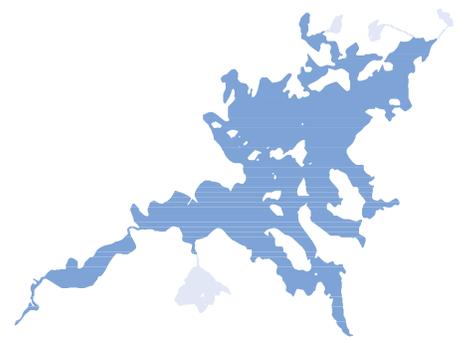


the *Loon Flyer*

Published by the Squam Lakes Association Spring 2003



SQUAM WATER QUALITY REPORT

The SLA has monitored Squam's water quality since 1979, through a collaboration with the University of New Hampshire's Freshwater Biology Group (UNH FBG) and the NH Lakes Lay Monitoring Program (NH LLMP). In the last Loon Flyer (Winter 2003) we presented the 2002 water quality report and here is a summary of long-term water quality data at six of the twelve NH LLMP locations. The charts show water transparency, which is measured in meters by viewing the depth when the secchi disk disappears. The line represents the trend over twenty-four years of monitoring.

As the year's weather can often influence much of a lake's water quality, it is important to review the weather conditions. The winter/ spring 2002 was characterized by below average snowfall that continued the trend of atypically low precipitation that began in 2001. The lack of significant rainfall, and the resulting limitation in overland runoff and overland nutrient transport into New Hampshire lakes, translated into deeper water clarity measurements and lower amounts of algal growth "greenness" relative to most years of water quality monitoring.

Little Squam West had a deeper seasonal average clarity than in 2001 and the overall trend is consistent with the water quality decline that had been documented over the past 16 years. The western site had less algal growth in the surface waters for the fourth consecutive year. While the surface algal concentrations have decreased for several successive years, an extensive mid-lake algal population persisted and remained ca-

Continued on page 7



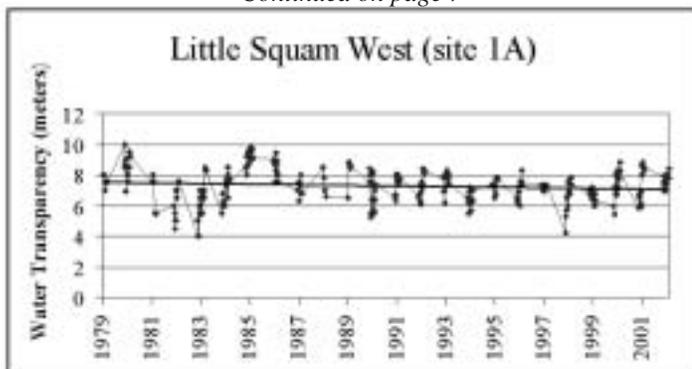
Welcome to the renovated SLA Resource Center, which was completed between October and April. Photo by Eric Morse.

SLA RESOURCE CENTER RENOVATION

It has been a long winter for all of us here at SLA, enduring unusually cold temperatures for lengthy periods of time and also working through a renovation of the SLA Resource Center.

The Resource Center renovation was completed on April 17. Conneston Construction, Inc. (CCI) was the low bidder for the renovation project, and submitted a guaranteed maximum price of \$423,500. The total construction costs were at \$435,145, an overage of \$11,645 or 2.7%, which is due to five change orders that occurred during construction. Our construction cost per square foot was approximately \$65.00 on 6,713 square feet of renovations, which is quite low.

The renovation included reconstructing the offices, with new wiring, plumbing and a central hallway. An Ecological Monitoring lab was built downstairs, along with new storage and maintenance rooms and a fully ADA compliant public restroom. A new meeting room, which is next to the Great Room was established and the staff housing units and Squam Lakes Conservation Society's office were revamped. Please stop by and take a look at the new SLA Resource Center.





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 Squam Lakes Association
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 website: www.squamlakes.org

The Squam Lakes Association is dedicated to conserving for the public benefit the natural beauty, peaceful character and unique resource values of the lakes and surrounding area. In cooperation with local and state authorities and other conservation organizations, the Association promotes the protection, careful use and shared enjoyment of the lakes, mountains, forests, open spaces and wildlife of the Squam Lakes region.

