

Draft

A Tourism Plan for the Charles Lathrop Pack Demonstration Forest



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FOR 476/676 Ecotourism and Nature Tourism
SUNY College of Environmental Science and Forestry
Syracuse, NY

January, 2015

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ACKNOWLEDGEMENTS

The FOR 476/676 class wishes to thank the following individuals with their help for this project:

Bob Davis, Forest Properties Director

Bruce Breitmeyer, Forest Property Manager

John Wagner, Professor

Zoe Jeffrey, Business Manager, Adirondack Ecological Center

Kristin Pasquino, Assistant Program Manager, Adirondack Interpretive Center



Thank you!

INTRODUCTION

The Charles Lathrop Pack Demonstration Forest was first established in 1927 and it was named after Charles Lathrop Pack, a wealthy Adirondack landowner. Charles Lathrop donated most of the current property to the State University of New York College of Environmental Science and Forestry. Today, SUNY ESF owns approximately 2,500 acres of woodlands that comprise Pack Demonstration Forest. The Forest is the site of North America's longest, continuously running forest fertilization studies program. Trails to the old growth tree known as the Grandmother Tree and up to the summit of Ben Wood Mountain are popular with local residents. Throughout the summer season, the Department of Environmental Conservation uses the forest's cabins and property to host a series of student environmental education camps.

This report was produced by SUNY ESF's Ecotourism and Nature Tourism class in the fall of 2014. The report assesses the attributes of Pack Demonstration Forest and provides recommendations for future programs and facilities. Data about the forest was collected during an on-site visit in October, 2014, and by the students from personal contacts, publications, and internet sources. The issues and concerns facing Pack Forest, goals and vision for the future, and proposed interpretive theme for the Forest (developed through an in-class facilitated discussion) are provided below.

Issues and concerns

1. If site is developed, don't want to compete with private sector campgrounds (no RV park-type campground); keep intensity low
2. Co-existence with DEC in the future – will it work or not?
3. Can we generate revenue while providing a valuable academic experience for our students
4. Residents stressed the low level of development – needs to be maintained
5. Sensitive natural resources – make sure they aren't negatively impacted
6. Pack Forest should be representative of all ESF
7. Should be used as a demonstration area for ESF majors
8. Promoting to non-local visitors
9. Width of forest roads may not be adequate for more visitor use
10. That the visitor center is easy to find and accessible to visitors
11. Preventing conflicts between different user groups
12. Making sure that there is free employee housing on site
13. Making sure some facilities are fully accessible
14. Making sure entrance is easy to find

Vision

In fifteen years, we envision Pack Forest to be:

1. A primary destination that attracts visitors and residents for outdoor education and recreation experiences;
2. A demonstration area used extensively by ESF students and faculty for experiential learning and research;

3. An area that protects and showcases local flora and fauna, and their habitats;
4. A financially and environmentally self-sustaining facility;
5. A facility that promotes ESF to visitors by highlighting academic accomplishments and research;
6. An area that serves as a regional gateway to the Adirondacks, and promotes its natural beauty;
7. An area used to strengthen the relationships among ESF, state agencies, and local villages (Warrensburg & Lake George).

Goals

1. To increase visitor use by 25% each year by promoting (through multiple media techniques) the recreational opportunities available at Pack Forest.
2. To increase visitor interest in ESF through on-site interpretation of the college's programs and research.
3. To enable and encourage stewardship of Pack Forest resources through interpretation and visitor management.
4. To maximize experiential learning and research use by providing the necessary on-site staff, resources, and facilities that ensure participation by a variety of ESF departments.
5. To make Pack Forest into a financially and environmentally self-sustaining facility that incorporates renewable/high-efficiency technologies and utilizes best management practices for resource conservation.
6. To strengthen the relationships among ESF, state agencies, and local villages (Warrensburg & Lake George) through collaborative educational, recreational, and promotional efforts.

Interpretive Theme

Pack Forest is an educational and recreational destination that uses its wealth of natural, cultural, and scientific resources to enhance visitors' stewardship and awareness.

SETTING AND HABITATS

Introduction

The Pack Demonstration Forest, or Pack Forest, is located in what is arguably the most diverse area of New York State: the Adirondack State Park. The Adirondacks offer a multitude of coniferous, deciduous, wetland, alpine, cliff, and freshwater settings.

Pack Demonstration Forest offers an almost all-encompassing sample of these areas (minus the alpine habitats). It has several wetland areas, coniferous forests, deciduous forests and unique ice meadows that make Pack Forest a testament to the area's diversity. Because it contains all of these habitats, the forest is also home to the majority, if not all, the region's large array of species.

Pack Forest is also rich in its Recreation Opportunity Spectrum (ROS) Zones, which are defined by the physical, social, and managerial attributes of the area (Lee, Beard, & Thomson, 2006). ROS Zones include: Urban (highly developed, city-like areas), Rural (developed but still natural looking areas), Roded Natural (natural areas, but there is still evidence of human impact—i.e. paved/graveled roads, Semi-primitive Motorized (moderate evidence of use, motorized vehicles still allowed), Semi-primitive Non-motorized (moderate evidence of use, no motorized vehicles allowed), and Primitive (low interaction between users, little evidence of impact by humans) (Cherokee Forest Voices, 2014). Overall, Pack Forest has a wealth of natural resources it can use to preserve its ecosystems, protect its fragile areas, and educate visitors about the breadth of diversity within the Adirondacks.

Setting

Pack Forest is positioned in the Adirondacks outside the town of Warrensburg and only about twenty minutes away from the town of Lake George. Managed by the State University of New York College of Environmental Science and Forestry (SUNY ESF), this site used to be the host of the college's summer field courses and electives, housing students for weeks at a time. Since then, it has been used as a research site for some students and faculty, and a new site, Cranberry Lake, has been used for summer sessions, leaving Pack Forest with a lot of open and vacant land.

There is also an area on the Southwest corner of Pack Forest Lake that the Department of Environment Conservation (DEC) has been using for its summer camps (see Figure 1). The DEC has also uses areas of Moon Mountain for rescue training. The current manager of Pack Forest is Bob Davis. There is also a steward who lives on the property and looks after it. Right now, old Rt. 9 (now called Pack Forest Rd), runs through the park and is used as the main "trail" leading throughout the area. Structure-wise, there is an old lodge, the steward's house, the main office, and the DEC camp around the lake (see Figure 1). Although there may be many old trails through the mountains, the only updated trail that Pack Forest has is the Grandmother Tree Trail, which is a scantily interpreted path through a coniferous section of the forest.

Recreation Opportunity Spectrum Zones

Urban: The site contains no urban ROS Zones.

Rural: The site has four sites that can be defined as rural. They have structures and there is evidence of development, but not much (refer to orange areas in Figure 1). The first rural area is where the main office is located just south of Pack Forest Lake. The second is the steward's house. The third is the DEC camp at the Southwest end of the lake, and the fourth is the lodge off of the Southeast corner of the lake.

Roaded Natural: Almost all of the main trail is considered "roaded natural" (refer to yellow areas in Figure 1). This means that there is still a significant level of development. Old Rt. 9 is a road that is still used by cars. Although it is a dirt road, is it accessible by car and frequented by locals. This can cause user conflicts between hikers and cars.

Semi-primitive Motorized: There are no areas currently in Pack Forest that allow motorized vehicles and are not considered roaded natural.

Semi-primitive Non-motorized: Semi-primitive Non-motorized sites still have a level of human development. The only area that was found to possess these traits was the Grandmother Tree Trail. This is an interpretive trail that contains a moderate to low level of signage throughout its course.

Primitive: Primitive areas are ones where there is little to no sign of human development. There can still be trails, but they are small foot paths. Pack Forest has a lot of land currently dedicated to primitive zones (see Figure 1). Many of the mountains within the forest are not being utilized for any developed hiking trails or interpretive trails.

Fragile Habitats

Wetlands: Wetland Habitats are always a concern when developing an area. Wetlands help reduce the amount of erosion and loss of microbes by lessening the effects of flooding (NYS DEC, 2014). Preserving wetlands as much as possible is in the best interests of the flora, fauna, and people in the area.

Ice Meadows: The ice meadows are a unique habitat within Pack Forest. These are areas where winter ice on the Hudson River is pushed to the river banks. The accumulation of ice results in a scouring effect that limits soil and plant development along the shores of the river. The ice can also remain frozen through the spring. Because of the interaction with the ice, certain plant species that are not great competitors are allowed to thrive there that would normally be squandered anywhere else. These rare plants include brown bog sedge, Clinton's club rush, whip nutrush, sand cherry, New England violet, sticky false asphodel, spurred gentian, and dwarf raspberry. (Adirondack Scenic Byways, 1998). Because of these species, it is imperative that this habitat is not only preserved, but also displayed so that visitors can learn about ice meadows and be inspired to protect them.

Some Occurring Charismatic Native Species

Because Pack Forest contains both deciduous and coniferous forests, it is likely that it contains most, if not all, the native Adirondack species. Table 1 is a condensed list of the most popular and populous species in the Adirondacks. Most of these species are found in healthy populations throughout the area, or are abundant.

Table 1. Occurring species within the Adirondacks that Pack Forest likely possesses (Adirondack.net, 2014; SUNY ESF, 2014).

Category	Species
Reptiles & Amphibians	Eastern Spade-foot Toad American Toad Fowler’s Toad Green Frog Grey Tree Frog Wood Frog Pickerel Frog Northern Leopard Frog Bullfrog
Mammals	Long-tailed Shrew Masked Shrew Eastern Cottontail Rabbit Little Brown Bat Eastern Coyote Red Fox Striped Skunk Raccoon Black Bear American Beaver White-tailed Deer Deer Mouse White-footed Mouse
Trees	Big Tooth Aspen White Pine Beech Paper Birch Yellow Birch Eastern Hemlock Balsam Fir Striped Maple Sugar Maple

Table 1 (continued).

Category	Species
Plants	Bracken Fern Hay Scented Fern Cinnamon Fern Common Wood Fern Canada Mayflower Goldthread Wood Sorrel Wintergreen Hobblebush Red Raspberry
Insects	Monarch Butterfly Great Spangled Fritillary Little Yellow Butterfly Eastern Tiger Swallowtail Black Fly Mosquito Honeybees Yellow Jackets Ichneumonid Wasps
Aquatic Species	Brook Trout Lake Trout Large Mouth Bass Small Mouth Bass Bullhead Yellow Perch Pike Walleye Crappie
Birds	White-breasted Nuthatch Ovenbird American Robin Belted Kingfisher American Woodcock Barred Owl Canada Goose Common Loon Common Yellowthroat Eastern Phoebe Wood Thrush Winter Wren Yellow-bellied Sapsucker

Possible Invasive Species:

Some invasive species to be aware of are listed in Table 2. If more people from out of town begin to visit Pack Forest, it may become likely that there will be a further spread of invasive insects and plants. Invasive plants have the capacity to outcompete native plants and use their resources, which is a threat to vulnerable native species. Invasive insects can have devastating effects on forests and can be nearly impossible to eradicate. Certain precautions will have to be taken to ensure and maintain the health of Pack Forest.

Table 2. Invasive species in the Adirondacks or are a threat to the Adirondacks and the damage they cause (APIPP, 1998).

Species	Possible damage
Balsam Woolly Adelgid	This insect chews through the bark of fir trees. Due to its toxic saliva, the trees become weak and can result in tree death.
Asian Longhorned Beetle	
Emerald Ash Borer	Although it is not in the area yet, the EAB devastates stands of ash trees by larvae eating through the bark and consequently girdling the tree. This is a species that should constantly be monitored for.
Purple Loosestrife	This perennial is spread widely by seed dispersal from both animals and humans. It grows in wetlands and moist habitats and can change the pH, soil composition and ability for a wetland to retain water.
Japanese Knotweed	This perennial begins sprouting in early spring—an advantage over most plants that sprout mid-late spring. It grows in large thickets and can quickly take over areas of forest and outcompete saplings and other herbaceous floor cover.
Common Reed Grass	This <i>Phragmites</i> species can is fast growing, and can take over acres of land in a short amount of time. It has the ability to outcompete many wetland species.

Summary

In summary, Pack Forest is in an ideal location for visitors to venture out and learn about the diversity of the Adirondacks, and it possesses the resources to do so in a manner that can protect its native flora and fauna. By properly allocating land to different ROS zones, fragile habitats can be preserved and the species in them thrive. Using different interpretive techniques, the habitats can be showcased and still protected. Pack Forest has substantial potential, and with a bit of work, it can become a valuable educational and recreational destination for locals and tourists alike.

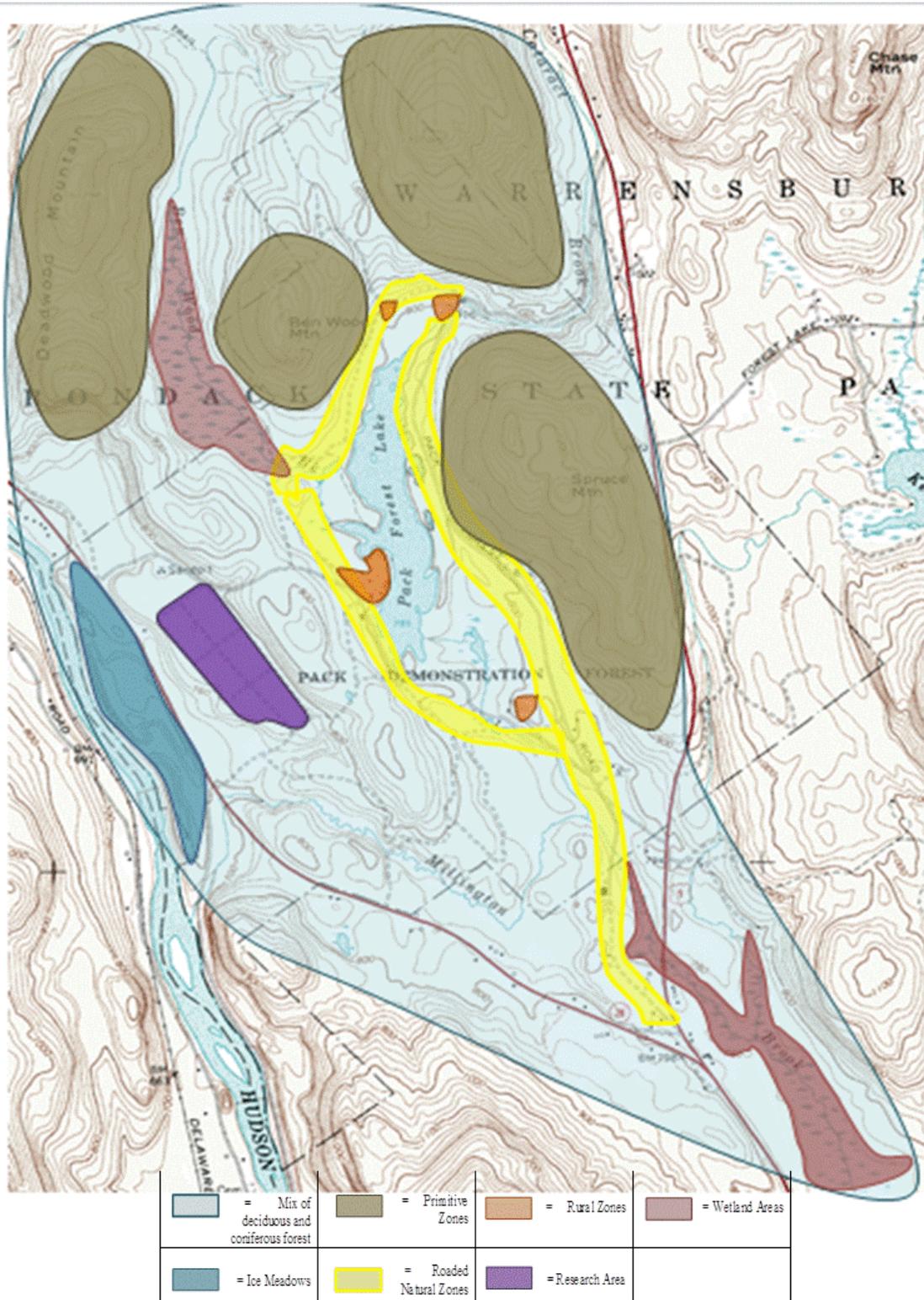


Figure 1. Pack Forest with current fragile habitats and ROS zones (Geological Survey, 1968).

TRAILS

Introduction

A well maintained trail system that provides access throughout Pack Forest for a variety of uses and ability levels is vital to the success of promoting the facility as an ecotourism destination. Not only will the trail system facilitate recreational use of the property, it can play a key role in the success of other components of this plan, particularly interpretation.

The current situation regarding trails at Pack Forest, including the types of trails currently in existence and their condition, current levels and types of recreational use, and components in the natural setting that are essential considerations in trail planning and maintenance were assessed during an autumn 2014 visit to the property.

Current Trail Network

The current trail network within Pack Forest consists mainly of forest roads (Figure 2). These roads total approximately 11.5 miles in length, and exist primarily to facilitate the movement of mechanized equipment and motor vehicles necessary for timber management throughout the property. The current condition of these roads is variable, ranging from well-used and maintained forest roads, to minimally used and maintained corridors. Many of these roads have already existing erosion control devices, including ditching and culverts to facilitate drainage. This network also covers most of the property, providing easy access to all areas within Pack Forest. However, it is generally preferable to construct trails so as to minimize visual impacts of human development, including roads, so these forest roads may also prove an impediment to providing valued recreational opportunities to the public (Proudman and Rajala, 1981).

The Grandmother Tree Trail is currently the only actual trail corridor of any significant length within Pack Forest that is intended (and utilized) primarily for non-motorized recreational travel. Approximately 0.5 miles in length, it provides access to the Grandmother Tree itself, as well as the adjacent old growth white pine (*Pinus strobus*) stand.

While the Grandmother Tree Trail was designed to accommodate access by persons with disabilities, it is not currently compliant with the Americans with Disabilities Act (ADA). The following shortcomings for the trail were identified based on the list of necessary accessible features compiled by Kuehn (2014):

- There is no signage at the trailhead explaining the accessibility of the trail.
- The trail surface, while “firm and stable,” is extremely slippery in spots.
- Several fallen trees on the trail result in obstacles in excess of 2 inches in height.
- There is no edging along many sections of the trail to keep wheeled access devices (wheelchairs, etc.) on the trail.
- There is a lack of other accessible facilities on site in addition to the trail, including accessible bathroom facilities.

A property map from Pack Forest based on surveys of the property in the 1930’s indicates a few other short hiking trails within the forest. However, given the age of the map, and the lack of

interesting destinations that were accessed by any of the trails, it seems likely that most of these routes have not been maintained and are difficult if not impossible to find.

While there is currently some signage in place directing visitors to and along the Grandmother Tree Trail, it is minimal in its presence and effectiveness. Proudman and Rajala (1981) suggest that signage must be understandable, systematic, and vandal-proof. The existing signage is generally understandable, but is not systematic, nor is it vandal-proof.

Features of Interest

Pack Forest contains multiple features of interest that may serve as worthwhile destinations accessible through a trail network. These include:

- Ben Wood Mountain
- Spruce Mountain
- The Grandmother Tree/white pine old growth stand
- Pack Forest Lake
- Charles Lathrop Pack's grave
- The Hudson River ice meadows
- Silvicultural research plots

Current Types and Levels of Use

Pack Forest is already a destination in use for recreational opportunities that utilize the road and trail network. The general public utilizes the property for hiking, paddling, cross country skiing, bicycling, horseback riding, and snowmobiling.

Hiking is the primary use of the trail network at Pack Forest, with the Grandmother Tree Trail being the primary destination for hikers. On weekends in spring, summer, and fall, it is not uncommon to see visitors on that trail. Many of the groups are comprised of families including both small children and elderly family members.

Visitors commonly utilize Pack Forest Lake for paddling. Access to the lake is provided in the form of 2 informal put-ins on the east shore that are accessed via short trails from Old Route 9.

While not officially encouraged, horseback riding is also not discouraged and is a common use of the property. Much of this use is confined to the forest road network within the property.

Snowmobiling occurs during the winter. A section of Old Route 9, in conjunction with the forest road up to the summit of Ben Wood Mountain, is designated as Trail S81D, and is a part of the statewide network of snowmobile trails that stretches across NY.

Additionally, the NYSDEC Environmental Summer Camp utilizes much of the property and the trails within for recreational activities during its summer sessions.

Visitor use conflict on the property appears to be minimal, but this is more likely a result of low levels of overall use rather than any effective management of the various types of recreational use that occur at Pack Forest.

Terrain and Topography

Pack Forest contains variable terrain, ranging from steep and rugged rocky slopes on the hills and mountains in the northern, eastern, and southern portions of the property, to fairly flat forested stands on the western portion, to lowland wetlands within the central portion. Consideration of these features is essential to the construction of a well-laid out and easy to maintain trail network.

The property contains all or part of three mountains: Ben Wood Mountain (north of Pack Forest Lake), Spruce Mountain (between Pack Forest Lake and Route 9), and the lower slopes of Moon Mountain (on the south end of the property, east of the Hudson River). The terrain in the vicinity of these mountains is quite steep, with many areas exceeding 20% grade. Construction of any trails through this terrain will require extra hardening to mitigate the effects of the steep terrain. Figure 3 shows a topographic map of the area, while Figure 4 shows the steepness of the slopes within Park Forest.

Additionally, wetlands are present within Pack Forest. These are primarily located near the center of the property, with several adjacent to Pack Forest Lake. Other wetlands are found along the outlet of Pack Forest Lake and in the vicinity of Millington Brook. As with the areas of steep terrain, any trails constructed in or near these wetlands will have to be carefully planned so as to ensure that the trails remain accessible and that no undue impacts upon the wetland ecosystems are initiated. Figure 5 shows a map indicating those areas in the vicinity of Pack Forest that were identified by the Adirondack Park Agency as consisting of wetlands.

Summary

Pack Forest has the resources necessary to develop a successful recreational trail network, including attractive scenic destinations, and an already active user base. Several challenges exist that must be overcome in reaching this goal, including the need to provide for a natural experience free of visual impact by man-made facilities, and the difficulties inherent in routing trails through steep terrain and wetlands. With careful planning, these obstacles should not prove insurmountable.

Pack Forest Roads and Trails

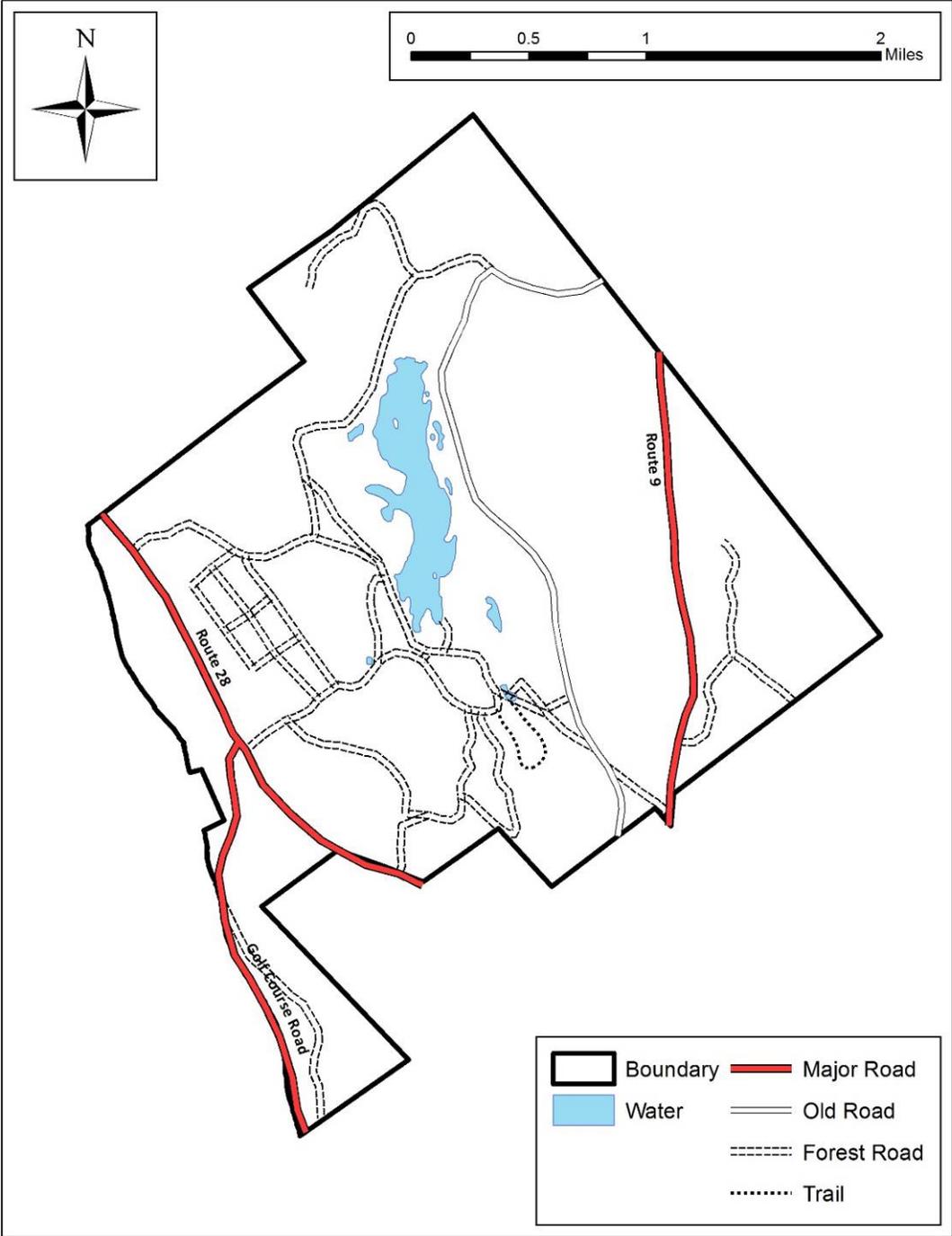


Figure 2. Roads and Trails of Pack Forest

Pack Forest Topography

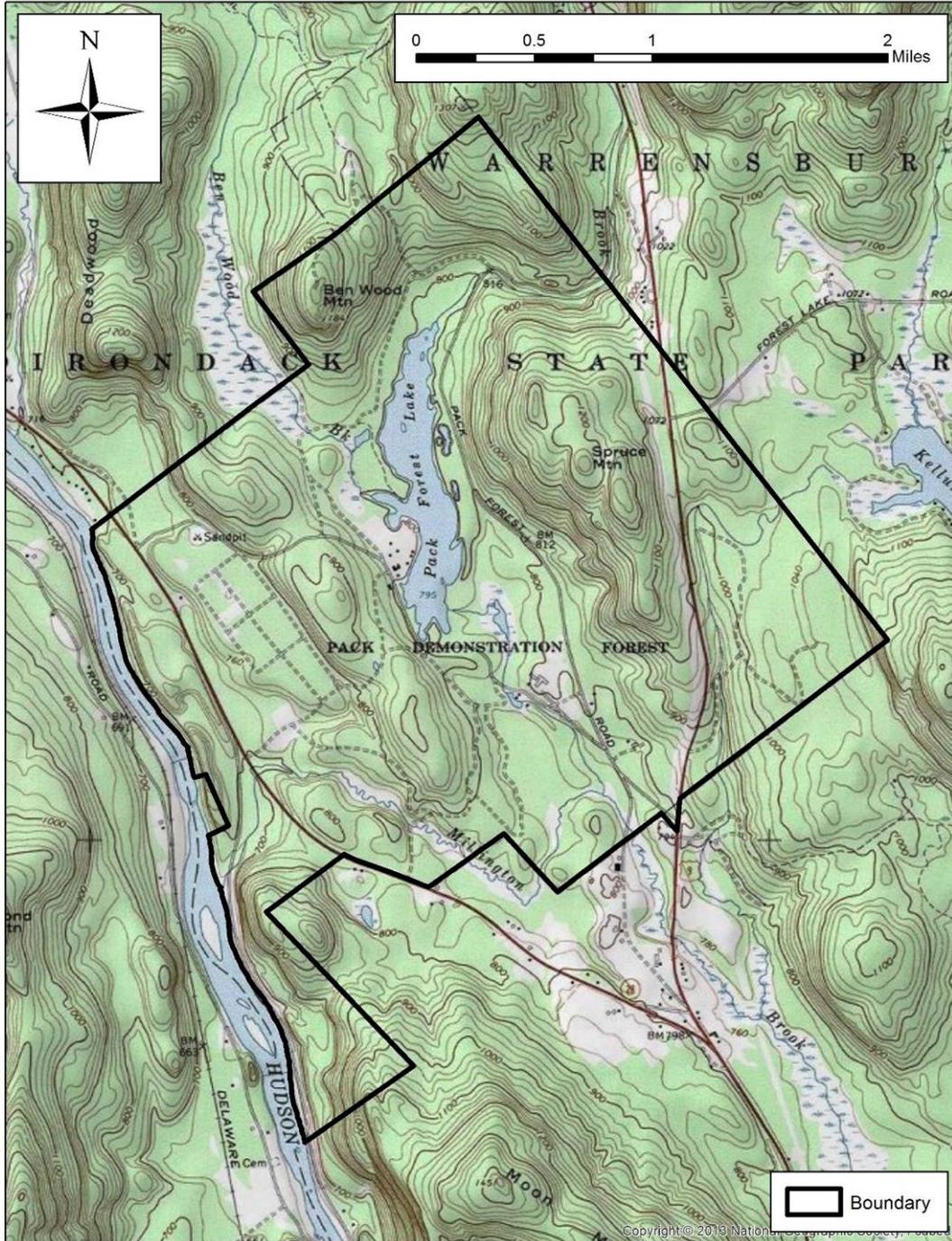


Figure 3. Topography of Pack Forest

Pack Forest Slopes

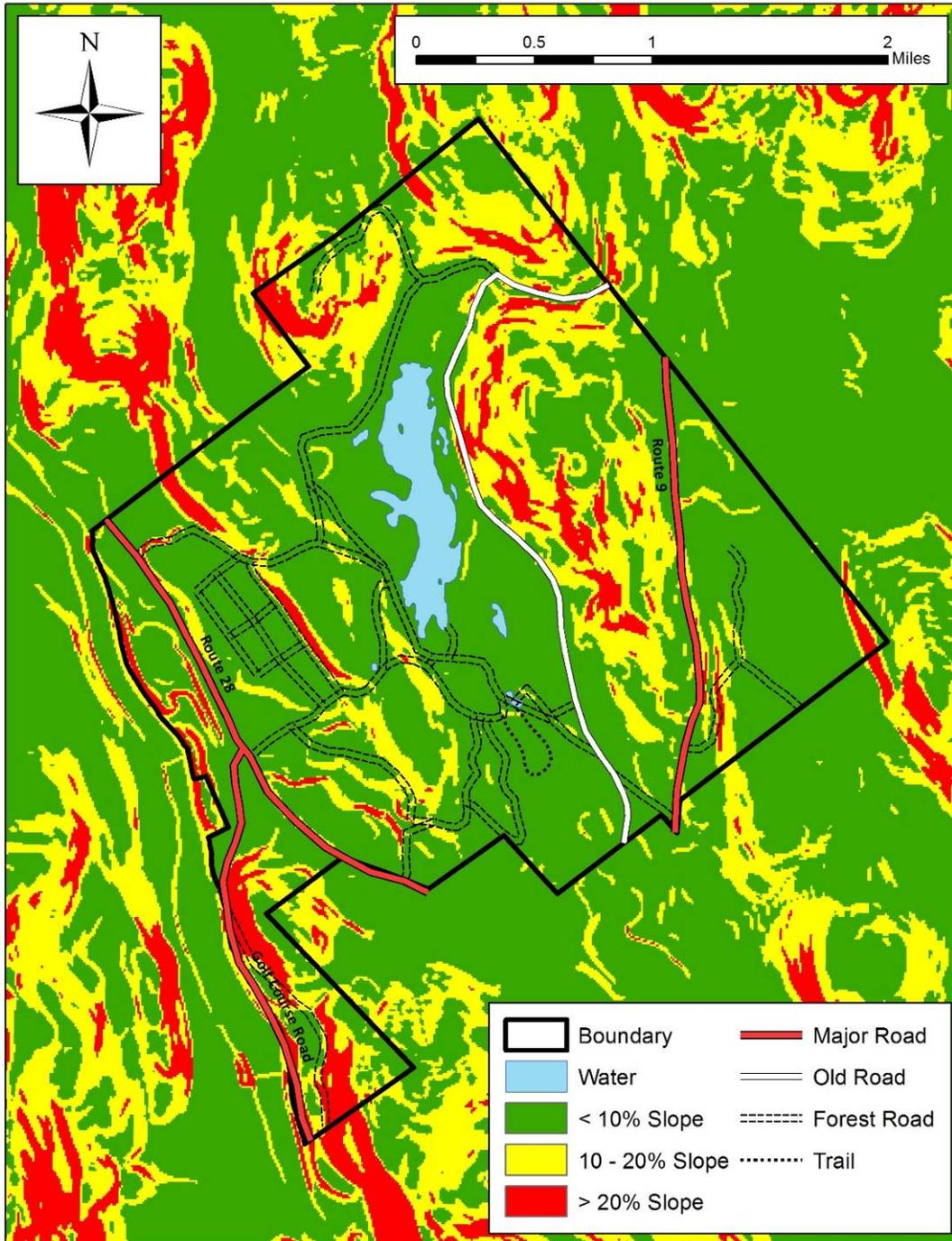


Figure 4. Pack Forest slopes

Pack Forest Wetlands

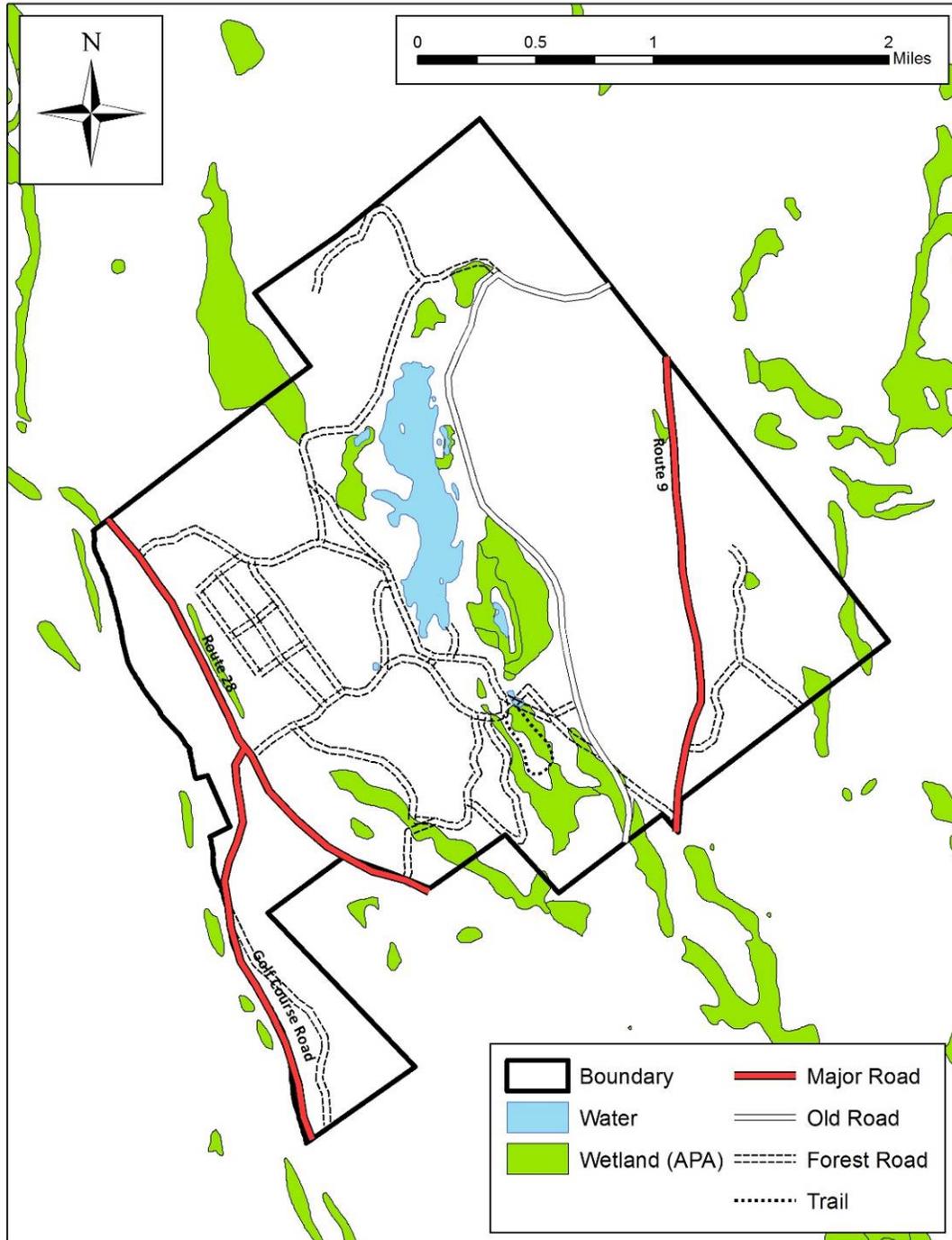


Figure 5. Pack Forest Wetlands

INFRASTRUCTURE ASSESSMENT

Introduction

Pack Forest is a 2,500 acre wooded property managed by SUNY ESF in the town of Warrensburg, NY. The site has a long history of use as a summer research and education facility, but after a fiscal crisis in 1990 the SUNY ESF summer program was moved to the Ranger School and now Pack Forest is underutilized (Davis, 10/4/2104). A portion of the property is maintained by the Department of Environmental Conservation and used as a summer environmental camp for youth, but most of the infrastructure on the property is in need of repairs and improvement. This report assesses the current state of infrastructure on the property.

Entrance

The current entrance to Pack Forest is off of route 9 in Warrensburg, NY. It is marked by a large sign in a roofed kiosk. The sign advertises SUNY ESF and the ecology workshops for teenagers that occur on the site. The sign is large and informative, but it does not specifically advertise recreation opportunities for the public such as hiking and boating. The entrance driveway is big enough to accommodate large vehicles with trailers.

