
# PEOPLE IN THE PARK

## A TOOLKIT FOR FOSTERING VIBRANT ADIRONDACK COMMUNITIES

CONWAY SCHOOL OF LANDSCAPE DESIGN | MARCH 2008 | KEVIN ADAMS | LIZ KUSHNER | CATHERINE PEDEMONTI | DILLON SUSSMAN

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March, 2008

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# EXECUTIVE SUMMARY

The Adirondacks are at a unique moment in their history. Long divided by passionate disagreement about land planning, residents are coming together to work out their differences. They realize that they must work together to overcome common challenges, that they must speak with one voice to be heard in a noisy and crowded world.

The Common Ground Alliance is one example of this new spirit of cooperation. The Alliance is an ad hoc group of leaders representing non-profit organizations, municipal governments, businesses, and economic development and environmental organizations in the Adirondacks. They work together to identify common concerns and to build a platform for action. They work by consensus and leave "axes, egos, agendas, and logos" at the door. Their *Blueprint for the Blue Line*, published in February 2008, is an articulate statement of problems facing the region and steps that can be taken to mitigate them. It identifies fourteen major challenges facing the Adirondacks:

1. Aquatic and Terrestrial Invasive Species
2. Acid Rain
3. Global Climate Change
4. Main Street Revitalization
5. Water, Sewer, and Stormwater Infrastructure
6. Marketing and Entrepreneurial Development
7. High-Speed Telecommunications
8. Workforce/Community Housing
9. Transportation Infrastructure
10. Energy
11. Effective Governance and Policy Framework
12. Land Use Change
13. Property Taxes
14. Primary Healthcare Crisis

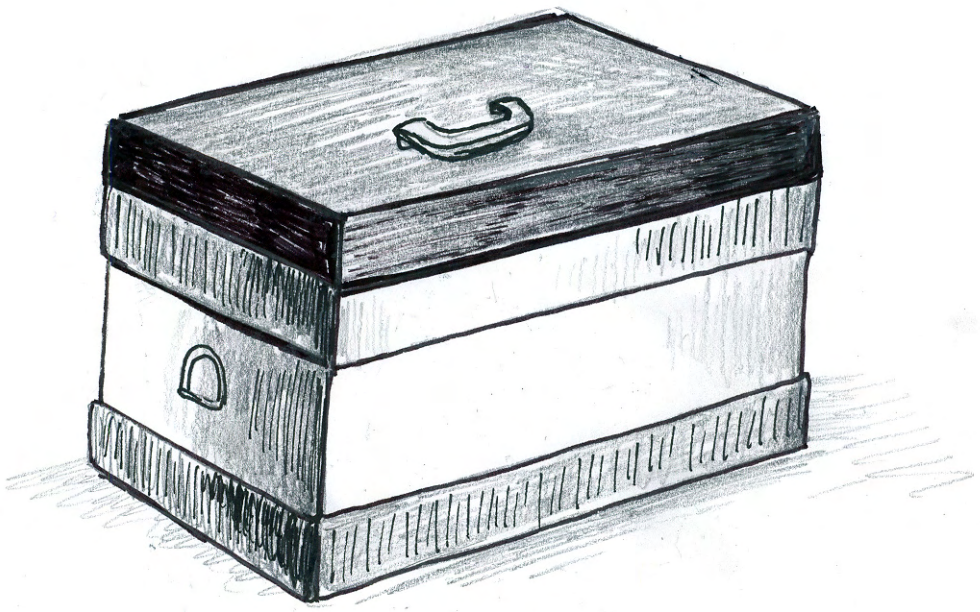
Recognizing the value of a fresh perspective on the Adirondack region's future, the Common Ground Alliance approached the Conway School of Landscape Design to build on the *Blueprint for the Blue Line* and identify tools for, as they put it, "marrying the Adirondacks' economy and environment to foster vibrant communities."

This handbook re-frames the long-standing economy-environment antagonism by proposing a view of community development that improves quality of life through reinvestment in natural capital, built capital, human capital, and social capital.

The handbook shows that by taking advantage of the region's abundant natural, built, human, and social assets, Adirondack residents—smart, hardworking, and persistent—can foster communities that satisfy and sustain them: all-season communities that can thrive in the winter, spring, summer, and fall; self-reliant communities that are not dependent on the whims of tourists, state government, or international corporations; vibrant communities that are ecologically rich, economically sound, and socially fulfilling.

The handbook has two parts. The first chapter of Section One describes the Adirondacks as they are now, identifies significant trends and presents a vision of vibrant communities in the Adirondacks. Chapter Two of Section One presents the historical and economic analysis that led to the vision. It includes a brief discussion of conventional and new theories of economics. There are important ideas in this chapter, and we hope readers will take the time to read it, but for a casual reader in a hurry, skipping to the strategies presented in Section Two might be a better way to start. Section Two presents tools for realizing the vision described in the first part. Techniques for place-based economic and community-development are complemented by stories of innovative activities that are already remaking the Adirondacks and similar places.

The ideas and tools illustrated in this manual are not exhaustive or cure-alls. There are many other tools for building successful communities. There are also real trade-offs inherent in the tools presented; communities must make complex decisions about the kind of future they desire. Ultimately, lasting revitalization will only succeed if Adirondack residents are full participants, sitting down together to take control of their own futures. This report provides examples of how that conversation might proceed.



# 1

# SECTION

# A VISION

## FOSTERING VIBRANT ADIRONDACK COMMUNITIES

A vision requires looking at how things are now and imagining how they could be.

### HOW THINGS ARE

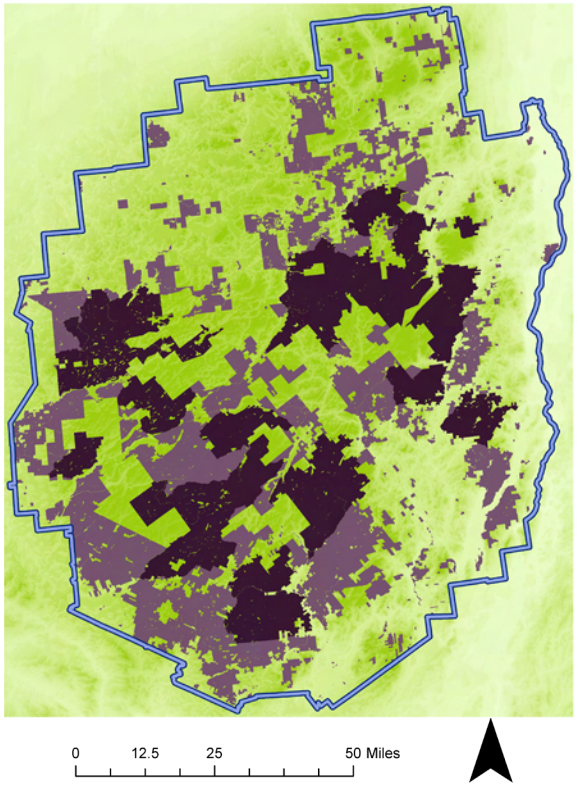
The Adirondack region is vast and complex, making fine-grained economic, ecological, or social analysis difficult. Challenges of scale are compounded by the region's divided political history, which has profoundly shaped the way residents see the Park, and its successes and failures. The picture of the Park described below, drawn from available publications and conversations with people on the ground in the Adirondacks is, of course, incomplete. It does, nevertheless, point toward a new view of the Adirondacks and the relationship between its people and the land.

Stories about the Adirondacks typically begin like this: the Adirondack Park was established in 1892. The Park was based on a novel concept: massive tracts of land would be protected, as "forever wild," but people would continue to live among the protected forests. Towns, villages, farms, and working forests would remain. The Park was, and is, special because it incorporated both people and nature. How has this arrangement worked out?

#### CONSERVED LAND

In terms of conservation, the Park has mostly been a success. Over 3 million acres of forest have been permanently protected from development. The Park contains one of the largest contiguous deciduous temperate forests in the world. The large wild areas have fostered the return of the moose and the cougar to the Park. The wild areas have enriched the lives of Adirondack residents and millions of visitors.

But the "forever wild" designation has not protected the conserved lands from the long-distance effects of human activities. Acid rain has poisoned—among other things—Adirondack lakes, loons, and sugar maples (Jenkins & Keal, 2004). Invasive species have marched through the Park: funguses decimated chestnuts and elms at the beginning of the twentieth century; Eurasian watermilfoil is choking out native aquatic vegetation (Grisi, 2005). Meanwhile, global climate change is having local effects. Adirondack winters have already warmed by 4 degrees since 1970 (Jenkins & Keal, 2004). If recent predictions are correct, Northeastern winters will warm by 8 to 12 degrees by the end of this century and summers might warm by 6 to 14 degrees. The pace of these changes is unprecedented and Adirondack ecosystems may not be able to adjust to them. It's likely Adirondack spruce and fir trees will not survive (Frumhoff, 2007). The Adirondack forest will still be protected at the end of this century, but it will likely be a very different forest from what exists now. The Adirondack dream of a land where the earth and its community of life are untrammeled by man may not be possible.




CONSERVED LAND

*Approximately 50% of the Adirondack Park is owned by the state.*


## WORKING, RESIDENTIAL, AND INDUSTRIAL LAND

*Approximately 50% of the Adirondack Park is privately owned.*

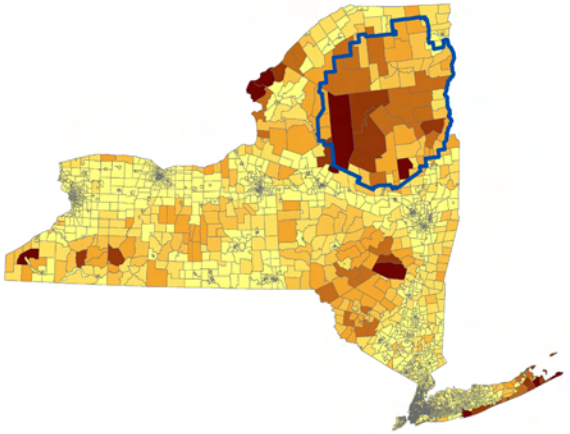
## THE PEOPLE IN THE PARK

And what of the people who live in the Park? Approximately 132,000 full-time residents call the Adirondacks home. They can be found in 102 towns and charming villages, nestled in forests, and along lakefronts.

For Adirondack residents, life in the Park has been a mixed bag. There have been success stories and there are serious challenges. On the positive side, Adirondack residents live in a place of incredible natural beauty. They have enjoyed quiet days, dark nights, and strong communities while Americans in other parts of the country have lost touch with nature and their communities.

