# **DRAFT**

# A Management Plan for the

# Joseph A. Blake, Jr. Wildlife Sanctuary







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Ecotourism and Nature Tourism Class with Tug Hill Tomorrow staff and members Fall, 2012

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### Introduction

The Joseph A. Blake, Jr. Wildlife Sanctuary is a 130-acre property a few miles east of Watertown, NY. The property was donated to the Tug Hill Tomorrow land trust in 2012 by the North Country Bird Club. Working together and with THT members and staff, the students in FOR 476 and 676 identified the issues and concerns facing the property, and developed a vision and goals for the property's future. This report details the assessment conducted and provides recommendations for future THT efforts in the sanctuary.

#### **Issues and concerns:**

- 1. The lean-to and sugaring house are currently used as a party place.
- 2. Past use of the property for hunting.
- 3. Trees that are dead, in decline, or in poor condition (hazards).
- 4. The smell of manure from nearby farms.
- 5. Poor access for:
  - Parking;
  - Finding the sanctuary;
  - Finding the main trails from the road; and
  - For people with disabilities
- 6. Inadequate bathroom facilities (currently a one-stall pit toilet).
- 7. Spread of invasive species in the sanctuary (garlic mustard; potential in future for emerald ash borer).
- 8. Poor condition of the lean-to.
- 9. Little undergrowth (due to crowding in the overstory) in sanctuary woodlands.
- 10. Wetland and wetland buffer areas will require permits before an alterations are made.
- 11. Fundraising is needed.
- 12. Poor trail marking and poor trail system design.
- 13. Controlling unauthorized access but maintaining a positive atmosphere.
- 14. Maintaining the sanctuary in the future (staffing and costs).
- 15. Other hazards on site (old hunting stand).

#### Vision:

By 2023, we envision the Joseph A. Blake, Jr. Sanctuary to be a place that:

- Is known for educational opportunities for school and youth groups in Jefferson and Lewis Counties, as well as more distant locations;
- Welcomes and attracts visitors primarily within a fifty-mile radius;
- Demonstrates that forest management and recreational opportunities can be compatible within a natural setting;
- Is linked to other natural destinations in the region;
- Has visually appealing facilities for outdoor recreation and educational experiences (rest rooms, trails, amphitheater, etc...);
- Has a strong and involved volunteer base.

#### Goals:

- 1. To create a sanctuary that is visually appealing and has the necessary infrastructure for education and recreation opportunities.
- 2. To provide educational opportunities on-site for school and youth groups.
- 3. To make the sanctuary known within Lewis and Jefferson Counties as a place that offers a welcoming recreational and educational experience.
- 4. To practice sustainable forest management in a way that is compatible with recreation and education efforts, but does not compromise the sanctuary's natural setting.
- 5. To link the sanctuary to other natural destinations within a 50-mile radius.
- 6. To establish a strong and committed volunteer base that assists with facility development, maintenance, and education.

#### Theme:

Serene wetlands and a lush sugar maple forest in the historic, rural Blake Sanctuary provide an opportunity to discover unique wildlife habitat and learn about sustainable forest management.

### **Assessment of Site**

# Setting and Habitat Assessment

#### Introduction

The Joseph A. Black Wildlife Sanctuary (JABWS) is located on Middle Road several miles east of Watertown, NY. In order to choose feasible management strategies for the sanctuary in the future, it is important to understand the current habitat conditions of the site, as well as the potential of the site for recreational opportunities. The management, location, historic uses, ownership, present uses, and flora and fauna are assessed.

#### Location

The Joseph A. Blake Wildlife Sanctuary is located near Watertown, NY. It is within 50 miles of Carthage and Fort Drum, NY. The sanctuary is located right off Middle road and next to an abandoned town road.

#### Management

The land was once managed for farming, followed by management and maintenance for birds and bird watching. Today the land is managed for recreational uses and forestry.

#### **Recreation Opportunity Spectrum**

The Recreation Opportunity Spectrum (ROS) is a tool used by public land management agencies to identify the current setting of an area, and the appropriate level of development and management suitable for that setting. The ROS is for the JABWS is "roaded natural." It is identified as a roaded natural area due to the proximity of Middle Road to the sanctuary. In a roaded natural area, access to the area is maintained by road and parking facilities; minimal other facilities (e.g., basic bathroom facilities) may be available as well. Forest management activities often occur in this type of area, but are kept to a minimum as much as possible to maintain the area's natural appearance.

#### **Historical Uses and Ownership**

JABWS is owned by Tug Hill Tomorrow Land Trust and was previously owned by the North Country Bird Club. Before the birding club took ownership of the land, a family who sold it to the birding club owned it. The birding club used the land for bird watching and only had a few trails; the land was not heavily manipulated. In 1874, the land was cleared and became a farm. After 1961, the farm was abandoned and the forest started to grow back.

#### **Present Uses**

Today the land is used for hiking, biking, skiing, and snowshoeing. There are two main trails that are still open: the blue trail and the red trail. These trails access only a small part of the sanctuary and only display the immature hardwood forest and a small section of the mature hemlock forest that is found on the property.

#### Cover type

There are four main cover types within the JABWS; two other cover types in smaller areas are also established. The four main cover types are hardwood swamp, mature northern hardwood forest, mature northern hardwood forest, and open marshland. The two smaller cover types are immature and mature hemlock forests. Tug Hill Tomorrow has rough estimates of how many acres each cover type overlie: the hardwood swamp covers 26.9 acres and the mature northern hardwood forest covers 14.2 acres. The cover type that covers the most acres is the immature hardwood forest, which covers 77.3 acres. The immature hemlock forest covers the smallest amount, overlying only 1.8 acres. The remaining cover types can be seen on the attached cover type map. The wetlands contained within the sanctuary are designated as both federal- and state-designated wetlands. The state designation requires that a 100-foot buffer adjacent to the wetland be protected as well.

#### Flora and Fauna

The main flora found was sugar maple. Sugar maple seemed to be the most dominate tree throughout all the areas besides the wetland and hemlock forests. Other trees we saw were apple trees (remnants of the old farm), yellow birch, white pine, black cherry, white ash, and cedar. Most of the trees looked healthy, though a handful of them were in bad shape. The trees were also growing very close together and had nearly closed off most of the canopy. There were a handful of younger trees but most of the forest was older.

Other flora we found were ferns (such as bracken fern and Christmas fern), raspberry, grape vines and grasses. The ferns and raspberries were mainly found by the water sources. The grasses were growing anywhere they sun hit the ground. In most places though there wasn't much understory growth.

The only Fauna we saw were a few garter snakes. We did not visit at a time to see many birds, but the history of the property indicates that there are many birds and white-tailed deer that habituate the sanctuary.

#### **Invasive species**

Two invasive species were seen on the property: garlic mustard and buckthorn. Buckthorn could be seen randomly throughout the property, while garlic mustard was mainly concentrated in one spot (the lean-to). Tug Hill Tomorrow has already started to work on the garlic mustard problem by removing the species.

#### Conclusion

The habitats found at the JABWS are unique for the area. This would be a wonderful and unique experience for many local people. The habitats are mostly healthy and need just a little work. Overall the JABWS is in very good condition.

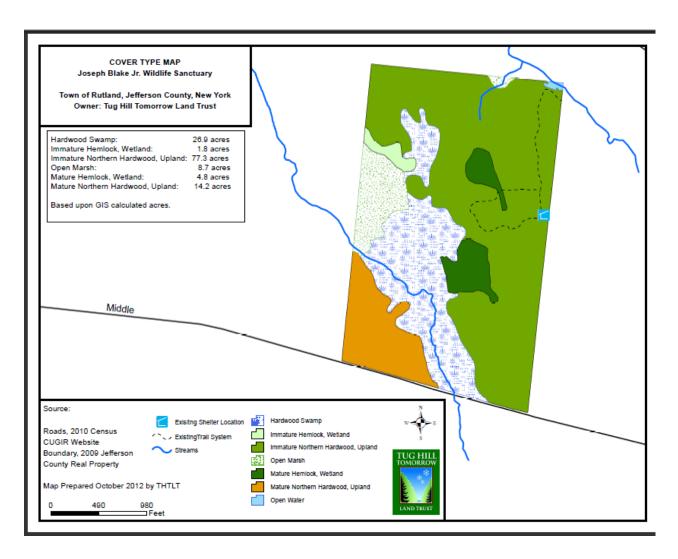


Figure 1. Cover types in the JABWS (source: THTLT).

#### Trail Assessment

#### Introduction

This section of the report focuses on assessing the trails. The existing trails will be evaluated with regard to current use, length and difficulty, appearance and quality, safety and liability, accessibility, directional signs on site, and inclusion on trail map. Through this assessment, later recommendations can be made based on what was initially found in the field. The area is designated as a wildlife sanctuary and also has a designated wetland running through it; these land designations need to be kept in mind when assessing and planning for the future.

#### **Existing Trails**

The trails labeled with red and blue arrows are the only trails maintained on the site. The blue trail leads down to the pond area where there are many bird-siting opportunities. The red trail takes you through the big maple stand. Other trails were here in the past (Figure 2) but have not been maintained. Some have even been lost completely, like the Everett Stone trail that is supposed to be located on the sanctuary's west border. Access from the road could not be found, there was no evidence of a worn path and trail markers could not be found.

#### **Current Use**

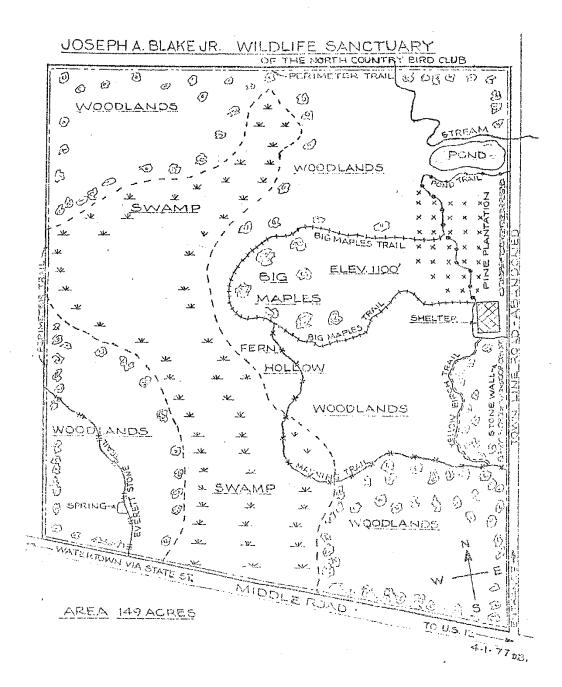
Trails on the sanctuary are currently used primarily for hiking and bird watching. In the future, managers would like the trails to be open to other non-motorized forms of recreation including biking, snowshoeing, and skiing. Recreation may need to be monitored to ensure the maintenance of the roaded natural ROS classification.

These trails are of a relatively short length and could be considered as trails to hike. The sanctuary has the potential to develop trails with more difficult sections as well as trails longer in length. There was leaf litter covering the trails so they were hard to follow; however there is a considerable amount of red and blue plastic markers on the trees to guide visitors through the forest.

The trails appear to have well drained soils and no significant erosion. Most of the soil on the property, according to the soils report from the National Cooperative Soil Survey, is Bombay loam with a 3-8% slope. The soil report also reveals that the possibility of development and usage of trails on this site is somewhat limited. However, trails can still be put in place and the soil will not be significantly impacted if proper planning is put in place and the area is managed properly (Soil Survey Staff, 2012).

#### **Safety and Liability**

One safety issue is the leaning trees and widow makers along the trail. A liability concern is the presence of a deer hunting tree stands on the property; this may invite people to climb on it and potentially get hurt. The presence of the tree stand indicates that there may be hunting in the sanctuary, which may not be conducive to the area's designation as a wildlife sanctuary and is potentially dangerous to visitors.



**Figure 2.** Historic trail map for the JABWS. Only the Pond Trail (Blue Trail) and Big Maples Trail (Red Trail) still exist today.

#### Accessibility

The access to trails is off the abandoned town road located on the east side of the sanctuary's land. This road is somewhat confusing to a first time visitor. It does not allow for the easiest access to the trails because no information is as to where the trails are located along the road. None of the trails on the property are currently accessible to individuals with physical disabilities.

#### **Directional Signs**

The directional signs on the property are mostly red and blue trail markers. Yellow arrows can also be spotted in the area around the lean-to, which is confusing because the yellow trail is no longer maintained. This system of having directional arrows is an easy and effective way to inform visitors about trail routes. There are plenty directional signs located on the property; , most of them are found around the old lean-to where the trails start. It is good to have these directions, but it may be a little overwhelming at the same time.

One concern is the proper installment of these trail markers and signs. Most of the newer arrow signs appear to be installed correctly, but a few of the older signs look to be hanging on trees in a way that is not good for the sign or the trees' health.

#### Site Map

The existing map of the trail system (Figure 2) is out-of-date. The map provided to us by the birding club is hand-drawn and includes many trails that are no longer maintained. Some of the trails on the map could not even be found on the site such as the yellow trail and the Everett Stone trail. Another down fall of this map is that the trails have different names than what can be found on the property today. For example, the blue trail is labeled pond trail on the map and the red trail is the big maple trail. Furthermore, because there is no map available online or at the site, visitors have no way of knowing how long the trails are or where they will end up. An upto-date map of the sanctuary is needed both on-site and on Tug Hill Tomorrows' web site.

#### **Summary**

There are currently two easy, short existing trails on the site today commonly used for hiking and bird watching. These trails are labeled with red and blue markers; however, there is no map available for public use. These trails are not handicap accessible and can be difficult to locate off the old town road. Development is somewhat limited because of the soil types on the site as well as the site designations as a wildlife sanctuary and a wetland area. There is a safety concern with the leaning trees and widow makers throughout the site, as well as the hunting stands located within the property's boundaries. There are positive and negative attributes to the property in terms of trails. The site does have a good potential to be a place of recreation in the future with careful management.

#### Facilities Assessment

#### Introduction

The facilities assessment was completed with input from THT staff and board members. Access, on-site facilities, and safety and security were considered during the assessment.

