POOR QUALITY
ORIGINAL Images throughout

1997 Barn Preservation Grant Application

Applications must be received at the Division for Historic Preservation by 4:30 p.m. on Monday, **March 17, 1997** or be **postmarked by Saturday, March 15, 1997**. In fairness to all applicants, incomplete applications or those received after the deadline will NOT be considered. Please refer to the "1997 Barn Preservation Grant Manual" before completing this application form. Use a separate application for each building.

RECEIVED
MAR 17 1997

Vermont Division for Historic Preservation

Office location: 135 State Street
Montpelier, Vermont

Mailing address: 135 State Street
Drawer 33
Montpelier, VT 05633-1201

Telephone: (802) 828-3044

1. APPLICANT NAME The Nature Conservancy, Vermont Chapter
   Address: 27 State Street, Montpelier, Vermont 05602
   Daytime phone: (802)229-4425

2. PROPERTY OWNER (if different from applicant): SAME
   Address:
   Daytime phone number:

3. BUILDING NAME: Field Barn
   Date of original construction, if known: 1810*, 1830**
   FARM NAME OR OTHER PROPERTY NAME: Galick Farm
   Street Address: Helen W. Buckner Preserve at Bald Mountain
   Town/City: Galick Road, West Haven, Vermont (not a mailing address)

4. Does the proposed project conform to local town and regional plans? YES X NO___

5. BUILDING USE: How will this project promote the best long-term use of the building? Note if the property is protected through easements, transfer of development rights, participation in the "current use" program, etc. Use additional sheets if necessary.

   The nature of this project is essential stabilization, without which this building will have no long-term use. This Field Barn (and all the Galick Farm buildings) lies within the Helen W. Buckner Preserve at Bald Mountain. This preserve is owned by The Nature Conservancy and is protected by conservation easements held by the Vermont Housing and Conservation Board. The Nature Conservancy is currently

-continued on additional page-

* according to UVM Study **according to Charlie Parker study

5A. If the building is used for non-agricultural purposes and is open to the public, is it handicapped accessible? Building is in remote field location.

6. Is the building a local landmark? Describe why. Use additional sheets if necessary.

In a sense this building is a local landmark. Anyone who visits the Galick Farm now can see that the Field Barn is the one remaining structure outside the main farmstead area (see sketch map). It serves as a solitary focal point from many vantages around this huge preserve. As it is the only structure remaining of what was once its own remote collection of farm buildings, including a residence, it is the sole architectural link to an important piece of this area's history.

7. DESCRIBE ANY WORK that has been performed on the building in the last five years. Use additional sheets if necessary.

NONE

8. DESCRIBE THE PROPOSED PROJECT IN DETAIL. Tell why the project is needed. Tell how you will do it. What materials and methods will you use? Be specific.

Please see additional page.

#5 cont.

in the process of completing a comprehensive, long range use and management plan for the preserve and all its buildings. We anticipate the Field Barn being used for hay storage, haying machinery storage, and possibly as a stopping/meeting point on educational field trips at the preserve. This project will promote a future of continued use of this barn within an exceptional protected setting.

#8

The deterioration of this building will reach the point very soon where the scope of work needed will go beyond simple roof and sill replacement, and reach the point where it is no longer economically or practically feasible. The rate of deterioration was accelerated by the theft of slate off the west side of the roof and the shed roof 2 1/2 years ago.

We propose to:

1) Document, then remove shed addition.

2) Remove debris in and around building.

3) Adjust grade around building.

4) Jack building, replace failed sills and repair stone piers.

5) Repair failed top plate above door with either a) application of a "sister" member or b) installation of a supporting timber underneath.

6) Replace failed rafter pair and adjacent sheathing.

7) Re-install "matching" slate roof over stripped area and replace broken slates on west roof. Install preform galvanized roof panels over repaired area on north end of east roof using similar or matching panels.

8) Re-sheath and repair door.

9) Re-sheath exterior walls.

All repair and replacement carpentry will be performed using rough sawn green hemlock or pine of matching dimension to existing. Sheathing fasteners to be determined.

9. WORK DESCRIPTION and COST ESTIMATES. (see #8)

Item 1,2,3 Clean up and shed removal,site work Cost $2,200

Item 4,5 Jacking, foundation, frame repair Cost $5,500

Item 6,7 Roof Cost $3,500

Item 8,9 Exterior walls Cost $3,800

TOTAL PROJECT COST : $15,000

10. DESCRIBE WORK NEEDED AND PLANNED AFTER THIS PROJECT:
If your building needs additional work after the completion of this project please describe the long-range plans and list the work needed in priority order.

Possible floor replacement.

11. LIST ANY PRESERVATION PLANS, REPORTS OR EVALUATIONS OF THE CONDITION OF THE BUILDING.
If there have been architectural reports, needs assessments, historic structures report, architectural plans or specifications or similar evaluations of the condition of your building list the documents below and include a copy with your application.

"A SHEEP DAIRY CASE STUDY" (AND INCLUDED APPENDICES*)
*Appendix #1 "Technical Assistance Program Report"
by Charles A. Parker, Preservation Carpenter

12. GRANT AMOUNT REQUESTED : $7,500
MATCHING SHARE : $7,500

13. MATCHING SHARE Summary (list each source of funding):

Source The Nature Conservancy Budget Amount $7,500
Line item FY/98

Source _____ Amount _____

14. If the total project cost is greater that the sum of the grant request and the matching share, indicate the source(s) of the additional funds.

		In-hand	not yet in hand
Source _____	Amount _____	☐	☐
Source _____	Amount _____	☐	☐

15. HISTORIC STATUS OF BUILDING:
(Contact the Division if you do not know the current status.)

_____ Individually listed on the National Register of Historic Places

_____ Listed on the National Register as part of an historic district. Name of HISTORIC DISTRICT _____

_____ Listed on the Vermont Historic Sites and Structures Survey/State Register of Historic Places Survey #_____.

If NOT listed on the National Register, fill out Section 15 A & B.

15.A & B.

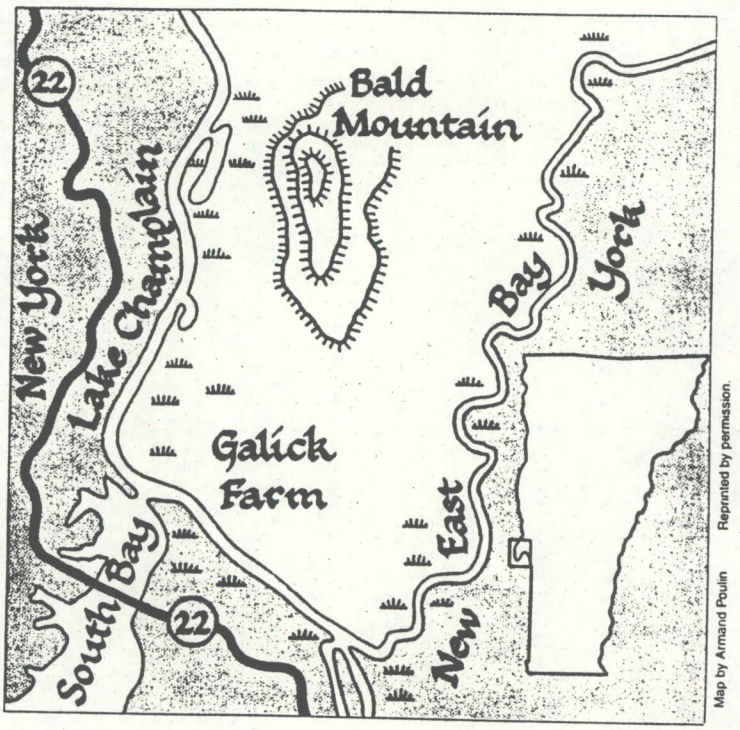
THIS SECTION MUST be completed only if the property is NOT listed on the National Register AND the property has not been previously reviewed for eligibility by the Division. (If a previous review has occurred, enclose the letter you received from the Division that confirms National Register eligibility and do NOT complete this section.) Review for National Register eligibility will be undertaken during the grant selection process. If a property is in a village or neighborhood setting, this review may include review of the village or neighborhood as a potential historic district. See the back page of this application for examples.

A. Briefly describe the HISTORY of the farm in general and this building in particular.

Please see attached pages 2-3 of "A SHEEP DAIRY CASE STUDY" and Field Barn page from Charles Parker study, also attached.

History of the Galick Homestead

Located along the narrow southern reaches of Lake Champlain, the Galick Homestead sits on a 4,500 acre peninsula in West Haven, Vermont southwest of Bald Mountain. Since the sale of the property in 1989 to The Nature Conservancy, the farm is now contained within the confines of The Conservancy's 3,100 acre Helen W. Buckner Memorial Preserve at Bald Mountain. Specifically, the preserve includes all lands and wetlands bounded by Lake Champlain on the west, East Bay to the south, the Poultney River to the east, Ghost Hollow Road to the northeast, and the base of the north slope of Bald Mountain to the north.



Native Americans lived on and hunted throughout this area of Vermont during the Pre-Columbian period. Submerged British and American warships lie in the waters of East Bay, which served as a kind of "mothball" anchorage for military vessels at the close of the War of 1812.

Before settlement, the farm's pasture land was completely covered in oak-hickory woodlands. In the last two centuries, the land has seen a variety of agricultural uses.

Prior to the Galick's arrival in 1918, the main house was built as a retreat for a wealthy New Yorker. The Galicks have since raised sheep, mink, beef cattle and dairy cows, as well as trapped such wildlife as muskrat, raccoons, otter, and foxes. Before the access road was constructed, milk was shipped to a creamery in Whitehall, New York on a home-made, flat-bottomed boat.

In 1989, The Galicks sold their property to the Vermont Chapter of the Nature Conservancy for $800,000 with the condition that they retain life-

tenancy on the property. The Nature Conservancy has a particular interest in this area because of several rare species found here including the five-lined skink and the rattlesnake, as well as over a dozen rare plant species.

More than two dozen structures make up the Galick Homestead, dating from c.1830 to c. 1965. The remoteness of the property and traditional farming methods have protected the integrity of these buildings from modernizing and vandalism; however, lack of proper maintenance over the last twenty years has left many of the buildings in varying states of disrepair. Still, the buildings tell a compelling story about the history of self-sufficient farming of the late-19th and early-20th century.

The property is currently not listed on the National Register of Historic Places. It is most likely eligible as a district under criteria A (the buildings are associated with settlement and agricultural patterns that have made a significant contribution to the broad patterns of history) and criteria C (the farmstead represents a significant and distinguishable entity whose components may lack individual distinction). It was not included on the state survey of Vermont, primarily because of its remote location and limited accessibility for the surveyors.

1997 BARN PRESERVATION GRANT APPLICATION
Applicant - The Nature Conservancy
Section 15 A attachment

From Charles Parker study

Field Barn

Although this barn is not part of the central farmstead it is by far the most significant structure. Field barns like this are in real danger of disappearing from the landscape due to their remote locations and their vulnerability to theft and neglect. This is a three bay English barn with queen post supported by oversized wind bracing. The frame consist of soft wood hand hewn post and beams with up and down sawed 45° wind braces and sheathing. The date for this type of construction is earth 19th century. The existing conditions are as follows:

- The sills are intact in most places but need some replacing where they have deteriorated. The upper frame has failed above the door.
- The shed has failed and is causing damage to the main barn and should be documented and removed.
- The slate roof, some sheathing and one rafter have been removed.

The scope of work for this barn should be as follows:
- Replace all failed sills.
- Remove shed addition.
- Repair failed top plate over center door.
- Install galvanized metal preform panel roof over new rafter and sheathing.

Sheep Barn

The recent conversion of this barn to one of the many machine shops makes the original use hard to determine. However, this barn has the shape and size of a sheep barn. It is compiled of three barn frames all having different styles of framing. Starting from west to east: first is a unique heavy but small hand hewn post and beam frame dating from the early 19th century, then a light post and beam frame from the mid-19th century, finally a balloon frame from the late 19th century. These three frames are all brought together under a common roof of slate in a scalloped band pattern common to the farmstead. The existing conditions are as follows:

- Failed sills throughout.
- Racked and sagging framing in two later sections.
- Some upper framing deterioration in late 19th century frame (east end).
- Minor roof repair on north side of late 19th century frame (east end).

Scope of work for this barn should be as follows:
- Jack up entire barn and straighten east end.
- Replace all deteriorated sills.
- Repair north top plate at east end.
- Repair failed roofing on northeast roof



A Sheep Dairy Case Study

The Galick Homestead
West Haven, Vermont

HP 204 • Roger Lang
December 7, 1996
Meg Campbell • Jim Moran • Katie Wollan

1997 BARN PRESERVATION GRANT APPLICATION

Applicant - The Nature Conservancy

Galick Farm Field Barn, West Haven

Attached Report(s)

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Galick Homestead Technical Assistance Program Report, Charlie Parker

"An Ecological Gold Mine," Bryan Pfeiffer, Vermont Life, Summer 1992.

I. Project Overview

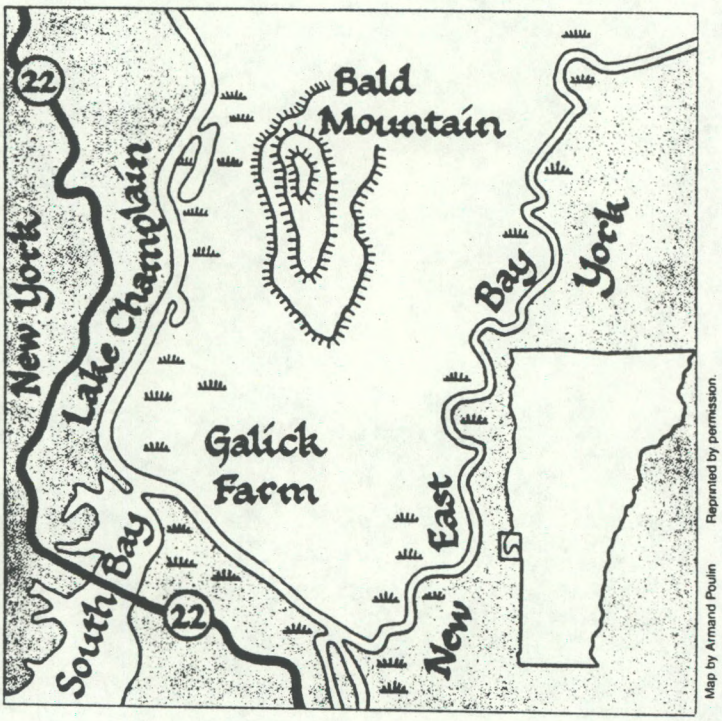
Introduction

This case study examines the feasibility of a sheep dairy/breeding operation at the Galick Homestead in West Haven, Vermont. The Galick Homestead is part of the Helen W. Buckner Memorial Preserve at Bald Mountain which is owned and managed as a conservation area by the Vermont Chapter of the Nature Conservancy. This study presents one potential future use of Homestead that will generate enough income to preserve and maintain the historic farm buildings and at the same time be in keeping with the Nature Conservancy's mission and goals for the property.

This case study report has been prepared for Historic Preservation Economics, a core course in the master's degree program at the University of Vermont. While the information presented in this report has been well researched, please bear in mind that this is the work of students; professionals in architecture and agriculture should be consulted if this idea should be carried to fruition.

History of the Galick Homestead

Located along the narrow southern reaches of Lake Champlain, the Galick Homestead sits on a 4,500 acre peninsula in West Haven, Vermont southwest of Bald Mountain. Since the sale of the property in 1989 to The Nature Conservancy, the farm is now contained within the confines of The Conservancy's 3,100 acre Helen W. Buckner Memorial Preserve at Bald Mountain. Specifically, the preserve includes all lands and wetlands bounded by Lake Champlain on the west, East Bay to the south, the Poultney River to the east, Ghost Hollow Road to the northeast, and the base of the north slope of Bald Mountain to the north.



Native Americans lived on and hunted throughout this area of Vermont during the Pre-Columbian period. Submerged British and American warships lie in the waters of East Bay, which served as a kind of "mothball" anchorage for military vessels at the close of the War of 1812.

Before settlement, the farm's pasture land was completely covered in oak-hickory woodlands. In the last two centuries, the land has seen a variety of agricultural uses.

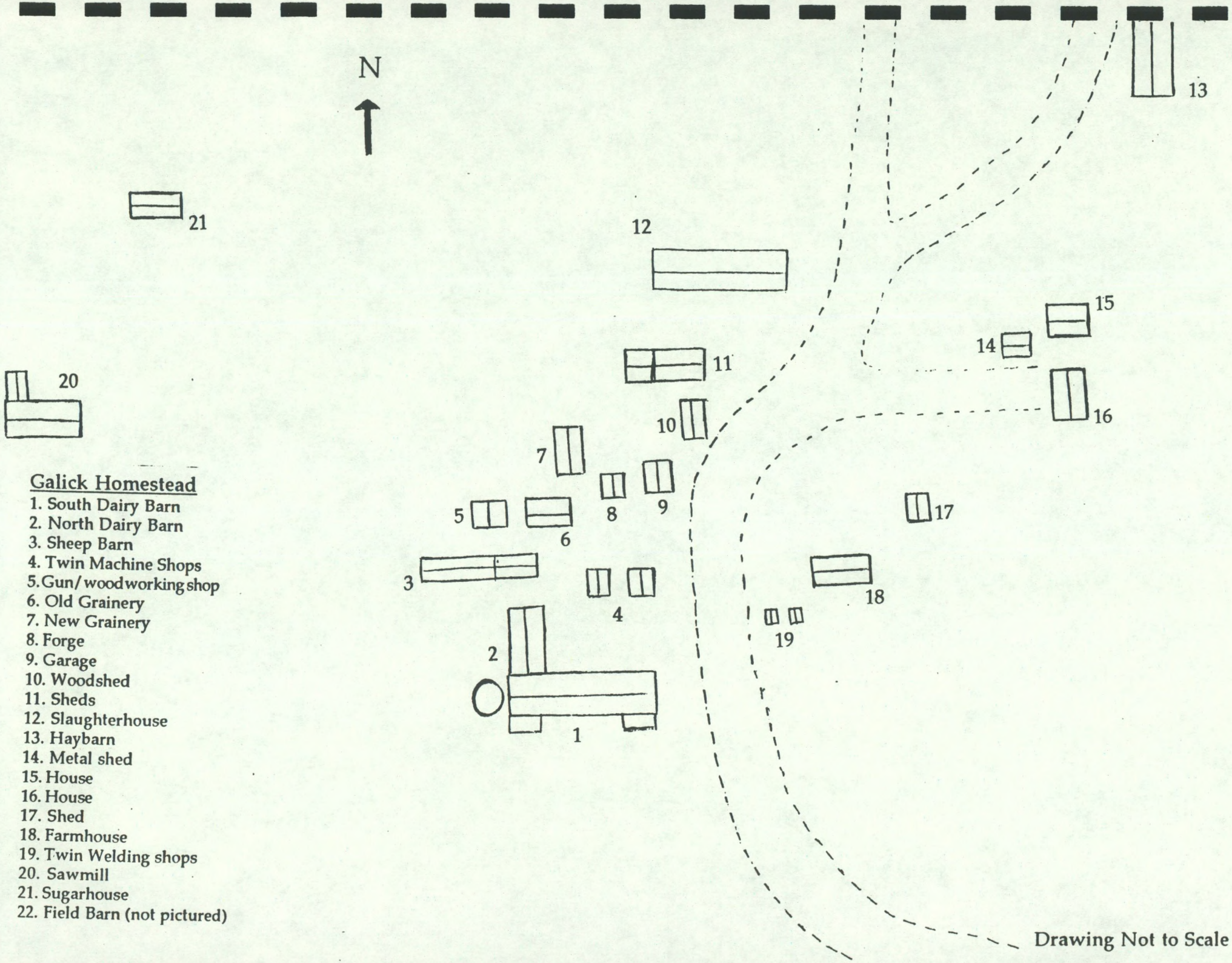
Prior to the Galick's arrival in 1918, the main house was built as a retreat for a wealthy New Yorker. The Galicks have since raised sheep, mink, beef cattle and dairy cows, as well as trapped such wildlife as muskrat, raccoons, otter, and foxes. Before the access road was constructed, milk was shipped to a creamery in Whitehall, New York on a home-made, flat-bottomed boat.