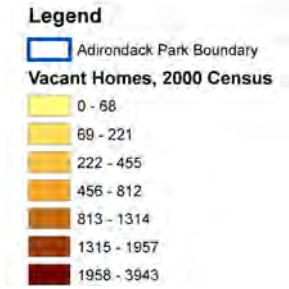
Adirondack residents have been affected by many of the major changes that have played out in the United States since the late 1800s. A short list of these changes includes: rapid industrialized natural resource extraction in forests and mines, followed by deindustrialization; increasing disparities in wealth; changes in land management policies, including the creation of wilderness areas, land-use legislation, and conservation easements; and national demographic and power shifts from rural areas to urban areas and from the northeast United States to the south and west.

These changes have had real implications for Adirondack communities. Adirondack workers have suffered from the loss of their primary industrial base of lumber and paper mills. Residents now commute long distances to lower-paying jobs. Children leave home and don't return. Fire departments and PTAs can't find volunteers. Meanwhile, second-home buyers continue to want their piece of the Adirondacks. The "great camps" of Adirondack history are smaller now, but there are far more of them. Second-home sales drive up prices. Long-time residents can no longer afford to live in their communities. Adirondack residents call them "the towns where the lights are off in the winter."



## SECOND HOMES

*Compared to New York State as a whole, the Adirondack Park has many second homes. Second home development may be raising housing costs for Adirondack residents.*



## TRENDS

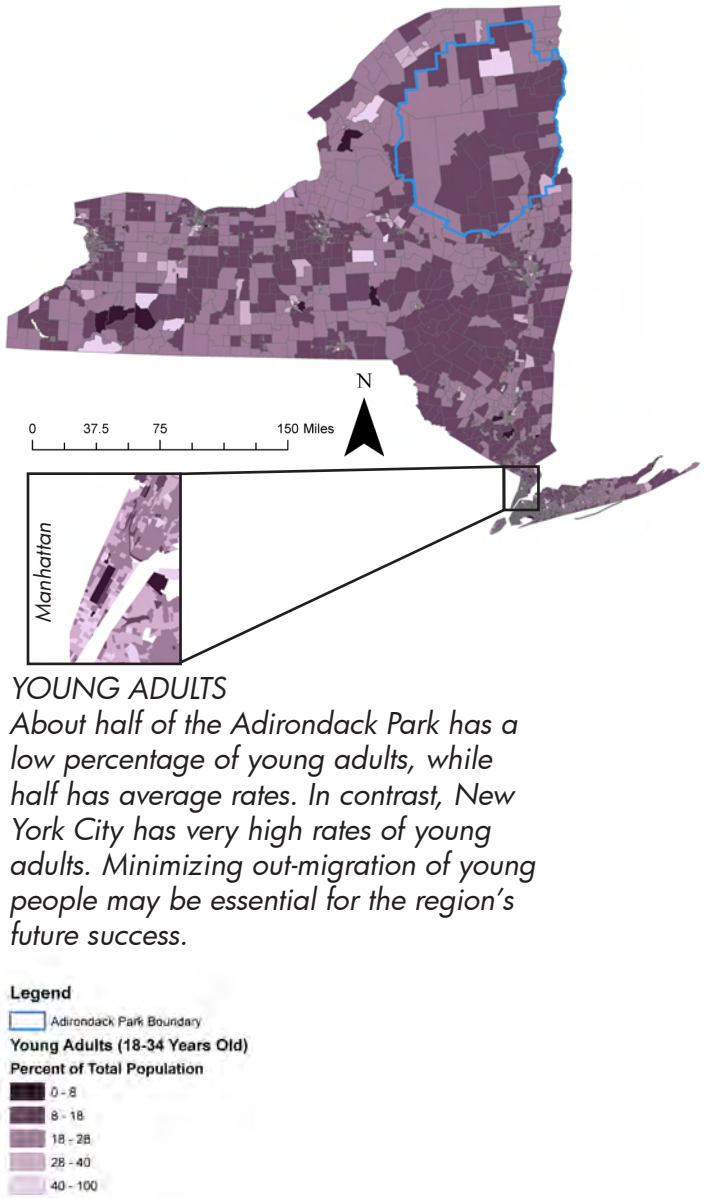
The Adirondacks will continue to be affected by the major trends facing the United States. Increasing economic globalization and declining fossil fuels will have day-to-day implications for Adirondack residents who have high rates of unemployment and long commutes. Global climate change and other long-distance ecological shifts will impact Adirondack human communities, as well as natural ones. For example, winter tourism might decline as the Adirondack snow season is cut in half. Conversely, demand for Adirondack lakes might grow as millions of New York City residents seek relief from over one hundred ninety-degree days each summer by 2099 (Union, 2007). There are several current trends facing the Adirondacks that deserve a closer look because they raise the kind of questions the region will have to face in the future.

### DEMOGRAPHICS

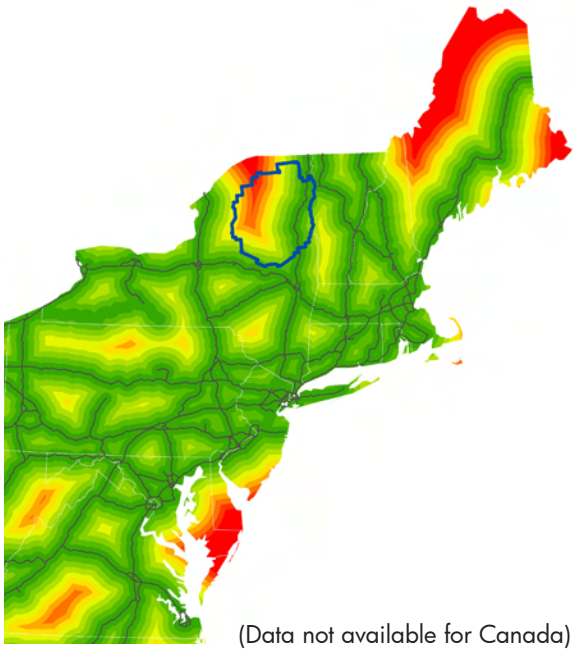
Current demographic trends show that rural places across the United States are losing people to urban areas. The loss of population reduces the rural places' ability to maintain strong communities and economies. In the Adirondacks this trend shows up as a "brain drain" in which bright, young Adirondackers are drawn to cities. The loss of rural population is also taking place across the northern forest and it is particularly severe in the Midwestern states. There are many possible explanations for the shift: loss of jobs in rural places as farming and forestry have declined, falling crime rates in cities, media portrayals that glorify city living, warmer winter temperatures down south.

Whatever the cause, the loss of population hits the Adirondacks hard because the region's residents are already spread out in small widely-dispersed settlements and villages. With around nineteen residents per square mile, the Adirondacks have one of the lowest population densities in the northeast. Compare this with the rest of upstate New York, which has a population density of 227 people per square mile (Webb, 2002). With so few people in each community, every person is important.

The loss of young people raises some important questions for the Adirondacks. How can the region keep the talent they have and attract functioning members of their communities to replace the ones they have lost? If young people are attracted to cities, is there a minimum population density that will maintain stable Adirondack communities? What is the future of the larger Adirondack towns? Do they need to be revitalized to attract more young people? Will the pendulum swing back toward rural living, flooding the Adirondacks with back-to-the-landers, or people who want to enjoy small town living and outdoor recreation?




*YOUNG ADULTS*
*About half of the Adirondack Park has a low percentage of young adults, while half has average rates. In contrast, New York City has very high rates of young adults. Minimizing out-migration of young people may be essential for the region's future success.*




(Data not available for Canada)

*DISTANCE TO INTERSTATE HIGHWAYS*
*The northeast portion of the Park is nearly an hour from an interstate highway. This affects the delivery costs of products to and from those areas. As fossil fuels rise, transportation costs might consume a significantly larger portion of Adirondack budgets. On the other hand, the Adirondacks' proximity to major markets might open new opportunities for the region.*

## THE COST OF FOSSIL FUELS

At the dawn of the twenty-first century, many experts believe that the era of cheap fossil fuels is past. A glance back four decades provides the necessary perspective. By 1970, the U.S. had pumped half of all the oil it would ever pump from its territory, and from then on began a decline in its ability to control the price of oil. A decade of oil shocks and economic turmoil ensued; the spectre of an age of scarcity sparked an interest in alternative energy and back-to-the-land movements across the country. But in the 1980s—when oil was discovered and pumped from Alaska and the North Sea—the world was once again awash in oil and the price fell to ten dollars a barrel. For a quarter of a century, roughly 1983 to 2005, petroleum could be had throughout the industrial world at bargain prices. In the economic, infrastructural, and cultural initiatives that emerged during those years (such as the boom in second-home development in the Adirondacks), "Can we afford the energy cost?" was not a question that needed to be asked (Heinberg, 2003).

But as fossil fuel prices skyrocket, people are paying more attention to the cost of energy. Many experts believe that the worldwide fossil fuel production is at, or near, decline. Increases in the costs of goods and services based on their embodied fossil fuel use—the amount of fossil fuel it takes to create, transport, or run them—may soon ripple throughout our economies and our lives (Adams, 2006).

One activity highly dependent on fossil fuel, where dramatic changes—in a region of 138,000 people spread thinly over three millions acres—will soon alter residents' lives like no other, is transportation.

For Adirondack residents, both year-round and seasonal, the dramatic increase in energy costs could mean today's personal transportation habits become unaffordable. This may entail more people staying put in the Adirondacks, more people moving out, or even more people visiting from downstate New York, when exotic vacation options become financially unfeasible—nobody knows for sure. But transportation costs are likely to keep changing and the impact could be tumultuous. A great many of the Adirondacks' current economic arrangements, infrastructure, and personal and collective habits that grew up in the past few decades may have to be reworked, perhaps in a hurry.

Transportation consumes about forty-three percent of our energy use and ninety percent of our oil (Adams, 2006). During the past quarter century of ultra-cheap energy, transportation costs were so low that they became a negligible fraction of the cost of goods. Wal-Mart's shelves could be stocked by China and local industries could be flattened.

With the rise of transportation costs, not only will Wal-Mart's "warehouse on wheels" business

model, as it has been called, be under pressure, but the entire global trading system could realign as it becomes less feasible to use petroleum as a material, to engage in energy-intensive manufacturing, or to transport products long distances. There could be radical new pressures for more local manufacturing, increased demand for raw materials for industry, and a growing clamor for non-industrial and thus less energy-intensive food sources (Adams, 2006).