#### **Road/Trail Infrastructure**

On the eastern side of the Joseph A. Blake Jr. Wildlife Sanctuary, Town Line Road, an old abandoned road by the town of Rutland, provides hiking access. It is a gravel road that runs in a North-South direction from Middle Road nearly to Plank Road. This road is considered abandoned due to New York State Law stating that if a road is not maintained for over six years, it becomes abandoned and the land the road was once on is deeded to the adjacent landowners. The abandoned Town Line Road is only one car-width wide, making it very difficult to turn around if someone tried to drive on it. It is slowly being taken over by successional plant species and is suffering erosion due to poor water drainage off the road.

The frontage of the Joseph A. Blake Jr. Wildlife Sanctuary is on Middle Road in the town of Rutland, New York. Middle Road is a paved road, maintained by the town of Rutland. There is not a lot of room to pull off the road because the shoulder is only one- or two-feet wide. This narrow shoulder makes other means of transportation like walking or biking dangerous to the visitor coming to the sanctuary. The shoulder consists of approximately a foot of gravel, followed by mowed grass that slopes down and away from the road.

The few maintained and marked trails currently on the sanctuary are simple dirt trails through the forest with little improvements such as a gravel substrate. Most of the sanctuary is relatively flat and there is little need for these improvements.

#### **Parking**

Parking at the Joseph A. Blake Jr. Wildlife Sanctuary is very limited. The main parking area is the first thirty to forty feet of the abandoned Town Line Road. This parking only fits two to three cars in a straight driveway, blocking the first cars in behind the last one. The other area to park is on the shoulder of Middle Road. Parking on Middle road is dangerous and risky with the

shoulder being very narrow and the ground sloping away from the road. The parking area is also near the top of a small hill on Middle Road and many cars come racing over the hill at speeds in excess of 55 mph, making it dangerous for visitors to pull in and out of the parking area safely.

#### **Facilities**

There are limited facilities already present at the Joseph A. Blake Jr. Wildlife Sanctuary. There is only one pit toilet and one poorly maintained lean-to. Both the lean-to and the pit toilet are just to the west of the abandoned Town Line Road. The pit toilet is in usable condition, but the lean-to shelter is rotting and not in usable condition. The pit toilet is in good shape and works for the occasional users that



visit the sanctuary. The toilet would not be suitable for large school groups or youth groups, as it would take a long time for all the children to use the restroom. The pit toilet also allows odors to enter the natural environment.



The lean-to shelter is in poor condition and is not suitable for being used for informational or educational sessions. The lean-to is made out of logs and milled timber and has come to the end of its lifespan. The rotting wood cannot be salvaged or repaired, giving the ultimatum of tearing down the lean-to. The cost of repairing the structure would be greater than if a new one was built and the old one was torn down.

#### **Appearance**

The overall appearance of the sanctuary is excellent. There is a serene wetland that almost splits the sanctuary in half and provides a tranquil setting for bird watchers and nature enthusiasts. The remnants of an old growth sugar maple forest within a new generation of sugar maples are still present, creating a unique habitat for wildlife such as porcupine and different species of songbirds. There also are some historical remnants present on the sanctuary. Running along the west side of the abandoned Town Line Road is an old barbed wire fence with a stone wall. These historical remnants give the sanctuary the appearance of what the land once was to the visitors, telling the story of its past.

There is a small concern of trash problems that was observed at the sanctuary, especially in the mowed area next to Middle Road. The trash included empty bottles and bags that were most likely littered by people driving by, carelessly throwing their trash out the window.

#### Safety/Security

There were numerous safety and security issues found at the Joseph A. Blake Jr. Wildlife Sanctuary. The condition of the lean-to is one. The wood that the structure is made out of is rotting, making the structure unsafe for use. This concern is especially important because it was noted that this lean-to is a favored spot for young adults to party, creating a potentially dangerous situation.

Heavily leaning trees, dead standing trees, and trees in poor condition are another concern. Trees leaning heavily (shown in the picture to the right) can fall during extreme weather events, and could cause potential harm to structures or to visitors. Dead standing trees are also a concern now, as well as in the foreseeable future. A failing red pine plantation was cut in order to make the blue trail safe for visitors. Other large dead standing trees such as the old growth sugar maples can pose a risk with



their large heavy trunks and branches.



There is potential for dead standing trees to be a concern in the years to come, especially with the migration of the Emerald Ash Borer. Since much of the forest at the sanctuary is ash, there is a high likelihood that most of the ash will be killed by this insect.

Along with the structure and tree concerns at the sanctuary, there is also an old tree stand found on the sanctuary. This is a liability to the Tug Hill Tomorrow Land Trust, and can result in a lawsuit if a visitor was to climb up the ladder and accidently fall off of it. Along with the tree stand, there is the potential safety concern of hunters hunting on the edges of the sanctuary or driving the deer through the sanctuary to other hunters.

#### Lighting

Currently at the sanctuary there are no lights within the sanctuary or on the stretch of Middle Road that it is on. It is a rural farming community with little urbanized development. This can also pose a safety risk for visitors if they are not able to make it out of the woods before dark.

### **Summary**

The visitor facilities assessment of the Joseph A. Blake Jr. Wildlife sanctuary revealed both positive and negative aspects. The sanctuary did already have a small restroom, and some parking, suitable for small groups or individual visitors. It also had a clean and natural feeling and appearance, making the sanctuary inviting to the visitors. Improvements in parking, safety/security concerns, and the other facilities would allow larger groups, such as school or youth groups to visit the site.

# Marketing Assessment

#### Introduction

This section will identify both existing and potential visitor markets for the Joseph V. Blake, Jr. Wildlife Sanctuary. This wildlife sanctuary has the opportunity to attract different visitor groups based on their interests. We will assess local population demographics within the range of a 50-mile radius, including Watertown, Fort Drum and Carthage. Demographics including age, group composition, educational level, and recreational needs and interests are considered.

#### **Demographics**

*City of Watertown:* According to the 2010 census, the total population of Watertown is 26,705. The total number of households in the city are 11,036, and 32% of them have children under the age of 18; 10% from 18 to 24; 30% from 25 to 44; 19% from 45 to 64, and 16% who were 65 years of age or older (City of Watertown, 2012).

*Fort Drum:* According to the 2000 census, there are 12,123 people living in Fort Drum. There are 2,253 households in the area. Among them, 75% had children under the age of 18 living with them (United States Census Bureau, 2000).

*Village of Carthage*: According to the 2000 census, there are 3,721 people living in the village of Carthage. Age distribution was 28.3% under the age of 18, 9.0% from 18 to 24, 28.6% from 25 to 44, 19.6% from 45 to 64, and 14.5% who were 65 years of age or older. The median age was 34 years. 36.0% of the total 1,417 households have children under the age of 18 (United States Census Bureau, 2000).

#### **Visitor groups**

**Local residents:** The Joseph V. Blake Wildlife Sanctuary promotes itself to the public who are within the 50-mile radius near the sanctuary. Therefore there are 42,549 residents of Watertown, Fort Drum, and Carthage are all within the range of promotion. Although there are some existing visitors of local residents who come to the site regularly, there is still a need for substantial promotion to improve local residents' engagement

Student groups: There are eight schools in the Watertown school district and five schools in the Carthage school district. Both school districts consist of programs of kindergarten to 12<sup>th</sup> grades. There are no schools located in Fort Drum. Students living on the installation attend school in Indian River Central School District (north of Fort Drum) and Carthage Central School District. Student groups are considered the primary market for the Sanctuary with the most potential for marketing because the sanctuary can cooperate with adjacent schools to offer environmental educational programs.

*Community groups*: Local community groups such as Boy Scouts and Girl Scouts, local youth groups, daycare, SACC (School Aged Children Care), and religious communities are considered potential visitor groups for the Wildlife Sanctuary. Moreover, these community groups can take advantage of the natural setting of the Sanctuary to conduct outdoor activities.

*Families with children:* According to the census, approximately 3,520 families in Watertown, 1,697 families in Fort Drum, and 510 families in Carthage have children under the age of 18 (United States Census Bureau, 2000). There are overall 5,727 families with children under the age of 18 within the 50-mile radius of the Wildlife Sanctuary. The sanctuary provides outdoor recreational opportunities such as hiking, mountain biking, snowshoeing, cross-country skiing, and wildlife observation for families with children to interact with nature.

Senior citizens: According to the census, 16% of local residents of Watertown (City of Watertown, 2010) and 15% of local residents of Carthage (United States Census Bureau, 2000) are over the age of 65 (no data obtained for Fort Drum). Therefore, there is an approximately 4,679 senior citizens living in these two regions. The Blake Wildlife Sanctuary can promote to senior citizens from the health perspective. Since the sanctuary consists of mostly mild slopes, it can provide a place for senior citizens to exercise and enjoy nature.

*Wildlife observation lovers:* One of Joseph V. Blake Wildlife Sanctuary's attractions is the existing wildlife on site. Therefore, the site can provide an opportunity for wildlife observations. Bird-watching already occurs at the sanctuary. Therefore, more marketing is necessary to promote to wildlife observation lovers as one target demographic.

**Table 1**. Existing, growth, and potential markets of the Sanctuary

Market group	Existing	Growth	Potential	Low Potential
Local residents	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Student groups		$\sqrt{}$	$\sqrt{}$	
Community groups		√	√	
Families with children		√	√	
Senior citizens			√	
Wildlife observation lovers	√	√	√	

#### **Market Position**

The following market position statement was created to guide marketing and promotional efforts for the sanctuary:

Joseph Blake Wildlife Sanctuary is located at the cross section on Middle Road in the Town of Rutland, Jefferson County, New York State. This property is owned by Tug Hill Tomorrow, and contains a rich landscape of sugar maple forest, wetland, and wildlife, which can be used by the public for hiking, mountain biking, snowshoeing, cross country skiing, and wildlife observations. Local residents, particularly families with children, youth groups from nearby towns, and wildlife observers will appreciate the resources on the site. The sanctuary can work with schools to accommodate student groups; the site is also well-suited for families. The location of the

sanctuary is convenient for visitors to plan for a day trip. The sanctuary will encourage visitor engagement with nature.

#### **Summary**

The Joseph V. Blake Wildlife Sanctuary provides various outdoor recreational opportunities for the purpose of recreation and environmental education. The identified potential market groups include local residents within a 50-mile radius, student groups, community groups, families with children, senior citizens and wildlife observation lovers. Most of the potential visitor markets are seen as a growing trend in the future. Student groups are considered as the primary market that can take a full advantage of the resources of the sanctuary. The Joseph V. Blake, Jr. Wildlife Sanctuary has a tremendous potential to benefit the community by attracting visitors, promoting local economic growth, and providing an extraordinary experience of the natural environment.

#### Promotions Assessment

#### Introduction

The Joseph A. Blake, Jr. Wildlife Sanctuary has many avenues for promoting opportunities. Through a larger network, the Sanctuary will be able to gain publicity to increase public awareness of what the Sanctuary has to offer. In addition to these larger networks, the Sanctuary will create a reliable brand to attract the intended market. In this assessment, existing promotional techniques at the Joseph A. Blake Wildlife Sanctuary will be assessed, along with existing techniques within the Watertown area. In addition, three other similar natural areas in New York State will be examined to assess the potential for using similar strategies at the sanctuary.

#### Existing promotional techniques at the sanctuary

The Joseph A. Blake, Jr. Wildlife Sanctuary is a new acquisition for the Tug Hill Tomorrow Land Trust. Since it has only recently been acquired, the sanctuary has yet to use promotional efforts. There has been a newspaper article in the *Watertown Daily Times* stating that the Land Trust has taken over the property. A blurb about the Sanctuary can also be found at <a href="http://tughilltomorrowlandtrust.org/land-protection/properties-you-can-visit/">http://tughilltomorrowlandtrust.org/land-protection/properties-you-can-visit/</a>. Aside from these promotions, there are no official or planned promotions for the Sanctuary.

#### **Tug Hill Tomorrow Land Trust**

Tug Hill Tomorrow Land Trust is a regional, nonprofit organization that works to conserve land in Jefferson, Lewis, Oneida, Herkimer, and Oswego counties. The Land Trust is promoted through its website (http://tughilltomorrowlandtrust.org), e-newsletter, newsletter, press releases, local news outlets, guides, and a Facebook page. The Tug Hill website provides in-depth information about the organization and offers gateways to other promotional websites as well. The e-newsletters are distributed to those who provide their email to Tug Hill. The e-newsletter is a short one-page information update on what is going on within the organization for that month. The Tug Hill Tomorrow Greenings Newsletter comes out twice a year, in the fall and spring. Newsletters are distributed to those who donate to the Land Trust. Different press releases are made at the discretion of Tug Hill in order to promote to a wider audience. Tug Hill Tomorrow Land Trust has also been in the news through the Watertown Daily Times and other local media outlets. Two guides are offered through Tug Hill Tomorrow. Tug Hill: A Four Season Guide to the Natural Side can be purchased on the website, and a more promotional guide, Tug Hill: Recreation Guide, can be requested for free. This latter guide is can be used throughout all the seasons featuring different recreational opportunities in the Tug Hill region. Tug Hill's Facebook page has 206 likes and is frequently updated with information and pictures.

#### The Greater Watertown North Country Chamber of Commerce

The Greater Watertown North Country Chamber of Commerce is a 5-Star Accredited chamber with nearly 1,000 members throughout Jefferson Country and the region. The Chamber has a visitor center that provides local and travel information to visitors, members, and the public. The Chamber has a large online presence with a website (http://watertownny.com), Facebook, Twitter, Flickr, Foursquare, Scribd., Youtube, and Pinterest. The Twitter account associated with the Chamber has 98 followers and is used frequently as well. The Chamber's photo stream on

Flickr is updated with pictures from local events. The Foursquare link on the main website directs all visitors to the Chamber's Scribd. account where you can read a large array of shared documents. The Chamber's Youtube has videos created by the Chamber showcasing different parts of Watertown and events. Visitors that have a Pinterest can pin the Chamber to their board. The Chamber also has a newsletter that comes out once a month. To receive the newsletter you do not have to be a member of the Chamber. The Chamber also hosts a wide array of events that are promoted and advertised through TV and radio. The Chamber has been established for over 100 years and has created a reliable brand. The Chamber's Facebook has 425 likes and is updated frequently advertising events in the area.

