

Honoring Battell’s Legacy: Middlebury’s Unprecedented Conservation of Bread Loaf Today

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The Conservation Easment — A Legal Mechanism for Protecting Bread Loaf

The Bread Loaf Forest and Campus Zones, encompassing approximately 2,100 acres of woodland and fields is conserved in perpetuity by a conservation easement granted to the Vermont Land Trust by Middlebury College. A conservation easement is a conservation tool that uses the force of law to control how a piece of land is managed. Typically, an organization, known as a land trust, holds a conservation easement that restricts how a piece land is used; the land trust has the responsibility of ensuring the easement is enforced and the land is being managed within the easement’s specific restrictions. Conservation easements can be financially attractive to large private landowners because they can be qualifiers for special tax deductions, but this doesn’t apply to Middlebury as a non-profit institution. Easements typically last forever and subsequent land owners of a conserved parcel have to be willing to accept the terms of the easement. The one basic thing that is common with all conservation easements is a restriction that prevents development across the conserved landscape. Often there will be other unique restrictions, though, that have a goal of protecting the unique nature, biodiversity, or cultural value of a place. If the Vermont Land Trust noticed that Middlebury was logging one of Bread Loaf’s specially designated “Ecological Protection Zones”, they could intervene and, if necessary, take the College to court because it would violate the easement’s legally binding agreement. Easements are a powerful conservation tool because they hold the force of law, last forever, and provide a high level of certainty for the future management of land. The Bread Loaf easement was written to allow for its particular uses as a campus, nordic ski center and educational resource to the college, as well as a biological preserve for the nature that inhabits the Bread Loaf wildlands. Since an easement is effectively permanent, both the Vermont Land Trust and the College had to work together to carefully to craft a special easement that meets present day needs while also being flexible to the potential realities of the future and, of course, fulfilling the primary goal of keeping Bread Loaf’s natural character preserved forever. Unique to Bread Loaf’s conservation easement is that it supports public use; most private conservation easements don’t allow for public use. And that is one aspect that makes Middlebury’s conservation of these lands so unprecedented — its deliberate protection of land for both humans and nature.

The Purposes of The Bread Loaf Conservation Easment:

- Primary — (1) Biodiversity protection, (2) recreational uses, and (3) educational opportunities**
Secondary — Conservation of the scenic open space, and historic and cultural resources

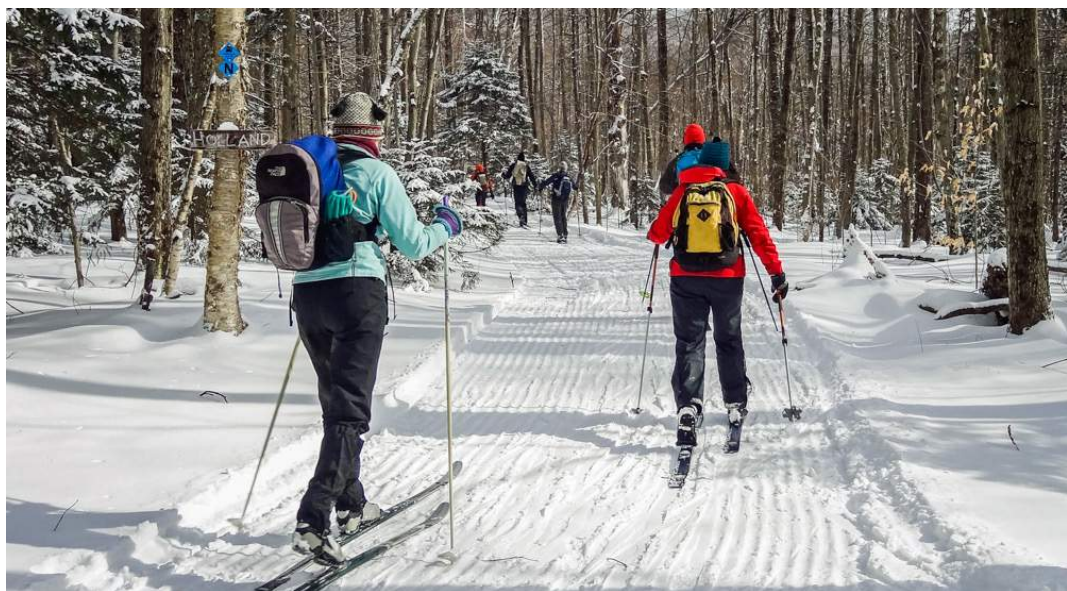
The Story of Conserving Bread Loaf —Middlebury’s Achievment in Land Trust Conservation

