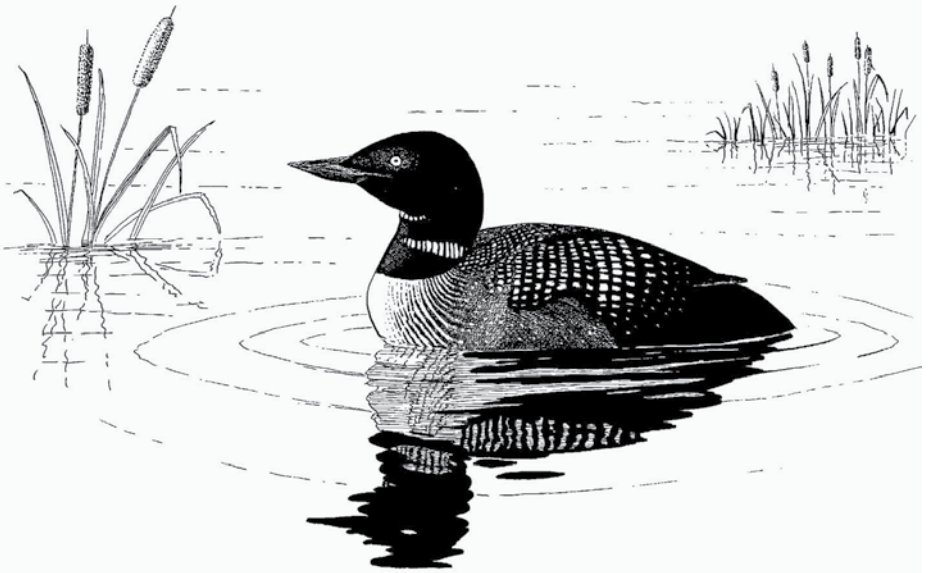


MAIDSTONE STATE PARK

A Natural
History Guide



AGENCY OF NATURAL RESOURCES
Department of Forests, Parks and Recreation

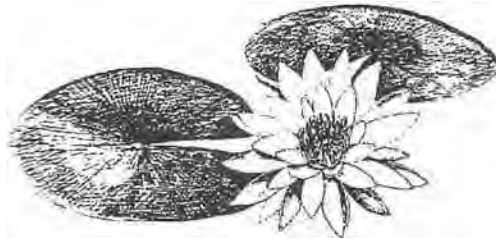
Maidstone State Park

Maidstone Lake is one of the clean, clear lakes found in the Northeast Kingdom of Vermont, an area known for its rugged terrain and wild beauty.

Home of the lake trout, landlocked salmon and smelt, this deep lake also supports loons, an occasional moose, and other wildlife attracted to this remote location.

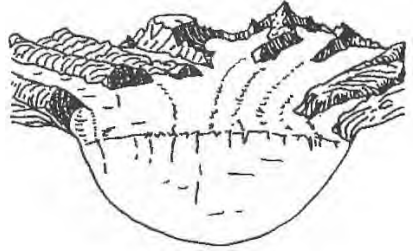
The 475 acre state park and forest is a combination of northern hardwood and boreal forest with sugar maple, beech, yellow birch, red spruce and balsam fir as the most common trees.

Maidstone and its surroundings are rich in opportunities for recreation and reflection. This booklet can guide you in your explorations of this amazing place.

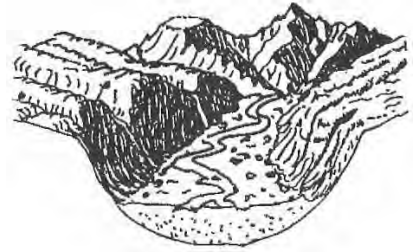


Glaciers

Maidstone State Park is a wonderful place to relax and enjoy the peaceful beauty of nature. As you sit and relax, taking in the view, it is hard to imagine that everything you see was formed by tremendous geologic forces. Twenty thousand years ago glaciers covered this region, moving from north to south, scraping everything in their path. These glaciers were more than a mile thick and incredibly heavy. Everything was scraped away, all plants and all soil. All living things were removed. In Maidstone, the heavy glacier gouged out the landscape, creating a perfect low point for the lake to form later.