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BOAT SAFETY CLASSES

NH Boat Safety Classes will be offered at the Squam Lakes Association three times this summer and each session will include two 3 1/2 hour classes on Monday and Wednesday evenings. Classes will be offered at SLA on June 16 and 18, July 21 and 23, and August 4 and 6 from 6:00 to 9:30 pm. Call the NH Department of Safety (1-888-254-2125) to register for the classes. The fee is \$10 for the class and an additional \$10 for the certification. Another alternative is to take the class and test for certification on-line at: www.boat-ed.com/nh.

COURTESY BOAT INSPECTION

The Marine Patrol Auxiliary will provide a Courtesy Boat Inspection at Church Island on Saturday, July 19th from 10:00 am to 2:00 pm. The Marine Patrol Auxiliary will make sure your boat meets the legal requirements and will provide a free inspection sticker to all boats that pass.

STREAM ASSESSMENT PROGRAM

This year the SLA will be teaming up with New Hampshire Fish and Game and the New Hampshire Department of Environmental Services to pilot a volunteer stream assessment program, which will monitor the health of New

Hampshire's streams and rivers. We are looking for 2-3 individuals who would like to be part of this exciting new opportunity. There will be a training session held in June and no experience is necessary. If you are interested or would like more information, contact Lisa Vickers at SLA.

VOLUNTEERS NEEDED

Volunteers are needed for the Weed Watcher Program, to monitor the spread of exotic plants. Please help us to control the spread of variable milfoil on Squam by monitoring a section of shoreline.

The Boating Education and Safety Committee is looking for volunteers to assist with the annual boat count and to distribute educational materials to boat launches and marinas.

To volunteer, please contact SLA at (603) 968-7336.

ADULT SAILING CLUB

The SLA will offer an adult sailing club using four Club Junior sailboats from 4:30 to 7:00 pm on the following Thursday afternoons: June 26, July 24, and August 14. The sailing sessions will be limited to eight participants and the fee is \$5 per session. For more information and to sign up call SLA at (603) 968-7336.

The Squam Lakes Association gratefully acknowledges the support of

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whose generous contributions underwrite this issue of the Loon Flyer.

SLA ESTABLISHES MEAD CONSERVATION CENTER

In January the Squam Lakes Association signed a Special Use Permit with the US Forest Service to establish the Mead Conservation Center in Sandwich Notch. Mead Conservation Center (MCC) will be dedicated to maintaining hiking trails, providing youth recreational opportunities, and Leave No Trace education to benefit the Squam and Sandwich area. SLA, Wonalancet Outdoor Club (WODC) and the Student Conservation Association (SCA) have been cooperatively utilizing the property for trail maintenance since the spring of 2000.

The 22-acre property, which is located at the base of Mt. Israel includes the historic Lewis Q. Smith farmhouse, which was built in 1850 and is one of two remaining farmhouses from the Sandwich Notch community that once consisted of over 60 houses.

SLA and WODC maintain over 100-miles of hiking trails in the Squam and Sandwich Ranges and both organizations utilize Student Conservation Association interns. The trail crews live at MCC from June through November and perform trail maintenance. The trail crews work a combined total of approximately 5,700 hours per year.

“We hope to continue Jack Mead’s conservation legacy by establishing the Mead Conservation Center,” said Eric Morse, SLA Natural Areas Manager. “We appreciate the cooperative support from the White Mountain National Forest, WODC, SCA, Alfred Quimby Trust and White Sylvania Trust.”

SLA plans to preserve the Smith farmhouse, which is eligible for the National Historic Register and has a long-term maintenance plan which calls for \$160,000 of improvements. Funding will be sought from local, state and Federal grant sources with matching fund-

ing to come from donations. Please contact Eric Morse at SLA (603) 968-7336 if you are interested in making a donation for Mead Conservation Center. For more information, visit www.squamlakes.org.

CHAMBERLAIN-REYNOLDS MEMORIAL FOREST 50TH ANNIVERSARY

There will be a celebration at Chamberlain-Reynolds Memorial Forest on August 2, from 9:00 am to 12:00 pm to celebrate the 50th anniversary of the forest. SLA is co-hosting the event with the New England Forestry Foundation (NEFF). The forest was donated by John Wister in 1953 and the SLA has managed the property for low impact recreation since 1960.

VOLUNTEER TRAIL WORKSHOPS

Four Volunteer Trail Workshops will be conducted by SLA this spring and summer. The workshops offer an excellent opportunity to meet the SLA Trail Crew and learn about trail maintenance.

