

Rines Forest Management Plan

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Executive Summary

The Rines Forest Management Plan was developed by the volunteer citizen Rines Forest Advisory Committee with guidance and input from Town Manager Bill Shane, Town Councilors Jeff Porter and Steve Moriarty, and contract forester Jay Braunscheidel. The committee was ably supported by Nancy Stroud and Anne Brushwein.

The overall goal of the plan is to ensure the Rines Forest will be managed to:

- forever conserve the area as a forest
- improve the condition and diversity of the forest and wildlife habitat
- provide opportunity for passive recreation
- maintain the snowmobile trail connecting Bruce Hill and Blanchard Roads with Range Road
- encourage educational use of the property
- periodically harvest timber and pulpwood

The Property is governed by a permanent Conservation Easement held by the Cumberland and Chebeague Land Trust to “protect the Forest’s natural beauty, wildlife and varied ecosystems.” The Easement states “The Protected Property shall be used only for conservation and low-impact outdoor recreation and educational activities that do not rely on substantial alteration to the natural resources.”

The Easement also states “...any cutting of trees should be done under the guidance of a forest management plan developed by a professional forester with input from a professional wildlife biologist.....The forest management plan must include provisions for protecting soils, water quality and high value plant and animal habitat.”

This Management Plan was designed to meet the conservation goals outlined in the Conservation Easement. It includes background and history of the Rines Forest, physical and biological descriptions of the Forest, a copy of the Conservation Easement, a list of allowable and prohibited uses, and a detailed matrix of management recommendations for recreational/educational activities and natural resources. There is also a short discussion of how this property fits into a larger vision for conserving open space in the town of Cumberland.

The Appendix includes copies of the deed, survey plan, trail map, purchase & sale agreement, warranty deed, promissory note, a zoning map of the region, and an extensive forest management plan.

The acquisition and conservation of the Rines Forest by the Town of Cumberland, along with the recommendations included in the Rines Forest Management Plan, meet many of the goals of the 2009 Comprehensive Plan as they relate to sustainability, critical natural resources, environmental protection, land use planning , recreation and open space.

The Comprehensive plan notes that while other resources discussed in the plan can be built (infrastructure, public utilities) or enhanced (fiscal capacity), natural resources are finite and usually irreplaceable. Consequently, their protection is of paramount

importance. The plan goes on to state that, *the largest threat to habitat and natural resources in Cumberland has been and continues to be incremental growth. As the landscape is divided up into smaller and smaller pieces, it becomes inhospitable to a greater number of species, both plant and animal. As development increases, not only does the character of the town change, but such development can cause other adverse impacts to the natural resources such as non-point source pollution (i.e., run-off that contains pesticides and fertilizers) oil spills, etc., can pollute the rivers, streams and coastline and diminish our shellfish and fishery resources.*

Please see the Introduction to the Forest Management Plan for an overview of the goals and plans for sustainable management and harvesting of the forest over the next 20 years. As stated there, the Rines Forest will be managed to provide timber and pulpwood for local markets at a sustainable rate; to protect soils, water, and wildlife habitat; to grow older successional forests that will add to the diversity of forest types across the landscape; and to provide a variety of recreational opportunities for the people of Cumberland and their neighbors. All cutting will be done using state-of-the-art equipment and Best Management Practices. The Forest Management Plan will be updated at least every 10 years.

Introduction

The Rines Forest Management Plan is intended to provide guidance in the oversight and maintenance of the Rines Forest according to the *Rines Forest Mission Statement* and *Rines Forest Stewardship Principles*. As with sound management practices, this is a living document, which should be reviewed periodically to ensure that it is achieving the goals of the Mission Statement and Stewardship Principles. The Plan acknowledges the balancing act required between changes in ecological practices and needs as outside pressures impact the property while encouraging passive recreation by members of the community. In addition, it is hoped that the Rines Parcel will become one of the cornerstones in a Town wide greenbelt in which protection is extended beyond its boundaries to adjacent lands through easement, gift and direct purchase.

The Rines Forest is an undeveloped parcel, approximately 200 acres in size, located off of Range Road in the Town of Cumberland Center, Maine. At the time that the Town acquired the land in 2002, the Rines family of Gorham had maintained the parcel as a tree farm. A large block had been planted to red pine in the 1940's and managed for harvest. Management activities up to the time of purchase included thinning, trimming, and selective harvest according to common forest practices. The prime access to the site has been from Range Road, within a 50-acre parcel retained by Mr. Dale Rines. The road extends from Range Road to a point near the northern boundary of the Dale Rines parcel where it divides, one branch going to the northwest corner of the property while the other branch goes to the northeast. Skidder trails crisscross the site and generally have not been maintained. The public has been allowed to use the gravel access road for snowmobiling. In addition, the Rines have allowed people to walk, ski and snowshoe on the property.

