

Lookout

BY JANIS BARTH

The sky lowered and held only the promise of more snow. A cold sun, pale and milky as birch, hung low on the horizon. Only a subdued light filtered through the dense crowns of spruce and hemlock—ancient pines, spear-shaped and still.

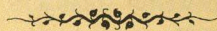
Here, in the soft pine trailings of the forest floor, there are no surveyor's stakes, no carefully tended lot lines. There are, as there have always been, the mountains. Granite-ribbed, the Adirondacks were old when the continent was young.

The old logging trail underfoot twists and falls and leads steeply into the past. Time was, the great north woods stretched unbroken, rich in timber. The cross-cut saw of the timberjack broke the winter's silence and the great workhorse rivers, the Raquette and the Grasse, carried highways of logs to the rich markets in Albany and New York City. Along the dark ridges of the high peaks, the wolf, the moose, the cougar, and the lynx lived and died and, as civilization pushed deeper into the vast forests, became a dry footnote in the bureaucratic tally of such things: Extinct to the region.

The road is pockmarked and rough and memory lies as thick as dust.

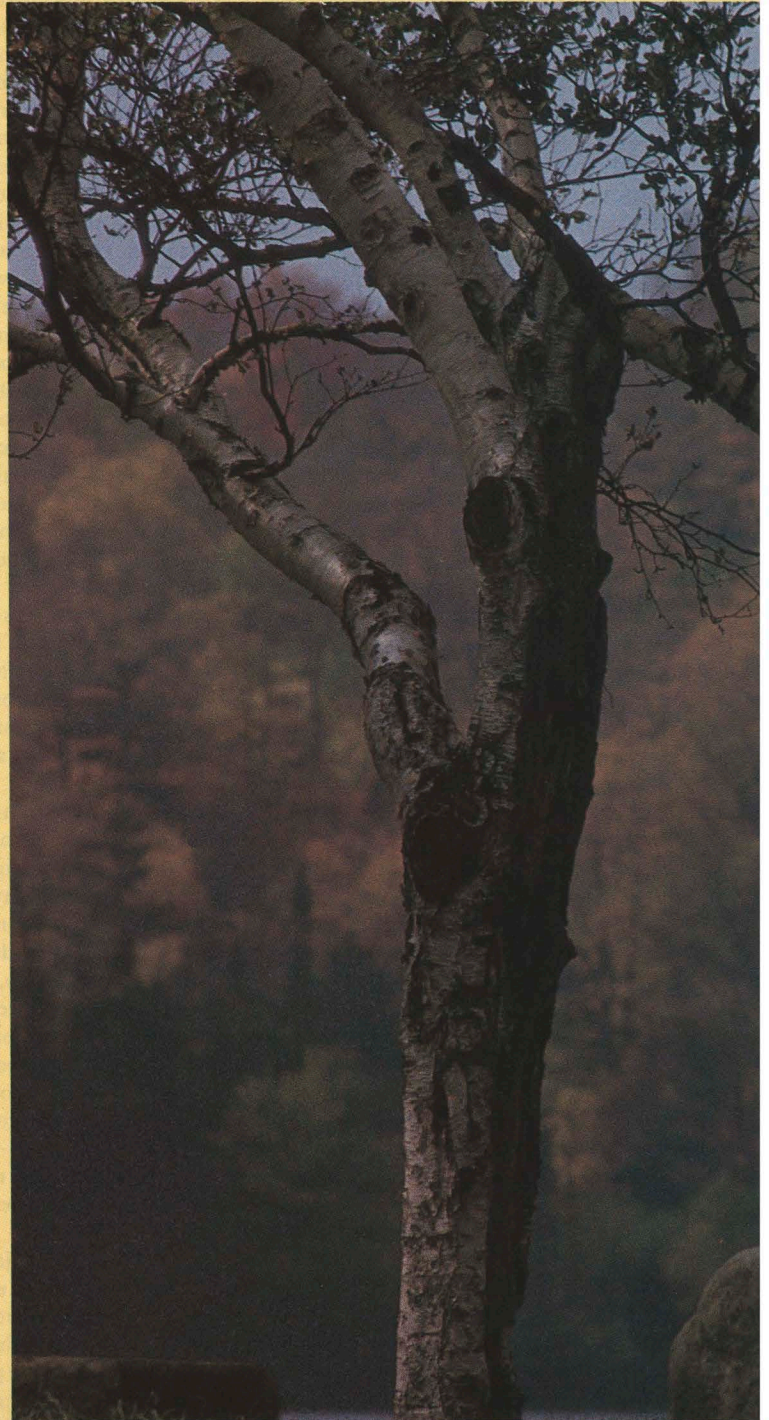
In 1885, long before it became fashionable to set aside public parks and preserve the natural landscape for future generations, the State of New York determined that this untamed place should remain forever wild. The creation of the Adirondack Forest Preserve and, in 1892, the Adirondack Park, guaranteed a natural legacy. Within the boundaries of the six-million-acre park—the Blue Line, as it was designated on official state maps—lies the last vestige of wilderness in the northeastern United States.

We are reflected in this spare landscape, says Adirondack historian Edith Bendow Pilcher. Something irrevocable will have gone out of us if we lose these unbounded waters, silence the eagle, and push our roads through the last of the trackless forest.