On June 7 (National Trails Day) we will

work on the Mt. Morgan Trail from 9:00 am to 2:00 pm. On June 14 we will work on the Wentworth Trail to Mt. Israel from 11:00 am to 4:00 pm and will meet at Mead Conservation Center (MCC). On July 5 we will work on the Mead Trail, on the back side of Mt. Israel from 9:00 am to 2:00 pm and will meet at MCC.

NH TRAILS DAY

NH Trails Day is July 19. We will meet at Mead Conservation Center at 9:00 am and will work on the Crawford-Ridgepole Trail from Sandwich Notch to Doublehead until 3:00 pm. A celebration dinner for NH Trails Day volunteers will be held at Mead Conservation Center from 4:00 to 6:00 pm.

MT. MORGAN TRAIL

SLA received a grant for \$11,390 from the Recreational Trails Program (RTP) to reconstruct the Mt. Morgan Trail in 2003. The RTP funded SLA trail work on the Mt. Percival Trail in 2002, the Old Bridle Path in 2001, and Belknap Woods and Cotton Mountain Trail in 1999. SLA also received a \$6,226 Challenge Cost Share grant with the White Mountain National Forest for the Mead and Algonquin Trails.

HIKE FOR THE TRAILS

Saturday July 26th
8:00 am at Mt. Morgan Trailhead



Intermediate Hike: Morgan & Percival Loop.

Advanced Hike: Cotton Mtn Trail to Crawford-Ridgepole Trail to Mt Percival Trail.

Sponsored by:

Bridgewater Power Company

Summit Rehabilitation

Rockywold Deephaven Camps

For more information visit www.squamlakes.org
or call SLA (603) 968-7336

MORE IMAGES NEEDED FOR OUR SQUAM CENTENNIAL HISTORY BOOK

By Chris Kuhn, SLA Centennial Book Committee

We continue to be pleased and amazed at the number of treasured photographs and paintings that you have shared with us. We hope that one or more items on our newest 'Wish List' will trigger a memory of a family photograph that you will want to share.

If you have any of the following images, or know where we can find them, please contact the SLA office at 603-968-7336, or Rachel Carley at 10 Camp Dutton Road, Litchfield, CT 06759, email: rcarley@hotmail.com, or phone: 860-567-5132. Also we will be unable to use digital images, but either slides or photographs can be used.

- The original Sandwich Creamery
- Early photos of the motor courts
- Original Paintings of Squam. There were a number of them done in the 1800's, and we are trying to track their current location. Even if you have seen one in a museum or elsewhere, we would love to know where to find it.
- Views of the lake from Diamond Ledge Road, Sandwich.

- Photos of the memorable individuals that have been part of the history of the area. One that comes to mind is George Plant, especially one in his marine patrol boat.
- Portraits of the early settlers.
- Contemporary scenes and events of the 1940's to 1980's
- Views of early ice harvesting, i.e. at Rockywold
- Red Hill in the Fall
- The hurricane of 1938
- Low water photos and prints. The lakes were historically very low in the 1800's, but the 1900's have also had some low water years.
- Little Squam, the Squam River, and Little Squam from Leavitt Hill
- Photos that contain multiple Squam generations (we will keep asking for this one).

Finally, we have one current request. This winter was one of the coldest and snowiest in many years. We hope that many SLA members (or friends) have some great winter photographs that might be used in our book. Panoramas, views across the lakes to the mountains and islands, ice harvesting, ice out, the sled dog races, or special family activities would all be of interest.



A Morning at True Farm will be presented by SLA on August 12 at 10:00 am.

Thank you all for your continued interest and support of our history of Squam.

SQUAM LAKES HISTORY... FARMS AND FARMERS

A MORNING AT TRUE FARM
TUESDAY, AUGUST 12, 2003

For many years farming was a mainstay of the Squam Lakes region. Anyone who has climbed the surrounding mountains has seen stone walls at elevations that seem impossible. How did the settlers, without the aid of modern machinery, clear these enormous upland tracts of land? While most farmland has returned to woody growth, there remain a small number of farms that give us a view backwards to what life was like 150 years ago.

True Farm in Holderness was originally built before the American Revolution as an inn. For many years it was just one of many farms dotting the Squam Range hillside. Becoming a gentleman's farm in 1900, the farm looks much the way it did so long ago with lovely gardens, strutting peacocks, and grazing horses in fields overlooking Squam Lake.

Film producer/ director and owner George Butler has kindly agreed to talk to us at True Farm about its history. While True Farm has its own unique story of fires, crises, and celebrations, it typifies many of the area's surviving farms. Author Rachel Carley will give an overview as to how the turn over of the failing farms to the summer visitors began the revival of New Hampshire areas as the Squam Lakes Region.

