



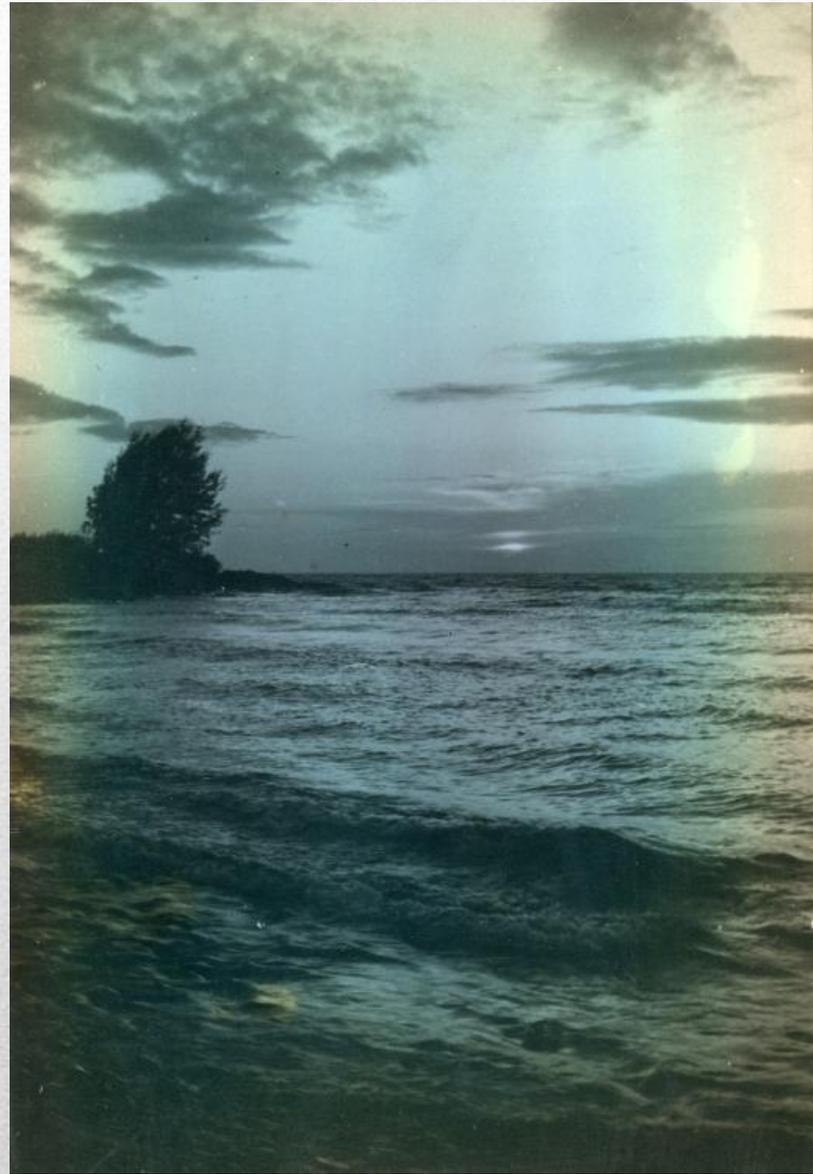
Williamson History Machine

Williamson's Weird Weather



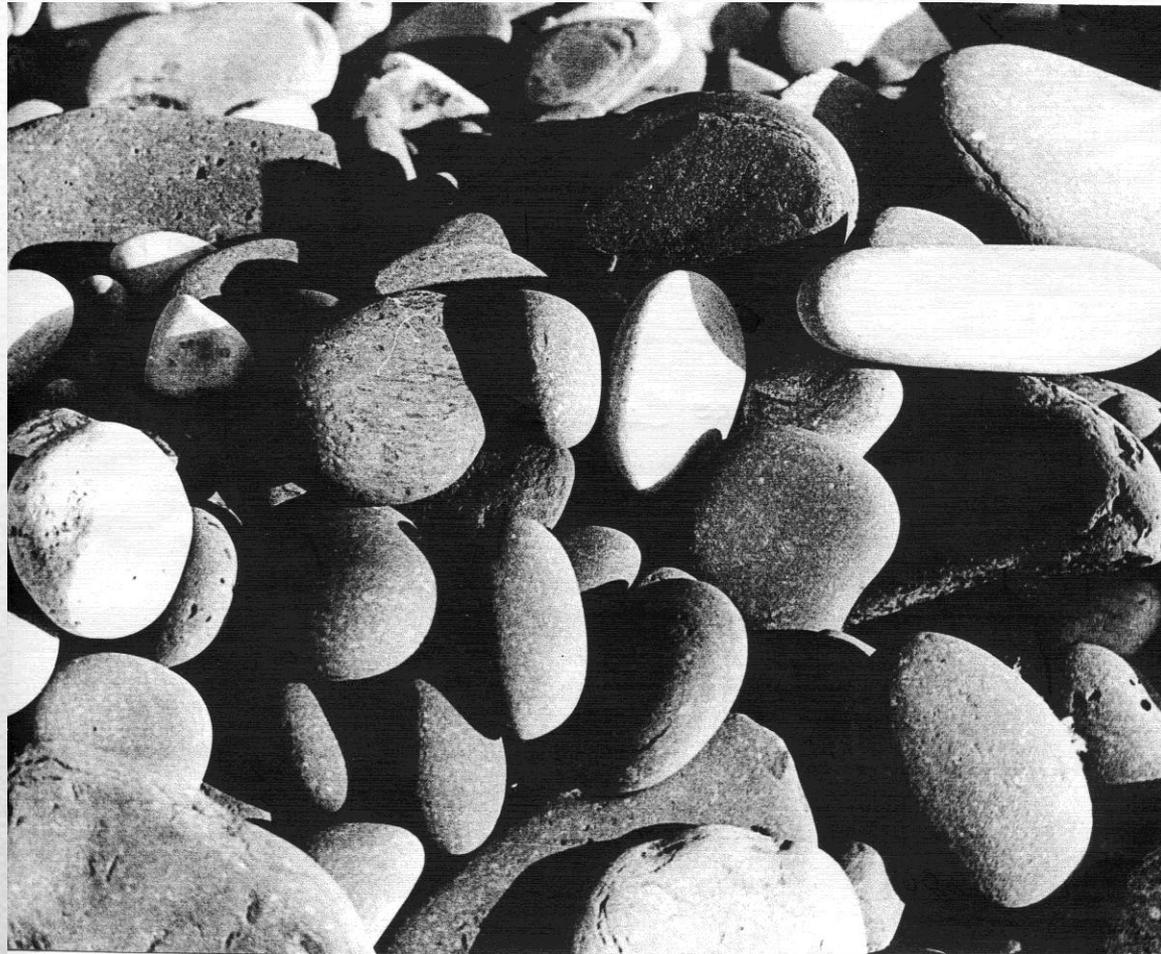
This is a waterspout or tornado over water around the turn of the 20th century.

**Lake Ontario
can leave us
with serene
sunsets or ...**





Tons upon tons of snow as seen in this shot of ice, cover near Ontario's edge.



**Weather works to erode large boulders
into smooth rounded rocks.**



We get many influences from the lake but perhaps none so large as lake effect snow.

Why does lake effect happen?

It all has to do with the temperature of the lake. It takes a long time for the lake to cool down from its warmer summer temperatures. When a cold air mass passes over the lake in winter, the lake water still has relatively warmer temperatures. As condensed air rapidly rises and as moves inland, it can no longer hold this condensation, and it falls producing a large amount of snow. You could say it makes us flakey. The more open water there is on the lake, the more snowfall. That's why we get more snow than Rochester, but everywhere east of us gets more still. Why does the east get more? It's due to the fact that our winds usually come out of the West or Northwest and pass over the open waters of Lake Ontario longer. This is known as the lake's fetch.

Why do we get more lake effect than areas near Buffalo?

Once again, it's because of the lake. Lake Erie freezes over in the winter because at 200 feet deep it is much more shallow than Ontario at 900 feet deep. Here's an experiment for you. Take two gallon jugs. Fill one $\frac{1}{4}$ of the way full. Fill the other completely full. Place both in the freezer, check every ten minutes and find out which freezes first. It's the same as lake effect and Lakes' Erie and Ontario. When Erie freezes the lake effect snow machine turns off because it doesn't have water to draw from.

So why is it cooler near the Lake Ontario and Erie shorelines in the summer?

Once again, it's the lakes. Since they are deep it takes a long time for the water to warm up in the spring. What about that cool breeze you feel at Forman Park or Lake Rd.? It's nature's air conditioner. Lake Ontario. So while we whine about lake effect snow in the winter, not too many people whine about the wonderful lake effect breezes in the summer.