Roads/Access

US route 9, also called Main Street, is an off property road providing access to the only public entrance to Pack Forest. It has wide shoulders, approximately 3 feet on each side, and connects Pack Forest to the town of Warrensburg (Partelow, Lester E., 1941). The shoulder width is good for bicyclists. However, R J Sweet Inc is a large saw mill currently operating very close to the entrance to Pack Forest. Logging trucks often drive along route 9, causing a safety concern for bicyclists (Googlemaps, n.d, Davis, Bob, 10/4/2014).



Figure 6. Route 9 provides access to Pack Forest (photo: Vanessa Gravenstine)

US Route 28 is a scenic byway, it is more heavily trafficked and has a smaller shoulder compared to route 9 (Cawley, Sarah, 2014). There are 5 entrance points to Pack Forest off of route 28 (Partelow, Lester E., 1941). All of these entrances are currently gated and closed to public vehicles. On the property, these roads become small, unimproved logging and forest service roads. There are wetlands in Pack Forest along the eastern side of route 28 for about a half mile (Partelow, Lester E., 1941). These access points may be useful for emergency situations and maintenance operations even though they do not serve as public entrances.

Old Route 9 is a first class forest road that runs on Pack Forest property for 2.5 miles (Partelow, Lester E., 1941). The road surface is mostly frost heaved pavement and gravel. It is possible to drive on this road, but would not be sustainable in the long term. It has not been maintained and there is no shoulder. Like many roads in Pack Forest, Old Route 9 has suffered damage due to Hurricane Irene (Davis, Bob, 10/4/2104). This road is important because it leads to the “old lodge” building. Even though it needs major improvements, the presence of this road will prevent the need to build new roads to attractions on the property, which will in turn minimize the habitat disruption that can result from new infrastructure construction.



Figure 7. Signage with Old Route 9 in the background and close up of Old Route 9 surface (photo: Vanessa Gravenstine).



Figure 8. Golf Course Road – first class forest road (Photo: Vanessa Gravenstine).



Figure 9. Road to DEC camp – first class forest road (Photo: Vanessa Gravenstine).

There are several first class forest roads and logging roads within Pack Forest which vary in surface type and condition of maintenance. These roads include the packed dirt and gravel road from route 9 to the office/maintenance buildings and the well maintained and smoothly paved, Golf Course Road which runs along the Hudson River (Partelow, Lester E., 1941).

Golf course road has a narrow shoulder but does include many pull outs and scenic views. Pack Forest also has a plethora of poorly maintained logging roads crisscrossing the property. These roads are often used as trails by locals on foot, bicycle or horseback (Jackson, Brendan 2014).

There are only a few trails within Pack Forest, the largest of which is the handicapped accessible or ADA trail. This trail has a few benches, some educational and informational signage and is delineated in many places by a wooden border. This trail is a great asset to Pack Forest, but the slippery boardwalk surface on many of the bridges will need to be improved. On the north side of Pack Forest, there is also a 500ft trail on Ben Wood Mountain, it is connected to a logging road. There are also a few trails near the dam and the open marsh area south of the lake (Partelow, Lester E., 1941).

Buildings

Several buildings are located within Pack Forest. The DEC camp is a part of the property which is currently being leased to the Department of Environmental Conservation for \$1.00 per year, the lease will be terminated, renegotiated or renewed in 2017. The DEC runs eight 1-week long popular field ecology camps for teenagers during the summer. The organization is responsible for maintenance of the buildings and grounds within the camp area as well as all utility costs incurred by camp operations (Davis, Bob, 10/4/2014).

The camp area includes student and faculty cabins, an office, a dining hall, a laundry building, washroom buildings with showers and restrooms, and picnic areas with lake access. To date the DEC has repaired the septic system, removed lead paint from the buildings, and repaired the shower and laundry facilities. There are plans to build a first aid building and a pavilion in the near future (Davis, Bob, 10/4/2014). All buildings are ADA accessible, but have no infrastructure for heating or winter residency. These buildings would make great facilities for the visiting public, however Pack Forest benefits from the improvements that the DEC is making and does not currently have the staff, visitor numbers or other resources to warrant managing these building on its own.



Figure 10. Well maintained paths around buildings at DEC camp (Photo: Vanessa Gravenstine)

There is limited winter housing in Pack Forest. Two useable winterized residency buildings are located on the property, the manager's house which is mostly vacant, and the caretaker's house which has full time residents. Bob Davis, SUNY ESF/Pack Forest properties manager, and other visitors sometimes stay at the manager's house. The caretakers house has an old garage that is not used and could be taken down (Davis, Bob, 11/6/2014).

The old Resource Conservation and Development (RC&D) building is currently vacant and in need of repairs, but could be revitalized and turned into usable year-round housing for researchers. It is insulated and has a kitchen, bathroom, sleeping area, satellite TV and internet. It needs a better well and showers (Davis, Bob, 11/6/2014).

The "old lodge" would make an excellent visitor center. It has a restroom, water, a kitchen, and adequate space for parking. It is connected to aerial electrical lines, but is currently disconnected from the meter because the lodge is not being used (Davis, 11/6/2014). It is a beautiful building that could easily be renovated to become a welcoming and educational space.

Near the old lodge and the ADA trail is a cluster of maintenance buildings. The area includes an old sawmill, an office with a small bathroom and conference room, a maintenance shop, several small vehicle storage barns and some sheds. The old saw mill might be useful as a museum or maybe some of the vintage equipment could be displayed in the visitor center. These maintenance and office buildings will probably be important if visitor numbers increase, therefore increasing the need for maintenance and operations staff and equipment.

Existing Parking



Figure 11. Parking near office.

The majority of the existing parking is by the office and maintenance buildings. During the class field trip we measured the parking area directly outside of the office, it was 4,375 square feet (25 ft by 175 ft). Google Earth imagery shows that there is much more space in addition to the measured space which could accommodate a large number of cars. Bob Davis estimated that over a hundred cars could park in that area, it is the largest clearing in Pack Forest (11/6/2014).

Although some landscaping and demarcation would be necessary, it could provide parking for day users, staff and overflow from other areas. Currently, visitors park on the side of the road (old route 9) when using boat launches or going for day hikes. They most likely feel unsure about whether or not public parking is allowed in the maintenance building area.

Additional parking on the property includes a parking area for the DEC camp and space for cars in front of the lodge. By the ADA Trail, there is a grassy area with space for about 3 cars. If a campground is constructed in the future, a parking spot should be provided by each campsite.



Figure 12. Area highlighted in red is 4,375 square feet (25 ft by 175 ft), but there is much more space for parking around these buildings. (Source: Google Earth)

Electrical and Lighting Systems

Aerial electrical and telephone lines run from route 9 to the DEC camp and along the forest roads to the maintenance buildings and the old lodge (Partelow, Lester E., 1941). Electricity is metered and tied into the grid. The DEC pays for camp utilities and keeps a generator on site. The DEC buildings and maintenance buildings have exterior lighting. The old lodge has exterior lighting, but it needs to be upgraded. There is no electricity on other parts of the property (Davis, Bob, 11/6/2014). At current, the lighting and electricity system is adequate. If a campground is opened and use of the boat launches and lodge increases, there will be a need for more lighting so visitors feel safe in the evening. Electricity will also be needed at the campground for emergency purposes.

Sewage Systems and Restrooms

Septic systems are used for all Pack Forest buildings. The DEC is interested in expanding one of the septic systems on the DEC camp site (Davis, Bob, 11/6/2014). Restrooms are located in most buildings. However, the office/maintenance buildings could benefit from additional restrooms for use by maintenance workers and staff. There are currently no public restrooms in Pack Forest. Public restrooms would be needed near proposed infrastructure such as the visitor center, campground and trailheads. An environmentally friendly option such as composting toilets would be preferable.

Water

Access to potable water in Pack Forest is provided by several on site wells. At the DEC camp there are 2 wells, a pump house and several propane tanks for heating water and providing heat for dryers. The caretaker's house and manager's house each have a well, there is one well for the office/maintenance buildings, and there are plans to put in another well for the old RC&D building. The cost of putting in a well is about \$15,000 (Davis, Bob, 11/6/2014). There are no public drinking fountains. More wells might be needed in order to provide potable water to the public, including water at the campground and drinking fountains near trailheads.



Figure 13. DEC camp – electrical lines, water, propane and generator
(Photo: Vanessa Gravenstine)

The Pack Forest Lake is one of the biggest attractions in Pack Forest. The lake has two rustic undeveloped canoe launches on the east side. On the south end of the lake is a dam that functions to maintain the level of the lake. It is a Class A, low hazard dam which means that if it failed it would not damage homes or threaten human life (Davis, Bob, 11/6/2014). A few years ago the dam was inspected by engineers and was found to be capable of supporting two 25

megawatt turbines and could power the entire property on hydropower at current electricity usage rates (Davis, Bob, 11/6/2014).



Culverts are located at several spots where water runs underneath forest roads. The culverts are frequently dammed by beavers and Bob Davis is interested in building a bridge to replace the culvert closest to the office/maintenance buildings.

Figure 14. Culvert.

Summary

In conclusion, Pack Forest might not need additional roads or buildings in order to support higher visitor numbers, but the property will need improvements for existing infrastructure. The forest roads need to be widened and re-surfaced in order to accommodate heavier use. The lodge would need to be renovated and turned into a functional visitor center. If a campground is added to the property it would need water, electricity and restrooms. Year-round lodging for researchers could be obtained with a renovation of the old RC&D building. There is space for parking at the DEC camp, at the lodge, and by the maintenance buildings; however, the public currently parks on the old route 9. Parking needs to be better organized near the maintenance buildings and parking is needed at the future trailheads and campground. Overall, Pack Forest is in a good position to be upgraded to a more fully functional and higher capacity park for tourists, locals, students and faculty.

INTERPRETIVE MATERIALS

Introduction

It is important and necessary for a place of interest or potential visiting center to obtain interpretive components. Interpretation is an approach used to connect the public with their surrounding environments. It is an educational activity that aims to reveal meanings about our natural resources and culture (Beck, 2011).

Various media such as guided tours, brochures, trail signs, wayside exhibits, and even promotional websites can be considered in the use of interpretive materials because it helps to enhance the visitors understanding of a specific place. Understanding often times leads to appreciation and thus protection of these natural wonders and historic landmarks. It is important to express interpretative material in a personal and individualized way to elicit a response from the visitor. Interpretation is informational, inspirational and often times intuitive because it seeks to preserve the future of particular places across the world by provoking general awareness. Interpretation takes place in museums, forests, wildlife refuges, zoos, national parks and cultural sites. Through interpretation, visitors gain a better understanding of a places' beauty and meaning, and in turn develop a desire to protect it for future generations.

Current Interpretation at Pack Forest

Interpretation is a process by which visitors see, learn and experience first-hand the resources a particular area possesses. Currently, the amount of interpretation offered at Pack Forest is minimal. It greatly lacks any connection that visitors often seek out through interpretation when attending new places. Pack Forest has potential to be a place that offers significant recreation, spiritual and educational values through interpretation, but that potential is not being met.

Pack Forest is an interesting story in itself. However, there is limited expression of the area's natural and cultural history and a significant need to showcase the individuality of this forest in order to engage public interest.

There is one current interpretive trail that provides the visitors with access to a forested ecosystem and to a few historic sites. Along the trail there are small interpretative signs detailing the surrounding environments, however, many of these signs are outdated. The signs are difficult to notice and visitors rarely stop to read the information provided on them, and therefore did not provide for an educational or inspiring experience. The text was drawn out, too long and did not capture attention. These signs do provide the visitor with biological and ecological information but in a way that is not interactive or stimulating, often times easily forgettable.

Along the main trail lies one of the most important of Pack Forest's cultural and ecological resources, the Grandmother Tree. This grand White Pine is a characteristic example of the old growth present along the trail. Near the Grandmother Tree is a small sign that details the story of the tree. The story is worth sharing and definitely deserves more attention, however, the sign is small and difficult to read. The white pine is one of the last old growth trees standing succeeding the microburst of 1995. This organism deserves for its story to be shared to the visitors in a way that expresses its ongoing wonder.

The opportunities for interpretation at Pack Forest must be greatly expanded if the area is going to become noticed and used by other demographics amongst our population. It is essential that the use of interpretative materials is enhanced in order to get this area the visitation it deserves.

Resources for Additional Interpretation at Pack Forest

In the midst of Pack Forest, a historic lodge possesses unique charm. At the moment, the lodge is used only for storage. It shows great potential to be an interpretive center. The style of the infrastructure is captivating and draws attention.

It's a beautiful building that holds much history when inside. There are numerous planks of wood from the past signed with the names of students who attended the forest summer program in the past. These artifacts are not showcased, but instead hidden. The lodge is home to items that have the potential to fascinate potential visitors. People are intrigued by the past and want to learn more if the information is handed to them attractively. This building holds much promise because the appearance is interesting which leads to visitor curiosity.

The local communities of Warrensburg and Lake George another potential asset that could aid in interpretation at Pack Forest. Potential visitors who may seek opportunities for interpretation include not only local residents, but visitors to these communities from outside the region. Having access to this community and showing the opportunities that are available to them will benefit and add to the success of Pack Forest.

Use of Interpretive Materials at Nearby Visitor Centers

The Wild Center in Tupper Lake, New York provides interpretation to the public through a variety of resources. Its visitor center is innovating, interactive and attention grabbing. It has a strong following and has established for itself a community. Resources for interpretation at the Wild Center include brochures, on-site exhibits, an interactive website, media rooms, live animals, guided tours, and many more interpretive materials that add to the visitors' experience.

The Adirondack Interpretive Center (AIC) located in Newcomb, New York is another center that provides opportunities for interpretation to tourists within the Adirondack Park. Interpretation at the AIC is facilitated through the use of interactive exhibits and brochures.

The surrounding centers provide different examples of interpretation. Nevertheless, both centers have the same mission: enhance the visitors' ultimate experience in an area in a way that is fun, engaging and lasting.

Summary

Interpretation can be an asset to Pack Forest as it will provide increased public awareness of the property, maintain inspiration throughout the forest by the implementation of accessible information, and provide an overall positive experience. Pack Forest needs to become a location for visitors where the experiences they share foster a sense of place attachment that encourages them to both return to the area in the future, and desire to protect its natural and cultural resources. Pack Forest needs to enhance its use of interpretive materials in order to get the public recognition it deserves. Through interpretation, Pack Forest has the potential to provide a destination for visitors that is educational in addition to recreational.

INTERPRETIVE CENTER BUILDING ASSESSMENT

Introduction

Pack Forest is a property owned by the State University of New York College of Environmental Science and Forestry (SUNY ESF). It is located in an area that serves as a gateway to the Adirondack Park, making it an outstanding location for visitor traffic. The property has an exceptional potential for environmental interpretation, especially with the presence of a new interpretive center.

This would require an appropriate building that would include facilities such as restrooms, exhibits, classroom space, and offices. A successful interpretive center is often accessible for disabled individuals, offers convenient parking, and is surrounded by a number of trails. Pack Forest certainly has the potential to develop an interpretive center that offers these facilities to its visitors. Two examples of successful interpretive centers within the Adirondacks are the Adirondack Interpretive Center (AIC) and the Wild Center.

Adirondack Interpretive Center

The Adirondack Interpretive Center, located in Newcomb, New York includes a beautiful 6,000 square foot building used for visitor education and recreation. The building features a large classroom (Figure 15) that could be used for a number of different programs or presentations. There is a kitchen area that is used mostly for storing food for events as well as a large and well-maintained restroom for visitors. The remainder of the space is filled with tasteful exhibits relating to characteristics of the property. Additionally, there is a plan in place for altering one of the large rooms into a forest exhibit room focused on natural resources and wildlife.



Figure 15. The Adirondack Interpretive Center classroom.

Parking: There is easily accessible and convenient parking available just outside of the interpretive center. The walk from the parking lot is smooth and short, making the center available to almost anyone interested.

Accessibility for disabled individuals: The Adirondack Interpretive Center seemed quite accessible to disabled individuals. There are four primary trails on the site, and one is ADA (Americans with Disabilities Act) accessible. The trail is easily reached and can be used by individuals in wheelchairs. The center was fairly accessible for disabled individuals as well. It was open enough for a wheelchair to move around freely.

Trails: There are four trails that are located at the Adirondack Interpretive Center. In the summer, the trails are used for hiking and guided interpretive walks frequently. Additionally, the trails are commonly used for bird watching, wildlife viewing, photography and running. In the winter, snowshoeing and cross-country skiing are fairly common. Several points on the trails have canoe access, so that paddlers can also access the site.

The Wild Center

The Wild Center complex encompasses a total of 54,000 square feet. The entire property is pictured in Figure 16. The building, pictured in Figure 17 was built on an old mining site in order to reduce habitat destruction of viable habitats and to make use of an otherwise useless property. It was built with sustainability in mind, using solar panels and a renewable heating system. Additionally, it was the first LEED certified museum in New York State. One of the large rooms on the inside of the building is pictured in Figure 18. The rest rooms are compostable toilets, pictured in Figure 19, which are odorless and waterless toilets to help conserve freshwater. The center has a own café and store to purchase merchandise and food at. There are many exhibits in the center, one of which, a forest exhibit, is pictured in Figure 20. There is also a theatre, a planet room, and other areas that could serve as classrooms.



Figure 16. The Wild Center aerial view.



Figure 17. The Wild Center building.



Figure 18. One of the large rooms inside of the center.



Figure 19. Composting toilets.



Figure 20. Forest exhibit.

Parking. There are two parking lots at the center. A unique feature of the parking lots is that they were designed to be green parking systems. An image of a lot is pictured in Figure 21. The pavers used last three times as long as typical blacktop, saving the center maintenance costs. The grass sections allow for percolation, which will help to filter pollutants out of the water running through.



Figure 21. Green parking lot

Accessibility for disabled individuals. The center is quite accessible for disabled individuals. Wheelchairs are available for loan for no cost, as well as a power scooter and wagons for children. There is a 0.2-mile accessible loop trail that is around Greenleaf Pond. There are also guided nature walks that are specifically designed for the visually impaired. Some of the videos shown in the movie theatre are captioned, and all of the videos in the forest exhibit are captioned. Finally, there are assisted listening devices for theatre performances.

Trails. There are three primary trails at the Wild Center. Additionally, there is a canoe path where tours are given in the summer. They are quite simple and easy to access. The trails are used for hiking and for guided interpretive walks. In the winter, the center offers free snowshoe rental for the trails.

Pack Forest

Existing Buildings. Pack Forest is fortunate to have a significant amount of available infrastructure already in place. There is an office building, which seems to be the most utilized building on the site. It is not big enough to function as much more than an office building, but it works efficiently for that purpose. The office building is pictured in Figure 22. There are also two barns near the office building. These buildings would be great for storage. There is a campground that has been rented out by the Department of Environmental Conservation for several years. It is in excellent condition and the main building is pictured in Figure 23, followed by Figure 24, which shows one of the cabins. The most underutilized building, which has arguably the most potential, is the old lodge on the site. The outside of the building is pictured in Figure 25, followed by Figure 26, which shows some of the interior of the building. There are several small rooms surrounding the main room on the ground floor, as well as some rooms in the attic on either side of the lodge. Additionally, there is a basement used primarily for storage. There is a decent amount of open space around the lodge that could be used for parking.



Figure 22. The main office



Figure 23. The main building in the campground.



Figure 24. One of the cabins on the campground.



Figure 25. The exterior of the old lodge.

Potential for Future Construction. According to Bob Davis, there is potential for future construction if it is necessary. In one of the barns near the office, there appeared to be a plethora of lumber that could possibly be used for construction. Additionally, it would apparently be an option to relocate some of the existing buildings instead of building new ones. Considering the existence of the magnificent old lodge, it seems that although construction is an action worth considering, the old lodge would be an excellent building for a new interpretive center.

Summary

Pack Forest is located in the perfect location for visitor traffic. It is such a vast and beautiful property that it arguably has more to offer than other interpretive locations in the Adirondack park. It has existing infrastructure that could be quite advantageous for development. The most underutilized building with perhaps the greatest potential is the old lodge on the site. The interpretive opportunities on the property are abundant. In developing an interpretive center, the site will have to be sure that it is ADA accessible, with convenient parking, restrooms, easily reached trails, and eye-catching exhibits that help to promote the unique characteristics of the property.



Figure 26. The interior of the old lodge.

INTERPRETIVE CENTER EXHIBITS

Introduction

This assessment will discuss the interpretative exhibits that could be created in an environmental center in Pack Forest. The interpretative exhibits will be based off the resources and history of Pack Forest. Current on-site and online exhibits will be explored at two interpretive centers in the Adirondacks. This assessment will describe the onsite and online exhibits of the Wild Center and the Adirondack Interpretive Center to provide examples of types of exhibits that can be applied to Pack Forest.

Resources at Pack Forest

The resources at Pack Forest that could be the focus of interpretative exhibits include the ice meadows, maple syrup collection, Pack Forest Lake, old growth white pine forests, the grandmother tree and the grandmother tree trail, Charles Lathrop Pack's gravestone, and the association with SUNY ESF. Education about these exemplary resources could be provided to visitors through on-site exhibits or online exhibits.

The Wild Center

Onsite Exhibits. The onsite interpretative theme of the Wild Center is different ecosystems in the Adirondacks. Exhibits are mixed between indoor and outdoor exhibits. The exhibits are broken down by ecosystem and assembled in a formation inside the center so that the visitor can make easy transitions from one exhibit to the next (A. Fox, personal communication, October 30, 2014). An example of an exhibit can be seen in Figure 1. Exhibits feature live animals, multi-media shows, hands-on activities, and other interactive installments (The Wild Center, 2014).



Figure 27. An example of an exhibit at The Wild Center. *photo credit: Becca Chambers*

The live animal exhibits feature river otters, ducks, and fish, among many other animals that the center presents for events. The otter exhibit has two otters on display at a time but has more otters living in the Center. There are plenty of aquariums found inside the center that showcase the different fish species of the Adirondack region. The ducks and the fish are found together in the marsh exhibit. There is also a butterfly garden trail that grows native flowers to attract different species of butterflies. There are many other animals that are used in the Big Wolf Great Hall for programs (The Wild Center, 2014).

The multi-media shows are featured in the Flammer Theater and Planet Adirondack. The Flammer Theater hosts events daily and screens movies. Planet Adirondack is a large world globe that takes up one section of the center. Through the use of technology, the presenters can show different events happening around the world and relate it back to the Adirondacks. This is an exhibit that can be visited by guests as well as utilized as a tool for educational programs (The Wild Center, 2014).

There is a hands-on room where visitors can hold and interact with objects on display. It is referred to as the “Naturalists’ Cabinet” on the website (The Wild Center, 2014). Other exhibits have different interactive features. There is one exhibit that allows visitors to stand on a substance that simulates walking on moss. There is another exhibit that simulates a cloud and encourages visitors to “touch a cloud (B. Chambers, personal communication, October 17, 2014).” Figure 2 depicts the “touch a cloud” installment of an exhibit.



Figure 18. "Touch a cloud," as part of an exhibit. *photo credit: Becca Chambers*

The Center is currently working on a new exhibit called “Wild Walk” that is projected to open in the summer of 2015. The Walk will take visitors above the forests and give them a different perspective on the landscape. The Walk will also feature detailed stories and provide objects for visitor interaction. It will include a tree house, raised bridges, and raised walkways (The Wild Center, 2014).

Online Exhibits. The online exhibits display a similar theme to the onsite exhibits. Instead of focusing on different ecosystems of the Adirondacks, the online website focuses on specific species or concepts in the Adirondacks. The website dedicates a tab with information that visitors can access any time. This information can be found under the “Dig In” tab of the Wild Center’s website. The “Dig In” page offers a few different informational tabs (Dig In, 2014).

The informational tabs include: “Our River Otters,” “All About Monarchs,” “Island in the Sky,” “Mother of Invention,” and “The NASA Movie.” “Our River Otters” offers information about the otters that are part of the live exhibit as well as general information on otters. “All About Monarchs” offers videos and readings on how to grow different plants that attract butterflies. It also provides information about monarch migration. “Island in the Sky” is an informational page about the high peak, White Face. It offers the most information of all the tabs and includes facts about White Face, like how it got its name. “Mother of Invention” offers pictures of different animals and interesting facts about what they can provide to humans and their respective ecosystems. “The NASA Movie” refers to the film *Water Falls*. NASA selected the Wild Center to host the world premiere of the film on January 25th, 2014. The tab on this part of the website provides information about precipitation and water that relates back to the Adirondacks (Dig In, 2014).

There is a section on their website that allows visitors to “Tour the Center.” It is a very brief overview of what The Wild Center offers. It is organized in a slide show with pictures and brief descriptions of some of the exhibits (The Wild Center, 2014).

The Adirondack Interpretive Center

Onsite Exhibits. Many of the materials for the exhibits at the Adirondack Interpretive Center (AIC) were left over by the Adirondack Park Agency, who formerly operated the center. The visitors who utilize the center range in age as most of the visitors are people who are stopping in while visiting the Adirondacks. Their onsite center sees about 5,000-7,000 visitors annually, with the bulk coming through during July and August (K.L. Pasquino, personal communication, October 4, 2014).



Figure 29. Pelts of various animals found in the Adirondacks.

The exhibits vary and include taxidermy animals, skulls and skeletons of local animals, an eagle wingspan, minerals and rocks, animal pelts, a room with activities for children, and informational signage. Figure 3 and Figure 4 depict two of the exhibits. The center also has a balcony for viewing wildlife and different guide books visitors can use to identify what they see.

The AIC is in the process of opening a new exhibit. The “Northern Forest Room” will include three-dimensional interactive displays and paintings on the natural and human history of the Northern Forest and Adirondack Park (Pasquino et al., 2013). The exhibit will be split into three different sections. It will consist of the “Northern Forest Wall,” “Forest Community Wall,” and “Science in the Adirondacks Wall.” The exhibit will also consist of oversized plate-glass windows for year-round wildlife viewing. It will also consist of paintings and mounted specimens common to the Adirondacks. The “Science in the Adirondacks Wall” will showcase the student and faculty research conducted in the Adirondacks (Pasquino et al., 2013).



Figure 30. Children's room with interactive materials.

Online Exhibits. The Adirondack Interpretive Center is featured on websites through SUNY ESF and NYSDEC. Through the DEC website, there is a list of “Wildlife to Watch” while at the AIC. By clicking on one of the listed animals, the visitor on the website is brought to another page where they can read more information about that animal. It has facts entitled “Did You Know?” along with listings of the best place to see the animal (Adirondack Interpretive Center, 2014).

The AIC has another webpage through SUNY ESF. On this page, there is a tab marked “sightings.” This has tables that list the different animals and plants that have been recently sighted at the AIC. Under the “Reconnect to Nature” tab there are links that the visitor can click on to bring them to different websites. Under the “Resources for Kids” heading the visitor will find “The Water Page,” “Recycle Works,” “Science Project Ideas,” and “Energy.” This is information that can be accessed and utilized by the visitor at any time (The Center for Nature Interpretation in the Adirondacks, 2014).

Summary

The exhibits at both the Wild Center and the Adirondack Interpretive Center provide excellent examples of interpretive exhibits in a nature center. The Adirondacks feature strongly in themes of both the nature centers. The exhibits provide great ideas for engaging the public that can be applied at Pack Forest. Even though the setup of the Wild Center exhibits and the AIC exhibits were different, they were still able to provide information to the visitors about the surrounding areas.

ASSESSMENT OF NEARBY CAMPGROUNDS

Introduction

Pack Forest is a demonstration forest operated by SUNY ESF. It has been more heavily used in the past, yet current resources are underutilized. However, it has potential to be a vibrant community again. One component of a revitalization plan for the property is the addition of a campground. The following report is an assessment of what resources are present and what would be required in order to establish a campground at Pack Forest.

Pack Forest is ideally located to serve as a gateway to the Adirondacks. The planned campground for the site is envisioned to be a rustic, sustainable, and family friendly. Due to the site's unique connection to SUNY ESF, the campgrounds will accommodate for a wide range of users, from students to families to backpackers. Identifying this customer base is a critical first step to assessing the site. Knowing what will be required, we can evaluate the resources present and begin to plan the site design. Campground site placement is one example of how accurate assessments are a necessary step in the planning.

Local Campgrounds

Pack Forest would offer a unique camping experience. The facilities and resources at Pack Forest provide for an educational experience, the trails cater to a wide range of skill levels, and the landscape showcases a diverse array of habitats. The campsites envisioned will thus fill an underrepresented niche in the local area by providing for a more rustic, yet family friendly experience than that offered at some of the nearby campgrounds.

Within a thirty minute drive from Pack Forest, there are a number of campgrounds. Many of these are private parks, but there are two state parks. Pack Forest campground must be mindful of what the state parks offer so that there is no competition among state agencies. Additionally, it is important to be conscious of what the other campgrounds offer because this information can be used as a template of resources needed and to identify areas where Pack Forest can stand out.

An assessment of the regional campgrounds looked at an overview of each of the nine local campsites and observed many similarities. From the websites, it was clear that most campgrounds offered picnic tables and fire rings at each site. Seven of the nine campgrounds listed electric and sewage hookups in their site descriptions. Most of these additional hookups are for RV campers and would not be necessary at Pack Forest.

A majority of the campgrounds boasted beach access and swimming pools. Many of the sites further specified that the beaches were sandy and the pools were heated. Six campgrounds advertised having a camp store to sell food, clothing, firewood, and general supplies to visitors. Not necessarily the same six, listed that they allowed for pets to stay on site.

About half of the campgrounds websites described boat rentals, laundry facilities, outdoor sports facilities and game rooms. The boat rentals varied from kayaks and canoes to rafts and waterskies. Examples of outdoor sports facilities included volleyball courts, basketball courts, and tennis courts. Examples of activities inside the game room included TV, pool, shuffleboard,

foosball, and ping pong. Four of the campgrounds listed playgrounds on the premises. Another four campgrounds promoted their wifi and cable access.

Just two of the campgrounds listed amenities which were ADA accessible, including tent and RV sites, trails, and showers. One campground listed mountain biking trails and another campground listed a shuttle to Lake George. Table 3 shows a further breakdown of what amenities each campground has to offer and the cost to rent each site. From this list, it can be observed that the local campgrounds have a variety of offerings and facilities available, however, Pack Forest's facilities and resources can incorporate additional activities and thus expand the local offerings. (Adirondack Camping Village, 2014; Daggett Lake Campsites, 2014; Hearthstone Point, 2014; Lake George Battleground, 2014; Lake George Escape Camping Resort, 2014; Lake George River View, 2014; Schroon River Campsites, LLC, 2014; Stony Creek Family Campground, 2014; Warrensburg Travel Park and Riverfront Campground, 2014)

Campground Placement

Site placement is crucial to a favorable design. Depending on the location and resources available for camping, it will ultimately affect the overall design of Pack Forest's trails, buildings, and general visitor flow.

There are four main considerations when determining the best site placement: topography, proximity, vegetation and soil type. The topography is the main constriction for campground placement at Pack Forest. Although Pack Forest encompasses 2,500 acres, much of that is terrain in exceedance of slopes appropriate to campsites. Additionally, surrounding the lake are many open and forested wetlands. Secondly, proximity is a measure of how near the campground is to main roads, hiking trails, interpretive center, and other facilities at Pack Forest. The campground should be relatively easy to access from each of these locations, yet site placement must be conscious of use zones and ideally be located away from heavy day use and traffic areas. In Pack Forest there is threatened vegetation in the ice meadows along the river. Campground placement must avoid this rare and sensitive area. Lastly, the soils must be able to support the use level associated with camping. For example, wetland soils will be muddy and frequently inundated with water while exposed soils are susceptible to wind erosion and easily degraded. (Davis, 2014; Hultsman, Cottrell, & Zales-Hultsman, 1987)

Given these three parameters and the site's unique relationship with the Department of Environmental Conservation, there are two locations which are best fitted for campgrounds. Currently, Pack Forest leases a section of its land to the Department of Conservation. The DEC uses the facilities for a summer camp program in exchange for upkeep and maintenance of the leased area. This relationship has been crucial in preserving many of the buildings. In 2017, the DEC has the option of choosing not to renew this lease. Their decision will play a role in site placement and consequently there are multiple options for campground site placement.

In the first scenario, in which the DEC would not renew the lease, site evaluations identify the northeast shore of the lake as the best fit. In the second scenario, in which DEC does renew the lease, site assessments propose the campground placement to be located between the experimental plots and the current DEC camp on the western shore of Pack Forest Lake.

The northeast campground will be located on a narrow plot of land extending east of Old Route 9. Distances further than that and closer to Spruce Mountain, are too steep for campsites. Elevations in this area quickly change from 820 to 860 feet. Additionally, in this section there are two old logging roads which can be employed for one-way campground flow paths. The eastern side of the lake rates very strongly in the proximity assessment. It is approximately one mile away from the proposed interpretive center and even closer to trail heads for Spruce Mountain and Ben Wood Mountain. Furthermore, there are two small boat launches on the eastern side of the Lake. Lastly, the soil is comprised of a sandy loam. Sandy loam is a relatively well drained soil, thus being near to the lake will not be a concern because the soils are not susceptible to flooding or ponding. Figure 31 shows the USGS soil map for Pack Forest. (Partelow, 1941; US Department of Agriculture, 2013)

The western campground can be allocated a larger area of land because the slope is less steep. Elevations range from 880 to 920 feet over a larger area of land than the northeastern location. As with the northeast site, the western site also has two old logging roads which would allow for one-way traffic and ease of visitor flow through the campground. This site is approximately a quarter mile from the current DEC camp and 1.3 miles from the proposed interpretive center. The nearest hiking trails are the Grandmother Tree and Ben Wood Mountain Trails. Similarly to the northeast site, the western campground is located on sandy loam soils. Further northwest of the proposed location, there is a sand pit which is susceptible to wind erosion. Without further assessment it is unknown if there is potential to have similar issues with the proposed campground location. At this point, it does not appear to impact the proposed location but further research would be required to determine its significance. (Partelow, 1941; US Department of Agriculture, 2013)

Campground Design and Potential Challenges

After assessing what local campgrounds provide and by becoming familiar with Pack Forest's resources available, the next step in planning is considering site design. It is important to know what features the campgrounds will incorporate and what amenities should be added in the future plan.

Pack Forest campgrounds should ideally be designed in clusters as to provide maximum privacy for campers. Clusters include a cleared area for tent placement, yet the clearing is surrounded by trees and vegetation. This buffers noise and creates a more secluded, primitive atmosphere. However this design may be challenged by the topography of the site, especially at the northeast site. On the other hand, Pack Forest campground is proposed to be relatively small in comparison to other regional sites and may suit the narrow plot well. (Hultsman, Cottrell, & Zales-Hultsman, 1987)

An assessment of other regional campgrounds showed that almost every campground includes a campfire pit, picnic table, and parking at each site. In Pack Forest careful site planning will be crucial to minimizing the risk of fires, the chances of graffiti and resource abuse, and the confusion of traffic flow patterns. Flow patterns and parking are of special concern because Pack Forest vision requires minimal vehicle use. However, at both proposed campground locations there are preexisting logging roads. With some maintenance, those roads can provide the

backbone needed to the campground and move cars through in a one-way flow path. (Hultsman, Cottrell, & Zales-Hultsman, 1987)

Aside from individual site design consideration, the campground overall will need to include additional features. These include light, water, restrooms, and dumpsters. Electricity and water are crucial to camper safety and health and will be provided for in the infrastructure plan. The restrooms and showers provided will incorporate green technology because Pack Forest is envisioned to be a model for sustainable technology and management practices. Furthermore, they should be ADA accessible. Given the fact that only two regional campgrounds currently provide this, Pack Forest can expand their accessibility to all.

One of the largest concerns resulting from the assessment of campground placement and design needs is the separation of day users and overnight customers. The DEC presence is very influential in this, but there are other factors as well. For example the northeast campground runs the risk of user conflict with its proximity to the boat launches. This has the potential to create traffic and interrupt the campgrounds. One solution may be to place a gate at either side of Old Route 9 to direct traffic and users. For the western site, the proximity to the experimental plots and the DEC summer camp has the potential to create user conflict. These are items which must be addressed in the planning of the campgrounds to ensure the best campground design, maximum user enjoyment, and ensure minimal areas of concern.

Lastly the campgrounds require a shelter or common area. This common area is seen repeatedly throughout the assessment of regional campgrounds. However, many of those were in the form of a game or arcade room. Rather than relying heavily on such forms of electronic entertainment, Pack Forest requires a more rustic arrangement. One example is a pavilion where guests can be sheltered from the rain, meet one another, and relax. This area can potentially provide a few grills for cooking and picnic tables.

Summary

An assessment of Pack Forest and surrounding regional campgrounds highlighted the enormous potential for a successful campground at Pack Forest. Many of the resources required are already present at the site and Pack Forest offers additional resources which many of the other campgrounds do not. Furthermore, results from the evaluation of topography, proximity, vegetation and soil type pointed to two locations best suited for campgrounds. Each proposed site has advantages and disadvantages, yet the presence of the DEC summer camp will play a large role in site location choice. Evaluation of resources currently present and assessment of amenities offered at local campgrounds identify features to include and forecast potential challenges which may arise in campsite planning at Pack Forest. The recommendations report will address possible solutions to incorporating all such features and propose resolutions to identified challenges.

Table 3. Select attributes of regional campgrounds.