In 1989, The Galicks sold their property to the Vermont Chapter of the Nature Conservancy for $800,000 with the condition that they retain life-

tenancy on the property. The Nature Conservancy has a particular interest in this area because of several rare species found here including the five-lined skink and the rattlesnake, as well as over a dozen rare plant species.

More than two dozen structures make up the Galick Homestead, dating from c.1830 to c. 1965. The remoteness of the property and traditional farming methods have protected the integrity of these buildings from modernizing and vandalism; however, lack of proper maintenance over the last twenty years has left many of the buildings in varying states of disrepair. Still, the buildings tell a compelling story about the history of self-sufficient farming of the late-19th and early-20th century.

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Galick Homestead

1. South Dairy Barn
2. North Dairy Barn
3. Sheep Barn
4. Twin Machine Shops
5. Gun/woodworking shop
6. Old Grainery
7. New Grainery
8. Forge
9. Garage
10. Woodshed
11. Sheds
12. Slaughterhouse
13. Haybarn
14. Metal shed
15. House
16. House
17. Shed
18. Farmhouse
19. Twin Welding shops
20. Sawmill
21. Sugarhouse
22. Field Barn (not pictured)

The Nature Conservancy Profile



The Nature Conservancy's Vermont Chapter began land protection work in Vermont in 1960 and has grown steadily since then. Today, over 90,000 acres of Vermont's natural areas have been protected through the Conservancy's work. The Vermont Chapter is part of The Nature Conservancy (TNC) in Arlington, VA, which has become an international organization in the last few years.

TNC manages over 1300 preserves, the largest privately owned nature sanctuary system in the world. TNC also operates several businesses whose profits support specific properties, including the Pine Butte Guest Ranch in the Montana Rockies, the Gray Ranch in the Animas Mountains in the Bootheel of New Mexico, the Hart Prairie Preserve in northern Arizona, and Little Pecan Island Preserve in Louisiana.

The mission of the Vermont Chapter of The Nature Conservancy mission is "to preserve plants, animals, and natural communities that represent the diversity of life in Vermont, by protecting the land and water they need to survive." This 7500 member chapter is governed by a Board of Trustees of 26 Vermonters and maintains a staff of 10 in Montpelier. The Vermont Chapter of TNC manages more than 30 preserves and have completed over 90 natural area acquisition projects since 1960.

One member of the Nature Conservancy staff is on-site land steward, Mary Droege, whose job is to manage the Helen W. Buckner Memorial Preserve as well as several other preserves in the Southern Champlain Valley. Mary oversees and implements all aspects of the preserve management, including leading field trips, monitoring the health of rare plant and animal populations and natural communities, and helping set species and natural community research and management goals. Mary has worked closely with the case study group to share specific thoughts and ideas regarding to the Galick Homestead, as well as to act as a sounding board for potential case studies. In December of 1996, Mary and a subgroup of the Board of Directors will work together to develop a long-range plan for the Galick Homestead and the Preserve.

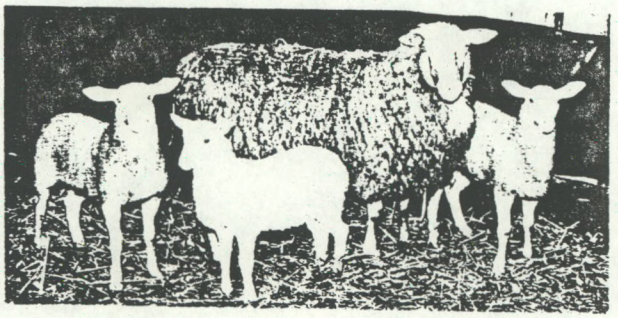
In general, the Nature Conservancy tries to stay focused on preserving the ecosystem and usually tries to find a third party to handle non-ecological conservation projects. The Vermont Chapter has been very supportive of the

idea of a sheep dairy/breeding operation because they are interested in keeping the hayfields and pasture land open and realize the importance to Vermont of exploring alternative forms of agriculture. In addition, they support the idea of keeping the buildings preserved for a specific use, rather than investing money for the sake of preservation alone. Finally, while it would be most desirable for the operation to be profitable, the operation could still be successful in the eyes of the Nature Conservancy if it simple broke even or provided enough income for base maintenance of the property.

II. The Sheep Dairy Proposal

Why a Sheep Dairy?

Operating a sheep dairy on the property is a natural fit for the reuse of some of the existing farm buildings. Little interior modifications are necessary to make the buildings usable, and having sheep on the property is low impact agriculture (especially compared to dairy farming with cows) and will keep the hayfields and pasture land open. The operation would be owned by the Nature Conservancy but managed by a farmer with experience in agriculture. All the profits would be redirected into the property for building stabilization, future maintenance, taxes, etc.



Our case study considers two potential sheep dairy scenarios. The "Cheap Sheep" option involves a 200 American breed dairy sheep whose milk will be used for the making of "green" cheese, that will be shipped off-site and marketed elsewhere. The "Steep Sheep" option involves starting with a small flock of imported East Friesian breed sheep and gradually building the flock to 100 sheep. This particular breed is significantly more valuable because each ewe produces about twice as much milk as the American breeds. The milk would be made into green cheese as it is in the "Cheap Sheep" option. In addition, the offspring of the flock could be sold as valuable breeding stock breeding stock.

Other options our group considered include:

Interpretive and Educational Center

The first floor of the Main House could be converted into a visitor center with simple displays interpreting the natural and agricultural history of the property. The visitor center could also be a gathering place for the start of environmental education field trips for local school groups. In addition to the grounds, a visitor-friendly biological/natural history research laboratory on the second floor of the house will aid as an educational tool. The Field Barn could serve as a sheltered pavilion/outpost for visiting groups.

This proposal was not pursued as a case study due to the property's remote location and unreliable road access, as well as its limited potential for economic return. In addition, this concept is a familiar one and the Nature Conservancy thought it would be a better use of our time to pursue a less familiar idea.

Minor Breeds Conservation Center

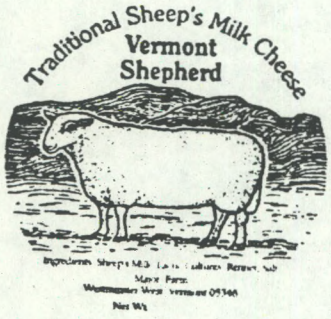
The barns and outbuildings could be used by a minor breeds conservation group such as the American Livestock Breeds Conservancy as housing for breeding stock for a wide variety of rapidly disappearing farm breeds. The intent of such an operation is in keeping with The Nature Conservancy's overall philosophy. The scale and environmental impact of such an operation would be carefully monitored. Such a farm operation could supplement the experience of visiting school groups and other casual visitors.

This option posed the possibility of competing interests between these two organizations. When compared with the economic potential of a sheep dairy, this proposal seemed less favorable.

On-Site Ecology Laboratory and/or Preservation Field School

The outbuildings could be modified for use as an ecology lab in conjunction with local schools or universities. During the summer months, the buildings could be stabilized/restored as part of a preservation field school.

While this option is in keeping with the overall management goals for the preserve, it runs the risk of draining resources away from the Nature Conservancy's primary conservation goals without offering much income in return.



Sheep farming is not a new idea in Vermont. The hundreds of thousands of sheep that once populated the rolling hills in the early 19th century were prize Merino sheep imported from Spain for their valuable fleeces which could be spun or woven into wool fabric, a staple for the textile industry in growing pre-industrial and industrial America. While the raising of large herds of sheep for wool has found more profitable locations such as in the western United States and Australia, the once booming sheep industry in Vermont proves that both the climate and terrain are suitable to the successful raising of sheep.

Sheep's Milk Cheese

While the concept of sheep dairying is a relatively new and unusual one for most Vermonters, cheeses made from sheep's milk are a familiar part of the American diet. American consumers purchased over $400 million of sheep's milk cheese in 1994. Ninety-nine percent of this was imported from Europe and the Middle East. Popular sheep's milk cheeses include: French Roquefort, Italian Peccorino, Romano, Spanish Manchego, and Greek and Israelei Feta.

Vermont has made a name for itself in the specialty food and cheese industry. American consumers associate Vermont products with high-quality natural products. Vermont Shepherd Cheese produced at the farm of Cynthia and David Major (the largest in the state) in Westminster West, Vermont has established a niche in specialty food shops across the country. Steve Jenkins, author of *Cheese Primer* (New York: Workman Publishing, 1996) describes the Major's product as "spectacular raw sheep's milk cheese," and "an American Treasure" that is "a firm, buttery, Gouda-shaped sheep's milk cheese with a wondrous grassy, herby, nutty flavor." The Majors' Vermont Shepherd Cheese was awarded the best aged sheep's milk cheese in the country by the 1995 American Cheese Society.

In addition to their own farm, Cynthia and David Major are operating the Sheep Dairy Center at Patch Farm to help other Vermont farms become

established in sheep dairying and farmhouse cheese production through training, research and technical assistance. Following the European model, the Patch Farm is establishing a central curing facility to which local farms can bring their "green cheese" to be aged for four to twelve months. The cheese will then be marketed from the Patch Farm facility. By 2001, the Center would like to have 10-12 Vermont farms producing farmhouse cheese.

Raw sheep's milk is about four times as valuable as raw cow's milk ($.14 versus $.90 per pound). The Majors are currently paying about $5 per pound for green cheese and are able to sell cured cheese in specialty food markets across the northeast for an average of $20 per pound.

As an alternative form of agriculture, there has never been a more promising time in Vermont for the operation of a sheep dairy and production of sheep's milk cheese.

Sheep Breeding

Because sheep dairying is still in its infancy in Vermont, there exists great potential for the breeding and selling of high-yield dairy sheep. Ag-Innovations in Warren, Vermont currently imports East Friesian dairy sheep from Europe. Ewes of this particular breed comes from carefully selected and controlled flocks and on average produce more than twice that of American breeds—over 1100 lbs. of milk a year, and as much as 2400 lbs. for superior ewes. In addition, East Friesians also average approximately 2.6 lambs per litter compared to approximately 1.8 lambs per litter for American breeds. East Friesians also breed out-of-season, so it is possible to accelerate their lambing schedule and produce more milk and lambs per annum than with average American breeds.

As of this fall, there is one flock of East Friesians in Vermont (Greensboro) and one flock across the border in New York State, in addition to several owned by Larry and Linda Faillace, owners of Ag-Innovations.

In today's market in Vermont, imported East Friesian rams and ewes range in price from $4,000 to $8,000 a piece. While such prices seem exorbitant, the potential for selling offspring of purchased sheep at a comparable price exists in theory for the next several years at least.

Unlike a sheep dairy operation based on the use of American breed sheep, basing an operation on the dairy and breeding of East Friesians has not yet demonstrated successful long-term profitability in Vermont. The idea, however, is quite compelling. Even if the sheep can recover their purchase cost in the next several years, and lose value as breeding stock over the long term, the operation would not be a failure. Because of their high milk production, it only takes 100 East Friesian sheep to produce as much milk as

200 American breed sheep, significantly reducing the amount of labor needed to milk and care for the sheep and thereby creating an overall more sustainable operation. In addition, East Friesians are just as valuable as American breeds for meat production.

The Case Study

For the purposes of this case study, we have presented a financial analysis of a sheep dairy based on an American breed of sheep (the "Cheap Sheep" option) and a dairy/breeding operation based on the East Friesian breed (the "Steep Sheep" option). Our team recognizes the pros and cons of both scenarios. The Cheap Sheep option has proven successful in Vermont, yet it requires a fair amount of labor and will offer a modest but not excessive return. We have every reason to believe that the Steep Sheep option will be as successful in terms of cheese production as the Cheap Sheep option, yet the investment in the livestock poses a considerable risk. Like most high risk ventures, it also has the potential for great profits.

Location Description

West Haven is located in the extreme western portion of Rutland County, Vermont. It is surrounded by the towns of Fair Haven (to the east), Benson (to the north), Dresden, New York (to the west, across Lake Champlain), and Whitehall, New York (to the south). It is 20 miles west of Rutland, Vermont (Vermont's second largest city) and 20 miles northeast of Glens Falls, NY. The topography of West Haven is variable, ranging from a low of 100 feet at Lake Champlain to a high of 1080 feet at the top of Bald Mountain. Its physiography reflects the fact that the town lies at the southern extreme of the Champlain valley.

Land use in West Haven reflects its long history as a self-sufficient farming community. The long-standing land use pattern of individual farms separated by farm and forest land predominated throughout the 1960's and 1970's. Only recently has this pattern started to give ground to diffuse residential usage as more townspeople seek employment outside of town. The social and cultural setting of the town is a reflection of its past and present population. In 1990, the population of West Haven was 306 (the second smallest in Rutland County). The size of the population has changed little in recent decades, growing from a population of 240 in 1970 to the present number, or by less than 1.4 percent per year.

Major natural resources in the town include its agricultural and forest lands, mineral resources, wildlife habitats, wetlands, lakes and ponds, rivers and streams, and recreation areas. Many of these resources contribute directly to local economic activities such as farming and forestry. Others contribute indirectly, by attract travelers and tourist who purchase goods and services in the town.

Site Description

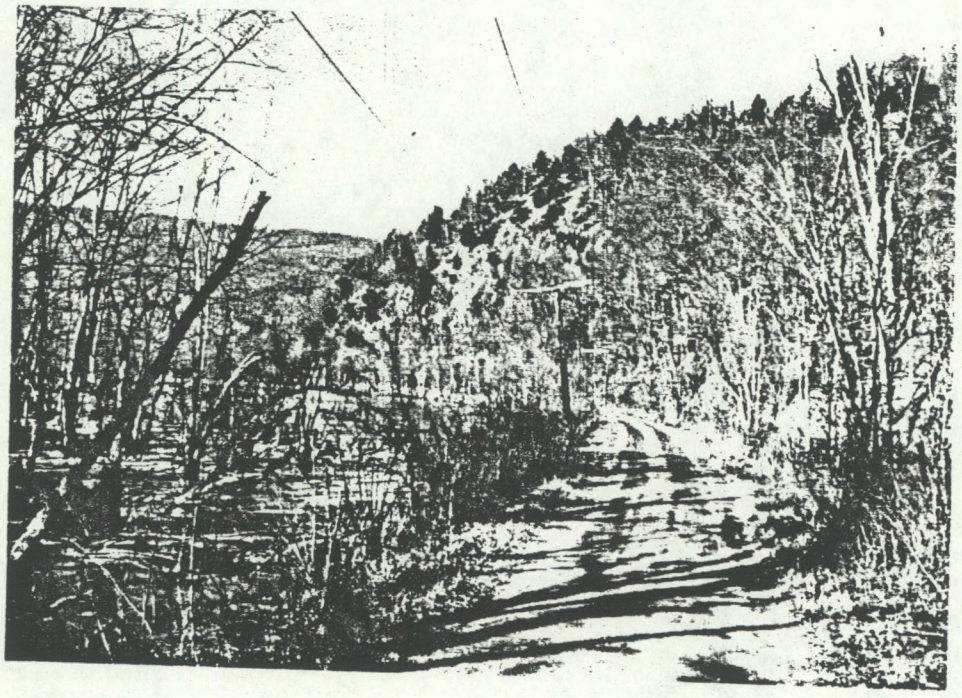
The remote Homestead is reached by crossing a narrow bridge north of Whitehall, New York and following a dirt road approximately two miles along the southern part of the peninsula.

The Galick Farmstead is located within a designated Conservation District. This conservation contains West Haven's most important habitat and natural resource lands. The Conservation District, which takes up just under half the land area of the entire town, is predominantly characterized by tall hills, steep slopes, wetlands, and stream corridors. It has a very low population density and very limited access. Specific marshes, numerous deer

yards, and several significant wildlife habitats and communities. The natural features of this area are exemplary from local, state, and regional perspectives. Soils in much of the district have low potential for on-site sewage disposal.

Improvements

Since this land has been in agriculture for many years and our proposal is likewise for an agricultural use, there are few improvements that are necessary to the success of a sheep dairy operations.



Access

Perhaps the biggest challenge to any future use of the Galick Homestead is the limitations of the current access road which is subject to seasonal flooding. Typically, the road is impassable by regular vehicles for one month between April and June, though trucks and some 4-wheel drive vehicles can get through. The Nature Conservancy has no immediate plans to upgrade the road and envisions limited use during this season and access as it has been historically—by boat.

The most direct access to the property is from Whitehall, NY across the East Bay Bridge. This bridge is not posted as to maximum capacity, but could easily support crossings by refrigerated vans.



