



**CANTON LAND
CONSERVATION TRUST
INC.
Fall 2008
Newsletter**

The Land Trust will be conducting a forestry operation on its Sun Wind and Woodland and Breezy Hill Farm Preserves on the west side of Breezy Hill Road in the coming months. This operation will involve an improvement or sheltered harvest, improving the general vigor of the residual forest, and allowing light into the forest to promote regeneration of new growth. In addition, the Land Trust will open the old fields on the Sun Wind and Woodland Preserve to improve wildlife habitat, particularly for ruffed grouse and woodcock. These are species of special concern because of their shrinking habitat in young forests and old fields.

The Land Trust manages its larger properties under management plans prepared with the assistance of a licensed forester. There are currently in place four plans prepared at different times relating to the Breezy Hill Road properties, the Smith Tree Farm, the Mary Conklin Preserve and the Swan Preserve. The management plans were developed with grants from a federal cost sharing program, and they were reviewed and approved by the Connecticut state forester.

This is not the first forestry operation undertaken by the Land Trust. In 1999 there was a harvest on the Smith Tree Farm property, which involved a salvage harvest of hemlock in decline from the hemlock woolly adelgid insect and a clearcut of a 5-acre white pine stand that was in decline from storm damage. The clearcut was temporarily fenced to prevent deer browsing of seedlings, and the early successional forest is now over twenty feet tall and fully stocked with hardwood and white pine saplings.

A permit was obtained for this current harvest from the Canton Inland Wetlands Commission for the crossing of a small stream. The crossing will utilize a timber bridge to minimize any impact. The actual forestry operation is considered as-of-right because it is an agricultural operation.

The forestry operation at the Breezy Hill Road properties is designed not to interfere with existing hiking trails, but the property will be posted during the time trees are being cut, and the public is asked not to enter the property when the operation is in progress to prevent any danger to hikers while the trees are being felled.

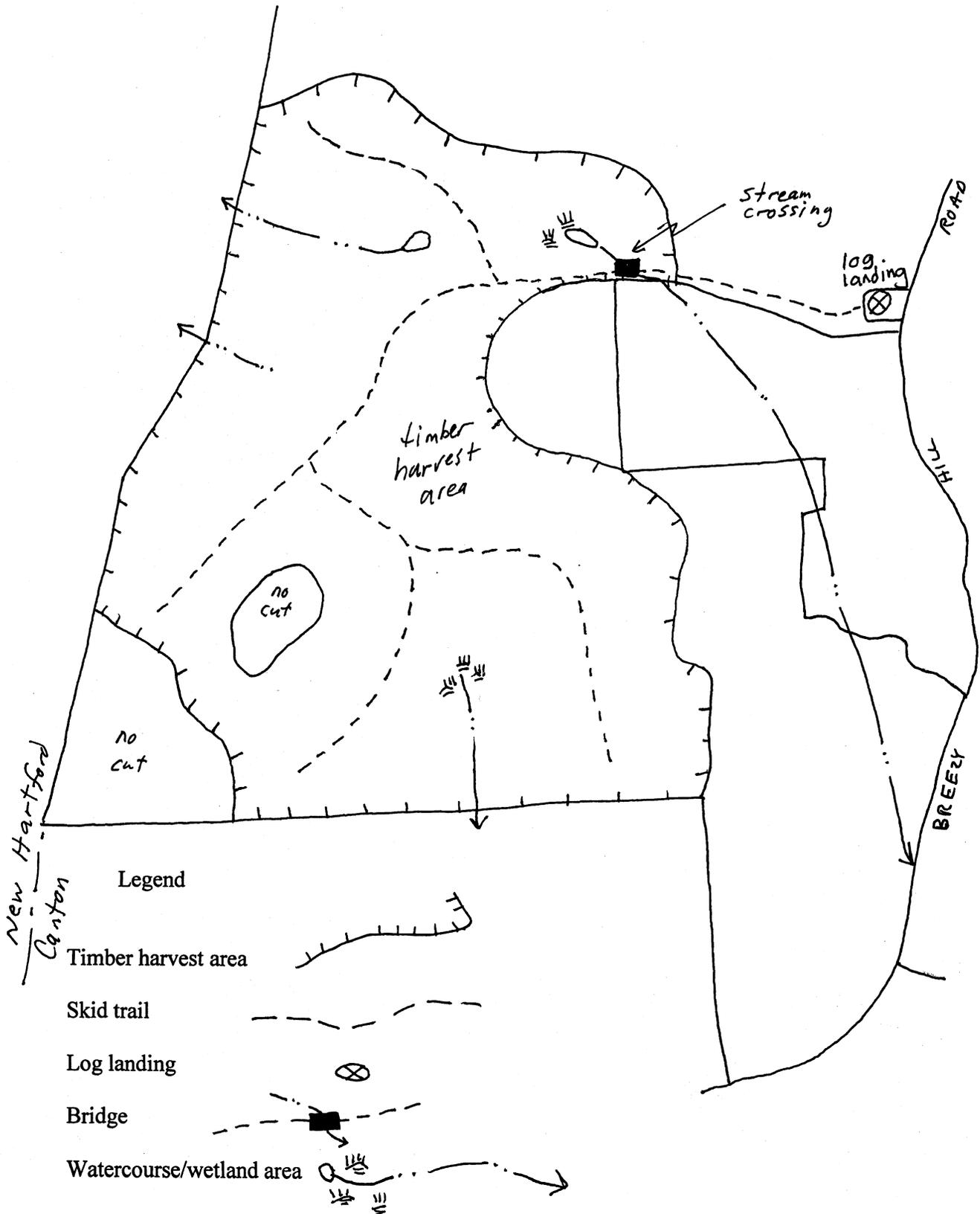
The Land Trust's forester, Jim Gillespie of Forestland Consultants, LLC, Sharon, CT, has marked the trees to be removed, and he will be selecting a buyer for the timber. The forester will supervise the activity of the certified logger who does the actual tree harvesting to ensure that the operation is conducted according to best forestry practices and consistent with the Land Trust's primary use of the land for hiking and passive recreation. Skid trails and other disturbances will be smoothed out and replanted where necessary to minimize any erosion.