There are two small borrow pits on the site, which were used as a source of material for construction of the access road. The portion of the site not planted to red pine is primarily mixed forest of hemlock, red oak, white pine and maple. The eastern half of the site is truncated by a series of steep ravines associated with tributaries of Mill Brook. The western half of the site is gently rolling, moderately to well-drained soils. Forested wetlands occur along the western property boundary, and within the northeastern portion of the property bordering Mill Brook and associated tributaries.

The following document provides an overview of the history of the parcel prior to acquisition by the Town, an inventory of natural resources, and management recommendations relative to recreational/educational activities, resource management, and maintenance.

Purpose and Objective of Management Plan

Through the direction of the Cumberland Town Council, the Rines Forest Citizens Advisory Committee was established. The Advisory Committee's primary focus was to provide guidance to the Council regarding matters related to the management of this community resource by developing a management plan for the Rines Forest Property.

The purpose and objective of the management plan is to incorporate the mission statement and stewardship principles into a living document that will be used as a guide by the citizens of the Town of Cumberland pertaining to the use, improvement and preservation of the Rines Forest.

Town Council Charge

The Cumberland Town Council hereby establishes the Rines Property Citizens Advisory Committee for purposes of making recommendations and providing guidance to the Cumberland Town Council regarding the use, improvement, and preservation of the Rines Property. Such recommendations shall include, but shall not be limited to, the following:

- Exploration of opportunities for passive recreation;
- Conservation of the Property and preservation of existing habitat;
- Establishment of accepted forestry management practices; and
- Maintenance of hunting and fishing activities.

The members of the Advisory Committee shall be appointed for three-year terms, although initial members shall be appointed for staggered terms of 1, 2, and 3 years. The Committee may report and make recommendations to the Town Council on an interim basis as its discretion or at the Council's request, but must submit an annual report to be received and considered by the Town Council at its first regular business meeting each December.