Campsite Name / Contact	Stony Creek Family Campground 518.696.5029	Lake George Battleground St.Campground 518.623.1200	Hearthstone Point State Campground 518.623.1200	Daggatt Lake Camping / 518.623.2198	Adirondack Camping Village 518.688.5226	Lake George Escape 518.623.3207	River View Campground 518.623.9444	Warrensburg Travel Park & Riverfront Campground 518.623.9833	Schroon River Campsites 518.623.2171
Address / Distance from Pack Forest	18 Grist Mill Rd / 27 minutes	2224 State Route 9 / 19 minutes	3298 Lake Shore Dr / 18 minutes	660 Glen Athol Rd / 16 minutes	42 Finkle Rd / 14 minutes	175 E Schroon River Rd / 12 minutes	3552 State Route 9 / 8 minutes	136 Schroon River Rd / 9 minutes	686 Schroon River Rd / 13 minutes
Electric / Sewage			Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes
Fire ring / Picnic table	Yes / yes	No / yes	No information / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	
Parking / Camp Store	No information / yes			No information / yes	No information / yes	No information / yes	Yes / no	No information / yes	One car per site / yes
Beach / Pool	Yes / yes	No information / yes	No information / yes	No information / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes	Yes / yes
Boat Rental			Yes	Yes			Yes	yes	yes
Other Activities	Playground, game room			Mountain biking, outdoor sports courts, water sports	Playground, movie, game room, outdoor sports courts	Outdoor sports courts, Lake George shuttle, movies	Game room, outdoor sports courts, min golf, playground	Game room, outdoor sports courts	Game room
Number of sites	39	68, ADA accessible sites	251, ADA accessible sites available			575 Rv sites, 30 tent sites, 55 cabins	125		
Price	30 per night primitive tent sites, 38 per night full hook up RV	22 per night	22 per night	35-45 per night tent, 375 per week cabin, 555-855 per week cottage	36-58 per night per site, 65-100 per night cabin,	27+ per night RV, 20+ per night tent, 45+ per night cabins	37-55 per night per site	30-35 per night tent, 50-75 per night RV	25-47 per night per site, 82 per night cabins

OVERALL DESIGN ASSESSMENT

Introduction

Pack Forest is a 2,500 acre wooded property on the southern edge of the Adirondacks just west of Lake George and five miles north of Warrensburg, NY. (NYS DEC, 2014) Donated to the State University of New York College of Environmental Science and Forestry (SUNY ESF) in 1927 by Charles Lathrop Pack, the site supports ongoing environmental research and education. (SUNY ESF, 2014) The site's relatively accessible trails, 85 acre lake, and variety of scenic habitats attract visitors from neighboring communities, researchers from SUNY ESF, and an annual DEC youth sleep-away camp. (NYS DEC, 2014) The DEC maintains the camp facilities, while SUNY ESF manages the rest of the property. (SUNY ESF, 2014)



Figure 32. Pack Forest. Photo credit: C. Ponte

The overall character of site is rustic and secluded, making it a welcome contrast to the more heavily developed and visited recreational areas in the popular Lake George region. That said, the property's existing infrastructure and high quality natural features are well situated to support a greater degree of visitation and recreational use.

Currently, no plan exists to designate the spatial organization of the site's multiple uses and that identifies ways to develop Pack Forest as a successful self-sustaining research and recreational attraction into the future. The following assessment provides an overview of the existing use and design of the site, exploring suitability of various areas for different activity needs. The overall design is categorized into use zones that introduce key features explored in greater depth in other chapters within this plan.

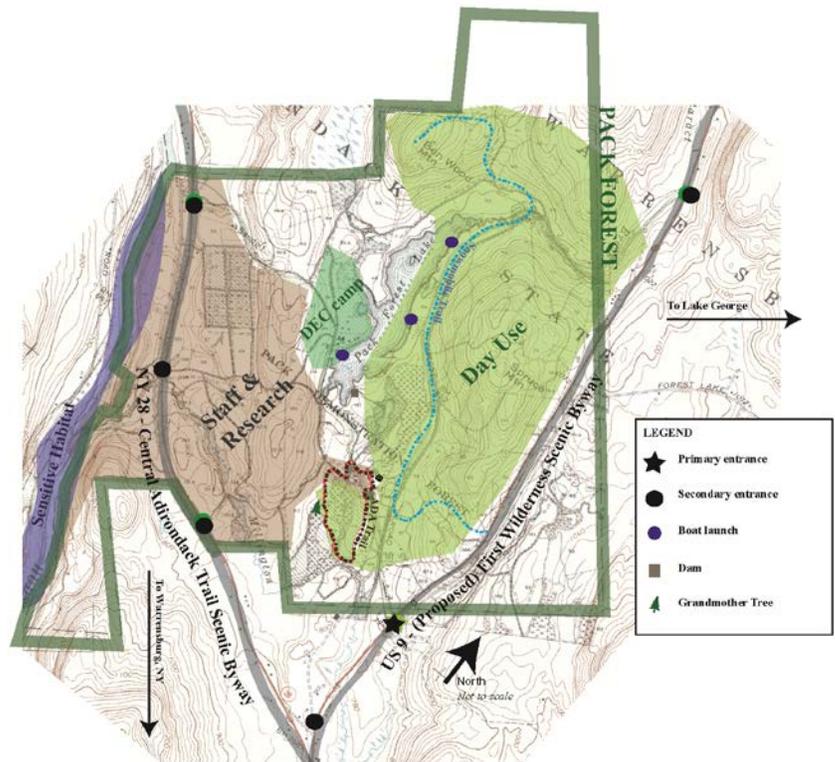


Figure 33. Pack Forest map overlay showing use zones, existing attractions, entrances, and relationship to neighboring areas – created using Adobe Photoshop and Illustrator CS5 by C. Ponte

Entrance Zone

The primary entrance to Pack Forest is located on the south side of the property where old US 9 and present US 9 intersect. (Figure 33 and Figure 34) This entrance is the most well maintained and frequently used of the 6 access points to the property. Old US 9/Pack Forest Road splits north of this entrance with one branch continuing along the original US 9 route until it connects with present US 9 and the other heading west toward Pack Forest Lake past the DEC campground until it connects to NY 28. Other access/egress points are currently gated and the logging roads connected to these points are in poor condition. They serve as emergency/staff entrances to the facility. The quality of the existing primary entrance is enhanced by its connection to US 9

which becomes the Main Street of Warrensburg, NY just south of the property. The wide shoulder of US 9 is favorable for biking, creating a nice connection to town bike routes. The First Wilderness Scenic Byway being planned for US 9 also presents potential for more regional connections at this point. (NY DOT, 2014). While the angle

of the entrance is a bit sharp, the width of the road near this entrance allows for two-way traffic and can be expanded to include entrance infrastructure if needed (Figure 35). This entrance is also closest to the existing staff offices, parking area, ADA trail, and the unused historic lodge which can be repurposed for public use (Figure 34). The intersection of two scenic regional routes (NY 28 and US 9) south of the property also encourages a southern entrance to the facility. Furthermore, the present entrance is well positioned to serve as a mediating space between the day use recreation attractions on the eastern side of the property and the working areas on the far western side of the property (Figure 33).

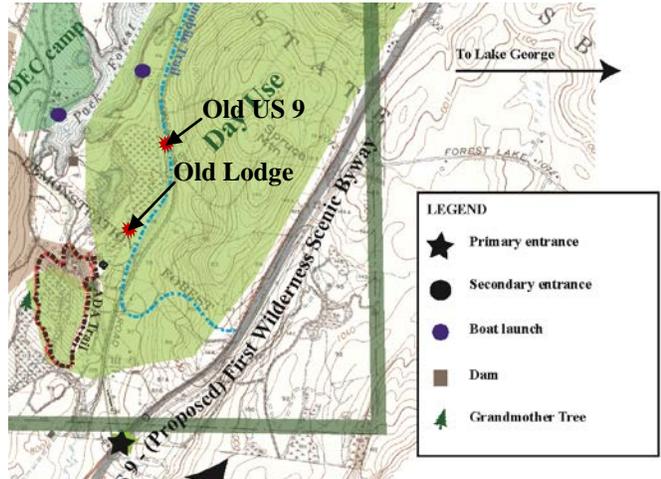


Figure 34. Primary entrance at intersection of old US 9 and present US 9/ (Proposed) First Wilderness Scenic Byway/ Main Street of Warrensburg, NY.



Figure 35. Pack Forest Primary Entrance. Photo credit: V. Gravenstine

Staff & Research Zone

The central area on the south side of the property is currently where offices, storage, and the property caretaker's home are located (Figure 36). These actively used structures are connected to the existing utility systems on site. Facility Manager Bob Davis is exploring the possibility of generating hydro-electric power from the existing dam on the south side of Pack Forest Lake to provide alternative power to this infrastructure. He is also open to repurposing unused structures, such as the old Saw Mill and RC&D house, to better meet facility needs (Figure 37). The reuse of the RC&D building for seasonal staff housing is especially of interest since the site presently has no sufficient way to accommodate seasonal workers. (B. Davis, personal communication, Oct. 5, 2014).

According to Bob Davis, active forestry research is ongoing on the far west of the property in a series of square research plots. The shoreline of the Hudson River along the westernmost edge of the site also contains rare ice meadows of interest to environmental researchers and preservationists (Figure 33). Other activities on the west of the property include the use of the steep slopes on the north side of Moon Mountain for search and rescue training. (B. Davis, personal communication, Oct. 5, 2014).

This concentration of non-recreational features on the south and west side of the park can be organized as a staff and research zone kept separate from visitor day use and camping. Separating these uses is important both for visitor safety and to minimize visitor disruption to facility operations. The area categorized as the research and staff zone has sufficient space to accommodate additional supply storage, staff areas, training activities, and research projects beyond what is currently taking place (Figure 33).



Figure 36. Pack Forest caretaker's home. Photo credit: C. Ponte



Figure 37. Pack Forest sheds and old Saw Mill. Photo credit: C. Ponte

Day Use Zone: Interpretation/Hiking/Boating

The logging roads throughout the site offer relatively easy strolling surfaces to access attractions such as the lake, Charles Lathrop Pack's tombstone, the Ben Wood Mountain summit, and the ADA nature trail. Visitors to Pack Forest roam through these old logging roads with minimal interpretation and guidance. No overall interpretive plan exists for the site



Figure 38. Pack Forest directional signage. Photo credit: C. Ponte

and way-finding is limited to a few directional signs near the primary entrance (Figure 34). This creates confusion for visitors and potential user conflicts on the site. The site has problems with horseback riders not using appropriate trails. Active forest research areas and campground areas present conflicts for day-use recreation. Sensitive habitats, like the ice meadows along the Hudson River, can also suffer damage from unknowing visitors. While the low amount of visitors has kept incompatible activities at a minimum, this might change in the future if more day-use visitors come to Pack Forest.

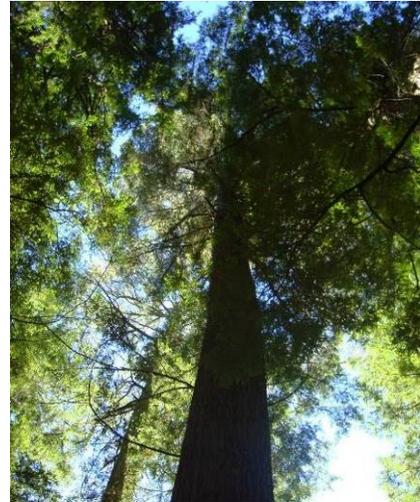


Figure 39. Old growth pines. Photo credit: C. Ponte

The main attractions promoted to the public are the lake and the ADA nature trail, both accessible from old US 9 near the primary entrance (Figure 33). The nature trail offers views of an impressive old growth pine known as the “Grandmother Tree” (Figure 39). The large lake offers calm water for paddling that is enticingly removed from the more commercialized waterfront of Lake George and the white-water of the Hudson River. Lake access is available at two points on its east shore where boaters can drive up and park along old US 9. In the wintertime, this route also doubles as a snowmobile trail that takes riders up to the summit of Ben Wood Mountain (Figure 33).

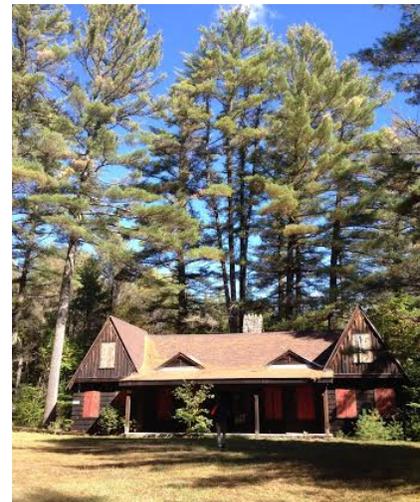


Figure 40. Old lodge. Photo credit: C. Ponte

Bob Davis is interested in repurposing the old lodge building located along old US 9 (Figure 40). The lodge and the area surrounding it may be ideally suited for transformation into a future visitor center. The building is still connected to existing utilities. (B. Davis, personal communication, Oct. 5, 2014) Its location places it close to the primary entrance, the ADA nature trail, the lake's eastern shore access points, and the Ben Wood Mountain summit trail. Parking for cars, bikes, and even snowmobiles can be accommodated by using the open space near the lodge and in the existing parking area near the staff office.

Camping Zone

Camping on the property is limited to the NY Department of Environmental Conservation (DEC) maintained facility on the western shore of Pack Forest Lake (Figure 41). The DEC uses this space for their annual youth summer camp from late June to mid-August. (NYS DEC, 2014) The seasonal campground contains a variety of structures ranging from 20 person cabins to a large dining hall. The buildings are not winterized, so off-season use is very limited. The maintenance/use agreement for these structures will be revisited in approximately 15 years. (B. Davis, personal communication, Oct. 5, 2014).



Figure 41. Cabin from DEC campground. Photo credit: C. Ponte

Alternative accommodations for non-DEC campers do not exist on the site.

Complications, such as steep terrain and lack of privacy, make it difficult to site a location for additional tent camping. Through careful design, a small rustic campground may be possible in the low area between the eastern shore of Pack Forest Lake and Spruce Mountain (Figure 42). This area would allow for easy lake access, attractive views, proximity to the Ben Wood Mountain trail, and less than 2 miles walking access to the old lodge. On the east side of the lake, it would be removed from the DEC camp and research areas. The area also has an electrical connection along the old US 9 corridor. Potential conflicts between day-users and campers in this recreation-intensive area will need consideration.

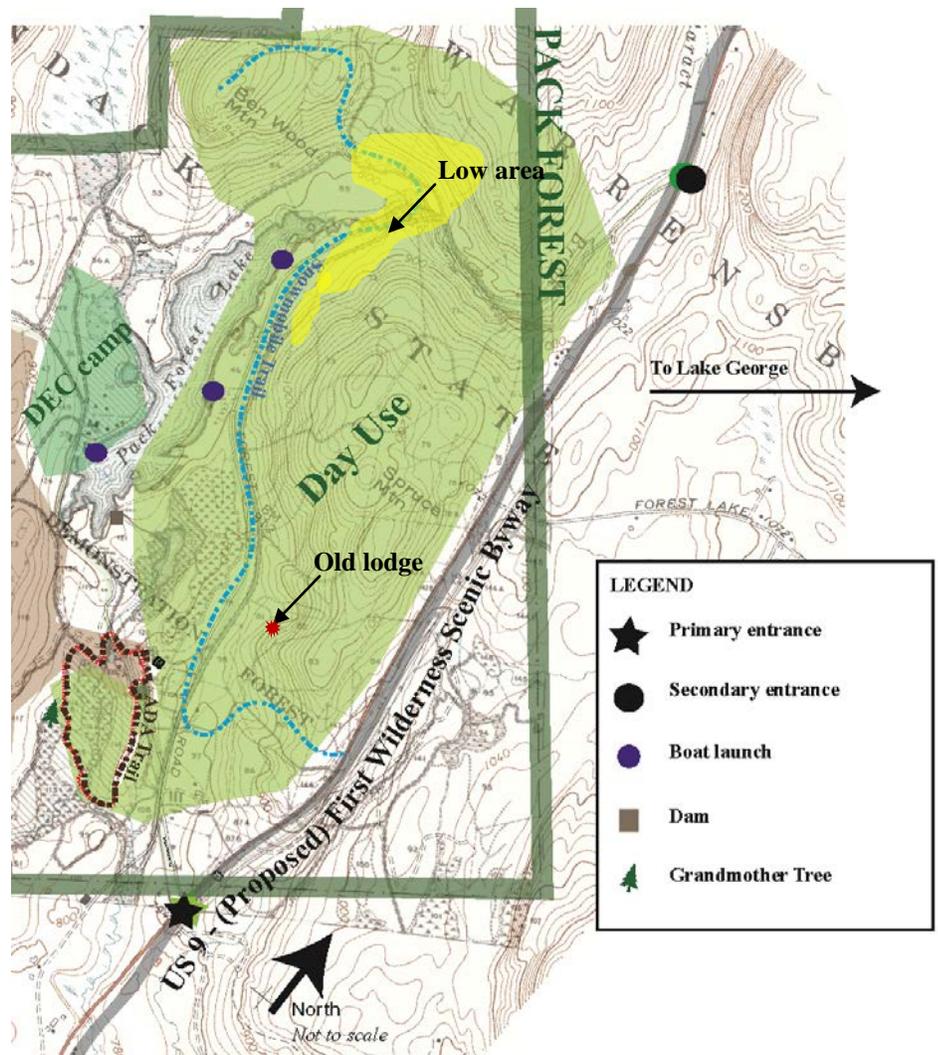


Figure 42. Additional campsite possibilities at Pack Forest in relation to existing features.

Summary

Categorizing Pack Forest into different use zones provides a basis for developing recommendations for smoothly integrated structural and programmatic changes on the property. The site has many advantageous features which need only be maintained and enhanced.

The existing primary entrance is already well located for building stronger connections with Warrensburg and taking advantage of the new First Wilderness Scenic Byway along the US 9 road corridor. It need only be enhanced as a more formal welcome area with greater orientation for visitors. The division of visitors to the east (lodge area) and maintenance/staff use to the west (saw mill area) will improve the overall function of this entrance area. The proximity of the lodge and saw mill areas however allow for easy movement of staff between visitor and non-visitor areas. Permission and funds are needed for any recommended road work, signage, and building repairs to improve this entrance zone.

The staff/research area need not experience a large amount of transformation and more non-recreation activities can be encouraged in this area. Recommendations are needed for converting the old RNC building to seasonal staff housing and connecting it to the existing staff areas. Since the facility currently lacks on-site housing beyond the care-taker residence, this is an important consideration for better meeting programmatic goals.

The day use zone can be improved through more thoughtful interpretation and improved trails. Recommendations for separating trails by user type and skill level will expand the recreational potential of the area and minimize user conflicts. Recommendations are also needed regarding the use of cars on old US 9/Pack Forest Road and where parking should be located. Managing the old US 9 corridor for different users will be a challenge where multiple scenarios may need to be explored. Overall vehicle movement through the site should be carefully managed, perhaps focusing visitor vehicular traffic to the southern portion of the day use zone and the more southern boat launch area. On-site visitor management strategies will need to be considered to encourage day-use recreation in some areas and not others. Connections to nearby attractions may also be explored along this eastern portion of the property.

Camping opportunities on the site beyond the area used by the DEC are limited by the steep terrain of the property. New overnight use areas will be constricted by this lack of space. The seemingly best location for tent camping at Pack Forest outside of the DEC camp area is also along the potentially busy old US 9 road corridor. Space and logistical restrictions on the number of campsites may hinder the feasibility of offering this service to the public.

Overall, the site can build on its existing positive reputation as a quiet secluded get-away in an otherwise developed and crowded tourist region. Design recommendations can spring from quality existing features and underused/remnant infrastructure. The repurposing of areas and materials both saves money and fits with the environmental mission of this SUNY ESF owned facility. All design recommendations should keep in mind ways to balance the valued reclusive character of the site with the desire to increase public use of Pack Forest.

MARKETING GROUPS ASSESSMENT

Introduction

This report aims to identify visitor demographics for Pack Forest to provide a basis for future marketing of the area to those who are most likely to use it in the future. This analysis is based on data collected from the Warren County Tourism Department, Adirondack Interpretive Center, the Wild Center at Tupper Lake, a Hudson Valley survey commissioned by the Schenectady County Legislature and a national nature tourism study conducted by the American Fish and Wildlife Service. The analysis is broken down into four key categories of demographic information: where visitors are from, visitor gender, age, income level and education, length of stay and recreational needs and interests.

By analyzing this data and identifying a target group, it will then be possible to develop a marketing strategy to best attract new visitors to the site and meet the project goal of increasing visitation by 25% each year. This will also help site planners to realize the vision of making Pack Forest into a “primary destination that attracts visitors and residents for outdoor education and recreation experiences.”

Visitor Characteristics

Where visitors are from. It can be expected that visitors will primarily come to Pack Forest from New York State, New Jersey, Connecticut and Massachusetts. In the most recent study of Warren County, 53% of visitors were reported from within New York State, 16% of visitors were from New Jersey, 6% were from Connecticut, and 5% from Massachusetts (Warren, 2012). 83% of people surveyed identified themselves as returning visitors (Warren, 2012).

In Tupper Lake in a year, more than 60,000 people, 5,000 of which were students from 96 schools visited the Wild Center (Wild Center, 2012). A national survey also found that for nature tourism destinations, 64% of visitors were from urban areas and 36% from rural regions (FWS, 2011).

A recent Adirondack survey also found that in 2012, for the second year there was a strong trend of a larger proportion of visitors coming to the park who live within a day’s drive or less than there was in previous years (Adirondack, 2012). This statistic was echoed by the Wild Center report which found that 85% of visitors were from nearby areas in 2011 (Wild Center, 2012). The Warren County data supports this finding as 3,393,013 people visited the area for a day trip, while only 571,486 persons stayed at local campgrounds (Warren, 2012). The Wild Center survey in Tupper Lake, however, also found that their international visitors came from approximately 40 countries and their domestic visitors came from all 50 states (Wild Center, 2012).

Gender, age, income level, education. A national study also reports that in general, visitors to natural areas in the United States are 46% male and 54% female, which is near even (FWS, 2011). However, a study of the Hudson Valley found that when visitors are singles, they are predominantly male (Feeney, 2000). Both the Hudson Valley survey and the Warren County data also indicate that with respect to age, trip planners are primarily in the 40-50 year old age group and slightly more likely to be female (Feeney, 2000) (Warren, 2012). There was more diversity

in ages in groups as for every 4 adult visitors there was 1 child (Warren, 2012). The Wild Center annual report found that their visitors in 2011 ranged from 0 to 104 years of age (Wild Center, 2012).

As far as income level goes, the average salary of 40% of visitors to Warren County was in the range of \$81-120,000 while 25% of visitors were in the range of \$41-80,000 (Warren, 2012). Similar figures were also found by the Fish and Wildlife Service Assessment (FWS, 2011).

In terms of education, the Warren County survey found that 34% of visitors had attended a 4 year college, 25% had attended a 2 year college and 19% had just a high school diploma. In general though, most visitors had received some level of higher education. However, it may also be useful to note that the Wild Center visitors' professions have been recorded as teachers, governors, senators, civic leaders and scientists (Wild Center, 2012). As such, it may be beneficial to also consider targeting marketing to professionals in various fields more so than those who have achieved a certain level of education.

Length of stay. The Warren County survey found an average stay of 3.8 days for overnight visitors (Warren, 2012). The Adirondack survey found a similar figure of 4.9 days for overnight visitors (Adirondack, 2012). Additionally, the Wild Center report found that on average, visitors stayed in the region for 4 days or more (Wild Center, 2012). The Adirondack survey also noted though that this figure of a 4 night average represented a substantial increase from the 2011 average reported visit duration of 2.8 days (Adirondack, 2012). It is also higher than the five year average of 4.0 nights (Adirondack, 2012).

With respect to time spent in the interpretive center, it was recorded that the average visitor spends no more than 2 hours at the wild center (Wild Center, 2012). The Wild Center of course has more resources and interpretive materials than most visitor centers, however this benchmark can serve as a good estimate for how long visitor attention span is. However, it may also be useful to keep in mind the findings of a 2010 study published in the Wall Street Journal which revealed that visitors only spend an average of 2 minutes on a single exhibit (Arnsdorf, 2010).

Recreational needs and interests. Some potential concerns of visitors to Pack Forest may include: a lack of services, trail conditions, personal safety, conflicts with other trail activities, the behavior of other trail users, dangerous road intersections, directional signage, accessibility and parking (Feeney, 2000). Visitor interests can be divided into two camps, indoor and outdoor activities. Outdoors 45% of visitors were most interested in scenic touring, 43% in outdoor sports and 26% in hiking (Warren, 2012). Indoors 73% of visitors were most interested in dining, 69% in shopping and 17% in history, heritage and arts (Warren, 2012).

It may also be valuable to note that the Hudson Valley study recognized an untapped demand for biking and heritage tourism in New York State (Feeney, 2000). As such, the available resources which may best appeal to visitors include: public recreation opportunities, health and fitness facilities, open space conservation areas, riverfront access, environmental education opportunities and special events locations. The event space in particular is a big draw for the Wild Center hosting 70 meetings of outside organizations and more than 1,250 wedding guests attend weddings at the center each year (Wild Center, 2012). The Wild Center assessment also

found that some of the unique draws of their park included: a regional science space to enhance their education programs, volunteering opportunities (300 participants per year) and behind the scenes tours at visitor center (Wild Center, 2012).

Advertising Methods

For advertising purposes, it may be useful to observe that 73% of visitors researched and found their destination using the internet, while only 39% found it through mailings for Warren County (Warren, 2012). 30% of visitors also noted when surveyed that their choice to visit was influenced by coupons or discount opportunities (Warren, 2012). The Wild Center survey found that 6 out of 7 of visitors made Tupper Lake their destination of choice because of visitor center (Wild Center, 2012). Additionally, the center has a global web presence. In an average month, it is estimated that people from more than 150 countries access the educational functions of the website to learn about the area and the experiences it has to offer (Wild Center, 2012).

Summary

The findings of this assessment suggest that the Pack Forest key visitor demographic will primarily consist of people from New York State, New Jersey, Connecticut and Massachusetts and mainly from urban areas. It can also be expected that a large percentage of visitors will be from local areas, within a day's drive, especially school groups. There is no gender that is more likely to visit the forest, however for singles there may be more of a market for men and for group trip planners there may be more of a market for women.

The target demographic of trip planners are also mostly middle aged people from upper middle class and upper class income brackets. Visitors are also mostly college educated. It can be expected that overnight visitors will remain in the area for approximately 4 days. People are also likely to stay a maximum of 2 hours at the visitor center, provided it is large enough and provides ample interactive exhibits and interpretive opportunities.

When looking for activities, visitors are likely to be drawn most by scenic tours and outdoor athletic activities, especially biking. However there also exists a potentially undeveloped market for Heritage tourism. Hosting events is also an attractive element for visitors as are volunteer opportunities. In selecting a nature tourism or ecotourism destination, people are also primarily motivated by internet research, however the use of mailed flyers and coupons has also yielded successful results.

ASSESSMENT OF PACK FOREST PROMOTION

Introduction

The Charles Lathrop Pack Demonstration Forest has tremendous potential to be improved as a primary tourism destination. Tourism promotion could be a very effective tool to attract a lot of tourists from near and far. Tourism promotion is important for publicizing and advertising the tourism experiences of a destination. Assessment of the present promotional condition of Pack Forest is necessary to develop an effective program of promotion for the site. This report will assess the present promotional status of Pack Forest. It will also assess the promotional efforts for nearby Adirondack Tourism destinations, Warren County tourism, and two interpretive centers in the Adirondacks.

Assessment of Promotion

Promotion of the Adirondacks. The Adirondacks is one of the most diverse destinations on the East Coast, offering unparalleled outdoor recreation. The Adirondack Park was first established in 1892 by the State of New York amid concerns for a need to protect the area (DEC, 2014). Today it covers an area larger in size than Yosemite, Yellowstone, Glacier, Grand Canyon and the Great Smokey National Parks combined (DEC, 2014). For destinations within the Adirondacks, promotion includes tourism guidebooks, brochures, websites (<http://visitadirondacks.com/>), maps, and newsletters. Assessments of promotional materials for Adirondack tourist destinations are given below:

Promotion on the Visit Adirondacks Tourism Website. On this website (<http://visitadirondacks.com/>) are a number of promotional materials for different attractions within the Adirondacks. Major regions in the Adirondacks include the Adirondack Coast-Plattsburg, Adirondacks Lakes, Adirondack Seaway, Adirondack Wild, Adirondacks Tug-Hill, Lake George, and Lake Placid regions. Different promotional materials found on the website include tour packages, photos, videos, maps and directions, information about restaurants and hotels, and information about recreation facilities (cabins and campgrounds, trekking, hiking, kayaking, canoeing, bird watching).

Promotion by Guidebooks. Guidebooks for the Adirondacks are found in every nearby store, all over New York, and in surrounding states. The guidebooks include information about Adirondack attractions, maps, and services. Samples of Adirondack's guidebooks are shown in Figure 43.

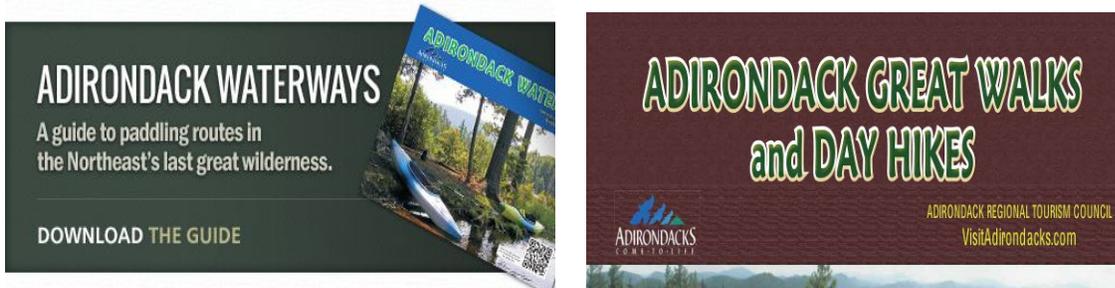


Figure 43. An Adirondack Tourism Guide (Source: <http://visitadirondacks.com/>)

Promotion by Brochure. Brochures are found in tourist destinations and attractions, and Chamber of Commerce offices and visitor centers in the Adirondacks. Brochures are usually promotional in nature, but often do contain educational information as well.

Products in Blogs and Social Media. Social media provides a place where tourists can share both good and bad experiences of the area visited. In blogs, tourists give very useful recommendations for future tourists and the authority. There are a bunch of blogs (some are associated with the tourism promotional websites of Adirondacks). Therefore, positive feedback by tourists in the blogs acts as an effective promotional mechanism. Also, tourists use social media such as Facebook, twitter, and YouTube to share their experiences. Social media plays a vital role to promote the Adirondacks as a destination.

Promotion through Newsletters. Another important promotional material for the Adirondacks is newsletters. These newsletters give important news, facilities, upcoming events, and attractions in the Adirondacks to tourists. Examples of some newsletters are the Hamilton County Express, the Adirondack Almanac, and the Hudson Mohawk Resources Conservation and Development Council newsletter.

Promotion by Radio or Television. Local radio gives information about the attractions in the Adirondacks. Thus, it is another important promotional tool for the area.

Examples of Promotion by Other Visitor Centers in the Adirondacks

There are different institutions within Adirondacks which are promoting the area in their own way. Pack Forest is currently not featured in these promotional materials.

Adirondack Interpretive Center (AIC) in Newcomb. The AIC offers outstanding learning opportunities within the Adirondack Park. It is managed by the SUNY College of Environmental Science and Forestry (ESF). Information about the AIC is found on the SUNY ESF webpage (<http://www.esf.edu/aic>). This website provides information about the events held in the Adirondacks, blogs (sharing the experiences by the tourists), trail information (summer and winter trail maps and Google maps), social media links, etc. The website itself is not interpretive, although the AIC itself is interpretive in showcasing biodiversity of the region, providing education or classroom facilities, showing photos and exhibits, and displaying literary collections.

The Wild Center (Tupper Lake). The Wild Center, situated in the Adirondacks, is another interpretive center. The website of the Wild Center is very well organized and gives information about the center and Adirondacks. Also, newsletters, photos and videos are exhibited in the website. The website has links to social media, where tourists can upload their pictures, memories, videos about their trips. Information about tour packages, hotels, and restaurants can also be found on the site. Most importantly, The Wild Center has a logo of its own (Figure 44). There are also mailing options which provides information to the public through e-mails. Maps are also found in the website.

The pictures and videos found on the website are highly interactive, and background pictures are animated, which makes tourists interested. The market groups of the Adirondacks are also

considered by The Wild Center. Information about school groups as well as various wedding packages can be found on this site. There is also information about volunteer opportunities and camping near the center. Anyone can purchase tickets for any package directly from the website. Lastly, there are a number of video clips found on the website.



Figure 44. Wild Center logo (Source: <https://www.wildcenter.org/>)

Promotion of Nearby Destinations

Lake George Area. The Warren County Tourism Department promotes the Lake George Area mainly through its website: <http://www.visitlakegeorge.com/home> (Figure 45). Information about recreation and camping facilities, events, tour packages, hotels and restaurants, and service centers around Lake George can be found on this website. Featured articles and newsletters can also be found on the website. Tourists and the community members can easily become members of the local Chamber of Commerce (COC) and be included in the mailing list. This site provides information about local COC funding.

Softcopies of brochures of the Lake George area are found on the website. Photo galleries and video clips on the website attract tourists to visit this area. Daily weather forecasts are given on the website so that tourists can easily plan their visit. To obtain visitor feedback, social media pages such as Facebook, YouTube, and twitter are directly linked with the website. For different seasons, the website lists different attractions.



Figure 45. Branding of Lake George Area (Source: <http://www.visitlakegeorge.com/home>)

Warrensburg, NY. Warrensburg is very popular for the world's largest garage sale (<http://www.warrensburgchamber.com/>), which is promoted well by different promotional materials. The Warrensburg Chamber of Commerce (COC; Figure 46) website gives full information about local commerce in the area (Figure 46). Information about camping, lodging, and events can be found on the website. Information such as the history of Warrensburg, maps, parking facilities during garage sale etc. could also be found from the COC webpage. Local businesses are mainly promoted by this COC, including local hotels and restaurants. Links to other Adirondacks tourism websites are given in this COC website.



Figure 46. branding of Warrensburg COC (Source: <http://www.warrensburgchamber.com/>)

Promotion of Pack Forest

Pack Demonstration Forest is used mainly for educational purposes. There is little promotion of the forest at present. Only the Adirondacks Tourism Website and Town of Warrensburg website provide information about the forest. Some information is found in the Pack Forest booklets named as “The Pack Organizations” and “Town Forests.” There are some maps and reports, such as Foster's "Charles Lathrop Pack Demonstration Forest" related to the creation and operations of the Charles Lathrop Pack Demonstration Forest. Another report is the recreational and economic value of forests called "Town Forests," and the operations of the Demonstration Forest (NY State History Archives, 2014). Other materials about Pack Forest can be found in different sources. Those are described below:

NYS Department of Environmental Conservation (DEC). The DEC website provides information about summer camps within Pack Forest, directions and small maps, recent events, pictures, camp schedules, and links to Facebook. These could be regarded as basic information, since there is little actual promotion of the forest for visitors.

Adirondack Tourism. This website (<http://visitadirondacks.com>) provides the Pack Forest map (Google map) and attractions around Pack Forest.

SUNY ESF. The webpage of SUNY ESF provides information about the Environmental Education Tour of the forest, the Adirondack Ecological Center, and the Cranberry Lake Biological Field Station.

Town of Warrensburg. The Town of Warrensburg website provides information about the location and facilities around Warrensburg, and a trail map for Pack Forest.

Social Media. There is a fan page for Pack Forest on Facebook where DEC campers share their experience. There are also a number of blogs where tourists wrote about the Grandmother Tree, hiking, old growth forests, and other experiences of the forest.

Newsletter. Newsletters in the Adirondacks only publish news about the scheduling of the summer camp at Pack Forest.

Guide books. There is no guidebook specifically for Pack Forest. However, stories about the Grandmother tree are included within guidebooks for the region.

Summary

In summary, at present there is no extensive promotion of Pack Forest. Some positive and negative aspects were found after assessing the potential for promoting Pack Forest:

Positive aspects:

- There are many existing documents and records available about Pack Forest.
- Promotion of nearby destinations is extensive because the Adirondacks is a prominent tourism destination in NY. There are also other attractive destinations in Warrensburg and Lake George which attract various tourist groups in different seasons.
- As there are very good promotional websites already in existence in the Adirondacks, it would be easy for Pack Forest to work with these promotional sites for its own promotion.

Negative aspects:

- As there are a number of renowned destinations in Adirondacks, Pack Forest will need to compete with promotions for other destinations.
- There is currently no visitor market data for Pack Forest.
- Funding and/or volunteer/staff time will be needed for promotions.
- Promotions will have to wait until after the visitor center is completed.

The Adirondacks have many tourism destinations and recreational facilities. Our main aim for Pack Forest is to create a tourism destination which will provide facilities for recreation and education. Therefore, it is very important to promote the area to attract tourists interested in the out-of-doors. Branding is very important for Pack Forest, so that tourists feel interest in visiting the area. Market information is also urgently needed to plan future promotions for the area.

Brochures and guidebooks will be needed for Pack Forest. Social media and blogs could play an important role in spreading news about Pack Forest quickly and easily. A website for Pack Forest can provide information (such as maps, photos, videos, trip schedules, events, etc.) in an interactive way. Membership opportunities could also be facilitated through the website. Thus members would be updated about new attraction or facilities. Lastly, advertisements through other promotional sites and media (radio, television, or newspaper) could help promote Pack Forest. In these ways, Pack Forest could become a primary destination for tourists in the Adirondacks.

ASSESSMENT: TRANSPORTATION TO PACK DEMONSTRATION FOREST

Introduction

This section of the report assesses the current transportation methods that exist to and around Pack Forest. The proximity to nearby towns, such as Lake George and Warrensburg, has also been taken into account. Existing travel routes and mode of transportation have been assessed and accounted for, as well as possible routes for other types of transportation, i.e. water ways.

Route 9

Route 9 is also known as Main Street leading out of Warrensburg, NY. It is a single road that brings drivers directly past the main entrance for Pack Demonstration Forest. It takes approximately five minutes to get to the main entrance from the center of town. The existing road is in fairly good condition, as one can see in Figure 1 below. There are many local residents and visitors who travel through the area, which makes this the perfect entrance for Pack Forest.

This route could be a prime travel road for visitors to Pack Forest. The shoulders are wide enough for bikers and walkers without the need to worry about passing vehicles. There are some stretches of the road that are narrower than others, and some that may pose a danger later on with ice heaves in the road.

As of now, there is no trail connection from Warrensburg to Pack Forest. This limits any walkers to the roads, and can also cause user conflict between the three modes of transportation stated above. Although the shoulder is wide in Figure 47 below, it is always a good idea to separate users when able to.



Figure 47. Google Maps view of Route 9 outside of Warrensburg, NY.