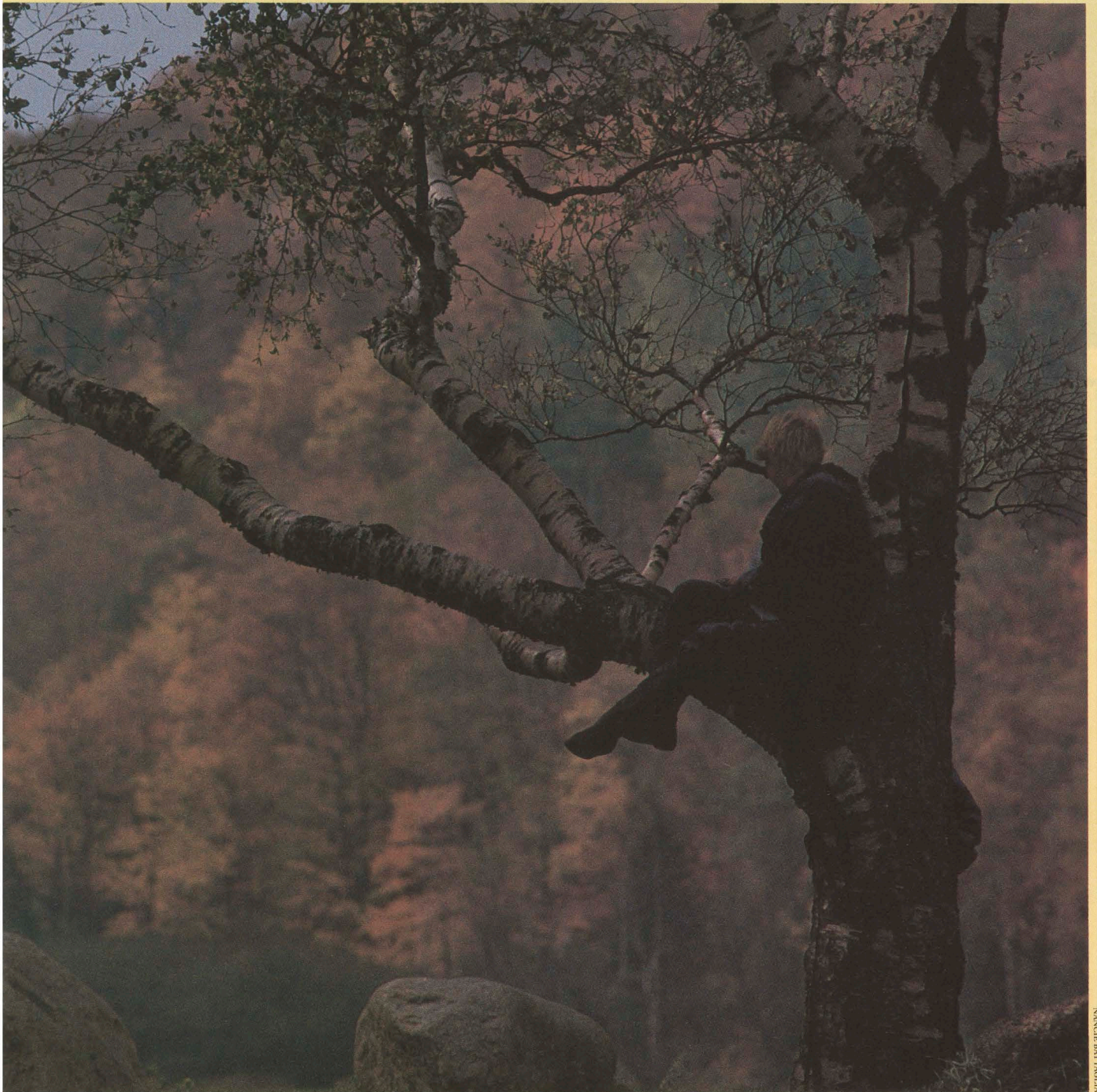


Principal photography by Nancie Battaglia

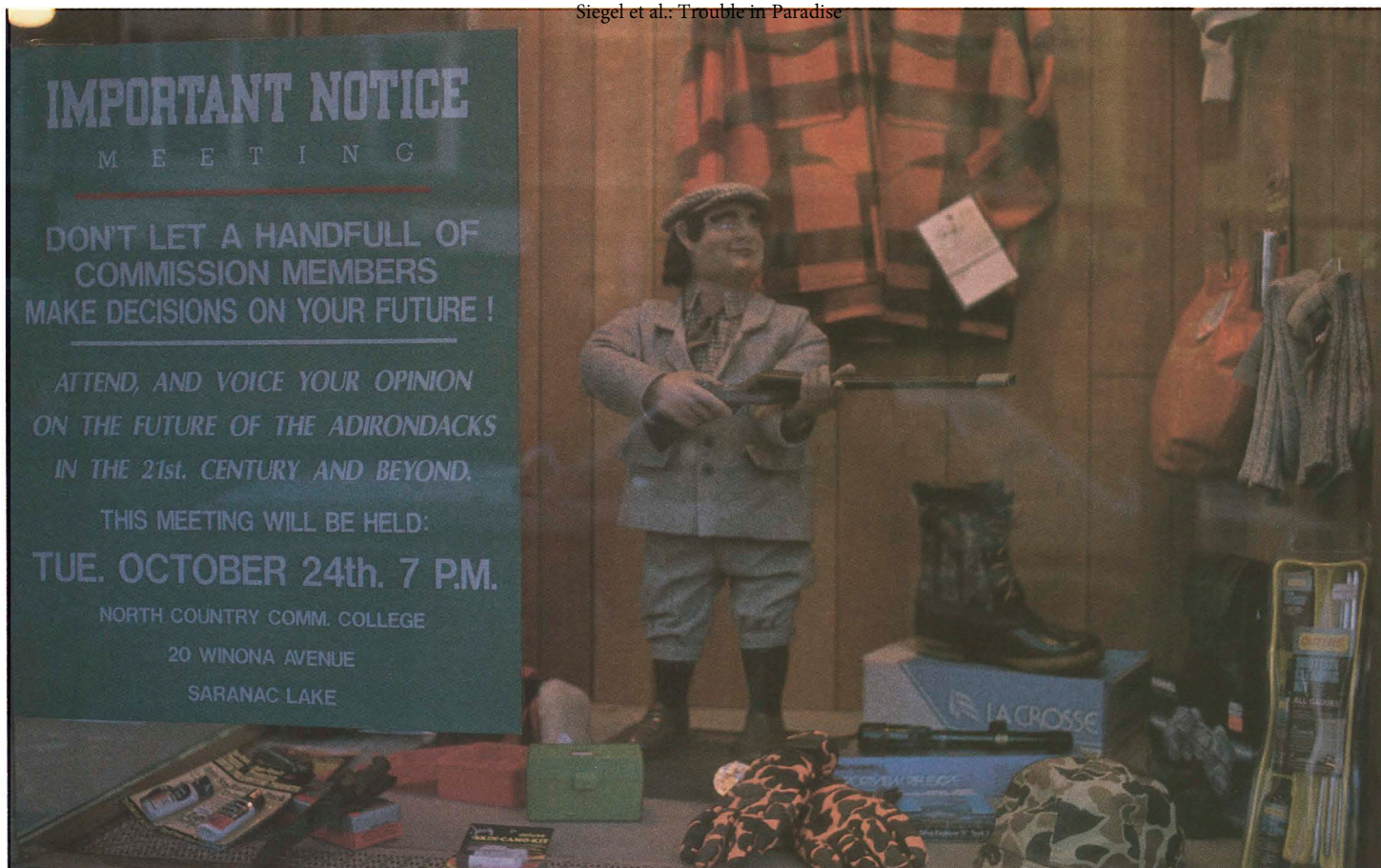
Profiles by Mary Ellen Mengucci



In New York's vast Adirondack Park, humankind is winning a battle with nature that it had hoped to lose. Now the state searches for a new strategy because, for better or worse, the park belongs to all of us.



NANCIE BATTAGLIA



NANCIE BARTOLDA

Marylee Armour '73, G'81

Mountain Time Tales

Soon after writer Marylee Manson Armour met Donald Burnap, one of the original homesteaders in Old Forge, New York, she began recording his life story. Last year—174 audio tapes later—she published *HeartWood: The Adirondack Homestead Life of W. Donald Burnap*.

The book chronicles Burnap's 75 years on Fourth Lake, from childhood until his death in 1987. Full of family history and stories about Burnap's 47 years as captain of the Fulton Chain mailboat, *HeartWood* provides readers with glimpses into everyday life in the Adirondacks.

