

The year 2023 has truly been a pivotal year for our organization, created more than 20 years ago, due to the acquisition of a completely new identity with the adoption of a new name and logo. Since January 2023, Conservation Lac Brome replaced the former Renaissance Lac Brome: a name which was no longer representative of our mission. Our team invested significant efforts to ensure a smooth transition between the two identities.

# A NEW BLUE PATROL MEETING CITIZENS ON LAND AND ON THE WATER

It was a pivotal year also due to the establishment of our new **BLUE PATROL**. This initiative, which adds a nautical component to our previous on-land residential visits, allowed our patrollers to meet boaters on the lake, at the boat-washing station, and at the boat launches to raise awareness about the best eco-responsible navigation practices.

A special thank you to the **Town of Brome Lake** and **Bombardier Produits Récréatifs** for their substantial donation, allowing us to finance the acquisition of a brand-new motorized boat. Unfortunately, given the heavy rainfalls, outings on the water were not as frequent as we would have liked in 2023. Nevertheless, the 134 boaters encountered were all welcoming, open and receptive to the advice of our patrollers.



2023 Blue Patrol, (from left to right) Mathilde Richard-Pitre, Élora Michaud, Camille Breton

And now for our on-land patrol... As you may have noticed, residential construction projects were numerous in 2023. Unfortunately, our patrollers noted significant gaps in erosion prevention measures on all 33 sites visited. Eight (8) of them had to be reported to the Town which is committed to putting in place means to strengthen the application of its regulations.

Overall, a total of **548 residents, visitors and construction workers** were encountered by our **BLUE PATROL**, on the water, on land, during door-to-door operations and public events. All in all, a successful and promising initiative for upcoming years!



### THREATENING WEATHER PHENOMENA

The extreme weather events that hit our region, notably the torrential rains, led to increased lifting and transport of phosphorus and sediment towards the lake.

Remember that high phosphorus concentrations can have an impact on water quality and contribute to the proliferation of aquatic plants and algae. Since 2008, we have observed a slight upward trend in the concentration of phosphorus in the lake. This summer, phosphorus levels in the lake water exceeded the target threshold of 15  $\mu g/L$  in July, reaching 19.2  $\mu g/L$ . In short, the lake waters remain overly enriched with phosphorus.

Although we cannot control heavy rainfalls, it is imperative that lake users do not amplify the problem by disturbing the bottom of the lake which already contains a large quantity of sedimented phosphorus that can be released by deep disturbances. In 2023, we noted that the average phosphorus levels in 4 of the lake's 6 tributaries still exceed the standard of 20  $\mu g/L$  of phosphorus which would guarantee better health of the lake long term.

It goes without saying that we will continue to carefully monitor the impacts of climate change and extreme weather events on our waterways in the coming years. This is especially important as, according to weather models, our region is expected to experience more abundant and intense rains as well as warmer temperatures in the coming years. These effects of climate change could have a negative impact on the health of Brome Lake.

Due to the heavy rain, two of our annual activities had to be cancelled. That was the case of the **Coldbrook Creek Cleanup**, due to strong currents and of our flagship event, **Paddle Brome Lake**, due to rain and violent winds. However, do not worry, for these annual activities were simply postponed and we hope to see you in the coming summer!

#### ALGAE AND BLUE-GREEN ALGAE

The average water transparency of the lake in summer 2023 was 3.4 m which is slightly better than the average of previous years. However, it is important to note that water transparency dropped significantly from 4.25 m to just 2 m as of July 20th. This drop persisted until October, indicating a strong presence of algae and suspended matter in the water column.

During the heatwave at the beginning of July, we also observed a blue-green algae bloom which was, fortunately, quickly dissipated by the winds. A second bloom occurred in September, a month that was particularly warm and sunny. Unlike previous years, however, this one lasted several days and covered a large portion of the lake.



#### **ACTIVITIES WITH THE COMMUNITY**

For the second year in a row, members of Faisons notre part, dove into the waters of the lake for a clean-up operation which took place, this year, in front of Douglass Beach and near Eagle Island. Partner of the event, the Club Nautique de lac Brome made its facilities available and mobilized volunteers. The result was impressive: more than 700 kg of waste, probably present for decades, was removed from the bottom of the lake.



Faisons notre part's team and divers during the 2023 Brome Lake Clean-up

Also in partnership with the **Club Nautique** and **OBV Yamaska**, we organized recreational and educational activities to raise awareness of aquatic ecology for students in the village. This contributed, we hope, to awakening their environmental awareness and preparing the succession of the younger generation!



Coldbrook Creek discovery activity with Knowlton students





2023 Board of directors and employees (from left to right): Richard Bickley, Guy Shedleur, Don Joyce, Hélène Drouin, Patrick Binckly, Anaïs Renaud, Jean-Pierre Pilon, Danielle Paquette, Christian Roy, Léa Couture. Absent in this photo: Françoise Stanton, Caroline Côté-Larose, Marcos Castellanos, Mona Gagnon, Élizabeth Dupéré, Mathilde Richard-Pitre, Élora Michaud, Camille Breton

## BOARD OF DIRECTORS AND PROJECTS TEAM

We would like to thank Danielle Paquette, Élizabeth Dupéré and Richard Bickley, dedicated administrators who left their positions due to personal reasons. As a result, our board of directors now counts 9 members out of a total of 12 positions. The members of our board, in addition to ensuring the smooth running of the organization, volunteer several hours of their time to realize all our projects. We thus need reinforcement!

We have also experienced significant changes within our projects team. Our project director, Anaïs Renaud, who had worked with the organization for 5 years, left us in July. Although we are saddened by her departure, we are delighted with her appointment as environmental advisor to the Town of Brome Lake. Furthermore, we are pleased to welcome Marcos Castellanos, project director, and Léa Couture, environmental specialist, to the team.

In short, we had a very busy year in 2023 and we approach 2024 with optimism because we feel the mobilization of our community towards the protection of the lake, now more than ever. More and more of us are saying:

I take care of my lake!



Jean-Pierre Pilon President of CLB





A special thanks to all donors and volunteers of CLB who allow us to improve our activities to protect Brome Lake and its watershed.

Consult our Annual Activity Report which will be available at the Annual General Meeting on May 4th, 2024 for a more detailed review of CLB's achievements in 2023 and future projects.