The Adirondacks can take advantage of the many opportunities caused by a world of declining fossil fuels. Will Adirondack farming and forestry be revitalized as fossil fuels supplies decline? Will the Adirondacks become leaders in alternative energy utilizing the region's abundant supplies of wind, rushing water, and biomass?

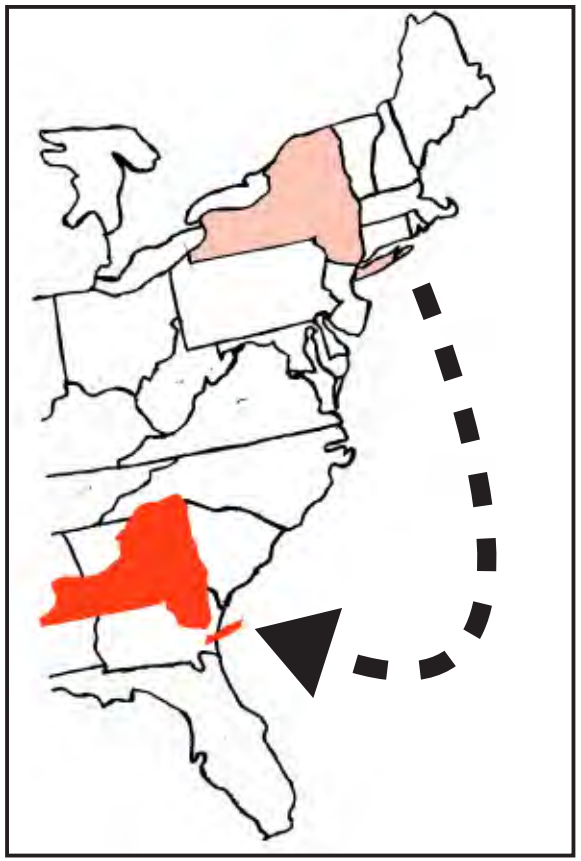
## GLOBAL ECOLOGICAL CHANGE

Three current ecological trends raise fundamental questions about the future of the Adirondack wilderness and humans' place in it.

Over the last hundred years, acid rain and snow, primarily caused by car emissions and Midwestern power plants, has doubled the number of highly acidic lakes in the Adirondacks. The acidity kills plants and fish and it alters soil and water chemistry, which has long-term effects. For example, for the past forty years, acidified soils have prevented sugar maples from reproducing normally. Acid precipitation has also contributed mercury to lakes and streams, which has accumulated in fish and poisoned everything that eats them, including loons, eagles, and fishermen (Jenkins & Keal, 2004). Although levels of sulfur dioxide have dropped, nitrogen levels have not, and so Adirondack ecosystems continue to feel the effects of acid rain. Even if acid rain were to halt immediately, the changes it has wrought in soils and lakes, and plant and animal communities will be felt for generations (Jenkins & Keal, 2004).

Invasive species, which include plants, animals, and microbes that were brought to the Adirondacks by humans, are spreading throughout the Park, on land and in lakes and streams. Invasive species are troubling for several reasons. They can choke out native species or make them vulnerable to disease. They can alter fundamental natural processes, like the way water moves across the land, how much light reaches the bottom of a lake, or how often fires occur. Invasive species typically follow human transportation routes. In the Adirondacks they hitch rides on cars and boats. But even without human help, invasive species can still move across the landscape (Randall, 2003; Grisi, 2005).

Global climate change isn't just about rising temperatures; it's about wholesale ecological change. It will fundamentally alter where plants and animals can survive. If upstate New York's climate becomes more like South Carolina's current climate, as is predicted, it will be a whole new ecological niche that has never existed on earth before (Frumhoff, 2007). The region will



*GLOBAL CLIMATE CHANGE*
*By 2090, New York summers are predicted to feel like current summers in South Carolina (Union, 2007).*

still have New York State's soils and its lengths of days and sun angles, but it will experience South Carolina's temperatures, and a completely novel set of precipitation patterns. Many creatures that currently live in the Adirondacks will no longer be able to survive and will need to find new homes. For example, the alpine communities on top of Adirondack mountains will probably not survive (Farnsworth, 2008). Other creatures from other places will be looking to fill the niches left by Adirondack natives, but what creatures will they be, and will they be able to migrate long distances into the Adirondacks? Even if Southern longleaf pine could survive in the new New York, how long will it take to arrive? Will it be able to make the journey, if its habitat is marching northward faster than the wind, water, or organisms can spread its seeds?

In all three cases, it seems that the Adirondack wilderness is no longer untouched by man. Is an acid lake *wilderness* if it was acidified by human actions? Is a wilderness forest really *wilderness* if its most significant nut-producing tree was wiped out by a human induced fungus? Will the wilderness still be *wilderness* if its climate has been dramatically changed by humans? In each of these cases, there are profound moral questions for the stewards of the Adirondack Park. Should humans take actions to help these ecosystems regenerate? If a highly acid lake returns to a more natural pH, should humans take steps to reintroduce the life that was once in them? Or should we let nature take its course? If invasive species take over a portion of the forest preserve, should we eradicate them? If climate change is coming, should people be testing trees now to see which will survive warm winters in Adirondack soils? Should we be establishing seed-beds for the future forest? Will the wilderness be better off with no human manipulation, some, or a lot? How do we determine where the line is?

The challenges and questions outlined above point to the need for increased cooperation amongst all of the people who care about the Adirondacks—locals, state officials, visiting tourists, non-governmental organizations. Adirondackers have a long history of surviving under difficult circumstances, but these difficult circumstances have also, at times, been divisive. To succeed in the future, Adirondackers will need to find common ground and identify common goals. They will need to engage all members of their communities and all sectors of their economies. They will need to participate in local and regional planning.

Together, Adirondackers can foster vibrant communities that provide a good quality of life for people and healthy woods and waters. Together, they can look to the future and see better times ahead.

## HOW THINGS COULD BE
A VIEW OF THE FUTURE

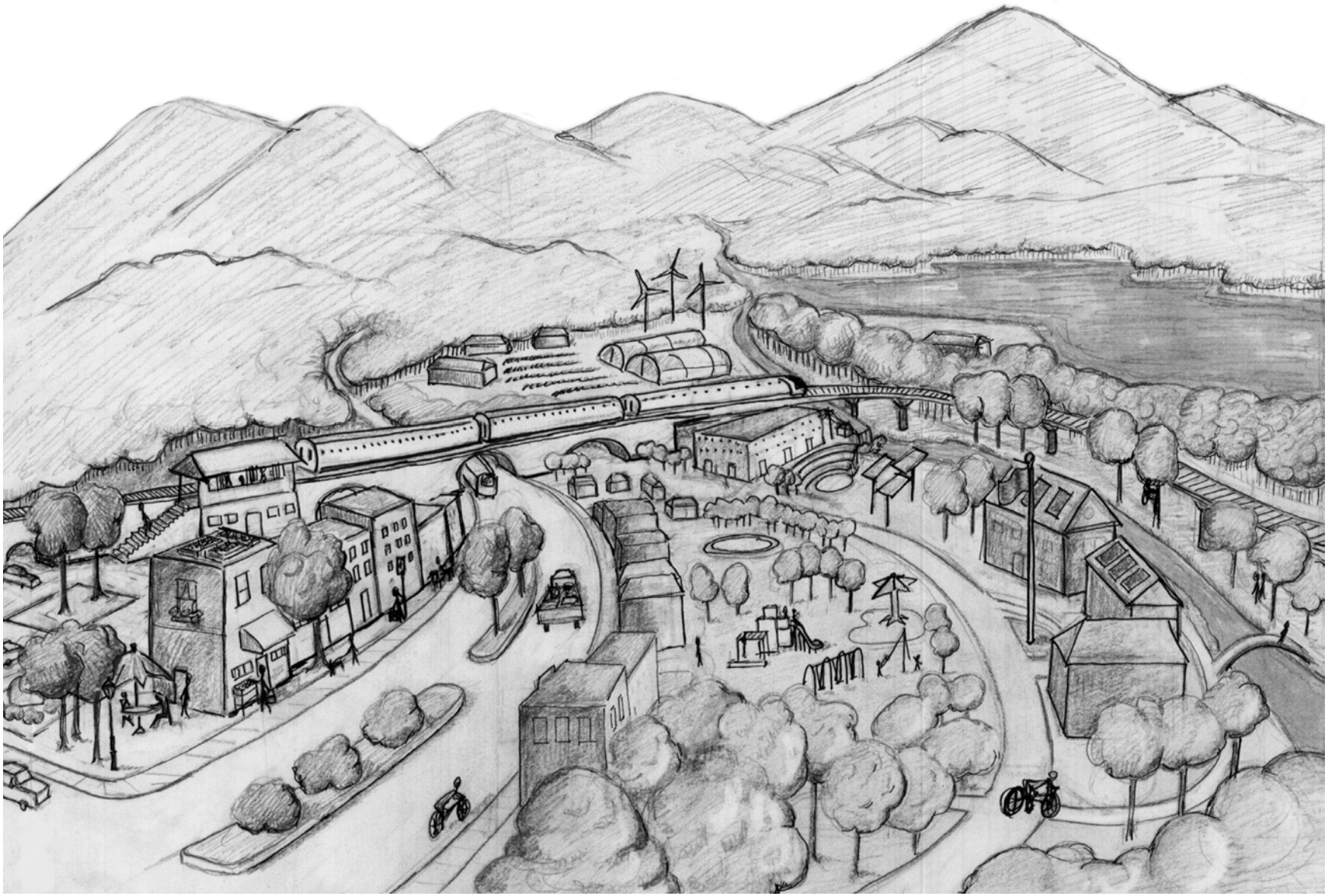
*The people of the Adirondacks enjoy vibrant communities that are ecologically rich, economically sound, and socially fulfilling. When asked why they live in the region, Adirondack residents often reply, "There's a good quality of life here." That simple phrase has deep meaning across the Park.*

*Adirondack residents work close to home in fulfilling jobs that provide solid incomes. Some workers telecommute to distant offices using the region's state-of-the-art broadband network. Others make a living from the region's abundant natural resources. Outdoor education specialists, park rangers, guides, farmers, foresters and carbon traders play an active role in protecting and regenerating the Park's natural resources so that future generations will be able to use them too. The local economy is building strength, especially among businesses that serve full-time residents. Residents take pride in shopping in the Park, where they trade AdironBucks for local fruits and vegetables, crafts, and manufactured goods.*

*Adirondackers power their lives with home grown power—some have small-scale wind or microhydro turbines in their back yards. Others take advantage of municipal biomass plants that provide heat and electricity to revitalized main streets.*

*Adirondack settlements and villages are full of life. Streets are lined with stores, restaurants, social clubs and churches. During lunch, full-time and seasonal residents converse with visitors who have come to enjoy, not only the Park, but the innovative people who live in it. Vacationers can be seen unloading their bikes from train stations in most towns, eager to begin rides from hamlet to hamlet, stopping in bed and breakfasts and small businesses along the way. Adirondackers also use the train, although more and more they find they rarely leave the Park, since most of what they want can be found close to home. Many Adirondack residents are homeowners. They live in established neighborhoods, where residents know and support each other. Adirondackers spend their plentiful free time playing with their children, visiting with grandchildren, or exploring the healthy woods and streams that are easily accessible to all.*

*Adirondack residents have reinvested in their land, their towns, their people, and their social networks and the investments have paid off.*



# THE MARRIAGE

## RENEWING THE UNION BETWEEN THE ENVIRONMENT AND THE ECONOMY

### HOW THINGS WERE

Looking back at the Adirondacks' rich history provides examples of how Adirondack communities and economies have succeeded in the past and where they have fallen short. The history of the region, before and after the Park's establishment, suggests that the region's vast natural resources have always been the foundation of Adirondack communities and their economies. The present challenge, then, is to find ways to utilize those resources in a way that benefits Adirondack communities both now and for the long term. Adirondack history points toward a future that strengthens "the marriage between the region's environment and its economy."