The event begins at 10:00 am. The cost is \$25 per person and light refreshments will be served. You may also enjoy informal tours of the gardens and stables. Proceeds from this event will support the publication of the 2004 SLA Centennial Book.



PANCAKE BREAKFAST

Saturday July 12th

8:30 - 10:30 am



Presented by the Lake Use & Preservation Committee

Speaker: David Graham, Director of NH Music Festival
 "Preserving the Natural and Cultural Environment"

Adults: \$7 in advance, \$9 at the door

Children 6-12: \$4.50 in advance, \$5.50 at the door

Children 5 & under: \$3.00

Reservations: Call SLA (603) 968-7336

DETERGENTS AND WATER QUALITY

These days there are an overwhelming number of choices at the grocery store. From bread to soap it can be confusing what brand to buy. The decisions we make can affect our environment. For example, the automatic dishwasher detergent you buy may be affecting the water quality of our lakes. These detergents contain phosphorus which is a nutrient naturally found in our lake waters. However, an excessive amount of this element leads to algal blooms.

Phosphorus has largely been removed from soaps and laundry detergents in response to environmental concerns. At a recent trip to the grocery store, different brands of automatic dishwasher detergent phosphorus content was examined. The table below breaks down the phosphorus content of powders, gels, and tabs from five popular brands.

Brand	Powder	Gel	Tab
A	4.5%	6.2%	8.7%
B	4.5%	4.3%	-
C	-	1.6%	-
D	6.4%	4.5%	8.7%
E	5.3%	4.0%	-

From this table it is clear that the best choice is the product with the lowest phosphorus content, the brand C gel. This has an extremely low phosphorus content at 1.6% while Brand D in the

tab form has a whopping 8.7%. Next time you are buying dishwasher detergent, please check the labels, compare phosphorus content, and purchase those with the lowest content. This small step can help to protect our lakes for generations to come.

SHORELAND PROTECTION

The Shoreland Protection Act was passed in 1991 and was enacted on July 1, 1994 and revised in 2001. It was passed to protect waterbodies from pollution and over development and it regulates what type of repairs, replacements, improvements or expansions can be performed on existing developments.

The Shoreland Protection Act covers different topics that protect surface waters and one in particular is the use of fertilizers. According to the Protection Act, "no fertilizer or pesticide may be used within 25 feet of the waters edge, except for limestone. From 25 feet to 250 feet from the waters edge only low phosphate, slow release nitrogen fertilizer may be applied." Although these are the general restrictions, towns such as Holderness and Sandwich do not allow any type of fertilizer or pesticide use within 250 feet from the water's edge.

These fertilizer restrictions were imposed to protect our lakes, rivers, and

streams from excessive nutrient loads that speed the process of eutrophication, a lake's natural aging process. Have no fear though, there are other alternatives that will help keep your lawn green this season. Below are some tips to keeping your lawn healthy.

Contrary to popular belief, grass does not need much water. Lawns only need about one inch of water per week. By watering your lawn excessively problems such as diseases and shallow root structures develop.

All the nutrients your lawn needs to stay healthy this summer are right in front of you. Using water from the lake to irrigate your lawn will supply enough nutrients that you won't need to supplement with fertilizer.

Aerate your lawn so that water, nutrients, and air can penetrate the soil easier. This involves removing small cylindrical cores of soil from the lawn.

Check the pH of your soil. It is ideal to be between 5 and 7. The University of New Hampshire Cooperative Extension charges a small fee for soil testing.

By following the simple regulations of the Shoreland Protection Act, you are helping to protect and conserve one of New Hampshire's most precious resources. For more information, please contact our office.



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whose generous contributions underwrite this issue of the Loon Flyer.

SQUAM RULES FISHING DERBY

The Squam Lakes Association will host its first-ever, hopefully-annual, "Squam Rules Fishing Derby". Anglers of all ages and abilities are invited to participate in a week-long event designed to introduce area residents and visitors to the wide variety of fishes in Squam's waterways.

From June 30 to July 6, participants "compete" for low-value prizes by catching, identifying and releasing as many of the lakes' 23 different species as possible. Scoring is by honor system, and no credit is given for catching big fish or many fish of the same species – i.e., a perch and a sunfish count for more (2) than three 10-lb. largemouth (1). All lakes, ponds and streams in the Squam watershed are eligible, and participants can fish from any boat or from shores and docks. Adult and under-13 divisions are planned.