As the glaciers slowly melted many years later, they retreated toward the north and released huge amounts of water. The melting water carried all the boulders, gravel and sand that had been trapped in the ice of the glacier. As these torrential glacial rivers slowed down, the debris started to fall out. The largest rocks fell out first, those are called glacial erratics. You can find glacial erratics here in Maidstone State Park—look for large boulders in the woods. The large erratics you see were transported from locations far away.



Smaller debris such as the sand and gravel trapped in the glacier settled more slowly into the glacial streambeds and eventually blocked many melting streams. When a dam of rocks and sand blocked the glacial stream in this area, Maidstone Lake was formed in the depression created by the massive glacier. As you look out at the landscape now, look for signs of tremendous geologic forces that formed this now tranquil place.



Maidstone Lake

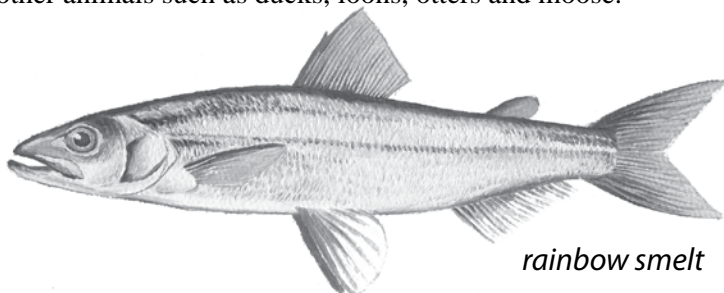
Maidstone Lake is unique because of its great water quality. You can imagine that water fresh from a glacier is about as pure and clean as you can get. Even 12,000 years later, Maidstone Lake is one of the highest water quality lakes around.

The deep clean water provides perfect conditions for a prolific cold water fishery. The lake water is stratified into layers of temperatures where the deep part of the lake stays cold year round. Fish that thrive in Maidstone Lake include lake trout, landlocked salmon, rainbow trout, brook trout and smelt. The trout species and salmon are fun to catch in the summer months, and the smelt, often food for the other fish, are very fun to catch during the winter months.

This cold, sandy bottomed, boulder strewn, spruce and fir tree rimmed northern lake is excellent habitat for these fun game fish and many other animals.

There is something special about a pristine lake surrounded by a thick forest. Not only is this lake home to some of the most interesting cold water fish, but is also excellent habitat for many other plants and animals. The surface film of Maidstone Lake is home to insects that can walk on top of the water surface such as water striders, as well as home to floating plants like lily pads. Below this is the open water level, where free swimming fish like trout and microscopic plants dwell. The very bottom of the lake has the very coldest water, and is the place where trout, salmon and smelt retreat on the hottest summer days. The bottom surface of the lake is also habitat for insect larvae such as mayflies, dragonflies and damselfly larvae. The sandy bottom is also home to crayfish.

All these plants and animals make up a complex food web where they get the energy they need by feeding on the other plants and animals in the lake. When you include plants found on the shoreline, Maidstone Lake is a very complete and complex habitat for the animals mentioned here, and other animals such as ducks, loons, otters and moose.