Fencing

In order to keep the sheep safely contained and out of reach from predators, fencing will need to be erected around the pasture land which they occupy. The suitable forms of fencing for a sheep herd range from flexible netting to New Zealand high tensile wire to woven wire cattle fence. Depending on the type of fencing used and the kind of pasture management practiced (rotating the livestock among small areas of pasture versus many acres of free range pasture) the cost ranges from $.09 to $.75 per foot. For the purposes of this analysis, we have chosen an average price of $.45 a foot and determined the average amount needed to be that which could enclose a 100 acre square piece of pasture land.

Power

The property relies on power supplied by Niagara-Mohawk of New York. This power reaches the Galick Farmstead via a private power line. The present line is old, but usable. Its single phase system should be able to support a small milking operation, as it has in many of the more remote areas of Vermont for much of the 20th century.

Any improvement to the current line would have to be done by a private contractor, since Niagara-Mohawk lacks the jurisdiction to maintain

lines in Vermont. A base-line estimate of repair costs by a private contractor would probably run about $10 a foot.

If it ever becomes necessary to link the farm with the Champlain Valley Power System (which serves most of West Haven), a new line would have to be set up. CVPS tentatively suggests that the cost of such a line would be about $150,000.

For the purposes of this case study, we have not included any power system upgrades in our financial analysis.

Waste Water Disposal

It is likely that the existing system is antiquated and requires upgrading. The situation needs to be explored by a qualified professional. Costs for upgrading the system are as yet unknown but are integrated in the 5% contingency allocation in our financial analysis.

Water

According to the General Warranty Deed, the Galick family life estate is currently served by a spring. It is a strong possibility that a sheep dairy operation would need a well.

Drilling a well would cost about $7 per foot, with an additional cost of $7.50 per foot for casing (about 50 feet of casing would be required for a 400 foot job). A drive shoe, together with a water-tight well cap, would cost about $85. A Gould Stainless Steel Pump and a "203" 60 gallon tank would cost $1650.

We have included the cost of digging a new well in the financial analysis.

Building Improvements

Most of the buildings on the Galick Homestead are barns and outbuildings (ranging from good to poor condition) with the exception of the main house and two more recent residences. A thorough conservation report was prepared for The Nature Conservancy in January 1995 by Preservation Carpenter Charles Parker which recommended an initial scope of work for six of the buildings with unique historical value. The report further recommended that The Nature Conservancy document and remove those structures not slated for repair. Estimated costs for the recommended work total $71,800. (See Appendix.)

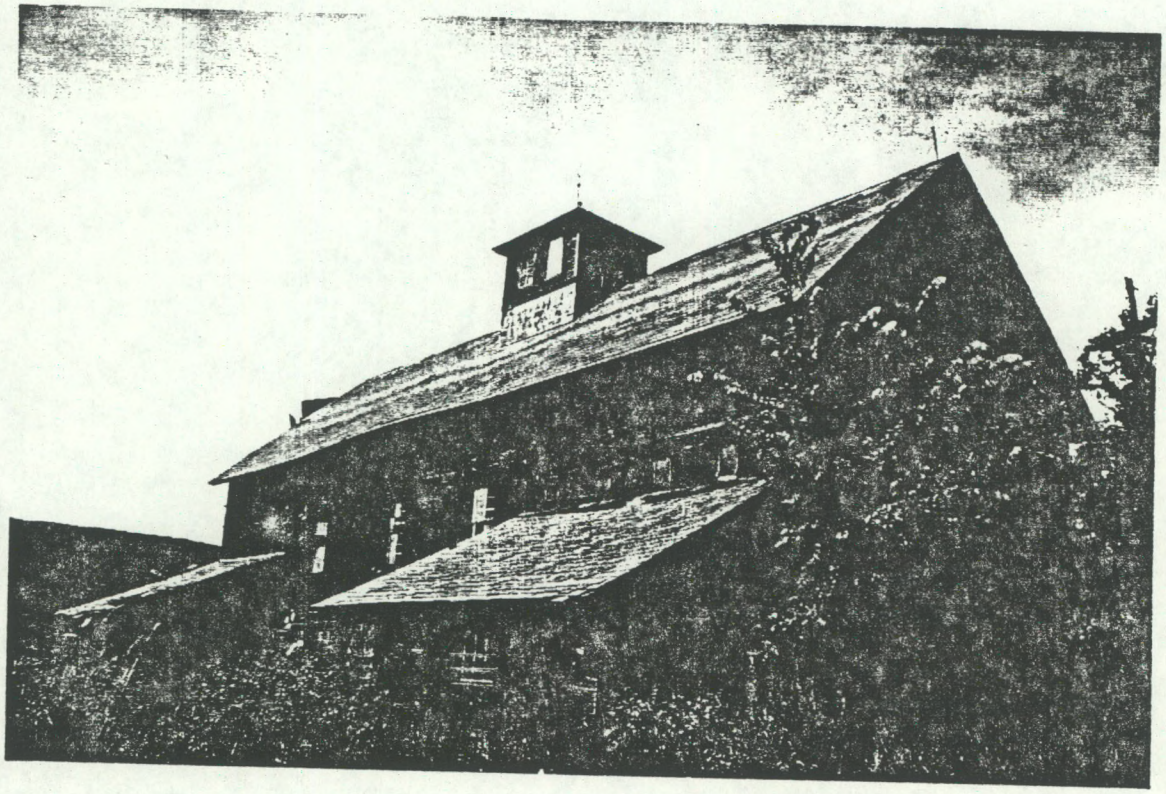
The Dairy Barn (two connected structures referred to as the South and North Dairy Barns), the Sheep Barn and the Field Barn have been selected for this purpose of sheep dairying, as they best meet the space requirements of the operation. Several building improvements must be made beyond basic stabilization. We have included the cost of improvements and stabilization of these three buildings in our analysis.

South Dairy Barn c. 1891

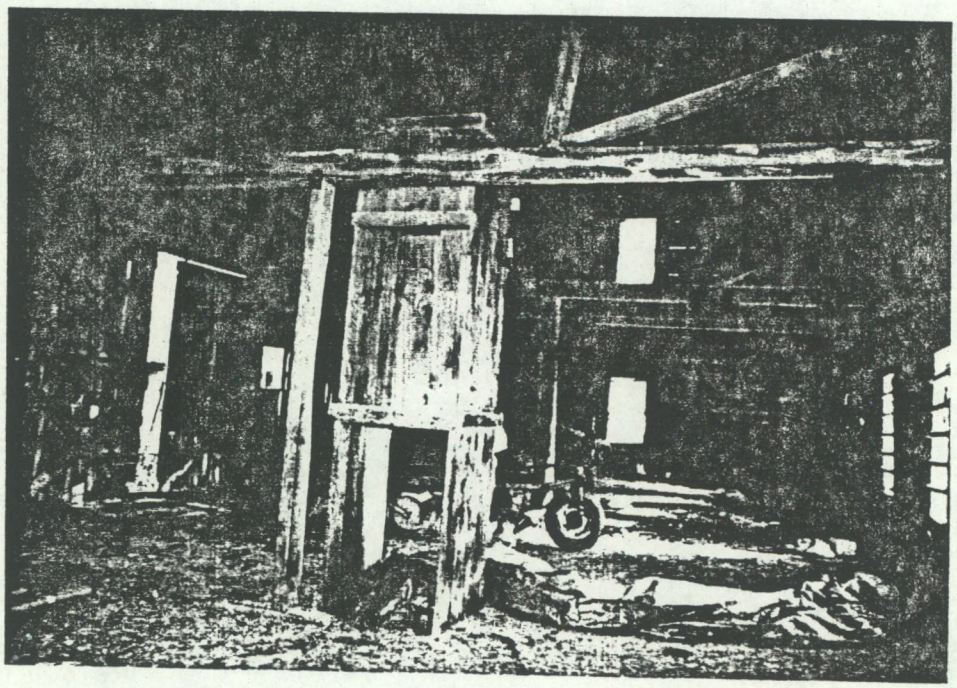
The southern portion of the Dairy Barn is a two-story, 25′ x 60′ barn intended for hay storage and shelter. The upper level will continued to be used for hay storage (as will other miscellaneous barns on the property). The lower level, intended as a pen area, needs to be equipped with pens, hay feeders, and a watering system. The wiring and water pipes need to be upgraded. This space should adequately house 100 sheep.

The following stabilization is recommended:

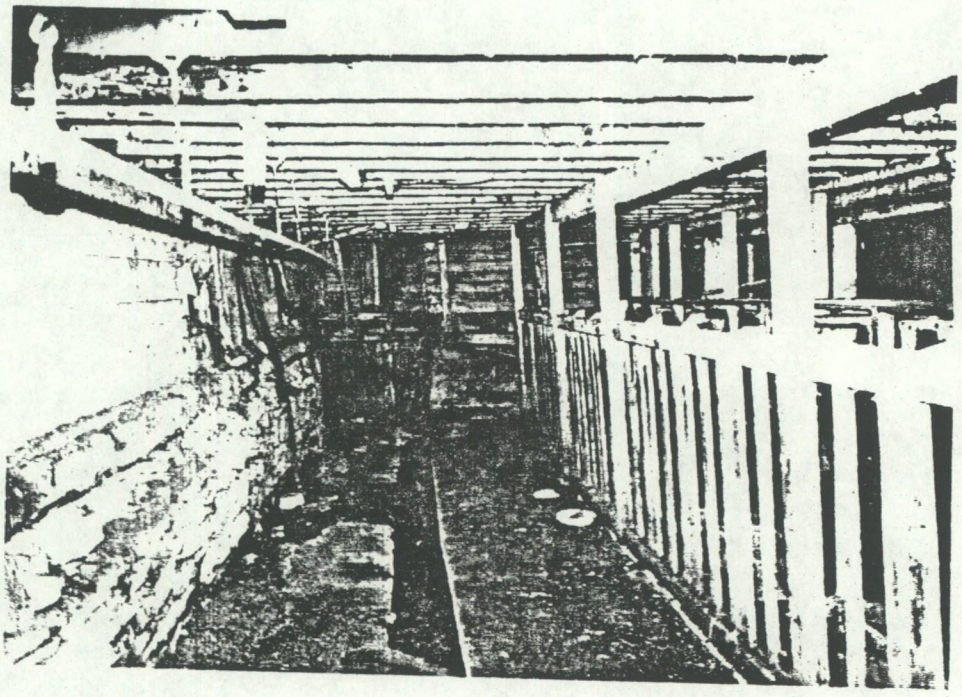
- Regrade northwest side of arm to create positive grade away from building
- Replace south deteriorated sills, matching size and species
- Grade exterior for positive grade around replaced sills
- Install five turn buckles between top plated to pull barn back, simultaneously raise cupola to original height and add frame to support failed cupola supports
- Repair slate roofs using matching size and color and following original pattern
- Seal transit in the milk room ceiling with approved asbestos sealing paint



South Dairy Barn, South Facade



South Dairy Barn, Interior Second Level Hayloft



North Dairy Barn, Ground Floor, Old Milking Parlor

North Dairy Barn c. 1870

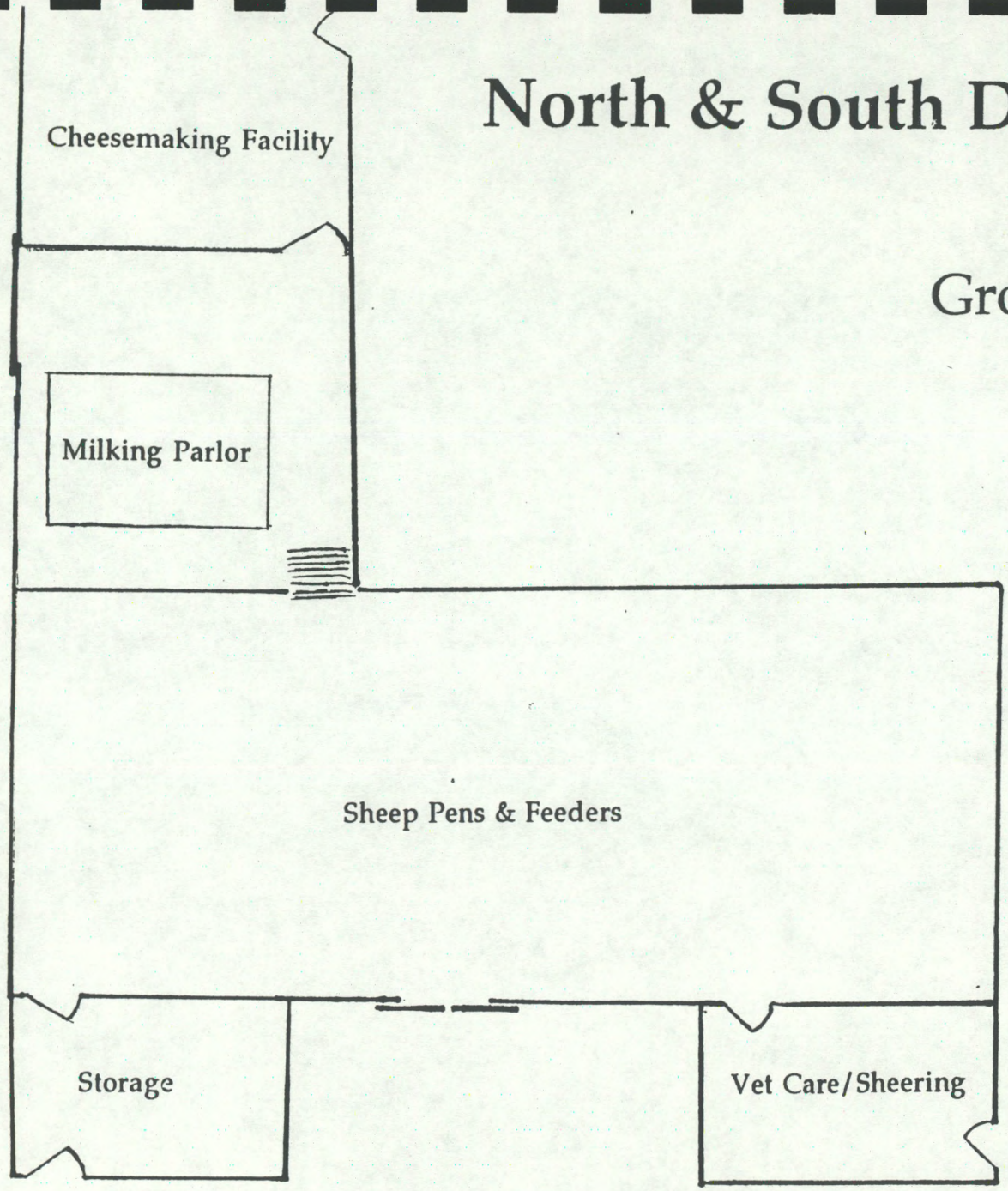
The attached northern ell of the Dairy Barn, which measures 30'x 20', is slated as the milking parlor and cheesemaking facility. This building was previously utilized as a cow dairy and the standing cow stanchions and existing concrete floor (in poor condition) need to be removed and replaced. A dividing wall between the milking parlor and the cheesemaking facility (at least 160 square feet) needs to be constructed. The entire northern ell needs to be insulated and equipped with a monitor heater (kerosene or oil is suitable); wiring and water pipes need to be upgraded.

The following stabilization is recommended:

- Remove concrete and failed southeast foundation and replace with dry laid stone
- Create positive grade high drive
- Supply drainage at southwest corner past silo to lower grade to daylight
- Replace deteriorated posts and nailers on north wall
- Through bolt top plate above swings beam
- Remove all non-essential organic matter
- Add additional support to eve overhang

North & South Dairy Barn

Ground Floor



Drawing Not to Scale



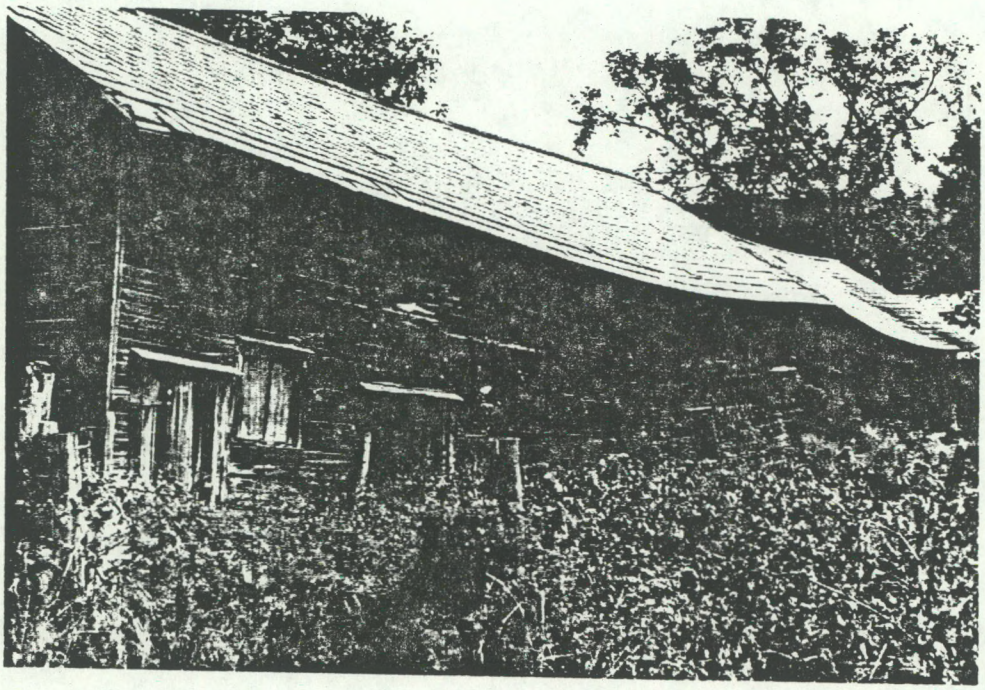
Sheep Barn, East and South Facades

Sheep Barn c.1850-c.1900

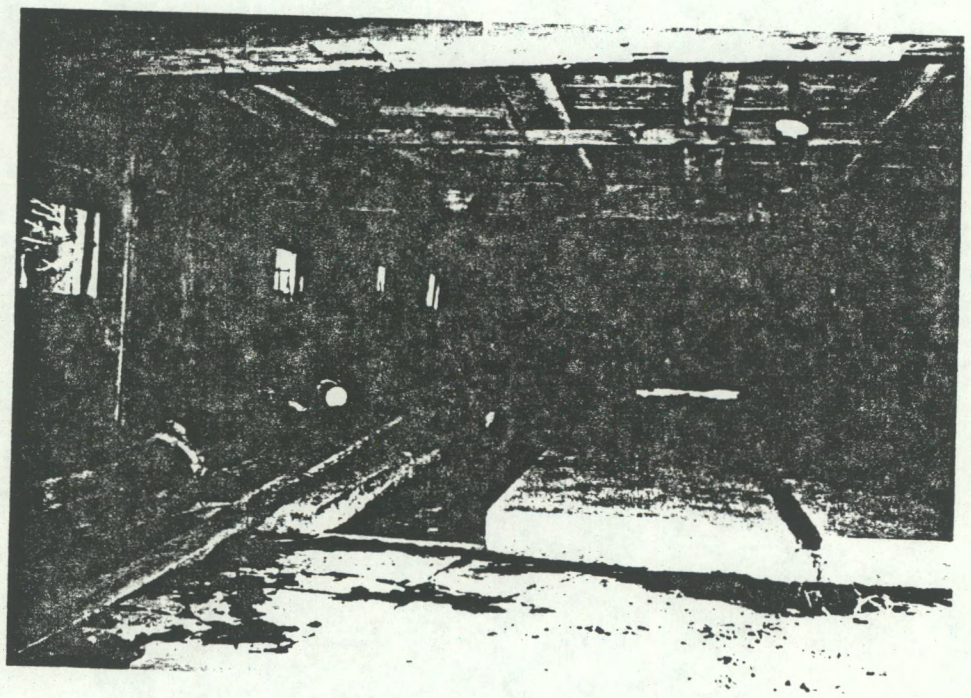
Space for an additional 100 sheep is provided by the 18′ x 90′ Sheep Barn. The existing concrete floor is adequate for the sheep operation. Pens, hay feeders and a watering system need to be added. Windows and doors need to be added so the sheep can't escape, and wiring and plumbing need to be upgraded.