"Some of our fish, like bass and salmon, achieve rock-star status with certain groups," says SLA Executive Director Chris Devine. "But every fish species plays an important part in the lakes' ecosystem, and every one can be fun to catch. Many of our residents would be hard-pressed to name even half the fish



Participants on the Mt. Morgan Snowshoe Tour enjoy the view of Squam after the two mile hike. SLA offered a variety of snowshoe, cross-country skiing and skating tours in the winter of 2003. Check the Fall Loon Flyer or squamlakes.org for next year's tour schedule. Photo by Eric Morse.

in Squam." Devine and the SLA board hope the event will help people appreciate the breadth and diversity of the aquatic resources, and teach people to interact with them in non-intrusive ways.

Participants should pick up a free catch-record form at SLA headquarters on Rte. 3 in Holderness, at one of the three Squam Marinas, or at Golden Pond Country Store in Holderness. Alternately, forms can be down-loaded from the SLA web site, www.squamlakes.org.

Participants are encouraged to pick up free fish-identification books at SLA headquarters. Completed catch-records must be turned in to SLA by 3:00 pm on July 6, at which time winners will be announced and event keepsakes (caps and t-shirts) awarded. For further information, call the SLA at 968-7336 or visit www.squamlakes.org.

ALDEN ROWING SHELLS DEMO DAY



Alden Rowing Shells will have a Demonstration Day at the SLA on Friday, June 27, from 10:00 am to 5:00 pm. Come by and learn more about the increasingly popular sport of sliding-seat rowing. Alden's thirteen boat styles include recreational, competitive, and traditional shell designs.

For information about Demo Day and rowing classes, please contact Katie McComas and Nancy McDonald at mccomas@rcn.com, 617-566-6162 (before June 20) or 603-968-9601 (after June 20).

BIKE AROUND THE LAKE

SUNDAY JULY 13TH
9:00 AM AT SLA



Bike Around the Lake is a fun family bike ride that supports the SLA Youth Programs.

The funds raised will support JSLA and CYSP scholarship and equipment funds.

Sponsored by: Rhino Bikes & Clif Bar

For more information visit www.squamlakes.org or call SLA at (603) 968-7336.

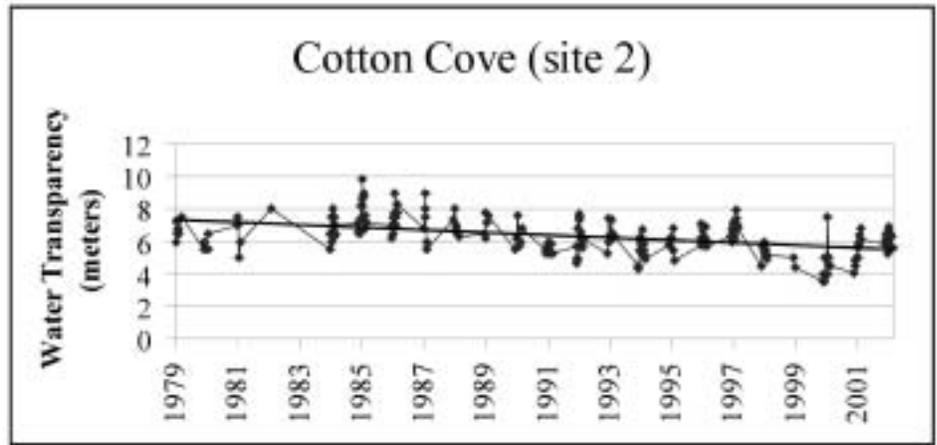


SQUAM WATER QUALITY CONTINUED

pable of resulting in short-term algal blooms and a concurrent reduction of water clarity.

Cotton Cove was characterized by a significant seasonal average water clarity increase. However, the long-term trend of decreasing water transparency documented between 1979 and 2000 should not be overshadowed by the recent increase in water transparencies documented over the past two years; the water quality changes more likely reflects the variation in precipitation. The 2002 seasonal average algal concentration was slightly higher than the 2001 seasonal average level. However, no short-term algal blooms that are characteristic of a moderately nutrient enriched lake, were documented.