#### **Carthage Area Chamber of Commerce**

The Carthage Area Chamber of Commerce provides multiple benefits for businesses and people. The Chamber does not have many promotional media besides a website (http://www.carthageny.com). Within the website are some news releases. It is unknown if there are other media outlets outside of the internet.

#### 1000 Islands International Tourism Council

The 1000 Islands International Tourism Council is a nonprofit organization that has served the promotion interests of the 1000 Islands international region since 1956. It promotes through a vast array of media such as a very detailed website, up-to-date Facebook, extensive mailing list, and guidebooks. The Tourism Council reaches a very large audience because it promotes an international destination with a long history. The website provides information on recreation, attractions, events, and lodging; it is informational and helpful. The Council's Facebook has 2,291 likes, has deals for potential visitors, and shows pictures of the area. To join the mailing list only an email is needed. It is unclear what those on the mailing list receive. The website also offers many 1000 Islands brochures and guidebooks which are divided into different subjects to cater to different visitor groups. The three offered are 1000 Islands Travel Guide, Fishing & Hunting Guide, and Black River Recreation Guide. They can all be received via mail.

#### Promotional strategies used by other natural areas Baltimore Woods Nature Center

Baltimore Woods Nature Center is a non-profit environmental education organization in Marcellus, NY. In order to promote itself, the Center periodically sends out press releases and other news items to the media. If anyone wants to be added to this mailing list, all they have to do is submit an email. In addition, they publish a newsletter, *The Overlook*, for every season. *The Overlook* is sent out to members of Baltimore Woods and can be picked up at the interpretive center. *The Overlook* can also be accessed online at the Baltimore Woods website, <a href="http://www.baltimorewoods.org/">http://www.baltimorewoods.org/</a>. The website is detailed and provides a lot of information. Baltimore Woods also has a Facebook page with 1,044 likes. The page is often updated with pictures of events and reminders of upcoming programs. Other promotional flyers are made for programs and summer camps, but these are often only displayed at Baltimore Woods.

#### **Hudson Highlands Land Trust**

The Hudson Highlands Land Trust is a community-based organization committed to protecting the area of the Hudson Highlands. Up to 2008, The Land Trust printed a newsletter each year during the late summer. It is unknown to whom the newsletters are distributed, but they can be

read online. In 2008, the Land Trust began publishing a monthly e-newsletter via email. The enewsletter is sent out to anyone on the Hudson Highlands Land Trust mailing list. To join the mailing list, an email must be provided. The website (<a href="http://www.hhlt.org/">http://www.hhlt.org/</a>) seems to be the main source of promotion for the Land Trust. It contains all the information needed for the Land Trust such as programs, land protection, publications, public policy, and how to support the Land Trust. Other ways to find the Land Trust online are through Facebook and Twitter. Their Facebook page has 257 likes and is updated frequently with pictures and promotional flyers of their programs. Their Twitter has 129 followers with information about events and links to find other information about what is going on in the Hudson Highlands area.

#### Dionondehowa Wildlife Sanctuary & School

The Dionondehowa Wildlife Sanctuary & School is a non-profit organization in Shushan, NY. The Sanctuary has two main ways of being promoted: their website (http://www.dionondehowa.org) and their newsletter. Their website is very simple but provides information about both the Sanctuary and the School. Their newsletter is published once a year. It is unknown to whom the newsletter is distributed, but all articles are detailed and provide a wide range of information.

#### **Summary**

Overall, most organizations in the area surrounding the sanctuary and throughout the state have been shifting to a stronger online presence to promote themselves and connect with their visitors. Many still do provide newsletters but e-newsletters are becoming more common in all of the mentioned organizations. It should also be stated that all of these organizations are most likely promoted through word of mouth by creating good reputations within their communities. Since the Wildlife Sanctuary is still in its infancy, it is has not yet developed a brand or attempted many types of promotional media.

# Interpretation Assessment

#### Introduction

The Joseph A. Blake Wildlife Sanctuary is an undeveloped, rural area in the town of Rutland, NY (Tug Hill Tomorrow Land Trust, 2012). The sanctuary is bordered by an abandoned old town road on one side and a swamp and wetlands on the other side. It is filled with a variety of birds, other wildlife, and has a large sugar maple stand. This preserved forest is to be utilized as a place of recreation, but more importantly as a teaching tool for the children in nearby schools and for other visitors. The following assessment will aid in determining the best approach to creating a successful interpretive experience for visitors at the sanctuary.

#### History of Joseph A. Blake, Jr. Wildlife Sanctuary

The Joseph A. Blake Wildlife Sanctuary started out as the property of William Twinning around 1818. This property was used as a farm and was passed through several hands before being sold to the North Country Bird Club in 1965. The club used it as a birding site where they maintained the land to view birds. In May, 2012, the Tug Hill Tomorrow Land Trust bought the property with the goal of providing a place for recreation and education in a natural setting.

#### Joseph A. Blake, Jr. Wildlife Sanctuary Today

Since this sanctuary is a newly acquired property, it has few interpretive strategies or programming currently. The sign for the sanctuary has a positive tone but is not easily visible from the road. There is a lack of interpretive signage in the sanctuary and the signs for the trails are small and easily missed. There is no clearly designated area (except for a small lean-to that is falling apart) where interpretive programs can be conducted.

The Tug Hill Tomorrow Land Trust group already has a website and some interpretive strategies for some of their other properties, but is just beginning to consider interpretation for this new property. The THT website has a small section dedicated to the sanctuary that quickly describes what it once was and what activities can be done on the land. However, this description does not include the main goal of the sanctuary (i.e., to be used as an educational tool). Included in the description is a link to contact THT for volunteer positions to help with trail maintenance. It does not ask for volunteers for assistance with any other efforts at this time. Some positive aspects of the website are that there is a staff page which connects the potential visitor to the staff, and a page to sign up for newsletters. The website allows users to get to know about the staff and be kept updated on the events and programs available. Their outreach system includes having some contacts with local schools and Ft. Drum. They also spread the word on their events and programs by doing press releases, posting on Facebook, and putting up posters in libraries and other public locations (L. M. Garrett, personal communication, Nov. 16, 2012).

Two issues that need to be addressed are that there are no programs listed for the sanctuary under the programs page and the sanctuary is not listed in the *Tug Hill Recreation Guide* which is linked to the website. This lack of information makes it difficult for the public to find out about the sanctuary and what it has to offer. However, the only activities that the sanctuary has had since the new ownership were trail clearings and other work projects. The site also lacks a trail map of the sanctuary.

#### **Beaver Lake Nature Center: Interpretive Strategies**

Beaver Lake Nature Center is found 15 minutes northwest of Syracuse, NY in Onondaga County. The nature center property is filled with trails that can be hiked alone or with a program provided by nature center staff. This center has a few interpretive strategies that could be used in the sanctuary.

The nature center has a large sign that is clearly visible from the road. At the start of each trail there is a large sign with the name of the trail as well as the length of the trail (Roaring, 2006). This information allows visitors to easily identify which trail they are willing to hike. Along the trails, there are interpretive signs discussing the various flora and fauna found on the property; these signs connect the visitor to the environment around them. Other positive interpretive features at this nature center are the few boardwalks and outlooks with telescopes that are good places for interpretative programs. Also, within the nature center are educational displays that further enhance the learning of visitors.

Beaver Lake's website is found within the Onondaga County Park's website. This website has links to a trail map and a brochure listing the programs for the upcoming season. The website allows visitors to see what they can expect from the trails before getting to the destination. The nature center has a teacher's newsletter that shares interesting facts and classroom activities that a teacher could sign up for by emailing a request for one. There is also another link to a page with information on school groups as well and a link to a brochure of educational programs provided by the center.

#### **Baltimore Woods Nature Center: Interpretive Strategies**

Baltimore Woods Nature Center is located in Marcellus, NY and is a place-based nature education organization (Baltimore Woods Nature Center, 2008). There are some areas such as a pavilion that is used for programs (Roaring 2006).

Their site includes many pictures of people doing different activities that give the public that image of having programs to experience. It allows the visitors to picture themselves doing those same activities. There is also a page for volunteers that describe the duties that a volunteer would have which would allow one to determine if they would like to volunteer.

The school program brochure is quite interpretive, as are the programs that are listed. This brochure that is handed out to teachers has the interpretive features such as a description of the nature center, the history, mission, and contact information. Each program listed has a fun creative title with a description that discusses the lesson learned and the activities that will be done in correlation with the lesson. All of the programs revolve around natural history and science as well as some cultural history. Every program includes a lesson either on site, out in nature, or has nature come to the class in the form of interpretive props. The programs are listed in the brochure by the grade level for which each program is geared towards. At the end of the brochure is a registration form that can be filled out and sent back to the nature center.

#### **Blue Heron Park: Interpretive Strategies**

Blue Heron Park is found on the South Shore on Staten Island, New York. It has a series of trails and a nature center building. This park also has a few interpretive strategies that may be used in the sanctuary.

In front of the building is a small three-sided kiosk-like structure. It has a map of the trails, a poster with a list of all the events during that upcoming season, and a display case with a theme that is changed by the rangers that work in the nature center. This allows the visitors to orient themselves within the park, be updated on the events that will be occurring, and see the interpretive display created by the staff. Inside of the nature center are many props that are used for interpretation including animals, animal artifacts (also known as biofacts), posters, books, and craft supplies. These are found along with other equipment in storage areas within the building. The trails here also have interpretive signs discussing the local flora and fauna.

#### **Interpretive Strategy Potential**

The interpretive strategies from the three different natural areas all have the potential of being used in the sanctuary. Having a large sign for the sanctuary is important for visitors to be able to easily find the entrance to the sanctuary from the road. Large trail signs at each starting point would make it easier for visitors to determine where they were inside the sanctuary and the interpretive signs along the trails would help to educate them on the flora and fauna of the area. While it is not a high priority to install boardwalks or outlooks, having a larger open area along the trails for interpretation would deter groups from gathering on the trail which causes trail widening and erosion. Educational props would only enhance the learning experience but would require a place for storage. A map is important in order to allow the visitors to orient themselves within the sanctuary.

A newsletter for teachers would be a good form of outreach, to keep teachers updated on the educational programs. This helps with the goal of turning this property into an educational tool. A school program brochure that is distributed to teachers and schools will provide information that will allow them to decide whether they want to register and for which program. Providing a registration form at the end of the brochure makes the process of registering simple. Also, having a trail map on the site would allow potential visitors to see the property before actually arriving there and they can plan their activities beforehand.

#### **Summary**

Tug Hill Tomorrow Land Trust has a good starting point with the interpretive programming and strategies that it applies to its other properties. These programs and strategies need to be applied to the Joseph A. Blake Jr. Wildlife Sanctuary. With a little more work and some additional strategies implemented on the property, this sanctuary will become an important educational tool for the public.

# Transportation Assessment

#### Introduction

The Joseph A. Blake Wildlife Sanctuary is located in the town of Rutland, NY, which is ten minutes east of Watertown. The most important observation made when the class traveled to the site in mid-October was that the sanctuary would be very difficult for many potential visitors to find. Other concerns will be addressed in this chapter.

#### Travel by road

Due to its location, it is clear that the potential visitors to the site will likely travel by vehicle. When assessing potential travel routes, it was also important to identify the potential markets to which the sanctuary will cater. The markets are clearly going to be mostly Watertown, Fort Drum, Carthage residents, and those scattered around Jefferson County. The major roads involved with connecting these potential visitors to the site include Interstate 81, State Street (NY 126), Van Allen Road (NY 12), East Rutland Street (US Route 11), Route 3, Route 26, and Route 126. Traffic levels along these routes are generally not congested and are free flowing. The exceptions would be Interstate 81 because it links major cities and towns north and south spanning the entire New York State. Other considerations include construction delays that will be rather unpredictable, but expected. Overall, traffic congestion should not become a problem for the sanctuary. Currently, the sanctuary has no official parking spaces, although a few parking spaces are available at the end of Old Townline Rd.

#### Travel by bike

Currently, Middle Road does not have a lined shoulder that can be used for bicycle riding to the sanctuary. Low traffic volume on Middle Road, however, suggests that the lack of a shoulder may not be an issue for experienced riders.

#### **Travel by Bus**

County Road 160 (Middle Road) is not included on any bus route. There are two bus services that provide transportation to Watertown, NY: Greyhound and Megabus. They include Watertown on their travel routes on Interstate 81 from both the north and south. Another bus service that potential visitors may use would be the local Watertown bus service called Citibus. Citibus implements five routes during the year. Citibus is able to link all the routes with a transportation station downtown. From this drop-site (which is next to Route 126), visitors could bike or take a taxi to the sanctuary.

#### Travel by Air

Potential visitors could use several airports that exist that in the area. Five international designated airports are connected by the major travel routes. From 81- South, there is Syracuse Hancock International airport and Binghamton Regional airport. Travel to the site from these airports is estimated to be 90 minutes and 150 minutes, respectively. From 81-North, there are two additional airports, Ogdensburg International and Massena International Richards Field. Travel from these airports is estimated to be 90 minutes and 120 minutes, respectively. Last, there is Watertown International Airport, likely to be the main airport used to travel to the

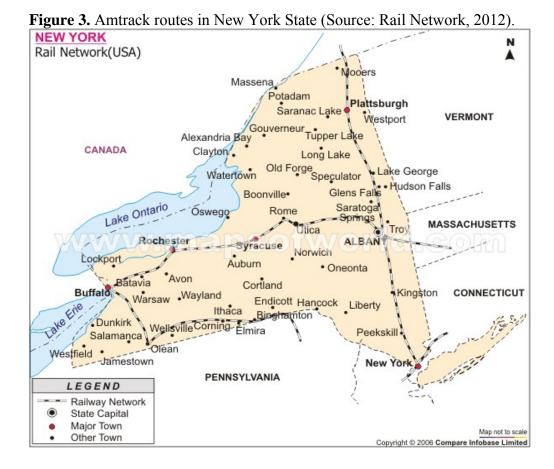
sanctuary. Travel from Watertown International Airport is estimated at 15 minutes. There are also two domestic airports located in the region. Alexandria Bay airport which is located 45 minutes north of the sanctuary or Long Lake domestic airport which is located 45 minutes east of the sanctuary.