#### HISTORY OF THE REGION'S INDUSTRIES

The Adirondacks are part of America's great Northern Forest—the contiguous boreal and northern hardwood forest that flows from upstate New York across Vermont and New Hampshire and hooks northward deep into Maine. For generations, the people of the Adirondacks have made their livelihood by harvesting the vast resources of the region's environment to fuel their economy.

Early Native Americans were seasonal visitors—hunters and fishermen—who left the region before snow started to fall. Those who remained through the winter were mockingly called Adirondacks, "bark eaters," by the Iroquois. Just one year after Henry Hudson "discovered" the Hudson River in 1609, the Dutch began sending ships up the river to purchase furs from Iroquois who hunted in the Adirondacks. As the fur trade boomed, the Europeans made massive profits (the price for a pelt in Europe was nearly one thousand times what a Native American received for it), while the Native Americans nearly extinguished most furbearers in the region and engaged in a hundred-year-long war for control of trading routes (Schneider, 1998 and Jenkins & Keal, 2004). The French and the English followed suit, battling each other for control of the region's water routes in the French and Indian War. During the Revolutionary War, and again in the War of 1812, it was the British and Americans who fought for control of water routes. This early period established two patterns, which can be traced throughout Adirondack history. First, a run on the region's resources was initiated by an external demand. The resources were over-harvested and then exported world-wide. The people who harvested the resources did not profit as much as those who resold them. Second, the region's waters were highly valued and control of them was the subject of intense conflicts.

European settlers began moving into the Adirondacks around 1800. They stuck to the region's periphery, farming the rich soils of the Champlain, Saranac, Hudson, and Ausable valleys (Jenkins & Keal, 2004). Though growing seasons were short, and the influx of these farming homesteaders eventually began to ebb after 1840, those who remained grew apples, potatoes, and oats, herded sheep and cattle, and ran dairies for years to come. Their spirit of self-sufficiency inspires the Adirondacks today.

By the middle of the nineteenth century, iron ore mining and iron making had solidified as the Adirondacks' primary industry. Iron mining took advantage of the region's rich iron deposits and waterpower. It also consumed nearly seven thousand acres of trees per year, which were harvested to make the charcoal that heated the forges. Dozens of towns grew up around the iron mines, especially in the northeastern portion of the region. Many were company towns where the mining companies also owned the houses and the stores. Workers were paid in scripts that were redeemable only at the company stores. The mining companies profited greatly from this system. In the 1870s, J. & J. Rogers Iron Company owned three stores and sold more than $350,000 in goods (Adirondack Museum, 2008). Iron mining ended in the region after World War II,

*Miners worked long hours under dangerous conditions.*

in part due to the high cost of transporting the iron out the region. Some towns vanished with the mines, but many remained. The effect of transportation costs on Adirondack industries' competitiveness continues to be a significant factor in the region's economy, as do the former mining towns.

Tanning was the second largest industry in the early 1800s. It thrived where there were plentiful supplies of hemlock, whose bark yielded tannic acid used for leather production. Like the mining industry, tanneries cut large swaths of forest. By the turn of the century they had cut the hemlock on between a million and a million-and-a-half acres of land (Jenkins & Keal, 2004). Once the accessible hemlock supplies ran out, so did the tanning industry. By 1900, the tanning industry was dead in the Northern Forest (Williamson, 2002). Like the iron industry, tanning also left a legacy of towns that had grown up around an industry. These towns are mostly located in the south and southeast of the region.

Early logging was a byproduct of farming. A farmer could make a quick dollar from the hardwood forest he or she cleared by making potash from its ashes, which was used for making soap, glass, dye, and fertilizer (McMartin, 1994). Timber harvesting began in earnest in 1813, when the first log drive on an Adirondack river took place. Pine was stripped from the hills and floated down Adirondack waterways to wood-hungry cities. When the pines ran out, spruce became the tree of choice (McMartin, 1994). Like the fur trade of the seventeenth century, the wealth from logging primarily accrued to the traders—those who bought and sold Adirondack lumber. By 1850, Albany had the most active lumber port in the country. Timber barons made a fortune while the typical Adirondack lumberjack worked fourteen hours a day for a top wage of $2.50 per day plus four meals (Adirondack Museum, 2008).

Unlike the ironworks and the tanneries, forestry companies did not usually establish towns. Lumberjacks would spend the fall and winter in lumber camps, where they slept in bunkhouses and ate in the camp mess hall. In the spring, the lumberjacks would follow the logs down the rivers, breaking logjams and camping along the way (Adirondack Museum, 2008). A small resident population of innkeepers and hunters did settle in the Adirondack interior. Small hotels were established at the heads of many of the log-driving rivers and some of the larger lakes (Jenkins & Keal, 2004) At first they serviced the lumberjacks, but around 1850, the Adirondacks' popularity as a vacation destination began to grow. The region was promoted through numerous travel guides and memoirs. Their authors praised the beauty of the region and declared that the wilderness could refresh the spirit of a person worn down by city life: "Give a month to the enjoyment of a wilderness-life, and you will return to your labors invigorated in strength, buoyant in spirit—a wiser, healthier, and better man" (Hammond, 1857).

*Tanneries consumed massive numbers of hemlock trees.*

*Sportsmen discovered the Adirondacks in the 1850s.*

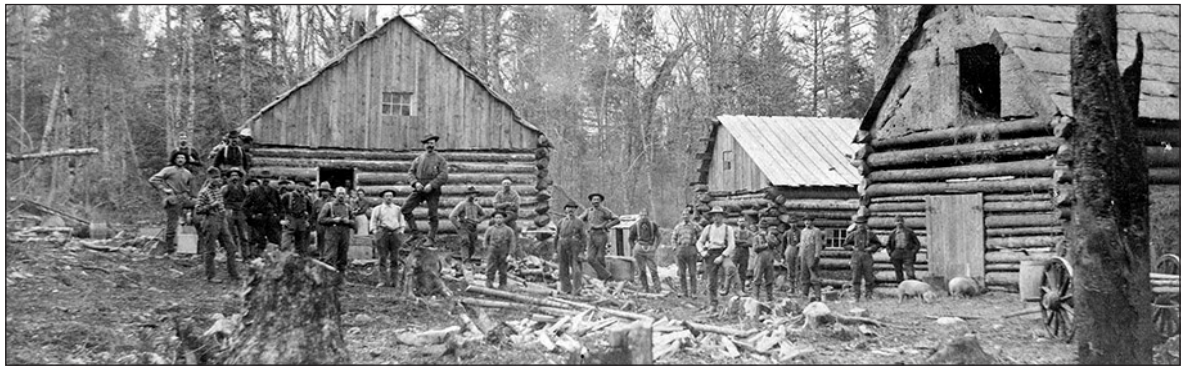
The sportsmen were joined by other vacationers. In the mid 1800s, artists, philosophers, scientists and others seeking inspiration turned to the Adirondacks. Ralph Waldo Emerson's poem "The Adirondacs" captured the sentiment of the scholars transported to the wilderness from their city homes (Handmade, 2006).

> And, in the forest, delicate clerks, unbrowned, sleep on the fragrant brush, as on down-beds. Up with the dawn, they fancied the light air, that circled freshly in their forest dress, made them to boys again. Happier that they slipped off their pack of duties, leagues behind, at the first mounting of the giant stairs (Emerson, 1858).

While the philosophers came for the "spirit in the woods," the very wealthy came to the Adirondacks to play and display wealth. They built "great camps" along lakeshores, complete with private steamboats, private train stations, and massive private parks.

In the 1870s, paper mills arrived in the Adirondacks. They provided steady employment and created an even greater demand for Adirondack wood. Paper mills used trees that previously had no value: poplar, balsam, and odd-sized trees.

Thus by the late 1870s the major elements were in place that have continued to define Adirondack life since. The region's periphery was dotted with farms, industry and small towns. The interior was more sparsely settled. It contained working forests, private parks, and scattered villages that depended on vacationers. Sportsmen loved the region for its game and its fish; scientists and philosophers drew inspiration from its wilderness; the very wealthy appreciated it as a playground; and the residents made their living working for captains of industry—in the mines, mills, forests, tanneries and hotels. All groups valued the region's natural resources, but had different ideas about how those resources should be used. That created a tension that would change the Adirondacks forever.



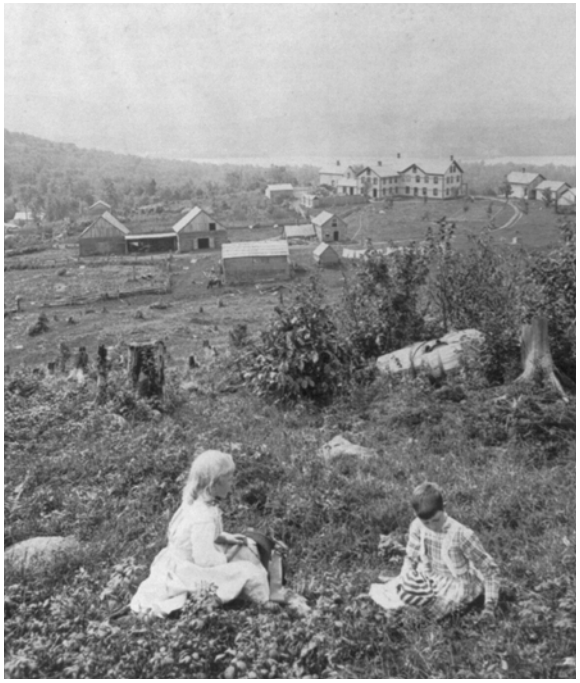
*Lumberjacks went into the woods in fall and did not come out until the snow melted.*

## THE ESTABLISHMENT OF THE PARK

The establishment of the forest preserve in 1885, and the Adirondack Park in 1892, grew out of widespread concern that the Adirondacks would be destroyed by unfettered logging. A coalition of diverse groups advocated for the Park's protection and succeeded.