People thought it no particular hardship to walk 25 miles in the old days. There were men who walked from Raquette Lake to Old Forge for a Masonic Lodge meeting, and then walked home again. It was 18 miles each way.

When I was a kid in the latter years of grammar school, we'd put on a pair of skis, ski to Old Forge, put on our dancing shoes, dance 'til midnight, put our ski boots on, and ski home.

I can remember in the summertime walking from our place to Old Forge just to get a soda. At least that was our excuse.

Burnap realized how difficult it must be for today's generation to imagine the life he led as a boy in the Adirondacks in the early 1900s.

The world was such a quiet place. There were no airplanes, no power boats, no cars, no engines, no television, no radios, and no electricity.

The sound we heard most often, indoors, was the crackling of the fire in the stove. Outdoors, we might hear the rhythmical sound of men using a two-saw, or the sound of someone splitting wood with an axe.

Armour, who received a dual undergraduate degree from the College for Human Development and the School of Education in 1973 and a master's degree from the College for Human Development in 1981, made her first tape with Burnap in 1976. "We had no way of knowing the breadth of the project begun by that first taping," she writes in the introduction.

This summer, Armour saw *HeartWood* go into its third printing. —M.E.M.



The governor's commission and the politics of preservation: "I think some of the reaction—whether it be government or a commission, or downstate versus upstate—is [the Adirondack residents'] perception of other people telling them what to do with their land," says Ross Whaley, president of the College of Environmental Science and Forestry and a commission member.



"We all need a place where we can escape from the pressure and noise of the cities, a place where we can hear only nature's sounds, a place where we can renew ourselves," Pilcher says. Since 1967, she and her husband have spent their summers at Big Moose Lake, a seemingly bottomless body of water carved into the southwestern plateau of the Adirondacks. A 1950 graduate of SU's College of Arts and Sciences, Pilcher has written a dozen magazine articles and two books on the park's past: *Castorland: French Refugees in the Western Adirondacks, 1793-1814* and *Up the Lake Road*, published in 1987, a book saluting the Adirondack Park on the occasion of its centennial two years earlier.

In a single generation, Pilcher has seen the condominiums go up and the voices of spring peepers hushed. She has seen the great canopies of spruce turn gray and lifeless and the fat trout vanish from shadowy ponds. And she has heard the sound of poison falling from the sky in the patter of acid rain.

"The process is irreversible. We have to preserve [the wilderness]," she says. Her voice is hushed and each word has the careful weight of a writer. "There will never be a second chance if we don't make it this time."

The Adirondack Park sprawls across the forested northland of New York, a stronghold against the congested streets and snarled traffic of the Atlantic seaboard's urban corridor.

Roughly the size of Vermont—nearly three times the size of Yel-

lowstone National Park—the Adirondacks are the last major remnant of wilderness lands and waters east of the Mississippi River. They comprise a patchwork of public and private lands, thousands of lakes, hundreds of miles of wild and scenic waterways, and a diverse environment sheltering hundreds of species including many rare and endangered plants. Ninety percent—approximately one million acres—of the designated wilderness in the Northeast falls within this park (the largest outside of Alaska).

Here, says Ross Whaley, president of the SUNY College of Environmental Science and Forestry at SU (ESF), “is the richest variety of life zones that you’ll find in the United States. . . . You go from spruce swamps and bogs to northern hardwoods, to marshes, to lakeshores and upper spruce slopes. And the list goes on.

“You have the place that is home to the fisher, pine marten, golden eagle, osprey, blue heron, and now the return of the moose and the restoration of lynx. There are more than 50 species of mammals, more than 200 species of birds, more than 60 species of fish.”

From the farmlands of the Champlain Valley and the exposed plateaus of the northwest highlands, the Adirondacks climb steeply, underpinned by granitic rock that is, geologically, the oldest in the nation.

Among these grandfather peaks 46 rise to an elevation above 4,000 feet—nine of them cradling fragile alpine plants at their summits. The headwaters of Lake Champlain and the Hudson, St. Lawrence, Mohawk, and Black rivers rise from these sheltering forests.

For much of history the area was a howling wilderness where, pioneer environmentalist Bob Marshall wrote, a man could walk for days in any direction without crossing a road and the white-tailed deer could live its life without once being caught in a hunter’s crosshairs. Indeed, the name Adirondack—although the precise definition is lost—is said to come from the Iroquois word for “bark eater.” Whether they applied it to their Algonkian enemies as a term of derision or as admiration that they were able to eke out an existence in this harsh terrain is anyone’s guess. But well into this century, the interior of the park remained largely a no-man’s land—the province of hunters and legendary guides who could navigate by the stars and the ridgelines.

As late as 1954, William Chapman White would write in *Adirondack Country*: “As a man tramps the woods to the lake, he knows he will find pines and lilies, blue herons and golden shiners, shadows on the rocks and the glint of light on the wavelets, just as they were in the summer of 1354, as they will be in 2054 and beyond. He can stand on a rock by the shore and be in a past he could not have known, in a future he will never see. He can be a part of time that was and time yet to come.”

There is no longer, in the Adirondacks, any certainty to those words.

The park is a great natural inheritance, a biological treasure recognized by the United Nations as an International Biosphere Reserve. But if development pressures continue, conservationists warn, the wild beauty of the park will vanish in a generation.

Everyone wants a piece of the Adirondacks. The sportsmen want managed wildlife habitats and easy access to fishing holes. The environmentalists want wilderness. Yuppies want mountainside retreats. And the 130,000 people who call the park home want jobs and affordable places to live. The developers want to subdivide, the

paper companies want to run their skidders, and almost all of them say they want it the way it used to be.

This timeless land may be jeopardized by the very desire to possess it. Some 40 percent of the park is publicly owned forest preserve. The remainder is held privately, and fully one-quarter belongs to six private timber companies, raising the stakes should corporate priorities switch from cordwood to condos. Here, as in few other places, public and private lands coexist. Here, many believe, is where that model will survive or fail.

Increasingly, as the shorelines are carved up for second-home developments and construction pushes into the wildest and most remote areas of the park, there is a sense that time is growing short. A wilderness subdivided is a wilderness lost.

“In the last 20 years, we’ve seen the forces of development pyramiding, with more organization and affluence,” says Pilcher. “We have to concern ourselves with the shorelines and the skylines and the ridgelines. People are headed toward the hilltops. They’re changing the landscape of the park. When you look up, you don’t see the mountains and the trees silhouetted against the sky. You see townhouses.”

On a clear day, on the peaks outside the hamlet of Blue Mountain Lake, Forest Ranger Greg George can see 20 miles to the summit of Mt. Marcy and deep into the Hudson Gorge. The woods, he says simply, suffer for the development and we are the poorer for it.

“People enjoy coming to the Adirondacks for what it is, not for what it’s going to be when we get done developing it,” says George, a 1975 ESF graduate. “It’s a stronghold, a refuge. We have a respon-

Donald Krone '75

The Games Are Over

After the 1980 Winter Olympics, it looked as though Lake Placid, New York, might turn into a ghost town. Though it possessed world-class winter sports facilities, few people and little funding were available to keep them in use.

