

Swartswood Lake: Sussex County's Treasure

by Margaret R. Emmetts



Some ten thousand years ago, during the last ice age, glaciers covered much of the North American continent. These huge rivers of ice covered northern New Jersey, reshaping the land beneath them as they advanced. "V" shaped river valleys were broadened and deepened into the "U" shaped valleys characteristic of glaciers. As the climate warmed and the glaciers retreated, melt-water flowed through these widened valleys forming glacial rivers and streams. Where the glaciers had cut deepest, the water pooled to form glacial lakes.

Such was the history of Swartswood Lake, nestled in the hills of northwest New Jersey. Just as the glaciers reshaped the land over time, so has the character of the lake and its use changed over the years. Today, treasured for the beauty,

habitat and recreational opportunities it provides, it is the focus of community protection efforts.

Changing Roles

Early history of the lake includes stories of Indian raids. During the American Revolution, the lake provided power for several gristmills as well as water for livestock and irrigation for the crops of nearby farms.

In the 1870s a railroad was constructed that linked the Pennsylvania coal fields and the New York metropolitan area, and opened the Swartswood Lake area, which was on the route of the railroad, to tourists. Families would camp around the lake in tents, many staying from July 1 through Labor Day. As the campsites were improved, tents began to give way to small cottages.

By the 1920s and '30s, the lake was home to speakeasies, dance halls, boxing training camps and, if local

A boat is docked on Swartswood Lake.



gossip is to be believed, to some "ladies of the evening." During World War II, both the numbers and sizes of the cottages grew until the summer community dominated the lake. As transportation to metropolitan areas became more readily available, some year-round homes began to appear.

A Tiny Treasure Blossoms

In 1914 George Emmans ceded 12.5 acres of land to the state for use as a public park. In return for this gift to the state, he and his heirs were awarded life rights as the only concessionaire at the park.

From this modest beginning, Swartswood State Park has grown to its present size of 1,400 acres. Open all year, the park has 70 campsites, hiking trails and picnic facilities. A sandy beach, boat rentals and a food concession are open from Memorial Day to Labor Day. A popular feature of the park is its series of entertaining and educational *Twilight at*

Swartswood programs. Presented on weekends by local experts and artists, the programs are broad in scope and appeal to all ages. Live music, slide programs of local plants and animals, astronomy, Indian lore, maple sugaring, canoe trips, folklore and live lion cubs are just a sampling of the recent presentations.

In 1958 the Washington Rock Girl Scout Council opened Camp Lou Henry Hoover, named for the wife of former U.S. president Herbert Hoover. The year-round facility, covering 328 acres, stretches from high atop the hills overlooking the lake's west shore to its waterfront. During July and August, resident summer camps are held for girls in grades 2 through 12. The last week of August through Labor Day is traditionally reserved for family camping. Facilities range from a winterized building to platform tents and pitch-your-own areas. The camp also boasts a

well-appointed beach area for swimming and boating.

In 1959, a group of sailing enthusiasts got together to form the Swartswood Yacht Club. Forty years later, it's still going strong. From the end of May through mid-October, Sunday afternoons will find skippers clustering around the club's pontoon boat eagerly awaiting the horn that signals the start of the day's races. The club sponsors both Sunfish class and mixed fleet races. Mixed fleet means that all types of boats can compete in a single race regardless of size or class. Scoring is accomplished by adjusting race times using the Portsmouth Handicap system.

The Swartswood Yacht Club also schedules a variety of social activities for non-sailors. Each fall, a Commodore's dinner is held to award trophies to the winning racers. In February, the members meet for brunch and an ice skating party. Active in the community,



Men and machines combat lake eutrophication.