The following stabilization is recommended:

- Jack up entire barn and straighten east end
- Replace all deteriorated sills
- Repair north top plate at east end
- Repair failed roofing on northeast roof



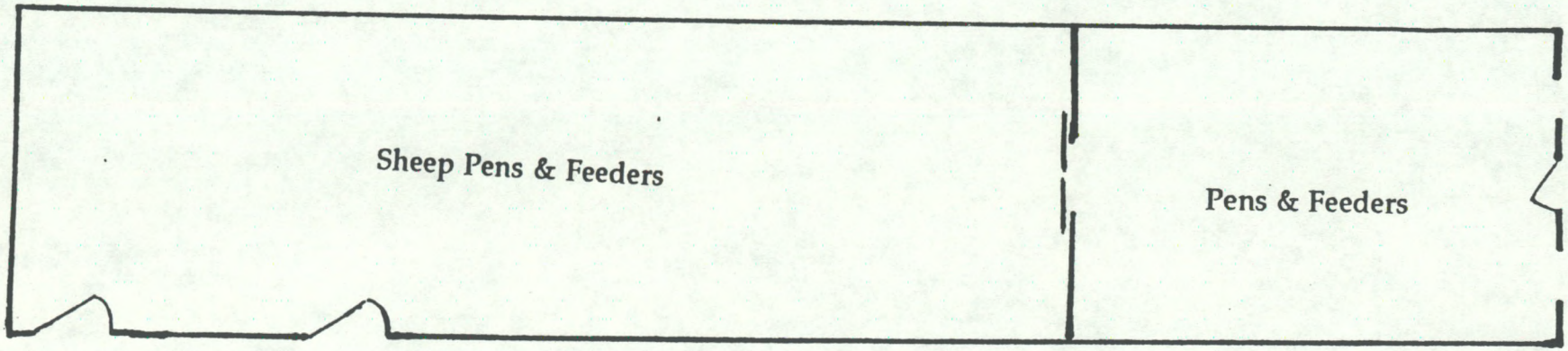
Sheep Barn, South Facade



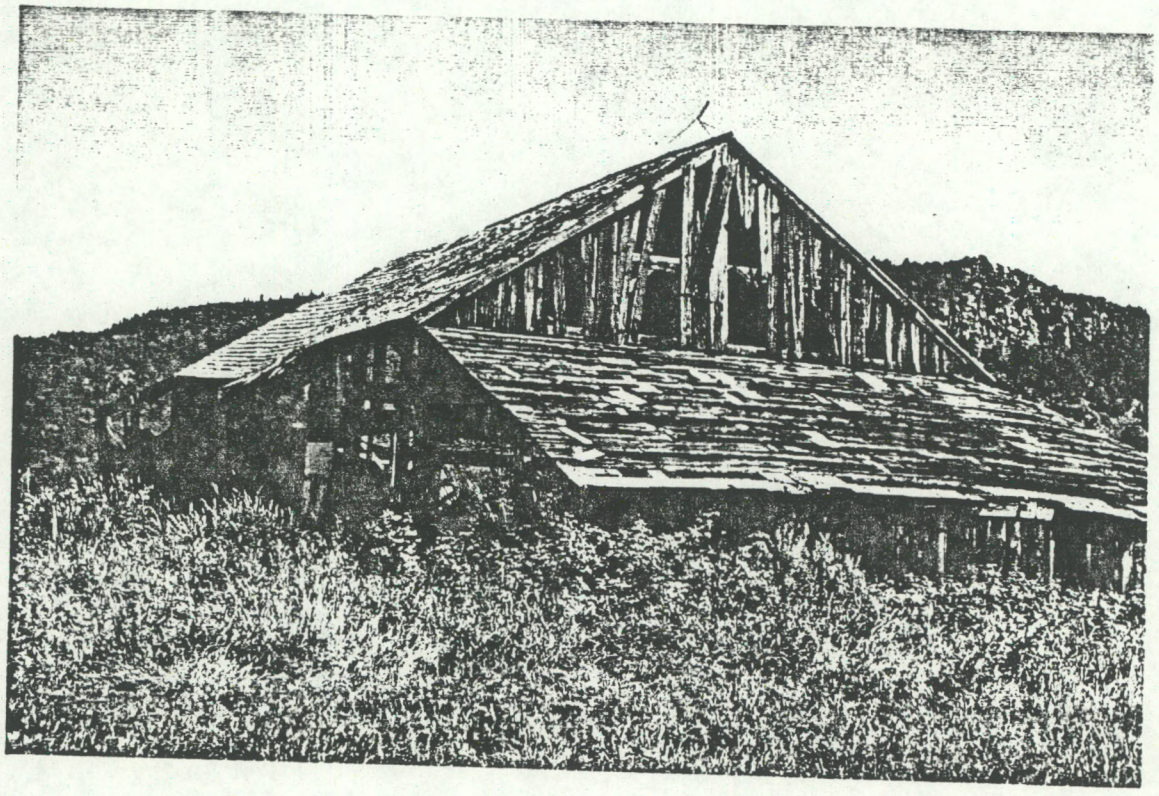
Sheep Barn, Interior

Sheep Barn

Ground Floor



Drawing Not to Scale



Field Barn, South Facade

Field Barn c. 1810

The Field Barn will be used as a remote shelter for the sheep when they are out on pasture. No renovations beyond stabilization are necessary.

The following stabilization is recommended:

- Replace all failed sills
- Remove shed addition
- Repair failed top plate over center door
- Install galvanized metal preform panel roof over new rafter and sheathing

Local Zoning Requirements

Under Section 103 of the West Haven Zoning Ordinances, agricultural and forest uses are permitted in the Conservation District. Under Article VI, an agricultural use is defined as involving land "containing at least two (2) acres which is used for raising livestock, or agricultural or forest products, including farm structures and the storage of agricultural equipment...and, as an accessory use, the sale of agricultural products raised on the property." Proposed uses of the existing agricultural structures should not require local zoning permits or variances.

Dairy Permits

In order to meet the Vermont Department of Agriculture requirements, a permit will be required authorizing the milking of livestock and the sale of produce to the public. In addition, a Milk Handler's License will need to be obtained. The cost of this license is $200 for the first year, with annual charges of $50 thereafter. The Milk Handler's License will only be granted after a public hearing (the whole process taking 60 days). Inspections of both the milking operation and the physical plant are required. These will occur at three month intervals for inspection of the physical plant, and six month intervals for the inspection of the operation's sanitary process.

New milk plants cannot be built, or existing structures remodeled for use as milk plants, unless plans and specifications are submitted to the State Commissioner of Agriculture and approved.

Water Permit

Any manufacture of cheese may constitute a "commercial use" under state law. If so, a Water Supply and Wastewater Permit would have to be obtained. The sufficiency of any pre-existing and newly constructed systems will have to be determined by a privately-hired, licensed engineer in order to qualify for the permit.

Act 250

Any commerical component of the operation would require an Act 250 permit. This permit would address a number of issues, most notably those involving the operation's impact on West Haven's thin soils, its waters, and its wildlife.

The following pages contain the cost estimates for the "Cheap Sheep" and the "Steep Sheep" Dairy operations. The estimates are based on facts and figures gathered from conversations with Preservation Carpenter Charles Parker; Construction Manager Mark Naegley; Sheep Farmers Cynthia Major, David Major, Larry Faillace, and Linda Faillace; and Farm Animal Manager Donald Campbell.

We have taken the liberty of making several educated assumptions for the purposes of this economic analysis:

1. Housing would be provided for the farmers on the property. This has been taken into account in determining their salaries but household operations (heat, electricity, etc.) have not been accounted for.

2. We assume that the existing hayfield is of high enough quality to be easily converted to pasture. 100 acres for will be used for pasture land, 100 acres will be used for hayfield. We have figured that all the hay needed for the sheep will be available on the property and is therefore figured at a zero cost in our analysis.

3. Farm equipment necessary for haying and manure spreading is figured into the cost estimates. We have presented the price of good used equipment. A significant portion of the startup costs could be spread out over the years by not buying this equipment and hiring a local farmer to do the haying for the operation.

4. On the few occasions that the sheep will need to be moved, a stock trailer can be leased. This cost is figured into the miscellaneous operating expenses.

5. For the "Steep Sheep" option, we assume that the sale price of the sheep is considerably less than that which one must pay today for the East Friesian breed. Today, an East Friesian Ewe costs $4000-$7500: we have figured sale of ewe lambs at $2000 for years 2 and 3; $1200 for year 4; and $600 for each year thereafter. East Friesian rams costs $6000: we have figured sale of ram lambs at $3000 for years 2 and 3; $1500 for year 4; and $750 for each year thereafter.

GALICK FARM SHEEP DAIRY OPTION 1: "CHEAP SHEEP"
PROFORMA

THIS ANALYSIS SHOWS AN ECONOMIC SCENARIO FOR A 200 SHEEP DAIRY (AMERICAN BREED).

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
APPLICATION of FUNDS						
1. Acquisition	0					
2. Direct Costs						
A. Stabilization	40,800					
B. Renovation	13,300					
C. Sitework	8,354					
D. Equipment	41,350					
E. Livestock	23,000					
3. Indirect Costs (20%)	25,361					
4. Contingency (5%)	6,340					
TOTAL COSTS	$158,505					
SOURCES of FUNDS						
1. Historic Preservation Grants	40,800					
2. Nature Conservancy Funds	117,705					
TOTAL FUNDS	$158,505					
INCOME PROJECTION						
1. Cheese Operations	29,285	58,570	60,327	62,137	64,001	65,921
2. Sale of Sheep	9,100	18,200	18,746	19,308	19,888	20,484
TOTAL INCOME	$38,385	$76,770	$79,073	$81,445	$83,889	$86,405
NET PROFIT						
1. Total Income	38,385	76,770	79,073	81,445	83,889	86,405
2. Operating Costs						
A. Livestock Expenses	(15,425)	(15,888)	(16,364)	(16,855)	(17,361)	(17,882)
B. Labor	(45,000)	(46,350)	(47,741)	(49,173)	(50,648)	(52,167)
C. Misc. Operating	(6,050)	(6,232)	(6,418)	(6,611)	(6,809)	(7,014)
NET PROFIT	($28,090)	$8,301	$8,550	$8,806	$9,070	$9,343
DISTRIBUTION of PROCEEDS						
Balance of Profits	(28,090)	8,301	8,550	8,806	9,070	9,343
Nature Conserv/Bldg Fund	0	(8,301)	(8,550)	(5,724)	(5,896)	(6,073)
Farmer Bonus	0	0	0	(3,082)	(3,175)	(3,270)
NET PROCEEDS	$0	$0	$0	$0	$0	$0

The "payback" term for the Nature Conservancy Investment would in theory be about 12 years. All profits, however, will be reinvested in the farm to:
1)stabilize the remaining farm buildings and contribute towards their maintenance and
2) provide an incentive bonus for the farmer.

GALICK FARM SHEEP DAIRY: OPTION 1, EXTENDED

APPLICATION OF FUNDS		
1. Acquisition	0	
2. Direct Costs		
A. Stabilization		
1. Field Barn	9,600	
2. Sheep Barn	8,500	
3. N. Dairy Barn	12,200	
4. S. Dairy Barn	10,500	40,800
B. Renovation		
1. N. Dairy Barn		
Concrete Floor (1000 sq. ft.)	1,800	
Heating (1000 sq. ft)	1,000	
Insulation (1000 sq ft)	1,200	
Partition Wall	500	
2. S. Dairy Barn		
Plumbing Improvements	750	
Electricity Improvements	1,000	
Pens (SB & DB)	1,250	
Hay Feeders (SB & DB)	200	
Waterers (SB & DB)	700	
3. Sheep Barn		
Repair Window & Door Openin	1,000	
Plumbing Improvements	750	
Electricity Improvements	1,000	
Pens	1,250	
Hay Feeders	200	
Waterers	700	13,300
C. Sitework		
1. Water/Well digging	4,910	
2. Fencing	3,444	8,354
D. Equipment		
1. Milking Equipment		
Can Cooler	600	
Milk Cans (8 @ $100)	800	
Milker (2 @ $250)	500	
Vacuum Pump	750	
Headgates, feeder	3,800	
2. Cheesemaking Equipment		
Vat	7,500	
Knives	500	
Molds	100	
Press	400	
Refrigerator	400	
3. Farm Equipment		
Truck	9,000	
Tractor	9,000	
Baler	3,000	
Mower	1,500	

GALICK FARM SHEEP DAIRY: OPTION 1, EXTENDED

Manure Spreader	1,800	
Wagon	500	
Tetter/Rake	1,200	41,350
E. Livestock		
A. Sheep		
200 ewes @$100	20,000	
2 rams @$1000	2,000	
B. Dogs/Llamas (2 @ $500)	1,000	23,000
4. Indirect Costs (20%)	20,761	25,361
5. Contingency (5%)	5,190	6,340
TOTAL DEVELOPMENT FUNDS		$158,505

INCOME PROJECTIONS*		
1. Cheese Operations		
Green Cheese (11,714 lbs. @ $5/lb.)	58,570	58,570
2. Sale of Sheep		
Feeder Lambs (300 @ $40 ea)	12,000	
Cull Ewes (50 @ $25)	1,000	
Breeding Ewes (40 @ $100)	4,000	
Wool	1,200	18,200
TOTAL INCOME		$76,770

* Startup year figures are estimated to be one-half of all subsequent years; 3% inflation is figured into cheese operations and sale of sheep

OPERATING COSTS		
1. Livestock Expenses		
Sheep Grain ($69/ewe)	13,800	
Sheep Hay	0	
Vet	1,000	
Shearing	625	15,425
2. Labor*		
1 full-time	23,000	
1 full-time	13,000	
1 year-round intern	9,000	45,000
3. Misc. Operating Expenses		
Milk Handler's Liscense	50	
Supplies	4,000	
Utilities & Fuel	2,000	6,050

*3% inflation is figured into the cost of labor

GALICK FARM SHEEP DAIRY OPTION 2: "STEEP SHEEP"
PROFORMA

THIS ANALYSIS SHOWS AN ECONOMIC SCENARIO FOR A 25 SHEEP DAIRY/BREEDING OPERATION (E. FREISAN) MULTIPLYING TO 100 MILKING EWES OVER 3 YEARS.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
APPLICATION of FUNDS						
1. Acquisition	0					
2. Direct Costs						
A. Stabilization	40,800					
B. Renovation	13,300					
C. Sitework	8,354					
D. Equipment	41,350					
E. Livestock	138,000					
3. Indirect Costs (20%)	48,361					
4. Contingency (5%)	12,090					
TOTAL COSTS	$302,255					
SOURCES of FUNDS						
1. Historic Preservation Grants	40,800					
2. Nature Conservancy Funds	261,455					
TOTAL FUNDS	$302,255					
INCOME PROJECTION						
3. Cheese Operations	14,643	29,285	58,570	60,327	62,137	64,001
4. Sale of Sheep	150	79,740	155,480	272,360	137,360	137,360
TOTAL INCOME	$14,793	$109,025	$214,050	$332,687	$199,497	$201,361
PROFIT						
1. Total Income	14,793	109,025	214,050	332,687	199,497	201,361
2. Operating Costs						
A. Livestock Expenses	(3,699)	(7,149)	(14,074)	(14,074)	(14,074)	(14,074)
B. Labor	(36,000)	(37,080)	(38,192)	(39,338)	(40,518)	(41,734)
C. Misc. Operating	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)
NET PROFIT	($32,907)	$56,796	$153,784	$271,275	$136,905	$137,553
DISTRIBUTION of PROCEEDS						
Balance of Profits	(32,907)	56,796	153,784	271,275	136,905	137,553
Nature Conserv/Bldg Fund	0	(56,796)	(153,784)	(21,275)	(86,905)	(87,553)
Farmer Bonus	0	0	0	(50,000)	(50,000)	(50,000)
NET PROCEEDS	($32,907)	$0	$0	$0	$0	$0

The "payback" term for the Nature Conservancy investment would be about 4 years. All profits, however, will be reinvested in the farm to:
1)stabilize the remaining farm buildings and contribute towrad their maintenance and
2) provide an incentive bonus for the farmer.