Route 28

Route 28 branches out of Route 9 just south of the Pack Demonstration Forest. This is a scenic road that goes from the Catskills all the way through the Adirondack State Park (Route 28, New York). There are multiple areas that can be used along this stretch of road as an exit point for Pack Forest. The existing road is in good condition, although the shoulders are narrower than they are on Route 9. This can be seen in Figure 48.

Experienced road bikers would be able to use this as a transportation method to and from both Warrensburg and Lake George. Apart from that, it would be difficult to allow others access to the shoulders without putting users in danger.

Route 28 cuts through Pack Demonstration Forest, and can be essential in bringing people to the area. Since Route 28 is a scenic route, it allows for the aesthetic value that most visitors ultimately travel for. As they look from side to side on this road, they will find a rural and natural experience, especially in comparison with more urban areas to the south, such as Lake George. The aesthetic value that can be found on Route 28 is a significant resource that Pack Forest can utilize.



Figure 48. Google Maps view of Scenic Route 28.

Water Ways

The Hudson River borders Pack Demonstration Forest. Along this river, there are ice meadows, which are fragile ecosystems that are continuously being wiped out by flood season, winter freezing, and many other natural disasters. However, this area is unique and beautiful, and therefore can help with the visitor access to Pack Forest.

There are many places along the river that can be used as access points. Further assessment of the area must be conducted in order to properly place boat and canoe access in order to not harm the current and fragile ecosystem that was stated above.

Off the Hudson River, there is also Millington Brook. This brook connects directly to the main lake within Pack Forest. This connection is approximately two miles long, and can have some rough waters including but not limited to whitewater, as well as marshy areas. The dam at the south end of the lake is also an obstruction to the access to Pack Forest, but this can be overcome with some small changes. The brook can therefore only be seen as a transportation route for the people who are experienced in canoeing and kayaking and can therefore endure the travel to the main lake.

Lake George, NY

Lake George is fifteen minutes away from Pack Demonstration Forest. In assessing the transportation opportunities that are within Lake George, Table 4 below has been generated. There are many bus transportation systems, such as Greyhound, that could be used in this area. Jefferson Lines was found to be more inexpensive than other options. A taxi company, such as Adirondack Cab Co. was also assessed, but no prices were given. Taxi companies can be useful in bringing visitors to and from Pack Forest, and therefore should be taken into account.

In addition to vehicle transportation, there is also the opportunity to rent various pieces of equipment that would allow for a visitor to make it to Pack Forest. There are canoes and kayaks through Lake George Kayak Co. and bicycles can be rented through Beach Road and Bait.

Warrensburg, NY

As stated previously, Warrensburg is approximately five minutes away from Pack Forest. This town can be considered a secondary tourist destination, as there is not as much recreational opportunities in this town as there is in Lake George. There are still many restaurants and local businesses within Warrensburg, but the selection of transportation methods to Pack Forest in the town was extremely limited.

Table 4. A variety of transportation methods within the Lake George area. Prices are likely to vary.

Name of Transportation	Name of Business	Type	Hourly (\$)	Daily (\$)
Jefferson Lines	Jefferson Lines	Bus	N/A	N/A
Adirondack Cab Co.	Adirondack Cab Co.	Taxi Service	N/A	N/A
Kayak	Lake George Kayak Co.	Single	\$29	\$65
Kayak	Lake George Kayak Co.	Double	\$39	\$75
Canoe	Lake George Kayak Co.	Royalex	N/A	\$69
Canoe	Lake George Kayak Co.	Composite	N/A	\$79
Bicycle	Beach Road and Bait*	Bike	\$8	\$30**

*\$100 security deposit

**Can be rented for the week for \$130

Summary

If one were to look at Figure 49 below, they would see the transportation and access points that were discussed above. In blue, there is the Route 9 entrance road, red would be the scenic Route 28, and the green circle is the Hudson River access along with Millington Brook. There are many possible ways for tourists to make their way to Pack Demonstration Forest. Various vehicles, bikes, and kayaks are just a few of the transportation possibilities that are within this area.

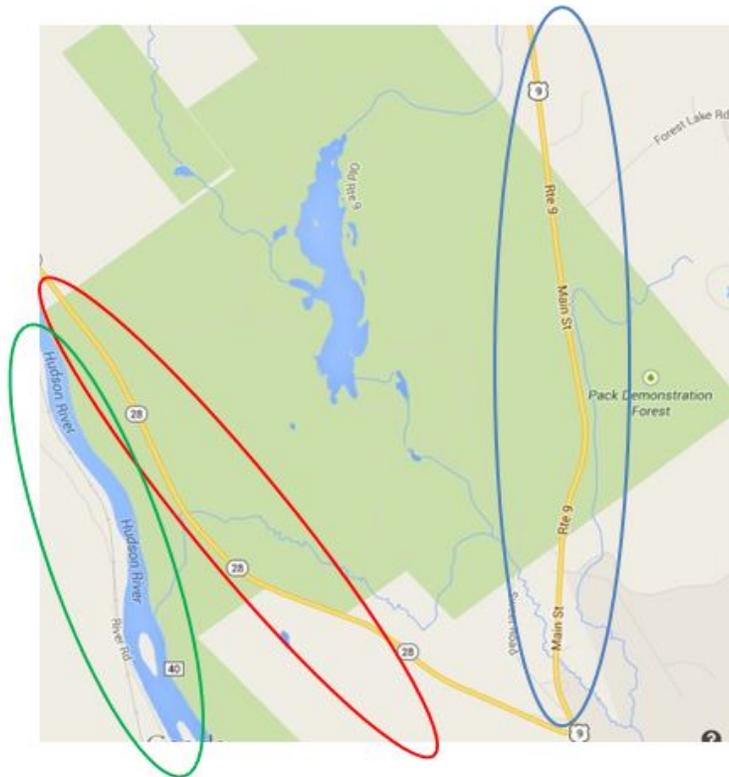


Figure 49. Possible areas of access for different transportation methods to Pack Demonstration Forest.

WORKING WITH LOCAL BUSINESS

Introduction

Warrensburg, located in the southeast region of the Adirondacks, is a small town within Warren County just west of Lake George. The town is well known as a gateway to the Adirondacks and has gained attention through an annual event known as the “World’s Greatest Garage Sale” (Chamber of Commerce, 2014). These key attractions inspire much of the local business in the area. This report highlights local businesses that visitors of the area, and visitors to Pack Forest, might be attracted to. Many of these businesses have the potential to work collaboratively with Pack Forest to host events, generate visitors and sell goods and services.

Accommodations

Accommodations in Warrensburg vary from motels and bed and breakfasts to campsites as seen in Table 5 (Warrensburg Business Listing, 2014). Alynn’s Inn is an example of more comfortable lodging, while the Budget Motel serves a need for cheaper rooms. There are also a variety of campsites, though all seem to cater to tenting and RV’s and have amenities such as swimming pools and Wi-Fi. These appeal to a wide range of visitors and can give us some idea of the types of accommodations that already exist that may help shape Pack Forest, as well as competition to be aware of.

Activities

Activities that are available in Warrensburg that are addressed are mainly outdoor ones (Table 6). From overnight camps to paintball fields and a large golf course the area appeals to a variety of markets. Pack Forest can take inspiration from these and find what might be most relatable to the proposed center.

Table 5. Accommodations in Warrensburg New York

Business	Description	Product/Service	Website	Phone
Alynn's Butterfly Inn	"Romantic Weekend Getaway"	Local Bed and Breakfast	http://www.alynnsbutteflyinn.com/	(518) 623-9390
Budget Inn Motel Route 9	"Clean comfortable room at a great rate"	Local motel available for low prices. Playground, picnic table areas.	http://www.lginn.com/	(518) 623-2955
The Lodge on Echo Lake	Large cabin lodge directly on the lake	Used for events such as weddings and corporate events. Food services available. Large event space. No rooms for stay.	http://www.thelodgeonecholake.com/	(518) 623-5599
Lake George Schroon Valley Resort	Exclusively RV and Campground Resort	138 sites total. Open 5/10-10/15 Amenities include clubhouse, swimming pool, hiking trails, marina, laundry, playground, store, restroom facilities	http://www.rvonthego.com/new-york/lake-george-schroon-valley-resort/	Not Provided
Schroon River Campsites	Over 155 acres of privately owned campground	Full electric hook ups, laundry, hot shower with restrooms. Boat rentals such as canoes and kayaks. In ground pool and open deck space. General store for camping goods.	http://www.schroonrivercampsites.com/	(518) 623-2171
Warrensburg Travel Park	Seasonal campground for tenting and RV's	Full RV Hook ups, in ground pool, restrooms and showers, access to laundry services, camp store and boat launch	http://www.warrensburgtravelpark.com/	(518) 623-9833

Table 6. Activities in Warrensburg New York

Business	Description	Product/Service	Website	Phone
Cronin's Golf Resort	18 Hole 6,161 yard 70 par course	Golf Course with in ground pool and accommodation	http://www.croninsgolfresort.com/	(518) 623-9336
Discoveries USA	Supply shop for Hunting, Fishing and Paintball Enthusiasts	Hunting equipment, guns and ammo, fishing gear, freeze dried food for camping, gift shop, toy section, paintball course	http://www.discoveriesusa.com/	(518) 623-4567
Echo Lake Camp	Overnight Summer Camp for children and teens	Cabins, Tennis Courts, Baseball Fields, Swimming Pools, Lake Access	http://www.campechola.com/	(518) 623-9635
Warren County Fish Hatchery	Century old fish hatchery equipped for visitors, located near central ADK trails	View hatchery operations, interpretive films, visitor center, fishing, pavilion available	http://www.adirondackscenicbyways.org/resource/fish-hatchery-warrensburg.html	(518) 623-2877

Summary

The town of Warrensburg is filled with lively local businesses that could be useful in connecting Pack Forest with surrounding areas. The businesses this report addresses are those in the categories of “Accommodations” and “Activities”. Warrensburg does not seem to be lacking in places for visitors to stay and provides a wide range of lodging opportunities.

A unique niche in the market for more primitive lodging holds potential for Pack Forest. Activities for visitors to do seem to be centered on outdoor activities such as hiking, canoeing, camping, hunting, fishing and golfing. Pack Forest has the potential to offer similar activities with unique sights and features to enjoy.

WORKING WITH NOT-FOR-PROFIT ORGANIZATIONS

Introduction

SUNY ESF would like to work with not-for-profit organizations to gain support for their plan to revitalize Charles Latham Pack Demonstration Forest for the purpose of attracting and servicing its students, staff and the general public. Pack Forest is located in Warren County, a tourist hub in the Adirondack State Park. The park is rich in natural resources and environmental activism. Its mountains, rivers, lakes, ponds, streams and “forever wild” forest preserve draws visitors from NYC, Boston and Canada.

Residents and advocates of the park take a keen interest in welcoming visitors, but they also work hard to protect it and promote responsible use through their many not-for-profit groups. The following list identifies some of the many existing not-for-profit organizations that could provide environmental, economic, technical and cultural support to Pack Forest.

Not-For-Profit Organizations

Common Ground Alliance of the Adirondacks (CGA) is a forum for public-private collaboration. Community and regional members, business leaders, conservation and advocacy groups discuss what works best for Adirondack Park residents, communities and resources. Topics have included water quality, high-speed communication, invasive species prevention, acid rain, sustainability, affordable housing and health care. A major initiative that has evolved from CGA is the Adirondack Futures project, which aims to create a common vision for the future of the park. Contact: CGA core group includes Ross Whaley, senior advisor to the Adirondack Landowners Association (518) 359 – 9631, rosswhaley@roadrunner.com. ProBono leaders of the futures project Dave Mason (518) 524 – 1703. Email: dave12942@gmail.com and Jim Herman (518) 524 – 1703. Email: jim12942@gmail.com

The Adirondack Ecological Center (AEC) was established at the 15,000 acre Huntington Wildlife Forest by SUNY ESF in 1971. Scientists from around the world come to AEC to conduct research on the natural and cultural systems of the northern forest. The AEC provides the ecological understandings that drive the management practices used in the Adirondack Park. Contact: 6312 State Route 28N Newcomb, NY (518) 582-4551

The Northern Forest Institute (NFI) is an initiative recently launched by the AEC to focus on “conservation education, leadership, and stewardship of natural and designed environments.” NFI is located within the Huntington Wildlife Forest. Because Pack Forest and NFI share SUNY ESF’s mission and are located in close proximity to each other, it will be important for them to collaborate and coordinate their programs in order to avoid overlap or redundancy. Contact: Frank Morehouse. Program Manager. 5922 State Route 28N Newcomb, NY (518) 582-2000 2xt 11. femoreho@esf.edu

The National Outdoor Leadership School (NOLS) teaches leadership, teamwork, outdoor skills, environmental studies, and risk management using a hands-on, fun, learn-by-doing approach in a wilderness setting. NOLS Northeast is located at Paul Smith’s VIC. Contact: Brian McDonnell (518) 327 6247 or Lindsay Yost (800) 710 – 6657.

NOLS Wilderness Medicine Institute (WMI) provides full service support for organizations that host their courses. WMI offers courses on the prevention and treatment of medical emergencies in remote places. Courses range from wilderness first aid to wilderness EMT for everyone and advanced courses for medical professionals. Contact: NOLS Wilderness Medicine Institute, 284 Lincoln Street, Lander WY 82520- 2848.

The Adirondack Mountain Club works to protect natural resources, promotes responsible recreation and provides educational workshops and guided hikes. Contact: Goggins Road, Lake George, NY (518) 668-4447.

The Adirondack Museum presents Adirondack history and illuminates man's relationship with nature in order to promote informed decisions about its future use. Contact: David Kahn. Blue Mountain Lake Rt. 28 &30 (518) 352 – 7311

The Cornell Cooperative Extension facilitates Cornell University's research based programs in five core areas: agriculture and food; environment, natural resources, climate change and sustainable energy; youth development; nutrition and obesity prevention; community and economic vitality. Contact: Cornell Cooperative Extension, 377 Schroon River Rd. Warrensburg, NY, (518) 623-3291

The Boy Scouts of America focuses on character development and values-based leadership training. Scouts can learn hundreds of merit badges for the skills they learn. Popular skills are first aid, swimming, environmental science, kayaking, camping, search and rescue, and game design. Contact: 15 Pearl Street, Glen Falls, NY 12801. (518) 792 – 6468

The Girl Scouts of America aims to help girls become leaders, learn skills, and gain confidence by engaging in field trips, environmental stewardships and community service projects. Contact: 213 Meadowbrook Road, Queensbury, NY 12804

Warrensburg Central School's mission is to "Provide opportunities for students to become productive members of our changing society." Contact: Superintendent John Goralski (518) 623-2861.

The Lake George Association is a citizens group that has been protecting the fresh waters of Lake George for 128 years. Their educational programs include a floating classroom and field trips, citizen science, Geographical Information Systems (GIS) support, and invasive species prevention. Contact: Lake George Association, Inc. PO Box 408, Lake George, NY 12845. (518) 668 3558

The Lake George Land Conservancy is a not-for-profit land trust that works to preserve and protect the natural, scenic and recreational resources of the Lake George area. Their nature preserves are open to the public for educational, scientific and recreational use. Contact: Macionis Family Center for Conservation. 4905 Lake Shore Drive, Bolton Landing, NY 12814. (518) 644 – 9673

The Adirondack Chapter of the Nature Conservancy works to preserve and protect the land and water and the web of life that depends on them. It partners with the Adirondack Land Trust to protect farmland, forest and pristine shore lands and it provides grants to help local communities with conservation projects. It also houses the Adirondack Park Invasive Plant Program (APIPP), a partnership program of 30 organizations and 600 volunteers that manage invasive species in the park. Its 600 active researchers and analysts provide scientific and technical assistance. Contact: Nature Conservancy, Adirondack Chapter, P.O. Box 65, Route 73 Keene Valley, NY 12943 (518) 576 – 2082

The Greater Adirondack Resource Conservation & Development Council works with local organizations and citizens to empower them to solve problems related to land conservation, community development and environmental improvements. They offer an educational program called Salmon in the Classroom, sponsor a family day called Waterfest and provide scholarships to Pack Forest's summer camp. Contact: Greater Adirondack RC&D Council, 394 Schroon River Road, Warrensburg, NY 12885 email: info@greateradirondackrcd.orgn

The Fund for Lake George is a non-profit organization that uses long-term scientific research, partnerships, and direct investment to protect the waters of Lake George. It has partnered with Rensselaer's Fresh Water Institute to restore Lake George to as natural an ecological state as possible. Contact:

Fund For Lake George (518) 668 9700, email info@fundforlakegeorge.org or Chris Navitsky, Lake George Waterkeeper, cnavitsky@lakegeorgewaterkeeper.or

The Warrensburg Historical Society researches and preserves the history of Warrensburg and presents it at their museum by way of photos and artifacts. Contact: Warrensburg Historical Society, PO Box 441 Warrensburg, NY 12885. Whs7396@yahoo.com

The Adirondack Council is committed to an Adirondack Park that is comprised of wilderness areas, working farms and forests and vibrant communities. It adheres to high ethical standards and advances educational programs and policies based on the best science available. It works in collaboration with partners and considers the diverse viewpoints regarding the future of the park. Contact Adirondack Council P.O. Box D-2, 103 Hand Ave. #3 Elizabethtown, NY 12932 (518) 873.2240 info@AdirondackCouncil.org

The Paul Smith's Visitor Interpretive Center has 3000 acres of land, with 25 miles of trails and 6 miles of interpretive trails. It offers a wide variety of educational programs and recreational activities. Contact: Brian McDonnell 8023 State Route 30 Paul Smiths, New York 12970 (518) 327- 624. Email bmcdonnell@paulsmiths.edu

The Adirondack Interpretive Center is a 236 acre site that borders Rich lake. It has 3.6 acres of interpretive trails. It is managed by SUNY ESF and offers educational programs by their own staff and students. It has a new exhibit with interactive and three dimensional displays. Contact: AIC 5922 State Rt. 28N Newcomb, NY 12852 (518) 582 2000.

Summary

There are many not-for-profit organizations that offer a vast array of educational and recreational programs. Collaboration with the Common Ground Alliance (CGA), a not-for profit organization that hosts forums that bring together many of these non-profit groups as well as residents, business leaders and elected officials to share ideas, would be a good way to begin working with not-for-profit organizations. The Common Ground Alliance can provide a network of assistance to Pack Park as it initiates its revitalization project.

Two other non-profits that would greatly enrich the early efforts at Pack Forest are ESF's Adirondack Ecological Center and its newly established Northern Forest Institute, both of which are located nearby in Newcomb. These organizations could provide the basis for building supportive relationships and the information and technical assistance needed to develop the project.

GOVERNMENT AGENCIES

Introduction

As Pack Forest is situated in the Adirondack Park region as well as in Warrensburg and Lake George townships, it provides an excellent opportunity for working with multiple government agencies for technical assistance. Currently, the New York State Department of Environmental Conservation uses various Pack Forest facilities for summer camps. More agencies could partner with Pack Forest to provide volunteers, assist in funds, promotion of the forest, and ultimately assisting to make Pack Forest an ecotourism destination for local and visitors to enjoy. Table 7 shows a breakdown of agencies that could potentially partner with Pack Forest to promote the environmental stewardship and learning at the site.

Table 7. List of government agencies.

Agency	Description	Contact Information
United States Forest Service	To create partnerships with both public and private agencies to spread their goal of stewardship through planting trees, improving trails, and to have an educational aspect on conservation and fire prevention of the forest. Their goal is to sustain the health, biodiversity, and productivity of the forest system for present as well as future generations.	Northern Research Station (NRS): 11 Campus Blvd., Suite 200 Newtown Square, PA 19073 Phone: (610) 557-4017 http://www.nrs.fs.fed.us
United States Environmental Protection Agency	To provide accurate information nationally to all parts of society in order to reduce environmental risk by promoting education and conservation.	Environmental Protection Agency: 290 Broadway New York, NY 10007 Phone: (212) 637-3000 Fax: (212) 637-3526
United States Fish and Wildlife Service	To work with other groups and organizations to conserve and protect various wildlife habitats for the benefit of the American society.	New York Ecological Services Field Office: 3817 Luker Road Cortland, NY 13045 Phone: (607) 753-9334 http://www.fws.gov/northeast/nyfo/
New York State Department of Environmental Conservation	To improve the health, safety and welfare of the people in New York State and their economic and social well-being by conserving, improving and protecting the state's natural resources and environmental issues.	Office of Communication Services: 625 Broadway Albany, NY 12233-4500 Phone: (518) 402-8013

Table 7 (continued).

Agency	Description	Contact Information
New York State Office of Parks, Recreation, and Historic Preservation	To provide responsible stewardship opportunities for the state’s natural resources.	Peebles Island Resource Center: P.O. Box 189 Waterford, NY 12188-0189 Phone: (518) 237-8643
New York Department of Economic Development- I LOVE NY	To promote a growing economy for New York State through tourism opportunities.	ESD Main Offices: 625 Broadway Albany, New York 12207 Phone: (518) 292-5100
Warren County Department of Public Works	Oversee parks and recreation, recycling, highway and traffic, and sewer administration.	Jeffery E. Tennyson: 4028 Main Street Warrensburg, New York 12885 Phone: (518) 761-6556
Warren County Department of Planning and Community Development	Provides planning and technical services to local zoning boards.	Planning Department: 1340 State Route 9 Lake George, NY 12845 Phone: (518) 761-6410
Warren County Soil and Water Conservation District	To implement programs and projects to protect the counties watershed resources.	Warren County SWCD: 394 Schroon River Road Warrensburg, NY 12885 Phone: (518) 623-3119 E-mail: jim99@nycap.rr.com
Warren County Youth Bureau	To provide services to help youth with educational growth.	Maureen Schmidt Director, Human Services Building: 1340 State Rt. 9 Lake George, NY 12845 Phone: (518) 761-6362

Summary

There are an abundance of national, state and local government agencies that can partner with Pack Forest to collaborate with for events and programs as well as provide technical services. Because Pack Forest has few connections, these agencies must be involved in the planning process to ensure the center’s success.

PACK FOREST REGIONAL CONNECTIONS

Introduction

The Pack Forest location is ideal for connecting to local communities. Being only a half hour from Lake George gives a good opportunity to promote it as an attraction to the tourists in the area. It may also lend a hand in forming partnerships with local businesses and governments. The access point on Route 9 allows it to be accessed easy by people passing though the region and makes it accessible for outside communities.

Pack Forest is located within a short car drive from two large communities: Warrensburg and Lake George. Warrensburg is a small village near Pack Forest with a couple attractions that may draw tourists to the area. The village is adjacent Hackensack Mountain and serves as a good hiking destination. There are two parking areas with trailheads located in the village. When marketing the area a destination like this could be grouped with other natural features or attractions. The village also has canoe and kayak access to both a small lake and the Schroom River.

Lake George is a larger community and is a very developed primary tourist destination. The area has many attractions along with its multiple shops restaurants and motels. Bering close to these communities gives Pack Forest a good core for connections and visitor bases

Regional Connections

In order for this plan to establish connections ESF will have to work with local and state organizations to help establish partnerships. Getting local support is key advancing the plan as the local communities will be affected by the development.

The area around Pack Forest is rich with many attractions that host a large array of activates that would be benefitted by the opportunities Pack Forest could provide. If people are visiting the Lake George region for a specific activity such as hiking, then the Pack Forest trails could be marketed as a package along with other local attractions. Many of these locations could be packaged together or marketed as a part of a connected network of attractions. Table 8 shows the multiple attractions in the surrounding regions near Pack Forest.

Table 8. Local attractions.

Location/Attraction Name	Description	Contact information
Warrensburg, NY	A village located less than a ten minute drive from the Pack Forest site. Hosts many community events and had access points for both hiking trails and river access.	(518) 623-2161
Event- World’s largest garage sale- Warrensburg, NY	An example of one of the numerous community events hosted by the village of Warrensburg.	(518) 623-2161
Hackensack Mountain- Warrensburg, NY	There is access at a trail head in Warrensburg to 3 trails that have a total combined length of 3.5 miles. Activities include hiking, birding, cross-country skiing and snowshoeing, and walking leashed dogs. Trails are carry in carry out and camping, alcohol, fires and motorized vehicles are not allowed.	(518) 623-2161
Prospect Mountain- Lake George, NY	Visitors may drive up the mountain on the Veteran’s Memorial Highway, built and dedicated in 1969 in honor of America’s War Veterans. The summit provides amazing scenic views overlooking what is called “the 100 mile view.” The cost is 10 dollars per car. You may also hike the mountain on well-marked trail that requires only medium hiking experience. Hiking is free and should take approximately three hours to complete.	(518) 668-5198
Lake George Land Conservancy Preserve & Trails. Lake George, NY	Watershed preserve that has sixteen miles of trails for hiking that range from novice to advanced.	Phone: 518-644-9673 Email: info@lglc.org Facebook: www.facebook.com/LGLandConservancy

Table 8 (continued).

Location/Attraction Name	Description	Contact information
Beaver Brook Outfitters Weavertown, NY	Provides a wide range of outdoor activities with a family oriented environment. Offers guided whitewater rafting, fishing, and hiking tours. Provides climbing, caving, and extreme sports excursions. They also offer overnight camping and equipment rentals. In the winter season they offer ski and snowshoeing equipment and trips.	518-251-3394
Schroon River launch on River Street Warrensburg, NY	A public boat launch open to public with parking provides river access for cartop vessels only that are hand launched.	(518) 623-2161
Shermantown Road Park Glen Falls, NY	Created in 1987 by the Feeder Canal Alliance to preserve and protect the history of the Glens Falls feeder canal and towpath trails. Offers visitors and locals the opportunity to learn about the significant of local history through responsible recreation and environmental education.	518-792-5363 info@feedercanal.org

Summary

The Pack Forest Demonstration Site has great potential to be an attraction that has strong ties to the region’s recreational community. The proximity of Pack Forest to both Warrensburg and Lake George make it an ideal location for facilitating these ties. These locations are large hubs for tourists in the region and Pack Forest could be marketed to reach the visitor audience as well as locals. Its location may also allow it to be a primary destination where visitors can venture out from the center to natural attractions and hubs like Lake George. Pack Forest holds a large array of disciplines for recreation including hiking, paddling, camping, day use activities, and education.

EMERGENCY SERVICES AND VISITOR SAFETY ASSESSMENT

Introduction

To facilitate the safe use of Pack Forest as a destination for outdoor recreation, it is useful to compile a list of the emergency services that are provided in the vicinity. This is important because the public needs to be reassured that their safety is extremely important to those in charge at Pack Forest. This will help the visitors to have a better experience while at Pack Demonstration Forest and hopefully encourage them to visit again and spread the word of this fine, recreational destination. Having a system put in place for different types of emergencies will be helpful for the future of Pack Forest and will allow for more effective responses to emergencies in the event that they occur, and, in the case of extreme emergencies, even help to save the lives of those in distress.

Potential Risks to Visitors

With the numerous activities available to the public while at Pack Demonstration Forest, there are also many ways in which the visitors could be injured while taking part in recreation. Some of the recreational opportunities at Pack Demonstration Forest include canoeing, hiking, mountain biking, snow shoeing, and taking casual nature walks.

If the canoe tips over, a visitor may be dumped into the water. If this visitor does not know how to swim, this could be a very serious life threatening situation. In colder weather, this could become an even more serious emergency due to the chance of hypothermia.

Hiking is a recreational activity that many people will participate in while at Pack Demonstration Forest. Hiking can be dangerous when a visitor walks over the wooden boardwalks because these paths can become very slippery. A visitor could slip and injure themselves, by spraining their ankle or wrist, resulting in the need for medical attention. A visitor could also be injured if there are fallen trees or large rocks on the trails.

Mountain biking can result in numerous medical emergencies while at Pack Demonstration Forest. Currently there is no designated trail for this recreational activity. If a mountain biker accidentally ran into a hiker or walker, this could result in a variety of different medical emergencies depending on the degree of impact.

Snowshoeing is a recreational activity that will only be able to occur during the winter months. Serious medical emergencies could result from this activity due to the fact that the winter can be extremely cold in this region. Hypothermia is a serious emergency that should be taken into account for winter recreational activities at Pack Demonstration Forest.

Nature walks can result in medical emergencies. If a visitor is not properly educated on the area, they could possibly consume wild flora or other natural organisms growing in Pack Demonstration Forest, such as fungus, which could potentially cause harm to the visitor. It is also important that visitors do not engage the wildlife. If visitors feed the wildlife or approach them, they could upset the wildlife resulting in a defensive attack. It is important to stress that visitors should be educated to a degree of which they can protect themselves, but it is also important that the visitors know that there is help if needed.

Table 9. Emergency Services in the towns of Warrensburg, Lake George, and Glens Falls, NY.

Service	Town/Village	Address	Phone Number
Volunteer Fire Department	Village of Warrensburg	Warrensburg Volunteer Fire Department 18 Elm Street Warrensburg, NY 12885	518-623-9766
	Town of Lake George	Lake George Volunteer Fire Department 179 Ottawa Street Lake George, NY 12845	518-668-5083
Sheriff Department	Warren County	Warren County Sherriff Department 1340 Route 9 Lake George, NY 12845	518-743-2500
Police Department	Village of Warrensburg	Warrensburg Police Department 17 Stacy Street Warrensburg, NY 12885	518-623-4673
Emergency Services (Medical Services, Fire Protection)	Town of Lake George	Warren County Office of Emergency Services 1340 State Route 9 Lake George, NY 12845	518-761-6240
Search and Rescue Agencies	Village of Warrensburg	Lower Adirondack Search and Rescue P.O. Box 655 Warrensburg, NY 12885	No Phone Number Provided
Poison Control/ Medical Toxicology	Village of Warrensburg	Eugene Mctiernan 3767 Main Street Warrensburg, NY 12885 - 1837	518-623-2844
Medical Facilities	Village of Warrensburg	Warrensburg Health Center 3767 Main Street Warrensburg, NY 12885	518-623-2844
	Glens Falls	Glens Falls Hospital 100 Park Street Glens Falls, NY 12801	518-926-1000

Table 10. Vehicle service stations and shops in Warrensburg, Lake George, and Glens Falls, NY.

Service	Town/Village	Address	Phone Number
Car Service Stations	Village of Warrensburg	Warrensburg Tire House & Service Center 3775 Main Street Warrensburg, NY 12885	518-623-1100
	Village of Warrensburg	Warrensburg Car Care Service Center 3979 Main Street Warrensburg, NY 12885	518-623-3039
	Town of Lake George	Thomson's Garage 2124 State Route 9 Lake George, NY 12845	518-668-5337
	Town of Lake George	Maltbie Chevrolet 1794 State Route 9 Lake George, NY 12845	518-685-4238
Bicycle Repair Shops	Village of Warrensburg	Grind N Gears Café 3897 Main Street Warrensburg, NY 12885	518-504-8060

Summary

Pack Forest is located near many towns, including the Villages of Warrensburg, Lake George, and Glens Falls, that have emergency services. Many of these local businesses are located on Main Street in the Village of Warrensburg, resulting in a drive of approximately ten minutes from the Pack Forest property. The closest hospital is located in Glens Falls which is approximately a thirty minute drive from Pack Forest. The visitors of Pack Forest will feel safer knowing that, if there is an emergency of any kind, Pack Forest staff have a plan for how to act. Emergency information should be provided to all visitors when they first arrive at Pack Forest and will be available on the website so visitors can plan out their trips ahead of time.

ORGANIZATION STRUCTURE AND STAFFING

Introduction

This assessment examines the organizational structure existing at Pack Forest. The organizational structure of Pack Forest, an Adirondack property managed by SUNY ESF, is limited currently to two paid staff members and a property caretaker.

Pack Forest

The current organizational structure at Pack Forest seems to be very decentralized. There are contact points and webpages for the land on both the ESF website and the NYSDEC website, leading to different information and different contact information available to the public. Determining exactly how this land is managed is difficult.

SUNY-ESF is a college located in Syracuse, NY and is part of the larger State University of New York system. It is classified as a “doctoral granting institution” within this system. The university is organized into departments and operates bureaucratically as a business and education center. The college has many properties throughout the state, one of which is Pack Forest. The Director of Forest Properties at SUNY-ESF is Bob Davis (SUNY ESF, 2014).

Pack Forest itself has few staff in charge of oversight of the property. However, there is little current need for oversight besides the summer camps that take place on the property, which are administered by the NYSDEC. Therefore, the oversight of Pack Forest comes mainly from Mr. Davis, a Forest Property Manager, and a caretaker. The staffing of the property as it currently stands is mostly appropriate due to the limited use that the property sees.

Currently, there is a point of contact between ESF and NYSDEC due to the use of the property for DEC summer camps. The DEC currently maintains the buildings and facilities in the summer camp area of Pack Forest.

Benefits and Limitations of the Current Staffing

There are positives and negatives of the current staffing and organizational structure of Pack Forest. Most of the positives are related to the fact that this property has the resources of a larger college and university system to take advantage of. Business and economics of the property can be maintained by well-qualified professionals at the university level.

A disadvantage is that the decentralized staffing of the property makes it difficult for visitors to identify contacts for the property. When people cannot discover contact information and understand the purpose and main reasons for the property, it is difficult for visitors to understand how they can use the property. Contact information is needed for Pack Forest.

Adirondack Interpretive Center Staffing and Structure

Another ESF property, the Adirondack Interpretive Center at the Newcomb campus, is similar to Pack Forest in that it is a property managed by ESF separate from its main campus. This property has an established interpretive center operated on site by employees and students of the college. An assessment of the operations of this property gives slightly more insight into how properties that currently operate in a manner similar to the vision for the Pack Forest property.

Management of this property was transferred to ESF in 2010 after being operated by the Adirondack Park Agency since it opened in 1989. The staff at this property is employed by SUNY-ESF and operates the campus as an extension of the college. There are staff who operate the property for day-to-day business, and there are many programs offered on the property, each administered by ESF employees. Students, residents, and employees also staff many of the interpretive aspects of the Adirondack Interpretive Center. Since this property is also operated by SUNY-ESF, the administrative and bureaucratic operations of Pack Forest will closely resemble that of the Adirondack Interpretive Center.

The Wild Center Staffing and Structure

The Wild Center is another interpretive center in this Adirondacks that is owned and operated independently. This facility has a much more centralized organizational structure for operations and staffing. The website for this organization shows a significantly detailed structure and staffing. This is beneficial for those who want to know who to contact for different information and operation information.

The Wild Center's organizational structure includes a board of trustees, a chairman, a president, and an advisory board that oversees the major decisions and operation actions made at the center. This higher organization enables a core of staff at the operational level to maintain grounds, exhibits, programs, and many important aspects of an interpretive center. The Wild Center has a functioning and identifiable staff in the operations of the center. This structure is beneficial for effective management of a nature center.

There are separate individuals in charge of day-to-day operations, interpretive materials, school programs, website management, education, and membership to the center. Contact information for all critical employees at The Wild Center is readily available to visitors on the center's website. This makes the operations and information side of the interpretive center very transparent and easy to utilize, and allows for ease of information access for those outside of the center. This is crucial for bringing in and pleasing potential consumers of the services offered by The Wild Center.

There are many important aspects of The Wild Center's staffing that can be taken away for the improvement of Pack Forest, including the centralizing of information. Furthermore, while a large staff such as that at The Wild Center is not necessarily feasible at a place such as Pack Forest, the delineation of responsibilities is crucial for the efficient administration of a functioning property such as the one desired at Pack Forest.

Summary

In summary, the staffing and organization of Pack Forest is currently limited. There is no central contact information available for any of the current operations. The decentralized nature of the staffing prevents any significant action to be taken in terms of increasing visitor flow and access. Having identifiable staff located on the property would allow for effective implementation of the vision for Pack Forest.

PACK FOREST VOLUNTEERS AND TRAINING ASSESSMENT

Introduction

Pack Forest and its wealth of environmental resources reveal a host of volunteer programs that could be implemented. Volunteerism is where someone extends a courteous service without the anticipation of financial gain/compensation and willingly contributes their personal time and energy to benefit others. Additionally, the majority of volunteer services are associated with non-profit or not-for-profit organizations. According to the Volunteering Code of Good Practice in London, volunteering is “an activity that involves spending time unpaid and doing something that aims to benefit the environment, individuals, or groups other than or in addition to close relatives” (Home Office, 2005 p.4).

Presently, there lacks the implementation of an active volunteer program at Pack Forest and there is also no significant evidence that volunteer programs existed in the past. This assessment attempts to determine the feasibility of a fruitful volunteer policy and volunteer program frameworks that can be utilized to encourage the care and sustenance of the valuable natural resources at Pack Forest. Investigations have revealed that there are currently volunteer bases at two nearby nature organizations within the Adirondack vicinity which include The Adirondack Interpretive Center (AIC), in Newcomb, and The Wild Center (TWC), in Tupper Lake.

Discussion

The seasonal volunteer programs at both the AIC and TWC currently operate on weekends only. Unfortunately, the volunteer base at the AIC does not have a structural volunteer framework in place. The AIC’s volunteer program primarily comprises of three volunteers including an astronomer, a mycologist, and a naturalist from the local community who haphazardly visit the site based on their availability. In most cases, the frequency of volunteer visits can range from 1-2 times a month. Additionally, there lacks a standard volunteer policy implemented at the AIC.

In contrast with the AIC, volunteers at TWC are at the heart of the organization and are very instrumental with the integration of the existing community and the internal resources. TWC strongly supports volunteer contribution/involvement and provides opportunities for a variety of volunteer roles in maple operations, campus landscaping, interpretative guides, office team support, trail maintenance, store worker, event staff, animal care, and exhibit interpretation. In addition, the opportunities at TWC are assigned to match the volunteer overall interests and skills. Any member of public is welcome to participate in the volunteer program at TWC, provided they satisfy the mandatory age requirement of being 14 years and older (The Wild Center, 2014).

Volunteering at TWC

Generally, the TWC advertises and recruits volunteers based on the vacancy of specific positions within the organization. When someone expresses interest in the volunteering program, an application, job description, and brochure, etc., are sent to them. Furthermore, “each position description includes position title, purpose, responsibilities, qualifications, training provided, time commitment, and supervisory staff assigned” (Thomas, 2004).