#### Taxi service

Watertown offers several taxi services. A visitor could use any of these companies for a taxi: Yellowcab of Watertown, Big Man's Cab, Checker Taxi, Happy Cab Y, Freedom Cabs LLC, AAA Speedy Taxi, or East Coast Taxi.

#### **Travel by Train**

Travel by Amtrack rail is possible (see figure 3). The passenger rail system does not enter Jefferson County but it does pass through Onondaga County in Syracuse, NY. Visitors that travel by train are likely to enter through the William F. Walsh Regional Transportation center. Options to travel north to the site include taxi, bus, or automobile.



#### **Nearby Communities and travel routes**

Markets using 81-South include Syracuse and its surrounding suburbs, Pulaski, Binghamton and surrounding suburbs, Camden, and Mexico. Markets using 81-North include Alexandria Bay, Gouverneur, and Potsdam. Markets arriving from State St (Rt. 126) or Van Allen Road (US 12) include Carthage, Lowville, Boonville, and Utica and its suburbs. Watertown/Fort Drum markets use Rt. 3, Rt. 12, Rt. 11, and Rt. 126, arriving from the west.

#### **Summary**

Currently, travel to the sanctuary includes walking, biking, or automobile. Connections from air, train, or bus can link many visitors to the Watertown area but are forced to use a secondary mode of transportation to reach the sanctuary. Some signage exists to help identify the sanctuary but many more will be required to ease the transportation process.

#### Local Business Assessment

#### **Benefits of Partnership**

Partnering with Local Businesses is a smart strategy for the Joseph A. Blake Wildlife Sanctuary for many reasons. It benefits both sides of the partnership equally, providing motivation for business to cooperate with the sanctuary.

If the sanctuary partners with a business, it builds credibility and a positive company image for that business because it shows that the business is supporting the outdoors and conservation of important land and wildlife habitat. Similarly, it will boost money inflow to businesses if tourists that visit the site see the names of sponsoring businesses and visit these local shops and businesses in Jefferson County.

The sanctuary gains the obvious benefit of increased revenue in the form of donations. This money can go towards making the site more accessible for visitors in the form of signage and educational materials. The sanctuary could also gain the expertise from different businesses that could help enhance the site and make it more attractive to a wide demographic.

#### **Regional Considerations**

There are many regional considerations that are factored into the future of the Joseph A. Blake Wildlife Sanctuary. The scope of this assessment will primarily examine relationships with local businesses and the potential that lies here.

The sanctuary is located outside of Watertown, leaving little room for direct contact with businesses. What it does have on its side is that the most convenient way to get to the sanctuary is through the main city of Watertown, which draws more visitors to the area, therefore boosting the local economy (Tinney, 1968).

#### **Current Progress**

The wildlife sanctuary has been making some headway in its collaboration with local business. Last year they held a "Race for Open Space" which was sponsored by Community Bank and benefitted the Joseph A. Blake Wildlife Sanctuary. The Tug Hill Tomorrow Calendar also has many sponsors, which helps get the name out there and attract more visitors to the area. This encourages community and local involvement, boosting the local economy and raising awareness while providing learning opportunities at the wildlife sanctuary (Voss, 2012).

#### **Future Plans**

Looking to the future, Executive director Linda Garrett hopes to see more local businesses sponsoring specific events at the wildlife sanctuary. She also is hoping that businesses will use their donations to help pay for program development or trail signage and maps. A big part of gaining local business involvement will be the challenge of getting business representatives out to the site to see what the wildlife sanctuary is trying to develop. This kind of direct involvement will aid in businesses being able to see what is going on and what the vision is for the area. This will entice businesses to put their faith in Tug Hill and perhaps even call on other local

businesses to do the same. With this kind of momentum, we can expect there to be rapid evolution in the Joseph A. Blake Wildlife Sanctuary (Madden, 2012).

#### **Proven Success: Merkle Wildlife Sanctuary**

Figure 4 depicts a map of the Merkle Wildlife Sanctuary. It is a proven result of the positive benefits a partnership with local businesses can have. This sanctuary really took off when businesses started getting involved and the sanctuary evolved into the well-marked series of trails and attractions shown in the image. It proves another reason why the Joseph A. Blake Sanctuary should seek out the support of local business: to fully develop their sanctuary and build it up to a higher standard (Maryand, 2012).

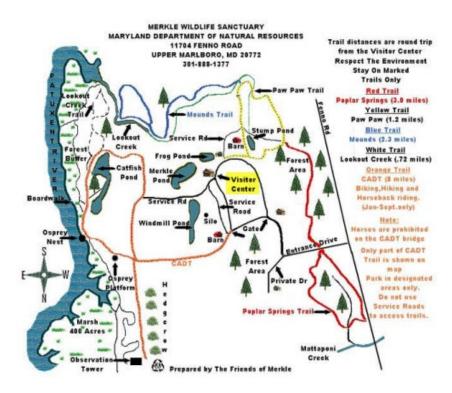


Figure 4. Merkle Wildlife Sanctuary (source: Maryland Dept. of Natural Resources).

#### **Summary**

While the Joseph A. Blake Wildlife Sanctuary is making some headway when it comes to relationships with local businesses, there is still a lot of room for improvement and expansion on that relationship. Following the suggestions outlined in the assessment above and considering the analysis provided, the sanctuary will be able to drastically improve its site to attract more visitors and educate the public.

# Assessment of Local Organizations and Agencies

#### Introduction

The staff of the Joseph A. Blake Wildlife Sanctuary would like to see the sanctuary grow and become an important part of the community and an attraction for the region. In order to accomplish this, the sanctuary would benefit from partnering with organizations and agencies that could help with volunteers, events, promotions, or other kinds of support. Table 2 is a list of organizations in Watertown and Jefferson County that could partner with the sanctuary and that might have resources to offer. Tables 3 and 4 list educational, federal, state and local agencies that could partner with the sanctuary and that might have resources to offer the sanctuary.

**Table 2.** Organizations

Organization	Description	Contact Information
Adirondack Mountain	Adirondack Mountain Club	No distinct individual to contact
Club - Black River	(ADK) is an outdoor adventure	www.blackriveradk.org
Chapter	club dedicated to conservation,	
	advocacy, recreation, education,	
	and stewardship.	
Boy Scouts of	The Boy Scouts of America (BSA)	Leo Brizzi, District Director
America	is a youth organization that aims to	2803 Brewerton Road
- Longhouse Council	develop character, citizenship and	Syracuse, NY 13211
- Tri-Rivers District	fitness in its members. A main	315-463-0201
	avenue for accomplishing this is	leo.brizzi@scouting.org
	by encouraging community service	www.cnyscouts.org
	and participation.	
Chamber of	The Greater Watertown Chamber	Lynn Pietroski, President & CEO
Commerce	runs a visitor's center and provides	1241 Coffeen Street
- Greater Watertown-	local and travel information to	Watertown, NY 13601
North Country	visitors, members and the general	315-788-4400
	public. This business network is a	chamber@watertownny.com
	local organization of businesses	www.watertownny.com
	whose goal is to further the	
	interests of its members.	

 Table 2 (continued).
 Organizations

Ducks Unlimited	Ducks Unlimited works to conserve, restore and manage wetlands and associated upland	Steve Fahey State Co-Vice Chairmen Eastern NY
	habitats for waterfowl, other	806 County Hwy 27
	wildlife, and people.	Richfield Springs, NY 13439 315-717-6565
		stvfahey@yahoo.com
		www.ducks.org/new-york
Fort Drum Army Base	Child, Youth & School Services	Karin Sikirica, CYSS Coordinator
- Child, Youth &	(CYSS) at Fort Drum provides	Mt Belvedere Blvd, Bldg P-10720
School Services	programs and activities for middle	Fort Drum Army Base
- Summer Youth	school and high school students.	315-772-6715
Programs		www.drummwr.com/
		ChildandYouthServices.htm
Girl Scouts	The Girl Scouts (GSUSA) is a	Barbara Iwinski
- NYPENN Region	youth organization that aims to	Community Development
	empower girls and to teach its	Manager
	members key values. One of the	249 State Street
	ways of accomplishing this is by	Watertown, NY, 13601
	encouraging community service	315-782-1890 x2211
	and participation.	biwinski@gsnypenn.org
		www.gsnypenn.org
Great Lakes Seaway	Seaway Trail works to increase	Mike Bristol, President & CEO
Trail	tourism revenues and to enhance	401 West Main Street
	the quality of life for travelers,	Sackets Harbor, NY 13685
	communities, and its members.	315-646-1000
		info@seawaytrail.com
		www.seawaytrail.com
Kiwanis Club of	Kiwanis International serves	James Reichhart, President
Watertown	children and youth by working to	P.O. Box 655
	improve their quality of life and by	Watertown, NY 13601
	encouraging leadership and service	315-773-2222
The Neture	among youth.	dermady@wsbny.com
The Nature	The Nature Conservancy is	Northern New York Project
Conservancy	dedicated to conserving land and	269 Ouderkirk Road
	water resources, and preserving	Pulaski, NY 13142
	local plants, animals, and	315-387-3600
	ecosystems.	www.nature.org/ourinitiatives/ regions/northamerica/
		unitedstates/newyork/index.htm
		unitoustates/newyork/muex.ntm

 Table 2 (continued).
 Organizations.

North Country Bird Club	The North Country Bird Club is a non-profit bird club concerned with environmental issues which affect northern New York.	Corky Marlowe, President P.O. Box 634 Watertown, NY 13601 haldex@twcny.rr.com www.facebook.com/pages/North- Country-Bird-Club/98540286097
Parks and Trails New York	Parks and Trails New York is an advocate for parks and trails statewide. They are dedicated to improving the economy of New York and the quality of life of New York residents.	Robin Dropkin, Executive Director 29 Elk Street Albany, NY 12207 518-434-1583 ptny@ptny.org www.ptny.org
Rotary Club - Watertown Evening Club	Rotary Clubs aim to instill the importance of service in its members and in the citizens of the community the club serves.	Vickie Quigley, President PO Box 6142 Watertown, NY 13601 315-786-6633 www.watertowneveningrotary.org
Rotary Club - Watertown Sunrise Club	Rotary Clubs aim to instill the importance of service in its members and in the citizens of the community the club serves.	Tim Virkler, President P.O. Box 6423 Watertown, NY 13601 contact@watertownsunriserotary. org www.watertownsunriserotary.org
Tourism Bureau of the Thousand Islands Region	The bureau aims to develop and promote the tourism industry and its employment base for the overall economic benefit of the region.	P.O. Box 709 Wellesley Island, NY 13640 315-482-2520 www.visit1000islands.com
Tug Hill Commission	The Tug Hill Commission works to maintain clean water, healthy forests, productive farms, and stable communities.	Dulles State Office Building 317 Washington Street Watertown, NY 13601 315-785-2380 tughill@tughill.org www.tughill.org
Zoo at Thompson Park	The Zoo focuses on New York State ecosystems, through conservation, education and recreation.	One Thompson Park Watertown, NY 13601 315-782-6180 www.nyszoo.org

 Table 3. Educational institutions.

Watertown High	These two high school clubs might	1335 Washington Street
School	provide youth involvement for the	Watertown, NY 13601
- Adventure/Outing	sanctuary.	315-785-3800
Club		www.watertowncsd.org/
- Environmental Club		WatertownHigh.cfm
Watertown High	Key Club is the high school	Advisor: Leonard Planes
School	branch of the Kiwanis Club.	President: Siraj Sindhu
- Key Club		www.watertowncsd.org/
		webpages/lplanes/whs.cfm
Watertown High	Members of the National Honor	Advisor: Leonard Planes
School	Society must take part in a	www.watertowncsd.org/
- National Honor	community service project.	webpages/lplanes/
Society		nationalhonoresociet.cfm

Table 4. Agencies.

Agency	Description	<b>Contact Information</b>
Department of	The Department of Environmental	Judy Drabicki, Regional Director
Environmental	Conservation (DEC) works to	317 Washington Street
Conservation	conserve, improve and protect	Watertown, NY 13601
- Region 6	New York's natural resources and	r6info@gw.dec.state.ny.us
	environment.	www.dec.ny.gov
Environmental	The Environmental Protection	US EPA Region 2
Protection Agency	Agency (EPA) aims to protect	290 Broadway
- Region 2	human health and the environment	New York, NY 10007
	through conservation, education	877-251-4575
	and policy enforcement.	www.epa.gov
Historian	The City Historians work to	City Clerk/Historian
- City of Watertown	collect, preserve and document the	245 Washington Street, Room
	history of Watertown.	101
		Watertown, NY 13601
		315-785-7780
Parks and Recreation	Parks and Recreation strives to	Erin Gardner, Superintendent of
- City of Watertown	provide a broad range of recreation	Parks and Recreation
	programs and facilities to enhance	Watertown Ice Arena
	the quality of life for Watertown	William T. Field Drive
	residents.	Watertown, NY 13601
		315-785-7775
		parksrec@watertown-ny.gov
		www.watertown-
		ny.gov/index.asp?nid=120

Table 4 (continued). Agencies.

Planning Board	The Planning Board is responsible	245	Washington Street	
- City of Watertown	for reviewing requests for site	Wa	tertown, NY 13601	
	plan, special use permit, zone	315	315- 785-7730	
	changes and subdivision	ww	w.watertown-	
	approvals.	ny.	gov/index.asp?nid=216	
Planning Board	The Planning Board assists in the		nald R. Canfield, Director	
- Jefferson County	development and implementation	175	5 Arsenal Street	
	of comprehensive plans, land use		tertown, NY 13601	
	regulations, and community and		5-785-3144	
	economic development plans and		w.co.jefferson.ny.us/index.asp	
	strategies.	x?p	page=87	
Cornell Cooperative	The Cornell Cooperative Extension		Stephanie Graf, Program	
Extension of Jefferson	(CCE) program aims to educate peo		Supervisor	
County	about agriculture and food, home an		203 North Hamilton Street	
	family, the environment, community	1	Watertown, NY 13601	
	economic development, and youth		315-788-8450 x251	
	development.		sjg42@cornell.edu	
			www.ccejefferson.org	
Youth Bureau	The Youth Bureau provides youth		Ginny Harrington, Director	
- Jefferson County	development opportunities, along with		175 Arsenal Street	
	funding and support for programs that		Watertown, NY, 13601	
	enhance the development of children		315-785-3382	
	and youth.		ginnyh@co.jefferson.ny.us	
			www.co.jefferson.ny.us/inde	
			x.aspx?page=123	

#### **Summary**

There are a number of organizations and agencies that can partner with the Joseph A. Blake Wildlife Sanctuary. Some can provide volunteers, such as the Boys Scouts, the Girl Scouts, the Watertown High School clubs and the North Country Bird Club. Other organizations and agencies can help the sanctuary by providing promotional help, such as the Watertown Chamber of Commerce or the Great Lakes Seaway Trail. The Nature Conservancy, Cornell Cooperative Extension and Ducks Unlimited can provide educational assistance, while the Department of Environmental Conservation and Planning Boards of Watertown and Jefferson County can help with logistics and technical support. By partnering and working with a variety of organizations and agencies, the sanctuary can work towards its goals of growing and becoming well known in the area.