June 23rd, 2015 was a celebratory day in Middlebury College’s visionary environmental legacy when College President Ron Leibowitz and Vermont Land Trust attorney Rick Peterson signed a conservation easement conserving Bread Loaf in perpetuity. A conservation project of this scope is very much unprecedented among institutions of higher education; to the best of public knowledge, never before has a college conserved land with a perpetual conservation on this scale. The conservation of Bread Loaf was, to say the least, a very complicated project, demanding serious considerations over the economic, political, and practical realities of the College. How does the Board of Trustees, within their fiduciary duty to the College, forfeit a potential monetary asset of 2,100 acres of developable mountain land? Who will pay the cost if the College can’t? How does the College consider the ecological features of Bread Loaf and ensure they are properly conserved while accommodating the practical needs of using Bread Loaf as a ski center and English school? Why even consider conservation in the first place? These are some of the many complicated questions that had to be answered to in the process of conserving Bread Loaf.

Inspiration for the project goes back as far as 1998 when an Environmental Studies Senior Seminar, under the guidance of Vermont wilderness advocate Jim Northup, persuaded President John McCardell to order an analysis of how the terms of Joseph Battell’s will, stipulating the preservation of certain lands gifted to the college, were followed and how the College may be able to reconcile with potential violations of its terms and mitigate the effects of the will’s ambiguity. The Board of Trustees made a start at conserving Bread Loaf by approving a resolution in 1999 to protect some of the lands that were intended to be a part of Battell Park — a forest preserve of lands surrounding Bread Loaf that Battell stipulated in his will be formed following his death.

When President Ron Leibowitz became Middlebury’s 16th President in 2004, he wanted to build on the conservation vision of the 1998 Senior Seminar and pursue protection of the Bread Loaf lands in honor of Battell’s intent by extinguishing the land’s development value through a conservation easement. His request was denied because the Board of Trustees felt they simply couldn’t tie their hands and forfeit the ability to monetize the existing 2,100 acres of Bread Loaf lands.

Who’s going to pay for the development value of Bread Loaf, since the College can’t? Answering that question was perhaps the most challenging and ambitious aspect of making any dream of conserving Bread Loaf come to fruition. Further pressure started to build in 2008 when the financial



Skiers make their way through a mixed yellow birch-red maple-red spruce forest now conserved in perpetuity by the Vermont Land Trust. Pictured here is Vermont’s Catamount Trail, which passes through Bread Loaf’s woods. Source: Middlebury College’s Rikert Nordic Center.

crash threatened the College’s financial stability and ideas about the development value in selling off of some of Middlebury’s land were considered more seriously. Leibowitz believed that extinguishing the development value was a necessary step. Furthermore, raising the money to do it was seen by Leibowitz as a simultaneous solution to cover the mounting costs of maintaining the Bread Loaf campus. Middlebury needed a donor to help offset Bread Loaf’s development value.

In 2013, Leibowitz looked to alumnus Louis Bacon ’79, attending a National Audubon Society event where Bacon was awarded the Audubon Medal for Conservation. Bacon’s philanthropic legacy in conservation runs deep, granting over 210,000 acres of personal land to protection under conservation easements. Leibowitz approached Bacon at the event, proposing a team effort to help conserve Middlebury’s mountain lands.

A multi-faceted land-planning process was conducted to assess the titles, boundaries, and ecological features of Middlebury’s many parcels. Middlebury College Professor and conservation ecologist Marc Lapin was hired to conduct a full natural community assessment of the mountain lands to gain a more complete picture of what ought to be conserved and how best to do it; this, in the end, greatly influenced the particular restrictions and guidelines written into today’s conservation easement and long-term management plan. Additionally, the financial aspects of such a conservation project were considered. Middlebury, as a non-profit institution, was not entitled to substantial tax deductions private land owners would typically receive for conserving 2,100 acres of forestland. Middlebury, again, realized a partnership with Bacon as an ideal solution. Bacon in the end was able to offset the cost of Middlebury conserving Bread Loaf with the Vermont Land Trust and forfeiting its development rights, by giving a cash gift to the College. Bacon in turn would receive the tax benefits of donating to his alma mater. Bacon’s generous cash gift ultimately helped to pay for half of the assessed development value of Bread Loaf and, with funding from his own Moore Charitable Foundation, also establish the Bread Loaf Preservation Fund to help maintain the Bread Loaf campus into the future. The Board of Trustees used restricted College endowment funds to help pay for the other half of the development value, making this a successful joint effort.