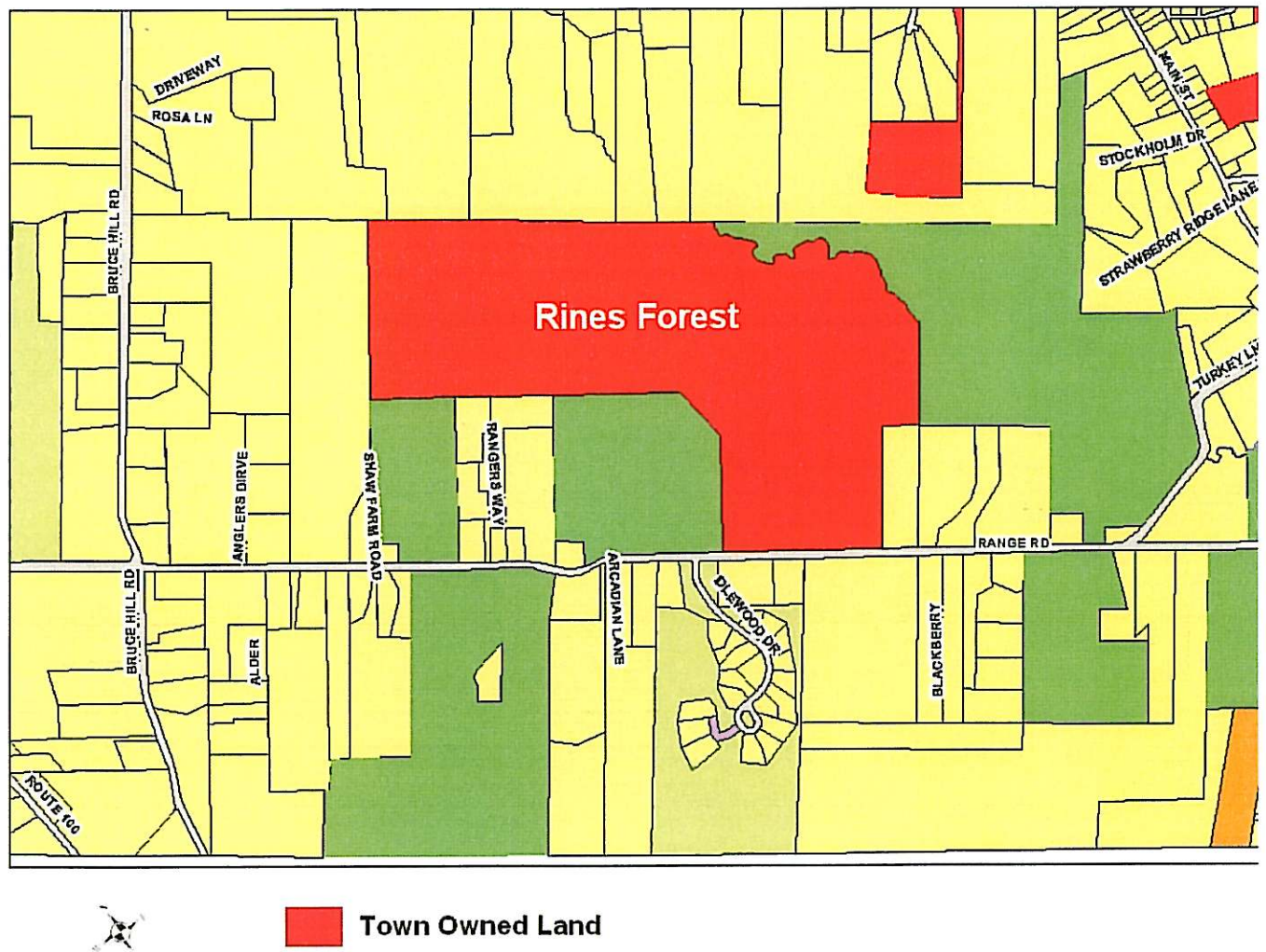
Rines Forest Mission Statement

The Cumberland Town Council holds that the Rines Forest property is a unique tract of land that shall remain forever in its undeveloped forested state. To this end, it is the collective responsibility of the community to protect the Forest's natural beauty, wildlife and varied ecosystems. Citizens and friends are encouraged to passively recreate within the property's boundaries while conserving its natural environment.

Rines Forest Stewardship Principles

1. The Town Council endorses the maintenance of the Forest to assure its present undeveloped forested state and will, *within limits established by any Town Council*, provide the human and fiscal resources necessary to do so.
2. A Forest Management Plan will be adopted and updated.
3. Within the scope of the management plan, areas determined to be environmentally sensitive and vulnerable shall receive specific attention.
4. A citizen based Advisory Committee shall report to the Town Council and provide an Annual Report which outlines the progress made toward maintaining the Rines Forest Stewardship Principles.
5. A network of trails including a new access from Range Road shall be maintained and improved.
6. Future acquisition for connectivity is encouraged and future planning shall be coordinated with the Town Lands and Conservation Commission.
7. Citizens are encouraged to passively recreate within the boundaries of the forest.
8. Educational use of the property for individuals or organizations shall be encouraged.
9. A list of acceptable uses of the Forest will be created and incorporated into a "Use Policy".
10. An informational brochure outlining the property's environmental attributes, a map of trails and other related issues of interest will be published and maintained.

Location of the Forest



Description of Land and Natural Resources

The Rines Forest today is a mixture of 60-year-old red pine plantations, old pasture fields grown up to mixed hardwood-softwood stands, hemlock stands, and floodplain forests. The red pine plantations predominate but some sections have been regularly pruned and harvested leaving an intermittent canopy with scattered under story saplings and other sections have abundant hardwoods and softwoods of different ages mixed in with the pines. Hemlock stands can be found on steep slopes rising from the streams, while hardwood floodplain forests are common along the flatter, meandering stretches.

The property has large sections of relatively flat sandy soils and terrain where the red pines were planted and a smaller area to the south that is characterized by steep rolling hills interspersed with intermittent cascading streams. The northern and northwestern perimeters of the property are dominated by forested wetlands, with shallow standing water much of the year.

Several streams run through the Rines Forest, the largest being Mill Stream, which eventually feeds into the Presumpscot River and then Casco Bay. Several permanent and intermittent streams feed into Mill Stream as well. These generally flow down steep, rocky beds between upland ridges and carry especially heavy flows during and after large rainstorms. Mill Stream meanders through flat sandy floodplain forests in the upper reaches, cascades over rocky falls and through a small rocky canyon in the middle section, and then spreads out into shrubby or open marshes in the lower sections before leaving the property and heading towards Winn Road. The streams are generally clear except following rainstorms or snowmelt when they are laden with eroded sediment from upstream of the property. A variety of aquatic invertebrates, dusky salamanders and small brook trout can all be found in Mill Stream.