In 1864, the New York Times published an editorial that set the stage for the Adirondacks' future. The editorial was in response to news that Thomas C. Durant's Adirondack Company was building a railroad line from Saratoga into the heart of the Adirondack wilderness. In some ways, it reads as an advertisement for that railroad.

> Within an easy day's ride of our great City… is a tract of country fitted to make a Central Park for the world… and with [the railroad's] completion, the Adirondack region will become a suburb of New-York [sic]… It will become to our whole community, on an ample scale, what the Central Park now is on a limited one… and here we venture a suggestion to those of our citizens who desire to advance civilization by combining taste with luxury in their expenditures… let them form combinations, and, seizing upon the choicest of the Adirondack Mountains, before they are despoiled of their forests, make of them grand parks, owned in common, and thinly



> dotted with hunting seats, where, at little cost, they can enjoy equal amplitude and privacy of sporting, riding and driving, whenever they are able, for a few days or weeks, to seek the country in pursuit of health or pleasure. In spite of all the din and dust of furnaces and foundries, the Adirondacks, thus husbanded, will furnish abundant seclusion for all time to come; and will admirably realize the true union which should always exist between utility and enjoyment (New York Times, 1864).

It is somewhat unclear whether the New York Times was calling for the government to seize control of the Adirondacks, or for private individuals to form cooperatives that would protect the Adirondacks. In either case, the editorial gave wide exposure to the idea of an Adirondack preserve.

The state of New York began purchasing land in the Adirondacks in the middle of the nineteenth century. Joel T. Headley described the scene in 1849, "you have no conception of the quantity of lumber that is taken every winter.... A great deal of land is bought of government solely for the pine on it, and after that is cut down, it is allowed to revert back to the State to pay its taxes" (Headley, 1849). In addition to forfeiting lands that had already been harvested, timber companies also relinquished lands that were too rugged to be profitably cut. It seems that early land purchases by the state were not part of an effort to create a park. Instead, the state was simply buying land that no one else wanted. The state was essentially taking a burden away from local communities and holding the land until it could profitably return to forestry (Jenkins & Keal, 2004).

In 1872, the State of New York contracted a young surveyor named Verplank Colvin to chart the lands of the Adirondacks and see if it was appropriate to establish a park at the headwaters of the Hudson River (Henshaw Knott, 1998). In one of his reports to the New York State Legislature, Colvin sounded the alarm:

> Unless the region be preserved essentially in its present wilderness condition, the ruthless burning and destruction of the forest will slowly, year after year, creep onward... and vast areas of naked rock, arid sand, and gravel will alone remain to receive the bounty of the clouds and be unable to retain it (Adirondack History, 2008).

Colvin's comments reflect ideas of scientific forestry that were developing at the time. Scientific foresters, also called conservationists, had begun to realize that massive deforestation led to soil erosion and reduced the forest's ability to regenerate. They also realized that deforestation could lead to flooding and droughts. Scientific foresters opposed clear-cutting and advocated instead for forest management that would enable larger long-term yields.

Colvin's report about forest destruction was echoed by many travelers, especially those who saw the vast wastelands on the eastern side of the Adirondacks, which were caused by forest fires and unrestrained wood harvesting for ironworks and tanneries. By 1885, the conservationists, sportsmen, vacationers, and downstate industrialists had convinced the state that the Adirondack needed protection. The state created a forest preserve from the lands they already owned. The forest preserve was essentially a timber bank that would be harvested in a restrained style.

It was only in 1892, when it became clear that wide-scale deforestation in the Adirondacks was threatening the water supply for the Erie Canal, that the Adirondack Park was established. In other words, the creation of the Park occurred because the Park's timber economy threatened the economy of wealthy downstate industrialists. It was a conflict between different economic uses for the region's environment that led to the creation of the Park.

Nevertheless, even the establishment of the Park did not prevent the cutting of trees on state lands, nor did it quell fears that deforestation was threatening water supplies. Seneca Ray Stoddard, author of a popular book about the Adirondacks, wrote:

> The propagation of game and fish in the Adirondacks is eminently commendable as a sentiment; the great State Park is an undoubted blessing and the preservation of the forests for the Nation's sanitarium of great worth to humanity, but the question of pure water for the millions is infinitely more important than all the others.
>
> Soon the people of the great cities must look to the mountains for the water they drink. They have a right to it, untainted, and to its undiminished flow—now jeopardized by the cutting away of the forests about its head…. This is the danger that threatens.… The State should control, absolutely, to the rim, the Hudson River watershed. To our heirs it would be a hundred times the value of lands that send their water other ways (Stoddard, 1893).

*Sportsmen joined forces with conservationists and industrial interests to advocate for the Park's protection.*

In statewide voting in 1894, New Yorkers, convinced that logging on state lands had to stop,

passed an amendment to the state constitution that declared state land within the Park would be "forever wild." The level of protection that the constitutional amendment established is almost unique world-wide. Ironically, much of the "forever wild" land that had already been heavily influenced by humans by the time the clause was introduced. Some bore the scars of logging. Other areas of the forest had been more subtly altered—by the extirpation of the beaver, and the affects of fires and erosion on neighboring parcels.

The establishment of the Park and the constitutional amendment reflected the complex interplay of interests at work in the Adirondacks. The coalition of industrialists, preservationists, scientific foresters, sportsmen, and vacationers had established a Park that would be a balance between public and private, between wilderness and working land. In both the public and the private lands, the Park was a marriage between the economy and the environment. The state-owned parts of the Park provided what are now called ecosystem services by protecting drinking water and water for transportation. The wilderness drew vacationers, who appreciated the restorative qualities of wilderness or hunted its game. The privately-owned parts of the Park supplied necessary materials for the industrial machine: timber, paper, iron, and minerals. These industries employed the residents of the Park who mostly lived in towns near the Park's edges. Residents also served the tourists who came to enjoy the wilderness and the lakes. Adirondack residents were in the enviable position of having several industries to support them, and ready access to land that other people considered a worthy playground. In the words of the New York Times editorial, they were in a position to "admirably realize the true union which should always exist between utility and enjoyment."

## HOW TO GET THERE FROM HERE

### CONVENTIONAL & ALTERNATIVE NOTIONS OF ECONOMY

Unfortunately, many Adirondack residents have not benefited from the Park's unique opportunities. A brief look at economic theory helps to explain why.

The term "economics" comes from the Greek oikos (house) and nomos (custom or law), hence "rules of the house." Economics provides the rules we use to manage our households both individually and as communities, or even at the scale of regions and nations. The economy, then, can be understood as simply the production, distribution, and consumption of all the things people make or the services they provide, and the myriad ways we exchange goods and services so that as best as possible, everyone can "manage their households" well.

| 2005 Employment Location Quotients | |
|---|---|
| Industry Sectors | Adirondacks |
| Forestry, Agriculture, Hunting & Fishing | 2.9 |
| Utilities | 1.2 |
| Construction | 0.7 |
| Manufacturing | 1.4 |
| Wholesale Trade | 0.6 |
| Retail Trade | 1.3 |
| Transportation & Warehousing | 0.8 |
| Information | 0.7 |
| Finance & Insurance | 0.6 |
| Real Estate, Rental & Leasing | 0.6 |
| Professional, Scientific & Technical Services | 0.4 |
| Management of Companies & Enterprises | 0.4 |
| Administration & Waste Management | 0.5 |
| Educational Services | 1.5 |
| Health Care & Social Assistance | 1.4 |
| Arts, Entertainment & Recreation | 1.2 |
| Accommodation & Food Services | 1.1 |
| Other Services (Except Public Administration) | 1.0 |
| Source: Generated from US Census Bureau's County Business Patterns | |

*Figure 1*

### CONVENTIONAL EXPORT-LED ECONOMIC DEVELOPMENT THEORY

To understand what drives an economy and what does not, regional economic planners often use export-led theory analysis. This theory assumes the different industry sectors in an economy, such as manufacturing or retail, can be broken into two key categories: basic sectors and non-basic sectors. Basic sectors are those activities that draw money into that local economy. They do this supposedly by feeding an economy's growth via the production of a surplus that is not being used to meet local needs and therefore can be exported. Non-basic sectors are important contributors to the economy as well; however, non-basic sectors are mostly consumed by the region itself and, according to conventional export-base theory, do not achieve economic development. This view of the economy is very prevalent.

To test the value of export-led theory, the authors conducted a location quotient analysis using data from 2005. Location quotient analysis compares a region's economy to the economy of similar regions. In this study the region's economy was compared to the United States as a whole and to states in the Northern Forest.

The results of this analysis suggest that in eight of the eighteen sectors defined by the U.S. Census Bureau, the Adirondacks economy is relatively weak. The category of professional, scientific, and technical services is very low. The Adirondacks are relatively strong in retail, manufacturing, health care and social services, and education services. In utilities, transportation, entertainment and recreation, and accommodation and food services, the region is no different than the nation. And in only forestry and agriculture is the region clearly a leader (Figure 1).

The strength of the social service and education sectors reflects the high number of government jobs in the region. Governments employ approximately one-third of the region's workers. The largest employer is a school. The second largest is a prison (Jenkins & Keal, 2004).