But two years later, New York created the Olympic Authority, an organization to promote events that use the existing athletic structures. The Authority now manages and promotes up to 50 events each year at the Olympic facilities, including World Cup competitions, Olympic trial events, and concerts.

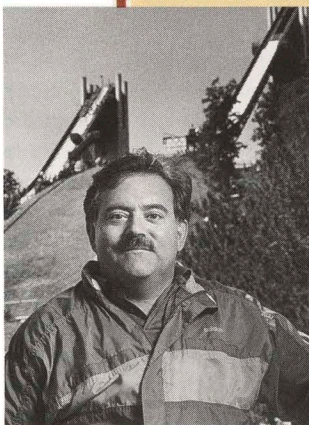
These events have played a large role in turning things around for the Lake Placid area, according to Donald J. Krone, director of public relations for the Olympic Authority.

“Lake Placid has experienced phenomenal economic growth in the past decade,” he says, “and I think the Authority’s activities are the key reason. You can measure that growth in building and construction of second homes, and in the number of new businesses in the area. You can also measure it in tax receipts, which have essentially doubled, from \$5 million annually in the post-Olympic period to over \$10 million today.”

According to Krone, who received a master’s degree from the Newhouse School in 1975, the Authority has spent about \$30 million in facility improvements. In December, it opened a new U.S. Olympic Training Center. The \$16-million complex includes an indoor gymnasium, housing, and food service facilities, and is designed to guarantee long-term use of the existing Olympic structures.

Eventually, Lake Placid may see the Winter Games return. “We’ve fiddled around with the idea,” says Krone. “Lake Placid hasn’t given up its long-term interest in returning the Olympic Games. But what’s more important for the Adirondacks . . . is maintaining high-level visibility and continuing international events.”

—M.E.M.



NANCIE BATTAGLIA

sibility of stewardship so that we can pass it on to future generations. To develop the Adirondacks is an atrocity that should be prevented. . . . People own property for such a short period of time in the scheme of things—it's so minute—but they can do so much damage to it for all time.

"Acid rain may change the composition of the land, but the wildlife and the trees will adapt to it. Something will adapt to it. Once you divide up the land, it can't be put back together again."

Vacation homes nibble at the edge of the Sentinel Range Wilderness. Aviation markers blink on the steep hillsides across the open fields of the Lake Placid horse-show grounds.

On a summer afternoon, 10,000 powerboats churn Lake George into a 32-mile raceway. The resort village on the southern tip of the once-fair lake is a hodgepodge of marinas, motels, souvenir shops, and fast-food joints.

Development is changing the Adirondack Park in a way that was not envisioned a generation ago. Currently, 3.5 million acres are privately owned. Much of it is being eyed by land speculators. Development in the park is regulated by a 17-year-old zoning plan administered by the Adirondack Park Agency (APA). The plan was once considered daring, innovative, and restrictive enough to incite attacks on APA staff members and an arson attempt on the agency's headquarters. But, while the plan slowed the pace of development, it failed to foresee the market in mini-wilderness retreats that has fueled the new real estate boom.

Applications to the APA for building and subdivision permits are expected to increase 72 percent this year. Last year was the agency's busiest year ever, as the demand for vacation homes increased the price of real estate 10 percent every three to four months. At the same time, sharply increasing land values and rising taxes are making it difficult for farmers and timber companies to fend off development pressures. But while conservationists wring their hands and issue dire warnings, there are those who say this isn't all

bad. Or even half bad.

Margaret Pfrany Sauerhafer, a 1964 graduate of the College of Arts and Sciences, left a well-paying job as education director of the Pennsylvania trial lawyers' association for the good life in the mountains. In 1971, she and her husband opened Whispering Woods campground on Long Lake so others could enjoy the same things that brought them to the park: "the beautiful scenery, the hiking, the woods, the water, the peace and quiet." (For more on Whispering Woods, see page 16.)

Ask Sauerhafer about development in the Adirondacks and she talks about environmentalist scare tactics and what she sees as the ability of people to live in harmony with the environment, not at odds with it.

"They talk about rampant development, but I don't see any rampant development," says Sauerhafer, who is also director of parks, recreation, and tourism for Long Lake. "I see very gradual development. These are beautiful homes—very expensive homes. I don't find a building to be something not to be looked upon.

"There was a good reason for creating the Adirondack Park. We *did* strip the land once," she says. "But we can exist here with the animals and trees and tourists. We love them."

Not just love them, depend on them. In the area around Long Lake, some 20,000 tourists visit each year. Almost all sales tax revenue collected in Hamilton County comes from tourism. George sees 12,000 people climb the trail to the Blue Mountain fire tower each year. In all, the Adirondack Park is home to 210,000 seasonal residents and hosts an estimated nine million visitors annually.

Phil Johnstone, a 1975 ESF graduate, is an operations supervisor with the state Department of Environmental Conservation. He, too, takes a more accommodating view of the park. "It's important to preserve what we have and make sure our water is clean and our air is clear. . . . But we do need a mix of people and woods. People are important, even though we do tend to be the ones who mess things up the most."

Jim Vermeulen '72, G'76/Karen '80 and R.L. Stolz '81

Because It's There

The Adirondack mountains are a place of adventure for thousands of hikers and climbers each year. While the cliffs and mountains may not be the world's largest, rock and ice climbers revel in their challenge, particularly in the winter months.

"I enjoy the high peaks generally, such as Mount Colden," says Jim Vermeulen, an avid Adirondack mountaineer. But Vermeulen, editor of *Mountain Journeys*, a collection of essays about the joys and perils of mountaineering, also spends a great deal of time exploring obscure and hidden rock faces in the southern Adirondacks. Often Vermeulen makes first ascents of these cliffs.

"One of my favorite places is called Long Pond," says Vermeulen, who graduated from the College of Environmental Science and Forestry in 1972 and received a master's degree from the School of Education in 1976. "We found a cliff there. It's about five miles back in and it has a nice pond. You can canoe to it."

Vermeulen, a special education teacher in Camillus, New York, regularly combines adventures—hiking and canoeing, for example—to reach a cliff. "That's what I really like to do," he says. "In the winter, you pick out a peak and begin the approach on skis. Then you switch over to, say, crampons, and do some ice climbing or some steep slide climbing to get to the summit.

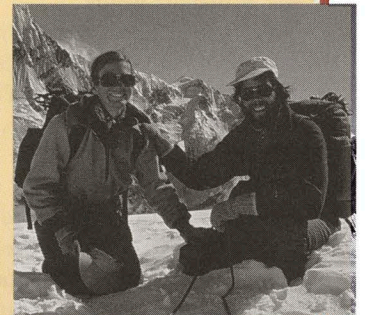
"I really enjoy winter mountaineering. I think the Adirondacks in the winter are much more challenging," says Vermeulen.