The interested individual is then invited to either visit TWC in person or engage in an over-the-phone discussion to identify available volunteer options and specific interests. Subsequently, their application is received and reviewed, and then the prospective volunteer is interviewed informally. Accepted volunteers are afforded the opportunity to choose one of the vacant positions offered at the center and training is provided by the particular department that they have been assigned to. However, if any dilemmas arise with the selected volunteer position, the situation is reevaluated and the volunteer is allowed to try another position offered at TWC (Thomas, 2004).

On the other hand, there are several perks utilized to encourage active volunteer participation at TWC which include: free admission to the center, a complimentary one-time admissions voucher for another person following 25 hours of volunteer service, 20-25% discount benefits at the Wild Supply Company, and 10% off food and beverage purchases (Thomas, 2004).

Volunteering at Pack Forest

To successfully establish a volunteer program/framework at Pack Forest, the organizational structure, local community needs, and the risk management factors would first have to be assessed before further proceeding. In order to benefit both the organization and participating volunteers when implemented, the volunteer program should be valuable, feasible, appropriate, and safe. Only then can the proper procedures and policies for the volunteer program at the Pack Forest be successfully developed.

Establishment of a Volunteer Program at Pack Forest

Establishing a volunteer program at Pack Forest will present many advantages such as an increase in efficient workflow, fulfillment of unattended tasks, local community involvement, and operating within budget constraints just to name a few. There are many questions to be answered before progressing to the phase of inherent advantages that exist within volunteerism. Listed below are some of the questions that need to be answered if the existing volunteer-base - models from the nearby TWC is unsuitable for adoption by the Pack Forest:

1. What is the Pack's Forest vision and goals?
 2. What is the intended volunteer program's purpose?
 3. What is the Pack Forest trying to accomplish with the surrounding communities of the Adirondacks?
 4. How well does the volunteer program fit into the vision and goals of the Pack Forest?
 5. Can the establishment of a volunteer program at the Pack Forest satisfy its goals?
- (HandsOn Network, 2010, p.2)

Possible Volunteer Opportunities

Table 11. Possible volunteer activities at Pack Forest.

Activity	Description
Bird Identification Guide	Identification of local bird species and assistance with the organization's participation in annual bird counts
Interpretive Trail Signage	Constructing and strategically placing signs where points of interest are proximal to trails and existing hotspots for unique flora and fauna require highlighting
Hiking/Trail guide	Delivering interpretive services on the ecology of the Pack Forest during guided walks
Invasive Plant Control	Assisting with the removal and control of invasive plant species for their successful control
General Maintenance	Maintenance and repair of the overall built areas on the site.
Trail Maintenance	Maintenance, restoration, and repairs on trails for their longevity
History Interpreter	Delivering the natural history of the Pack Forest and its surroundings
Visitor Center Receptionist	Providing efficient administrative, secretarial, and clerical services on behalf of the Pack Forest.
Sign Language Interpreter	Skilled interpreter who can fluently produce and interpret sign language produced by another.
Event Planner	Assisting with the planning, purpose, and scope of an event to achieve the desired result.
Camp Host	Performing required park duties in the campgrounds.
Volunteer Ranger/Warden	Conducting patrols to ensure that visitors are conforming to the code of ethics when recreating within nature
Office and Administration	Updating records for all financial activities and associated visitor data.
Education and Awareness Activities	Assisting with the preparation and dissemination of information to the local communities and schools through outreach.
Property and Leisure Activities	Assisting with the operations in the built facilities e.g. visitor center.

Summary

Pack Forest possesses great potential for involving the local Adirondack community and volunteer groups in a successful volunteer framework/program. The implementation of a performance oriented volunteer plan is highly feasible and would certainly lead to the refinement, conservation, and maintenance of the natural resources available at Pack Forest. In addition, arising gaps in budgetary privileges can be bridged if volunteers are actively involved in the myriad of outdoor recreation opportunities and nature events that can be facilitated within the Pack Forest vicinity. Further funding for additional projects can be obtained through event and recreation fees, membership dues, and donations. Decisively, volunteer recognition programs are essential for maintaining a fruitful relationship with volunteers so that their interest and involvement would not be ephemeral.

MAINTENANCE AND MANAGEMENT

Introduction

Despite the importance of establishing concrete maintenance and management plans, they are often not considered or funded once tourism destinations are developed. Maintenance and management of ecotourism destinations is multifaceted and should incorporate visitor management; maintenance of infrastructure including trails, buildings, roads, water lines, and septic tanks; and environmental management of invasive species, erosion, and other natural resources.

Maintenance in the camp area of Charles Lathrop Pack Demonstration Forest (Pack Forest) is currently under the purview of the New York State Department of Environmental Conservation (DEC) because of their use of the Environmental Education Camp. The remainder of the property is managed by the State University of New York College of Environmental Science and Forestry (SUNY ESF). However, a new management plan must be developed in response to the proposed expansion of tourism to Pack Forest. This is especially true if SUNY ESF chooses to regain managerial control of the DEC camp.

Visitor Management

Current visitor management techniques include some signage informing visitors of trail etiquette and well-marked, delineated trails to prevent visitors from wandering off-trail. Visitor management will become increasingly imperative as greater numbers of different visitor groups come to Pack Forest. Proper visitor management can reduce conflicts between different visitor groups (hikers versus horses versus mountain bikers, overnight campers versus day users, and hikers versus skiers versus snowmobilers) (Cessford, 2002). Separate single-use (as opposed to multiple-use) trails may need to be designated depending on the number of different visitor groups that come to Pack Forest.

The limited trail system and some signs are currently the primary methods of barring visitors from certain areas of the property, namely the active harvest and research areas. A clearer and more effective method must be developed if the trail system is to expand throughout the property. An alternative option would be to limit the harvesting period to winter when the number of visitors to Pack Forest will likely be lower.

Boat usage of Pack Forest Lake is and must continue to be limited to non-motorized vessels and those equipped with electric motors to protect the tranquility of the visitor experience and the natural environment. Visitors will also need to be urged to clean their boats to prevent the spread of invasive species to and from the lake.

Road and Parking Maintenance

Most of the roads and parking areas on the property are currently in poor condition. Although they currently do not support much traffic, this is likely to change if the number of visitors to Pack Forest increases. There is a short section of paved road between the entrance to the property and the SUNY ESF offices. The remainder are improved gravel roads. The main roads and parking areas on the property will likely need to be resurfaced. This can provide an

opportunity for the SUNY ESF department of Environmental Resources Engineering to demonstrate a potential application of impermeable pavement.

Resurfacing the roads and parking areas would also aid with snow removal. On-site staff are currently charged with snow removal. Snow will need to continue to be removed from the entrance road and parking lots during winter months if the property is to remain open throughout the year.

Several culverts are located along the roads to manage stormwater runoff. At least one of the main culverts is currently blocked by a beaver dam. Culverts will need to be regularly checked inspected for obstructions to ensure that they are functioning properly (New York State Department of Environmental Conservation, 2011).

Trail Maintenance

The existing trail system at Pack Forest is fairly small. The trails that are most heavily used by visitors, namely the trail to the Grandmother Tree, are well-maintained by on-site SUNY ESF staff. There is well-defined side cutting on either side of trails, thereby removing any potentially dangerous brush or vegetation. They are covered with mulch to promote drainage of water away from the trail surface. Water bars are installed to promote drainage and reduce erosion. While boardwalks have been constructed to limit visitor impacts in sensitive ecosystems and particularly wet trail sections, they are made of unfinished wood and extremely slippery if wet. They will need to be resurfaced in order to ensure visitor safety.

Several forest roads on the property could be converted into trails to augment the current trail system. These roads have been constructed to reduce erosion. As such, regular erosion control maintenance will not be necessary. The roads are generally single lanes, and therefore sufficiently wide so that further side cutting will not be necessary if they are converted into trails.

All trails will need to be maintained regularly, especially in the spring due to winter snowmelt. Water bars will need to be cleaned of debris and brush will need to be cleared from the sides of the trails so that it does not impede visitors. Mulch will need to be reapplied to trails as it is depleted. Widomaker trees will need to be removed from trail and campground areas to ensure visitor safety (Birchard & Proudman, 2000). This maintenance could be performed by volunteers, as little training is required to perform simple trail maintenance. Trails could also be groomed during the winter to attract skiers to Pack Forest.

Building Maintenance

Most of the buildings on the site, including the DEC campground cabins, offices, and old lodge, are structurally sound and in good condition. New roofs have been installed on the cabins. Lead paint has been stripped from the buildings. The buildings will need to be thoroughly cleaned if they are to be used by visitors. Grass around the buildings will need to continue to be mowed regularly. Several of the buildings near the old sawmill and the old Lodge need to be repainted as well.

Infrastructure Maintenance

Most of the infrastructure and utilities in Pack Forest have been adequately maintained by the DEC. The septic system of the DEC campground was recently repaired. The water, septic, and electric systems connected to all the buildings on the property are up to New York State safety codes. Septic waste and garbage must continue to be removed regularly. The cabins on the property are currently heated using propane stored in a small tank near the DEC campground. The propane system is only sufficient to run driers and heat water for the camp. It will not be sufficient to heat the cabins for winter use. The lodge will either need to be connected to the existing system or to a separate propane tank if it is to be converted into an interpretive center.

Natural Resources Management

Fortunately, few invasive species are currently present at Pack Forest. There are some patches of Japanese knotweed (*Fallopia japonica*). Japanese knotweed was introduced to the United States as an ornamental plant from eastern Asia in the late-1800s and spread throughout the United States. It is currently considered to be a “serious problem” in New York and a “severe threat” according to the Tennessee and Georgia Exotic Pest Plant Councils list (Shaw & Seiger, 2002). The plant grows to between 3 and 15 feet tall and thrives in disturbed areas. It grows in extremely dense stands and shades out native species, preventing the successional development of diverse vegetation assemblages. Thus, care must be taken to prevent the establishment of knotweed stands in areas where soil is to be disturbed, like the proposed campground and new trails. All of the roots of this plant must be killed before it can be fully eradicated because it can re-sprout from intact rhizomes (Northwoods Cooperative Weed Management Area, 2007). The New York Department of Environmental Conservation provides resources with advice for potential removal efforts on their website and their invasive species clearinghouse (New York Invasive Species Clearinghouse, 2014b).

The hemlock woolly adelgid (*Adelges tsugae*), is an invasive aphid-like insect that were introduced to the United States from Japan. It spread along the eastern coast and reached New York by the early 1980s. The adelgid feeds on hemlock plant tissues, which respond by scarring over. This scarring prevents water and nutrients from reaching plant tissues, leading to dieback of tree limbs and the eventual death of the entire tree. The hemlock woolly adelgid has been observed as far north as Schenectady County in New York (New York Invasive Species Clearinghouse, 2014a). Although the hemlock woolly adelgid has not been observed in Warren County, where Pack Forest is located, a contingency management plan will need to be developed to address this invasive species threat (United States Forest Service, 2012). The New York Department of Environmental Conservation provides a map of the distribution of the hemlock woolly adelgid on their website and encourages individuals to report sightings through the New York Invasive Species Clearinghouse (New York Invasive Species Clearinghouse, 2014a; New York State Department of Environmental Conservation, 2013).

Pickereel (*Esox niger*) have become a nuisance species in Pack Lake, despite the fact that they are native to the region (United States Geologic Survey, 2013). The pickereel outcompeted and functionally extirpated the local bass species (primarily largemouth (*Micropterus salmoides*), which were the main game fish in the lake. The pickereel population must be reduced significantly before bass can be reintroduced into the lake. This provides a potential opportunity for both SUNY ESF and the towns of Warrensburg to be active in in the management of Pack

Forest. The SUNY ESF Natural Resources Management department could demonstrate methods of invasive and nuisance species management while the Warrensburg Fish Hatchery could provide stocked bass once the pickerel population has been sufficiently reduced.

Recreational fishing is currently being regulated through the use of signs listing property fishing rules. For example, lead sinkers cannot be used because it is a toxic heavy metal which can bioaccumulate in the tissues of aquatic organisms.

Roads have been constructed on fairly flat terrain and existing trails have erosion control features (e.g. water bars, cambered surfaces, etc.), which will minimize erosion. Trails and roads need to be routinely inspected to ensure they will not erode with increased foot and automobile traffic, respectively (New York State Department of Environmental Conservation, 2011).

Summary

The physical infrastructure at, natural resource base of, and visitors to Pack Forest must be managed to provide an enjoyable visitor experience and ensure user safety. Having a well-defined maintenance plan will help guarantee that development areas of the property will remain in good condition, accessible, and fully functional. The extent and frequency of maintenance will be dependent upon the number of visitors and the impact of their activities.

Visitor management is necessary to reduce potential impacts and, by extension, the need for maintenance. Any and all management and maintenance plans must be adaptive in response to changing visitor usage. Current management of the Outdoor Education Camp is the responsibility of the DEC and will remain under their purview until their lease of the campground expires. Therefore, it is important for SUNY ESF to work with the DEC to determine an appropriate management plan for the property as a whole during this time. This will address all the issues that will arise with increased tourism to the property, while preventing the DEC and on-site staff from becoming overburdened.

A new management plan should be developed assuming ESF will take on all maintenance responsibilities if and when the DEC's lease of the camp expires. The presence of on-site staff will remain imperative for snow removal and expeditious maintenance. Maintenance and management of the property offer unique opportunities for involving SUNY ESF departments, keeping in line with the goal that Pack Forest be used as a demonstration site of the university's research. It also could provide opportunities local community and volunteer group involvement.

If properly managed and maintained, Pack Forest can be a valuable asset for SUNY ESF and the local community by providing multiple recreational opportunities, facilitating outdoor education, and promoting research while protecting and showcasing the local environment.

GRANTS

Introduction

Most forest, nature, and educational centers receive grant funding at one time or another. Some rely on grants to further their mission and reach their goals. Grant funding is a suitable way to procure funding for Pack Forest. There are many options regarding types and amounts of grants available. There are however some things to consider before becoming too entrenched in the grant funding process for Pack Forest. First we need to find out whether or not Pack Forest can directly receive grants or if they can only receive funds from a third party such as a friends group or the research foundation. These are very important limitations to keep in mind if Pack Forest will not be directly receiving funds from a foundation. Even with these factors at hand, grant funding should still be considered in revitalizing Pack Forest.

Grants Assessment

There are comparable facilities in the Adirondacks that are currently receiving grant funding. By taking a look at both The Wild Center and the Adirondack Interpretive Center, one could see that there are different sources and ways of procuring grants depending on the type of facility and resources it has.

The Wild Center. The Wild center is a registered 501(c)(3) non-profit organization. It can and does receive grant funding directly. The Wild Center has a full time grant writer on staff so they can dedicate a large portion of time, energy and resources to grant seeking and application (personal interview). They have received numerous very large grants to work on projects or create different attractions since their opening on July 4th, 2006. Before opening they received \$28.3 million in gifts, both grants and donations, and since then receive over 1 million every year in gifts. Table 12 summarizes some of the grants The Wild Center has received over the last 5 years.

The Wild Center also charges admission that is an arguably steep price for the local cost of living, but falls into a moderate price range for a tourist compared to other local attractions. The admission ticket is good for two consecutive days, which makes the cost more appetizing for area locals, where a tourist pays the same price but will probably only visit for one day. Aside from admission there is also a gift shop and café where local and artesian goods are sold. Admission, food and goods sales are all part of the income or funding sources of The Wild Center.

Between grants, donations, and sales, The Wild Center has a rather large operating budget. They have the option of creating wild and unique experiences for visitors because they are run as their own entity and can control their own budget. As we will see with the Adirondack Interpretive Center, there may be restraints to what Pack Forest is allowed to do as far as funding.

Table 12. Selected grants and contributions to The Wild Center.

Year	Sources of grants and contributions
2009	<ul style="list-style-type: none"> • \$1,377,059.00 • Contributions and Grants
2010	<ul style="list-style-type: none"> • \$1,825,652.00 • Contributions and Grants
2012	<ul style="list-style-type: none"> • \$1 Million • North Country Regional Economic Development Council • The Wild Center’s Wild Walk Experience • Full project cost is estimated at \$4.5 million
2014	<ul style="list-style-type: none"> • \$126,000.00 • New York State Energy Research and Development Authority • Add two 850-gallon tanks of thermal storage to an existing combined pellet boiler and solar thermal project.

Adirondack Interpretive Center. The Adirondack Interpretive Center is a property managed by SUNY-ESF. As such, it cannot receive direct contributions. However since SUNY is a not for profit, it can receive many different types of grants. The Adirondack Interpretive Center is generally hands off when it comes to their grants since they are administered through third parties. The Adirondack Interpretive Center receives grant funding in two different ways; the first is through the College Foundation at SUNY-ESF, and the second is through a designated “Friends of the Adirondack Interpretive Center” group. Both of these sources have their benefits.

The College Foundation can receive large grants that are designated for the Adirondack Interpretive Center; however there is some overhead and other costs that are associated with receiving funding in this way. A percentage of the grant allotted through the College Foundation is kept within the foundation and goes into different fees or other distribution areas. This works out when there is a large sum of money coming from a grant source, but when it is a smaller sum, the associated costs and time constraints can be more detrimental than it is worth.

The Friends of the Adirondack Interpretive Center can also apply directly for grant funding for the Adirondack Interpretive Center. This is a more direct way to fully receive whatever funding has been awarded. There is much less, if any overhead and generally the full grant amount goes to the Adirondack Interpretive Center. The friends group here usually applies for small local grants, which can be applied to all types of projects. The difference here is that when a grant is awarded to the friends group they then use it to work on a project and the Adirondack Interpretive Center can be very hands off with that money. The money granted in this way is never an actual part of the center’s operating budget.

Table 13. Selected Grants and Contributions to the Adirondack Interpretive Center

Adirondack Interpretive Center	
Do not apply for any of their own grants	
Local grants are applied for through their local Friends of the Adirondack Interpretive Center	They apply for and receive grants every year from the Adirondack Foundation usually under \$15000.00
	2014 Northern New York Audobon Chapter Cullman Grant
The College Foundation receives grant money that can be used for projects at the Adirondack Interpretive Center	Generally larger scale grants but there are costs associated with receiving grant funding through the College Foundation

Assessment for Pack Forest

Since Pack Forest is a property of SUNY-ESF, it can receive any grants that are available to a not for profit. The issue lies in that it cannot directly receive any grant funding. While there is a plethora of grants available to not for profits from both public and private foundations, our challenge here will be to figure out how to best approach receiving grants. In Tables 14 and 15 there are lists of grants available and applicable to the proposed revitalization of Pack Forest.

Table 14. Government grants of potential interest for Pack Forest

Government	Contact Information	Pertinent Information
Adirondack Park Upper Hudson Recreation Hub Grants (DEC) Community Development projects in the ADK's	http://www.dec.ny.gov/lands/93275.html	The applicaiton period for this grant is now closed. It looked into creating recreational opportunities in Adirondack region as well as creating shuttle services, connector trails and guide services.
New York State Energy Research and Development Authority Clean energy, energy efficiency for existing buildings, solar and solar thermal incentives	http://www.nysenda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx	There are various grants that are specific to energy research and development here. It seems there is always something open. Any project having to do with alternate energy sources could potentially be an option here.
North Country Regional Economic Development Council	http://regionalcouncils.ny.gov/content/north-country	There are usually multiple grant opportunities here. Anything having to do with regional Economic development. Something to keep in mind when we are making connections to Warrensburg and surrounding communities

Table 15. Nongovernment grants of interest to the revitalization of Pack Forest.

Nongovernment	Contact Information	Pertinent Information
Adirondack Foundation	https://www.generousact.org/	Largest grant making organization based in the Adirondacks Focus areas: Education, Culture, Human Well-being, Environment and Community Vitality
Andrew W. Mellon Foundation	http://www.mellon.org	Large foundation – majority of grants awarded in the Northeast Focuses on art and humanities but could potentially be used for interpretive offerings
New York Regional Association of Grant Makers	http://www.philanthropynewsdigest.org/rfps?search=1&tags_interest[]=environment	There are a variety of large and small grants here that can be used for various purposes. There are always various open grants that are available.

Summary

There are many options for funding when it comes to grants. Pack Forest is in an area that can potentially offer a wealth of opportunities to visitors. With proper funding, Pack Forest can achieve its new vision. After assessing potential opportunities, funding sources, and routes to achieve those funding sources the managers at Pack Forest can begin to create a more concrete view of the needs there and how to address them. With a better understanding of how other area natural areas address grant funding, the managers at Pack Forest can begin to address grant funding for the revitalization of Pack Forest.

MONITORING AND EVALUATION

Introduction

Monitoring and evaluation are critical components of the planning and management process. Monitoring entails systematic measurement and inventory of the area to compare the conditions overtime to understand how the site has changed. A successful evaluation plan can then determine how the goals and objectives of the area have progressed, whether they have been achieved, and if any changes need to be made for the future. Monitoring and evaluation can be very effective with regards to managing visitor number and experience, educational programs, and the preservation of the natural resource base. Strategies vary based on the destination and goals at hand; therefore, it is important to understand the resources available and the desired objectives. A strong plan is essential for successful implementation and growth of tourism as it requires the site to investigate whether possible modifications need to be made to ensure that goals are met efficiently and effectively.

Pack Forest

Pack Forest currently has no monitoring or evaluation plan in place. There is no formal monitoring or evaluation for visitation, educational programs or natural resources and any monitoring that is conducted is completed at random intervals and is generally done by staff outside of Pack Forest (i.e. Adirondack Ecological Center). Pack Forest has very little staff or resources to implement a consistent monitoring strategy. The caretaker on site and researchers in the area can be utilized for monitoring, specifically in preserving the natural resources since they have a general knowledge on the area and are able to see the changes taking place at the facility. Further, since there is limited baseline information on any aspect within the facility it is hard to establish evaluation techniques. Given the goals laid out in this document for Pack Forest, new and more extensive monitoring and evaluation strategies need to be developed. To help determine these strategies for Pack Forest two other natural areas in the Adirondacks were analyzed: the Adirondack Interpretive Center and the Wild Center.

Adirondack Interpretive Center

The Adirondack Interpretive Center (AIC) is located in the small town of Newcomb, New York and is managed by the State University of New York College of Environmental Science and Forestry (SUNY-ESF). The center first opened in 1989 funded by the state through the Adirondack Park Agency (APA) and the not-for-profit organization Adirondack Park Institute (API). Originally named the Newcomb Visitor Interpretive Center, in 2010 due to cuts in state funding the APA terminated financial support for the center and management transferred to SUNY-ESF. The site is currently managed by the school's Northern Forest Institute (NFI) while the API still offers supports for many of the educational programs. The AIC aims to welcome and help visitors learn about the beauty and importance of the Adirondacks as a natural, cultural, and recreational resource. The AIC wants to have a good following and reputation in the local communities so they place great importance on monitoring visitation and the quality of their programs to evaluate and determine ways to improve their work.

Visitation. The AIC uses several methods to record the number of visitors using the facility. The staff keeps a daily tally of visitors entering the building and they have a car counter that they put out throughout the year except for winter to give a count of how many cars come up the

driveway. They also use trail registers to get a sense for the amount of people using the trails, however they recognize that this is not a very accurate count. These responsibilities are shared by all of the staff members present. The AIC does not have specific means to monitor or evaluate visitor feedback. Any feedback is usually given simply through visitor-staff personal interactions; however, there is a guest register in the main lobby where visitors may write comments. In the summer of 2013 they did public surveys following two community events in Newcomb. These surveys asked various questions involving their visitation to the AIC, their opinion of the AIC and what they would like the AIC to provide.

Since ESF only started managing the building in 2011, they do not have a strong sense for what to expect in terms of visitor numbers. While they have been keeping track of numbers and comparing them from year to year they do not have any specific goals for visitation other than to increase from the years' past. The staff does recognize that there probably should be a more formal system for generating visitor feedback in order to ensure the needs of all visitors are being met. Continued effective marketing and promotion strategies and overall success of the AIC are reliant on the documentation and monitoring of changes in visitation.

Educational Programs. The AIC offers a wide range of programs throughout the year for outstanding learning experiences in the Adirondacks. In order for the continued success of these programs the staff has developed several ways to ensure that the programs are well-run and enjoyed by the participants. The staff takes count of everyone participating in a program and keeps a running record of all programs. At the end of several of the public programs the staff will hand out surveys asking the participant what they thought about the program and any suggestions for the following years. Also, many of the participants will share their opinions directly with one of the staff members. After the program is complete the staff will take time to reflect on how the program went and take note of anything that needs to be changed. This can be based on the questions and comments the participants shared, the general reactions (confusion, excitement, interest, boredom) from participants, and the results from completed surveys. All of the staff design and present programs and are therefore responsible for the monitoring and evaluation of their own program. If a program is presented jointly by more than one staff member they will work together to reflect on the program. The AIC actively works hard to monitor and evaluate their programs to ensure that they are continually presenting meaningful and educational programs that are well-received by visitors.

Preservation of Natural Resource. The staff will often walk the trails and are very familiar with the resources found among their property. While informal, the staff is able to keep an eye on the well-being of the natural resources. The AIC also participates in Project FeederWatch which is a national winter bird survey. The staff will systematically count the number of species that come to a feeder and enter this data into the national database. Next summer AIC will also start participating in Hummingbirds at Home which is a national hummingbird citizen-scientist reporting project. Both of these projects allow staff to monitor changes in species throughout the years.

While AIC staff does more of the informal monitoring a large portion of the monitoring and evaluation at the site is done by Adirondack Ecological Center (AEC) Staff. Located in the Huntington Wildlife Forest, the AIC and its trail system occupies approximately 236 acres of the

property while the rest of the 15,000 acres is dedicated to research and monitoring conducted by AEC staff. The AEC has established the Adirondack Long-Term Ecological Monitoring Program (ALTEMP) which monitors physical, chemical, and biological attributes for the Adirondack ecosystem. Some aspects of the ALTEMP research dates back to the 1930s which has proven to be invaluable as a set of long-term datasets and are incredibly useful for determining trends in the ecosystem. The results from this research can assess the impact of staff and visitor use on the environment as well as detect any change in species composition (i.e. invasive species, disease, etc.). While much of the ALTEMP research is not specific solely to AIC property, the research gives a sense of the health of the nearby systems and provides a similar to sense to what is occurring on AIC property.

The Wild Center

The Wild Center is a not-for-profit organization located in Tupper Lake, New York. The mission of the center is to ignite an enduring passion for the Adirondacks where people and nature can thrive together and set an example for the world. The Wild Center first opened its doors in July of 2006 on 31-acres of land. Located in the center of the Adirondacks, it has expanded to 81-acres and has become a prime attraction for the area. Although often considered a natural history museum of the Adirondacks, The Wild Center provides a much more lived-experience and does not match the traditional collection based concept of a museum. The center is science-based and uses its experiences, exhibits and programs to let visitors explore the latest discoveries made by natural scientists while understanding the connection between humans and their environments. The Wild Center puts a lot of time and money into the monitoring and evaluation of its resources since it wants to make sure it is an integral part of the community and provides lasting benefits for their visitors.

Visitation. The Wild Center charges an admission fee for all visitors which makes it easy to monitor the number of visitors. The admissions system can create reports on all sorts of data if it is needed later and allows them to monitor how many visitors come to the site over various time periods. Counting at the front desk is done by admission staff while visitor reports are produced by the Director of Admissions. The Wild Center also places a large focus on visitor feedback with numerous opportunities for visitors to express their opinions including: handwritten comment cards at the front desk, an iPad visitor feedback survey at the front door, surveys sent to members, and surveys posted social media. Periodically they will conduct surveys through a third party that are sent out to select visitors and members. They are constantly evaluating their visitor number and experience. Since the center has been around for several years their visitor numbers have leveled out and they now look to maintain the same yearly average of visitors. The staff has seasonal meetings to plan programming and experiences based on visitor feedback. They will actively prototype new exhibit ideas with visitors to see if they will work and adjust accordingly. The Manager of Visitor Experience as well as the Marketing Director is responsible for monitoring all of this activity and relaying the pertinent information.

The Wild Center also spent money to hire an outside consulting firm to evaluate the impacts the center has on the community. From this, they collected some demographic and economic data on the visitors to understand where they come from and how long they stay in the area. The consulting firm also addressed the economic impacts The Wild Center has on the local economy to learn how visitors interact with the area as a whole. The Wild Center is willing to put in the

effort to make sure they have a knowledgeable base as to the number of visitors as well as how they perceive the center. They have numerous staff members dedicated to this area to make sure all goals and objectives are met.

Educational Programs. The Wild Center offers a wide range of programs for school groups and kids to on the floor teaching exhibits. For the formal programs such as school groups or canoe trips, the participants are monitored in their point of sale system since there is an admission fee. Floor programs such as an animal encounter are not regularly monitored but they rely on staff feedback and an annual two week “counting week” where volunteers count the attendees at each program. The center asks surveys and gives comment cards to participants. For school groups teachers are given evaluation forms at some programs. They have an entire educational department dedicated to this area as well as numerous volunteers. The staff in this department will have meetings to assess the programs by looking at overall attendance (for all programs), program-by-program attendance, survey results, and other feedback. They will then adjust accordingly depending on their findings. The Wild Center strives to make educational programs that are fun and effective. It is important for them to evaluate this component of their organization since education is a large portion of their overall goals and objects. The staff recognizes the importance of monitoring and evaluating the programs to ensure they are moving in a direction which satisfies both The Wild Center’s vision as well as the participants.

Preservation of Natural Resource. This area is not a large focus for The Wild Center. Instead, they dedicate themselves to educating visitors on how to preserve the natural resources of the Adirondacks. They do this through outdoor programming and off-site expeditions. The center is focused on educating visitors in this area to help maintain the entire Adirondack system rather than just at their location. The site itself, however, is monitored by the facilities department which includes staff with landscaping experience. The clear pathways and trails are monitored by naturalists who lead visitor tours. Keeping visitors to trails by guided naturalists allow for minimal impact on the surrounding resources. Also, the naturalists and volunteers actively walk to the site so they can monitor any changes. In addition, The Wild Center does have some scientists and research projects on site which help monitor the larger ecosystem in terms of flora and fauna. These researchers can evaluate any changes or impacts being made at the site. As mentioned above, the leadership of The Wild Center does not place as much focus on evaluating the preservation of natural resources but through communication with various staff and scientists they still make sure preservation efforts are effective, moving in the right direction, and meeting their goals and standards.

Summary

It does take time and effort to effectively monitor and evaluate visitor use, educational programs, and the natural resources but without these strategies a lot of time, effort, and resources may be wasted on projects that are ineffective. Both the AIC and The Wild Center understand the importance of monitoring and evaluation and are willing to put forth the effort so that the site may be preserved for the future. Not only is it important for the overall well-being of the destination but monitoring and evaluation is also important to understand how visitors interact with the site.

Based on the analysis from these two comparative destinations, Pack Forest should work towards developing a monitoring and evaluation plan that: is regularly evaluated and revised; carefully monitors visitation numbers, trends, and feedback; provides staff and visitors the opportunity to evaluate educational programs; utilizes scientific researchers to monitor the natural resources; and clearly states expectations for monitoring and evaluation strategies in relationship to the desired goals and outcomes. While it may be an arduous task, monitoring and evaluation should be a high priority for Pack Forest to ensure the goals for the site are being achieved.

FACILITY RECOMMENDATIONS

Overall Design Recommendations for Pack Forest

Overview. People are attracted to landscapes that they perceive as visually interesting yet easy to navigate. An assortment of attractions, like those at Pack Forest, makes a destination engaging and memorable over multiple visits. However, a logical design, that helps visitors experience these attractions enjoyably and safely, is also essential. Currently, Pack Forest lacks an overall design plan for using the facility as a joint recreation and research destination. This report offers recommendations for how the property can be organized spatially to accommodate outdoor recreation, ongoing research projects, a new visitor center, and a new campground (Figure 50). By incorporating a balanced comprehensive design plan, Pack Forest can prepare for increased public access without sacrificing its important ecological, aesthetic, and educational qualities.



Figure 50: Overall map of Pack Forest, showing proposed use zones, trails, and campgrounds Image by C. Ponte using Adobe Creative Suite CS5 programs

Overall design to manage visitor behavior and mitigate conflicts. A single clearly identified entrance area will best orient visitors to the property, guiding them to the areas suited to their activity interests. While the current entrance is well situated for receiving guests from Warrensburg and Route 28, improvements can make the area more eye-catching and welcoming. To avoid confusion, other existing entrances should use gates or removable bollards to limit access for emergency purposes. These entrances could also be temporarily opened for events, such as the arrival and departure of DEC summer youth camp participants (Figure 51). Within Pack Forest, bollards or other temporary barriers could discourage motor vehicle access to certain trails, periodically close trails for research projects, and close off unused sections of the proposed campground area (Figure 51).

Signage directing day use visitors to park at the proposed visitor center will help keep non-staff motor vehicles on the east side of Pack Forest along old US 9. Overflow parking is easily accessible nearby at the staff office area. After parking their cars at the visitor center lot, hikers can access trails throughout the site by foot (Figure 52). Existing and new trails will cater to a range of abilities, from gentle ADA compliant strolls to more vigorous treks up Spruce Mountain. Due to potential conflicts with pedestrians, bikes, and cars, horseback riding should be encouraged on the west side of the property away from old US 9 (Figure 52). Similarly, some of the new trails can be winterized to separate cross country ski and snowshoe recreation from the existing snowmobile trail. Clear signage can help different groups of recreation enthusiasts know what trail is best for their safety and enjoyment. The better experience provided to these existing visitor groups will encourage future visits and a continued appreciation for Pack Forest.

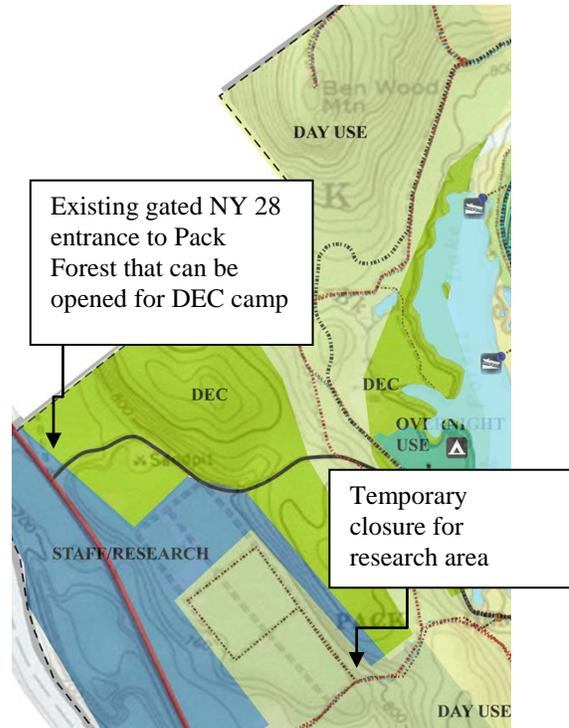


Figure 51. Detail of overall design map showing examples of temporary entrances

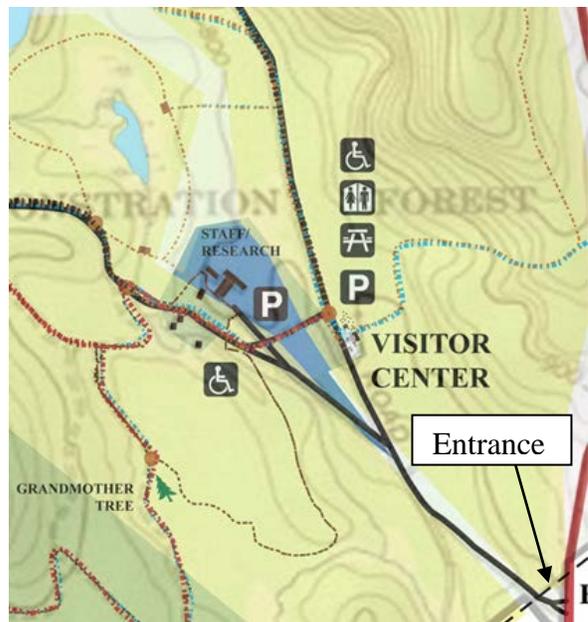


Figure 22. Detail showing visitor center in relation to entrance and different trails (thin brown = foot, thick brown = bike, red = horse, blue = winter trails)

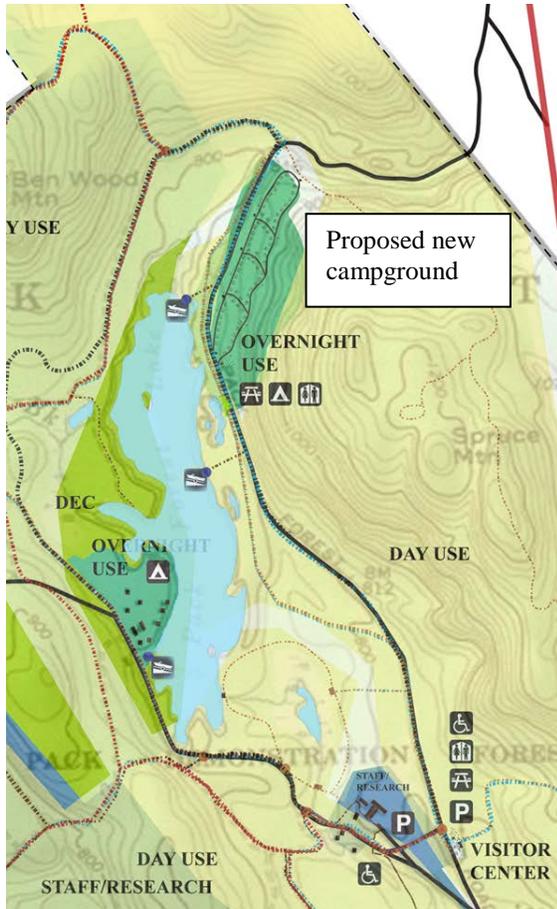


Figure 53. Detail of proposed campground in relation to DEC camp and visitor center

When the DEC youth camp is in session, visitors seeking a peaceful hike can utilize the proposed trails on the east and south sides of the property away from the areas most frequented by exuberant teen campers. The location of the visitor center and main entrance on the south side of Pack Forest further concentrates day use recreation away from the DEC camp, allowing the teens to still enjoy the northwest areas of the property that they traditionally frequent for summer camp activities (Figure 50).