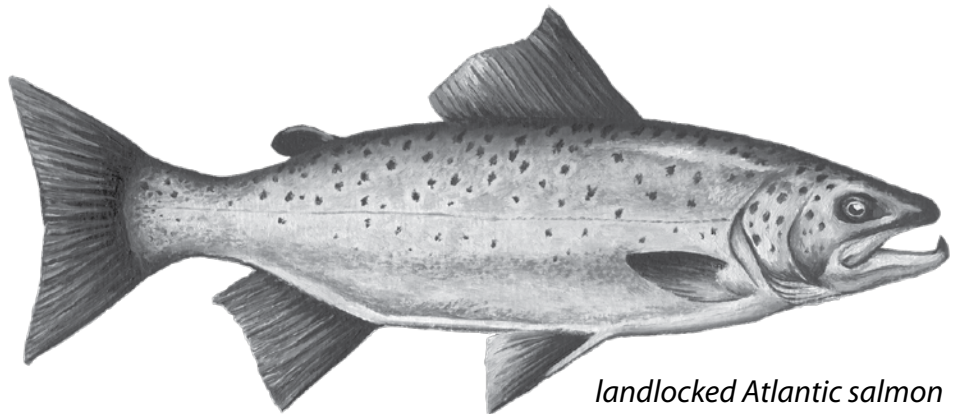
rainbow smelt



brook trout



lake trout



landlocked Atlantic salmon

Boreal Forest

Glacial deposits left in Maidstone State Park created the foundation to grow the boreal forest you see around the lake today. There are many different types of trees growing in Vermont, and every type of tree has different needs and requirements that determine where they can grow. A boreal forest is one in which the dominant tree species are red spruce and balsam fir. The reason this forest is so different than the northern hardwood forests you see in other places around Maidstone State Park is because the air around the lake is cooler, and the soils are also thinner and more acidic. Evergreen trees thrive in cool climates and in acidic soils—that is why you see them at higher altitudes and northern latitudes. The evergreen needled trees form a dense layer here, shading out the forest floor. You can find lichens hanging from trees, and a green mossy carpeting on the forest floor. Common plants you may find include bluebead lily, striped maple and hobblebush. The boreal forest here is home to red squirrels, porcupines, fishers and moose.



balsam fir



red spruce

Trees & Flowers

The boreal forest provides habitat for an interesting assortment of trees and flowers. You can see things here in Maidstone State Park that are difficult to find in other places. The most common trees are red spruce, balsam fir, sugar maple, striped maple, beech and yellow birch. As you walk through the forest, watch for the green striped bark, and large leaves of striped maple trees. Look for the fine strips of yellowish bark tendrils from yellow birch trees.

In the mossy carpet of the forest floor, you can find some uncommon wildflowers. In springtime, you can spot the elegant drooping yellow flower of bluebead lily. Later in the summer, the same plant will be graced with a few blue colored berries. While you are walking through the woods, watch for small, clover shaped leaves and the white and pink striped flowers of common wood sorrel. If you are lucky, and look closely, you may even find pink lady's slipper—Maidstone is home to many of these rare orchids. If you are lucky, and look very carefully, you may even find the rare white lady slipper growing here.



showy lady's slipper

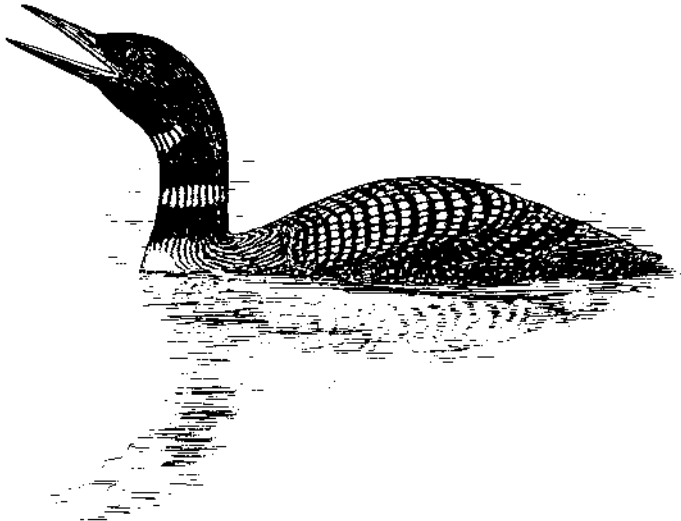
Loons

The best known symbol of the wild north is the call of the loon. At night and sometimes during the day you can hear that distinctive tremolo - the wailing, yodeling call of loons on Maidstone Lake. These uncommon birds prefer the solitude of remote northern lakes. Previously on the Vermont endangered species list, loons are increasing in population, although Maidstone is one of the rare places where loons have nested successfully in Vermont for several decades.