# Assessment of Regional Connections

#### Introduction

This section of the assessment will explore the natural areas, events and attractions surrounding the Joseph A. Blake Jr. Wildlife Sanctuary. Though situated in a rural area, the sanctuary is surrounded by other attractions that may be used for connections in the future. Broken down into its simplest form, the site can be either utilized at a regional or local scale. The regional scale looks into how you can get this site incorporated in a nationally recognized trail system, such as a scenic byway. Local scale looks at what is within a short driving distance that local townspeople might utilize when going out for a day trip. This particular sanctuary lends itself to working most closely with three main surrounding regions: the city of Watertown, the city of Canton, and the Tug Hill State Forest Region. While the regional scale might reach more people, it's anticipated that the local scale will be far more appropriate for the anticipated attraction.

#### **Natural Areas and Attractions**

Table 5 provides a list of the attractions surrounding the Joseph A. Blake Jr. Wildlife Sanctuary; two regional attractions, the Great Lakes Seaway trail and Olympis Scenic Byway, are included.

**Table 5.** Potential regional and local connections with the sanctuary.

Attraction	<b>Contact Information</b>	Visitor Experience
Olympic Trail <sup>a</sup>	Phone: 518-891-6200 Adirondack	The Olympic Trail travels from Lake
	North Country Association	Champlain to Lake Ontario, passing
		through the Adirondack Park. In
		Watertown, the trail follows Route 3.
Great Lakes Seaway	Phone: (315) 646-1000	This National Scenic Byway is
Trail <sup>a</sup>	Email: info@seawaytrail.com	focused to provide a traveling visitor
	Address:	with hopes of seeing the Great Lakes
	Seaway Trail, Inc.	Region with a map of not only
	401 W. Main St.	historical & cultural locations, but an
	PO Box 660	assurance of an amazing scenic view
	Sackets Harbor NY 13685	of the area along the way.
NYS Zoo at	Phone: (315)782-6180	This zoo provides visitors with the
Thompson Park <sup>b</sup>	Address:	chance to explore and see wildlife
	One Thompson Park	that's native to New York
	Watertown NY 13601	ecosystems. It does this through
		conservation, education, scientific
		study and recreation.

 Table 5 (continued). Potential regional and local connections with the sanctuary.

Alex Duffy Fairgrounds <sup>b</sup>	Watertown Parks & Recreation Phone: (315)785-7775 Email: parksrec@watertown- ny.gov Address: 970 Coffeen St. Watertown NY 13601	A site designed for multiple uses visitors can enjoy multiple activities, including; walking trails with scenic views, a picnic area, swimming, and much more. This site is also a location of several events including baseball games and other activities in the county fair buildings.
Watertown "Walking Trails" <sup>b</sup>	Watertown Parks & Recreation Phone: (315)785-7775 Email: parksrec@watertown- ny.gov Address: 970 Coffeen St. Watertown NY 13601	These sites are advertised by the city of Watertown, it consists of 7 main trails. Including Thompson Park (ski & snowshoe trails as well as walking trails), Riverwalk, Waterworks Park, and Bicentennial Park. These trails are designed to be accessible for family outings and leisurely walks.
Dry Hill Ski Area <sup>b</sup>	Phone: (315)782-8584 Email: info@skidryhill.com Address: County Route 67 Watertown NY 13601	This Ski location is designed for skiers, tubers, and snowboarders alike. With rentals and lessons available families can come, experienced or not and enjoy these fun snow activities.
Tug Hill & Surrounding Forests <sup>b</sup>	NYS DEC Phone: (315)376-3521 Email: r6info@gw.dec.state.ny.us Address: 7327 State Rte 812 Lowville, NY 13367	These state forests cover much of the Tug Hill Plateau. Popular locations for winter sports such as snowmobiling, snowshoeing, and cross-country skiing, as well as summer activities.
Beartown State	NYS DEC	Boasting a wide variety of wildlife,
Forest <sup>b</sup>	Phone: (315)376-3521	including bobcats, and waterfowl,
(Canton)	Email: r6info@gw.dec.state.ny.us Address:	this beautiful state park is home to people seeking activities of all types.
	7327 State Rte 812	From angling, to hunting, trapping,
	Lowville, NY 13367	and bird watching. This site contains two creeks that run through it giving it a diverse habitat appeal.

<sup>&</sup>lt;sup>a</sup> Regional attractions <sup>b</sup> Local attractions

The various Watertown locations include sites that address several activity types, many of which overlap with the types of activities that may be occurring in the sanctuary in the future. Locations like the NYS Zoo in Thompson Park are devoted to New York Wildlife education and conservation. The Alex Duffy Fairgrounds and the Watertown "Walking Trails" are locations for families to go and enjoy the great outdoors in a relaxed environment through walks, picnics, snowshoeing and much more. The Dry Hill Ski Area provides a location where skiers (potential cross country skiers) gather to enjoy the winter months. With these local attractions being so close and with such a diverse range of activities addressed, it is expected that the audiences here can be tapped into.

The Tug Hill Region and surrounding State Forests, as well as Beartown State Forest in Canton, provide opportunities for all types of outdoor enthusiasts. Everyone from birdwatchers to plant lovers are drawn to these sites to utilize their seclusion, peaceful atmosphere, and various trails. Such an atmosphere is similar to that found in the sanctuary and by working with these sites one can expect to find an interested audience there.

#### **Events**

Very limited information was discovered regarding events in the area of the Joseph A. Blake Jr. Wildlife Sanctuary. While located about an hour away from the sanctuary, the closest apparent and relevant event would be the Annual Winona State Forest Tourathon, designed for cross-country skiers to compete and enjoy the beautiful sites of the Winona State Forest and Tug Hill Region. It is anticipated that more events can be evaluated and discovered by forging relationships with the various attractions.

#### **Summary**

Due to its central location, the Joseph A. Blake Jr. Wildlife Sanctuary can utilize attractions from several different outlets. These outlets include: the Great Lakes Scenic Byway, Olympic Trail, Watertown, Canton, and the Tug Hill Region. Each of these regions can be expected to appeal to different types of audiences. The Scenic Byways will draw in travelers from around the nation, including those looking for a peaceful scenic drive all the way to those looking to get in touch with cultural roots. Watertown appeals to local families and the casual outdoor enthusiasts. The sanctuary appeals to this crowd by offering trails that are slightly less intense than those that might be seen elsewhere. The Tug Hill and Beartown State Forest will attract several interested parties, but especially bird watchers, who will be intrigued by the unique waterfowl drawn in by the wetlands of the sanctuary. By looking into the various attractions and events located within these regions, it is possible to look for connections that can be forged for the benefit of all, including the sanctuary, the attraction, and the visitor.

# Emergency Services and Visitor Safety Assessment

#### Introduction

It is important to consider emergency services and visitor safety when planning for the future and current use of the JABWS. In its current state there are several safety concerns on site that pose a hazard to visitors and volunteers alike. The most notable of these is the condition of the lean-to and a lack of a system such as a trailhead log to account for who is on the property at any given time. Taking the time to assess emergency services and visitor safety and correct issues now will allow for better emergency service and increase the safety of visitors in the future.

#### **Potential Risks to Visitors**

There are several visitor safety concerns on site at JABWS. The first concern is that the lack of road-front signage, which emergency services will use to quickly locate the property in the event of an emergency. The property is essentially unmarked with no visible sign or address, making it difficult for emergency services to locate the property in a timely manner.

The second concern is that the West side of the property can't be accessed without having to walk along the road as there are no sidewalks. Asking patrons to walk on the road is a major safety concern; a passing car can accidently injure them. This is mainly a concern for visitors potentially using the historic map of the sanctuary which shows a trail (no longer in existence) on the west side.

Third, while the red and blue trails are in good shape, trail sections no longer in use (i.e., those that are found on the historic trail map for the sanctuary) have numerous dead trees on them and could pose a safety hazard for visitors. In some places, the markers for these abandoned trails are still in place, indicating to visitors that these trails are open.

A fourth major concern is the lean-to on site, which is in deplorable condition. This structure poses a risk to anyone trying to use it and is a liability to Tug Hill Tomorrow while it is still standing.

The parking area is inadequate for visitor use. Because it is surfaced mostly with dirt, in wet or inclement weather it may cause visitors' cars to become stuck and stranded in the parking area. Given the relative remoteness of JABWS, the potential of stranded visitors is a serious safety concern

The final safety concern to note was the lack of a trailhead kiosk (with trail map) and registration log. A trailhead kiosk is important for visitors to familiarize themselves with the area before beginning a hike so that they do not become lost, or if they do become lost they are familiar with some important landmarks that can lead them back to safety. A registration log is important for emergency services personnel to be able to determine if there is someone on the property that is lost or missing. The lack of either of these things raises serious safety concerns with regards to visitor safety.

#### **Summary**

The town of Rutland's emergency services that respond to JABWS were found to be more than adequate. Serviced by two first-response equipped fire departments, two transporting ambulance agencies, and one helicopter ambulance, the first response care in the town of Rutland will meet the needs of visitors. The available emergency services, combined with the four search and rescue agencies and the three different law enforcement agencies that service the area, should make patrons feel safe visiting the JABWS. If an emergency were to occur, there are three hospitals and several urgent care facilities in the immediate area. These emergencies services are coordinated through the Jefferson County 9-1-1 Dispatch Center, to provide a unified and coordinated emergency services effort in Jefferson County. All this should contribute to a safe and inviting atmosphere at JABWS and the surrounding area. In addition, patrons will find two car service stations within five miles of JABWS in Watertown and two bicycle repair shops within ten miles of JABWS in Watertown. These will be able to meet the needs of patrons in the event of a vehicle or bicycle break down.

**Table 6.** Emergency Services for the JABWS in Rutland, New York

Service	Address	Phone
Hospitals*:		
Carthage Area Hospital Inc.	1001 West Street	315-493-1000
	Carthage, NY 13619	
River Hospital, Inc.	4 Fuller Street	315-482-2511
	Alexandria Bay, NY 13607	
Samaritan Medical Center	830 Washington St	315-785-4000
	Watertown, NY 13601	
Urgent Care*:		
Med Ready Urgent Care	19472 US Route 11 Watertown,	(315) 779-1104
Medical	NY 13601	
Watertown Urgent Care	457 Gaffney Drive	(315) 779-2273
	Watertown, NY 13601	
Urgent Care North Country	21017 State Route 12f	(315) 786-3436
	Watertown, NY 13601	
Quik Med Urgent Care	727 Washington St	(315) 785-7009
	Watertown, NY 13601	
Ambulance Services*:		
Black River Ambulance	121 LeRay Street	(315) 773-4501
Squad, Inc.	Black River, NY 13612	
Guilfoyle Ambulance Service,	438 Newell Street	(315) 788-4140
Inc.	Watertown, NY 13601	
Life Net of New York	NYS Route 12 F	(315) 639-3870
Dexter Base	22626 Airport Drive, Box 8	
	Dexter, NY 13634	
Fire Departments*:		
Felts Mills Fire Department	30985 County Route 143	(315) 773-2604
	Felts Mills, NY 13638	
Rutland Fire Department	28502 NYS Route 126	(315) 788-1498
	Black River, NY 13612	

**Table 6 (continued).** Emergency Services for the JABWS in Rutland, New York

Jefferson County Sheriff753 Waterman Drive Watertown, New York 13601(315) 786-2660Black River Police Department102 S Main St Black River, New York 13612(315) 773-5721	
Black River Police 102 S Main St (315) 773-5721	
Department Black River, New York 13612	
New York State Police 25873 State Route 37 (315) 782-2112	
Watertown Station Watertown, NY 13601	
New York State Police 120 So. Mechanic Street (315) 493-3190	
Carthage Station Carthage, NY 13619	
Search and Rescue*:	
Jefferson County Sheriff 753 Waterman Drive (315) 786-2660	
Recreation Patrol Watertown, New York 13601	
Carthage Area Rescue Squad 200 Riverside Drive (315) 493-1913	
Carthage, NY 13619	
South Jefferson Rescue Squad 26 N. Main Street, P.O. Box 126 (315) 232-2625	
Adams, NY 13605	
Thousand Islands Emergency 100 Union Street, P.O. Box 524 (315) 686-4333	
Rescue Squad Clayton, NY 13624	
Dispatch Center*:	
Jefferson County 9-1-1 753 Waterman Drive (315) 786-2601	
Dispatch Center Watertown, NY 13601	
Car Service Stations**:	
Bill Bartram Engineering 17764 Cook Road (315) 788-2015	
Watertown, NY 13601	
Ron's Brake and Automotive 24633 State Route 12 (315) 782-0197	
Service Watertown, NY	
Bicycle Repair Shops***:	
Ken's Bike Shop 19035 Washington Street Road (315) 782-7104	
Watertown, NY 13601	
Black River Adventures Shop   129 Mill Street   (315) 786-8800	
Watertown, NY 13601	

<sup>\*</sup>In the event of an emergency dial 911

\*\* Car service stations within five miles of Rutland are listed

\*\*\* Bicycle repair shops within ten miles of Rutland are listed

## Assessment of Organizational Structure

#### Introduction

The Joseph Blake Jr. Wildlife Sanctuary is currently owned and operated by the Tug Hill Tomorrow Land Trust. This is the first property the Trust has owned outright. Prior to ownership of the sanctuary, the primary objective of the trust was to obtain and manage easements both purchased and donated by landowners throughout the Tug Hill region. Efforts have allowed the trust to conserve over 7,000 acres to date. This section addresses the current organizational structure and the staff that are responsible for oversight of the sanctuary, their roles and responsibilities, and both benefits and limitations of the current structure.

