hope to educate and communicate with the public, and research community in order to fulfill our above stated purpose.

The Action

Since it's conception SPKL has:

- written letters condemning the proposed 200 bay marina development on Wood Lake and created public awareness on the proposed marina development,
- voiced concern over a proposed watercraft rental business that would create elevated noise pollution, congestion and lake degradation,
- applied for a grant to clean up Kal Lagoon,
- collected technical reports on Kal Lake and its watershed and,
- created the SPaRKLe newsletter including current SPKL issues, technical facts and local stories about Kalamalka Lake.



The Plan (so far)



Our collection of initiatives include:

- creating permanent signage at Kal Lake boat launches,
- partnering with the BC Lake Stewardship Society to complete regular sechi disc and temperature readings,
- working with local teachers to create educational displays, presentations and interactive field excursions and,
- creating awareness by participating in community events such as the Sunshine Festival, the Winter Carnival, Coldstream/Lavington Days, etc.



SParkLe

Spring 2009



Why is it that color anyway?



Kalamalka Lake is well-known for its attractive mottled aqua-marine, or “marled” colouring.

The amazing color changes are due to non-uniform calcium carbonate precipitation throughout the lake.

Calcium carbonate is present in the deposits beneath the lake⁴. As the lake warms, the calcium carbonate becomes less soluble resulting in the precipitation of calcite crystals. These crystals cloud the surface waters to an approximate 10 metre depth for much of the summer and early fall.

As the lake cools, the calcite crystals become soluble causing the aqua marine shades of summer to fade into the grey/blue hue of the lake’s winter personality.. .so now you know!

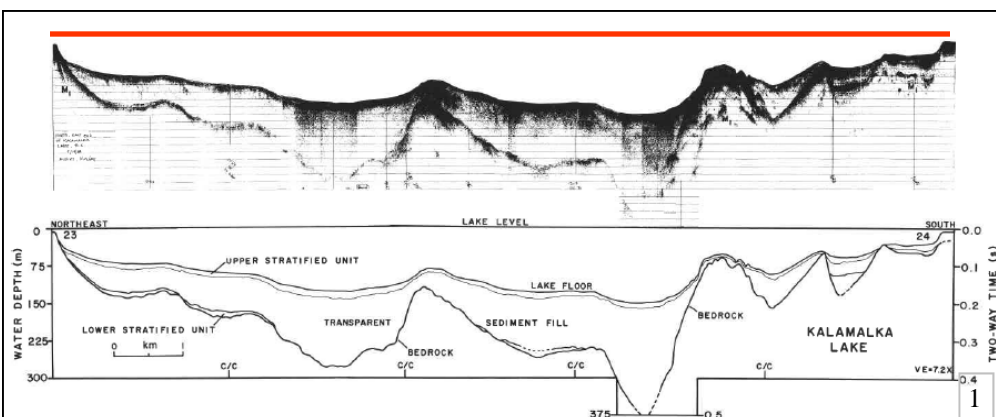
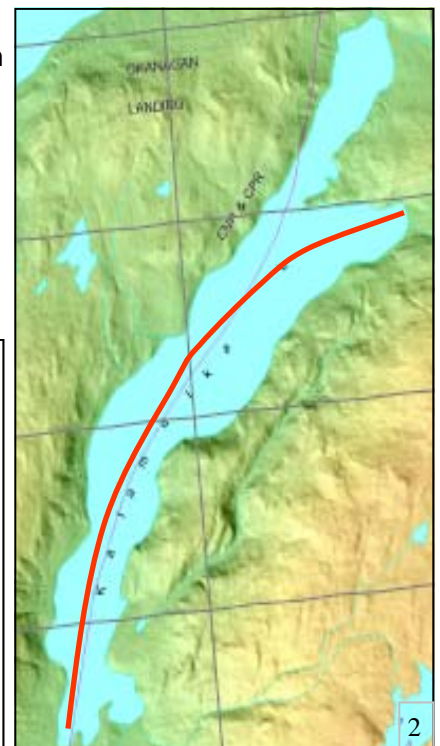
What lies beneath may surprise you.

A study completed in 1990 looked at what lies beneath Kalamalka Lake by completing a uniboom seismic reflection survey. Seismic reflections use sound waves to create images of materials that appear in varying shades of grey depending on their densities. The more dense, the darker they appear. The uniboom images, when taken at a constant velocity in a uniform path, appear as a cross section of what lies directly below.

In this study 23 crisscrossing paths and one long path down the centre of the lake were surveyed. The red line in both figures represents the water surface along this long path. The top shadowy figure below is the seismic reflection profile illustrating what the layers of sediment look like immediately below the water surface (the red line).