A Sampling of *Twilight at Swartwood* Programs

July 3

- ◆ Lake Ecology Canoe Trip
- ◆ Stories and Demonstrations of Early Sussex County Frontier by the New Jersey Frontier Guard
- ◆ Live Animals and Museum Artifacts from Space Farms Zoo and Museum

July 4

- ◆ July 4th Parade of Boats

July 10

- ◆ Kids Panfish Derby
- ◆ Lake Ecology Canoe Trip
- ◆ Introduction to Flyfishing

July 17

- ◆ Lake Ecology Canoe Trip
- ◆ Habitat Hike
- ◆ Astronomy

July 24

- ◆ Youth Sailboat Regatta
- ◆ Lake Ecology Canoe Trip
- ◆ Great Horned Owl and American Crow

July 29

- ◆ Nature Program: How to Care for Injured Wildlife

July 31

- ◆ Lake Ecology Canoe Trip
- ◆ Beekeeping — How Honeybees Live

August 7

- ◆ Lake Ecology Canoe Trip
- ◆ North American Bats — Our Misunderstood Night Visitors

August 12

- ◆ Nature Program: Learn about the Swartwood Lake Restoration Program

August 14

- ◆ Lake Ecology Canoe Trip

August 21

- ◆ Lake Ecology Canoe Trip
- ◆ Night Hike for Owls

August 28

- ◆ Lake Ecology Canoe Trip

September 5 and 6

- ◆ Labor Day Sailboat Regatta

September 12

- ◆ Raptor Migration

Call 973/383-5949 for more information about the July 4th Parade of Boats, Youth Sailboat Regatta and Labor Day Sailboat Regatta and 973/993-1982 regarding the Kids Panfish Derby. For details on all other programs, call 973/383-5230.

Swartwood Yacht Club teaches sailing to local children in the town's summer recreation program, offers boat storage and assists the state with its water testing.

In 1960, the United Methodist Church opened Camp Aldersgate on the west shore of the lake. It currently maintains 23 acres of lakefront, which it shares with the Yacht Club, and an additional 200 acres nearby. The camp provides a wide variety of group camps — sailing, fishing, canoeing, wood-working, peer counseling, to name a few. Facilities range from a modern lodge, which sleeps 72, to tent platforms. The camp welcomes groups of all denominations.

In 1974, local anglers formed the Paradise Fishing Club to promote fishing on the lake while protecting the environment. Each year the club stocks the lake with 500 to 1,000 brown trout. It also sponsors an adult fishing derby and contests for children.

In the 1990s, the park's staff, local residents and members of the Paradise Fishing Club and Swartwood Yacht Club became concerned about the water quality and weed conditions in the lake. They banded together to create the Swartwood Lakes Watershed Association.

A Treasure in Peril

Most people readily recognize that living things such as plants and animals have life cycles. Less obvious is the fact that lakes also have a life cycle. Once created, the length of their life span depends on a number of factors including their size and how man uses or abuses them. The natural aging process is called eutrophication. This process can be hastened by chemicals and pollutants that enter a body of water from farms, roads and septic systems anywhere within the lake's watershed, and is called cultural eutrophication.

Shallow areas of a lake may become nutrient rich from the pollutants carried

Mixed Fleet and Sunfish Races


The Swartswood Yacht Club has scheduled a number of sailboat races for the remainder of 1999. Club members can participate in all series and guests (non-club members) are welcome to sail in up to two races. To confirm dates/times and obtain additional information, please call 973-383-5949.

◆ Summer Series (Mixed Fleet and Sunfish Races)

There will be a total of eight races for the series, which will be run on Sunday afternoons from July 11 through August 29. In the mixed fleet series races, which begin at 1:30 p.m., all sailboats can compete under a handicap system. The sunfish series is for Sunfish class sailboats; these races begin after the mixed fleet races (at approximately 3 p.m.).

◆ Fall Series (Mixed Fleet)

There will be a total of eight races for the series, which will be run on Sunday afternoons from September 5 through October 10. (The series includes the club's Labor Day Sailboat Regatta races.) All sailboats can compete under a handicap system in the mixed fleet series races, which begin at 2 p.m.



into the water from local run-off. These nutrients support nuisance vegetation and algae that die and fall to the bottom each year. The area becomes more and more shallow until there is no longer a depression to hold the water. The area becomes a wetland, then a meadow, home to grasses and, in time, soft wood trees such as cottonwoods. Given enough years, hardwood trees will displace the softwoods and the cycle will be complete.