GALICK FARM SHEEP DAIRY: OPTION 2, EXTENDED

APPLICATION OF FUNDS							
1. Acquisition		0					
2. Direct Costs							
A. Stabilization							
1. Field Barn		9,600					
2. Sheep Barn		8,500					
3. N. Dairy Barn		12,200					
4. S. Dairy Barn		10,500	40,800				
B. Renovation							
1. N. Dairy Barn							
Concrete Floor (1000 sq. ft.)	1,800						
Heating (1000 sq. ft)	1,000						
Insulation (1000 sq ft)	1,200						
Partition Wall	500						
2. S. Dairy Barn							
Plumbing Improvements	750						
Electricity Improvements	1,000						
Pens (SB & DB)	1,250						
Hay Feeders (SB & DB)	200						
Waterers (SB & DB)	700						
3. Sheep Barn							
Repair Window & Door Openings	1,000						
Plumbing Improvements	750						
Electricity Improvements	1,000						
Pens	1,250						
Hay Feeders	200						
Waterers	700	13,300					
C. Sitework							
1. Water/Well digging	4,910						
2. Fencing	3,444	8,354					
D. Equipment							
1. Milking Equipment							
Can Cooler	600						
Milk Cans (8 @ $100)	800						
Milker (2 @ $250)	500						
Vacuum Pump	750						
Headgates, feeder	3,800						
2. Cheesemaking Equipment							
Vat	7,500						
Knives	500						
Molds	100						
Press	400						
Refrigerator	400						
3. Farm Equipment							
Truck	9,000						
Tractor	9,000						
Baler	3,000						
Mower	1,500						
Manure Spreader	1,800						
Wagon	500						
Tetter/Rake	1,200	41,350					
E. Livestock							
A. Sheep							
25 ewes @$5000	125,000						
2 rams @ $6000	12,000						
B. Dogs/Llamas (2 @ $500)	1,000	138,000					
4. Indirect Costs (20%)	20,761	48,361					
5. Contingency (5%)	5,190	12,090					
TOTAL DEVELOPMENT FUNDS		$302,255					
INCOME*							
1. Cheese Operations							
Green Cheese (max. 11,714 lbs. @ $5/lb.)	14,643	29,285	58,570	60,327	62,137	64,001	

GALICK FARM SHEEP DAIRY: OPTION 2, EXTENDED

2. Sale of Sheep						
Feeder Lambs ($40)	0	320	640	1,280	1,280	1,280
Cull Ewes ($30)	0	120	240	480	480	480
Breeding Ewes	0	4,000	4,000	120,000	60,000	60,000
Rams	0	75,000	150,000	150,000	75,000	75,000
Wool	150	300	600	600	600	600

*3% inflation is figured in for years 3-6.
* Ewe lambs will sell for $2000 for years 2 and 3; $1200 for year 4; $600 each year thereafter
* Ram lams will sell for $3000 for years 2 and 3; $1500 for year 4; $750 for each year thereafter.

OPERATING COSTS						
1. Livestock Expenses						
Sheep Grain ($70/ewe/ram)	1,890	3,640	7,140	7,140	7,140	7,140
Sheep Hay	0	0	0	0	0	0
Vet	750	1,500	3,000	3,000	3,000	3,000
Shearing	100	175	350	350	350	350
Insurance ($35 ewe, $42 ram)	959	1,834	3,584	3,584	3,584	3,584
2. Labor						
1 full-time	23,000	23,690	24,401	25,133	25,887	26,663
1 full-time	13,000	13,390	13,792	14,205	14,632	15,071
3. Misc. Operating						
Supplies	6,000	6,000	6,000	6,000	6,000	6,000
Utilities & Fuel	2,000	2,000	2,000	2,000	2,000	2,000

*3% inflation is figured into the cost of labor

III. Conclusion

Summary

Finding an appropriate adaptive use for the Galick Homestead is challenging because of the remote location of the site and the quantities and conditions of the historic structures. By reinstituting a private agricultural use for the Homestead, many of these challenges are circumvented.

Sheep dairying holds great promise for the state of Vermont. Starting a sheep dairy at the Galick Homestead could not only be an enterprise that is capable of producing enough income to maintain the property's buildings, but it could also serve as a model for other area farmers who are struggling in today's economy.

IV. Appendix

CHARLES A. PARKER PRESERVATION CARPENTER

16 January 1995

Nature Conservancy
Vermont Field Office
27 State Street
Montpelier, Vermont 05602

RE: Galick Farmstead

Dear Nancy,

Enclosed please find your copy of the Technical Assistance Program Report on the Galick Farmstead. Once restored these structures could provide a sound basis for your future plans.

I enjoyed my site visit to the Galick Farmstead and look forward to returning for a pleasure visit with my family in the Spring. Please feel free to call me with any questions you may have.

Sincerely,

Charles A. Parker

enclosures
cc: Paul Bruhn

995 IRELAND ROAD, STARKSBORO, VERMONT 05487, 802/453-4372

CHARLES A. PARKER PRESERVATION CARPENTER

Galick Farmstead
Technical Assistance Program Report

Funded in part by the Preservation Trust of Vermont

The Galick Farmstead is a unique collection of agricultural buildings situated on a peninsula of land in West Haven, Vermont, surrounded on three sides by Lake Champlain and on the remaining side by Bald Mountain. This geography makes this piece of Vermont an important natural preserve, while simultaneously creating a special historical time capsule. The remote environs of the farm and the independent nature of the Galick family have protected this historic site from development and modernization.

More than 26 structures make up the Galick Farmstead and date from 1830 to 1950. The following report will describe each structure, assess existing conditions for that structure and recommend a scope of work to repair the structures. All work should meet with the Secretary of the Interior's Standards for Rehabilitation. The barns will be listed in order of significance from a historical perspective. Following the assessments will be a list prioritizing repair and estimated costs.

995 IRELAND ROAD, STARKSBORO, VERMONT 05487, 802/453-4372

Field Barn

Although this barn is not part of the central farmstead it is by far the most significant structure. Field barns like this are in real danger of disappearing from the landscape due to their remote locations and their vulnerability to theft and neglect. This is a three bay English barn with queen post supported by oversized wind bracing. The frame consist of soft wood hand hewn post and beams with up and down sawed 45° wind braces and sheathing. The date for this type of construction is earth 19th century. The existing conditions are as follows:

- The sills are intact in most places but need some replacing where they have deteriorated. The upper frame has failed above the door.
- The shed has failed and is causing damage to the main barn and should be documented and removed.
- The slate roof, some sheathing and one rafter have been removed.

The scope of work for this barn should be as follows:
- Replace all failed sills.
- Remove shed addition.
- Repair failed top plate over center door.
- Install galvanized metal preform panel roof over new rafter and sheathing.

Sheep Barn

The recent conversion of this barn to one of the many machine shops makes the original use hard to determine. However, this barn has the shape and size of a sheep barn. It is compiled of three barn frames all having different styles of framing. Starting from west to east: first is a unique heavy but small hand hewn post and beam frame dating from the early 19th century, then a light post and beam frame from the mid-19th century, finally a balloon frame from the late 19th century. These three frames are all brought together under a common roof of slate in a scalloped band pattern common to the farmstead. The existing conditions are as follows:

- Failed sills throughout.
- Racked and sagging framing in two later sections.
- Some upper framing deterioration in late 19th century frame (east end).
- Minor roof repair on north side of late 19th century frame (east end).

Scope of work for this barn should be as follows:
- Jack up entire barn and straighten east end.
- Replace all deteriorated sills.
- Repair north top plate at east end.
- Repair failed roofing on northeast roof

Wood Shed

The woodshed is the oldest frame in the farmstead but due to resheathing and major alterations the original use is hard to determine. The frame consist of light weight crudely hewn posts and beams. The sills have deteriorated causing the building to compost down leaving upper frame intact.

The scope of work for the wood shed should be to:
- Jack up and restore to original height.
- Replace uprights to original height.
- Replace deteriorated sills.
- Patch and coat roof with aluminum asphalt coating.

Dairy Barn

The Dairy Barn is comprised of two individual frames combined together on a common bank foundation. The north barn is an early 18th century English barn moved to this location at the same time the south barn was built, in the late 19th century.

North Dairy Barn

The North Dairy Barn frame is a combination of hard and soft wood, hand hewn post and beam framing with hewn wind braces. All roof and wall sheathing was replaced in the late 19th century after relocation. The exterior siding and slate roof match that of the South Dairy Barn and most likely were done all at the same time. The existing condition of the North Dairy Barn is as follows:
- Failed stone foundation at southeast corner.
- Deteriorated sills along entire east side and west sill mid-span.
- All three north posts deteriorated as well as nailers.
- Failed top plate and associated swing beams.
- Sawdust stored in hay loft.
- East and west eve overhangs have failed.

The scope of work for the North Dairy Barn should be as follows:
- Remove concrete and failed southeast foundation and repace with dry laid stone.
- Create positive grade high drive.
- Supply drainage at southwest corner past silo to lower grade to daylight.
- Replace all deteriorated posts and nailers on north wall.
- Through bolt top plate above swingS beam.
- Remove all non-essential organic matter.
- Add additional support to eve overhang.

South Dairy Barn

The South Dairy Barn frame is a late 19th century light weight balloon frame containing later post and beam framing installed to support failing framing. The exterior siding and roof slates are original to this building and set the style for other updated building in the farmstead. The roof is topped with a ventilating cupola with hip slate roof that also has a scalloped band. The cupola "watch" section below the ridge of the barn is sheathed in slate.

Two small later shed additions exist on the south side of this barn. One is a milk room (east) the other is a barn cleaner shed. These both were added later as the farm became more mechanized.

The basement in both barns was always used for the milk parlor. The upstairs or hayloft originally was hay storage and also housed horses in the southeast corner of the South Dairy Barn.

The silo at the west end of the South Dairy Barn may not be original to the barn but is a early simple style of tongue and groove spruce staves with iron rod hoops with mechanical fasteners. There is no evidence of ever being roofed over. The existing conditions of the South Dairy Barn are as follows:

- Surface water infiltration at northwest foundation.
- South lower sill has deteriorated.
- Eve walls at hay loft have splayed out and failed.
- Slate roof has minor leaks throughout with significant leaks at intersecting east and west valleys.
- Transite board ceiling in milk house is untreated.
- Cupola support framing is inadequate and failing.

The scope of work for the South Dairy Barn should be as follows:

- Regrade northwest side of barn to create positive grade away from building.
- Replace south deteriorated sills, matching size and species.
- Grade exterior for positive grade around replaced sills.
- Install five turn buckles between top plates to pull barn back, simultaneously raise cupola to original height and add frame to support failed cupola supports.
- Repair slate roofs using matching size and color, follow original pattern.
- Seal transite in the milk room ceiling with approved asbestos sealing paint (although non-friable asbestos is not a highly regulated building material, disruption (sawing, sanding, demolition) of this material would represent a health hazard.

Original Grainery

The Grainery is a late 19th century grain storage building perhaps the best preserved barn of the farmstead. It is a post and beam hand hewn soft wood frame sheathed in a vertical board and batten siding. It is possible that originally there were no battens for ventilation. The existing condition of the Grainery is as follows:
- Grade is too close to sills.
- Sills may have deteriorated due to ground contact.
- Shed at west side has failed, trapping snow and rain against west wall.
- Attached eve corn crib framing has failed.

The scope of work for the Gainery should be as follows:
- Jack up and replace any deteriorated sills.
- Place building on high stone piers, as originally would have be done.
- Remove and document west shed.
- Repair attached eve corn crib sills, framing and roofing.

Sugar House

The Sugar House is a typical example of a mid-20th century sugar house. It has a light balloon frame on a cement foundation. The significance of this building is the "homemade" cement blocks. These were cast on site using a one block at a time mould. This building is in sound condition.

Miscellaneous Barns and Sheds

The remaining barns and sheds, although significant to the farmstead are not of unique historical importance. They include: sawmill, gunshop and woodworking shop, newer grainery corn crib, forge, garage, twin machine sheds (1½ story), twin acetylene welding shops (1 story) and a freezer locker-slaughter house. These building were all constructed in the mid-19th century. The existing conditions of these buildings varies from poor to excellent. However, the general conditions are as follows:
- Deteriorated and/or failed sills.
- Deteriorated floors.
- Deteriorated roofing.
- Endangered collections of tools.

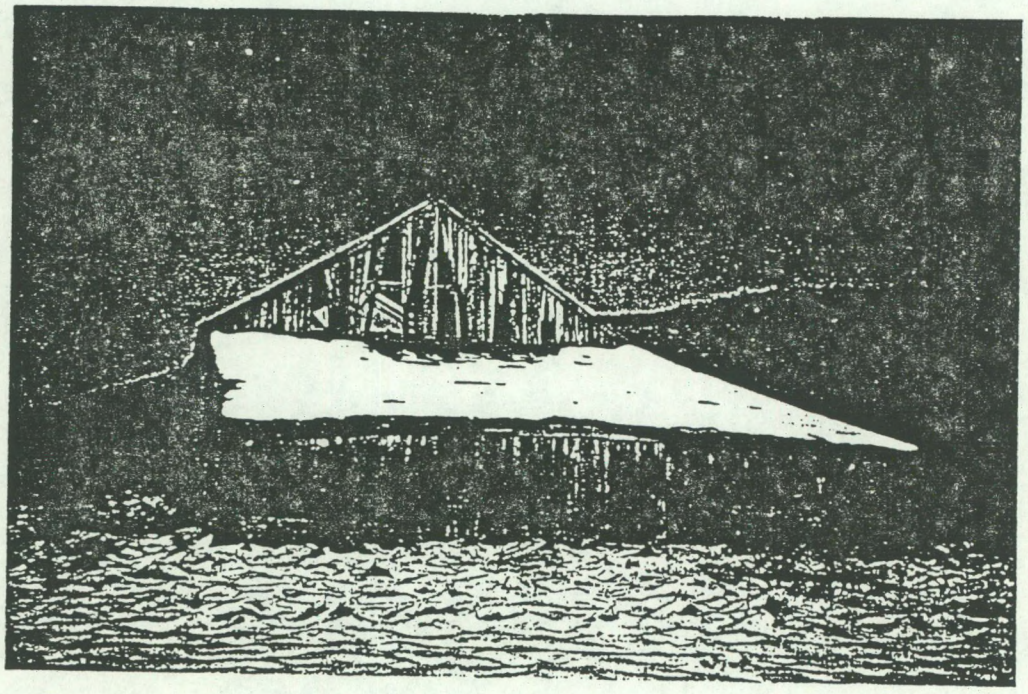
The scope of work for these buildings should be to:
- Document and remove any buildings that are not going to be repaired.
- Stabilize and or repair remaining buildings.
- Remove collections to storage for protection.

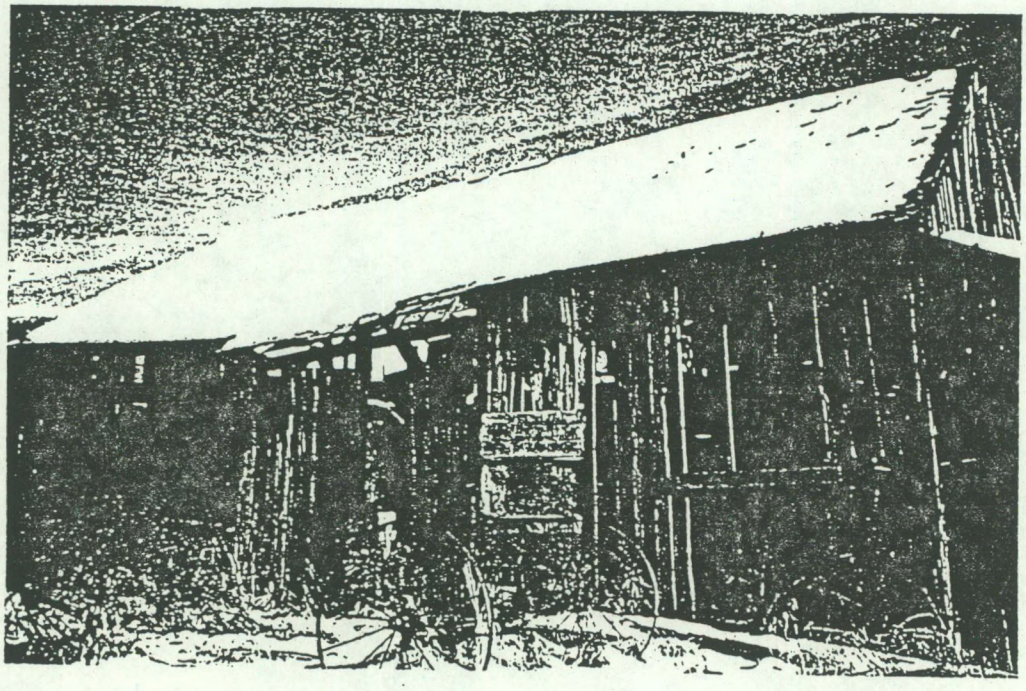
The Galick family independent spirit is evident in the self sufficient nature of the farm. It would have been possible to do any job, from moulding cement block, to sawing lumber, to forging metal implements, on site. This collection of structures provides a window into Vermont's yankee ingenuity and independent resourcefulness.

These barns currently house a great wealth of implements for every facet of homesteading. My recommendation is to document this collection and relocate those threatened by the elements.

