



variations to learn more about how the region had changed over thousands of years.

In 1994, we discovered some unexpected changes in the diatom collections of these Arctic ponds. At one site, we sank a hollow tube about 100 cm into the pond bottom, extracted a sediment core and sliced it into sections. By using dating techniques based on the radioisotopes carbon-14 and lead-210, we knew that this particular core stretched back about 6,500 years. For most of that time, the same three or four diatom species had dominated the pond. But around the mid- to late-nineteenth century, the diatom community changed dramatically: it became more diverse and complex, a sign that