#### 501(c)(3)

The organization was incorporated as a non-profit 501(c)(3) in 1991 soon after its founding. While this status makes the Trust tax exempt, it also governs the way the organization operates. Most notably, no person can own the business. Rather, a volunteer board of directors is elected to manage the organization. This board must consist of three or more members (Carter 2012). Typically, several committees are formed to manage the various business objectives including finances, fundraising, and outreach. Also, funding must be from public fundraising efforts and government grants. Records must be kept and financial statements must be publically available.

#### Management

An elected volunteer board of directors manages the Trust. This board currently consists of 14 members of various backgrounds from locations throughout the Tug Hill region. The charter allows for as many as 17 and as few as 14 members. The board itself has a chairman, vice chairman, treasurer and secretary. All the management decisions are the responsibility of this board. Board meetings are scheduled quarterly for this purpose. Typically, the board votes on whether or not to include new easements into their organization. Recently, the board voted to approve the purchase of the Joseph Blake Jr. Wildlife Sanctuary from the North Country Bird Club.

Committees in the case of the trust consist exclusively of members of the board. The different committees include the Fundraising Committee with three members, the Finance Committee with three to four members, the Executive Committee with five members, the Education and Outreach Committee, the Nomination Committee, the Accreditation Committee, and the Stewardship Committee with eight members. The Stewardship Committee is the main decision maker regarding management decisions. However, the Board of Directors can overrule a decision if an issue is deemed to be against the best interest of the organization. This is not a frequent occurrence, as more than half of the board of directors sit on the stewardship committee.

As the organization expanded, full-time employees were hired to manage the trust's day-to-day activities. Currently there are four full-time employees. The positions include: Executive Director, Community Programs manager, Office Manager, and Land Protection Manager. Linda Garrett is the current Executive Director of the trust. She was hired in 2002 as the first full time employee. Her main responsibility involves managing the different easements purchased by the trust. She works with the landowners to design the easements, and is responsible for following

up with landowners to ensure compliance of contractual obligations. She is also the main liaison between the stewardship committee and the hired staff. Kalie Brady works as the Community Programs Manager. Her responsibility is both outreach and education. She is responsible for networking with the community and managing the various educational programs that the trust participates in. Fawn Heins is the office manager. She is responsible for managing the finances and operations of the organization. Ms. Heins also acts as the assistant to Linda Garrett. Richard Johnston acts as the Land Protection Manager. This position was created in 2012 when Mr. Johnson was hired. His responsibilities include designing management plans to ensure sustainable management of the trust lands. Mr. Johnson is responsible for developing the management plan for the sanctuary. This document will be completed and delivered to the Board of Directors within the year. The plan will be critical for governing the future management of the sanctuary. While the board members are all volunteers, these are paid positions. Their salaries are paid for by way of state grants. Their offices are located in the New York State Zoo at Thompson Park located in Watertown, New York. Regarding the current employee workload, discussions with both Ms. Garrett and Mr. Johnson highlighted that employees are satisfied, and the current staff is sufficient to complete the workload of the trust.

Other activities, including accounting, have been subcontracted. Also, volunteers have played a critical role in the trusts activities. Most recently, in cleaning up the sanctuary, several members of the board have joined Mr. Johnson in trail clearing activities aimed at making the sanctuary more navigable by recreation users. The role of volunteers regarding the sanctuary both historically and in the future will be addressed in a later section.

#### **Managing the Sanctuary**

Regarding the wildlife sanctuary, ownership of land is new to the organization. As a result, roles and responsibilities are not as clearly defined as they are for managing the easements the trust possesses. The mission statement of the organization reflects this. It states: "To protect Tug Hill's working farm and forest lands, its wild lands, and its natural and cultural heritage, for the benefit of present and future generations." One does not see the incorporation of this property to be in the plan; managing is not the same as protecting. Prior to the purchase of the sanctuary, the responsibility of the board and staff was to ensure that the many landowners followed through on their contractual obligations. Now, with outright ownership of a piece of property comes new responsibilities. As the local population increasingly utilizes the sanctuary, new issues are certain to arise. The trust will now be required, and legally responsible, to manage the land for the safety, enjoyment, and education of the surrounding population. This includes ensuring the proper use of the grounds. A tour through the sanctuary indicated that this is a serious issue. Several sites indicated both the presence of hunting and use of motorized vehicles on or adjacent to the property. Furthermore, hazard trees and a dilapidated lean-to also pose safety threats requiring attention.

Infrequent meetings of the board have put a large part of this increased responsibility onto the staff as they prepare the land for recreational users. Trail clearings have already taken place to remove fallen and hazardous trees from the trails. Yet, there is no official plan for how to proceed. The board itself is currently mixed in opinions on how to manage the sanctuary. Some are in favor of managing the land for timber and other financial benefits including maple syrup

production. Others are seeking a more preservationist approach and want the area to remain completely natural.

### **Opportunities**

While managing a parcel of property is new to the trust, there is an organizational structure and staff fully capable of these new responsibilities. Committees currently exist that can undertake all decision making necessities of the trust. The diverse background of board members has already proven advantageous. For example, it was explained that the treasurer has a finance background that has already been applied in accounting. Other members were willing to take on the laborious task of trail clearing. This passion for the organization as well as this new project is a welcomed factor contributing to the success of the sanctuary. Furthermore, the staff members seem to be satisfied with their workload and do not appear to see the expansion of their roles in managing the sanctuary as an undue burden. Also, there is a strong potential to utilize volunteers to assist in the workload as will be explained in a later section.

A final important consideration that will have long lasting impact is the fact that Mr. Johnson is working on a management plan for the sanctuary. This document will design a strategy for the future of the property. This will include plans for construction, removal of hazard trees, and management of the flora and fauna. This document can be utilized to better define roles and responsibilities of the staff regarding in the new property.

#### Limitations

As a 501(c)(3) the organization is limited in how they can manage the property. While their intended use should not conflict with this non-profit status it is a consideration. The trust is also under contract from the seller of the property to manage the property in a particular way. There are also financial and manpower limitations that restrict the activities that can be carried out to improve the property. There may not be additional grants available to manage the property if in the future employees do not feel fully capable to carry out management activities. As stated earlier, property ownership is new to the organization. This will bring new responsibilities and potential liabilities that the organization is not yet accustomed to. Issues may arise that need to be addressed. Finally, the issue of revenue management or pure conservation needs to be resolved to ensure full support of the board going forward.

#### **Summary**

The organization is typical of a 501(c)(3). There is an executive board with four leadership positions, several committees each responsible for attributes of the business, volunteers and hired staff. While outright ownership is new to the organization, there is a strong structure in place and dedicated people involved that will properly manage the sanctuary. Going forward, issues with ownership will continue to emerge, but it is fully within the potential of the trust to successfully manage all new responsibilities.

# Maintenance and Management Assessment

#### Introduction

Prior to acquisition by the Tug Hill Tomorrow Land Trust (THTLT) in 2012, The Joseph A. Blake Wildlife Sanctuary was owned and managed by the North Country Bird Club. Due to a decline in membership and limited ability to maintain the property, ownership was recently transferred to Tug Hill Tomorrow. Land trust staff members, the board of directors, and volunteers are currently responsible for the management and maintenance of the sanctuary.

The 140 acre property is characterized by minimally managed forest lands, a network of trails, inadequate facilities, and a natural resource base compromised by invasive species. These factors, along with limited human and monetary resources, present management challenges. The property will need to be maintained in the context of a wildlife sanctuary, therefore low impact activities such as bird watching and hiking will be encouraged on site. Proper management will be necessary in order to realize the educational and recreational potential of the sanctuary. This assessment will discuss the past and current management strategies used to manage visitors and to maintain both the facilities and natural resources at the sanctuary. In particular it will examine visitor management, trail maintenance, building and infrastructure maintenance, and road and parking area maintenance. Management of the natural resource base, particularly invasive species control and tree removal will also be discussed.

#### **Recent Maintenance**

Upon gaining ownership of the sanctuary, the Tug Hill Tomorrow Land Trust has completed or organized the completion of numerous maintenance and management projects throughout the property. A portion of the work was done during volunteer work days; other projects were completed by the Boy Scouts of America. Land trust staff and members of the board of directors carry out maintenance duties as needed at the sanctuary. Some of the activities that have taken place at the sanctuary thus far include trail clearings, an invasive plant species pull, and the removal/pruning of hazardous trees.

#### **Visitor Management**

Visitor management strategies employed at the sanctuary consist of a trail register which is located in the lean-to and is meant to monitor visitor use via the tracking of signatures. The previous North Country Bird Club signs have been taken down and replaced by more welcoming ones created by the Tug Hill Tomorrow Land Trust. The signs are visible from the main road and communicate to visitors activities that are permitted on site.

#### **Trails**

Of the once extensive network of trails, the red and blue trails are currently the only usable ones on the property. Although remnants of the yellow trail can be found, it is no longer in use and has not been remarked. The existing trail system has seen some maintenance in the form of clearing projects. In addition, hazardous red pine trees have been cut down and remain on site. Overall, the usable trails are in good condition and no major projects, other than routine clearing

and maintenance, are deemed necessary. New trail construction will most likely take place as well

#### **Facilities (buildings)**

Two facilities exist on the property, these include a lean-to that is in extremely poor condition (hazardous) and unsuitable for any type of use, and a pit toilet bathroom that is insufficient for use by a large number of visitors. The bathroom is currently cleaned and maintained by the Tug Hill Tomorrow Land Trust Land Protection Manager. In addition, an old tree stand remains in one of the trees on the property; it is in poor condition and presents a hazard to visitors.

#### **Infrastructure**

Infrastructure in the form of water lines and a sewer/septic system is nonexistent on this property.

#### Roads

There are no main roads that run through the sanctuary. An abandoned town road lies adjacent to the property and is now considered to be owned by the THTLT. Without use of a four wheel drive vehicle, the road is not currently passable. Whether or not this road will become a usable part of sanctuary property has not yet been determined. It is not currently maintained as a functional road.

#### Parking Area

The old abandoned town road serves as the current parking area for the sanctuary. This present parking situation is inadequate for any vehicles of substantial size (including buses), and for a large number of vehicles. The parking area is not able to accommodate more than three or four cars at one time.

#### **Waste Removal**

A carry in/carry out waste removal policy is currently in place at the sanctuary. This policy will continue into the foreseeable future as the THTLT has no intention of providing trash receptacles at the sanctuary.

#### **Natural Resources**

Management of the natural resource base of the sanctuary will largely relate to invasive species control and the pruning and removal of hazard trees. Additionally, a large wetland exists on the property and activities that could potentially impact the wetland must be managed to comply with any regulations. The property contains some cultural resources in the form of old stone walls; the desire to protect these resources has been expressed.

In terms of invasive species, garlic mustard and the emerald ash borer are the two that are of primary concern. Garlic mustard is present on at least forty acres of the sanctuary; actions have been taken at the sanctuary to remove the invasive plant species. A volunteer group worked with staff to pull the plant from the area surrounding the lean-to. Ash trees, which could be greatly impacted by the potential introduction of the emerald ash borer (an ash tree killing invasive insect), make up a large part of the sanctuary's forest composition. The emerald ash borer

presents a significant management challenge; as it will create an excess of hazard trees on the property and will open the canopy, leading to additional forest regeneration.

A number of red pine trees from the plantation area have been taken down in order to minimize risk to visitors. The tree work was carried out by the Land Protection Manager and members of the board of directors. The numerous downed trees have not been removed and are visible from the existing trails.

#### **Summary**

Proper and thorough maintenance and management of the Joseph A. Blake Wildlife Sanctuary is necessary in order to provide an enjoyable visitor experience and promote increased use. Due to a lack of resources, thus far extensive maintenance and management of the property have not taken place. Along with a handful of major management projects, the Tug Hill Tomorrow Land Trust will have to carry out routine maintenance throughout the sanctuary. Any conflicting views held by board members as to what management activities should be allowed at the sanctuary will need to be resolved in order to move forward with any major projects including forest management, vegetation manipulation or herbicide application. Great potential exists for community and public involvement in the form of volunteer work days. Specialized projects may also be undertaken by youth groups and outdoor clubs. With regular maintenance and management of the resources, the Joseph A. Blake Wildlife Sanctuary will be a wonderful community asset and a sought after recreation and education destination.

# Volunteer and Training Assessment

#### Introduction

Volunteer involvement is an important way in which community members and community groups can be active within the Joseph A. Blake Wildlife Sanctuary (JBWS). By contributing time, labor, and resources, these individuals may significantly improve the sanctuary and establish personal connections to the area in the process. This assessment will address past volunteer involvement within JBWS along with information from not-for-profit groups who support areas much like JBWS within New York State. Objectively, the volunteer tasks listed from these other groups may constructively contribute to innovative and creative ideas for JBWS.

#### **Past Volunteers**

So far, volunteer involvement within JBWS has been limited to basic projects such as trail maintenance and clean up. Table 1 below lists the specific groups that have been involved thus far within JBWS and their volunteer tasks. The information from Table 7 was acquired through Richard Johnston, the Land Protection Manager for the Tug Hill Tomorrow Land Trust.

**Table 7.** Community groups and their related tasks within the JBWS.

<b>Community Group</b>	Volunteer task
Summer youth program (elementary and junior	Trail maintenance (basic clean up of trails)
high school age) from Fort Drum	
Boy Scouts of America	Trail maintenance (basic clean up of trails)
Tug Hill Tomorrow Land Trust (Board Members)	Trail maintenance (use of heavy equipment such as chainsaws to clear away dead trees and brush) Management and Development of JBWS as the respective primary owner/manager of the area.
North Country Bird Club Members (previous land owners)	Trail maintenance

#### **Case studies**

In order to provide additional ideas for volunteer involvement, three case studies of other similar natural areas are presented below.