Because the Rines Forest has a variety of habitats and terrain and sits in the middle of the single largest forested area remaining in Cumberland, it is home to many wildlife species. Amphibians include red-backed salamanders that live under downed logs or in the forest duff; spotted salamanders and wood frogs that live in and under the forest floor but breed in vernal pools (especially Frog Pond on the west side of Range Road); and American toads that live above ground in the forest but migrate to and from shallow wetlands to breed. A number of bird species are residents of the forest, including black-capped chickadees, downy and hairy woodpeckers, ruffed grouse, American crows, and wild turkeys. These birds feed on seeds, buds, or insect larvae, which they can find any time of the year. Barred and great-horned owls have been heard calling in the forest; they nest in early spring and hunt smaller birds and mammals for their food. Other bird species use the forest as an important stopover during migration, including the palm warbler, black-throated blue warbler, black-and-white warbler, and dark-eyed junco; these species all breed further north where they can successfully raise their young on the abundant insects. Others, including black-throated-green warblers, hermit thrushes, yellow-rumped warblers, ovenbirds, eastern wood peewees, great crested flycatchers and blue jays return to the forest each spring from the south to breed, nest and raise their young.

Mammals seen commonly in the Forest include white-footed mice, red-backed voles, gray, red and flying squirrels, snowshoe hare, and white-tailed deer. River otter, fisher,

porcupine, red foxes and coyotes also can be found in the forest but probably wander on and off the property in search of food, mates, and den sites. Signs of black bears and moose have been seen on the property before but these were probably only dispersing juveniles looking for a permanent home.

Woods roads are common throughout the Forest, most only temporary and covered with slash, but two are more permanent, underlain with sand and gravel taken from a gravel pit on site. The woods roads make a suitable rustic trail network although many are rough, covered with tire ruts, slash and standing water. During the fall hunters sometimes use these woods roads and in winter they are sometimes used for cross-country skiing and snowshoeing. The permanent woods roads are frequently used for walking, running, bird-watching, berry picking, hunting, snowshoeing and cross-country skiing. Raspberry and blackberry bushes are common along the woods roads, especially where cutting has occurred recently.

Historic Uses of the Land

Cumberland's Rines Forest is a beautiful, tranquil natural environment. Within its 275 acres grow large hemlock and pine trees as well as a sprinkling of red oak, birch, poplar and maple. It is a perfect canopy for the forest's diverse wildlife which includes white tail deer, coyote, fox, wild turkey, ruffed grouse and numerous wild birds. Along its boundaries, flows Mill Brook which winds its way through the forest providing visitors with beautiful waterfalls and places of solitude. Except for an occasional rock wall and a logging road or two, one can easily sense that they have escaped to a remote boreal forest far removed from a suburb of Maine's largest city.

Although the tract of land where the forest exists today was first surveyed by the E.C. Jordan Company of Portland in 1918 for J. Henry Rines, the history of the area suggests that the property experienced considerable change from the late 1700's until the turn of the twentieth century. Prior to 1821, when Cumberland became a town, settlers of ancient North Yarmouth were occupied primarily with hunting, fishing and lumbering. Because Cumberland had as many as six sawmills and two grist mills during the early 1800's with at least two found on Mill Brook, it's reasonable to assume that much of the land was initially forest. The wood from the Rines tract of land was most probably used not only for constructing homes, barns and the like but also for ship building. We know that the towering "king pine" trees found in nearby Gorham, North Yarmouth and other surrounding communities were used for ship's masts. Since there were boat yards in North Yarmouth, Yarmouth and Cumberland well into the nineteenth century, there is the likelihood that the timber from the area was also used for boat building.

It wasn't long before the forests of Cumberland and North Yarmouth were cleared of timber and replaced with farmland, mostly pasture for sheep and cattle. Certainly, the remnants of rock walls found on the Rines Forest property suggests that the land was used for farming purposes by the mid 1800's. Supporting this claim is the fact that by 1860 Cumberland had 230 buildings and a population of approximately 1,700 people, with their primary occupation being agriculture.

In 1918, J. Henry Rines combined several parcels of land totaling 275 acres along Range Road. The land was to be used as pasture for his cattle which were walked each spring thirteen miles to Cumberland from the main farm in Gorham. The property had a house, two barns and a well. According to Dale Rines, great-grandson of J. Rines, the property on Range Road was a typical farm with its cleared land enclosed by stone walls. For approximately twenty years the Rines family maintained the property for farming and supporting their live stock. In 1941, Dale Rines' grandfather decided to return the property to forest land. Seventy acres of open fields were planted with red pine and white spruce. From this point until the 1960's the forest grew and was pretty much left alone until the Rines family began to thin the forest. It was also at this time when the forest's major woods roads were built by Dale Rines and his father. This enabled the Rines family to harvest wood from the front to the rear of the lot. In more recent years Dale Rines, a forest engineer by training, has managed the property by thinning and selectively harvesting trees as well as maintaining the land. The result is a healthy working forest.