The diagram on the bottom describes what the seismic reflection represents. It shows that the surface beneath Kalamalka Lake has been eroded as much as 417 m below lake level (26 m below sea level!) and is characterized by a series of over-deepened depressions. Up to 272 m of glacial sediment has been deposited on top of this bedrock, mostly in a thick uniform layer.

The lack of layering seen most often in lake sediments suggests that the uniform layer was deposited very quickly. This supports Dr. Robert Fulton’s theory⁵ that a collapsed ice damn located in OK Falls, during the last glacial episode released massive amounts of water through the Okanagan Valley.





SPaRkLe Spring 2009



Kalamalka Stories: Linda Garrett

Linda Garrett (nee Scherba), a retired judge's secretary, was born in Vernon. Linda and her sister, Anne Louise, were raised on a small farm in the north BX area, not far from where Vernon Secondary School now exists.

Linda, being the oldest of the neighbourhood children, was often responsible for leading a gang of her younger peers out to Kalamalka Lake for the day, on foot, by bike, or even by tricycle. In those days, Kalamalka Lake Road, like many other main roads, was not paved. What was a routine trip to the beach for Linda and her charges, some as young as five years old, would be unheard of today. Linda admitted that the return trip on the dusty road in the sweltering heat was challenging but by the next day they'd often do it all over again.

Linda's family would often have Sunday picnics at Kal Beach. After experiencing a near-drowning off the dock during one of those Sunday picnics, Linda took swimming lessons at the beach.

Linda currently resides along the shores of Okanagan Lake and enjoys the natural beauty of our area every day. We thank Linda for sharing her memories with us.

If you'd like to share one of your stories about Kalamalka Lake please contact us. We'd love to hear about them and print them in this newsletter.



Mary Jane Salmon Recognized

After hearing about the proposed 200 bay marina on Wood Lake, Coldstream resident, Mary Jane Salmon, started a petition that included members of her choir. Mary Jane collected 21 signatures that were against the Marina proposed "on Wood Lake due to the affect on Kalamalka Lake". The petition stated that those signing it "do not regard it (the proposed marina) as being environmentally sound or of benefit in any way to our residents"

Our hats go off to one of SPKL's newest members. Yours is a great example Mary Jane. Thank-you!

SPKL Directors

Christine Cookson
Janice Morgan
Flo Ryan



Louise Christie
Jennifer Sigalet
Trina Koch

We are currently looking to add to our directorship. If you are interested in becoming an SPKL director and have some time and energy to invest, please contact us.

Contact Information

Mailing Address: 8585 Kalavista Drive, Vernon BC V1B 1K4
Phone: (250) 542-4350
Email: info@spkl.com

Interested in becoming an SPKL member?
Please fill out the membership form attached to this newsletter and send it in!

References

- 1 Seismic reflection investigation of Kalamalka Lake: a "fiord lake" on the Interior Plateau of southern British Columbia
UNES HENRYT . MULLINS
Department of Geology, Syracuse University, Syracuse, NY 13244, U.S.A.
NICHOLAESY LES
Department of Geology, University of Toronto, Scarborough Campus, West Hill, Ont., Canada M1C 1A4
AND
EDWARDJ. HINCHEY
Department of Geology, Syracuse University, Syracuse, NY 13244, U.S.A.
Received December 27, 1989
Revision accepted May 1, 1990
- 2 BC Watershed Atlas
- 3 http://farm1.static.flickr.com/38/162679693_d6b832b93e.jpg?v=0
- 4 The calcite cycle of Kalamalka Lake : Influence on Lake Productivity
D.D. Williams, 1972
<http://a100.gov.bc.ca/pub/acat/public/viewReport.do?reportId=12572>
- 5 Bedrock topography of the North Okanagan Valley and stratigraphy of the unconsolidated valley fill
Dept. of Energy, Mines and Resources 1972
(Geological Survey of Canada) ; 72-8.

Society for the Protection Of Kalamalka Lake (SPKL)



MEMBERSHIP INFORMATION

Mission Statement: To preserve and protect the quality and health of Kalamalka Lake watershed for all future generations so that the lake may be enjoyed by all user groups in an environmentally sustainable manner.

Name of individual or organization: _____

Mailing Address:

Phone number: _____

Fax number: _____

E-mail: _____

Membership includes volunteer participation in regular meetings, involvement in SPKL projects and receiving the SPKL newsletter.

Membership:

Family (\$25)

Individual (\$15)

Student (\$5)



Donations: A donation in any amount is welcome. Businesses donating \$50.00 or more will be recognized in the SPKL newsletter.

Amount enclosed: \$ _____

In signing, all applicants for SPKL membership acknowledge that they endorse and support the mission of the society.

_____ signed on the _____ day of _____
(Please sign here)

Please send to: SPKL, 8505 Kalavista Drive, Vernon BC, V1B 1K4

For more information visit our website at www.spkl.ca