**Friends of the Montezuma Wetland Complex.** Friends of the Montezuma Wetland Complex (FMWC) is a not-for-profit group that supports the Montezuma Wildlife Refuge located in Seneca Falls, New York. According to the FMWC website (Friends of Montezuma Wetlands Complex, 2012), typical volunteer activities and opportunities include:

- Operating the Visitor Center and the Lodge (gift shop)
  - o Running the cash register in the gift shop

- o Price and display merchandise,
- o Record keeping such as vendor information,
- o Daily tallies and deposits,
- o Monthly and yearly inventory counts.
- Opening and distributing mail, either on a weekly or bi-weekly basis.
- Staffing the visitor center desk.
- Help with the group's newsletter "Cattails"
- Writing and mailing thank you letters to new members and for donations.
- Volunteer coordinators to introduce new volunteers to the appropriate program/person and organize training.
- News Release coordinators; sending news for programs, announcements and events, both email and snail mail.
- Outreach Programs: volunteers to staff travel trailer at off-site programs.
- Programs/Tours; recruiting presenters, listing programs/dates, set up/break down and introduction of presenters for programs; preparing news releases for programs and getting it to the news release volunteer.
- Web page maintenance.

These tasks are all specific within the Montezuma Wildlife Refuge, but also contribute to the Friends organization in that they raise funds and complete tasks in which will better both entities.

**Friends of Fire Island National Seashore.** Fire Island, located off the coast of Long Island, New York, is designated as a National Seashore. The Friends of Fire Island National Seashore (FFINS) primarily "raise funds, volunteer, and support the National Seashore in preserving and protecting natural and historical resources of this outstanding national park" (Friends of Fire Island National Seashore, 2012). Goals specific to this volunteer group include:

- Improving the visitor center (volunteers run the operation).
- Reviving the environmental education program.
- Expanding the number and length of time lifeguards.
- Returning island information centers at Watch Hill and Sailors Haven to full operation.
- Increasing the number of summer rangers to restore late night and overnight service.
- Repairing and maintaining buildings, boardwalks, restrooms, sewer and water systems.
- Improving the ability to inventory and monitor wildlife, impact of storms, and changes to vegetation (Friends of Fire Island National Seashore, 2012).

Volunteers have the opportunity to create fund raising events, enlist qualified individuals from within the community to contribute to specified jobs such as monitoring wildlife, and lifeguard.

**Hudson Highlands Land Trust.** The Hudson Highlands Land Trust (HHLT), located in Garrison, New York within the Hudson River area, is comparable to the Tug Hill Tomorrow Land Trust (own JBWS) in its goals and operations. This not-for-profit organization protects lands under conservation easements within the region. Volunteer opportunities include:

- Guiding or assisting a guide during one of their "Take-a-Hike!" hikes.
- Conducting water studies.

- Beach clean-ups or trail maintenance.
- Managing educational workshops for adults or eco-activities for children during a Sustainability Expo or in other forums.
- Representing HHLT at information booths at various community events.
- Helping out at the annual Family Festival or with other outreach activities.
- Mailings (Thank you notes, event invitations etc.).
- Data entry.
- Fundraising.
- Grant research (Hudson Highlands Land Trust, 2009).

These volunteer activities contribute to keeping the land trust afloat. The list of various opportunities allows for interested individuals to choose what they are most interested in contributing.

#### **Summary**

Based on the not-for-profit volunteer involvement within other similar natural areas across New York State, it is apparent that JBWS has the potential to involve community members and community groups in many ways other than trail maintenance. All not-for-profit groups listed above have extensively contributed to improving, representing, developing, and maintaining natural areas. Not-for-profit groups are also important in that they bring funds to these natural areas through events and public/private donations. Through the assistance of volunteers, these events and donations are made possible. Tug Hill Tomorrow Land Trust controls JBWS, and has the opportunity to consider the other opportunities for their potential volunteers. Setting goals such as those established by FFINS and making volunteer task lists like those created by both FMWC and HHLT may be exactly what JBWS needs in order to obtain and organize the volunteer assistance it needs.

# Assessment of Grants and Financing

#### Introduction

The Joseph A. Blake Wildlife Sanctuary (JABWS) is a newly acquired property for the Tug Hill Tomorrow Land Trust (THTLT). The property is the first area the land trust will both own and manage. While THTLT already owns and protects several other natural areas, this will be the first time the organization needs to repair/replace facilities, do maintenance and run programs. In order to fund this, I researched the finances and grants of two similar nature preserves to serve as a model for JABWS. I also assessed the current sources of income and potential expenses of the JABWS under THTLT's management.

#### **Comparison with other sanctuaries**

Buffalo Audubon Society; Buffalo, NY. The Buffalo Audubon Society (BAS) is a local chapter of the National Audubon Society located in the city of Buffalo. The organization manages seven nature preserves totaling 1,000 acres. While its land is substantially larger than JABWS, there are other similarities. Like JABWS, the BAS properties feature opportunities for low-impact recreation, bird watching and nature education.

The Buffalo Audubon Society budgets for several things every year. One major expense for their property is upkeep of its trails and facilities. The BAS has to groom and mark several miles of trails and maintain boardwalks on all of its seven properties. In addition, the organization must upkeep around a dozen cabins on its main property, "Beaver Meadow Audubon Center," and a few other properties. Second, the Audubon Society must budget for its seven-person staff of office managers, educators, and property managers. Third, BAS must budget for its programming. Throughout the year, BAS runs dozens of wildlife education events, guided hikes, and community programs, and must budget for the staff, materials, and refreshments for these.

BAS has a diverse set of incomes to ensure its ability to operate and offer programming. The first is memberships. This organization offers supporters the chance to be members for \$25/year, in exchange for a monthly newsletter, discount on gift shop purchases, and discounted programming. Another income source, building off of memberships, is donations. BAS has a running database of over 7,000 current and past donors, of which 750 actually gave last year. Supporters may donate any amount they wish, but those donating \$100 or more every year become special members of the 100Club. BAS thanks their 100Club supporters with a lunch every year.

BAS also finances itself through legacy giving, sales of products in its gift shop, renting of its meeting spaces, sponsorship of events from major corporations and organizations, and income from its annual events (e.g., the "Bird-a-Thon," where birders collect pledges for every bird they spot and donate this money to BAS). Finally, BAS obtains income from grants. Grants come from the corporate sponsors that fund local school field trips to the BAS, the National Audubon Society, state/national government-issued land restoration programs, and other community organizations.

**Baltimore Woods, Marcellus, NY.** Baltimore Woods is a place-based nature education organization whose home base and interpretive center is located on 182 acres of land in Marcellus, NY. The property contains six miles of trails and an interpretive center/art gallery. Baltimore Woods' mission is to provide environmental awareness and stewardship to everyone, especially children, through low-impact recreation and teaching on and off their home base. They have expanded their reach to inner-city school kids with a program called "Nature in the City."

In order to keep Baltimore Woods running, its management staff budget for several things. First of all, the organization puts a substantial portion of its budget towards staff salaries. Baltimore Woods has an annual budget of around \$430,000, of which \$329,000 goes towards paying four full-time staff and several other part-time staff to manage the properties, run programs and raise funds. The director of Baltimore Woods, Patty Weisse, says this is a necessary expense as it brings in talented and hard-working people to fight for the survival of Baltimore Woods. Another major budget item is education programming. The nature center runs an annual summer camp, on-site programs and off-site education programs that it must pay for. Baltimore Woods also budgets for interpretive materials, such as trail maps and materials for its kiosk. Baltimore Woods also owns and rents out recreational items, such as snow shoes and cross-country skis, which it needs to replace periodically. Finally, Baltimore Woods must budget for property maintenance and upkeep, such as buying benches, maintaining its pavilions, and running its indoor interpretive center.

Baltimore Woods, like BAS, has a diverse set of income sources to ensure its survival. "The healthiest ecosystems are diverse ecosystems," says Patty Weisse. First of all, Baltimore Woods offers a membership program. The organization generates around \$50,000 from this program. Second, Baltimore Woods brings in around \$159,000 every year from on-site events (it charges a small fee for its "Nature in the City" programs). In general, local schools are able to pay Baltimore Woods for its programming through corporate sponsorship. The third source of income is from grants. Baltimore Woods obtains help with grants through the Association of Nature Center Administrators, as well as various nature-based non-profits and government organizations. The recreational materials, such as snow shoes, that Baltimore Woods rents out also generate a modest source of income for the center. Finally, Baltimore Woods owns an interpretive center with extra space for events. The organization makes a substantial amount of money renting this space out to community and school groups.

#### Joseph A. Blake, Jr. Wildlife Sanctuary's Current Incomes

As of right now, the Joseph A. Blake Wildlife Sanctuary does not have any sources of income. However, it is managed by the Tug Hill Tomorrow Land Trust, which has several different sources of income it will likely use to fund the JABWS as well.

THTLT is an organization supported by numerous people, businesses and foundations. In Tug Hill Tomorrow's 2011 Annual Report, the names of donors are listed by donation level. There are a few entities that donated \$500-5000, as well as many people and groups that donated between \$50-250. The monetary support given by these individuals last year was over \$129,000 and is the largest source of income for THTLT and most available for use on JABWS.

Another source of income for Tug Hill Tomorrow is sale of its calendar, photos and guides. The website offers about a half dozen ways for people to make purchases from THTLT, which the organization profits from. Last year alone, the organization made over \$59,000 in income from the products. While it is unknown whether any of this can go towards JABWS, it's a possible source of funds.

THTLT also receives income from grants. Last year, the organization received over \$67,000 in funds from state and federal agencies, the NYS Office of Parks, Recreation and Historic Preservation, The Land Trust Alliance, and several community organizations. The majority of grants obtained by THTLT are restricted to the programming, facilities, or maintenance specified by the foundation, and cannot be used for JABWS. However, the fundraising operations already in place at THTLT could be used to help JABWS acquire grants as well.

Finally, THTLT generates revenue from special events. Last year, the organization made over \$13,000 (after accounting for programming expenses) from fundraisers, hikes and other events. While the funds from these events are currently in use for THTLT's budget, similar events could be used to raise money for JABWS's upkeep and programming.

#### **Potential Sanctuary Expenses**

In order to get the Joseph A. Blake, Jr. Wildlife Sanctuary ready to meet its mission of providing opportunities to view wildlife in their natural setting and learn more about nature, a lot of work must be done for facilities, maintenance, interpretation, and marketing.

First, an improved trail map is needed. This effort has already been scheduled by THTLT and is funded through a \$10,000 Land Trust Alliance grant, according to Linda Garrett. In addition, the organization must budget for the creation of a new map, posting of this map at an entrance kiosk, and the printing of copies of the map for visitors.

Second, JABWS must budget for trail grooming and marking, as well as removal of old, decaying and dangerous trees and invasive species. While it has yet to be determined whether aggressive species removal must occur or not, the existing and new trails must be cleared of obstacles before hikers, birders, and mountain bikers can use them. Trail signs and interpretive signs marking various species, wildlife, and habitats should also be included in the budget.

Third, JABWS should plan for the expense of new facilities and upkeep of existing infrastructure. The sanctuary already contains a lean-to shelter, and a small outhouse bathroom facility. The organization should plan to pay for removal of the lean-to. A new parking area is needed, and port-o-jons near the parking area are recommended. An informational kiosk with visitor information and a map is also needed near the parking area. Putting up signs on major roads to the area are also needed so that visitors will have an easier time navigating to the sanctuary. Finally, a new, fully accessible boardwalk trail system near its wetland habitat would provide important access to the wetland area for educational purposes. The wetland is an area with diverse plant and animal species, specifically birds, but is currently inaccessible to most visitors.

JABWS must budget for programming and events. As of right now, there are no set events for the area. However, given its mission to educate people, especially children, about nature, JABWS must consider budgeting for tour guides, interpreters and event hosts for educational activities, birding groups, hikers and annual fundraisers. This may require hiring some part-time or seasonal staff, making fliers, and purchasing other materials for the events.

Finally, JABWS needs to plan for making maps, guides, fliers and other marketing materials. The wildlife sanctuary is fairly new as an educational, recreational and birding area, so the local community will need help finding out about it. JABWS should advertise in local papers, to local schools, community organization, and groups such as the Boy and Girl Scouts. JABWS should also budget for printing pamphlets, maps, and other guides for visitors coming to their sanctuary.

#### **Summary**

The Joseph A. Blake, Jr. Wildlife Sanctuary is a new wildlife area with lots of potential for recreational and educational opportunities. Nearby natural areas, such as Baltimore Woods and the Buffalo Audubon Society, provide a good model for what JABWS needs to put in its budget and also where they can obtain income from. The biggest takeaway from comparing these other natural areas is that the more diverse the income stream, the more likely a wildlife sanctuary is to survive. JABWS must plan to budget for trail maintenance, building some facilities and infrastructure, educational programs, and some local marketing. Funding for JABWS, while not yet secure, is likely to come from Tug Hill Tomorrow Land Trust's supporters, specific state and federal grants, and income from events.

# Monitoring and Evaluation Assessment

#### Introduction

The evaluation and monitoring process at a site is crucial for determining if goals have been accomplished. By revisiting goals through monitoring or resources and visitor experiences, property managers can determine if the management strategies were appropriate and helped to accomplish the goals the organization set for the site. This process requires managers and employees to analyze the effectiveness of management strategies and to investigate possible improvements or modifications that need to be made to ensure that goals will be met efficiently and effectively.

Because Tug Hill Tomorrow Land Trust has only recently required ownership of the Joseph A. Blake Wildlife Sanctuary, there are few evaluation and monitoring practices established at the site. With the development of new goals as outlined in this document, additional practices will need to be determined and applied to the management of the wildlife sanctuary. To help determine these evaluation and monitoring strategies for the wildlife sanctuary, two similar sites and their evaluation and monitoring strategies were researched and analyzed. These sites are the Wertheim National Wildlife Refuge in Shirley, Long Island, New York, and the Adirondack Interpretive Center located in Newcomb, New York.

#### **Wertheim National Wildlife Refuge**

The Wertheim National Wildlife Refuge (WNWR) is a 2,550 acre wildlife sanctuary that is a part of the Long Island National Wildlife Refuge Complex. The refuge provides access to a variety of habitats, both aquatic and terrestrial. With this diversity in habitat comes a diversity of wildlife, including songbirds, waterfowl, birds of prey, and reptiles. Infrastructure at the site includes a visitor center, bathrooms, information kiosk, and wildlife observation blinds. WNWR has similar goals to those established for the Joseph A. Blake, Jr. Wildlife Sanctuary. As part of the National Wildlife Refuge System, WNWR strives to protect and preserve the integrity and health of the natural resources of the site, as well as provide the public with recreational and educational opportunities to observe the wildlife and other resources at the refuge (Wertheim, no date given).