R.L. and Karen Yavorsky Stolz, who own Adirondack Alpine Adventures, a rock- and ice-climbing school in Keene, New York, prefer the Adirondack cliffs because the area is less developed than some climbing spots around the globe. "The Adirondacks are a little wilder," says R.L. "Most of the cliffs are farther away from the road. And they require some effort to reach and return from. And frankly, that's just the way I want it."

R.L. and Karen—1981 and 1980 graduates of the College of Forestry and the School of Management, respectively—opened their business in Keene because of the resources in the area. "If you were to pick the ideal spot to be involved in rock climbing, you'd come to Keene," says R.L.

Adirondack Alpine Adventures, which began in 1985, offers an array of ice and rock climbing courses for the novice and the expert. Students learn about equipment, safety, and climbing techniques through one-day, week-end, and week-long courses.

The Stolzes, who met at SU on an Outing Club trip, teach their Alpine mastery methods—structured experiential learning in the mountains—nearly year-round. "We're both in the field a tremendous amount of time," says R.L. "We're each out there teaching in excess of 150 days each year." —M.E.M.



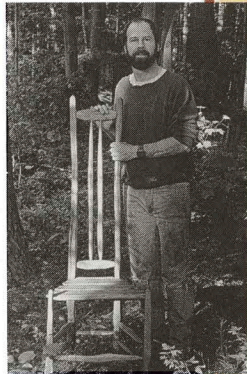


Securing the future of the park—resolving this tension between the needs of people and the protection of the environment—is not easily accomplished. ESF President Whaley, for the past year, has been studying this dilemma as a member of the Commission on the Adirondacks in the 21st Century. The commission, appointed by Governor Mario Cuomo to forge a vision for the park, recently recommended a one-year moratorium on subdivision and construction on most private lands, stringent development guidelines, and the acquisition of 654,850 acres to add to the state-owned preserve.

The difficulty in finding the balance—in guaranteeing a thriving population while preventing the Adirondacks from becoming islands of wilderness surrounded by strip malls—lies in the nature of the park itself. Whaley says: “It’s not a solid piece of public ownership. Rather, it’s a boundary, known as the Blue Line. Within that Blue Line is a mixture of activities that range from recreation to recycling, that go from fishing to foundries, that go from canoeing to timber cutting. Therein lies both the problem and the opportunity.”

The rights of future generations to have a piece of land that is kept as close as possible to its natural state inevitably conflicts with the rights of private landowners, Whaley noted. On a more practical level, strict regulatory controls and the relative isolation of the Adirondacks has left most park residents dependent on tourism and second-home development for their economic survival. Tourism is not just the principal industry. In many areas it is the only industry.

Viola Wickes sees the dilemma all too clearly. As a senior forest technician for International Paper, the largest private landowner in the Adirondacks, she argues



Condos in the woods: “People enjoy coming to the Adirondacks for what it is, not for what it’s going to be when we get done developing it. It’s a stronghold, a refuge. We have a responsibility of stewardship so that we can pass it on to future generations. To develop the Adirondacks is an atrocity that should be prevented,” says Forest Ranger Greg George ’75.



strongly that there must be a place for managed woodlands beside those that are kept forever wild.

Industry-owned forest land contributes to both the character and the economy of the region. Adirondack forests are also a vast sink

Ronald Sandborn '77

Branch Office

On Hulls Falls Road in Keene, New York, Ronald L. Sandborn makes his living creating sculpture from the forest. He builds rustic Adirondack furnishings.

“My work is very twiggy,” he says. “Some of the pieces are made with the bark on, some off. But the key to my work is that it is rustic. I consider it art.”

Sandborn, who sculpts everything from free-form chairs and headboards to entire dining room sets and spiral staircases, creates his pieces in a log home that he designed and built. Sandborn, a 1977 graduate of the School of Education, uses native hardwoods harvested from his own property and that of friends. “The inspiration comes from the natural shapes I see in the forest,” he says. “The search is as exciting as building the pieces.”

Many of Sandborn’s customers order furniture for their second homes in the Adirondacks. But others want to “take some of the woods home with them,” he says. Sandborn’s pieces range in price from less than \$200 to nearly \$2,000, depending on the labor involved.

Sandborn, a former school teacher, has been wood-working since his childhood. He began sculpting Rustic Adirondack Furnishings full-time three years ago, and has completed more than 100 pieces to date.

—M.E.M.



The tracks left by tourists: "It's important to preserve what we have and make sure our water is clean and our air is clear. . . ." says Phil Johnstone '75, an operations supervisor with the DEC. "But we do need a mix of people and woods. People are important, even though we do tend to be the ones who mess things up the most."



Paul '60 and Margaret Sauerhafer '64

Tents at Stake

Campers familiar with the Adirondacks know what to expect: peaceful locations on the lake, lush forests with scenic views, abundant wildlife, and rustic accommodations.

"The rustic style of the region attracts campers from all over," says Paul Sauerhafer, who with his wife Margaret owns and operates Whispering Woods Campground and Cottages in Long Lake, New York. "We get quite a few Europeans. They come over for holidays . . . to tour and stop in different campgrounds in the Adirondacks. People naturally expect a simpler kind of life when they visit this area. We don't disappoint them."

Like dozens of camping areas in the Adirondacks, Whispering Woods is a temporary home to thousands of people each year. The 100-site campground on winding dirt roads remains open year-round for cross-country skiers, snowmobilers, ice fisherman, and other winter vacationers.

Paul and Margaret Pfrany Sauerhafer, 1960 and 1964 graduates of the College of Arts and Sciences, respectively, began camping in the Adirondacks more than 30 years ago. They enjoyed their visits so much that they bought the campground in 1971. "It's a delightful way to make a living," says Paul. "The Adirondack Park is a wonderful place to live and camp." —M.E.M.



STEPHANIE ENGLISH

for atmospheric carbon dioxide, helping to fight global warming and the so-called greenhouse effect.

Wickes, a 1975 ESF graduate, has found a niche in an industry that is not only tolerated, but encouraged. Although loggers and environmentalists are at odds in many areas of the country, in the Adirondacks the timber industry has a long tradition of being a good steward of the land. "The days of the old cut and run are gone," as Wickes puts it.

Her husband, however, is a carpenter and much of his livelihood depends on building the vacation homes targeted by the commission. A moratorium on construction, Wickes says, would be devastating.

"How are we supposed to pay our mortgage?" she asks. "What are we supposed to do for one year while he's out of work? We have to live too."

Surrounded by immense natural wealth, Adirondackers are among the most impoverished residents of the state. Unemployment in the park, the commission found, is usually one or two percentage points above the state average. But the gap can grow much wider, particularly in the winter, when the vacationers have gone home and most of the restaurants,

hotels, and tourist attractions are shut tighter than an ice-locked lake.