The Town of Cumberland acquired 216.15 acres of the Rines Forest property in 2003. It is currently part of a 900 acre contiguous "block of un-fragmented forest habitat." A comprehensive management plan for the property has been developed by the Town's

Rines Forest Committee for the expressed purpose of insuring that the Forest will remain in its undeveloped state. In addition to management considerations, the Cumberland Town Council voted to place the property under the protection of a conservation easement, in perpetuity, with the Cumberland Mainland Island Trust on September 12, 2005.

References

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Mitchell, Russell and Strout, The Cumberland / North Yarmouth Register of 1904, Salem, Massachusetts: Higginson Bock Co., 1955.

Rines, Dale, Cumberland "Rines Forest" History, unpublished paper, 2004.

Sweetser, Phyllis Sturdivant, Cumberland Maine, Town of Cumberland, Maine: 1976.

Town Open Space Goals

The acquisition and conservation of the Rines Forest ("Rines") by the Town of Cumberland meets many of the highest priority objectives identified in the Cumberland Open Space plan ("plan") which was adopted in 1998.

In general, the Rines conservation easement meets four of eight broad goals outlined in the plan:

- Preservation of significant land for future generations
- Preservation or postponement of development
- Expansion of recreational opportunities for the residents
- Preservation of wildlife habitat and corridors

Rines meets all of the listed reasons for preserving forest land as identified in the plan:

- To preserve the aesthetics of large wooded tracts of land
- To keep land out of development
- Preserve wildlife habitat
- Preserve historic trails
- Preserve woodland as an economic base
- Prevent the further fragmentation of contiguous forestland
- Establish a greenbelt buffering the developed parts of Cumberland from the less developed areas.

The plan strives to apply a ranking system to forested property with the concept that greater acreage equates to a higher value. At the same time it singles out the exceptional value of individual parcels of forested land of more than 50 acres. It should be noted that the Rines property is over 200 acres.

In regards to preserving wildlife natural resources, the plan states that large blocks of forest provide habitat for many more species than do smaller blocks, especially if streams and wetlands traverse them. The Rines Forest contains several streams and includes at least two waterfalls of exceptional note.

The plan notes that to promote the preservation of forest the Town should purchase conservation easements and rights-of-first-refusal, along with maintaining public access of trails if appropriate. The Rines purchase includes the right of first refusal on another 50 acre parcel. Further, the Rines conservation easement provides for continued public access, a trail system, and stipulates that there shall be no future development on the property.

Finally, the plan notes that the Cumberland Mainland & Island Trust (CMIT) plays a significant role in the preservation of land, especially environmentally sensitive land such as wildlife habitat. The plan also states that the Town Council should work with CMIT to achieve the goals of this Plan. With the completion and acceptance of the conservation easement, this significant goal of the plan has been met with the Rines property.

Current Uses

The Rines Forest provides an ideal site for low-impact passive recreation. In an effort to maintain the property to its natural state, uses may be subject to change or suspension when overuse or negative impact to the land is identified. The list of current uses is below. Please also refer to the Management Matrix for more specific information regarding user's responsibility and/or limitations for each activity.

- Cross country skiing
- Educational study
- Fishing
- Horseback riding
- Dog walking
- Picnicking
- Hiking
- Hunting
- Snowmobiling on designated trails
- Trapping

Facility Use Rules

These rules have been adopted by the Cumberland Town Council to govern activities at Rines Forest:

Allowable Uses:

The Rines Forest provides an ideal site for low-impact outdoor recreation, including, but not limited to, nature study, cross country skiing, snowmobiling on designated trails, horseback riding, pet walking, snowshoeing, fishing, hunting, temporary tree stands (daily removal required), picnicking, hiking, plant study, and bird-watching by the general public. The Forest is home to numerous plant and animal species and habitats.

The Town of Cumberland is experiencing steady, accelerated development that often closes or restricts access to open space traditionally used and enjoyed by the public and therefore has established the Rines Forest Committee to develop Rines Forest Stewardship Principles and a management plan and to oversee the management of this Town protected Property.

The forest is protected by a conservation easement which ensures the permanent availability of the Forest for traditional recreational uses by the general public. The easement will permanently preserves the property's important recreational, scenic and natural resources and habitat for indigenous flora and fauna, while providing permanent pedestrian access.

Prohibited Uses:

- No unauthorized motor vehicles, ATV's or motorbikes.
- No camping except by written permission of the Town Manager.
- No open fires or charcoal fires.
- Carry In - Carry Out - No littering or trash disposal; all activities and users to remove all refuse carried in.
- No target shooting.
- Except for brushing and maintenance of approved trail systems, no cutting of trees, limbs except as approved by the Rines Forest Committee, no cutting of bushes, removal or vegetation without the approval of the Rines Forest Committee. No application of herbicides, pesticides or fungicides except with the approval of the Rines Forest Committee.
- No person shall deface, injure, remove or destroy any fences, signs, gates or any other structures or creations in or on the Forest.
- No construction or improvements are allowed without the express written permission of the Rines Forest Committee.