Surely, the economic challenges of forfeiting development assets in conserving land are not just unique to Middlebury. Middlebury and its generous benefactor Louis Bacon have helped set Middlebury apart in this unprecedented conservation achievement.

In 2016, Middlebury College was named the winner of the inaugural Charles H.W. Foster Award for Exemplary Academic Leadership in Land Conservation, Presented by the Academics for Land in New England (ALPINE), for its unprecedented conservation of Bread Loaf.

“We have preserved this land for eduction, for recreation, and for conservation. We love [Bread Loaf] because it emodies the heart and soul of learning in a setting that challenges us and inspires us,” Middlebury College President Laurie Patton reflected as she accepted the award at the Harvard Kennedy School in Cambridge, MA on February 22nd, 2016.

How Does the Easment Protect The Many Values of Bread Loaf’s Natural Landscape? Complex Conservation in Practice

The Larger Landscape

In thinking about how the Bread Loaf conservation easement fulfills its primary and secondary purposes, it is illuminating to first think about Bread Loaf as a puzzle piece within a much larger conserved landscape. Nearly 100 years after the passing of Joseph Battell, who gifted the current lands of Bread Loaf and surrounding 25,000 acres of forestland to the College in 1915, we have today made good on preserving this remarkable landscape. Bread Loaf’s existing 2,100 acres of conserved land are today a part of a much larger network of conserved U.S Forest Service lands, being surrounded on nearly all sides by federally protected Wilderness Areas — the highest level of federal land protection that makes up our nation’s National Wilderness Preservation System. The Breadloaf Wilderness, Vermont’s largest federal Wilderness Area of nearly 25,000 acres, to the north and the 12,336 acre Joseph Battell Wilderness to the south along the spine of the Green Mountains, situate the College’s Bread Loaf lands within a critical habitat patch that allows for the undisturbed movement of organisms across the State and even the entire Northeast.

Multiple Values and Multiple Purposes

Bread Loaf’s Conservation Easement is a legally binding document that states how the Bread Loaf lands must be managed, restricting its uses and providing guidelines for how to fulfill its designated purposes. The College and Vermont Land Trust, in crafting the easement, developed primary and secondary purposes for the lands. The terms of the easement are intended to help protect and fulfill these purposes. There are four primary purposes: (1) protecting the biodiversity and natural features of Bread Loaf, (2) protecting the outdoor recreational opportunities and resources, (3) protecting the features of Bread Loaf that support the educational missions and programs of Middlebury College, and (4) preventing the use or development of Bread Loaf that would adversely affect the above opportunities, resources, and features of the lands. The two secondary purposes are to conserve the scenic open space, and historic and cultural resources of the lands.

The terms of the easement were very deliberately considered in an effort to support the easement’s designated purposes. Language governing everything from how garbage and septic systems ought to be handled in the specially designated “Campus Zones” that compose the Inn and the English School’s various buildings to the type of forestry practices allowed on certain parts of the Bread Loaf forest to the use of snowmaking for Rikert are examples of how carefully this easement was crafted to meet the needs of the College and fulfill the goal of protecting Bread Loaf’s natural character. Certain activities such as new construction in the Campus Zones require prior permission from the Vermont

Land Trust. Commercial activities are also mostly forbidden under the terms of the easement, so, for example, the College cannot rent out rooms in the Inn to the general public for purposes that aren’t consistent with the easement; renting out rooms for the summer Bread Loaf Writers’ Conferences or English School is justified because it fulfills the educational purpose of the easement.