Livermore Cove water clarity was significantly higher than the 2001 levels

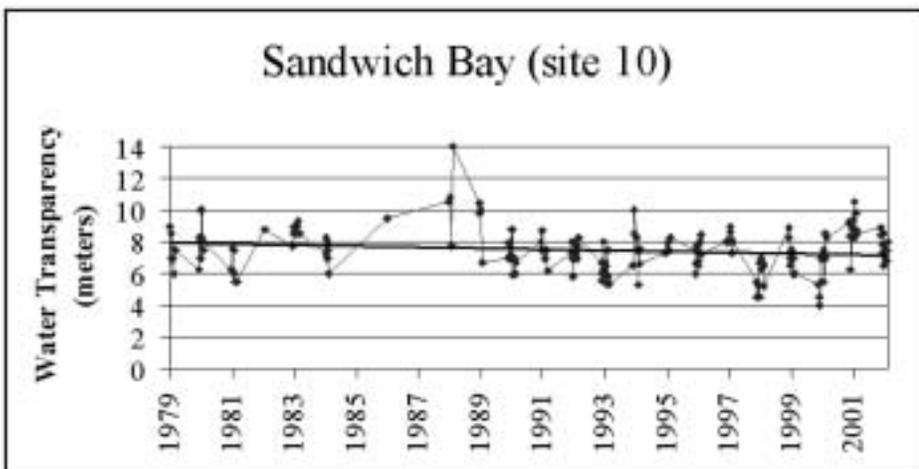


While the Sandwich Bay water quality declined slightly in 2002, the values did not suggest an abrupt decrease in water quality when compared to the data collected over the past five years.

Moultonboro Bay water clarity increased significantly in 2002 and returned to the levels documented during the 1980s. The 2002 algae levels increased relative to the 2001 algae levels, but remained atypically low and

continued to suggest a recovery from the “excessively green” levels that were documented in the early 1990s to levels more comparable to conditions encountered in the mid 1980s.

Sturtevant Bay was characterized by one of the higher seasonal average water clarity values documented over the past twenty years. The 2002 algae levels increased slightly but remained near the lowest concentrations documented over the past fifteen years of monitoring. This site continues to show improvement relative to the early 1990s.



and was similar to water transparency levels documented in the late-80s. Algae levels decreased for the third consecutive year in 2002 and were markedly less than the algal levels documented over the past 15 years of sampling in Livermore Cove.

Sandwich Bay was characterized by a reduction in water transparency during the 2002-sampling season and coincided with an increase in algal growth.

SQUAM ICE OUT

Squam’s ice out occurred on April 24th, which is six days later than the average ice out date since 1978. Karlene Schwartz won a gift certificate to the SLA Store for predicting the ice out date on the Squam Forum at squamlakes.org. Please post your comments, questions, or nature sightings on the Squam Forum.

The Squam Lakes Association gratefully acknowledges the support of



whose generous contributions underwrite this issue of the Loon Flyer.



SLA CALENDAR OF EVENTS

June 7	National Trails Day at Mt. Morgan Trail 9:00 am - 2:00 pm
June 14	Trail Maintenance Workshop at Mead Conservation Center 11:00 am - 4:00 pm
June 27	Alden Rowing Shells Demo Day at SLA 10:00 am - 5:00 pm
June 30	JSLA and CYSF Programs commence Monday - Friday
June 30- July 6	Squam Rules Fishing Derby. See page 7 for details.
July 5	Trail Maintenance Workshop at Mead Conservation Center 9:00 am - 2:00 pm
July 6	Lightning Sailing Races at Diamond Ledge, Sunday afternoons through August 17, 2:00 - 4:00 pm
July 12	Pancake Breakfast at SLA Resource Center 8:30 - 10:30 am
July 12	Squam Lakes Nature Photography by Eric Morse Opening Reception at SLA 4:00 - 6:00 pm
July 13	Bike Around The Lake (Benefit for SLA Youth Programs) at SLA Resource Center at 9:00 am
July 19	Squam Wildlife Census
July 19	Courtesy Boat Inspection at Church Island 10:00 am - 2:00 pm
July 19	NH Trails Day - trail work on Crawford-Ridgepole Trail 9:00 am - 3:00 pm, celebration dinner at Mead Conservation Center 4:00 - 6:00 pm
July 26	Hike For The Trails (Benefit for SLA Trails) at Mt. Morgan Trail at 8:00 am
August 2	Chamberlain-Reynolds Memorial Forest 50th Anniversary 9:00 am - 12:00 pm
August 2	SLA Annual Meeting at SLA Resource Center at 4:30 pm
August 3	Around the Lake Sailing Race at Diamond Ledge at 2:00 pm
August 12	Squam Lakes History, Farms and farmers, A Morning at True Farm at 10:00 am

Calendar subject to change - check the SLA Website - www.squamlakes.org
or call (603) 968-7336 for the latest information

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