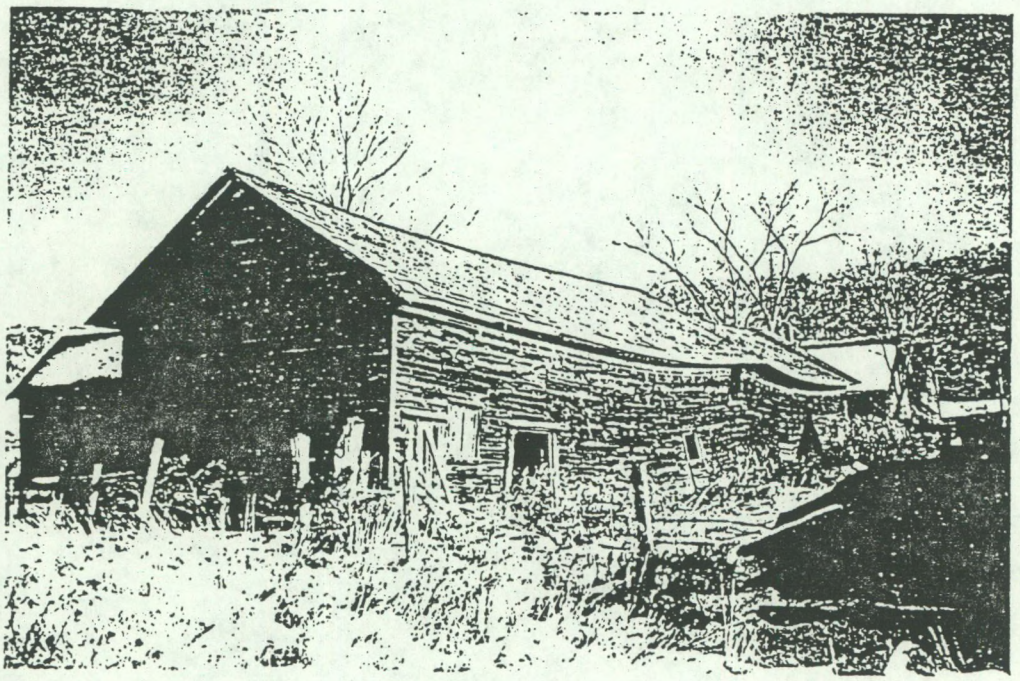
The following is a list of priorities and their associated estimated cost:

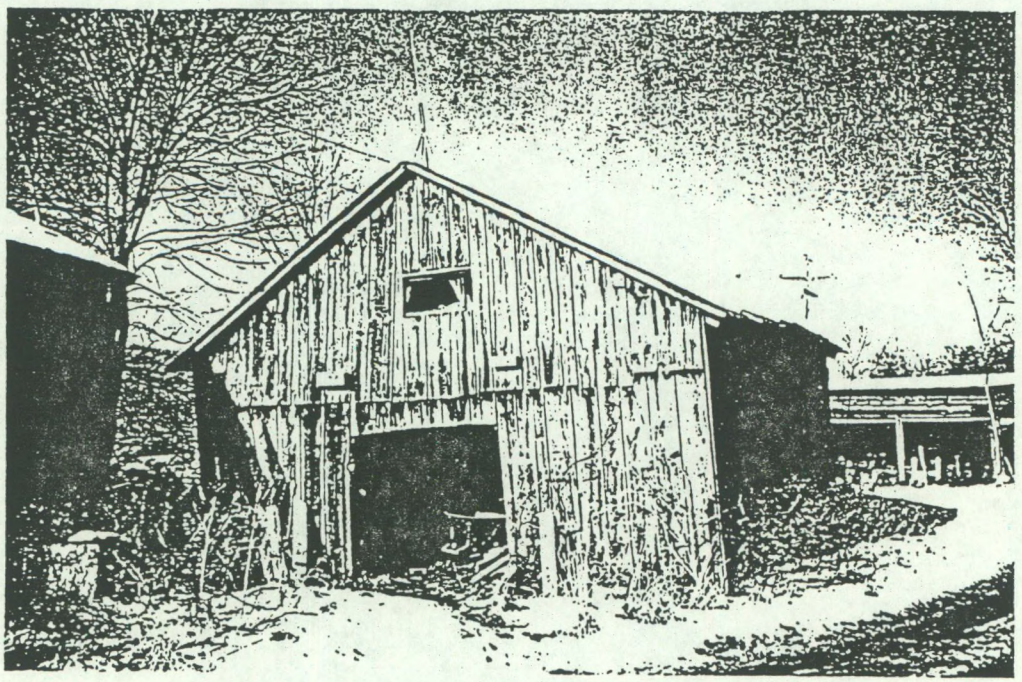
Field Barn	$ 9,600
Sheep Barn	$ 8,500
Woodshed	$ 5,900
North Dairy Barn	$12,200
South Dairy Barn	$10,500
Grainery	$ 3,600
Miscellaneous Barns	$11,500
Document & Move Collections	$10,000



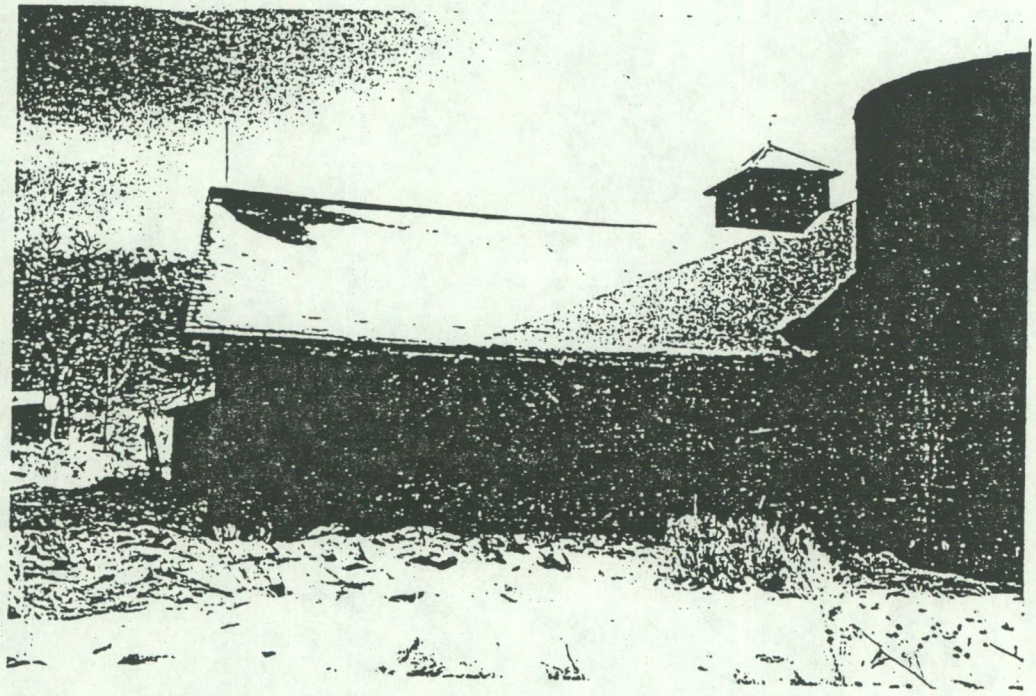


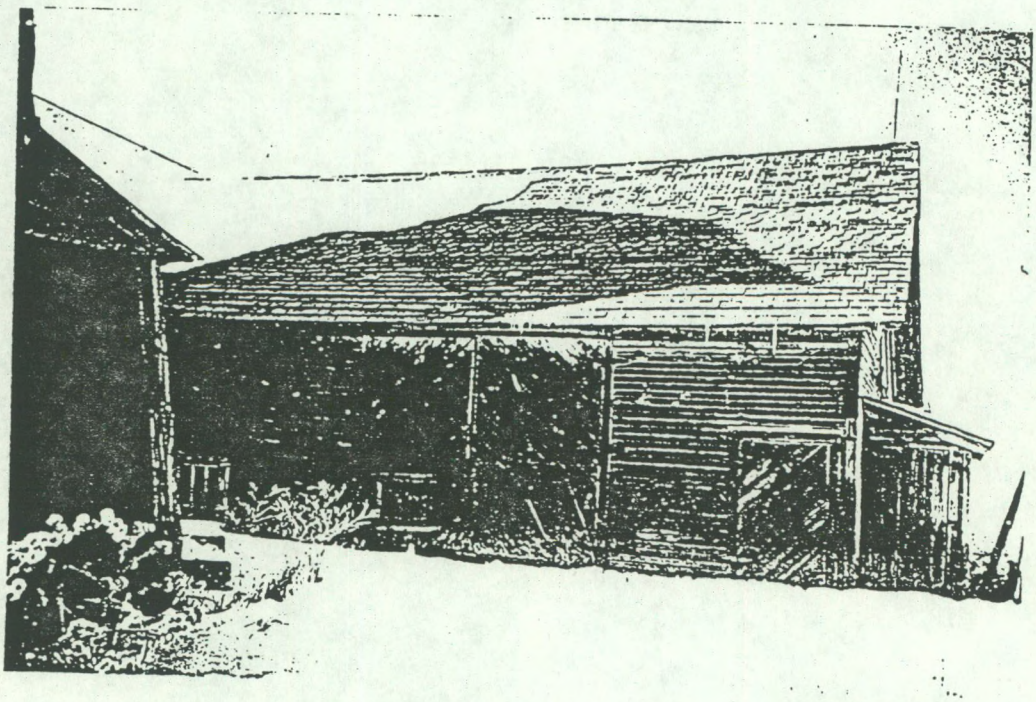
Top: Field Barn, south elevation
Bottom: Field Barn, west elevation



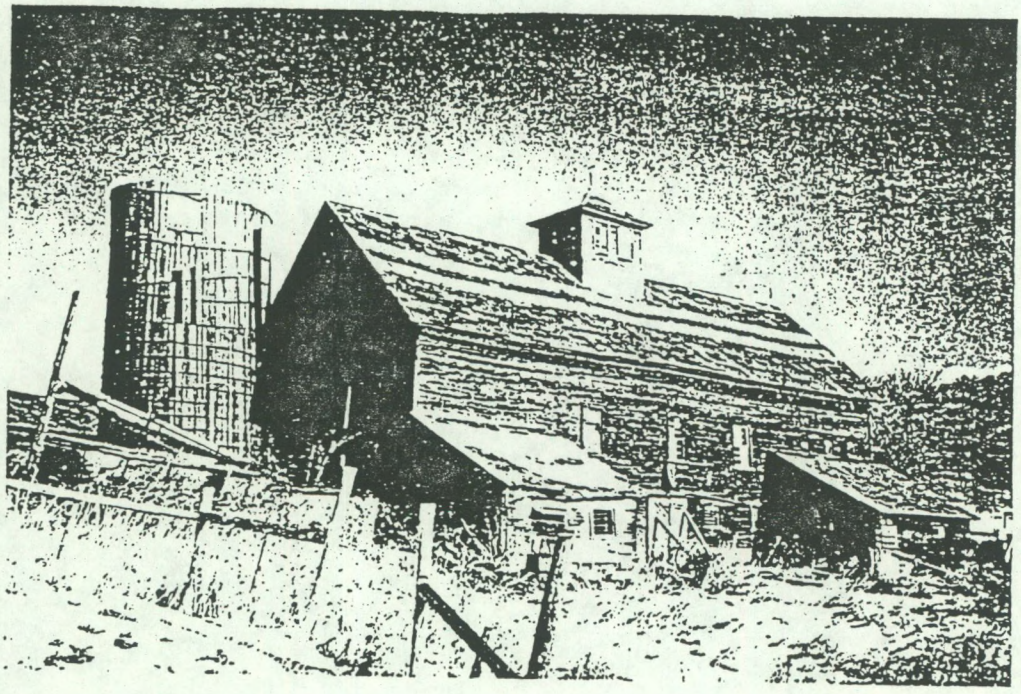


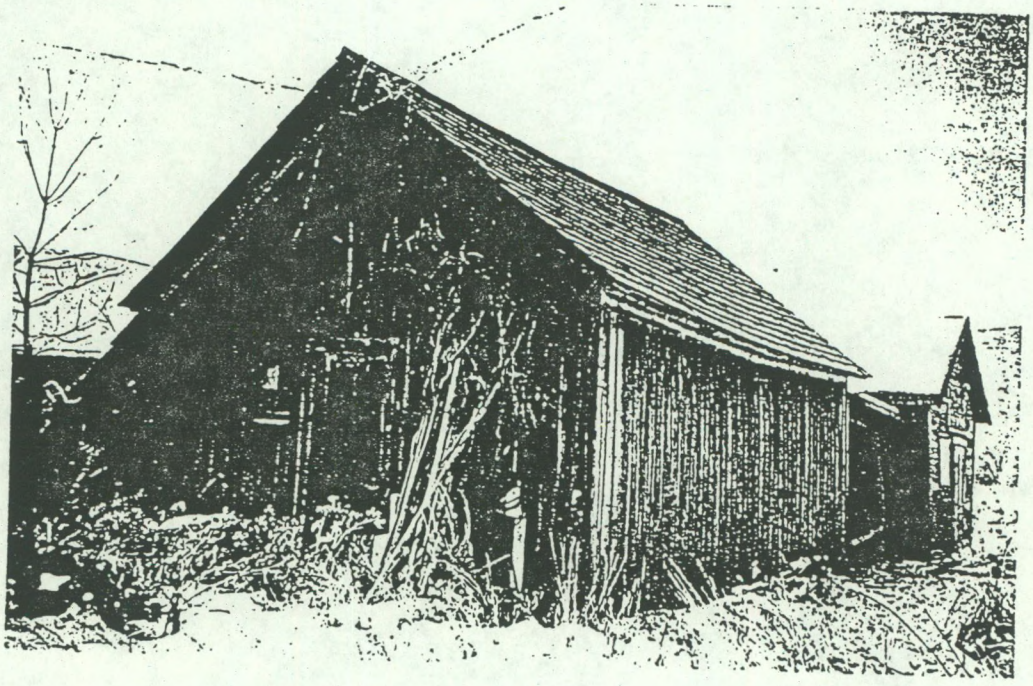
Top: Sheep Barn, southwest elevation
Bottom: Woodshed, south elevation





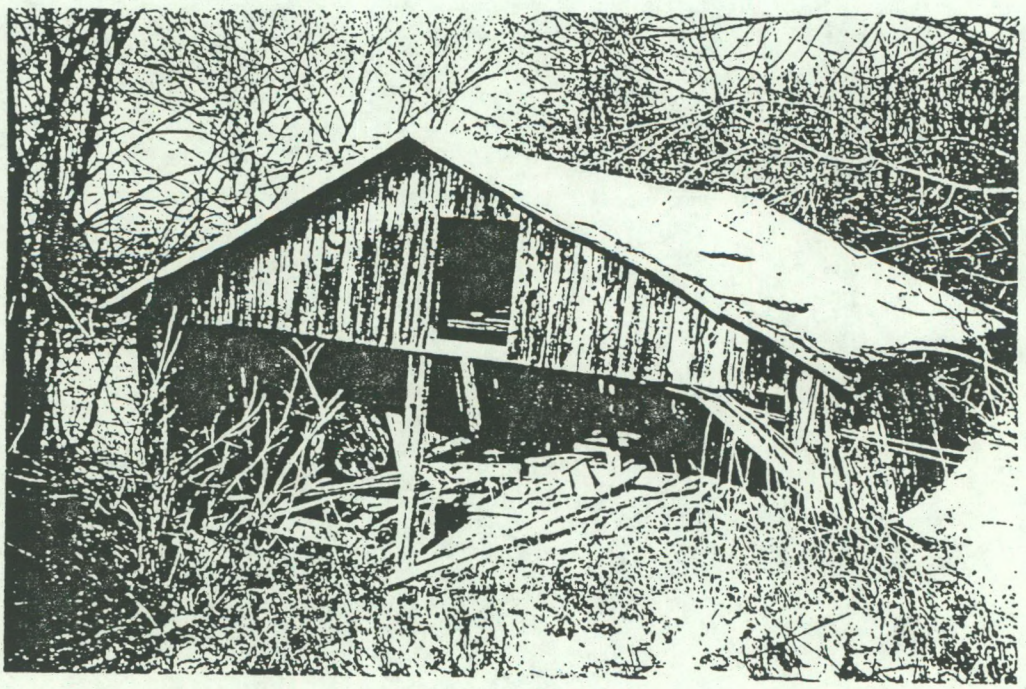
Top: North Dairy Barn, west elevation
Bottom: North Dairy Barn, east elevation



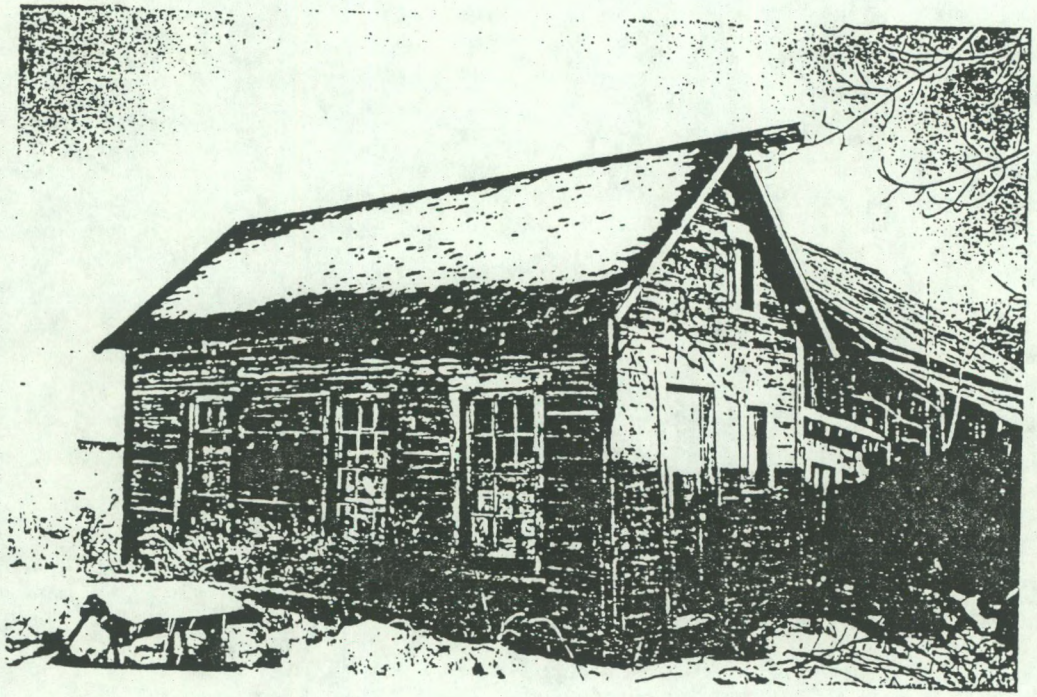


Top: South Dairy Barn, south elevation
Bottom: Grainery, east and north elevation



