

Did You Know That Spring Lake is aerated in the winter months?

If you look towards the north shore of our lake in the winter months you will probably see a white mist of what looks like two mushroom caps. These two white sprays create open water or polynia as they are known, and are formed by two electrically-run aerators and aerate or provide oxygen into the water in the winter months when ice covers the lake. Without this aeration, a cold and long winter with thick ice might starve the lake of enough oxygen to keep some fish and other types of wildlife alive. As it is, Spring Lake is known as a eutrophic lake (see our article on the EAC link of the Village website) and like many lakes in our region is gradually getting more shallow and producing more organic material which competes for available oxygen.

We have had several questions from residents about Spring Lake aeration and in point form we hope to answer as many of these as we can:

- The aerators are owned by and the electricity is paid by the Alberta Conservation Association. The 'ACA' is a not-for-profit organization, NOT a government department that has its funding provided through the sale of fishing and hunting licenses and increasingly through corporate donations.
- Aerator maintenance is also paid by the Alberta Conservation Association.
- A volunteer committee of several Village residents helps the ACA install the aerators in the fall and withdraw them once the ice melts in the spring.
- Advisory signs about lake aeration are placed at a couple of the key access points to the lake and safety warning signs about thin ice are strategically placed near the polynia to hopefully discourage anyone from approaching the open water areas.
- Oxygen levels are taken at various points throughout the lake and at various depths during the winter months. As an example, last year's measurements showed a healthy amount of oxygen was present. Rainbow Trout, which are stocked in our lake typically twice a year by the government, can overwinter and provide fishermen with quality-sized catches in the subsequent fishing season.
- Some water evaporation does occur but it is minimal relative to the rate that occurs in the 3 warmer seasons with wind and wave action.
- A word about lake flora and fauna: Winter aeration not only helps the sport fishermen. Because our lake benefits from increased oxygen levels due to aeration many types of plant life and small invertebrates also flourish. These provide food for other birds, amphibians and reptiles and the biodiversity of our lake increases. You may have noticed ospreys and white pelicans which were not common around our lake over ten years ago. These and other birds are drawn by increased food sources helped along by winter aeration.

- IF you ever see that one of the aerators in not functioning, we ask that you please call: **1 877 969-9091** or the Village Office. One of the Village Aeration volunteers or the ACA will follow-up.

There are about twenty lakes in Alberta which the ACA aerates. Another lake close to Spring Lake which is aerated is Muir Lake just north of Spruce Grove.

M. Madsen