The tourism industry can be understood as the combination of accommodation and food service jobs, entertainment and recreation jobs, retail jobs, and possibly construction jobs, to include all the second homes that are being built for seasonal use. Of these, in 2005 only retail was above average. Accommodation, food services, entertainment, and recreation were all rather non-basic, and construction was somewhat low. Based on this conventional economic development theory analysis one can make the surprising

| Northern Forest 2005 Employment Location Quotients* | | | | |
|---|---|---|---|---|
| Industry Sector | Adirondacks | Vermont | New Hampshire | Maine |
| Forestry, Agriculture, Hunting & Fishing | 2.9 | 1.0 | 0.8 | 5.2 |
| Utilities | 1.2 | 1.3 | 1.1 | 0.9 |
| Construction | 0.7 | 1.0 | 0.9 | 0.9 |
| Manufacturing | 1.4 | 1.2 | 1.1 | 1.0 |
| Wholesale Trade | 0.6 | 0.8 | 0.9 | 0.8 |
| Retail Trade | 1.3 | 1.2 | 1.3 | 1.3 |
| Transportation & Warehousing | 0.8 | 0.7 | 0.6 | 0.8 |
| Information | 0.7 | 0.9 | 0.8 | 0.8 |
| Finance & Insurance | 0.6 | 0.7 | 0.9 | 1.1 |
| Real Estate, Rental & Leasing | 0.6 | 0.7 | 0.8 | 0.7 |
| Professional, Scientific & Technical Services | 0.4 | 0.9 | 0.8 | 0.7 |
| Management of Companies & Enterprises | 0.4 | 0.6 | 0.7 | 0.5 |
| Administration & Waste Management | 0.5 | 0.4 | 0.9 | 0.6 |
| Educational Services | 1.5 | 2.0 | 1.6 | 1.0 |
| Health Care & Social Assistance | 1.4 | 1.1 | 1.0 | 1.4 |
| Arts, Entertainment & Recreation | 1.2 | 2.0 | 1.1 | 0.8 |
| Accommodation & Food Services | 1.1 | 1.2 | 1.1 | 1.0 |
| Other Services (Except Public Administration) | 1.0 | 0.8 | 0.9 | 0.9 |
| Source: Generated from US Census Bureau's County Business Patterns Data Set | | | | |
| * Sectors with location quotients above 1.2 are 'basic'. Sectors with location quotients below 0.8 are 'non-basic' | | | | |

*Figure 2*

| 1998 & 2005 Employment Location Quotients* | | |
|---|---|---|
| Industry Sectors | Adirondacks 1998 | Adirondacks 2005 |
| Forestry, Agriculture, Hunting & Fishing | 3.8 | 2.9 |
| Utilities | 1.2 | 1.2 |
| Construction | 1.3 | 0.7 |
| Manufacturing | 1.0 | 1.4 |
| Wholesale Trade | 1.1 | 0.6 |
| Retail Trade | 0.7 | 1.3 |
| Transportation & Warehousing | 1.3 | 0.8 |
| Information | 0.7 | 0.7 |
| Finance & Insurance | 0.7 | 0.6 |
| Real Estate, Rental & Leasing | 0.6 | 0.6 |
| Professional, Scientific & Technical Services | 0.6 | 0.4 |
| Management of Companies & Enterprises | 0.5 | 0.4 |
| Administration & Waste Management | 0.3 | 0.5 |
| Educational Services | 0.7 | 1.5 |
| Health Care & Social Assistance | 2.0 | 1.4 |
| Arts, Entertainment & Recreation | 1.3 | 1.2 |
| Accommodation & Food Services | 1.2 | 1.1 |
| Other Services (Except Public Administration) | 1.3 | 1.0 |
| Source: Generated from US Census Bureau's County Business Patterns Data Set | | |
| * Sectors with location quotients above 1.2 are 'basic'. Sectors with location quotients below 0.8 are 'non-basic' | | |

*Figure 3*

conclusion that the region's economy in 2005 was not driven by tourism.

Furthermore, when compared to the other states in the Great Northern Forest region—Vermont, New Hampshire, and Maine—the Adirondacks had some of the lowest location quotients (Vermont has the best of the four in the sectors related to tourism). Figure 2 (above) looks at this group of regions in 2005.

Unfortunately, looking at years before 2005 does not improve the picture of the Adirondack economy. Data from 1998 reveals an even worse export-led picture of the Adirondack economy as many Adirondack location quotients dropped between 1998 and 2005 (Figure 3). From this analysis one could conclude that, even by its own measures, export-base led economic development may not always be the best option for the Adirondacks.

## CRITIQUES OF CONVENTIONAL ECONOMIC DEVELOPMENT THEORY

This conventional economic-base theory analysis is often used to support a model of economic development based on comparative advantage and free trade. Comparative advantage is the theory that regions should specialize in producing the goods and services that they can produce most cheaply. Those products can then trade in the global economy. In contemporary export-base economic development, regions are encouraged to bring in businesses that create jobs. Those jobs have "multiplier effects" which lead to more jobs for people serving the employees of the primary industry. But are the assumptions of this traditional approach always valid? And what are some of the consequences of this approach?

Proponents of global free trade claim that it increases economic prosperity as well as opportunity. They place their faith in the economic theory of comparative advantage, believing that in general, free trade leads to lower

prices, more employment, higher output, and a higher standard of living.

Critics of the current wave of economic globalization, however, look at the damage to the planet in terms of the unsustainable harm done to the biosphere, as well as the human costs. They point to a multitude of interconnected consequences—social disintegration, a breakdown of civic society, more rapid environmental deterioration, increasing poverty and alienation—which they claim are the unintended, but very real, consequences of globalization.

The Adirondacks have seen the effects of export-base economics throughout their history. Fur trading, tanning, mineral extraction, and forestry, were all export-based industries. In their early days those industries caused rapid environmental deterioration, dangerous working conditions and social unrest, which—in the case of Native Americans engaged in the fur trade—even led to war. Currently, the Adirondacks are demonstrating some weaknesses of the multiplier theory. Although money does come into the region through forestry, it often goes right back out of the Park to purchase essential goods and services in the Park's ring cities.

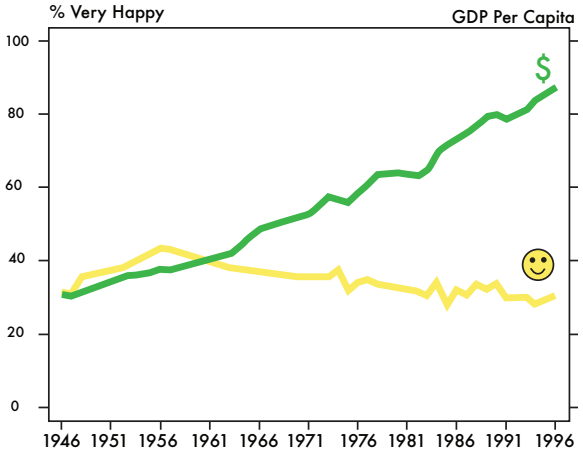
Within the United States, there has been an undeniable shift from manufacturing to service work. Professional service jobs still maintain middle-class wages, but many other service jobs often have wages and benefits that are low. Moreover, many families that were once part of the middle class because they held well paying but low skilled manufacturing jobs have had to take lower paying positions due to global outsourcing. This also means that people in the lower class have a much harder time climbing out of poverty because of the absence of the middle class as a steppingstone.

Meanwhile, recent scientific research has shown that across industrialized nations, happiness levels have been flat since the 1950s—even amongst people whose incomes have risen. And signs of unhappiness like depression, suicide and crime have been steadily increasing. It seems that beyond a modest threshold of wealth (about ten thousand dollars per year), more money does not actually make people happier (Layard, 2005).

## QUALITY OF LIFE

As an alternative to export-base economic development, some economists are proposing a new goal for economic development: improving quality of life.

To have a good quality of life, people need access to food and shelter, security, affection, understanding, participation in society, leisure, spirituality, creative and emotional expression, identity, and freedom (Costanza et al., 2007). Some of these items can be purchased, but many of them are not commodities. As Cornell economist Robert Frank said in his book *Luxury Fever*, most people would be better off if "we



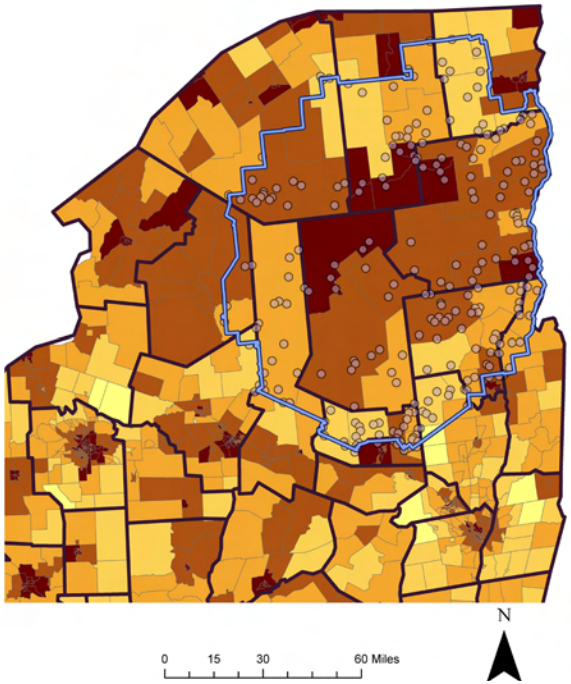

*The degree of happiness self-reported by Americans has fallen since about 1956, even while GDP has continued to rise (Adapted from Layard, 2005).*

consumed less and spent more time with family and friends, working for our communities, maintaining our physical and mental health, and enjoying the benefits of nature" (Frank, 2000).

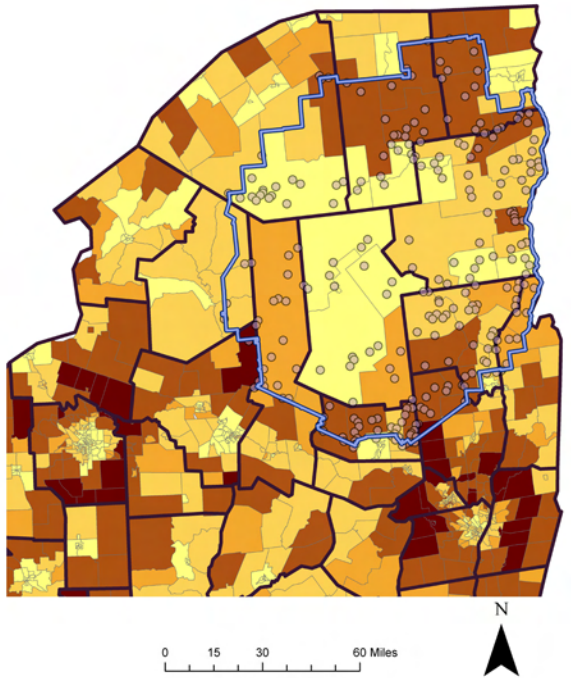
On the one hand, it seems that economic and community development in the Adirondacks does need to increase the amount of money circulating in the region; better paying jobs would provide Adirondack residents with better access to food and shelter. But Adirondack residents also need more opportunities to enjoy the other aspects of life that contribute significantly to quality of life. They need more time to enjoy leisure, family, and exercise. It's not enough to have good neighbors if you don't have time to interact with them. It's

not enough to have clear mountain streams if you don't have time to fish in them. Some statistics point out the problem: "Between 1973 and 2000, the average American employee added 199 hours to his annual schedule—that is, the equivalent of five forty-hour work weeks.... Between 1969 and 2000… overall labor productivity increased by 80 percent, so that the average worker in 2000 could produce nearly twice as much per hour as the average worker in 1969" (McKibben, 2007). If gains in productivity had been translated into reduced working hours, American workers would be working only a little more than twenty hours a week and would still be producing the same amount as they did in 1969 (Juliet Schor in McKibben, 2007). In addition to longer work days, commuting times have also been rising. Research by Robert Putnam shows that every ten minutes of commuting time cuts social activity by ten percent (2005).