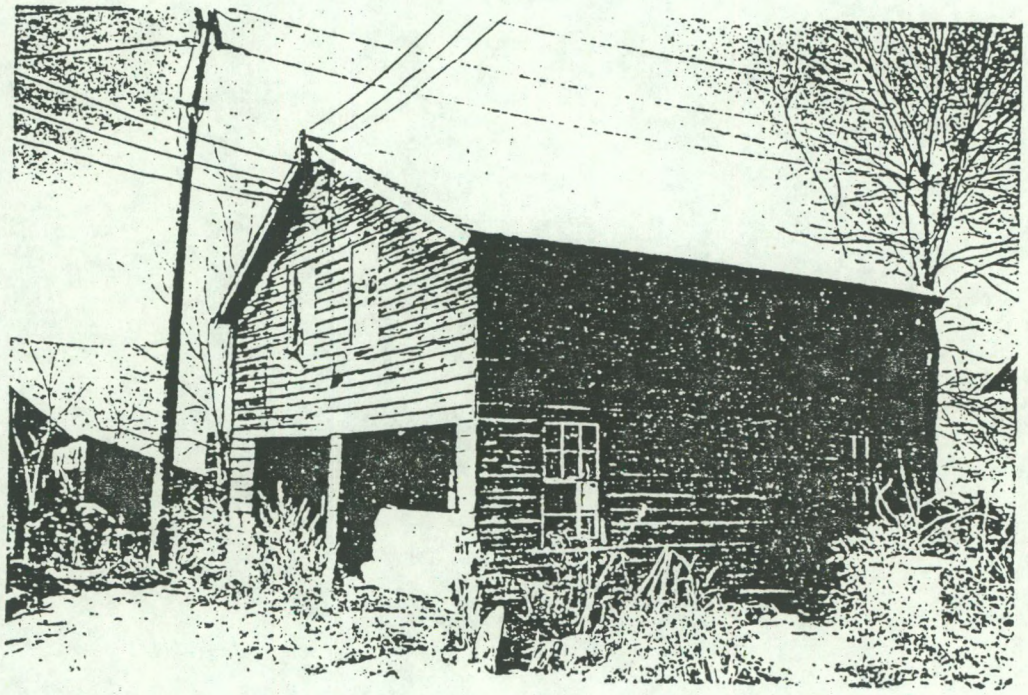


Top: Sugar House, east and north elevation
Bottom: Sawmill, south elevation





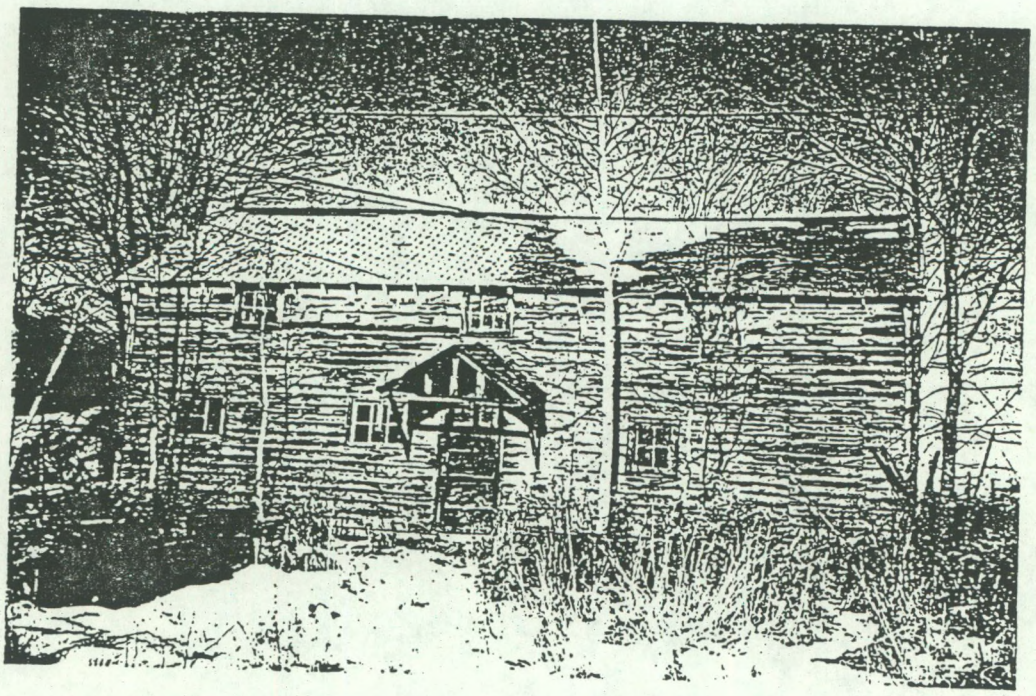
Top: Gun Shop/Woodwork Shop, west and south elevation
Bottom: New Grainery, south and east elevation





Top: Garage, south and east elevation with Forge in background
Bottom: Twin 1½ story Machine Shops, south and east elevation



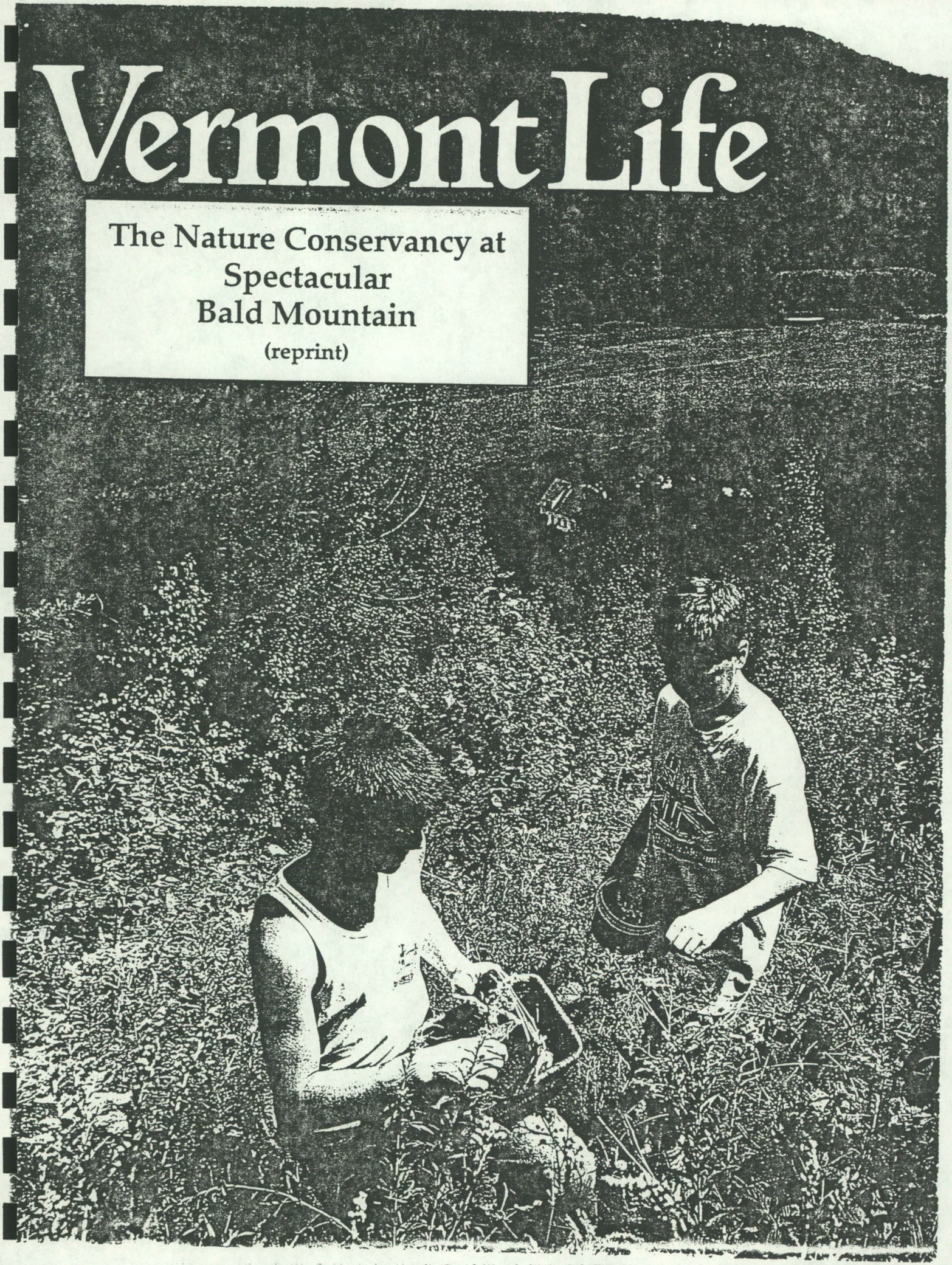


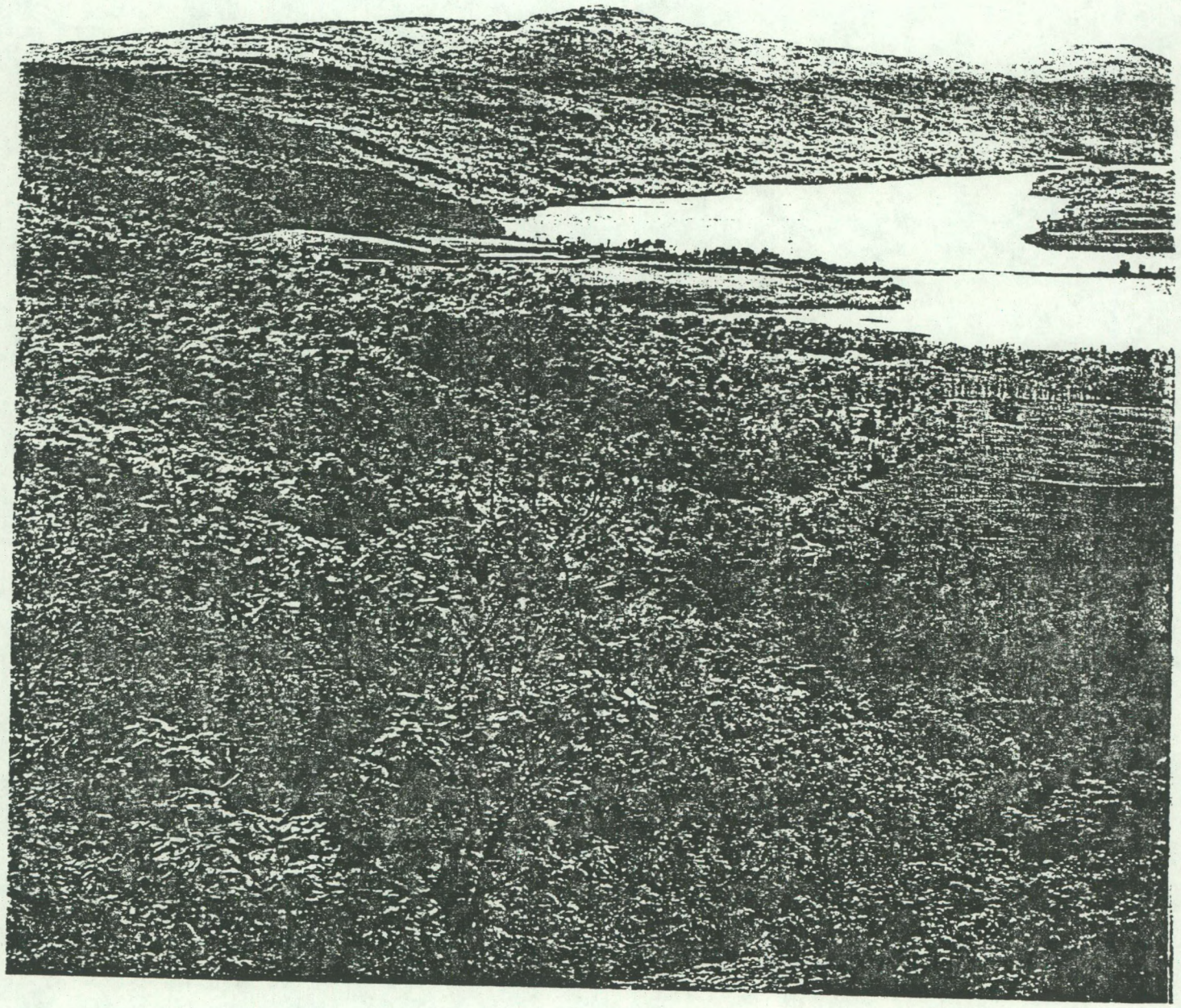
Top: Twin Acetylene Welding Shops, south and west elevation
Bottom: Slaughter House/Freezer Locker, south elevation

Vermont Life

The Nature Conservancy at Spectacular Bald Mountain

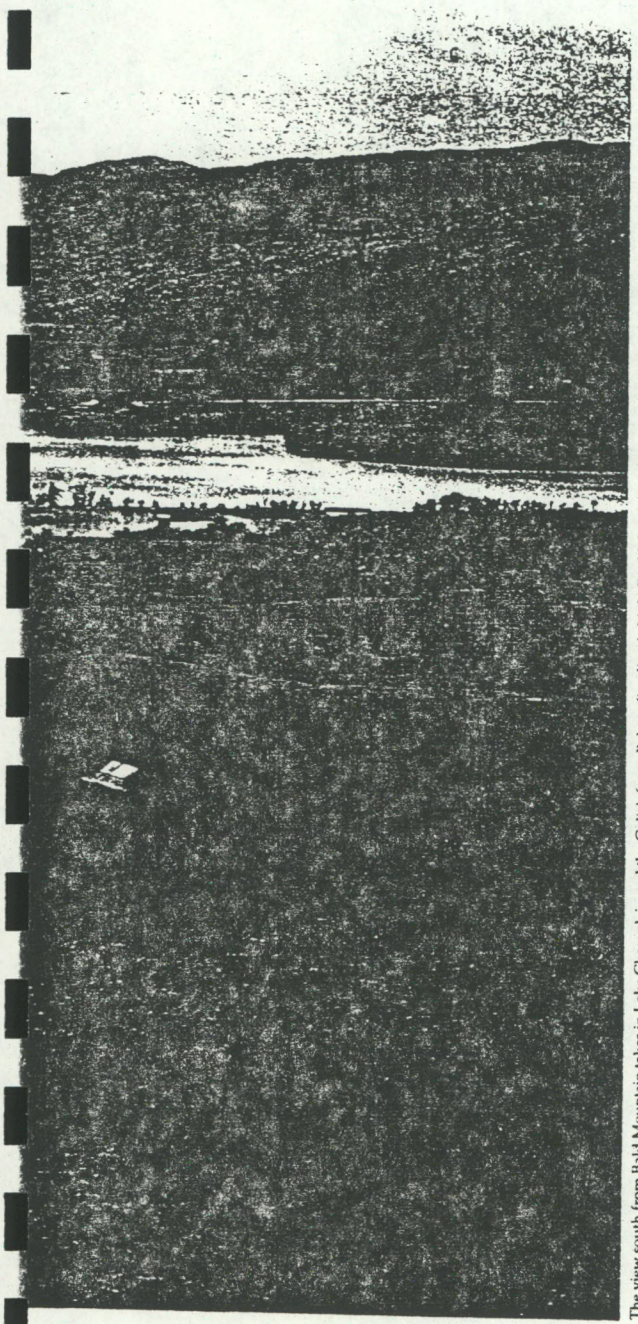
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An Ecological Gold Mine

By BRYAN M. PFEIFFER
Photographed by NANCY WASSERMAN



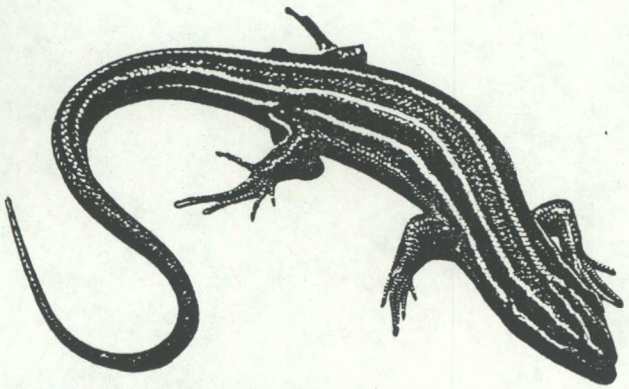
The view south from Bald Mountain takes in Lake Champlain and the Galick farm. Below, five-lined skink; Fred Whitehead, Animals/Animals.

West Haven's Bald Mountain Refuge Is Rich in Nature And History; How It Came to Be Is a Tale in Itself

A PAIR OF LIZARDS in a Massachusetts museum led Marc DesMeules to a promised land in Vermont.

Eleven years ago DesMeules, an ecologist with The Nature Conservancy's office in Montpelier, was studying some of Vermont's rare and endangered species. Research took him to Harvard University's Museum of Comparative Zoology. The museum's "Lizard Room" is no place for the squeamish. Behind a heavy metal door in the basement, where formaldehyde wafts through cool air, is a secluded library of lizards, thousands of them, carefully arranged in aisle after aisle of clear glass jars. There among the slimy specimens, DesMeules made a fateful discovery: two five-lined skinks, small lizards collected in Vermont in 1962 and shelved away in obscurity — at least until DesMeules came along. "Holy mackerel," he thought to himself. "This is a new species for Vermont if it's for real."

What followed was a personal odyssey for DesMeules that ended eight years later when The Nature Conservancy, with help from a state grant, bought and protected one of the most outstanding natural areas in Vermont. En route, DesMeules had eagerly traced the skink specimens to a remote property in West Haven — the Galick farm — along the southern terminus of Lake Champlain. He found much more than lizards. "This was one of the biggest ecological gold mines in the state of Vermont," DesMeules recalled years later.



The Galick Homestead Tract, which makes up the core of the Bald Mountain Natural Area and Wildlife Refuge, is a conservationist's paradise. Within its 1,500 acres are three miles of undeveloped Lake Champlain shoreline, a smattering of rare plant and animal species, ecologically diverse wetlands, unusual forest habitat, and the summit of Bald Mountain, with striking views up and down the Champlain Valley.

There is a cultural legacy here as well. Native Americans lived on and hunted this land more



Above: Tony, left, and Steve Galick. Says Tony: "You can't find another place like this in the whole state. I'd rather see it left as is, and let other people come and enjoy it."

than 10,000 years ago. Submerged British and American warships lie scattered in the Lake Champlain waters surrounding the reserve. And the Galick family, which came to the farm in 1918, remains a living legend in rugged individualism and Yankee resourcefulness.

Getting to the Galick property has never been easy. The farm is on a peninsula of Rutland County that juts south into New York State, cradled to the west and east by sections of Lake Champlain (map, page 31). There was hardly a road to it until the Galicks, using a massive steam shovel and two tons of dynamite, put one in about 55 years ago.

Here at its southern end, Lake Champlain is hardly recognizable. Its waters narrow dramatically and in the summer, interspersed with cattail marshes and drenched in the din of cicadas, have the feel of a lazy, muddy river. "It's like the deep south of Vermont — it really is," said DesMeules, an outdoorsman and naturalist who never hides his affection for the property.

That southern character stems from a pocket of distinctive soil and rock types and a diversity of plant and animal species that are relatively unusual for Vermont. Chris Fichtel, a biologist with the state's Natural Heritage Program, which keeps track of rare species and habitats, calls the reserve one of the most ecologically diverse Vermont properties in public ownership. "It's almost like a melting pot for species," he said.