- The Rines Forest shall use , but not be limited to, the State of Maine hunting, fishing and trapping laws and State leash.

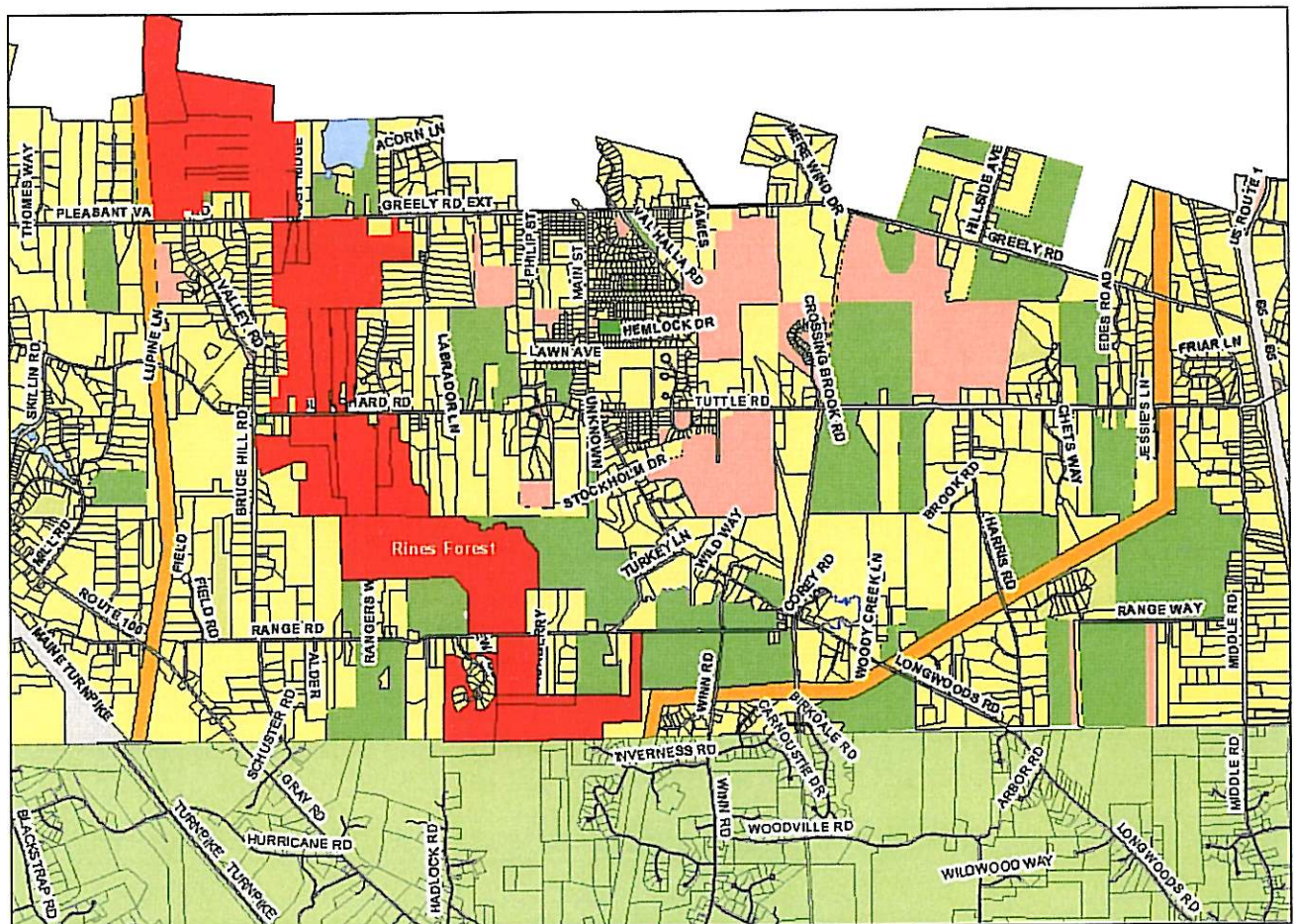
Any person aggrieved by the decision of the Town Manager, or Rines Forest Committee may appeal to the Town Council.

Future Acquisitions

The goal of the Rines Forest Advisory Committee is for the Town to acquire additional lands to further enhance the Rines Forest. The first priority would be to exercise the right of first refusal for the remaining 50 acres owned by Dale Rines at the time when he is prepared to sell it. Purchase of the entire parcel to be included with the Rines Forest would be ideal.