Protecting Bread Loaf’s Biodiversity — A Natural Community Approach to Conservation Design

Bread Loaf is an incredibly rich landscape, representing multiple rare and uncommon plant communities and landscape features. Bread Loaf’s lands are not only critical to protect because of where they are situated within the larger network of conserved forestland that surrounds them but also the for the unique biological, geological, and hydrological features that reside within them. A systematic, scientifically informed approach was taken to better understand the natural history of Bread Loaf and develop strategic plans to

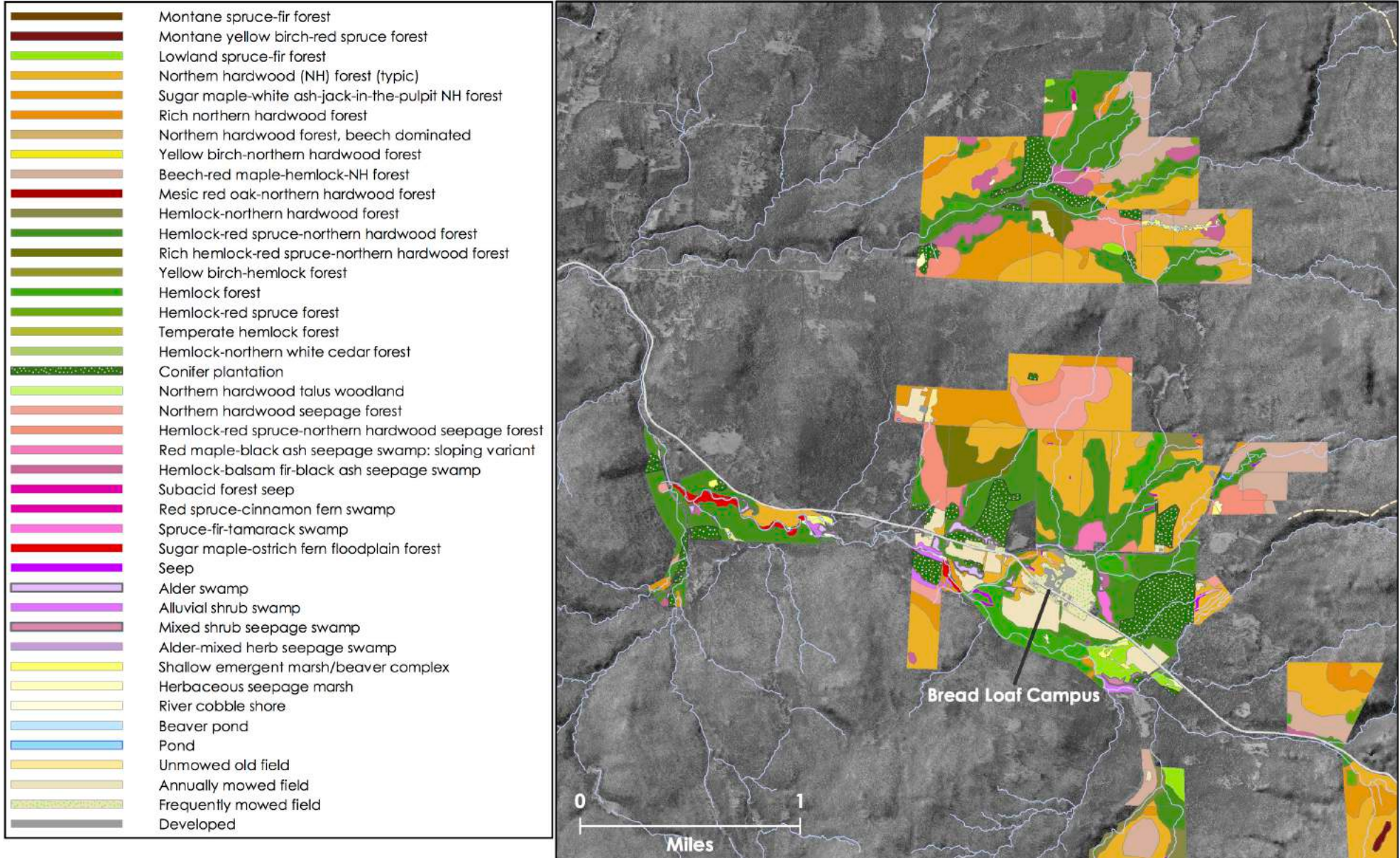
communities, also known as ecosystems, that compose the Bread Loaf lands. Involving time-consuming field work of walking the lands with a GPS, taking detailed notes, and processing the data with a GIS, Lapin developed a fine-scale map of Bread Loaf’s plant communities, associated soil types, and the hydrologic features that greatly shape the Bread Loaf landscape.