People camping in the new campground (proposed for the east side of the lake; see Figure 53) will be separated from the boisterous activity of the DEC summer camp. The campground will be within a short drive from the visitor center (Figure 53). Tent campers can drive their vehicles along the two-way but narrow Old Route 9 road to the campsites spaced along a small one-way road that reconnects to Old Route 9. Although campsites are sized to create a sense of seclusion and tranquil retreat, the proximity to Old Route 9 may interfere with the desired wilderness camping feeling. Screening campsites from the road with vegetation may be one solution. Unfortunately, the steep topography and wetlands within Pack Forest leave few options for the new campground’s location and significantly limit the amount of campsites that can be constructed. Closeness to the two eastern boat launches may make the chosen campground area attractive for campers interested in fishing and paddling. Some campground amenities such as a pavilion, composting toilets, and wildlife-proof waste bins can be located so that day users are also able to utilize them (Figure 54).

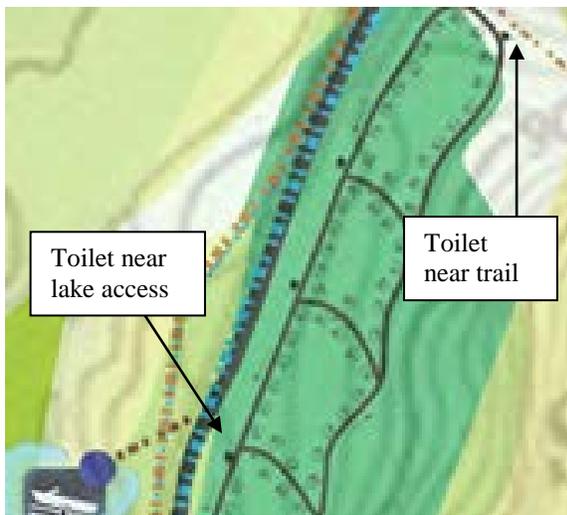


Figure 54. Campground amenities located for both day and overnight user groups

Create consistent design language for the facility. A consistent aesthetic vocabulary helps visitors make sense of a place. Utilizing the dark green color of SUNY ESF branding for example could reinforce the historic use of the property as a research site while also evoking the surrounding forested landscape (Figure 51). The exposed wood and use of boulders for road infrastructure at Pack Forest are compelling design elements that correspond to the rustic regional aesthetic of the Adirondacks. Any materials chosen for trail surfacing, building retrofits, signage and infrastructure should also be sensitive to natural resource protection, ADA accessibility, and the environmental mission of SUNY ESF. As such, these elements could be the basis for creating design standards for both new and restored features throughout the site. This consistency is most important in the day use areas of the property to improve visitor navigation while reinforcing place identity, interpretive efforts, and marketing (Figure 50). Furthermore, standardization of materials and color can make maintenance more cost effective.

Signage Recommendations

Improve main entrance sign. The main entrance sign on Route 9 should be improved in a way that attracts recreational visitors. Wording for the sign could read, “Pack Forest: Recreation and Research Area. Lake Access. Camping. ADA Trail.” Available outdoor recreation opportunities should be posted with symbols representing fishing, boating, restrooms, parking, camping, and handicapped accessible facilities. Wording should be kept to a minimum so that the sign looks simple and easy to read. The sign should be durable enough to survive year-round weather; it should have a rustic look and be protected by a roofed kiosk. It should be large enough that it can be read by passing vehicles and placed close to the road. There should also be signage on highway exits to Route 87 and on Route 28 that direct visitors to Pack Forest.

Place maps and directional signs at key points. Maps and signage help people find their way, which can decrease stress and enhance the experience at Pack Forest. Maps should be simple and clear with a consistent theme, style, and design. A rustic theme that blends in well with the natural environment is suggested. There are currently a few signs around Pack Forest, but they are in disrepair and should be replaced. Shortly after passing the entrance sign, visitors should see directional signs pointing to the visitor center, boat launch access, campground, and trails. Paper maps showing the trails and location of facilities in Pack Forest should be provided free of charge at the visitor center. There should also be a place to return used maps. Directional signs should be placed at each roadway intersection and in parking lots.

Implement signs where motorized vehicles are and are not allowed. Putting up signs about where snowmobiles are allowed and not allowed would concentrate where environmental impacts from motorized vehicles occur and will also minimize user conflict between skiers and vehicle users.

Recommendations for Building Repairs and Renovations

Convert old lodge to visitor center. The old lodge could easily be renovated and used as a visitor center. Its current location on Old Route 9 works well with the flow of traffic coming from the entrance on route 9 and heading towards the campground and boat launches. More details about the visitor center recommendations are given in the Interpretation Recommendations section.

Renovate the RC&D building. The RC&D building could be renovated and turned into researcher, student, and/or employee housing. The installation of a new well will be needed for water. Showers and minor repairs are needed.

DEC Camp buildings. The DEC has done a wonderful maintaining the buildings within the area that it leases from SUNY ESF. Continued renovation of buildings currently used for storage is encouraged in order to provide additional opportunities for housing for camp attendees.

Repaint the Forest Property Office (PF-MOF-98). The paint on the exteriors of both the old sawmill and the Forest Property Office (PF-MOF-98) is peeling. These buildings should be stripped and repainted. This is of particular importance as the current paint may still contain lead. This will dramatically improve the aesthetic of the buildings.

Recommendations for Roads and Parking

Changes to Old Route 9. The surface of Old Route 9 is in need of repair. It should be resurfaced with a hard, permeable and natural material such as packed dirt and gravel. Pull-outs should be added along the road in order to accommodate two-way traffic to and from the campground area without increasing the width of the road. Old Route 9 runs for about 2.5 miles inside Pack Forest; a total of five pull-outs, one every half mile, are recommended. A trail, parallel to old route 9 and adjacent to the lake, should be constructed so that visitors can travel on foot near the lake without the danger of car traffic. The speed limit on Old Route 9 should be 10 miles per hour.

Install gate access and fire tower at Ben Wood Mountain. The forest road to Ben Wood Mountain should be gated in order to limit access by motor vehicle to the mountain's summit. Motor vehicle access should only be allowed for those who are physically disabled or for emergency situations. At the summit of Ben Wood Mountain, the installation of a 40- to 50-foot fire tower is recommended in order to attract visitors to this site.

Parking lots. The main parking lots for Pack Forest will be in front of the visitor center, adjacent to the office/maintenance buildings, and near the DEC camp. Visitors should be able to easily find the trails from these parking areas (see Figure 56). The three main parking areas should be paved in order to decrease damage to the area due to overuse and weather conditions.

The parking area near the office/maintenance buildings will be plowed in the winter if these buildings are used year round.

Currently, the parking areas near the DEC camp and office/maintenance building are gravel; a new lot near the visitor center will be needed (see Figure 55 for recommended design and traffic flow patterns). Permeable pavers are recommended for this new parking lot since they help manage storm water and decrease pollution, and are also attractive in appearance. This ecosystem friendly parking area can be labeled with interpretive signs and serve as a demonstration of SUNY ESF's commitment to sustainable technology. Permeable pavement is available through the following:

- Gould Lawn and Landscaping, a small company in Lake George, NY:
http://www.gouldlandscaping.com/permeable_pavers.asp
- Unilock, a big paving company in Brewster, NY, about 3 hours south of Warrensburg. This company donated pavers to the Lake George Association in 2012.
Unilock.com

Unpaved parking spaces are recommended for each campsite and on the side of the road near trailheads for those who need handicapped accessible parking.

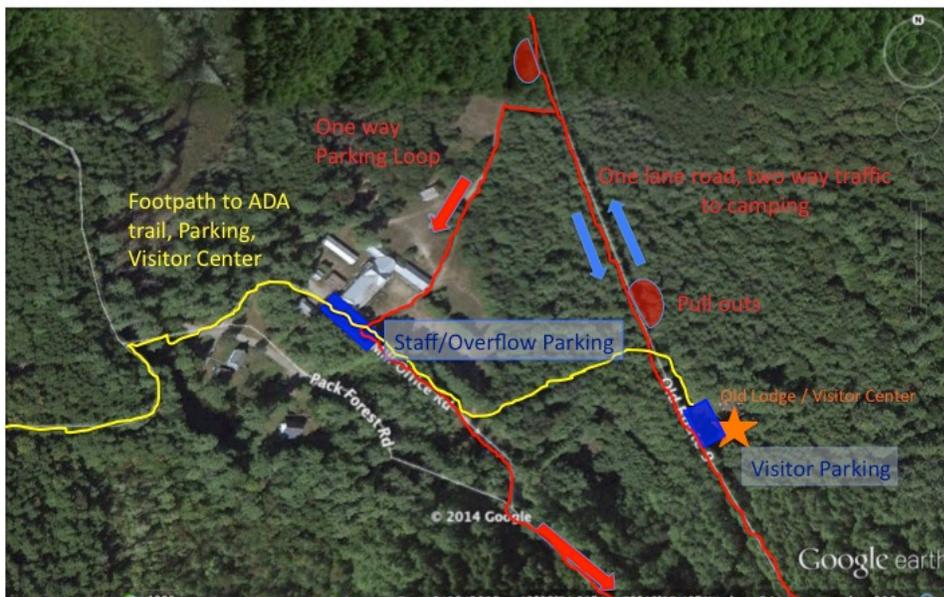


Figure 55. Map showing future connections between parking lots and trail.

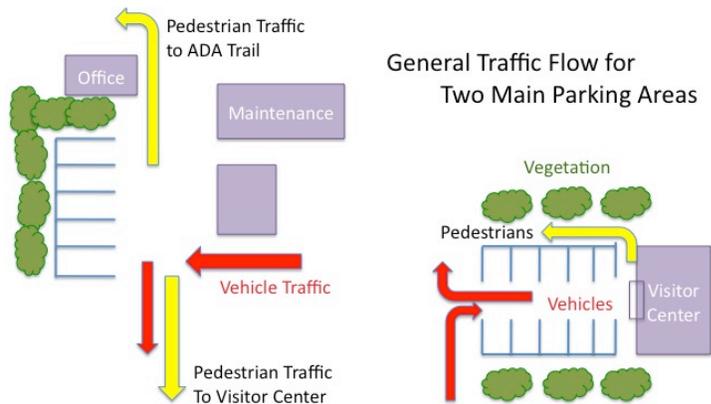


Figure 56. Vehicular and pedestrian flow to and from parking areas.

Campground Recommendations

Campground placement. A new campground is proposed for the land northeast of the lake and east of Old Route 9 (Figure 57). This placement option will allow for a safe, rustic experience. Placement will allow for minimum conflict between users groups, such as scientific researchers or DEC campers using the areas west of the lake. Other details regarding this proposed campground are:

- **Use current route 9 as the access point.** The connection from current Route 9 to old Route 9 should be gated at the northern end. This will prevent guests from entering the site near the campgrounds and ensure they instead enter by the Visitor's Center.
- **Check in at the Visitor's Center.** The Visitor's Center can act as the main hub of activity. As it is one of the first things visitors see upon entering the park, it will serve as an ideal location for campground check in. Additionally the Center can provide maps, firewood, and other items campers may require.
- **Utilize Old Route 9 as the access road to and from the campground.** This will allow for directed visitor flow from the entrance, to the Visitor's Center, to the campground. Traffic should be two way from the Center to the campground, but the road does not require widening. Keeping the road narrow will encourage slower driving. However, pull over areas should be located approximately every half-mile to provide places to pull over.
- **Ensure adequate signage.** Signs will be very important to direct visitors to the campground, around the camping loop, and to nearby trails. The main road and connecting roads within the campground must be clearly labeled for one way flow of traffic through the camping area. Signs will identify each campsite with a number, direct campers towards the restrooms, pavilion, and garbage disposal/recycling location.

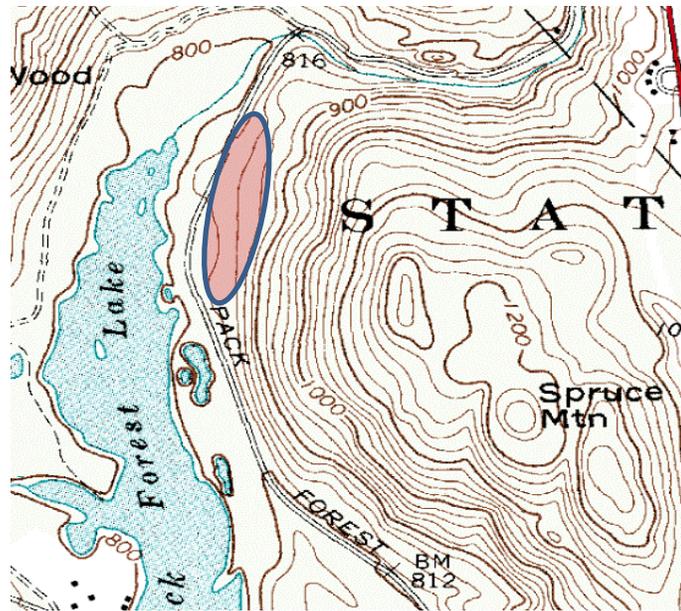


Figure 57. Map of Pack Forest. The red oval represents the general location of the campground. Photo credit: US Geological Survey, the Glen NY Quadrangle, with edits by Rachel Radicello.

Overall design of campground. Given the limited area of land suited to campground development between the lake and the mountain, the campgrounds should be designed as a single oval divided into 4 sections (Figure 58). Each section will contain 8 to 12 campsites suitable for tent use or small (< 23') motorhomes (the proposed number of campsites is 40). This design allows for sections to be opened one at a time as needed, allowing for expansion during the peak summer season or as the years pass. Meanwhile, during slower times of the season, managers have the option to limit the sections that are open, thus minimizing the amount of maintenance required. Sectioning will also allow for large groups (i.e. Boy or Girl Scout troops) to rent out an entire section. Furthermore, a program can be implemented similar to Adopt-a-Highway where groups can be responsible for ensuring their section stays clean from litter. A detailed design created by a civil engineer for the campground is recommended prior to construction, since new sections of road will need to be constructed, as will water service to spigots. Other recommendations for the overall design include:

- **Install electricity.** Electricity will be necessary for the restrooms and for providing safe lighting. To maintain the rustic, backcountry feel however, electrical hookups should not be provided at each site.
- **Place a pavilion at one end of the loop.** A pavilion will provide a common gathering space for campers to meet and it will provide shelter from the rain. Placement must be at one end of the loop to ensure that roadways are used, preventing creation of multiple paths as shortcuts.
- **Allow for sorted garbage disposal and recycling.** Garbage removal should be done weekly, or as seen necessary by management. The dumpsters should be labeled to allow for recycling. These containers should be made of durable “bear-proof” materials to prevent the attraction of animals.
- **Provide access to potable water.** Water spigots should be spaced evenly throughout the campground. NYS health regulations require one water spigot per ten campsites.

- Provide restrooms in the campground.** Restrooms should be provided at the end of each section within the larger camping loop. They should include compostable toilets, which are odorless and waterless, as well as showers heated by solar power. These services consume less energy and resources. As a general rule, one toilet is provided for each gender for every 35 campers (approximately eight campsites), and one sink is provided per two toilets. At minimum, one restroom stall should be handicap accessible. Restrooms should be no further than 300 feet from any single campsite. Other accessibility issues to consider include ramp access, doorway width, and sink height.

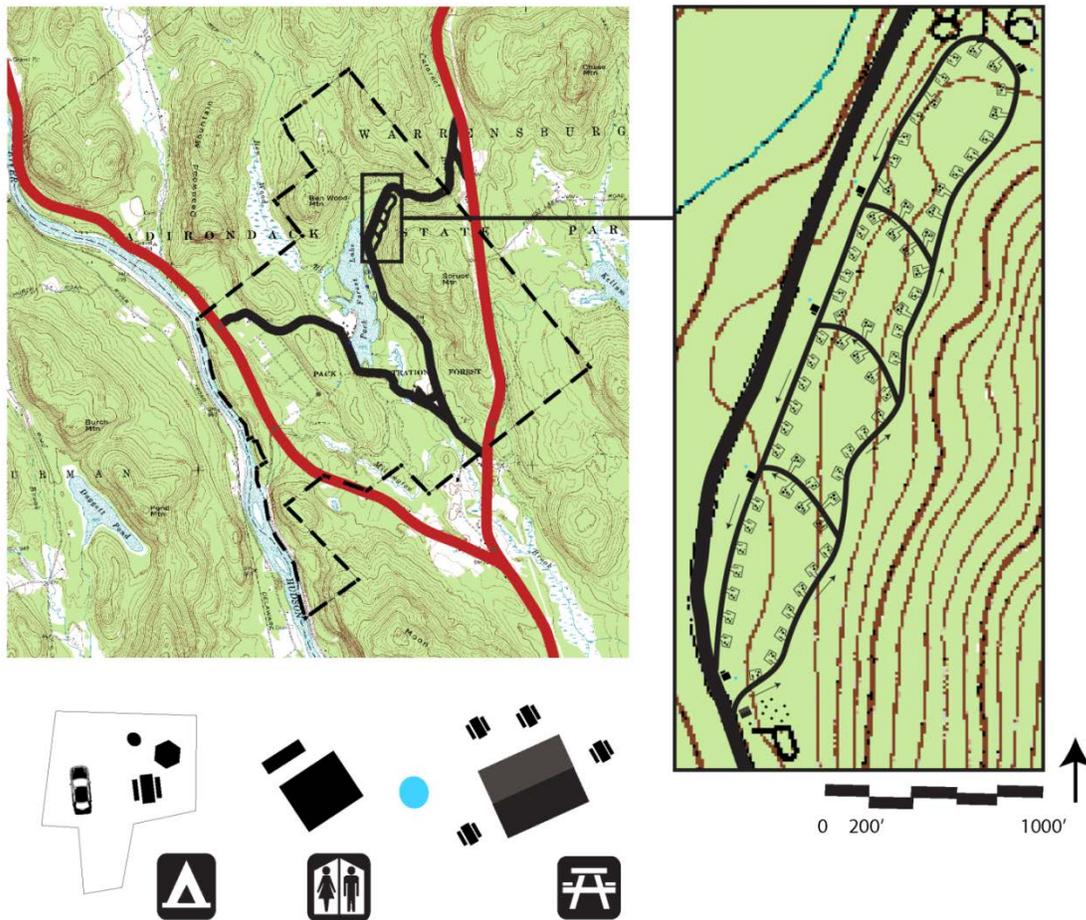


Figure 58. Map of proposed campsite design. This image shows possible expansion to maximize the number of camping sites; however, I would recommend opening approximately 40 campsites. Photo credits: Rachel Radicello and Cathy Ponte.

Design of with each individual campsite. Sites should be a minimum of 25 feet by 35 feet. NYS health requirements state that the site must be large enough to allow for a minimum of five feet between the tent and the site boundaries. Health requirements also necessitate a minimum of 10 feet between sites. Pack Forest campground can extend this to at approximately 40 feet between sites to allow for maximum privacy and seclusion, thus creating a rustic atmosphere. In addition, the following campsite amenities are recommended:

- **Campfire ring.** Each site should include a campfire ring. The ring should be lined with a metal rim to delineate the fire area. The ring should be placed away from any overhanging tree canopies. These measures will ensure fire safety.
- **Picnic table.** Each site should include a picnic table. The table should be made of durable material to prevent wood splinters, vandalism and graffiti.
- **Parking space.** Each site should include a parking spur. The spur should be 10 by 20 feet for tent sites (30 feet if small motorhomes are to be permitted). The spurs should be angled away from the road to enforce one-way traffic through the camping loop.

Accessible campsites for disabled visitors. For a campground containing 40 campsites, three fully accessible sites are recommended for visitors with physical disabilities according to the new Federal accessibility guidelines for outdoor areas (<http://www.access-board.gov/guidelines-and-standards/recreation-facilities/outdoor-developed-areas/final-guidelines-for-outdoor-developed-areas/text-of-the-guidelines>). Although these guidelines are for areas constructed or supported with federal funding, these guidelines will insure that visitors to state-owned facilities such as Pack Forest have positive experiences. These accessible campsites should be located on firm, level substrate. Accessible features include an accessible fire ring, parking spur, water spigot, and picnic table.

DEC camp. Should the DEC decide to not renew its current lease at some time in the future, SUNY ESF should consider renting the existing DEC camp cabins on a weekly basis during the spring, summer, and fall to families for vacations, family reunions, and other events (e.g., weddings). An analysis of the average cost for rental cabins in the Adirondacks will be needed to determine the rental fee to be charged, and the potential income to be derived from this effort.

Lean-tos along Millington Brook. Lean-tos could be built along this brook to accommodate paddlers interested in paddling to the Hudson River through Pack Forest. Two lean-tos placed one mile apart are recommended in order to give travelers an area for overnight use. These can be constructed of timber materials found in the forest.

Trail Recommendations

Expand the trail system in Pack Forest. Several new trails and modifications to existing trails are recommended for Pack Forest. New trails include the following:

- ***Construct an accessible loop trail along the outlet of Pack Forest Lake.*** Several factors make the area around the outlet of Pack Forest Lake ideal for construction of a trail accessible to those with disabilities for several reasons. The area is characterized by generally flat terrain, and is located adjacent to the proposed visitor center. Additionally

numerous resources provide abundant opportunities for destinations of interest along such a trail, including the gravesite of Charles Lathrop Pack and his wife, the dam on the outlet of Pack Forest Lake, Pack Forest Lake itself, and wildlife viewing opportunities in the wetlands alongside the lake. This trail may also serve as an interpretive trail to facilitate education about Adirondack ecosystems and Pack Forest history. Because of the presence of wetlands, special consideration will need towards routing the trail so as to minimize the potential for disturbance within sensitive areas. Figure 59 shows the approximate route this trail will take.

- ***Construct a hiking trail to the summit of Spruce Mountain.*** Construction of this trail will provide access to the summit of Spruce Mountain for hikers coming from both the visitor center and campground. Because Ben Wood Mountain is accessed by snowmobiles in winter, as well as occasional motor vehicle traffic in the spring, summer, and fall, it may not provide an experience with adequate solitude for visitors to Pack Forest looking for a peak to climb by foot. Access to Spruce Mountain via a foot trail will provide an alternative option for hikers who place a higher priority on solitude. The trail will begin at the visitor center, ascend the south side of the mountain, descend the north side of the mountain, and end near the campground area. This trails will also be in close proximity to the proposed trail on the east shore of Pack Forest Lake.

Because of the areas of steep slopes on Spruce Mountain, special considerations will need to be made towards appropriate routing of the trail and/or installation of improvements designed to minimize erosion issues. By ascending the ridge on the south side of Spruce Mountain, this trail can traverse areas of minimum slope, provide for a hike along interesting topography on the ridge, and will avoid the vicinity of Route 9 and the snowmobile trails along the power lines adjacent to that road. The north side of Spruce Mountain has generally appropriate slopes for a trail, with the exception of the base of the mountain. Side hilling will likely be necessary here to properly implement the trail. Figure 59 shows the approximate route these trails will take.

- ***Construct a new trail along the east shore of Pack Forest Lake.*** The primary purpose of this trail will be to facilitate pedestrian traffic along the east shore of Pack Forest Lake, eliminating potential conflicts between pedestrians and vehicles on Old Route 9. This trail will allow for direct pedestrian travel between the proposed visitor center and the campground. It will connect the proposed accessible trail near the outlet of Pack Forest Lake on the south end with the forest road network that exists on the north end of Pack Forest Lake. Along the way, it will also provide access both the campground as well as the Pack Forest Lake boat launch sites. Additionally, it will provide for a loop hiking option either in conjunction with the proposed Spruce Mountain Trails, or in conjunction with the existing forest road network around the north and west sides of Pack Forest Lake

From a risk management stand point, construction of this trail should be considered high priority, as it provides a safe corridor for hiking that connects multiple areas of interest in Pack Forest. It will also provide for a safe cross-country ski corridor in the winter away from the established snowmobile routes within Pack Forest. Figure 59 shows the approximate route this trail will take.

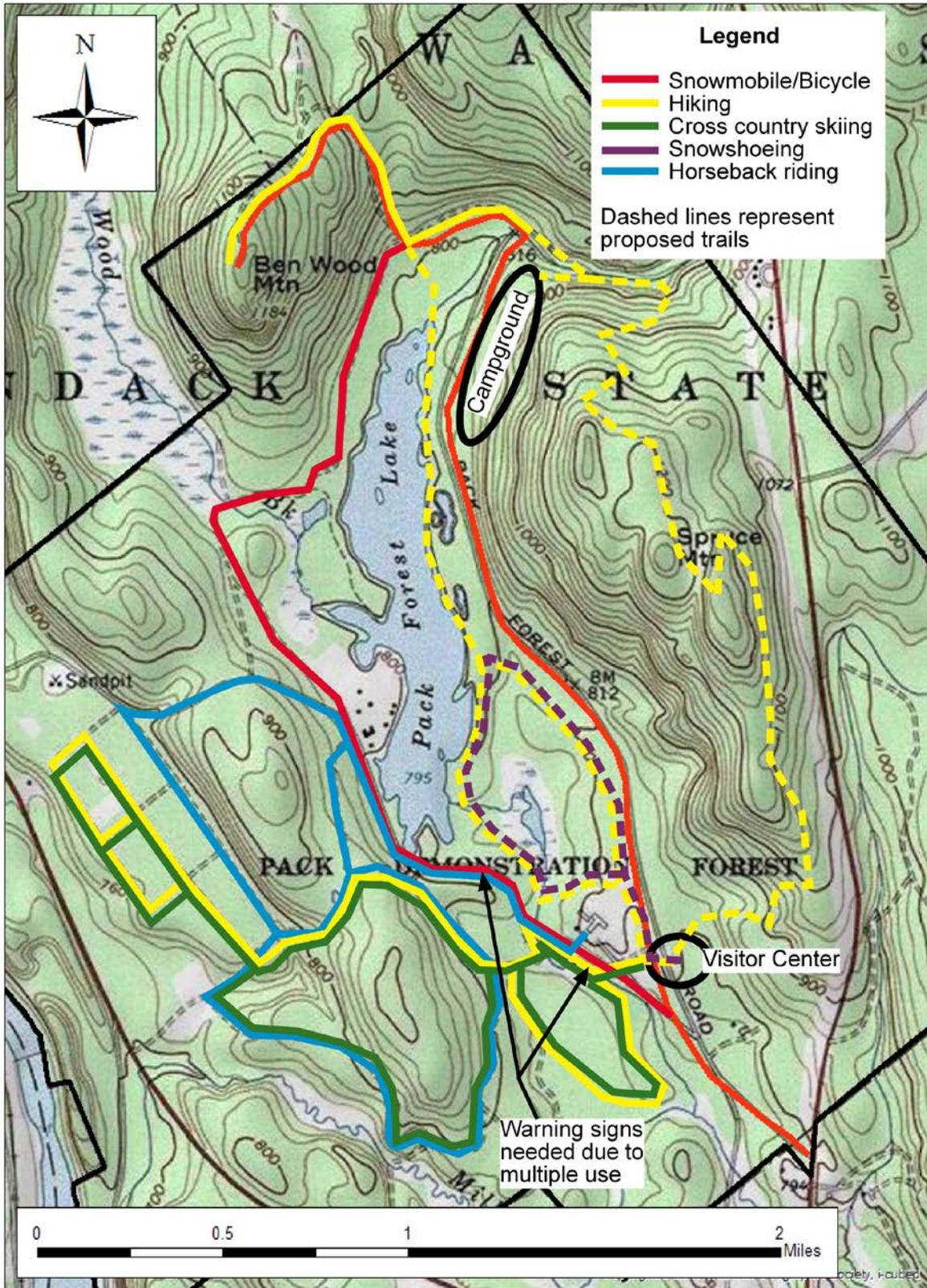


Figure 59. Existing and proposed new trails for Pack Forest.

- ***Construct a trail that provides access to the silvicultural research plots:*** A trail through the silvicultural research plots will provide the opportunity for the public to view and learn about the application of different silvicultural techniques practiced in forestry. This trail may also serve as an interpretive trail to help facilitate education about both ESF research specifically and forest management in general. Because of the ongoing nature of forest management at Pack Forest, this trail will have to be carefully routed to ensure that there is minimal interference between the trail and the silvicultural operations.

Maintain accessible trails to Americans with Disabilities Act (ADA) standards. The following criteria must be met in order to designate trails as “accessible:”

- All disabilities (hearing, speech, vision, physical, and cognitive) must be considered
- Accessible facilities in addition to the trails (bathrooms, parking, etc.) must also be included
- Slopes encountered along the trail must conform to the following criteria:
 - Will generally not exceed 5%, and will remain as close to 0% as possible
 - May exceed 5% but not 8.3% for a maximum of 50 feet
 - May exceed 8.3% but not 10% for a maximum of 30 feet
 - Will not exceed 10% at any location
 - Resting intervals are required between each segment exceeding 5% slope
- Trail surfaces must be firm and stable
- Tread widths must be at least 3 feet wide
- Openings (such as those between boards on a wooden bridge) must be less than 1 inch
- Trails must have a vertical clearance of 80 inches
- Trails must be free of any obstacles over 2 inches in height
- Trails must have passing intervals at least 60 inches wide every 1000 feet
- Resting intervals must be at least 60 inches long
- Accessible trails must have signs at the trailhead explaining the accessibility of that trail
- While not required, trails may have edging that is 3 inches in height along the sides of the trail (this is strongly recommend in any areas where the trail crosses board walks or traverses alongside slopes)

The Grandmother Tree Trail will require some rehabilitation to come into conformance to these standards. The new trail constructed around the outlet of Pack Forest Lake should be initially constructed to these standards.

Use appropriate standards for trail construction and maintenance. Proper trail construction and maintenance ensures that trails will continue to be enjoyable destinations for the public, and that impacts of trail use upon the local ecosystem will be minimal. All construction and maintenance should conform to the following standards:

- Wherever possible, soils of poor drainage should be avoided in favor of soils with a high gravel content that are well drained.
- Wherever possible, grades should exceed 10% only for short distances, and should only exceed 20% in areas where staircases may be constructed.
- Tread width should be at least 2 feet, and trail corridors cleared to a height of 8 feet.

- Trails on which skiing will be permitted should have a tread at least 4-6 feet wide to facilitate passing.
- Trails intended to be used for interpretation should only exceed 5% grade only for short distances, and the tread should be at least 6-8 feet wide.
- Erosion control devices (culverts, water bards, drainage dips, etc.) should be implemented every 5-6 vertical feet of elevation change. This will primarily be a concern on the Spruce Mountain Trail.
- In the vicinity of wetlands and shorelines, trails should be carefully routed to avoid impacts in these environmentally sensitive areas, with a setbacks from these areas as appropriate. While providing access to these areas is essential for the purposes of both education and enjoyment, such access should be limited to a few distinct areas with appropriate facilities (boardwalks, viewing platforms, etc.) to minimize those impacts.
- Trails should be well marked with consistent and easy to understand signage. The start of each trail should be indicated with a trailhead sign that also displays a map of the Pack Forest trail network with that specific trail clearly highlighted.
- Trailhead barriers may be necessary to discourage some types of unauthorized uses.

Implement appropriate zones for potentially conflicting trail uses. Different means of traversing trails can cause conflict between user groups. The greatest potential for conflict at Pack Forest exists between horseback riders, bicyclists, and motor vehicles, and between skiers and snowmobilers. By allowing only certain uses on certain trails, the potential for these conflicts can be minimized. Implementing the following recommendations will help to accomplish this:

- **Bicycling:** Allow bicycling only on the forest road corridor that circumnavigates Pack Forest Lake. Prohibit bicycles on all other forest roads and trails. Figure 59 shows the trails on which bicycling would be permitted.
- **Horseback riding:** Evaluate the network of forest roads to the west of Pack Forest Lake, and determine which are suitable for horseback riding use. Additionally, if use levels of both horseback riding and bicycling are low, horseback riding may also be permitted on the forest road corridor that circumnavigates Pack Forest Lake. If a campground is opened, however, use of Old Route 9 is not recommended for horseback riders due to potential conflicts with motor vehicles. Careful and constant monitoring of the situation is necessary to ensure that there is minimal conflict. Figure 59 shows the forest road network that may be suitable for horseback riding.
- **Snowmobiles:** Currently, snowmobiles are allowed within pack forest only on a connecting trail between Route 9 and Old Route 9, on a section of Old Route 9 east of Pack Forest Lake, and on forest roads within Pack Forest directly connecting Old Route 9 with the summit of Ben Wood Mountain. No changes are recommended to the snowmobile trails at Pack Forest. Figure 60 shows the current network of snowmobile trails at Pack Forest.
- **Skiing:** Construction of the proposed trail along the east shore of Pack Forest Lake will allow skiers to traverse this side of the lake without coming into contact with snowmobiles on Old Route 9 or on Ben Wood Mountain. In addition to this trail, skiing should be permitted on all foot trails (with the exception of the Spruce Mountain trail), as well as on all forest roads not maintained for winter motor vehicle or snowmobile travel.

- **Accessible motor vehicle use:** If there is a demand for motor vehicle access by persons with disabilities, it may be permitted to the summit of Ben Wood Mountain by personal motor vehicle.
- **Motor vehicles:** Minimize all other motor vehicle use of the forest road network at Pack Forest. Allowing essential motor vehicle use only will ensure the safety of Pack Forest visitors utilizing the forest roads for non-motor vehicle access.

Pack Forest Snowmobile Trails

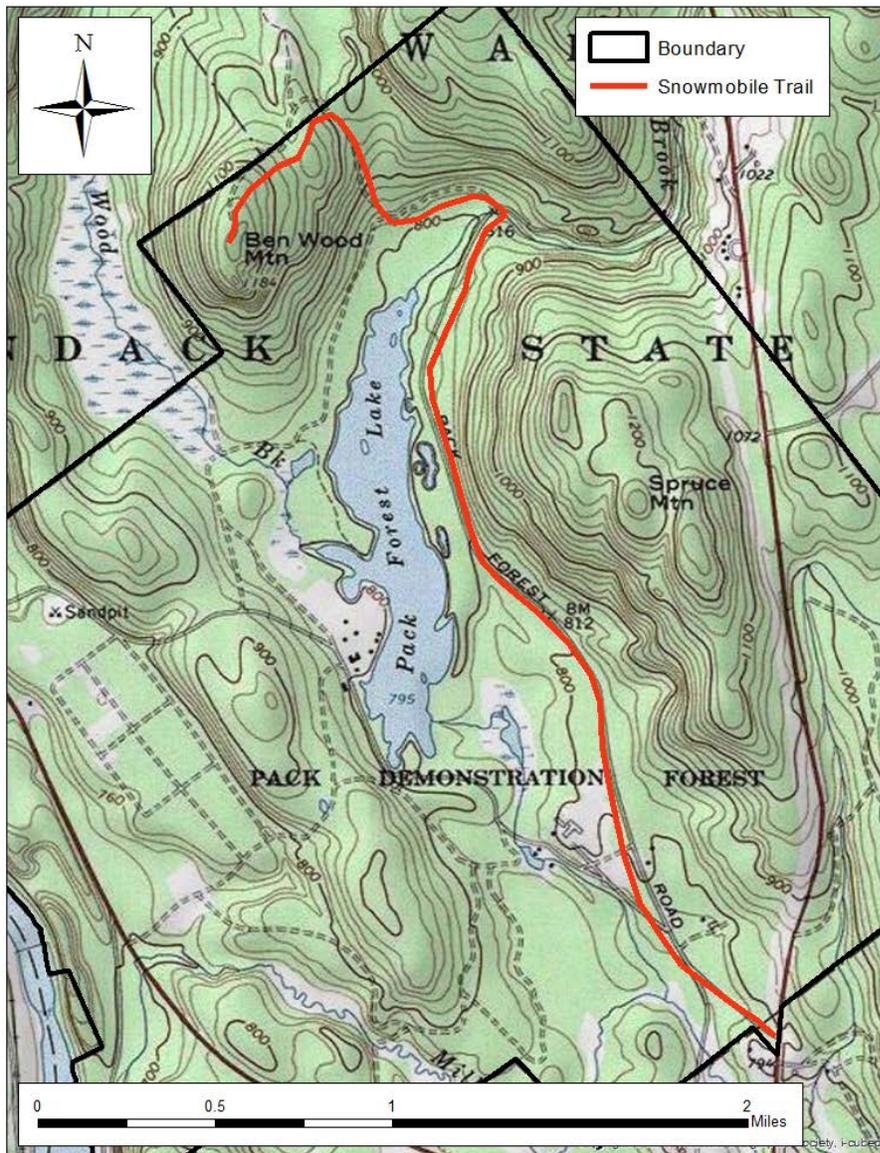


Figure 60. Pack Forest snowmobile trails

Add plastic coated wire mesh to boardwalks. Currently, the boardwalks in Pack Forest pose a health risk to visitors and are a liability concern for ESF due to their extremely slippery nature. Plastic coated wire mesh (Figure 61) is an inexpensive and easy to install solution for the slippery boardwalks on the Grandmother Tree Trail.



Figure 61. Wire mesh proposed for boardwalks. Source: Photo 1: <http://woodlandstewardship.org>; Photo 2: Diane Kuehn.

Interpretive trail signs. Installation of interpretive signs is needed at trailheads and along the trails to provide visitors with information in an interactive way that is educational as well as relatable to the environment. These signs should have limited text, and be routinely maintained to preserve quality and relevancy. These signs should include graphic media that showcase the natural history of the land, signify sacred places within Pack Forest (Grandmother Tree), explain local flora/fauna species found throughout the forest, and describe the unique ecosystems within Pack Forest, all the while aiming to inspire the visitor.

Implement trail closures as necessary to ensure safety. Because Pack Forest will continue operation as a working forest, it may be necessary to close certain trails at certain times to minimize the potential for injury to visitors. Such closures must be clearly communicated to the public.

Other Recommendations for Visitor Facilities

Use animal-proof trash and recycling bins throughout the property. Animal-proof trash and recycling bins will decrease wildlife disturbance by minimizing the ability of animals to become attracted to human food. Signs prohibiting the feeding of wildlife should also be posted. The metal bins are durable and can withstand many seasons of rain and snow. They are rather expensive at \$1,000 and up per unit, but they may be worth the price by reducing interference with wildlife. A trash/recycling bin center should be located at the parking area near the lodge for use by visitors and campers. All trash and recycling should be collected regularly from this central location in Pack Forest by municipal waste collection services. The DEC camp currently removes their own trash/recycling and will continue to do so for the duration of their contract with Pack Forest.