The Committee also recommends future acquisition of properties or rights of way to maintain or increase connectivity to existing or new trails. This can be accomplished through the purchase of development rights by allowing denser development in the center of the community while preserving more rural lands as well as conservation easements. Lands in Falmouth should also be considered for connectivity to this Wildlife and Habitat Corridor.

Funding from Land for Maine's Future should be explored in helping to achieve these goals.



Wildlife and Habitat Corridor

Forest Management Plan Overview

This Forest Management Plan was developed by Jay Braunscheidel, a licensed professional forester, in concert with the Rines Forest Advisory Committee and Town Manager Bill Shane. Jay patiently met many times with the Committee to discuss various management goals, strategies, and techniques that could be adopted in the plan. Following is the collective wisdom of this group.

The Plan is designed to build on the good forest stewardship of the previous owners, Dale Rines and his father and grandfather, and slowly transform large areas planted to red pine in the 1940s to a more diverse forest characterized by a mixture of white pine, red and white oak, sugar maple, beech and hemlock – all species that naturally occur at the site, but in many places are overshadowed by the plantation of red pines. In addition, the management plan is designed to encourage a diversity of ages and sizes of trees, allow for a few small openings that mimic natural disturbances, and especially to foster the growth of older trees that are becoming increasingly uncommon across the Maine landscape. This will be accomplished by carefully thinning and removing certain trees to provide light and room for other trees to grow up and out over time – just like thinning the carrots or beets in your garden. And just like in the garden, one thinning usually isn't enough. Thus, the current plan includes harvesting strategies for 2010, 2020, and 2025-2030, with different sections of the forest and different amounts of thinning planned for each harvesting.

The plan is also designed to protect key natural assets of the forest, including streams, wetlands, steep slopes and riparian areas (areas alongside water) and to protect and maintain productive soil, clean water, and diverse wildlife habitat. This means there will be no cutting near streams, wetlands or on the steepest slopes and that no new skid trails or harvesting equipment will be allowed in these sensitive areas. Also, special features important to wildlife such as dead standing trees, fruit and nut trees, and dead wood on the forest floor will be retained. A forest reserve of at least 20 and up to 60 acres will be established in the southern area of the forest where steep slopes, streams, wetlands, riparian habitat and some older trees can be found and where no cutting will be allowed.

The future forest should provide habitat for animals with large home ranges, such as white-tailed deer, fisher, river otter, goshawks, and barred owls; nesting songbirds that need expansive “interior” forest habitat to successfully breed, such as ovenbirds, wood thrush, and black-throated blue warblers; cavity-nesting species like black-capped chickadees, pileated woodpeckers, flying squirrels, and raccoons; and species needing dead and down wood on the forest floor such as redback and spotted salamanders, long-tailed weasels, and ruffed grouse. A few small openings of early successional forest may provide habitat for species like chestnut-sided warblers and eastern towhee.

Invasive species such as the glossy buckthorn, which is widespread throughout the forest and on adjacent lands and is out-competing native species that provide food and shelter

for our native wildlife, will be aggressively reduced through active mechanical thinning and herbicide control where necessary.

All cutting will be done using state-of-the-art equipment and Best Management Practices, including harvesting only on frozen ground so as not to disturb the forest floor or leave ruts, and will be directly supervised by Mr. Braunscheidel.

Under this plan, the Rines Forest will be managed to provide timber and pulpwood for local markets at a sustainable rate; to protect soils, water, and wildlife habitat; to grow older successional forests that will add to the diversity of forest types across the landscape; and to provide a variety of recreational opportunities for the people of Cumberland and their neighbors.

Because it was important to the members of the Rines Forest Advisory Committee to adopt exemplary sustainable forestry practices, the Rines Forest will be certified under the internationally recognized gold standards of the Forest Stewardship Council, with periodic audits to ensure we continue to meet the standards. We hope the management of the Rines Forest may serve as an example for other landowners in the region who also may want to manage their forest lands for multiple purposes in a sustainable way.

Management Matrix

A. Recreational/Educational Activities

Activity	Potential Natural Conflict	Potential Neighbor Relation Conflicts	Management Activities
Walking / Hiking	Habitat disturbance Tree carving Erosion / soil compaction	Disturbance of solitude-seekers. Littering	Evaluate condition of trails on a yearly basis. Repair natural or human damage in a timely manner. Develop limited number of trails including some loops. Close trails to give the land time to recover. Establish 'Carry-In / Carry-Out' policy for litter management. Pick-up after Pets and must abide with State leash laws
Picnicking	Soil compaction Localized habitat disturbance Forest fire	Littering Disturbance to trail users	Establish strict regulations regarding fire. 'Carry-In / Carry-Out'. No Open Fires
Cross Country skiing	Erosion/compaction of soil without enough snow cover	Accidents on steep slopes, difficult turns Collisions at intersections	Designated Trails not anticipated X- Country Skiing to have a shared use with snow mobiles Caution signs displayed on Trails to warn of Shared Usage
Horseback Riding	Soil erosion adjacent to trails Sedimentation of streams and wetlands Additional width may degrade trail edge	Messes left by horses in trails Surprise encounters with walkers and other non-horse users	Develop guidelines for horseback use if/when the need arises.