Per capita income is well below state levels. In 1985, the last year for which data is available, personal income averaged \$8,429 in the Adirondack Park, \$9,009 in other rural counties, and \$11,765 statewide. Across the park there are economic ghost towns: mining communities like Star Lake that dried up when the ore went bad. Route 3, the main road through the northern Adirondacks, winds past a vanquished landscape of shuttered convenience stores, hunting camps, and down-at-the-heels houses, gray as iron tailings.

Elsewhere, in such resort communities as Lake Placid and Lake George, the demand for vacation homes has sent the cost of land and housing well beyond the reach of many Adirondackers. The temptation is to blame the economy, failed mines, and meager paychecks on the strict regulations governing land use in the park.

Whaley has his doubts. "Their plight is the plight of rural America," he said. "If you look at unemployment rates, income levels, they're not a great deal different in Iowa. Nonetheless, it's the perception of the [Adirondack] residents that the regulation is all that prevents them from making a decent living."

With the release of the governor's commission report, and the perception that more regulation may become a reality, there is trouble in the great north woods. Angry Adirondackers have taken to the roads in long motorcades, snarling traffic and waving placards to protest what they view as illegal taking of their land without compensation. There are whispers about vigilante groups—Adirondack Minutemen and Adirondack Liberators—vowing to take whatever action is necessary.

"They're talking about taking to the woods, burning the woods," Greg George, the forest ranger, says. "It's a hotbed right now."

The vehemence of the response caught commission member Ross Whaley off-guard. He wasn't living in New York during the early days of the Adirondack Park Agency, when wheelbarrow loads of manure were dumped on the agency's front steps to protest zoning regulations that, in some areas of the park, imposed minimum lot sizes of 42.7 acres for a single-family home. A soft-spoken man, he admits he is a little less optimistic than he was when the commission report was only a matter of philosophical debate.

"This is guesswork on my part, but I think some of the reaction—whether it be government or a commission, or downstate versus upstate—is their perception of other people telling them what to do with their land," Whaley said.

He also understands politics and recognizes that Adirondackers, only 130,000 strong, must speak loudly or risk not being heard at all. Perhaps, once the emotional heat wanes, others will see in the park what he does: "A microcosm, a sample, where one could do the best in land-use planning that respects the dignity of the people who live there . . . that respects the concern for a prosperous economy, but at the same time respects the landscape."

With an historian's long view, Pilcher is plagued with doubts. "It's certainly not as clear-cut as black-and-white. Every one of us has within ourselves the desire to develop something for ourselves and, at the same time, we want to keep something for the future. I'm not sure it will be possible to find a balance. I think the debate will continue endlessly."

But even as the woods echo with rhetoric, there is a silence that lengthens like shadows over the lakes and ponds that seam the Adirondack Park.

Blue jays flicker and call in the hills above Woods Lake. Storms drift like smoke across the clear depths. But the still water reflects only an illusion of life. Deep within the untamed forests of the Adirondacks, Woods Lake is dying.

On the scientific scale used to measure acidity, the lake has a pH value of 4.7—not quite vinegar, but close. Researchers who have seen hundreds of Adirondack lakes soured to the point where they cannot sustain life say the culprit is acid rain. Aluminum stripped from the soil by acid snow pours into Woods Lake during the spring runoff, poisoning the young fish.

The snow, the rain, even the fog that shrouds the high peaks is tainted by the sulfur-laden fumes of coal-fired electric plants in the industrial Midwest. Emissions of pollutants have increased 200 percent in this century. Borne east by the prevailing winds, the smokestack emissions mix with the atmosphere and fall over the mountains—a deadly, airborne plague.

"You walk by waters every year where you know there used to be fish. You know there were places where you used to hear frogs and you don't anymore," the DEC's Johnstone says. "The maple leaves are just starting to come out now and it's the end of May. You have to

SU Press

Adirondack Reading

For several years, Syracuse University Press has collaborated with the Adirondack Museum in Blue Mountain Lake to publish books about the Adirondacks. Recent titles include:

- **Defending The Wilderness: The Adirondack Writings of Paul**

Schaefer by Paul Schaefer.

Defending The Wilderness brings together the best of Schaefer's writings on the Adirondacks. It chronicles the conservation movement in New York state in the early 1930s. Schaefer was a member of this grassroots movement that stopped the damming of Adirondack rivers—the largest conservation battle in the United States to date. This anthology not only records a half-century of conservation work by a man who was instrumental in the passage of the National Wilderness Act of 1964, but presents the essence of his wilderness philosophy. In his essays, Schaefer describes the beauty of the mountains, rivers, and forests.

- **Adventures in the Wilderness** by William H.H. Murray.

When it was first published in 1869, *Adventures in the Wilderness* enticed tourists from America's growing cities to experience camping in the Adirondacks for themselves. It was called "Murray's Rush." Unfortunately, most had not read the book carefully, and when the summer was unusually wet and cold there was an enormous outcry against Murray's "lies." In his book, he describes the Adirondack region and includes folklore, travel tips, and humor that the outdoorsman and lover of history cannot resist.

- **In the Wilderness** by Charles Dudley Warner.

Warner's essays, first published in 1878, depict the small, often ludicrous figure that the human cuts in the wilderness. *In the Wilderness's* humor and social satire make it as enjoyable now as when the first "tin-can and paper-collar tourists" began to flock to the Adirondacks. Warner's deadpan comment extends from "A-Hunting of the Deer," which is written from the deer's point of view, to a description of a hastily built shanty: "It needs but a few of these skins to cover the roof, and they make a perfectly watertight roof, except when it rains."

- **Rushton and His Times in American Canoeing** by Atwood Manley.

This is the story of J. Henry Rushton, who became famous as a builder of canoes. His career was born when he built a boat for a trip into the woods. Friends then asked him to build boats. Rushton's fame spread when he built an exceptionally lightweight canoe for the outdoor writer George Washington Sears, better known by his pen name Nessmuk. Manley's book includes a lengthy discussion of Rushton's craftsmanship, and several drawings and plans. —Stephanie English



Death from the air and other puzzles of an environmental holocaust: "The forest is so complex. My belief is, it's not one thing that's causing the decline. Acid rain may be a part, but I don't think it's the whole story," says paper company technician Viola Wickes '75.



wonder if it's just a late spring or if there's something more insidious."

Lakes in 14 eastern states from Maine to Florida have acid levels high enough to harm fish and other aquatic life, but the Adirondacks have been hardest hit. A three-year study by the Adirondack Lakes Survey Corp. found some 11,000 acres of lakes and ponds, about 5 percent of the total, have reached a critical stage of acidification. Fish have disappeared from 346 lakes and ponds, and another 250 are at risk of having all aquatic life extinguished.

The process starts at the bottom, with the destruction of the smallest life forms: the plankton and the fathead minnow and the freshwater shrimp. The ideal condition for fish on the pH scale is between 7—distilled water—and 8. On Pilcher's beloved Big Moose Lake, the rainfall has dropped as low as pH 3.14 (the lower the pH value, the higher the acidity). Below pH 6, fish begin to deform and die as the acid in the water alters their body chemistry, attacks gills, and interferes with heart action. Most species of sport fish stop reproducing in lakes with pH readings between 5.6 and 5.8. It comes as little surprise, then, that economists studying the impact of fishless, acidified lakes estimate that 80,000 angling days have been lost in the Adirondack region.