Install composting or solar-powered toilets at future campground. Composting or solar-powered toilets at the campground will conserve water and demonstrate SUNY ESF's commitment to sustainability by showcasing sustainable facilities. An assessment will be needed in order to determine the number of toilets required for the campground, and the preferred type (solar vs. composting). The number of toilets will depend on the number of anticipated users and the frequency of use. Composting or solar-powered toilets at the campground will eliminate the need and cost of an additional septic tank on the property. However, additional staff and/or maintenance work time will be necessary for upkeep. Some composting toilets require a heating unit that can be powered by electricity; solar powered composting toilets would not need to be attached to electrical lines. The conventional restrooms at the visitor center will be expanded, so additional composting toilets will not be needed at that location. Composting toilets can be purchased from a number of companies including Composting Toilet World (www.compostingtoilet.org), Advance Composting Systems LLC (www.compostingtoilet.com), and somewhat locally from Let's Go Green in Ontario Canada (www.letsogogreen.com).

Bring electricity to the campground. Power will be needed at the campground for composting toilets and minimal lighting by the toilets. Electricity could be obtained by extending the current overhead electrical lines to the campground location. Since minimal electricity is needed, it might be possible to obtain campground power from the proposed hydroelectric dam or solar panels. There should be a generator on site in case emergency lighting or electricity is needed.

Add public water sources. There are currently no public drinking fountains in Pack Forest. A drinking fountain will be needed at the visitor center and at the DEC camp. These fountains should be turned off in the winter. A new well, water pump shed, and water line connected to water spigots should be installed in the campground. Approximately one spigot will be needed for every 4 to 8 sites, depending on campsite spacing; the water line should be installed along the campground road as road improvements are made.

Add picnic tables. Picnic tables provide a nice gathering or meeting spot for groups and a place to rest for hikers. They would add to the experience of Pack Forest as a recreation park. I recommend placing one at each of the boat launch sites, and several adjacent to the visitor center.

Use the dam at Pack Forest Lake to create hydropower. The feasibility of hydroelectric generation at the dam should continue to be explored. Creating a self-sustaining source of power at Pack Forest would make operations cost-effective in the long term and would be a stellar demonstration of renewable technology in action. Perhaps SUNY ESF engineering students and faculty could be involved, which would fulfill Pack Forest's mission to integrate student work with onsite facilities. Tours and interpretive signs could make the dam and hydroelectric facility a unique highlight for visitors.

Conservation easement along the Hudson River. Work with the DEC to establish a conservation easement in the ice meadows areas along the Hudson River.

RECOMMENDATIONS FOR INTERPRETATION

Recommendations for the Visitor Center

Visitor center building. Designate the old lodge as the visitor center building. The lodge is located near the entrance of Route 9, making the center easily accessible by vehicle and the first attraction that visitors come across upon entering Pack Forest. It is aesthetically pleasing and is an appropriate size for a visitor center. The other existing interpretive center buildings within the Adirondacks are not as rustic and full of character, so the lodge would stand out as a unique interpretive center within the Adirondacks. Additionally, the fact that the property is somewhat of a “gateway” to the Adirondacks would distinguish this interpretive center from others.

Work is, however, needed before this facility can be used by visitors. The shutters likely need a fresh coat of paint, the building needs to be cleaned, walls need to be painted, and the windows that are boarded up need to be opened. Updates to the kitchen and bathroom areas are also needed. The basement is an important feature of the lodge because it is imperative that an interpretive center has ample storage space for temporary exhibits and other materials.

Unless a heating system can be installed in the visitor center, it is recommended that the center be closed during the winter. Although the interpretive center will be busiest during the summer months, it would still get ample use during the spring and the fall. Because the building is not equipped with a heating source such as propane, keeping the interpretive center open year-round would be a challenge. If heating could feasibly be installed, having the center open on weekends during the winter months is recommended. This would allow for winter programs as well as education for any drop in visitors participating in winter activities.

Other needed renovations and additions within the visitor center are as follows:

- **Accommodations for interpretive center staff.** Create boarding rooms for the interpretive staff in the attic. There are two rooms in the attic of the lodge, one on each side of the building. The doors to these rooms are relatively inconspicuous. These rooms should be renovated to be used as boarding for staff, especially in the summer months. If ESF students will be working at the center as interpreters, it would be useful to offer them free accommodation within the interpretive center. The inconspicuous doors would prevent visitors from exploring those rooms. However, it would be wise to install locks on the doors for the comfort of the staff. These rooms would primarily be used during the summer months during which students would likely be working at the lodge. An updated kitchen and bathroom facility will be needed to accommodate staff lodging.
- **Restroom facilities.** Expand the restroom facilities in the visitor center into the bedroom adjacent to them. The lodge already offers a restroom facility that is quite small and is a one-person utility. It should be expanded to have an updated restroom available for each gender. If feasible, construct restrooms with multiple stalls to minimize wait time during the busy months. The restrooms should be handicap accessible, and ideally provide a separate shower facility for the staff that would board in the attic of the lodge. The

shower room would remain locked during the day to prevent visitor access to the showers. There are four small bedrooms that surround the main floor of the lodge; one of the adjacent small bedrooms should provide the space for the restroom extension.

- **Kitchen.** Update the small existing kitchen area. This room could be used for food storage for staff and events.
- **Office.** Create an office and large classroom within the building. The small bedrooms on the opposite side of the building from the restrooms should be used as office and classroom space. The classroom could be used for indoor programs and presentations, and would also provide an alternative space for educational activities that are not weather permitting. The walls of the classroom should still be filled with exhibits that could be viewed when the room was not in use.
- **Visitor first aid area.** First aid supplies and an AED should be available for use in the staff office. All employees staffing the visitor center should be first aid, CPR, and AED certified.
- **Exhibit space.** The large room in the center of the ground floor should be used primarily for information and exhibits to help educate visitors. This room, paired with the classroom would help to convey the theme of the site: “Pack Forest is an educational and recreational destination that uses its wealth of natural, cultural, and scientific resources to enhance visitors’ stewardship and awareness.”
- **Visitor information area.** Set aside a small corner of space within the exhibit area for brochures and maps related to Pack Forest and the surrounding area.
- **Parking.** Designate the open space around the interpretive center as a parking area. Pavers should be installed throughout the space to protect the ground, but still allow for the percolation of water, similar to the lots at the Wild Center in Tupper Lake. The pavers last about three times as long as normal blacktop. If pavers are not economically feasible, gravel would also protect the ground and allow for percolation. There should be a few handicapped parking spaces available in the lot as well. Twenty-five to thirty parking spaces should exist in the lot to allow program attendees, interpretive center visitors, employees, and visitors who plan to use the trails around the center ample parking opportunities. If additional space is needed to allow for all of the parking spaces, a minimal amount of clearing should take place to expand the size of the lot.

Interpretive center staff. In order to successfully manage the center, a manager will be needed on site during all hours of operation. A manager for the center would likely facilitate a smooth operation, at least during the peak months. The manager would be responsible for any business that goes beyond interpretation and education. During the busy months, it would be ideal to have additional interpretive staff (possibly student interns) on site: one to run programs and one to answer questions within the center. There should also be a maintenance person who cleans the restrooms and is responsible for general upkeep of the building. This person could be an overall maintenance person for many of the buildings in Pack Forest. However, if the decision was made

that the center should remain open, there would only be need for one interpreter or manager and an occasional maintenance member to be at the center.

Use of the exhibit space. The overall design of the exhibit room should utilize as much wall space as possible, providing more space for visitors to move from exhibit to exhibit and for an old growth white pine forest exhibit placed in the middle of the room. The ESF research exhibit should be distanced from the Pack Lake exhibit, as both of these exhibits are the most interactive. By spreading out the interactive exhibits, it will ensure that visitors walk through the entire exhibit room. The proposed exhibits are as follows:

- ***Old growth white pine forest.*** For this exhibit, construct a real-size tree trunk of the grandmother tree inside the exhibit room. This exhibit will be in the center of the room and will be the first exhibit that visitors see when they enter the nature center. The real size model can be created around a support beam in the exhibit room or built so it extends from the floor to ceiling. By creating this real size model, it allows visitors to get close to understand the actual size of the tree. Around this model should be different boards that describe the old growth forest and its history in Pack Forest. There should also be a board of facts about the size of the grandmother tree as well as trail maps for visitors to visit the real tree. This nature exhibit will give visitors the opportunity to take photographs standing next to the model instead of walking from the trail to take photographs next to the actual tree. This exhibit can be utilized by all visitors because it provides multisensory components. Even though The Wild Center has similar exhibits, this exhibit will differ in that it highlights Pack Forest.
- ***Ice meadows interpretive exhibit.*** The creation of an exhibit that focuses on the ice meadows will raise awareness of the unique habitat located on the shore of the Hudson River. This exhibit is similar to exhibits at The Wild Center in that it will showcase a particular ecosystem in the Adirondacks. Since the ice meadows are unique in the Pack Forest area, this exhibit will also highlight Pack Forest, making it slightly different from The Wild Center exhibits. This exhibit will showcase the local flora and fauna while also promoting the area's natural beauty as described in the vision statement. This exhibit should include photographs and descriptions of the ice meadow ecosystem and its importance to the area. The photographs can include the change in the ecosystem throughout the seasons. This exhibit should be mounted on the wall of the interpretive center. The exhibit should avoid the use of technical jargon so all visitors are able to read and understand the descriptions.
- ***ESF staff and student research.*** This temporary exhibit can be updated as often as the research at SUNY ESF changes. Because the Adirondack Interpretive Center is constructing a similar exhibit where they will highlight SUNY ESF research in the Northern Forest, this exhibit should focus on topics that are specific to the Pack Forest area. While the content of the exhibit is temporary, its location in the center will remain permanent. This exhibit can utilize a television or large computer monitor to continuously stream a video about the various research projects. To prevent distraction to other visitors, the video should play without audio. The video should consist of a slow paced slide show that includes written descriptions and photographs of the various

research projects. This exhibit should be constructed on the wall closest to the visitor entrance, preferably near the brochures and other interpretive materials. This way, as visitors are picking up information in the center, they can also learn about the research being done by students and faculty.

- ***History of Pack Forest.*** This exhibit will discuss past timber and sawmill operations in Pack Forest, as well as the history related to Charles Lathrop Pack. The exhibit should provide information on the trail to the gravestone as well as other information regarding the history of Pack Forest and Charles Lathrop Pack. This exhibit should feature photographs and text on sturdy boards that are mounted on the wall. Photographs can include Charles Lathrop Pack as well as different photographs taken in Pack Forest throughout the years to note changes in the landscape. The text should be minimal and should only be used to highlight the different photographs that are featured on the exhibit boards.
- ***Creation of maple syrup.*** This exhibit will provide visitors with a step-by-step process on the collection of sap in Pack Forest. Along a wall, provide steps with photographs and real materials that are used to collect sap; then provide photographs and text about the process of boiling down the sap to create the syrup. An example of a sap collection bucket and its set up on the tree can be displayed using actual materials. The wall can serve as the “tree” with the bucket and spigot hanging from the wall. When constructing this exhibit, plan to use materials that will not be harmful to visitors who may interact with them. If it is not feasible to use real materials, provide photographs and descriptions of all the steps. All visitors will be able to utilize this exhibit because it will provide a visual component.
- ***Aquarium featuring fish from Pack Lake.*** Purchase one 120-150 gallon tank and place it in the corner of the exhibit center. Stock the tank with fish from Pack Lake to display the different species in the lake. Provide a name, description, and photograph of each fish on the closest wall to the tank. Provide descriptions of the ecology of Pack Lake near the fish tank as well. This exhibit will be beneficial to all visitors, especially those with children. The Wild Center has similar exhibits that are stocked with different species of fish. This exhibit will be similar, but it will have the added feature of information about Pack Lake. The fish will need to be moved back to the lake at the beginning of fall.

Other interpretive recommendations

Provide interpretive materials on invasive and rare species for visitors. Providing brochures, handouts or posters on what invasive species are, what they look like, and how they can damage certain ecosystems would allow visitors to know how to recognize, and therefore avoid spreading them. Visitors are going to want to keep the forest as pristine as possible and teaching them about species that have the potential to destroy habitats will instill in them a sense of stewardship towards the land.

Create a brochure to interpret and promote Pack Forest. A brochure should be created to orient visitors to Pack Forest and interpret the forest's resources and attraction. The brochure should include a trail map, basic interpretive information about attractions with Pack Forest, contact information, a calendar of events, and (if a Friends' group is created for Pack Forest) membership enrollment details. A brochure is offered not only as an informational guide, but as something the visitor can take home with them. Also, it is easy for local stores to give out brochures to their customers, further spreading awareness of Pack Forest.

Develop a quest. Visitors are constantly looking for new places to experience. Offering a quest is a fun and interactive way to get visitors to visit different locations within a park. A quest is created with rhythm and rhyme that acts like a song or poem. Each verse leads the visitor to an area that unlocks a clue guiding the visitor to their ultimate location. Sometimes the overall destination leads to treasure or a prize. This creates educational opportunities, provides historical information, and guides the visitor on an informal tour of the forest.

Add a geocache location to Pack Forest. Geocaching is a fun way to reach certain audiences who seek out new places to explore using a GPS unit. This activity has spread throughout the world and can be found almost anywhere. Adding a geocache to the property will get at least national attention from the demographic of people who utilizes this type of recreational activity. It is recommended that the geocache be located carefully so as to not damage fragile habitat through frequent visitation.

Develop an interpretive and promotional website. Today the use of social media is at an all-time high. The majority of visitor centers use websites as their main promotional tool, since it is an easy way to promote any area and gain a lot of recognition. With the use of social media like Facebook, Instagram, Flickr, Twitter, etc... the possibilities are endless when it comes to getting a destination noticed. It is important that Pack Forest creates its own website and online profiles to increase awareness of the recreational opportunities offered. The website should include the mission of Pack Forest, information about the history of the land, and attractive pictures that display the scenery of the area. The website should be easy to follow and user friendly, with clear descriptions and easy-to-access links. It should be used to inform, attract, and educate residents and visitors about the cultural, natural, and historic resources of Pack Forest. This website is discussed more under "Recommendations for promotion."

RECOMMENDATIONS FOR PROMOTIONS AND PARTNERSHIPS

Marketing Recommendations

Target New York State residents. Annual reports from other nature centers in the region indicate that the majority of visitors to Pack Forest will likely come from within the state. Additionally, a large percentage of people may come from within a day's drive. Advertising and marketing materials should be directed primarily towards residents of New York State, especially those within the Park Forest locale. Additionally, marketing should be directed to people in neighboring states and provinces including Quebec, Vermont, New Jersey, Connecticut, and Massachusetts.

Appeal to school groups. Outreach is needed to local teachers at both the grade school and university level to find ways to integrate Pack Forest into various curricula. Versatile programs should be developed which can be adjusted to fit differing age groups and areas of study. For assistance with this project, staff should reach out to other nature centers for preexisting materials or propose to local Girl Scouts, Boy Scouts, or upper level college students that they adopt the curriculum development as a project.

Direct group marketing to middle-aged females. Prior studies in the region have shown that most group trip planners are females over age 40. Marketing materials for groups should be geared towards people in this demographic group. As such, they should appeal to families, groups of adults and also groups of elderly visitors. It is recommended that both print and digital images and text reflect this group's interests.

Highlight outdoor activities. Most visitors will be interested in either scenic tours or outdoor athletic activities, especially hiking and biking. Marketing materials should play up these activities, especially in the form of strong visuals. It is also recommended that advertising be directed towards biking enthusiasts and competitive bikers who frequently seek new outdoor challenges and outdoor areas to explore.

Advertise culture. In many natural destinations, there is an underdeveloped market for heritage tourism. Advertising should capitalize on resources such as the Grandmother Tree and Pack's gravesite as historical and cultural attractions. This information could also be integrated with school visits and included in scenic tours.

Promotional Recommendations

Branding Pack Forest. For publicity purposes, branding is very important for tourism destinations since it reveals the uniqueness of the experience. It is necessary for Pack Forest to develop a good “brand.” The Pack Demonstration Forest will be a unique destination because it will provide overnight accommodations as it provides visitors with an educational and recreational experience. In addition, visitors will learn about the different research projects and environmentally sustainable practices at Pack Forest. A brand such as “rustic learning and living” or “Adirondack-style recreation and relaxation” should be considered to describe the visitor experience.

Creating a logo. Once the brand has been identified, a logo graphically representing this brand needs to be designed. This logo would be used in advertisements and various events.

Launch new website for Pack forest. Prior to opening the visitor center and campground at Pack Forest, a website will be needed to promote the grand opening and for future promotional efforts. This website could be accessed through the ESF website, but should clearly portray the rustic brand of Pack Forest. The website of the Wild Center is very well organized and could be used as a model for Pack Forest’s website. The Pack Forest website could include the following:

- Background information and history of the Forest;
- Visitor Center hours of operation and information;
- Campground information
- Trail information;
- Interpretive information (e.g., online games; environmental educational materials for different age groups; information about wildlife, invasive species, poisonous species; guidelines (etiquette) for use of resources at Pack Forest);
- Information about ESF research at Pack Forest;
- Digital brochures and maps;
- Emergency service information;
- Link to the Friends Group and volunteer information;
- Links to social media;
- Blogs by visitor center director discussing progress on the visitor center.
- Accommodation and restaurant information around Pack Forest;
- Sign-up for e-mail information and newsletter;

Promotion through existing websites. There are a number of promotional websites existing about the Adirondacks. Major tourism websites are managed by the Adirondack Regional Tourism Council (<http://visitadirondacks.com/>), Warren County Tourism Department (<http://www.visitlakegeorge.com/home>), and Warrensburg Chamber of Commerce (<http://www.warrensburgchamber.com/>). All of these tourism websites have their own promotional materials, including various information (tour package, hotel, restaurant, and facilities), photos, videos, brochures, maps, guidebooks, etc. Pack Forest is already promoted through some of these websites, but promotions should be expanded if a campground and visitor center are developed.

Host events. By hosting events such as small festivals and seasonal celebrations, more people would be attracted to Pack Forest. Potential sponsors such as local businesses could help publicize the park through their participation. Additionally areas of the park could be rented out for private events to bring more people to the forest as well as provide additional revenue for further development. This opportunity should be included in all advertising materials.

Creating brochures. Brochures are very important promotional materials for a destination. As there are no brochures for Pack Forest at present it is very important to create a brochure that includes trail and activity information for the area, as well as guidelines for the proper use of Pack Forest's resources. These brochures need to be interpretive as well as informative. Brochures could be supplied to various local stores, interpretive centers, hotels and restaurants, and parks for distribution. Pack Forest should likewise be willing to distribute the brochures of these other facilities, services, and destination.

Promoting Pack Forest through press releases in existing newsletters. Newsletters such as the Hamilton County Express and the Adirondack Almanac exist. Press releases about volunteer opportunities, facilities, and special events should be submitted for publication on a regular basis once the visitor center is open. Press releases and other information should also be made available through social media such as Facebook, twitter, YouTube, Instagram, and Blogs.

Recommendations for Connecting with Regional Attractions and Resources

Create a primary destination by utilizing Pack Forest's connections to local communities. Pack forest is located essentially minutes away from large tourist villages such as Warrensburg and Lake George. The surrounding area also holds a multitude of natural attractions the visitors could explore while visiting Pack Forest. Currently Pack Forest is used mainly by local residents. The addition of a campground and visitor center would turn Pack Forest into a tourist destination. The park could be packaged/ marketed as a place to enjoy rustic camping and hiking while being close to a variety of both natural and historic attractions. Marketing the park as a base for tourists to either visit or stay would allow them to enjoy Pack Forest as well as let them explore the surrounding region.

Highlight the history of Pack Forest and package it with the history of the region. Connect the site-specific history such as the grandmother tree and the grave site of Charles Lathrop Pack with the local historic sites to allow visitors to explore the history of the region. Both Warrensburg and Lake George have history museums; connecting them with Pack Forest will allow visitors to explore the history of both Pack Forest and the local area. A partnership with the Warrensburg history museum would be beneficial for this type of project. Creating an exhibit for the history museum that explains Pack Forest's history and invites visitors to take a short drive to visit would be needed.

Connect Pack Forest with local events. The local events such as the Warrenbery Community-wide Garage Sale bring large numbers of visitors to the region. Hosting a special event at Pack Forest during the weekend of the Garage Sale, for example, could raise awareness of Pack Forest. An event such as a walk/run around Pack Lake could be effective at raising funds for

Pack Forest visitor center renovations. By working with the chamber of commerce, Pack Forest could create a joint event that would promote both destinations, as well as SUNY ESF.

Connect the park with community clubs and outing groups. The park is already a great destination for many groups but it could utilize a more defined connection. Partnerships with local groups such as bicyclists, snowmobilers, birders, walkers, hikers, and horseback riders would help establish Pack Forest as a community treasure. Building these connections may also bring in parties of people or groups interested in helping to maintain or support the park.

Utilize the Forest's proximity to scenic byways. Pack forest is in close proximity to two major Scenic Byways, the Central Adirondack Trail and the Dude Ranch Trail. Through advertising in guidebooks created for these scenic byways, Pack Forest could be packaged as a major destination for visitors traveling the Scenic Byways.

Create travel corridors utilizing nearby rivers. The use of existing Hudson River put-ins upstream of Pack Forest and adding one car-top boat launch area within Pack Forest could attract people interested in paddling to the area. Due to the presence of ice meadows along much of the Hudson River in Pack Forest, careful site selection would be needed to avoid the ice meadows. Millington Brook, a tributary off of the Hudson River that passes through Pack Forest, also offers an opportunity to access the Hudson River without adding a launch site on the Hudson. Paddling on the brook, however, is only recommended for travelers who know how to navigate challenging waters. This brook is approximately two miles long, and connects the Hudson River with Pack Lake. Further research into the navigability of this brook would be required. A portage around the lake's dam would be required.

Warren County Fish Hatchery. A potential partnership could be made with the Warren County Fish Hatchery. This partnership could include restocking the lake with native sport fish such as largemouth bass. The hatchery could also encourage visitors to come to Pack Forest if they are interested in seeing some of these local fish in their natural habitat or for a good place to go fishing. There could also be events held at Pack Forest for fishing, possibly with the ever-growing bass fishing team at ESF. This could bring visitors to Pack Forest from ESF, as well as around Warrensburg. See <http://visitadirondacks.com/recreation/warren-county-fish-hatchery> for more information.

Recommendations for Connecting with Government Agencies

Partner with the United States Fish and Wildlife Service. This government agency assists in the development of environmental stewardship by providing knowledge about fish and wildlife. The Fish and Wildlife Service would be a good organization to partner with because they have programs that aid in the conservation and restoration of fragile habitats such as the ice meadows that are found within Pack Forest.

Partner with the United States Forest Service. This agency provides both technical and financial assistance in order to conserve forest systems by planting trees, improving trails, and providing education about sustainable forest management issues and fire prevention. The USFS would be a good partner because they could assist with trail improvement.

Keep the Department of Environmental Conservation as a Partner. Currently the DEC is occupying the youth camp area in Pack Forest in order to host children's environmental camps over the summer. The DEC is doing all maintenance and upkeep of the camp area. A partnership should remain between Pack Forest and the DEC for the summer camp to still be held here in order to maintain the upkeep of buildings within the camp area.

Partner with the New York State Office of Parks and Recreation and Historical Preservation. This agency works closely with organizations to develop invasive species management protocols. OPRHP can also provide natural history interpretation assistance. It can collaborate with Pack Forest by creating opportunities for volunteers and stewardship.

Involve the local government of Warren County. Include the Department of Public Works, Department of Planning and Development, and the Soil and Water Conservation District in the planning process of Pack Forest. These departments will strengthen the bond between Warren County and Pack Forest.

Recommendations for Connecting with Local Businesses

DiscoveriesUSA. Work with this local hunting and fishing supply store to promote outdoor activities within Pack Forest. The partnership could focus on emphasizing responsible outdoor recreation for visitors to Pack Forest. DiscoveriesUSA appeals to a wide market of users with a lot of activities for visitors. This market could be useful for Pack Forest to reach out to in order to get a variety of visitors there and enjoying activities during their experience. See <http://www.discoveriesusa.com/> for more information.

The Lodge at Echo Lake. The Lodge at Echo Lake is a large cabin event space featuring catering, a porch overlooking the lake and a large open event room located right off the main road in Warrensburg. This space could be used by ESF and Pack Forest to host promotional events. This could be a way to bring faculty, staff and students to the area and get them interested in nearby Pack Forest. The space could also inspire the visitor center at Pack Forest, including

the classic Adirondack feel and design. See <http://www.thelodgeonecholake.com/> for more information.

Local Artists. Pack Forest can work with local artists to integrate the local art into the visitor center. One local arts store, the Riverside Gallery, could bring its goods to sell in the visitor center. See <http://www.riversidegallery.com/> for more information.

Local artists, such as Rodney A. Bentley, have an interest in capturing the beauty of the space. Their work could be sold, auctioned or displayed in the center. This could create a strong sense of place for Pack Forest as a part of the Warrensburg culture.

Another opportunity to explore is for Pack Forest to house an artist-in-residence during the summer months. This individual would live on-site, receiving free accommodations and in return providing artwork, weekly workshops to visitors about their work, and regularly updating a blog about their experience. The artists' work would bring connections for students at the Syracuse campus to experience the sights of Pack Forest, potentially inspiring them to visit Pack Forest themselves. An article in the Daily Orange on Syracuse Campus discusses an artist in residence at the Adirondack Interpretive Center with a similar experience. See <http://dailyorange.com/2014/10/artist-in-residence-finds-inspiration-from-time-at-adirondack-interpretive-center/> to read more.

Local Accommodations. Working with local accommodations in Warrensburg provides the opportunity to reach a wide range of potential visitors for Pack Forest. There are a variety of places to stay in Warrensburg, ranging in price and experience. Some places, such as Alynn's Butterfly Inn, are an experience themselves and appeal to visitors for weekend getaways. Other hotels, such as the Budget Inn Motel, would be for people on a tighter budget looking for a place to rest their heads. Placing flyers or brochures in these places might inspire visitors to come visit Pack Forest during their time in Warrensburg. In addition, the visitor's center at Pack Forest could have information about places to stay. See <http://www.alynnsbutterflyinn.com/> for more information about Alynn's Butterfly Inn.

Pack Forest and Wild Waters Outdoor Center. Pack Forest could work with a local rafting company, Wild Waters Outdoor Center, to encourage visitors to paddle the Hudson River. Visitors to Pack Forest could have access to the river if a boat launch is installed, creating the potential for water sports. Located just outside of Lake George, Wild Waters Outdoor Center has received excellent consumer reviews. One option is to raft the Hudson River Gorge, a 17-mile stretch of river that can take all day. Other options range from 2-hour tours to overnight excursions. This is an excellent company to work with, gaining visitors for Pack Forest and business for the outdoor center. See <http://www.wildwaters.net/> for more information.

Rentals, bus and cab companies. Create a connection to local businesses that have a rental service. Companies in Lake George such as Lake George Kayaking Co. and Beach Road and Bait can be used for bike, kayak and canoe rentals. There is also a large variety of cab companies, such as Adirondack Cab Co., that could transport visitors to Pack Forest for a day visit, as well as bus companies, liked Grey Hound or Jefferson Lines, that offer service to Warrensburg.

RECOMMENDATIONS FOR ORGANIZATIONAL STRUCTURE, MAINTENANCE, AND MANAGEMENT

Organizational Structure Recommendations

Incrementally increase Pack Forest staff. Currently, Pack Forest is supervised by the SUNY ESF Forest Properties Director, the Forest Property Manager, and a volunteer caretaker (see Figure 62). The volunteer caretaker currently lives on the property and performs weekly security checks; monthly building safety checks; snow removal and ice control on walkways, roads, and parking areas during the winter; maintains the grounds (lawn mowing, raking, trash pickup); basic repairs; and reports to the SUNY ESF Forest Property Manager (Bruce Breitmeyer). The responsibilities of this individual may increase with regard to facility maintenance if the recommendations in this plan are implemented; consideration should be given for hiring this individual as a paid employee to maintain the property throughout the year. This change will ensure that all maintenance and repairs occur expeditiously and that larger problems are reported and dealt with quickly.

Before restoration of the old lodge into a visitor center occurs, an interpretation director will need to be hired. This individual will guide the renovations, oversee exhibit development, manage visitor center operations (once the visitor center is open), and supervise student interns hired to work in the visitor center. This position should be seasonal, beginning May 1 and ending after Columbus Day Weekend.

Following construction of the campground, a seasonal campground director should be hired. This individual will be responsible for overseeing campground management and maintenance, responding to any visitor emergencies or problems, and supervising student interns hired to work in the campground. Campground registration will be based in the visitor center; it is recommended that a student intern be trained to handle camper registration.

Volunteer assistance through a non-for-profit “Friends Group” at Pack Forest is greatly recommended. The Chair of the Friends should work directly with the Property Manager to determine how the group can best assist at Pack Forest. Once the responsibilities of the Friends Group are identified, the group should work closely with the Interpretation Director, Campground Director, and Caretaker as needed.

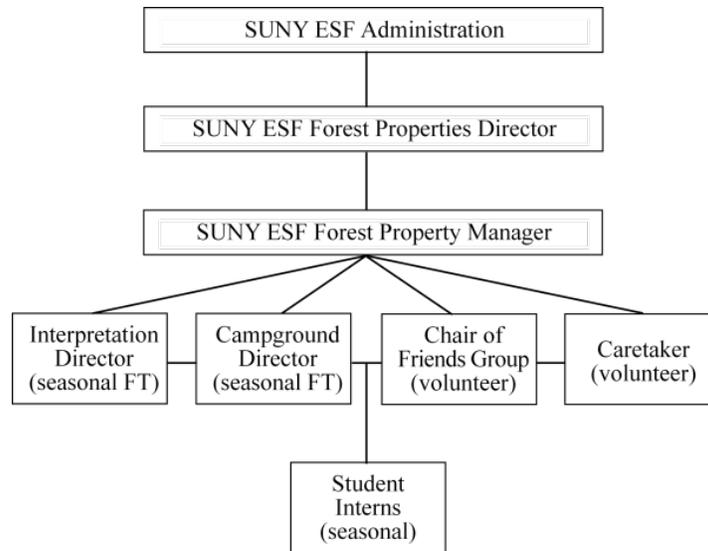


Figure 62. Proposed organizational flow chart for Pack Forest.

Centralize employee contact information. The contact information for any and all employees at Pack Forest must be centralized into one place to simplify contact of employees by visitors and volunteers. A website including descriptions of each employee position at Pack Forest and their responsibilities would allow for ease of access for those outside the facility to contact the person that can help them with any concerns or questions. Currently, there is no website with any staff descriptions or contact information regarding Pack Forest. Implementation of this recommendation would improve access to the staff from an outsider’s perspective and make the property more accessible digitally.

Volunteer Recommendations

Establish “The Friends of Pack Forest.” Nearly every state park that is efficiently managed today has a Friends Group that it works closely with. It is recommended that Pack Forest managers work with local residents in Warrensburg to establish a 501(c)(3) not-for-profit corporation that can help with specific projects and responsibilities in Pack Forest. Every successful volunteer organization has a clearly defined mission statement. Subsequently, the target of the Pack Forest’s administration should be directed toward ensuring that the volunteer opportunities accomplish the group’s mission, and match the needs to Pack Forest.

Conduct a volunteer needs assessment. A needs assessment should be conducted within Pack Forest and the surrounding communities to determine the interests and needs of local residents. The assessment will assist in an elimination process and select relevant volunteer opportunities that can be fruitful for the development of the environmental resources at Pack Forest. Some effective methods for conducting a quality needs assessment include surveys, interviews, and focus group discussions. Some questions to ask as part of the needs assessment are:

- How do residents currently use Pack Forest?
- How can volunteers fit into the overall mission, strategies, and goals for Pack Forest?
- What skills and knowledge would potential volunteers bring to Pack Forest?

Develop a comprehensive volunteer program/framework. The implementation of a volunteer program at the Pack Forest should highlight the major functional components that are required to streamline the appropriate environmental and conservation operations. It is of utmost importance that the community is involved to increase the availability of public support and the expansion of volunteerism beyond budgetary limits and personnel constraints. Several essential components for the successful establishment of a volunteer program include an initial needs assessment at the Pack Forest, the identification and development of appropriate volunteer positions, and recruitment strategies critical to the selection and placement of potential volunteers. Essential components of the Pack Forest volunteer program should include:

- A list of all volunteer opportunities that can be offered at Pack Forest.
- Volunteer motivations and benefits.
- Rewards for volunteer services provided.
- Description of the responsibilities and reporting procedures to be upheld by volunteers.

Screening, Interviewing, and Application process for all volunteers. Volunteers should be screened prior to their placement in an available position to ensure that they are qualified to perform accordingly. A completed application and an official interview should be required to assist in determining the assignment and appropriate placement of all volunteers based on their general abilities and experience. In addition, references and background checks should be administered prior to volunteer placement. These tasks can be completed by the Friends Group responsible for volunteer activities, with input from the Forest properties Manager. The steps involved in recruiting volunteers are as follows:

- 1. Identify volunteer needs.** The types of volunteers and the services that they provide would have to be determined based on the volunteer needs of the Pack Forest. The developing volunteer base must cater to the time constraints and associated abilities/needs of the potential volunteers to be considered. Categories of volunteer trends include long-term volunteering, short term volunteering, internships, and student volunteering, etc. Some types of positions to consider for Pack Forest are listed in Table 16.
- 2. Develop a strategy for effective volunteer recruitment.** A volunteer recruitment strategy is critical to determining who will be asked to volunteer as well as the manner in which the targeted individuals are asked. Questions of interest can seek to identify the qualification and interest of the targeted volunteer audience/individuals, where the potential volunteers can be found, and the motivational factors that would encourage people to volunteer. For the successful recruitment of local community members, volunteer opportunities should be advertised through job descriptions via local newspapers, flyers e-newsletters/community newsletters, and on the official Pack Forest website. The use of a Friends group to coordinate volunteer recruitment activities would simplify this process for Pack Forest Managers.
- 3. Identify Sources of Potential Volunteers.** There are several potential organizations, groups, and individuals who can become directly involved in volunteering at Pack Forest. Potential volunteer organizations and individuals include:

- Schools and Universities from the surrounding cities/towns within the state of NY: Many university/college present a plethora of registered student organizations/clubs who are always interested in volunteering and students often seek volunteer opportunities as resume builders (e.g., SUNY-ESF, Lemoyne, Cornell University, Paul Smith's College, Clarkson University, Onondaga Community College, and SU etc.). In addition, local high school students in need of community service hours could also volunteer, particularly for specific events held at Pack Forest. Student participation in the volunteer program would be applicable based on timely approvals and arrangement by the academic institutions involved.
- Corporate volunteers: Corporate firms may approve the involvement of their staff in volunteering at the Pack Forest as part of social responsibility procedures for environmental development within the local communities.
- Inmates: Incarcerated members of society or civic offenders on probation may be involved in community service programs which allow them to give back to society, fulfill a particular work requirement, or achieve a rehabilitative experience (e.g., Moriah Shock Correctional Facility).
- Members of society/general public: Environmental enthusiasts may take the sole initiative to become involved and be part of a volunteer program. People willingly presenting themselves to a volunteer program emerge from varying backgrounds.
- Community organizations/ Friends groups: Includes people devoted to making the environment a better place and are regularly involved in volunteer program operations. A Friends Group specific to Pack Forest would be most effective at engaging volunteers in Pack Forest activities and efforts.

Volunteer orientation and training. Orientation of the recreation areas utilized in the Pack forest must be provided to all volunteers upon successful placement into their respective volunteer positions. Immediate and periodic training for specific volunteer positions should be provided to ensure that volunteers receive essential information and updates about Pack Forest, and to satisfy the required standards (policies/procedures) and overall awareness. All volunteers would be required to attend mandatory training sessions. The training program should include the necessary tools, support, and information required for assuring volunteer success. There should be a clear description of the responsibilities and reporting procedures for the volunteers.

Implement an advisory committee for volunteers. A volunteer advisory committee (consisting of paid staff at Pack Forest) should be established to assist and support volunteers. In addition, any concerns arising with volunteers could be resolved with the assistance of this advisory group.

Establish a volunteer appreciation program. Appreciation events and incentives should be provided to volunteers for the considerable amount of time they invest at Pack Forest. Several considerate gestures for appreciation can include but are not limited to company discounts, seasonal social events for volunteers (e.g., dinner, lunch, small party), service awards, tokens of appreciation, gift cards, clothing, press releases about volunteer activities, etc.

Assignment of a volunteer space. The volunteer space could be housed in the visitor center office, and would serve as a gathering area for all volunteers. This space could contain assigned

lockers for the storage of valuables and personal items. In addition, the area would cater to the transitioning between the work shifts of arriving and departing volunteers.

Table 16. Possible Volunteer Opportunities at Pack Forest

Activity	Description
Invasive Plant Control	Assisting with the removal and control of invasive plant species.
General Maintenance	Maintenance and repair of the overall built areas on the site.
Trail Maintenance	Maintenance, restoration, and repairs on trails for their longevity and expected performance.
Interpretive Trail Signage	Constructing and strategically placing signs where points of interest are proximal to trails and existing hotspots for unique flora and fauna.
Visitor Center Interpreter	Assisting with the education of visitors in the visitor center.
History Interpreter	Delivering the natural history of the Pack Forest and its surroundings.
Hiking/Trail Guide	Delivering professional interpretive services on the ecology of the Pack Forest during guided walks.
Bird Identification Guide	Identification of local bird species and assistance with the organization’s participation in annual bird counts.
Visitor Center Receptionist	Providing efficient administrative, secretarial, and clerical services on behalf of the Pack Forest.
Sign Language Interpreter	Skilled interpreter who can fluently produce and interpret sign language produced by another.
Event Planner	Assisting with the planning, purpose, and scope of an event to achieve the desired result.
Camp Host	Performing required park duties in the campgrounds such as inspections, monitoring procedures, and ensuring visitor conformity to implemented regulations and policies.
Volunteer Steward	Conducting patrols to ensure that visitors are conforming to the code of ethics when recreating in Pack Forest.
Office and Administration	Updating records for all financial activities and associated visitor data.
Education and Awareness Activities	Assisting with the preparation and dissemination of information to the local communities and schools through outreach.