If, in recent years, Adirondack residents have not been able to live out the "true union which should always exist between utility and enjoyment," it is because they have lacked both stable satisfying jobs (utility) and time to participate in community and take advantage of their beautiful surroundings (enjoyment). To improve their quality of life, they will need to reverse both of these trends.




*WORKERS WHO COMMUTE BETWEEN 5 AND 24 MINUTES PER DAY*
*In the north-central portion of the Park between 70 and 100 percent of workers have moderate commutes.*




*WORKERS WHO COMMUTE BETWEEN 24 AND 59 MINUTES PER DAY*
*Very few workers in the center of the Park have long commutes, but 45 to 50 percent of workers who live on the western edge of the Park, and over 50% of workers along the Park's northern edge have commutes between 24 and 59 minutes.*

## IMPORT SUBSTITUTION

An alternative model of economic development, called "import substitution," could refocus the economy of the Adirondacks on improving quality of life, in both its monetary and non-monetary dimensions. This idea, developed by the urban theorist Jane Jacobs, asserts that the best way for a community to improve its economy is to become more self-reliant. Import replacement might be the most traditional economic development policy on the globe. Towns and hamlets have practiced it since the days of Mesopotamia (Jacobs, 1969). The small port of Venice pursued this strategy in its relations with Constantinople, as did the United States in the nineteenth century, Japan in the twentieth, and now China and India today.

The most successful places use initial trade to ignite a process through which they gradually replace the goods and services they have been importing with locally made versions. In a sense they create their own comparative advantage.

Jacobs cites the famous example of the Japanese transportation industry. The Japanese imported bicycles into Tokyo in the late 1800s. Tokyo bike repairmen began to make their own bike parts for repairs. Eventually they could make the whole bike and no longer needed to import bike parts nor the bikes themselves. This process evolved, so that by the mid-twentieth century the multi-faceted Japanese transportation industry manufactured ships, trains, and automobiles. This replacement process not only creates work, but, more importantly, creates know-how and encourages innovation. Places learn how to solve problems in new ways and then transfer this experience from one type of industry onto another.

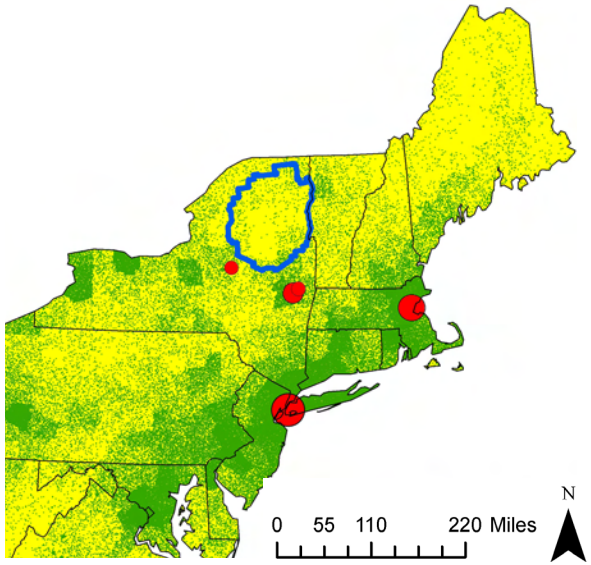
The Adirondacks can begin the process of strengthening their local economies by using the money that is currently coming into the region through forestry, outdoor recreation, and seasonal businesses, and reinvesting in local businesses that serve full-time residents. Building these businesses will benefit both the monetary aspects of the economy—Adirondack residents will have better access to the goods and services they need and more money will stay in the region—and the non-monetary—local businesses build better local communities. Anyone who has lived in a small town knows that there is more conversation among shoppers and storekeepers in local stores than in suburban big box stores. A recent study showed that shoppers have ten times as many conversations at farmers' markets than they do at supermarkets (McKibben, 2007).

## SETTING NEW ECONOMIC TERMS

Building local businesses and tailoring economic development to improve quality of life does not imply that the Adirondacks need to cut themselves off from the rest of the world. On the contrary, building a local economy can empower a region to renegotiate the terms of its relationships with its trading partners.

Since Europeans established trading posts on the outskirts of the Adirondacks, Adirondack residents have been negotiating from a weak position. Their best resources have been sold down the rivers and Adirondack residents have not been adequately compensated. Recently, the Adirondacks have been providing many of their best resources for free. The Park provides incalculable ecosystem services to the Northeast United States, including clean air, clean water, carbon-sequestration. As markets for ecosystem services grow, Adirondack communities will benefit if they can ensure that they are perceived as the stewards of those services and that they are justly compensated for that role.

The decline of fossil fuels may provide another impetus for the Adirondacks to renegotiate their terms with their neighbors. Current global economic arrangements are largely based on cheap fossil fuels. Low transportation costs make it possible for regions to search worldwide for the cheapest products. As fossil fuel prices increase, transportation costs will make up a greater percentage of the prices of products. Spatial proximity between producers and consumers will become more important. Seen from the sky at night, the Adirondacks hover like a flying saucer over an asteroid belt of cities from Buffalo to New York. That asteroid belt is made up of




*POPULATION DENSITY*
*The Adirondacks have a very low population density of about 19 people per square mile, but within one day's drive, there are over 85 million people. The relationship between the Adirondack region and its neighbors is vital to the region's economic well-being.*

eighty-five million customers within one day's drive of the Adirondacks. When proximity becomes more important, these customers may suddenly be looking toward the Adirondack region in wonder, especially at all the natural resources that could supply their economies. Adirondack forests and farms may become more attractive to nearby customers. Manufacturing and mining may also become more significant. The Adirondack region may accrue new economic power. Will that power benefit local residents?

Not only must the people of the Adirondack region start to set better terms with places downstate and across the Canadian border, but they must also start setting better terms with each other. The Park includes towns near its borders (often referred to by the Adirondack Park Agency as gateway communities) and interior towns. In addition, there are many towns that are split by the Park border. Some of those towns have dense populations outside the border, and sparse populations inside. The populations on either side of the Blue Line have different needs, but these towns are served by one governmental and one tax structure. Many workers currently commute into the Park for tourism jobs. As the location quotient analysis shows, those jobs are not really driving the economy or sufficiently providing for the people who hold the jobs. Perhaps it is time to expand economic development policy to deal with the regional issues of affordable housing, transportation, and other social issues that the Park's development patterns and its relationships with its neighbors have created.

In the nineteenth century, Adirondack economic relationships were extractive and exploitive of people and the land. In one industry after another, natural resources depletion led to economic decline in the Adirondacks. Then the people of the cities to the south, for better or worse, decided to make the region a Park, and Adirondackers have been dealing with the economic implications of that event for over a hundred years.

As new trends such as global warming and fossil fuel depletion arrive in the near future what will be the new set of terms? Will it be economic models that benefit the people of the Adirondacks or others? Will it be economic models that sustain the region's forests and thus the people's livelihoods or give away those resource in a boom that quickly leads to bust?

If Adirondack residents begin acting now, they can negotiate how their resources are used and under what terms. They can negotiate for economic terms that benefit the people of the Adirondacks, and that sustain forests, waters, minerals, and people's livelihoods. They can negotiate for terms that build toward long-term stability in the economy and ecological integrity.

## HOW TO BEGIN

If building local capacities through import substitution is the way to foster vibrant Adirondack communities, where should Adirondack entrepreneurs begin? For the Japanese, bicycles were the place to start. For the Adirondacks, who have long winters and long commutes, it might be alternative energy or alternative forms of transportation that need to be developed locally. Replacing some imported food with locally grown food is another good opportunity. Or perhaps, the Adirondackers can expand their well-known brand of Adirondack chairs to include a full line of furniture made by genuine Adirondack woodworkers using local Adirondack wood. In truth, there is not just one starting place. The Adirondacks can try many strategies simultaneously. Not all of the strategies will succeed, but as the adage says, "mistakes are shortcuts to learning" and as Adirondack residents become smarter, more strategies will be successful.

Identifying potential opportunities for building more vibrant Adirondack communities is basically a two-step process. First, identify goods and services that Adirondack residents need that could be produced locally. Second, reinvest in Adirondack assets that can help meet these needs. Towns and hamlets currently develop capital improvement plans for long-range purchases of equipment, infrastructure, or buildings. While capital improvement plans are usually for such tangible things, the notions of "capital" and its "improvement" can be expanded to a host of other assets, tangible and intangible, which support towns and the region.

First reconsider the idea of capital. Besides physical and infrastructural capital there is also knowledge and entrepreneurial capital, the diverse stock of people and their ideas that keep local economies humming. This human economic capital doesn't operate in a vacuum but sits in a social and natural context. Social capital may be maintaining a town or region's social cohesion while natural capital is aiding the air and water and all the other natural systems on which towns depend. Next, reconsider the idea of improvement. Many times it simply means more—more equipment, more schools—but often it can mean better. Finally, reconsider the idea of a plan. Is the best plan more business as usual or is it time to try something new?