The ultimate result of this operation will be a healthy forest with more opportunity for the largest trees to grow bigger, and the beginnings of a new forest as seedlings colonize the spaces left by the removal of the selected trees. The Land Trust will be able to use the income generated by the timber sale in part to support other management needs, including the restoration of old fields, boundary marking and trail maintenance.

Canton Land Conservation Trust, Inc.

Timber Harvest Site Plan

Breezy Hill Road, Canton, CT



CANTON'S GEOLOGY IN OUR WOODS

Who knew you could tell so much about Connecticut's geologic history from a simple hike in Canton's woods? There was much to learn and appreciate as geologist David Korzendorfer led a hike for the Land Trust on September 27th. Stopping frequently along the Arthur and Eunice Sweeton Trail off Breezy Hill, Mr. Korzendorfer interpreted the rocks that are so easily taken as just another part of our forested landscape.

Canton's land has undergone many changes in its geologic history. Today, the local rock is schist, Mr. Korzendorfer explained. Schist – a rough, coarse-grained, shiny grey rock often pocked with “blebs” (hunks or megacrysts) of garnets or other minerals -- is a metamorphic rock that was originally sedimentation formed between 490 - 440 million years ago (mya). Most surface land in what is now Canton was originally formed around 450 mya during the Ordovician period, when we were located on a shallow, continental shelf. Sediments such as silt and sand formed in layers, which were later pressed deep into the Earth, compacted into sedimentary rock, and then metamorphosed with heat and pressure into the schist we see today. Known as the “Breezy Hill Schist” of the “Hartland Formation”, Mr. Korzendorfer pointed out characteristic lineation or lines in the rock.

This lineation is evidence of how the minerals migrated into like-groupings while the rock was soft and malleable during metamorphosis. The schist is composed primarily of quartz, biotite, and plagioclase (orange feldspar). Often large mineral blebs formed as pockets in the schist during this plastic-like period. We were able to find several large, milky white quartz blebs as the trail wound through the woods, past old stone walls, and along a stream. In addition to interpreting the local rocks, Mr. Korzendorfer described the complex changes in geology in Connecticut, dating back to Pangaea and the Iapetus Ocean. Using a CT Geological Survey map, he discussed the many different rock types found across the state. From ancient sedimentary formations in the northwest corner, through our own metamorphic region, to the igneous basalt and red sedimentary rocks (arkose) of the rift valleys that flank the CT river basin, to the southeast corner that shares rock types with Africa and Scotland, Connecticut offers an enormous variety of mineral and rock history to be discovered.

Much of our development and use of land in Connecticut is based on our underlying rocks. Permeable arkose offers aquifers and fertile farmland, while impermeable basalt forms the state's traprock ridges and natural bottoms for our reservoirs. Ever wonder why there are lakes atop Avon Mountain? This is because the eastward tilt of the basalt, due to upheaval and folding over time, trapped the water moving up through the permeable arkose sedimentary rocks that were deposited between the basalt layers. Thus, the water emerges and pools on the tops of the ridge!