Crucial to the protection of Bread Loaf’s biodiversity, is first applying a “course filter” approach to conservation where underrepresented, rare, and uncommon plant communities and landscape features are given special protection, with the expectation that this helps to conserve the many organisms such as mammals, amphibians and birds that may inhabit those communities. The easement establishes special natural communities as “Ecological Protection Zones” or “EPZs.” The boundaries marking the EPZs were based on Lapin’s mapping of plant communities that are considered “state-significant” in Vermont. EPZs are afforded very special protections and restrictions under the easement, including the prohibition of for-

Seepage Swamp, Shallow Emergent Marsh/Beaver Complex, Northern Hardwood Seepage Forest, and many others. The hemlock seepage forests are perhaps the most apparent to visitors, when they enter the forest on the outskirts of the fields where hemlocks line the banks of Bread Loaf’s mountain brooks. Battell and Brandy Brook ski trails pass through good examples of this natural community.

The inventory helped reveal the unique character of Bread Loaf’s forest situated on a mid-elevation plateau, where the headwaters of many mountain brooks flow and underground water rises up out of the ground, making Bread Loaf an exceptionally wet landscape. Many of the natural communities, including beaver ponds, alder-tamarack swamps, and seepage forests, were represented in Lapin’s inventory because of how wet this place is. The wetlands and unique hydrologic features of Bread Loaf were also protected similarly to the EPZs. “Surface Water Protection Zones” or “SWPZs” were designated for areas within the 50-foot vicinity of perennial streams, ponds, vernal pools, and wetlands. SWPZs in Bread Loaf have the goal of protecting water quality, aquatic systems, and the organisms that inhabit them by requiring the use of all applicable management practices and erosion control devices when conducting activities like maintaining roads or trails. Like with EPZs, trying to do something as simple as maintaining a bridge at a stream crossing could become complicated if it falls within the boundaries of a SWPZ.

The biological inventorying of Bread Loaf and the special EPZs and SWPZs are examples of the way conservation is done today, using the modern-day technology of GIS analysis and long-term ecological planning. Effective, cutting-edge conservation involves making scientifically-informed decisions when crafting a conservation easement. Middlebury College is a leader in the field of conservation, as the first institution of higher education to approach a large-scale conservation project in such way, granting a conservation easement and conducting research for how to best manage and protect these mountain lands. Bread Loaf is an example of a conservation project that will endure through time. Now that the we have applied the course filter approach of protecting the significant natural communities of Bread Loaf, there is room in the future to conduct more “fine filter” data collection on individual organisms such as the mammals, amphibians, and birds that inhabit these biologically rich natural communities so we can be sure we are protecting everything that calls the Bread Loaf lands home. As a conserved area, Bread Loaf presents Middlebury College with numerous opportunities for research and education into the future.



The natural community map Marc Lapin produced in 2013 for an ecological report on the College’s mountain parcels. Over two dozen communities are represented in the biologically rich Bread Loaf Lands. Detailed here are also Bread Loaf’s many mountain brooks that flow through these communities, exemplifying how exceptionally wet this landscape is.

protect it. Sugar has greatly informed the restrictions and conservation planning guidelines written in the easement.

In 2009, just as serious conversations about the conservation of Bread Loaf were heating up, the College’s Land Committee hired conservation ecologist and Middlebury environmental studies professor Marc Lapin and student interns to conduct a biological inventory of all the college’s land holdings. Lapin’s inventory of Bread Loaf was largely based around the natural

estry and construction of new roads or trails and the requirement that activities within these zones involve special steps to retain the natural character, such as the soil integrity and species composition, that define them. Something as simple as building a bridge could become complicated by the easement’s terms if it is being done within an EPZ. 15 areas within Bread Loaf are EPZs and state-significant communities, accounting for nearly 40% of the total area of Bread Loaf. These communities include Hemlock-Balsam Fir-Black Ash

Sources:
• Michels, Katie. 2017. The Bread Loaf Conservation Project. Special essay project commissioned by the Middlebury College Dean of Environmental Affairs Nan Jenks-Jay.
• Marc Lapin, College Lands Ecologist, for his expertise on Bread Loaf’s ecology and conservation planning.