Activity	Potential Natural Conflict	Potential Neighbor Relation Conflicts	Management Activities
Snowmobiling	Minor habitat disturbance Trails provide access for predators	Noise Trail crowding Encounters with those seeking quieter forms of recreation	Limit to existing snowmobile trail. Post/maintain warning signs alerting skiers to snowmobilers, and vice-versa. Signage at entrance points directing snowmobilers to existing trails. Ongoing Review for connectivity and Subject to local agreements with local snowmobile club.
Educational Programs	Over-collecting Minor habitat disturbance	Noise Trail crowding	Discourage active collecting of live materials Group sizes over 25 require a permit
Hunting Fishing Trapping			Shared Forest with Hunters- Warning Signs posted Subject to Maine IF&W laws Shot guns only in Cumberland No Sunday Hunting allowed Wear Blaze Orange when in the Forest
Additional Uses	Determine on a case-by-case basis	Determine on a case-by-case basis	Any additional uses must be reviewed and Approved by the Rines Forest Committee

B. Resource Management Activities

Resource	Responsibility	Desired Results	Recommendations
Forest Management	Coordinated by Rines Forest Committee. Management practices carried out under supervision of licensed foresters, coordinated with wildlife biologist	Retain the diversity of the forest types and other habitats found within the Forest. Create a model of biodiversity in a small-scale community forest, with multiple management objectives. Retain features that add to the diversity of the forest.	Consult with a wildlife specialist to develop a long-term management plan for the present Forest and any additional lands that are added to it. Develop an interpretive program (brochures, signs, guided walks) to inform the public about the forest management objectives of Rines Forest. Leave dead trees >8" standing unless they present a danger to Forest users. Limited activities to control nuisance or invasive plant species.

Resource	Responsibility	Desired Results	Recommendations
Wildlife Management	Coordinated by Rines Forest Committee and Management practices carried out under supervision of wildlife biologist, coordinated with forester	Conserve biodiversity in a small scale community forest, with multiple management objectives. Prevent overpopulation of wildlife species or the establishment of exotic, invasive species. Retain features with significant wildlife value.	Consult with a wildlife biologist and forester to develop a long-term management plan that will enhance the value of the Forest for wildlife. Develop an interpretive program (brochures, signs, guided walks) to inform the public about the wildlife management objectives of Rines Forest. Leave most dead trees > 8" standing for woodpeckers and other species unless they present a danger to Forest users.
Erosion Control	Coordinated by Rines Forest Committee using the Maine Forest Service Best Management Practices under the guidance of the Cumberland County Soil and Water Conservation District (CCSWCD) and carried out under the supervision of a wildlife biologist, coordinated with forester	Prevent siltation of wetlands, brooks, and streams using natural measures whenever possible	Follow Best Management Practices for all work done in the Forest. Rely upon vegetative buffer using natural native vegetation to stabilize slopes, protect banks, and prevent further degradation. Minimize the use of structural means to control erosion. Evaluate all site improvements for their erosion potential. Coordinate all work with CCSWCD. Site new trails where there will be a minimum of erosion.

C. Trail Maintenance

Activity	Responsibility	Desired Results	Management Activities
Trail Maintenance	Public Works Forests & Recreation Rines Forest Committee	Trails maintained in a safe, attractive manner that invites responsible use.	Sponsor trail maintenance activities to bring trails back up to standards. Provide training sessions and proper tools for volunteers. Monitor trail conditions on a regular basis. Be prepared to close sections of trails as required to prevent environmental degradation or to protect specific habitats. Ref: Trail Construction and Maintenance Notebook.

Activity	Responsibility	Desired Results	Management Activities
Trail Building	Rines Forest Committee Public Works Volunteers	Attractive new trails – or trail relocation – as required that fit into the character of the landscape without degrading the natural environment or infringing on the privacy of nearby homes. Avoid constructing additional trails	Develop a Trail Master Plan. Use BMP's for all trail construction activity within Forest. Limit number of new trails. Avoid constructing trails that may be too steep, cross wetlands, or disturb critical habitat. Evaluate existing use levels on a yearly basis before making decisions regarding new trail construction. Prohibit unauthorized trail building. should oversee any new trail construction and repair.