The numbers are disquieting to William Rosenberg. Clean air and fresh water, he says, is a birthright. A straight-ahead individual, Rosenberg peers through his glasses with an intensity that suggests he can persuade doubters on the strength of his gaze alone. Clean air is more than a buzzword for him, it's a mission.

In 1989, Rosenberg, a 1961 graduate of SU's College of Arts and Sciences, was appointed to the Environmental Protection Agency by President George Bush to serve as the assistant administrator of the Office of Air and Radiation. His primary job has been to manage the reauthorization of the Clean Air Act and guide what he

describes as the administration's unwavering commitment to stop airborne pollution.

When the cost of dirty air is weighed against the cost of burning more expensive, low-sulfur coal, or installing emission scrubbers on Midwestern electric power plants, Rosenberg says the equation isn't even close. "In considering what cleaner air contributes to our economy, the first thing that must be weighed is the cost of inaction—the cost of dirty air," he says. "Each year, Americans spend billions of dollars to treat air-pollution-induced health problems. Chronic and acute respiratory illnesses, premature deaths, and the carcinogenic impacts of air toxins all have significant costs to society.

"Air pollution also damages our terrestrial and aquatic ecosystems and is diminishing the beauty of scenic vistas in national and state parks," he said. "We may not always know how to precisely qualify the cost of losing the opportunity to see the edge of the Grand Canyon, or the hills beyond the Great Smoky Mountains, or virgin red spruce forests on Mount Mitchell in North Carolina, but we do know that it adds immeasurably to the quality of our lives and that we want to preserve it and, if possible, improve those resources for our children."

Since 1978, when the College of Environmental Science and Forestry began monitoring the quality of air at Huntington Forest in the Central Adirondacks, there's been about a 15 percent decrease in sulfate concentrations. Dudley Raynal, an ESF scientist investigating the effect of acid rain, says those figures suggest there has been a slight improvement in air quality in terms of sulfur constituents, but that a decline in pollutants has yet to be reflected in the acidity of the precipitation skittering across Adirondack forests and lakes.

That troubles the DEC's Johnstone, who reads the natural signs

Richard Miller '56

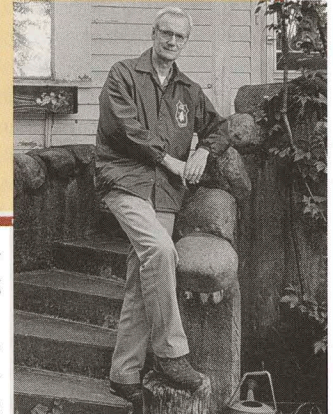
Ask a Ranger

Located in the Adirondack hamlet of Wanakena, on the banks of the Oswegatchie River, is the oldest forest technician program in North America. The New York State Ranger School, established in 1911, also happens to be a unit of the College of Environmental Science and Forestry at SU (ESF).

"Students here learn the technical, hands-on field skills of a forester," says Richard Miller, a 1956 graduate of ESF who is director of the Ranger School Forest Technology Program. "They can become forest rangers, conservation officers, forest technicians, and surveyors with all types of governmental and private agencies."

Students at the Ranger School first take one year of liberal arts and sciences at an accredited college, and then spend a second year at the 2,800-acre Wanakena campus—an outdoor laboratory of sorts—to study forest technology. They learn about field-work techniques in streamflow and water quality measurements, wildlife management, topographical surveying, and fire control.

"We prepare them for outdoor careers across the country," says Miller. —M.E.M.



the way a scientist reads a litmus test. Man's influence is showing in the Adirondacks in the late unfolding of leaves and the crystalline, lifeless blue of too many lakes and ponds. Johnstone says he finds himself coming down on the side of wildlife much more often than he takes the side of civilization.

When the Adirondacks are destroyed, when the last lake is ruined for the sake of cheap electric rates, where then, he wonders, will we go to see the bald eagle, the moose, and the quick slap of an iridescent brook trout rising above the water's surface?

"It's amazing how many people already don't get to see that, and I think that's why we've got to do something about acid rain," Johnstone said. "I don't think the earth can afford to lose any more of these places where there are habitats for animals, where the air and the water are still clear."

But there is every sign that time is growing short. The findings at Huntington Forest suggest the environment is at a crossroads. Pollution levels are abating, but the lakes continue to turn lifeless.

Mallards preen and shovel for bits of weed in the quiet shoreline bays and marshy fingers of Big Moose Lake. The ducks prosper. But the lake trout, the bass and the brook trout have vanished. Gone, too, are the otters that used to slide and play along the shoreline and the merganser, the skilled fisher of northern waters. When the wind blows out of the west, the air is heavy with industrial haze. And along the mountainsides, the trees have begun to die.

Gray skeletal limbs poke through the great canopy of red spruce covering the high peaks wilderness. State studies found 70 percent of the red spruce counted in a 1965 survey of Adirondack forests were dead by the mid-1980s. Some 250,000 to 300,000 acres of woodlands in Vermont, New York, and New Hampshire have been affected by dieback—the mysterious death of great blocks of once-thriving forests.

Viola Wickes is puzzled by the loss of spruce trees in the vast International Paper tracts. "The forest is so complex," she says. "My belief is, it's not one thing that's causing the decline. Acid rain may be a part, but I don't think it's the whole story."

Scientists are inclined to agree. Although they say the exact cause is unknown, the evidence points to acid rain as one important factor in forest decline. ESF's Raynal, a professor of forest biology, says spruce exposed to acid under laboratory conditions are less able to tolerate extremely cold weather—a fact of life in the higher elevations of the Adirondacks. This may contribute to the mortality of trees, but the question, Raynal says, is how to relate what's happening in the laboratory to what's happening on the mountainsides.

"Despite what many assumed to be a rather straightforward relationship between acid rain and spruce decline, it's not that clear," he says. "Acid rain seems to be one stress factor that influences spruce health, but many other factors, including severe climate conditions, as well as biological agents—like insects and fungal diseases—influence spruce decline."

Some scientists believe the connection works like this: Acid rain mobilizes toxic metals in soil water and the poisons are absorbed into the tree's tissues through the root system. The toxins leave the tree in a generally weakened condition, less able to withstand drought, disease, and severe cold.

Another theory is that airborne pollutants somehow fool the needles of high-elevation conifers so that they don't harden for the winter, leaving the tree susceptible to freezing.

Yet another hypothesis: The acid in the rain and snow bathes the trees and corrodes the waxy coating of the needles—much as it pits

house paint and the finish on cars—again weakening the tree and leading to its death.

"These linkages are not easy to demonstrate," Raynal says. "What scientists are saying now is that there is this kind of potential for trees to react this way."