One of the main reasons loons are no longer considered endangered is because of the ban on small lead sinkers. Lead is a toxic metal that loons and other water birds ingest when they eat fish with lead tackle, or when they ingest lead tackle directly. From 1985 to 2005 in New England 46.2% of adult loons died from ingesting lead fishing gear. You can keep loons safe by not using lead tackle with your fishing gear; it is illegal in Vermont to use lead fishing sinkers smaller than $\frac{1}{2}$ inch.

Loons are built for life on water. They have solid bones, unlike other birds, and their feet are placed far back on their bodies for excellent swimming strength. The traits that make loons so effective at finding fish to eat make them awkward on land. Because of this, loons build their nests close to lake shores, or even on floating logs in the water.

Nests on the ground close to water or located in the water can be flooded by boat wakes. It is important to give loons their space and keep your distance. Bring your binoculars and you may get to spot young loons riding on the backs of their parents.

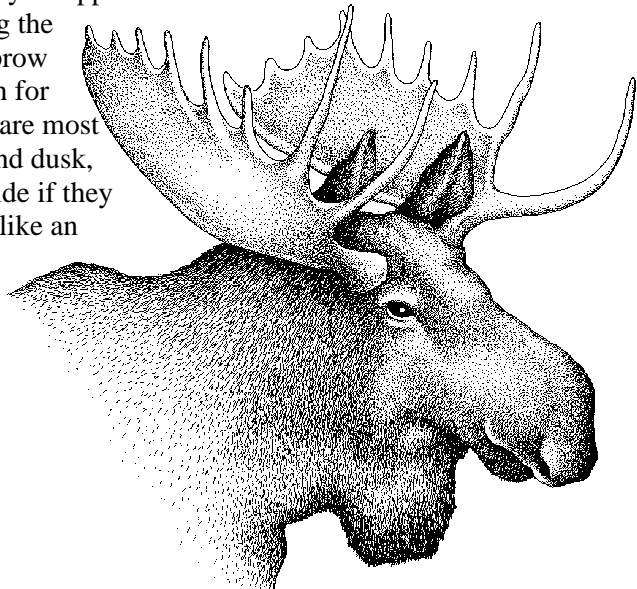


Moose

Some people say moose look like they are made of spare parts, but moose are perfectly adapted to life in the northern climate. Moose are the largest member of the deer family. They have very long legs to help them wade through the deep snow of northern winters, and hollow insulating hair to keep them warm on frigid days. These adaptations help moose thrive on the mountain ridges in Vermont winters. Because moose are so well adapted to cold weather, they are actually challenged by the heat of summer. When temperatures rise above eighty degrees, moose need to find a pond or lake to submerge in.

You may see moose swimming or standing around in Maidstone Lake on the hottest summer days, or you may see them feeding in the water early in the morning. Moose eat all sorts of vegetation—they are browsers. During the winter, they feed on bark, twigs and buds from trees. During the summer they eat green leaves, shoots and aquatic plants. If you are lucky, you may see a moose dig up tuberous crunchy lily pad roots for a morning snack.

Moose spend most of their time feeding because they are huge animals. Adult moose in Vermont can weigh 600-900 pounds, with males (bulls) being larger than females (cows). Bull moose grow enormous antlers that can weigh about 75 pounds. Imagine carrying 75 pounds of anything on top of your head! Despite their large size and their huge antlers, moose can silently disappear into the boreal forest with their antlers separating the foliage like the prow on a boat. Watch for them when they are most active at dawn and dusk, and you can decide if they look graceful or like an animal made of spare parts.



Trails

Maidstone State Park has three hiking trails to help you explore the boreal forest and lake. All are easy hiking and can be completed in less than an hour. All trails are marked with blue blazes.