Because of the repeated collisions and rifts of tectonic plate movement in Connecticut, the lineation in Connecticut rocks and hills runs toward the north/northeast. This was seen in all the surface rocks along the trail. This alignment of minerals benefits the moss found growing on many of the rocks: moss prefers some minerals to others, and so the lineation of the moss matches that of the rocks. The long lines of emerald green moss were clearly evident on one huge outcropping of rock overlooking the streambed. In addition, many rocks showed curves and ripples that were evidence of folding during metamorphosis.

(Canton's Geology in Our Woods *continued*)

Surprisingly, we didn't find any glacial erratics on the hike – the large boulders in the woods all were schist and were oriented in this northeasterly direction, indicating that they were native rocks and not dropped by a glacier thousands of years ago.

Our group of hikers was fascinated by the depth of Mr. Korzendorfer's knowledge and his enthusiasm. None of us were deterred by the rain that poured down halfway through the hike. At our unanimous request, Mr. Korzendorfer agreed to lead other hikes for the Land Trust in the future. If you're interested in learning more about minerals and rock formations, see their website <http://bristolgem.org/>. And, of course, watch for upcoming Land Trust hikes!

A NEW BRIDGE AT THE SWAN PRESERVE

When the Land Trust acquired the Swan Preserve in 1998, we built a trail that has been one of our most popular hiking locations. The trail requires crossing one of the tributaries of Cherry Brook and we built a bridge, using fallen logs for stringers, with a walkway of boards nailed to the logs. It served us well for several years, but in the last year the logs became rotten and the bridge began to sag more than it had.

After a trip to survey the situation and make a plan for a new bridge, a work party was scheduled for June 21. There had been a suggestion that we use discarded telephone poles – nice and straight and not likely to rot. That suggestion was voted down, though, because of concerns about toxic materials near the water. Instead, Ted Cowles cut two arborvitae trees from his property for the stringers. Ted stripped the bark and had two of the four sides slabbed using a portable sawmill. That work was contracted out.

Permission was obtained from the Swan family to cross their field with the materials for the bridge. When the work party day arrived, a shortcut across the field was mowed and multiple trips were made by the volunteers to carry in the materials and the tools.

Volunteers participating included project leader Ted Cowles, Mike Gotaski, Bill Duncan, Betty Stanley, Charlie DeWeese, John Rohlfing and Matt Casey. There were several others, including two of Matt's teenage friends.

The old bridge was removed and chainsawed into pieces so it could be removed. Parts of it were used in the process of supporting the new stringers as they were placed across the brook.

Once the stringers were in place, the decking was nailed to the bridge. The decking is four feet wide and made of pressure-treated (ACQ) yellow pine. The bridge is 16 feet long, and there is a handrail the length of the downstream side. The old bridge was an adventure to cross. The new one is straight and sturdy. There are also eight foot long ramps on each side, to make crossing safe and easy.

The entire project proceeded with several hours work from the most dedicated workers each day for a week, all led by Ted. The bridge was completed on June 27. There were some lively moments one day, when a heavy thunderstorm drenched the workers, and hornets were discovered in a nearby hollow tree. Wary workers avoided getting stung, and the overall experience of making the bridge was very satisfying.

Hey Kids.....
Canton Land Trust Trailblazers wants
you!



Join or renew for the 2008/09 season.
Monthly hikes with a kid friendly theme from October -April
(Children must be accompanied by an adult)

Please fill out info below and return to
Canton Land Trust c/o Mary Ellen Mullins, 42 Case St., Canton CT 06019
Questions: maryellenmullins@comcast.net, rhondadeweese@aol.com
jannyba@comcast.net (Jan Tanner)

Child(ren)'s name(s) and age(s) _____

Parent or guardian's name _____

Email address _____

(Hike details will be sent out to members by way of email.)

(We promise to keep your email address confidential)

Address _____ Phone _____

\$5 donation per child or family donation of any size _____

(We count on your generosity to preserve open space for generations to come!)

CANTON LAND TRUST/TRAILBLAZERS EVENTS CALENDAR

NOVEMBER

9 - Sunday 1-3 PM Trailblazers Swan Property Fairy House Hike, Case Street

DECEMBER

6 - Saturday 9 AM-2 PM Annual Christmas Tree Sale, Smith Tree Farm, Doyle Road
1-3 PM Trailblazers Holiday Hike, Smith Tree Farm, Doyle Road

JANUARY

TBA Sledding and Bonfire

FEBRUARY

7 - Saturday Evening Breezy Hill Preserve , Full Moon Night Hike!

MARCH

TBA Sun Wind and Woodland/Capen Cabin
Trailblazers Hayride, Hike and Hot Dogs

TBA Annual Members' Dinner

APRIL

TBA Mary Conklin Preserve, Trailblazers Letterboxing Hike

Work Party dates as well as Trailblazers events/times/locations to be announced via email prior to event. Hope to see you there!