"I think human beings in general like to look for simple cause and effect. It's appealing to say that acid rain is killing trees in the Adirondacks and indeed it may be contributing. But there are many factors affecting the health of trees in the Adirondacks. Atmospheric deposition, as we like to call it in the scientific community, is an important factor, but it has to be put in the context of severe drought, severe climate, and soil fertility."

The scientists ponder the facts and scrutinize the evidence. That was the problem in the beginning of acid rain research, Raynal says: There was plenty of anecdotal evidence, but none of the hard data necessary to evaluate the changes taking place in the forests and on the lakes.

So, he says, the research must continue—at Huntington Forest and on Woods Lake, where Syracuse University is participating in a landmark experiment to reverse the effects of acid rain.

Since 1985, scientists have neutralized the acidified water by dosing the lake with lime. At best, it has been a stopgap measure. The lake cleanses itself once a year, requiring constant transfusions of lime. And the limed water has been unable to stop the spring melt from poisoning spawning grounds with acid and heavy metals.

Last fall, on a day when the copper of beech leaves turned the air to tea, scientists turned to a combination of ancient and modern technologies, using helicopters to spread a thick coating of lime—between three and five tons per acre—on the forests surrounding Woods Lake. Farmers have used lime for centuries to neutralize the natural acidity of soil. The technique may be as old as the Romans.

If the computer models are correct, this task won't have to be repeated for another 75 to 100 years. This is the first attempt at a long-term restoration and Charles Driscoll, an SU professor of civil and environmental engineering who is among researchers monitoring the experiment, was cautiously optimistic as the work began

Gregory Timm '70

Current Conditions

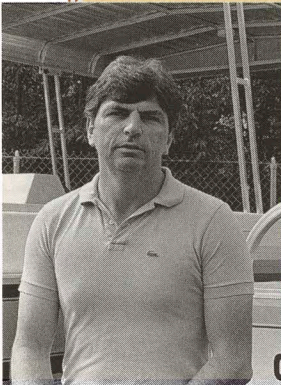
Gregory Timm's job keeps him busy seven days a week, 12 hours a day, for the better part of every year. Not the laid-back kind of life you might expect in the Adirondacks, but it suits Timm fine.

Timm, a 1970 graduate of the College of Visual and Performing Arts, owns Raquette Lake Marina, the largest marina in the central Adirondacks. Like others in the region, Raquette Lake sells a lot of "family 'run-about' boats—anywhere from 16 to 20 feet long," says Timm. "And pontoon boats or party barges are very, very popular." In addition, he says, visitors often rent canoes and other boats that are suited to the inland lakes of the Adirondacks.

"Boat rentals really started up here in the early part of the century. People used to rent Adirondack guideboats, which were made for this part of the country," says Timm, referring to the wide-bodied canoes once used on hunting and tracking expeditions. "... Today they are more of a showpiece than anything else."

Timm's business, which began as a small rental operation, has grown to a multi-million-dollar retail and service outlet. "We've made it into a year-round business," he says. The marina sits in the village of Raquette Lake on several acres of waterfront land and remains open daily from the end of February until mid-December.

—M.E.M.



last October. If the acid can be neutralized by the lime pellets—think of a large, slowly dissolving Tums tablet—there is hope that

a self-sustaining fish population can be returned to the wilderness lake.

"So far, so good. It looks quite positive," says Driscoll, an eminent and prolific acid rain researcher whose office spearheads a handful of data collection and analysis projects throughout New York and New England. "Where the acidity of the lake had been dropping to pH5 during the spring melt, this year the level never slipped below pH6.

"We were liming every year, every two years. We're hoping that might become decades," he adds. "It's relatively expensive. But if it lasts 50 years, it could be cost-effective. The outlay is on the front end. It could be a one-shot deal."

So much is at stake, Johnstone says. If acid rain continues unabated, an irreplaceable resource will be damaged and perhaps lost forever. "[The Adirondacks] can't afford to lose any more," he says. "We're as important as the rain forests. Maybe not in terms of the global climate or the ozone layer, but in our own way just as important."

Survival has always been a tightrope walk for the Adirondack Mountains.

By the closing years of the 19th century, the wilderness had all but vanished. New York had become the largest timber producing state in the nation. Seven thousand sawmills and 1,500 tanneries scarred the forest. Sparks from the railroads pushing deep into the wilderness ignited great fires that burned uncontrolled, laying waste to thousands of acres. The mountains, a state commission would find in 1885, had been reduced to an "unproductive and dangerous desert."

A decade later, as the once-endless forests lay ravaged and the lynx and the timber wolf were pushed from the high peaks, Article XIV, the "forever wild" clause, was added to the State Constitution:

Nature at heart: "We all need a place where we can escape from the pressure and noise of the cities, a place where we can hear only nature's sounds, a place where we can renew ourselves," says Adirondack historian Edith Bendow Pilcher '50. "... We have to preserve [the wilderness]. There will never be a second chance if we don't make it this time."



"The lands of the state, now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall forever be kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation public or private, nor shall the timber thereon be sold, removed or destroyed."

These 54 words, Whaley says, remain today the "strongest piece of wilderness legislation ever passed in the United States."

Another 70 years would pass before the federal government, in 1964, passed its own Wilderness Act. By then, the state was moving further in its protection of the Adirondack Park. In the late 1960s, Governor Nelson Rockefeller appointed a commission whose findings led to the creation of the Adirondack Park Agency, and to legislation that vested in the state unprecedented authority to regulate development on the private land in the park.

It is "the strongest piece of legislation over private land that has ever been enacted," Whaley says. "There's this tremendous conflict going on over the use of the land and the sense of 'let's save that piece of the landscape' has always won."

The words fade. The mountains remain.

A century ago, along the shores of Blue Mountain Lake—30 miles from the nearest railroad—civilization's light flickered and danced in the grand ballrooms and long corridors of the Prospect House, the first hotel in the world with electricity in its guest rooms.

The world pushes deeper still into the cedar churches and hidden winter meadows of the white-tailed deer, into the solitary lakes where loons call under a cold moon.

When the wilderness has disappeared, S.H. Hammond wrote as an earlier generation encroached, "where shall we go to find the woods, the wild things, the old forests? The old woods should stand there always as God made them, growing on until the earthworm ate away their roots and the strong winds hurled them to the ground, and new woods should be permitted to supply the place of the old so long as the earth remained.

"There is room enough for civilization," he continued, "in places better fitted for it." ■



JANIS BARTH is assistant city editor of the Syracuse Herald Journal. Her previous writing on the Adirondacks earned a Pulitzer Prize nomination in 1989. She is a summer visitor to the park herself, the owner of a small cabin on Cranberry Lake.

NANCIE BATTAGLIA is a prolific and award-winning photographer who resides in Lake Placid, New York. Her Adirondack photography appears in dozens of publications and she is the New York Times's principal photographic correspondent in the area. A 1977 graduate of the Newhouse School's photojournalism program, she served as the chief still photographer for the 1980 Winter Olympics.

MARY ELLEN MENGUCCI is a staff editor.