Invasive Species Management Recommendations

Implement yearly monitoring of habitats for invasive species. Monitoring for invasive species is extremely important to maintaining the health of the forest. Sending out students or researchers to perform surveys once a year to catalogue what species are in the area and if they are invasive would help determine whether changes in boat/terrestrial checks need to be made. Also monitoring native plant species for signs of invasives, especially in the case of invasive insects, is important because early detection can mean saving certain areas of forest from destruction.

Encourage reporting of hemlock woolly adelgid. Use interpretive materials, including maps and brochures, to encourage visitors to report hemlock woolly adelgid observations on the Pack Forest property. The woolly masses are easily identifiable, even by untrained individuals. Sightings should also be reported through the NYS DEC invasive species clearinghouse.

Visitors should be prevented from bringing firewood onto the property to prevent the spread of both the hemlock woolly adelgid and emerald ash borer. Local firewood should be available for sale on the property for campers visiting Pack Forest. A contingency plan should be developed in the case that the species does spread onto the property. Insecticidal soaps can be applied on trees that are infected to prevent the spread of the woolly adelgid. Trees located close to the lake or other water bodies can be injected with insecticides to prevent leaching of chemicals. If the infestation becomes sufficiently pervasive, forest-level biological control utilizing black lady beetle releases (*Pseudoscymnus tsugae*) should be employed (New York State Department of Environmental Conservation, 2013a; New York Invasive Species Clearinghouse, 2014a; United States Forest Service, 2012).

Set up precautionary check points on land to avoid invasive species. Invasive species in the Adirondacks can be detrimental to certain ecosystems. Unfortunately, once invasive species are found in an area, it can be difficult to eradicate them. Luckily, there are a few checks that can be done to make sure visitors are not aiding in the dispersal of invasive species. One is to encourage visitors to check their shoes and clothing for seeds. Wire-bristled shoe cleaners are a good way to make sure shoes are free of seeds.

Perform regular canoe and boat inspections to avoid the dispersal of invasive species. Regular boat checks are important for waterways. Pack Forest Lake is connected to the Hudson River, meaning there are many places invasive species can travel to, and many invasive species that can come into the lake. Making sure canoes and boats are clean and clear of Eurasian milfoil and zebra mussels before entering and leaving the lake can greatly help minimize invasive dispersal.

Remove Japanese knotweed infestations. The four Japanese knotweed (*Fallopia japonica*) infestations present in Pack Forest will need to be eradicated to prevent their spread (New York Invasive Species Clearinghouse, 2014b). The plants (including their root system) should be removed by hand because the patches are relatively small and because herbicide treatments are not recommended for sites near water bodies (Northwoods Cooperative Weed Management Area, 2007; Shaw & Steiger, 2002). This removal could be performed by trained volunteers.

Reduce the pickerel population in Pack Lake. The pickerel (*Esox niger*) population in Pack Lake must be significantly reduced before bass can be reintroduced into the lake (United States Geologic Survey, 2013). This can be done by encouraging fishing by visitors or by involving the SUNY ESF Natural Resources Management department to demonstrate adaptive management strategies to regulate fish populations. Population monitoring will be necessary to determine the initial population of pickerel and when the population is low enough to allow stocking of largemouth bass. Largemouth bass, the previously populous game fish in the lake, can be stocked from the Warrensburg Fish Hatchery once the pickerel population is lowered sufficiently. This will restore stable fish populations in Pack Lake and attract fishermen to the property.

Visitor Management Recommendations

Implement more explicit regulations to reduce potential visitor conflicts. Designate separate, single-use trails through the use of signage and indicate the allowed usage of each trail on maps. This will help reduce conflicts between visitor groups and protect visitor safety by preventing individuals traveling at drastically different speeds from interacting on trails. It is particularly important to designate separate trails for hikers, mountain bikers, and horseback riders during the summer and skiers and snowmobilers during the winter (Cessford, 2002). Interpretive materials and maps should also encourage visitors to stay on trails. This will prevent them from becoming lost and also reduce their impact on the environment.

Limit visitation to Pack Forest during winter months. Neither the DEC camp nor the old lodge (PF-LOG-95) are currently connected to propane systems that can heat the buildings during winter months. Although trail and road infrastructure can be utilized by visitors year-round, the lodge (interpretive center) and camp should close during winter months (Nov-March). This will limit the amount of additional infrastructure that needs to be installed. A new, larger propane system could be installed at both the camp and the lodge if funding can be obtained in order to allow those facilities to remain open throughout the year. Furthermore, closing the property to visitors at 18:00 can help prevent overnight visitation. Most visitors come to the property during the spring, summer, and early fall, so this is unlikely to significantly decrease visitation over the course of a year.

Ensure that visitors do not enter dangerous areas of the property. Bar visitors from accessing the areas of the property actively being used for timber harvesting and research. This can be done by posting no trespassing signs on the border of the aforementioned areas near trails and explicitly marking these areas on maps. Encouraging visitors to stay on trails using maps and interpretive materials will also help prevent visitor incursion into these areas. Trail closures designated with barriers and signs may be necessary during harvest operations. This will ensure that visitors are not injured in these potentially hazardous areas.

Regulate boat usage of Pack Lake. Limit boat usage of Pack Lake to non-motorized vessels and those equipped with electric motors. This limitation will protect the tranquility of the visitor experience and prevent leaking of pollution into lake waters. Furthermore, boats should be cleaned before and after launching them in the lake. This will prevent the spread of invasive species to and from the lake. Both of these recommendations can be accomplished with appropriate signage and/or interpretive brochures at the boat launches.

Regulate recreational fishing. Recreational fishing should be regulated by posting signs listing property fishing rules. Specifically, lead sinkers should not be permitted due to the toxic nature of lead which can bioaccumulate in the tissues of aquatic organisms. New York State angling regulations (regarding fishing seasons, minimum allowable lengths, and daily bag limits) should also be posted (New York Department of Environmental Conservation, 2013c). These rules should be enforced by regular, random spot-checks from on-site interpretive staff and property administrators.

Enact quiet hours at the new campsite. The new campsite should have quiet hours from 22:00 to 8:00 to manage visitors and promote positive experiences for overnight visitors. This could be either self-enforced if visitors are informed of the rules when they check in at the campground and/or using signs at the campsite itself.

Encourage a carry-in/carry-out policy for day users. A carry-in/carry-out policy of waste removal should be enacted for all day users. Information about this policy should be clearly posted at the visitor center and at all picnic areas. This policy would reduce visitor impact on the environment (promoting sustainable behavior) and the need for staff to remove garbage from the area.

Facility Management and Maintenance Recommendations

Resurface roads. Resurface the roads designated for vehicle traffic and parking areas (main parking and proposed interpretive center parking) on the Pack Forest property. This will facilitate snow removal and allow easier movement of visitors about the property. This could be used as an opportunity for the State University of New York College of Environmental Science and Forestry Department of Environmental Resources Engineering to be actively involved in the management of the property as a demonstration area by using permeable pavement.

Continue snow removal. Continue plowing the roads designated for vehicle traffic and parking areas (main parking and proposed interpretive center parking) on the Pack Forest property. This task can continue to be charged to on-site staff. Snow removal in these areas will allow visitors to continue to access the trails and interpretive center during winter months for snowshoeing, skiing, and snowmobiling. This would require on-site staff to remain on the property throughout the year or hiring a plow from Warrensburg, NY.

Inspect roads. Roads should be inspected monthly for areas that need to be repaired and to ensure that erosion is not occurring with increased vehicle traffic.

Inspect and clean culverts. Culverts need to be inspected for obstructions annually to ensure that they are not blocked. This will ensure that the culverts will function properly and reduce the need for road maintenance and erosion control (New York Department of Environmental Conservation, 2011).

Maintain existing and new trails. All trails will need to be maintained regularly, especially in the spring due to winter snowmelt. A full walk-through of all trails should be annually performed by a trail engineer to check for sections that need to be repaired due to erosion from increased foot traffic. Water bars will need to be cleaned of debris, especially in the fall. Brush will need to be cleared from the sides of the trails so it does not impede visitors (Birchard & Proudman, 2000). Vegetation and debris should be cleared 2 feet on either side of hiking trails. Ski trails should be cleared of vegetation and debris to a width and height of at least 8 feet. Mulch (if used on trail surfaces) will need to be reapplied as it is depleted. Widow-maker trees will need to be removed from trail areas to ensure visitor safety. Boardwalks will need to be resurfaced with wire mesh to prevent slipping (National Trails Training Partnership, n.d.). These steps will improve visitor experiences on the trails and prevent injuries. This maintenance could be performed by volunteers, as little training is required to perform simple trail maintenance.

Groom trails. Groom cross country ski trails during the winter months when snow depth reaches 6-12 inches. Trails can be re-groomed after every heavy (>4 inches) snowfall (Northern Arizona University Department of Parks & Recreation Management, 2000). Only specific ski trails need to be groomed. This will draw skiers to particular trails they are permitted to use, as opposed to other trails that can be used for snowshoeing or snowmobiling, thereby reducing user conflict. Trail grooming could be performed by on-site staff.

Maintain electric, water, septic, and garbage systems. Septic waste and garbage must continue to be removed regularly as septic and garbage storage facilities become full. This applies to both existing and proposed (at the new campsite) facilities. Electrical and water systems should be inspected every spring. The propane tank for the New York Department of Environmental Conservation (DEC) Outdoor Education Camp must be inspected weekly as well and refilled as it is emptied. The water chlorinator and meters should be checked and recorded daily. Water spigots at the proposed campsite should be inspected daily (New York Department of Environmental Conservation, 2013b).

Clean and maintain buildings. Grass around the buildings should be mowed every week during the growing season (May-Sept). Both the old lodge and DEC camp cabins will need to be thoroughly cleaned before opening every spring. Lighting, rodent traps, cleanliness, and screens in buildings should be checked daily when they are open. More building maintenance will be required if SUNY ESF assumes control of the DEC camp. Specifically, shower stalls will need to be scrubbed and disinfected, toilets will need to be washed, sinks will need to be cleaned, and floors swept and mopped in the camp bathhouse daily. In the kitchen, the sinks will need to be cleaned, the floors swept and mopped, trash removed, and compost disposed daily. Fire alarms, extinguishers, smoke detectors, and exit signs need to be tested/inspected weekly. The proposed campsite will also have at least one new bathroom. The floors, sinks, toilets, and showers in this bathroom will need to be cleaned daily (New York Department of Environmental Conservation, 2013b).

Emergency Services Recommendations

Safety requirements for employees. Require all employees or specific employees, such as rangers, to be first aid, AED (automated external defibrillator), and CPR (cardiopulmonary resuscitation) certified. Training for these certifications could be provided by the DEC on the Pack Forest property.

Provide visitors with information on available emergency services. A compiled list of the emergency service providers in the area surrounding Pack Forest should be provided to every visitor at Pack Forest. This allows the visitors to see that there are numerous medical and automotive services in the surrounding area in case of emergencies. This information should be posted in the Visitor Center where guests will see it when they first arrive. It could also be provided on the internet if Pack Forest plans to create a website for their destination.

Recommend traveling in the “buddy system.” To ensure visitor safety, all visitors should be encouraged to travel in pairs or in groups. Many emergencies occur when people are alone. This could be a serious issue if not addressed. In the winter months this becomes an even greater safety issue. Visitors in the winter should be informed of the effects of hypothermia and the use of the buddy system should be stressed.

Wildlife and visitors. Visitors should be warned not to feed or approach the wildlife. Wildlife should be admired from a distance and left alone. Feeding the animals could lead to many animals staying close to visitor-use areas in Pack Forest as well as aggressive behaviors.

Visitors and consumption of wild organisms. Visitors should be warned not to consume wild plants or fungi. The number of a local toxicologist should be available in the visitor center in case a visitor consumes toxic fungi. A list of local toxic species could be displayed in the Interpretive Center to inform visitors about these organisms. This list could also be provided on the proposed Pack Forest website. It is important to stress that the visitors do not eat any of the plants or fungi to ensure their safety and the safety of the environment and its biodiversity.

Signage for work or danger zones. To prevent visitors from entering unsafe areas, signs should be posted at these sites. Visitors should not be entering areas where construction is being completed, or areas where timber is being harvested. Signs for fallen trees or rocks should also be posted to prevent accidents. Hardhats should be worn in these areas to prevent worker accidents.

Boardwalk safety. The addition of wire mesh to wooden boardwalks can help prevent accidents in these areas. The boardwalks are currently very slippery and could lead to visitor or employee injuries. To prevent these injuries from occurring, wire mesh should be applied to these boardwalks immediately to reduce accidents. It is relatively inexpensive to purchase and install.

RECOMMENDATIONS FOR FUNDING

Interpretive center building. Application for a NYSERDA grant can be used for energy efficient initiatives in the process of turning the lodge into an interpretive center. Specific grants such as the solar thermal incentive (<http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities/PON-2149-Solar-Thermal-Incentive-Program.aspx>) or solar electric incentive (<http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities/PON-2112-Solar-PV-Program-Financial-Incentives.aspx>) programs are options for creating an energy efficient lodge/interpretive center. In the case that a heating system is to be installed there is also a NYSERDA grant for energy and environmental performance of Biomass fired heating equipment (<http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities/PON-3027-Energy-and-Environmental-Performance-of-Biomass-Fired-Heating-Equipment.aspx>) that could be used to install a biomass heating system similar to the one The Wild Center is currently using. All of the above mentioned grants are currently accepting proposals.

Interpretive center exhibits. Quality interpretive center exhibits can be one of the most expensive aspects when creating an interpretive center. Since this will be an important part of revitalizing Pack Forest, it is recommended that a large grant be applied for to cover a majority of the cost here. The Andrew W. Mellon Foundation (<http://www.mellon.org/>) offers grant funding for projects with a focus on higher education, arts, and humanities. This grant should be written by a professional grant writer, the fee for this service can be written into the grant. This application is by invite only, but they welcome inquiries for prospective invitees.

New trail development / Trail and property maintenance. Funding is available to link tourism and recreational opportunities with economic development. The Upper Hudson Recreational Hub grant (http://www.dec.ny.gov/docs/lands_forests_pdf/finchrecreationrfa.pdf) was presented in 2014 to promote connections between tourism, recreation and economic development. This specific grant was used to connect new and existing trails to local communities. This would be a positive way to promote a connection with Warrensburg while creating a new trail and updating existing trail infrastructure. Although the application period for this grant is now closed it would be a good idea to keep an eye on this for future funding.

Campground loop development (rest room building, water lines, campsite construction, campground loop road construction). Environmental Resource Management (ERM) (<http://www.erm.com/Documents/ERM-Foundation/US-Grant-Application-Inquiry.pdf>) has funding for environmental and sustainability related services. These grants can be used for creating compost toilets and even clean water systems both in the interpretive center as well as in the campgrounds. The grant period here is open and the application is very straightforward. Pack Forest can submit a proposal for a project, such as compost toilets, at any time and a decision will be made within 6 months of receiving the proposal. The National Park Service Outdoor Recreational Grant Program (<http://www.nps.gov/lwcf/index.htm>) also awards funding for creating new campgrounds and facilities at they site. This grant period is open until August 15, 2014. It would be beneficial to apply for both types of grants here. Matching funds from different sources can be a benefit when creating a new project.

Development of Interpretive and Promotional materials. Interpretive and promotional materials can help to bring people to Pack Forest. The Glenn and Carol Pearsall Adirondack Foundation (<http://www.pearsallfoundation.org/>) is a small grant making foundation in the Adirondacks. They award grants up to \$5000.00 to destinations within the Adirondack Park who serve the needs of the year round residents of the park. This is an excellent opportunity for a grant to help cover the costs of Interpretive and Promotional materials. Grant applications are accepted July 1st through August 31st.

Volunteer training costs. The Adirondack Foundation is a local private grant foundation in the Adirondacks, one of their areas of interest is education. This is where Pack Forest should start with seeking funding for volunteer training as well as other trainings that are going to benefit Pack Forest such as Wilderness Survival Training or First aid training for staff and volunteers. The foundation also offers recurring funding which means that Pack Forest could offer yearly, quarterly or other revolving trainings. Many of their grants have rolling application dates, but they are also open to unsolicited grant proposals.

Personnel salaries. Operating costs such as personnel salaries are difficult to secure grant funding for. Project based positions are a more viable way to secure grant funding for salaries. Hiring an interpretive professional to create personal and nonpersonal interpretive materials and experiences is a possibility. For this type of project an interpretive professional, materials and project outcome can all be wrapped into one grant proposal. The Andrew W. Mellon Foundation (<http://www.mellon.org/>) is a good start for this type of application. These grants are very competitive, so it would be in the best interest of Pack Forest to also hire a professional grant writer to apply for this specific grant. The fee for such a professional can also be rolled into the funding in this type of grant.

Other income sources. The Wild Center charges a fee to enter the building, and the Adirondack Educational Center charges different fees for interpretive programming. While it can be beneficial to charge fees for these types of services, it can also be a deterrent for some. It is not recommended to charge any further fees at this time until further evaluation has been completed to know the number and types of visitors the new Pack Forest will attract. However a suggested donation at the entrance of the Interpretive Center can be helpful.

MONITORING AND EVALUATION RECOMMENDATIONS

Implement strategies to monitor visitor numbers and feedback. To ensure visitor numbers are increasing each year (at least during the first several years of the visitor center being open) Pack Forest should implement a monitoring system to count the daily number of visitors. In addition, visitor numbers will increase as long as visitor expectations are being met. A visitor feedback system should be implemented which can include surveys or comment cards placed in the visitor center. Comment cards should include questions regarding positive and negative experiences, expectations about the site, whether they are a first time visitor, if they will return again, and suggestions for the future. If they are staying at the campground, visitors should be asked about this experience as well during check-out. This is a low cost, minimal time monitoring system which would only require one staff or volunteer to collect and tally visitor numbers and experience.

Monitor visitor interest in ESF. Pack Forest should conduct short surveys to monitor if there is increased visitor interest in ESF due to exhibits about ESF at the visitor center. An interactive exhibit in the visitor center can be developed to obtain information about the visitors' knowledge of ESF. There should be questions regarding the visitors' familiarity with the school, opinion of the school, and how they felt the interpretive materials reflected the values of ESF. Staff or volunteers in the interpretive center can also have personal interactions with visitors and ask similar questions to gauge visitor interest in ESF. Results from the exhibit and staff interactions should be recorded and monitored monthly to evaluate if interest in the school is increasing and whether the interpretive materials are effectively relaying the mission of ESF. This system is has a low cost for implementation and management. Using surveys can be an effective way to understand if the message of ESF is being perceived by visitors.

Monitor visitor stewardship. Surveys should be given to visitors to monitor and evaluate their opinions and actions towards natural resource stewardship. These surveys should be placed at the visitor center. The surveys should include questions regarding both behavior and attitude in regards to preservation of resources. In addition, staff and researchers in the area should walk the trails and surrounding area weekly and take note of any visible impacts and changes in the environment. Any visitor impacts, such as tree carving or off-trail hiking, should be explicitly recorded; management actions should be taken immediately to repair any damage. Particular attention should be given to the main nature trail and campground area. The research scientists in the area should be utilized to monitor the resource well-being. The staff should also complete monthly evaluations for how they feel the interpretive materials and site resources are being preserved and developed. In addition, visitor attendance at interpretive programs focused on enhancing stewardship should be recorded, as well as any feedback given for the program. These steps will ensure that Pack Forest is participating in good stewardship as well as enhancing stewardship for visitors.

Establish monitoring and evaluation strategies between Pack Forest and ESF departments. Pack Forest is an important site for many ESF departments. It is important to evaluate if all needs are being met for researchers and professors. Pack Forest management and staff should keep a record of all researchers and professors who use the site. This record should include how they used the site (research or teaching), the duration of the project, and any resources used. Survey

evaluations should be handed to all research teams prior to starting their projects. The surveys should indicate what resources and facilities the scientists will need in order to complete their projects. A final survey should then be given at the completion of the research project to ensure all needs were met during the course of the project and to provide feedback for the future. Pack Forest staff and management should keep a record of all of these surveys and make changes as necessary. In addition, a formal system should be developed to encourage communication between management of Pack Forest and staff of ESF during the entirety of research projects. This can include an online form or monthly meetings between both parties to ensure all needs are still being met. An annual survey should be given to all staff at ESF to understand which departments use the site, how they use the site, and any suggestions they have to make Pack Forest more useable in the future.

Assess the financial and environmental well-being of Pack Forest. Monthly meetings held by the Pack Forest management staff are recommended to monitor and evaluate budget, resource conservation, and environmental impacts. The budget should be monitored every month to ensure the effective using of funds and to cut expenses where possible. At these meetings the staff and scientists should assess if resource needs are being met and how sustainable technologies are being incorporated. The staff should keep a consistent record of any technological or management strategies put in place and monitor monthly how these strategies may be impacting the site both financially and environmentally.

Monitor the relationship between Pack Forest, ESF, state agencies, and local villages. Pack Forest will work to strengthen the relationship between ESF, state agencies, and the surrounding area by sending annual surveys to local businesses and homeowners, various agencies, and ESF staff and research teams. These surveys can be used to evaluate how the communities view, interact with, and value Pack Forest. The surveys can be sent via email to reduce cost and allow for easier data entry by the staff of Pack Forest. The trail registers, visitor surveys, and program evaluations should request the following information from visitors: location of residence, how they heard about Pack Forest, and date of visit.

RECOMMENDATIONS FOR PHASING-IN CHANGE AT PACK FOREST

Table 17 is designed to suggest possible phases that could be implemented for the recommendations in this report. Only major recommendations are included.

Table 17. Suggested timeline for phasing in changes at Pack Forest.

Timeline	Recommendation
Spring, 2015	<ul style="list-style-type: none"> • Determine potential costs of visitor center renovations, parking lot construction, trail construction, and campground construction.
Summer, 2015	<ul style="list-style-type: none"> • Begin fundraising/grant applications for visitor center renovations and parking lot construction costs. • Work with volunteers in the community to set up a Friends Group. • Begin renovations of visitor center with volunteer assistance (focus on cleaning, painting, and renovations of student lodging). • Work with Paul Otteson to set up a website for Pack Forest to promote existing trails and garner support for the renovations.
Fall, 2015 through Spring, 2016	<ul style="list-style-type: none"> • Continue fundraising/grant applications for visitor center renovations and parking lot construction costs. • Work with ESF students to develop a brochure/trail map for Pack Forest (possibly a class project for interpretation students at ESF). • Work with ESF administration to identify financial support for three student intern positions for the summer, 2016 (to work in the visitor center and on trail development). • Once financial resources have been secured, advertise three student intern positions for the summer. Interview students. A graduate student should be selected to act as the temporary Visitor Center Director.
Summer, 2016	<ul style="list-style-type: none"> • Student interns to staff the visitor center, develop basic exhibits in the visitor center, and flag potential hiking trails on Spruce Mountain and along the eastern shore of Pack Forest Lake. • Determine wetland boundaries near Pack Forest Lake to identify if proposed trail crosses wetland; apply for wetland permit if needed.
Fall, 2016 through Spring, 2017	<ul style="list-style-type: none"> • Begin grant applications for visitor center exhibits. • Work with Friends Group volunteers to construct new trails and for exhibit/campground fundraising. • Update brochure as needed with new trail information. • Work with ESF administration to identify financial support for four student intern positions for the summer, 2017 (to work in the visitor center). • Once financial resources have been secured, advertise four student intern positions for the summer. Interview students. Graduate students should be selected to act as the temporary Visitor Center Director and the Campground Director. • Work with a civil engineer to design the layout for the campground. • Work with ESF class to design visitor center exhibits.

Table 17 (continued).

Timeline	Recommendation
Summer, 2018	<ul style="list-style-type: none">• Construct the campground (complete 1 to 2 loops initially; additional loops can be completed in 2019). Open completed campground loops if possible (student interns will need to be trained in how to register campers).• Have student interns work on exhibits, or have exhibits constructed professionally (preferred option, but depends on financial resources).
Fall, 2018 through Spring, 2019	<ul style="list-style-type: none">• Continue with grant applications, fundraising, and visitor center exhibit development.• Once financial resources have been secured, advertise four student intern positions for the summer. Interview students. Graduate students should be selected to act as the temporary Visitor Center Director and the Campground Director.
Summer, 2019	<ul style="list-style-type: none">• Complete construction of the campground. Open completed campground loops if possible.• Continue work on exhibits, or have exhibits constructed professionally (preferred option, but depends on financial resources).

LITERATURE CITED

- About Warrensburg. Retrieved November 11, 2014, from <http://townofwarrensburg.org/>
- Adirondack Camping Village. Retrieved November 13, 2014, from <http://www.adirondackcampingvillage.com/>
- Adirondack Foundation. Adirondack Foundation Funds. Retrieved from <https://www.generousact.org/funds>
- Adirondack Interpretive Center (2014). The Center for Nature Interpretation in the Adirondacks. Retrieved from <http://www.esf.edu/aic/>
- Adirondack Interpretive Center. (2012). *Adirondack tourism survey*. Regional Office of Sustainable Tourism.
- Adirondack Interpretive Center. (2014). Retrieved from <http://www.dec.ny.gov/outdoor/55964.html>
- Adirondack Scenic Byways. (1998). *Hudson River Ice Meadows*. Retrieved November 9, 2014, from Adirondack Scenic Byways: <http://www.adirondackscenicbyways.org/resource/hudson-river-ice-meadows.html>
- Adirondack.net. (2014). *Species of Fish in the Adirondacks*. Retrieved November 9, 2014, from Adirondack.net: <http://www.adirondack.net/sporting/fishing/species/>
- Adirondack hiking guide. (2014). Adirondack hiking guide. Retrieved from: http://www.adirondack.net/hiking/kid_hiking.cfm
- Adirondack Interpretive Center. (2014). Adirondack Interpretive Center. Retrieved from: <http://www.esf.edu/aic>
- APIPP. (1998). *Species of Concern*. Retrieved November 9, 2014, from Adirondack Invasive Plant Program: <http://adkinvasives.com/species-of-concern/>
- American Fish and Wildlife Service (FWS). (2001). *Nature tourist demographics*. National Survey of Fishing, Hunting and Wildlife-Associated Recreation.
- Andrew W. Mellon Foundation (2014). Grants Database. Retrieved from <http://www.mellon.org/grants/grants-database>
- Arnsdorf, I. (2010). The museum is watching you. *The Wall Street Journal*.
- Auto Repair Warrensburg, NY. (n.d.). Retrieved October 26, 2014, from http://www.yelp.com/search?cflt=autorepair&find_loc=Warrensburg, NY
- Beach Road and Bait. Received from <http://www.beachroadbait.com/>

- Beaver Brook Outfitters. Retrieved November 11, 2014, from <http://visitadirondacks.com/recreation/beaver-brook-outfitters>
- Birchard, W., & Proudman, R. (2000). *Appalachian Trail design, construction and maintenance* (2nd ed.). Harpers Ferry, W.V.: Appalachian Trail Conference.
- Cawley, Sarah. (2014, November 6). *Transportation*. Student in-class presentation - assessment report presented during the FOR 676 class time, SUNY ESF.
- Center for Nature Interpretation in the Adirondacks. (n.d.). Retrieved October 9, 2014, from <http://www.esf.edu/aic/>
- Cessford, G. (2002). Perception and reality of conflict: Walkers and mountain bikes on the Queen Charlotte Track in New Zealand. *Journal for Nature Conservation*, 310-316.
- Chamber of.warrensburgchamber.com. Last updated 2014.
- Cherokee Forest Voices. (2014). *Definitions of Forest Service Terms*. Retrieved November 9, 2014, from Cherokee Forest Voices: <http://www.cherokeeforestvoices.org/Default.aspx?tabid=58>
- Commerce: Warrensburg. "Queen Village of Adirondacks".
www2nd ed.). Harpers Ferry, W.V.: Appalachian Trail Conference. \
- Daggett Lake Campsites. Retrieved November 13, 2014, from <http://www.daggettlake.com/>
- Department of Environmental Conservation (2014). Adirondack Park Upper Hudson Recreation Hub Grants A Partnership Between TNC, NHT, and DEC. Retrieved from <http://www.dec.ny.gov/lands/93275.html>
- Dig In. (2014). Retrieved from <https://www.wildcenter.org/>
- Eugene Mctiernan M.D., Pediatrics, Medical Toxicology. (n.d.). Retrieved October 5, 2014, From http://npidb.org/doctors/allopathic_osteopathic_physicians/medical_toxicology_2080t0002x/1912911835.aspx
- Feeder Canal Alliance Home. Retrieved November 11, 2014, from <http://feedercanal.org/>
- Feeney, S. J. (2000). *Analysis of trail use, regional benefits and economic impact*. Schenectady County Department of Planning.
- Glens Falls Hospital. (n.d.). Retrieved October 19, 2014, from <http://www.glensfallshospital.org/>
- HandsOn Network. (2010). Starting a Volunteer Program. Retrieved from http://www.handsonnetwork.org/files/resources/BP_StartingVolunteerProgram2010.

- Hearthstone Point*. (2014). Retrieved November 13, 2014, from NY DEpartment of Environmental Conservation: <http://www.dec.ny.gov/outdoor/24470.html>
- Home Office. (2005). *The volunteering compact code of good practice*. Home office, London, p.4.
- Hultsman, J., Cottrell, R. L., & Zales-Hultsman, W. (1987). *The Many Campgrounds We Really Have*. State College, PA: Venture Publishing, Inc.
- Jackson, Brendan. (2014, November 4). *Trails*. Student in-class presentation - assessment report presented during the FOR 676 class time, SUNY ESF.
- Kuehn, D. (2014). *Accessible Facilities*. Syracuse, NY: State College of Environmental Sciences and Forestry.
- Kuehn, D. (n.d.). *Parking Lots and Campgrounds*
- Lake George Battleground*. (2014). Retrieved November 13, 2014, from NY Department of Environmnetal Conservation: <http://www.dec.ny.gov/outdoor/24453.html>
- Lake George Escape Camping Resort. Retrieved November 13, 2014, from <http://www.lakegeorgeescape.com/contact/>
- Lake George River View. Retrieved November 13, 2014, from <http://www.lakegeorgeriverview.com/>
- Lake George Kayak Co. Retrieved from <http://www.lakegeorgekayak.com/>
- Lake George Volunteer Fire Department : Home. (n.d.). Retrieved October 6, 2014, from <http://www.lakegeorgefire.org/>
- Lee, M., Beard, J., & Thomson, F. (2006). *Recreation Opportunity Spectrum*. Retrieved November 10, 2014, from www.fs.usda.gov.
- Legat, Tracy (2/18/2014). Wild Center to receive additional NYSERDA finding. Retrieved from <http://www.wildcenter.org/sites/default/files/02.17.14%20NYSERDA%20grant.pdf>
- Legat, Tracy (12/19/2012). The Wild Center receives funding from the North Courtry Regional Economic Development Council. Retrieved from <http://www.wildcenter.org/sites/default/files/PR%2012.19.12%20North%20Country%20R%20egional%20Economic%20Developmen%20Council.pdf>
- National Trails Training Partnership. (n.d.). Trail Design and Construction Standards. In *Trail Design and Construction Standards; Northern Bonneville Shoreline Trail*. Bonneville, UT.
- New York State Department of Environmental Conservation. (2011). *Best Management*

Practices Field Guide.

New York Department of Environmental Conservation. (2013c). *Statewide Angling Regulations*. Retrieved from <http://www.dec.ny.gov/outdoor/31421.html>

New York Department of Environmental Conservation. (2013b). *Operations Monthly Workplan*.

New York Invasive Species Clearinghouse. (2014b). *Japanese Knotweed*. Retrieved from http://nyis.info/index.php?action=invasive_detail&id=43

The new NY Works for the North Country. Regional Economic Development Councils. Retrieved from <http://regionalcouncils.ny.gov/content/north-country>

New York Regional Association of Grant Makers (2014). *Philanthropy News Digest*, Currently active RFP's. Retrieved from [http://www.philanthropynewsdigest.org/rfps?search=1&tags_interest\[\]=environment](http://www.philanthropynewsdigest.org/rfps?search=1&tags_interest[]=environment)

New York State NYSERDA. Current Funding Opportunities, PONs, RFPs, and RFQs. Retrieved from <http://www.nysesda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx>

NYS DEC. (2014). *Lands and Waters*. Retrieved November 9, 2014, from Department of Environmental Conservation: <http://www.dec.ny.gov/lands/305.html>

New York State Department of Environmental Conservation. (2013). *Hemlock Woolly Adelgid*. Retrieved from <http://www.dec.ny.gov/animals/7250.html>

New York Invasive Species Clearinghouse. (2014b). *Hemlock Woolly Adelgid*. Retrieved from http://nyis.info/index.php?action=invasive_detail&id=43

NYS Department of Environmental Conservation. (2014). Pack Forest. Retrieved from: <http://www.dec.ny.gov/education/1875.html>

NY State History Archives. (2014). Charles Lathrop Pack Demonstration Forest. Retrieved from: http://iarchives.nysed.gov/xtf/view?docId=CESF_PackDemonstrationForest.xml;query=;brand=default

NY DEC. (2014). About Pack Forest. Retrieved from <http://www.dec.ny.gov/education/1875.html>

NYS DOT. (2014). First Wilderness Scenic Byway. Retrieved from <https://www.dot.ny.gov/display/programs/scenic-byways/lists/first-wilderness>

NY State Archives. (n.d.) Charles Lathrop Pack Demonstration Forest Records. Retrieved from http://iarchives.nysed.gov/xtf/view?docId=CESF_PackDemonstrationForest.xml;query=;brand=default

- Northern Arizona University Department of Parks and Recreation Management. (2000). Cross Country Ski Trail Considerations. Retrieved from http://www.prm.nau.edu/prm423/xc_ski_trail_design.htm
- Northern New York Audobon Foundation (2014). Cullman Grants. Retrieved from <http://nnya.org/conservation/cullman/>
- Northwoods Cooperative Weed Management Area. (2007). *Homeowner's Guide to Japanese Knotweed Control*. Retrieved from http://dnr.wi.gov/topic/Invasives/documents/japanese_knotweed_control.pdf
- O'Brien, L., Townsend, M., & Ebden, M. (2008). Report to the Scottish Forestry Trust and Forestry Commission, 9-18.
- Outdoor Recreation. Retrieved November 11, 2014, from <http://visitadirondacks.com/recreation>
- Pack Forest. (n.d.). <http://www.dec.ny.gov/education/1875.html>. Retrieved November 8, 2014.
- Partelow, Lester E. (1941, March). Compartment Map of The Charles Lathrop Pack Demonstration Forest. Warrensburg, NY: SUNY College of Environmental Science and Forestry.
- Pasquino, K., & Hai, P.. (2013). Coming Soon: The Northern Forest Room. Retrieved from <http://www.esf.edu/aic/documents/NFroompostersmallerv2.pdf>
- Proudman, R. D., & Rajala, R. (1981). *Trail Building and Maintenance* (2nd ed.). Boston, MA: The Appalachian Mountain Club.
- Route 28, New York. Retrieved from: <http://www.travelguideofamerica.com/scenicdrives/route28.html>
- Schroon River Campsites, LLC. Retrieved November 13, 2014, from <http://schroonriver.com/>
- Shaw, R.H., & Seiger, L.A. (2002). *Japanese Knotweed*. Retrieved from: <https://dnr.state.il.us/Stewardship/cd/biocontrol/12Knotweed.html>
- SUNY-ESF. (2014). NYS DEC Environmental Education Camp and Charles Lathrop Pack Demonstration Forest. Retrieved from <http://www.esf.edu/campuses/eec/>
- SUNY ESF. (2014). *Adirondack Ecosystem*. Retrieved November 9, 2014, from Adirondack Ecological Center: <http://www.esf.edu/aec/>
- Stony Creek Family Campground. Retrieved November 13, 2014, from <http://www.stonycreekcampground.com/>
- Things To Do In Lake George. Retrieved November 11, 2014, from <http://www.lakegeorge.com/things-to-do/>

- Thomas, T. (2004). *The Wild Center Volunteer Manual*, pp. 9-13.
- Town of Warrensburg New York. (n.d.). Retrieved November 2, 2014, from <http://www.warrensburgny.us/pubsafety.html>
- US Department of Agriculture. (2013). *Web Soil Survey*. Retrieved November 13, 2014, from Natural Resources Conservation Service: <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- United States Forest Service. (2012). *Forest Health Protection—Hemlock Woolly Adelgid*. Retrieved from <http://na.fs.fed.us/fhp/hwa/maps/distribution.shtm>
- United States Geologic Survey. (2013) *Esox niger*. Retrieved from <http://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=681>
- US Geological Survey. (1968). *The Glen, NY*. Warrensburg, NY, USA: USGS Geological Survey.
- Warrensburg Business Listing. “Town of Warrensburg New York: Gateway to the Adirondacks”. www.townofwarrensburg.org/business.html.
- Warrensburg Travel Park and Riverfront Campground. Retrieved November 13, 2014, from <http://www.warrensburgtravelpark.com/content.php>
- Warren County Local Chamber of Commerce. (2014). Warren County Local Chamber of Commerce. Retrieved from: <http://www.visitlakegeorge.com/home>
- Warren County Tourism Department. (2012). *Warren county visitor survey*. Lake George: Adirondack Regional Tourism Council.
- Warrensburg Chamber of Commerce. (2014). Retrieved from: <http://www.warrensburgchamber.com/>
- What Is The Lower Adirondack Search and Rescue Unit? (n.d.). Retrieved October 11, 2014, from <http://www.lasarny.org/>
- The Wild Center (2014). Retrieved from <http://www.wildcenter.org/>
- The Wild Center (2010). *The Wild Center Statement of Activities*. Retrieved from <http://wildcenter.org/annualreport/2010WCfinancials.pdf>
- The Wild Center. (2014). Retrieved from <http://www.wildcenter.org/search/node/volunteers>.
- The Wild Center. (2012). *An economic engine for the north country*. Plattsburgh, NY.