The primary focus of the Swartswood Lakes and Watershed Association is to slow the cultural eutrophication of Swartswood Lake through proper watershed management. Nutrients of chemical origin that foster the growth of nuisance aquatic plants and algae may come from sources miles away from the lake itself. All chemicals placed in or on the soil within the lake's watershed will eventually find their way into the lake waters. (A watershed is the entire area whose run-off drains into a particular

body of water. A rough estimation of a watershed's size can be determined by looking for the highest elevations in a 360-degree circle around the body of water. This can be a considerable area. For instance, the watershed of the Mississippi River extends from the crest of the Rocky Mountains in the west, to the crest of the Appalachians in the East.) Chemicals used to fertilize lawns, herbicides and insecticides used in agriculture, substances used on roads to control ice and seepage from septic systems all enter the ground water system. The ground water flows downhill, either as surface run-off from rain or snow, or in the flow of sub-surface ground water.

The increased growth spurt caused by these chemicals is similar to the effect of fertilizing your lawn. As a result, waters may become weed-choked. As each year's plants die off and decompose, these nutrients are re-released into the water and again become available for use. Over a period of years the nutrient level in the water can become significantly higher since nutrients are constantly being added and seldom removed. This constant influx speeds the eutrophication process.

Protecting the Treasure

At Swartswood Lake a harvesting project has been initiated. The harvester is a self-propelled floating barge that mows the underwater vegetation to a depth of about five feet. The cut aquatic vegetation is lifted by a conveyor belt into the harvester, where it is transported to the shore for removal. A season's mowing program can remove tons of biomass and the nutrients that would result from this biomass' decomposition. While this process will not solve a weed problem in one year, it will have a significant effect over the course of several years. Loss of nutrients will slow weed growth and reduce algae without the use of chemicals, which often carry harmful side effects.

Eurasian watermilfoil is a plant that is plaguing many lakes because of its rapid growth and the ease with which it can be transferred between bodies of water. Pieces of the plant may cling to the blades of an outboard motor as it is removed from a contaminated lake. When the boat is put into another body of water, the pieces drop off and the plant is introduced to a new location. Its rapid growth rate enables it to dominate a body of water in a relatively short time.

The State Park Service has installed large-scale aerators in the lake. They improve the fish habitat while controlling the negative chemical and algae conditions. Weekly monitoring results indicate that water quality not only is being maintained, but actually is improving.

Action Rewarded

Today, through the efforts of its residents and visitors, the third largest natural lake in New Jersey is a nature lover's paradise. Its predominantly forested shores are home to deer, beaver,

mink, raccoons and an occasional bear. A rare wild population of lotus thrives in its waters. These elegant five-inch yellow-green blossoms stand on stalks a foot above the water.

Anglers find large- and smallmouth bass, trout, pickerel, walleye and catfish in abundance. Bird watchers find ospreys, eagles and dozens of small birds as well as waterfowl. Stately swans, great blue herons and diving cormorants all call Swartswood home. Situated along the Atlantic flyway, the lake is visited by loons, coots and grebes as they make their annual spring and fall migrations. A bird blind located along the state park's Duck Pond Multi-use Trail serves as an observation stage for bird watchers. The trail is handicapped accessible, as is the state park beach.

The people of the surrounding communities have formed a unique partnership with state and local agencies, which will result in their passing of Swartswood Lake and its surrounding watershed to the next generation in better condition than they found it.

Swartswood Lake is a year round delight. Visit in the summer for a cooling dip and stay to watch a spectacular sunset. Come on an autumn morning and experience the quiet of a lake wrapped in a blanket of fog and see the magnificent color display of the hills as the sun melts the fog away. In winter, iceboat, fish, skate or do some cross-country skiing. Spend an evening sipping hot cocoa and listen to the ice creak, groan and boom as it expands. Watch a spring storm whip the lake's surface to whitecaps with spume flying from their tops.

The glaciers have come and gone, but the beauty they created in Swartswood Lake is expected to last for the next 100,000 years. Come and share the beauty. Take away pictures and memories, and leave only your footprints.

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CONTACTS

For more information about the park or the organizations and activities mentioned in the article, call or write to:

◆ **Swartswood State Park**
Steve Ellis, Superintendent
973/383-5230

◆ **Washington Rock Girl Scout Council**
908/232-3236

◆ **Swartswood Yacht Club**
Margaret Emmetts, Secretary
973/383-5949

◆ **Camp Aldersgate**
Declan Thomas, Director
973/383-5978

◆ **Paradise Fishing Club**
Janet Costello, Secretary
973/839-7259

◆ **Swartswood Lakes and Watershed Association**
P. O. Box 44
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