Moose Trail (3/4 mile) This is the place to walk if you would like to search for wildlife signs such as moose and red squirrels. The trail leaves from the right side of the road near sites 22/23 in campground area A. You will walk through spruce-fir forest, cross two streambeds and take a sharp left turn uphill. Next you will pass an old logging area and wind uphill through thick woods to the top of the hill. Note the glacial erratics (large boulders left by glaciers) in the forest here. Follow the trail downhill until you come to a T intersection on an old logging road. The right fork leads to the main road. Turn left and pick up the trail again in a few yards on the right. Continue to follow the trail where it ends in campground area B in between leantos Juniper and Boxelder.

Loon Trail (1/2 mile) This trail travels along the rocky shoreline to the south end of the lake, and it is a perfect place to walk to look for loons. The trail leaves from campground area B in between sites 33 and 35. You will enter the woods and quickly turn left heading uphill. Soon you will turn to the right, and level out for a little while and then head steeply downhill towards the lakeshore. Follow the trail along the shore to the end of the lake, and then walk around a short loop, and head back following the same path. You will end back at your starting point.

Shore Trail (1/2 mile) Follow this hike through cedar and hemlock woods along the lake shore. Trail hugs the shoreline between the camper's beach in campground area A and the bathhouse in campground area B.



North



to  5 mi.

DAY USE
AREA

Maidstone Lake Rd

Maidstone Lake

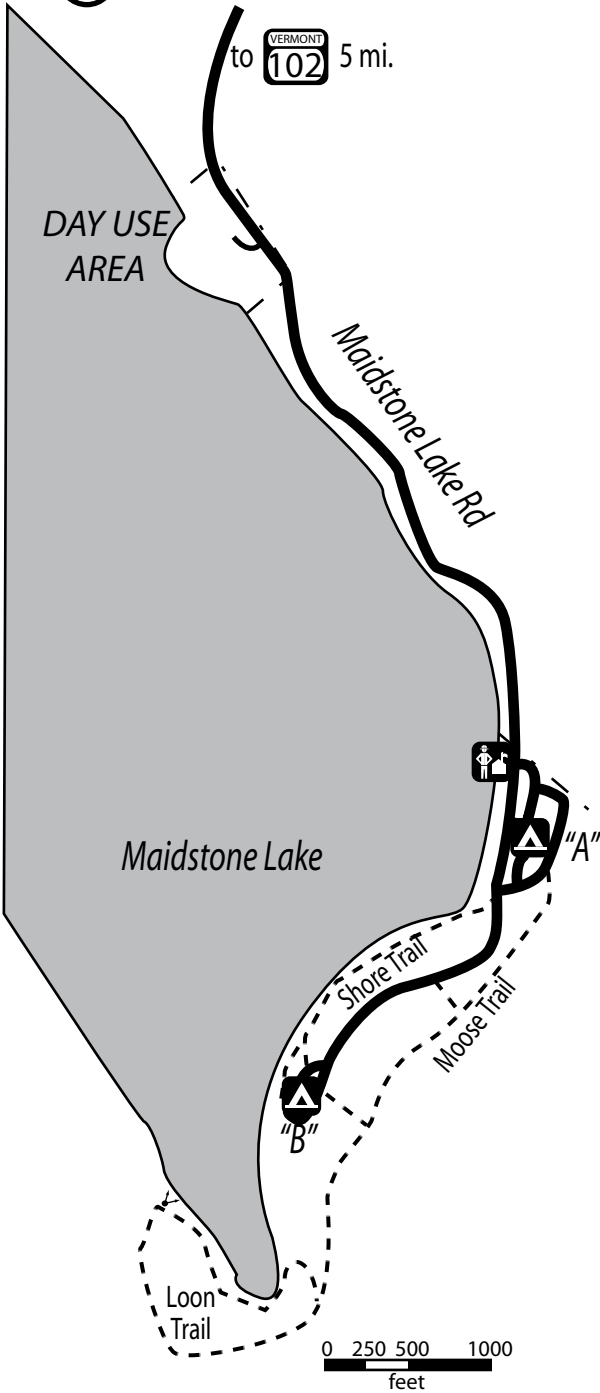
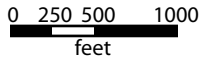
"A"

Shore Trail

Moose Trail

"B"

Loon
Trail





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