Consider the five-lined skink. Skinks are common south of Vermont, but the Galick site is at the northeastern-most end of their range. Skinks are Vermont's only lizards, an endangered species in the state. About five inches long, brownish with five racing stripes along their backs, they scoot along rocky forest edges and the talus slopes of Bald Mountain.

Another, more threatening, southern reptile lives here as well: the timber rattlesnake. Hunted for bounty to the brink of extinction in Vermont, the snakes now have a refuge on the reserve. The rattlers come in two varieties, a deep brown and a rich yellow, each with a geometrically patterned back. They live in a colony among the Bald Mountain talus slopes. Their defenders say the snakes are as much a part of Vermont's natural heritage as the white-tailed deer that roam the property or the peregrine falcons that soar over Bald Mountain's cliffs. Because the snakes live in an area closed to the public except in winter, visitors shouldn't worry about meeting them on the hiking trails.

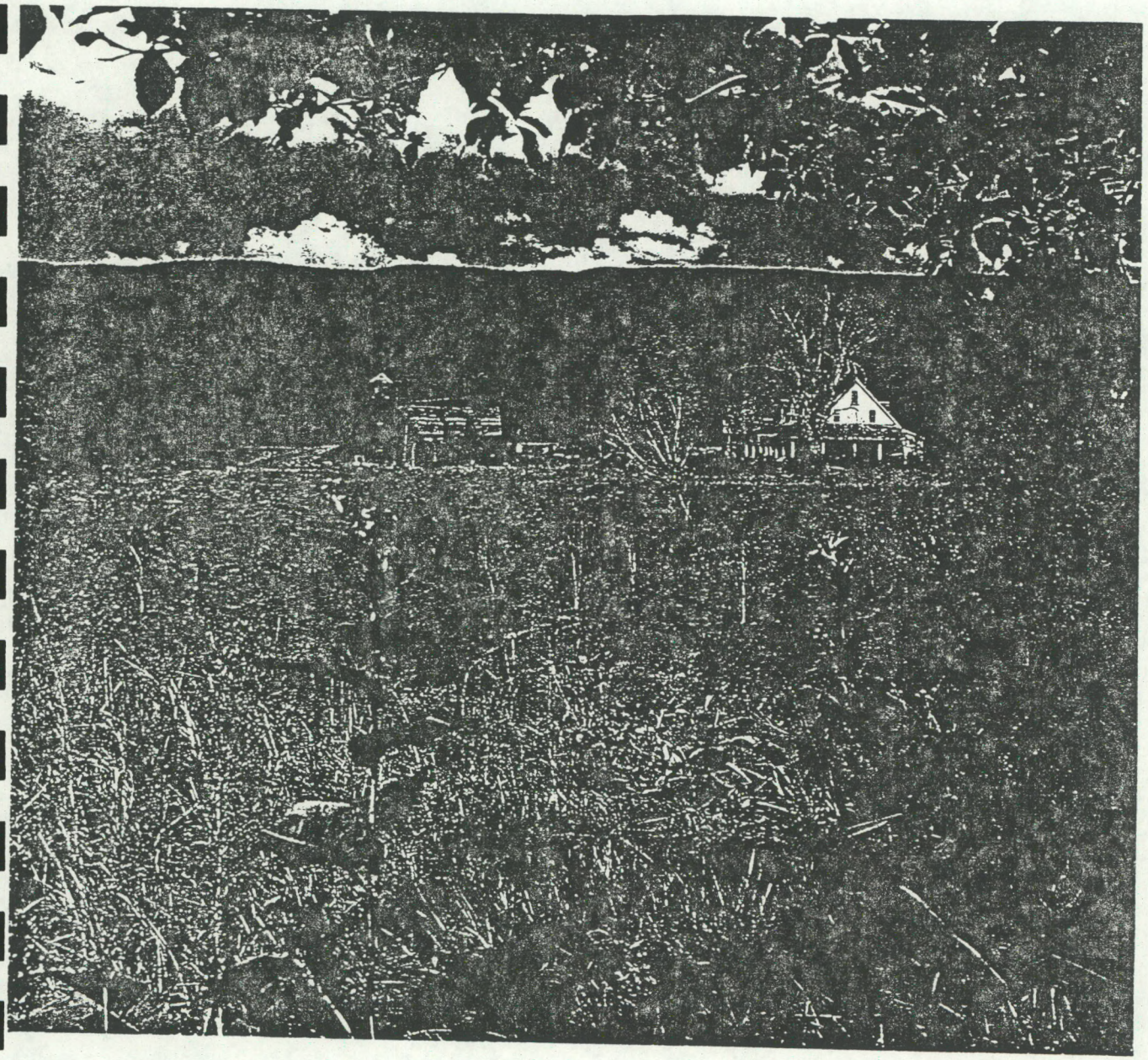
Besides snakes and lizards, one of the most obvious southern features at the reserve is its trees. An oak-hickory-hop hornbeam forest, relatively unusual for Vermont, covers a good portion of the property. Just as spruce and fir give the Northeast Kingdom its boreal, or northern, character, the oak and hickory make the Galick tract seem distinctly southern.

Overall, ecologists have identified 18 rare plant species on the property and 14 different "natural communities" — distinctive habitats such as talus slopes or cattail marshes or oak-hickory stands.

The reserve also has a following among archaeologists. Vermont's earliest inhabitants can be traced to the property. It was well suited for the Native Americans of the region because of its convergence of waterways (a source of sea mammals and fish) and its long views up and down sections of the Champlain basin (for spotting caribou or other large mammals). "The resources that would have been available there were extraordinary — just as they are today," said David Skinas, survey archaeologist with the Vermont Division of Historic Preservation.

Over the decades, the Galick family collected spearheads, arrowheads, stone tools, ceramic shards and other artifacts that indicate continuous use of the property for at least 10,000 years. Skinas said the reserve, now protected and off limits to collectors, provides considerable research opportunities to learn more about the region's early residents.

Ecologists with The Nature Conservancy also see extraordinary research potential. The conservancy, which manages 31 properties in Vermont, is planning a pioneering reforestation project for some of the reserve's agricultural land. Historically, the farm's pasture land was covered in oak-hickory woodlands. Because that forest type is so unusual for Vermont, the conservancy wants to return some open land to its natural state. In what



may be Vermont's largest reforestation project, volunteers will scour surrounding forests for acorns and hickory nuts, which will then be planted in sections of the pasture land. A half-century later, researchers expect, an oak-hickory forest will thrive.

"It will bring this area back to its natural state all that much faster," said DesMeules. "It will also give us some insight into how to restore a forest because it will be, to some extent, experimental."

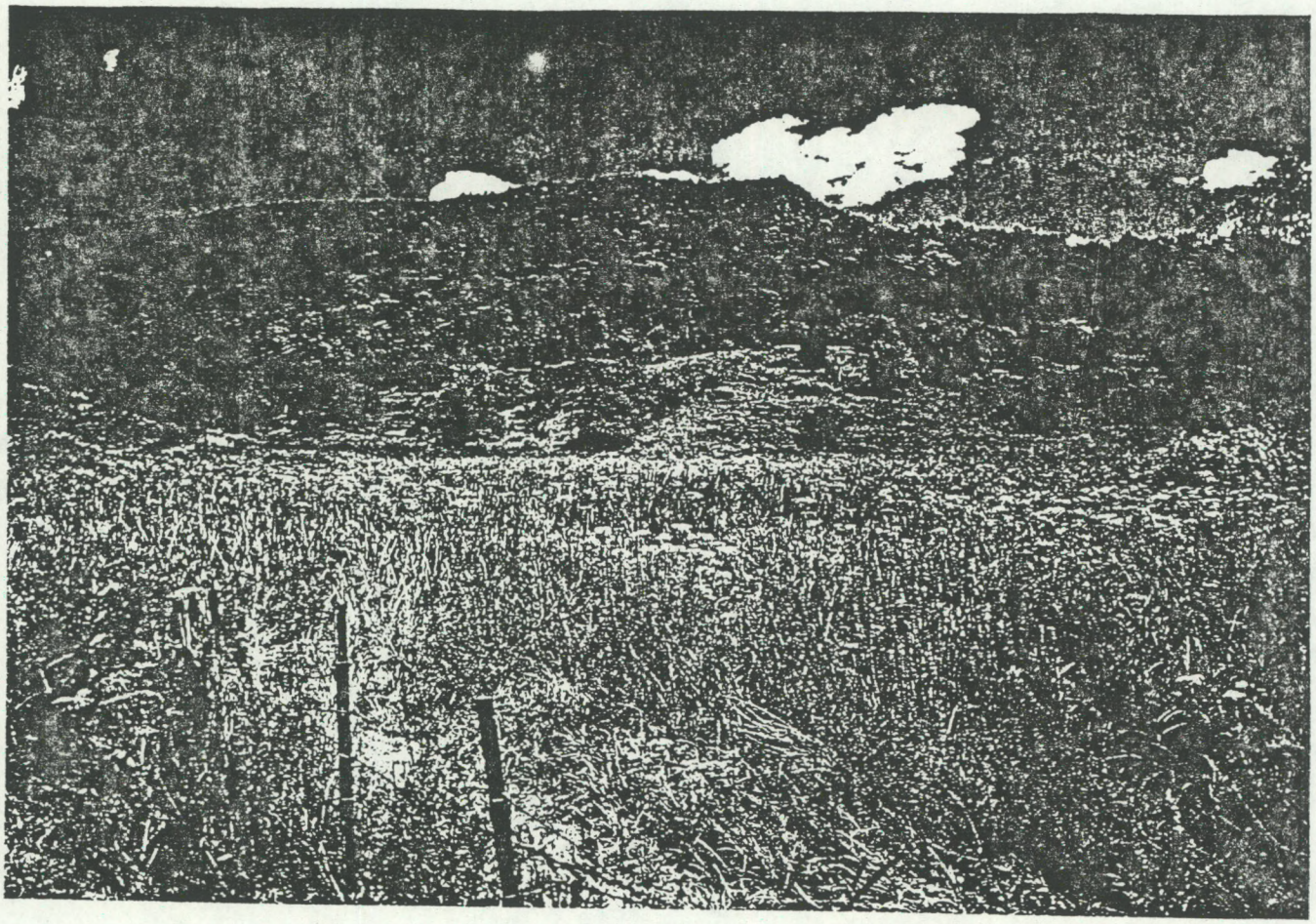
The rest of the farmland will be kept in agricultural use. The conservancy plans to let local farmers graze cattle there for a nominal fee.

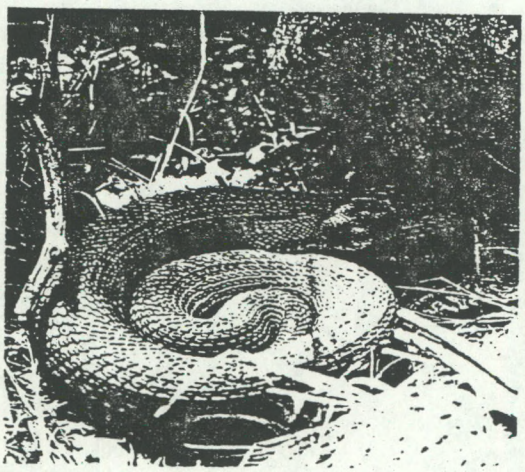
Long before The Nature Conservancy came along, the Galicks were pioneers and stewards of this land. Grizzled, resourceful and hardworking, the family coaxed a varied living from its acres for most of this century. They raised sheep, mink, beef cattle and dairy cows, shipping their milk (before building the road) to a creamery in Whitehall, New York, on a homemade flat-bottomed boat. They trapped muskrat, raccoons, otters and foxes. And they were legendary as local handymen who could fix all sorts of farm machinery; once, they helped raise a sunken ship from the lake.

The oldest Galick is Tony, who is in his early 90s. Until his older brother, Steve, died last year at 95, the two used to pass much of their summer days on the beat-up furniture on the porch that wraps around their century-old home. Steve Galick's rock-solid face and square, bristled chin befitted a man who farmed and fixed things most of his life. He would brag about his skills as an arc-welder, eagerly giving visitors a tour of the vintage metal shop equipment in his cluttered outbuildings.

The Galicks — Tony and his nephews Edward and Bill — are proud of their land and glad to have

The site includes not just the Galick farm, above, but rare plants and animals, diverse habitats, and traces of human use going back 10,000 years.





The species that live here — from the oak and hickory trees to the timber rattlers, right — are generally found much farther south.

it protected by the conservancy. "You can't find another place like this in the whole state," said Tony, gazing out from his porch past a catalpa tree toward the lake. "I'd rather see it left as is, and let other people come and enjoy it."

The Nature Conservancy's deal with the family allows the Galicks to live the rest of their lives on the reserve. Although they are $880,000 richer from the sale, they don't seem bent on any spending spree.

"We've done our share," Steve had said. "We have everything we need."

"I bought a new truck," said Bill Galick, "but nothing extravagant."

In 1981, when Marc DesMeules unexpectedly discovered the two lizard specimens in the Harvard museum, he also discovered the name Kinsman Lyon. According to the label floating in formaldehyde with the lizards, it was Lyon who collected the skinks at the Galick farm back in 1962. DesMeules wanted to track him down.

Lyon was a devoted and self-taught naturalist who, like DesMeules, was fascinated by reptiles and amphibians. But as a maintenance supervisor at the old Boston Museum of Science, not a trained scientist, Lyon and his field work were never widely recognized or appreciated. That changed when DesMeules came along.

After finding the skink specimens, DesMeules wrote to Lyon in New Hampshire expressing interest in his field work. But the reply came back from Lyon's wife, Eleanor, who said her husband was dying of cancer and was too ill to realize someone was finally interested in his work.

After Kinsman Lyon died in 1982 at the age of 59, Eleanor Lyon invited DesMeules to her home, and he gained tremendous insight into Lyon and his extensive field work. After the visit Mrs. Lyon gave DesMeules her husband's important documents and field notes and even his snake stick, which the young naturalist uses to this day. It was Kinsman Lyon's meticulous notes about

skinks and rattlesnakes that led DesMeules to the Galick farm.

"All through his notes are references to the Galick brothers," DesMeules said. "So, I sort of put two and two together and said, 'okay, I gotta go to this place.'"

Going there, however, was another matter. As local legend went, the Galicks didn't take kindly to visitors. "I had heard all sorts of rumors about the Galick family," DesMeules recalled. "That they'd shoot you on sight, that they don't want anyone out on their farm. You know the typical rumors... The fact that they lived on the same land with rattlesnakes, I think people got this association, well, rattlesnakes are really rough and tough and gruff and they bite and they're venomous, so the people who live up there must be like that, too."

Undaunted, DesMeules approached the Galicks through a mutual acquaintance, and finally met the family in 1982. "I find out, no, these guys are not crazy," he said. And in the next six years, DesMeules made dozens of trips to the farm, nurturing a friendship with Bill Galick and sharing with him a common respect for the rattlesnakes and the outdoors. Eventually, the conservancy and the Galicks came to terms on the sale of the farm.

DesMeules gives the Galick family a great deal of credit for its role in preserving a precious piece of Vermont. And he praises the Vermont Housing and Conservation Trust Fund, a state program that provides funding for affordable housing and land conservation, for the $440,000 grant that went toward purchase of the property. But he is also thankful for Kinsman Lyon. Eleanor Lyon says she is thrilled that one of her husband's favorite study sites is now protected for research and public enjoyment. "I'm happy to hear that Kinsman is getting some recognition," she said. "He really put an awful lot into his work."

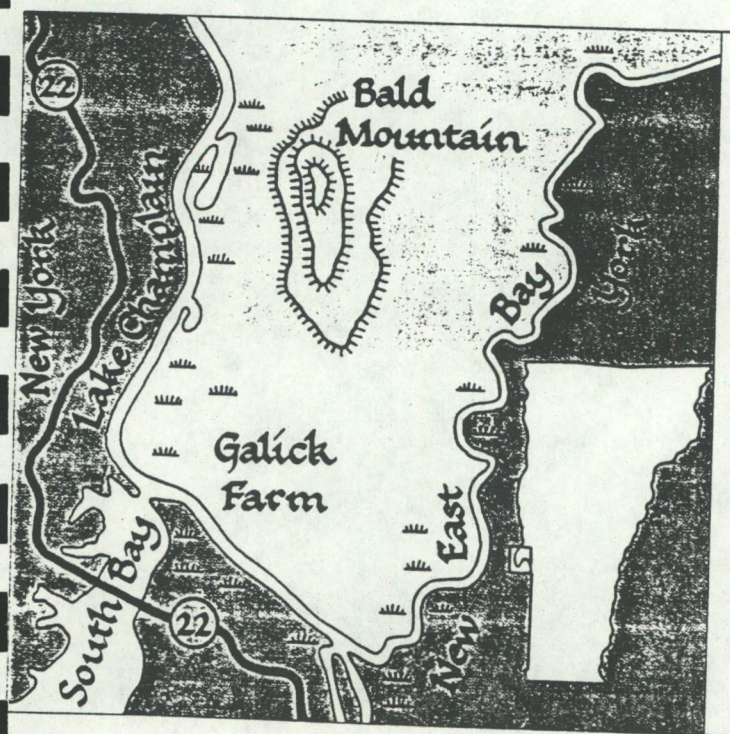
That devotion to reptiles and amphibians has indeed paid off — 30 years after Kinsman Lyon collected a couple of lizards in West Haven.

"I wanted to make sure that his work was not for naught, that we used it," said DesMeules. "And we did. We bought the Galick farm. We were directed there because of Kinsman Lyon. That was one of his favorite haunts." ∞

Bryan Pfeiffer is an enthusiastic naturalist and a reporter for the Barre-Montpelier Times Argus *and the* Rutland Herald. *He is a frequent contributor to* Vermont Life.



For naturalist Marc DesMeules, above, preservation of the Galick tract was the culmination of a journey that began with a chance discovery more than 10 years ago in a Boston museum.



Bald Mountain Natural Area is in West Haven, west of Fair Haven, in western Rutland County. The trail from the parking area is open year 'round. The Talus Trail that leads to Bald Mountain, however, is open only from November through March. All visitors are asked to keep away from the Galick homestead, which remains the family's private residence. For further information, contact The Nature Conservancy in Montpelier at (802) 229-4425.

Map by Armand Poulin

This file contained 35 mm slides, which have not been scanned.

The slides are on file at the Division for Historic Preservation.

Please contact the Division to view the slides.

2014