Adirondack assets fall broadly into four types of capital with overlaps and inter-relationships between them:

**Natural capital.** Renewable and nonrenewable goods and services provided by ecosystems

**Built capital.** Manufactured goods such as tools, equipment, buildings.

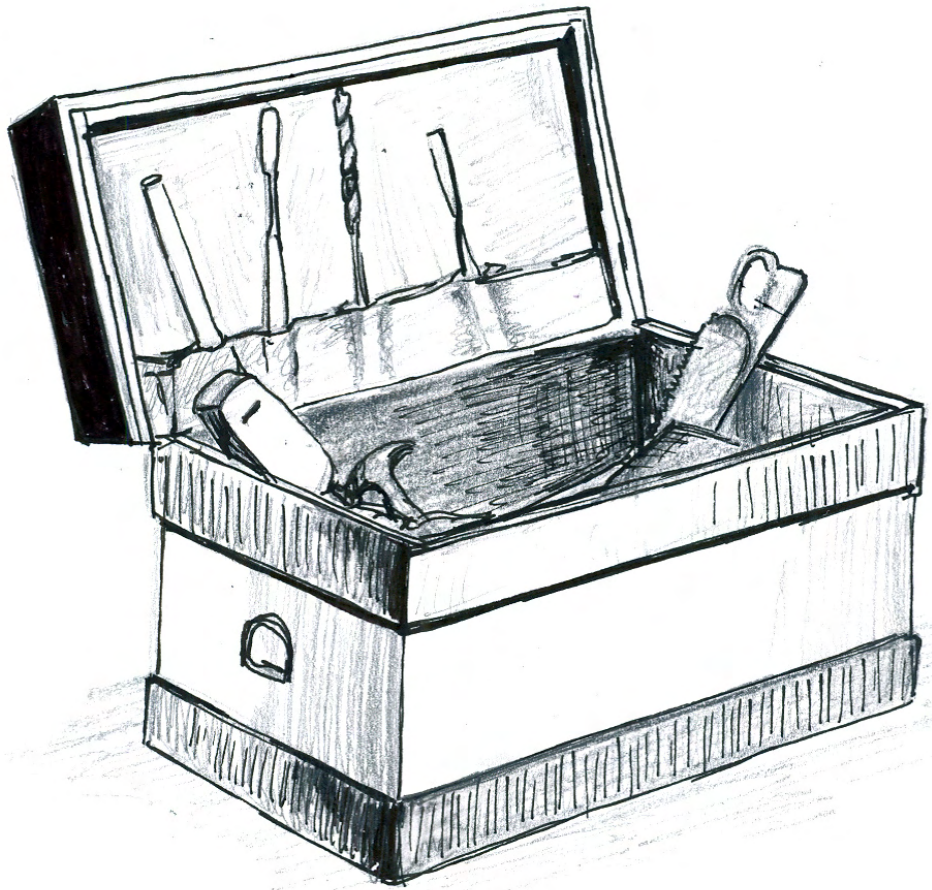
**Human capital.** The knowledge and information stored in our brains and hearts, as well as our labor

**Social capital.** Those networks and norms that facilitate cooperative action

By reinvesting in the region's natural, built, human and social assets, Adirondack residents can build vibrant Adirondack communities

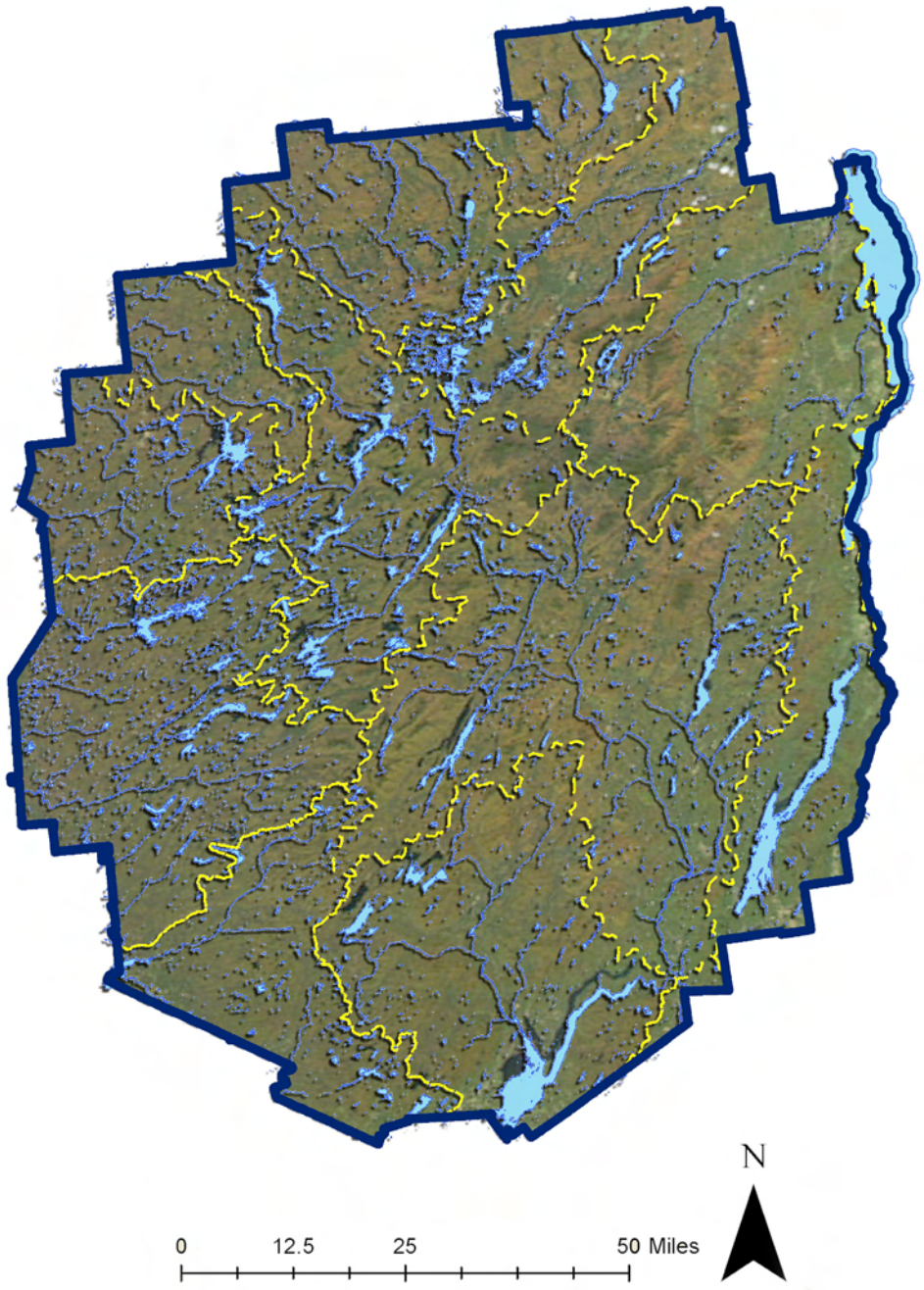
It's important that the economy is built upon reinvesting in assets, not just exploiting them. If Adirondack residents want to improve their quality of life over the long term, their assets need to grow over the long term. Adirondack quality of life will always depend on healthy ecosystems, efficient infrastructure, well-educated and happy people, responsive governments and strong connections amongst Adirondack residents. Strategies for developing Adirondack communities should be evaluated based on how they affect all forms of capital. For example, a building project that damages a wetland, which is protecting a town's water supply, may not be a good investment even if it provides short-term jobs. On the other hand, restoring a wetland might not be a good investment if it is in the only location for a new town facility that will allow the town to reach a critical population density to support a new school. There are complex decisions ahead. All Adirondack communities have a stake in them, and the most successful decisions are built from everyone's participation.

The next section of this handbook describes tools for fostering more vibrant Adirondack communities. It also spotlights efforts that are already under way. These tools and spotlights evince a future of the Adirondacks that could be very bright.



# 2

# SECTION




## NATURAL CAPITAL

*The Adirondack Park has immense natural resources. The Park covers six million acres—five and half million of which are forested.*

*The Park has eighty-five percent of all of the wilderness area in the eleven northeastern states, including 2,800 lakes and ponds, 35,000 miles of streams, and one million acres of wetlands in thirteen watersheds.*

*Ninety percent of all plant and animal species in the northeast are present in the Adirondacks.*

*If used wisely, the Park's natural capital will sustain the region's communities for generations to come.*

# NATURAL CAPITAL

Looking to natural capital for economic development doesn't necessarily imply resource extraction (such as mining or logging), which has contributed to the region's boom-bust economic history for centuries. More broadly, natural capital can include sun, wind, water, soils, wildlife, and forests. In the Adirondacks, natural resources abound: the largest temperate forest in the lower forty-eight states, headwaters of fourteen major rivers including the Hudson and the St. Lawrence, twenty-two natural lakes, and forty-six mountains over 4000 feet high.

But how can these resources be harnessed in a way that still preserves the integrity of the forest, protects water quality, and safeguards the other natural resources in the region?

Promoting sustainable management, regenerative design, and the conservation of resources, the following strategies suggest how the Adirondack economy can evolve by capitalizing on—while still maintaining and preserving—the resources that make the region exceptional.

**FOOD PRODUCTION • AGROFORESTRY • SUSTAINABLE FORESTRY**
**ECOSYSTEM SERVICES • BIOMASS • WIND POWER • HYDROPOWER**

# FOOD PRODUCTION

## FARMING IN ATYPICAL LOCATIONS

Presently, most of the farmland within the Park can be found along its periphery, with the highest concentration in the Champlain Valley where the soils are the most fertile and the least rocky, and the growing season is the longest. Several groups, including Adirondack Harvest, a community organization dedicated to farm advocacy, are already encouraging agricultural pursuits on existing and abandoned farms.

Through a combination of age-old and contemporary techniques, small-scale farming in slightly less desirable conditions, such as colder climates and rocky soils, could become a viable option for Park residents in other parts of the region. As climate change and fossil fuel depletion impact food production around the world, the demand for local produce will likely rise. Thus, the following techniques, just a sampling of those available, can make it possible to grow and sell more produce locally, reducing transportation and energy use and stimulating economic and community development.

*High tunnels at Rivermede Farm.*

### SEASON EXTENSION

#### HIGH TUNNELS

A high tunnel, one form of season extension, is a greenhouse that uses only solar passive heating. The structure can range in size and is often quonset-shaped, composed of metal bowed posts that are draped in a layer of plastic. The only dimensional standard is that high tunnels are tall enough to walk in and are sometimes built to fit a tractor. The height also works well for crops that require trellising, such as tomatoes. Other benefits include the tunnel's economical nature, as well as its ability to warm the soil and protect crops from wind, rain, and sometimes insects.

The focus of season extension isn't necessarily the production of crops in the winter, but more on the fact that spring crops can be planted earlier and fall crops harvested later, thus extending the season by a few weeks on either end.

### FOR ROCKY OR INFERTILE SOILS

While many parts of the region lack the soil structure to support large-scale intensive farming, several options exist for smaller-scale operations, including raised beds.

#### RAISED BEDS

Raised beds offer an alternative to back-breaking tillage and high-cost machinery that still provide excellent soil drainage and room for root growth. A raised bed also avoids the soil compaction that comes from walking between garden beds. Many farmers endorse no-till techniques, such as raised beds, maintaining that regular tilling can reduce soil fertility and disrupt soil composition.