Conservation Plan. In 2006, WNWR created a Comprehensive Conservation Plan (CPP) as required by the National Wildlife Refuge System Improvement Act of 1997. This document determines the goals of the refuge and the management and direction required to achieve these goals. Within the CCP are two levels of monitoring and evaluation of the strategies and goals of the site. First, implementation monitoring determines if the strategies for the goals were carried out and if they were done within the timeframe established by the CCP. Second is effectiveness monitoring. This determines if the strategies successfully accomplished the goals they were designed to achieve. A CCP also includes an environmental assessment or an environmental impact statement. This will be important for evaluating the preservation and protection of the natural resources of the site. There is also an evaluation process for the CCP itself. This step determines if the document needs any revisions or modifications in order to successfully achieve the purposes, vision, and goals of the refuge. The CCP should be revised every 15 years to

update the strategies to incorporate new information and changes in the condition of the natural resources (Long Island, no date given).

**Educational Programs.** Evaluation of educational programming at the WNWR is mostly based off of personal observations by staff and feedback from participants. A specific reflection of a watercolor workshop written by refuge manager Patricia Martinkovic addressed attendance, information covered, professionalism and reception by visitors (Watercolor, 2004). Using this evaluation of the program, it is much easier to determine if the program was successful and if it should be held at the refuge again. Ms. Martinkovic also noted that some of the participants have never visited or even heard of the refuge. This shows that the educational programs are improving visitation at the center. Staff also created a list of the educational programs the refuge offered to the public during a 12-month period (Great Programs, 2005). This also reflected on feedback from participants about what programs were well-received and should be continued.

Visitation and Visitor Experience. A national survey of wildlife refuges was conducted in 2010 and 2011 in collaboration with researchers from the U.S. Fish and Wildlife Service and the U.S. Geological Survey. The survey collected the opinions of over 10,000 visitors of 53 of the country's national wildlife refuges, including the WNWR. 90% of respondents reported consistently high marks for their experience at a national wildlife refuge. The most popular recreational activities were determined for the WNWR. This can be used to determine where efforts should be put to improve the visitors' experience and identify the improvements that would impact the most visitors. The opinions collected by this survey can also be used to analyze the quality of the visitors' experiences, what contributes to their experience and what can be improved (Werthiem, no date given).

**Preservation of Natural Resources.** The protection and preservation of natural resources is evaluated by both WNWR staff and researchers from other institutions. There is a large deer population in the refuge that requires management and evaluation strategies. Annual vehiclebased surveys, led by WNWR's staff members and volunteers, are done on established survey routes within the refuge, totaling 8.5 miles (Deer Survey, 2005). From the collected data, the refuge's biologist Florence James calculates the population density of deer within the refuge. This survey is done every year and provides a glimpse into ecosystem health as determined by changes in the population of this mammal. The refuge can in turn use this information to modify its management strategies. WNWR held its first managed public deer hunt in 2006 (First Managed, 2006). The hunt was important in managing deer populations and their negative impacts on understory vegetation. It was also intended that the hunt would reduce the number of deer-vehicle collisions on the roads surrounding the refuge. Comment forms were distributed to the hunters to get feedback and suggestions to improve the event in the following years. Proceeding the deer hunt, staff conducted a vehicle-based deer survey and found a population density of 47 deer per square mile (Annual Deer, 2006). This value was larger than their goal of 20-30 deer per square mile. This evaluation showed that the deer hunt did not successfully accomplish the refuge's goal.

Every year, biologist Florence James, WNWS staff and volunteers carry out the U.S. Fish and Wildlife Service Region 5 breeding bird surveys at the refuge. In one year, the surveyors recorded over 100 species of birds nesting on site. In this same year, they observed the calls of

rare species for Long Island and calls of two bird species listed under special concern by New York State (Rare Birds, 2004). Unusual sightings such as these can be used to identify changes in ecosystem conditions. Individuals and nests in boxes for bluebirds, house wrens, chickadees and titmouses, house sparrows, tree swallows and purple martins are counted and recorded each year by staff and volunteers. Comparing annual data will help show how community composition and species abundance change overtime (Nest Box Numbers, 2005).

Monitoring and evaluation at WNWR also includes invasive species. WNWR's senior biologist, Mark Maghini, found that the control of giant reed over three years helped to improve populations of native wetland species (Wertheim's Lead Biologist, 2004). These native species include rushes, sedges, smartweeds and cattail, and are especially important for wildfowl. In turn, the increased populations of these native plants led to increased populations of waterfowl. This evaluation strategy helped to identify the success of this management strategy of an invasive species.

#### **Adirondack Interpretive Center**

The Adirondack Interpretive Center (AIC) is located in the small, isolated town of Newcomb, New York and is currently managed by the State University of New York College of Environmental Science and Forest (ESF). The center was built in 1988 by the Adirondack Park Agency (APA) and was named the Newcomb Visitor Interpretive Center. Due to cuts in state funding, the APA terminated financial support for the center in 2010. To avoid the closure of the center, ownership of the center was transferred to ESF and is now managed by the school's Northern Forest Institute (NFI). The AIC offers over three miles of trails that offer glimpses into the beautiful resources the Adirondacks have to offer. The goal of the AIC is to help provide visitors with the means to establish a personal connection with their natural surroundings through the educational and recreational opportunities the center offers its visitors.

**Educational Programming.** The AIC offers educational programming to the public throughout the year that covers a wide range of programs related to nature and the environment. Staff at the AIC have established several procedures to ensure that these programs are well-prepared, informative, and well-received by the participants.

A large portion of the weekly staff meetings are dedicated to the educational programs. Led by Paul Hai, the program coordinator of ESF's NFI, each staff member explains and reflects on the programs they have led the previous week and will lead in the following week. Issues and concerns for upcoming events are addressed to be sure the programs are effective and meet the center's goals. Problems that staff encountered during the program are addressed and solved if possible. AIC staff are also required to fill out evaluation forms proceeding all programs. This evaluation includes how the program was received, any technical or procedural programs, attendance, and any suggestions for the future. These procedures ensure that the AIC is providing its visitors with high-quality, meaningful, educational programs that are helping the center achieve its goals.

At special ongoing events, surveys are sometimes passed out to participants to fill out. These surveys collect data on the demographics of the participants and their experiences. The surveys ask the visitors to list what they enjoyed the most and least at the program, as well as any

suggestions they have. These responses are then used to improve the program for the next time it is held at the center.

Visitation and Visitor Experience. Staff at the AIC place a lot of effort in documentation and recording of the daily visitation at the center. This is done through registers both at the front desk and at the beginning of trails, a manual count of visitors in the building, and a car counter in the parking lot. These practices help to establish a set of data that provide insight into visitation trends at the center. These data are then used to help determine what days require more staff, the optimal dates and times for programming, and the appropriate hours for the building to be open. Documenting changes in visitation is especially important in determining the success of marketing and public relation strategies practiced by the staff. For example, using this data in August 2012, it was determined that visitation had increased by about 30% over the past 12 months. This provides a strong insight into the awareness and acceptance of the center in the surrounding communities. These data also provides insight into the audience the center is attracting for marketing and promotional purposes.

**Preservation of Natural Resources.** The AIC recognizes the importance of protecting and conserving the natural resources of the site to continually provide the public with recreational and educational opportunities that help the center to achieve its goals. To monitor and evaluate the health of the site, the AIC utilizes the researchers associated with ESF's Adirondack Ecological Center (AEC), a research facility that is located about a mile away. Many of the research projects conducted by AEC staff and affiliates include research sites on the center's property or in the surrounding area. The results of their research help to identify any harmful impacts both AIC staff and visitors may be inflicting on the site, as well as other threats such as invasive species, diseases, etc.

Personal observations by the AIC staff are also helpful in identifying both short-term and long-term trends in the health and integrity of the property's natural resources and wildlife. It is required for each staff member to explore the trails for approximately an hour each day. This helps the staff become familiar with the property's resources and therefore makes it easier to identify if something is going wrong.

#### **Summary**

Analyzing the evaluation and monitoring strategies of similar natural areas in New York reveals strategies appropriate for the Joseph A. Blake Wildlife Sanctuary. These strategies include:

- Developing a management plan that is regularly evaluated and revised, and that also clearly states the expectations for evaluation and monitoring strategies.
- Providing staff with an opportunity to evaluate educational programming.
- Conducting surveys of visitors to determine where to improve the visitor's experience.
- Carefully monitoring visitation to record trends that help identify what marketing and public relations strategies are working and which ones need to be modified.
- Utilizing biologists on staff and from nearby research institutions to monitor the quality of the site's natural resources.

Using strategies such as these will ensure that the Joseph A. Blake Wildlife Sanctuary successfully accomplishes its goals for the future.

# Recommendations

The recommendations are listed according to goal in order of priority. Figures 5 through 7 identify the stages of development suggested for the sanctuary.

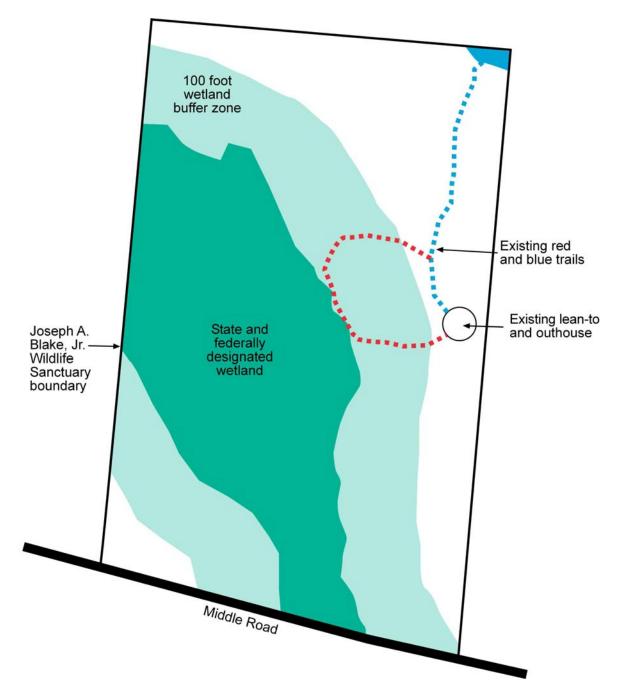
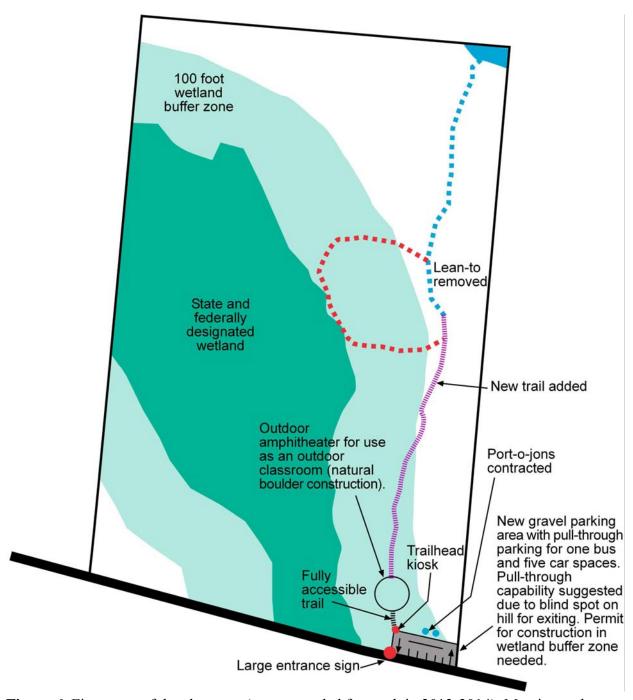
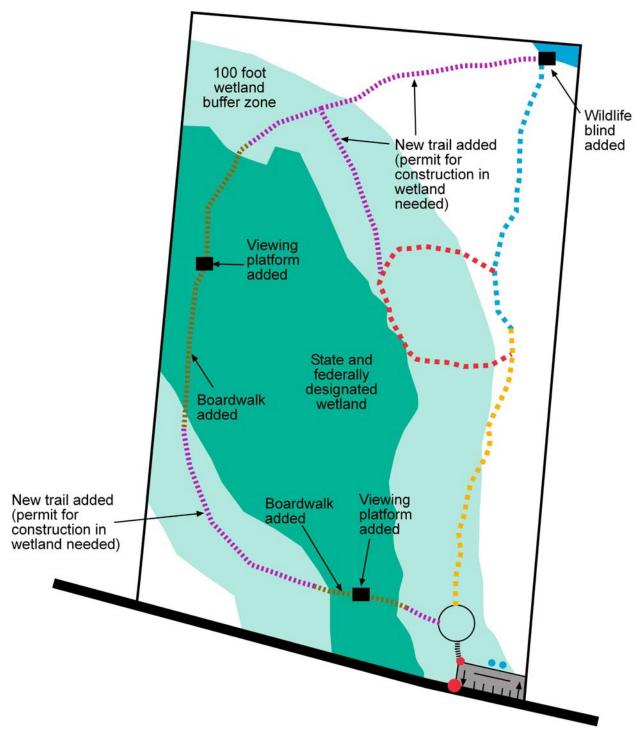


Figure 5. Sanctuary site as it currently exists. Map is not drawn to scale.



**Figure 6.** First stage of development (recommended for work in 2013-2014). Map is not drawn to scale.



**Figure 7.** Stage 2 of sanctuary development (recommended for 2015-2017). Map is not drawn to scale.

# Goals #1: To create a sanctuary that is visually appealing and has the necessary infrastructure for education and recreation opportunities.

**Remove or repair on-site hazards.** Remove the hazards on site such as the hunter's tree stand, and the lean-to. Leaning trees and downed trees lying across a trail should be removed so that they don't pose a hazard to patrons.

Collaborate with local emergency services. Work with the local fire department and ambulance service so that they are familiar with the Joseph A. Blake Wildlife Sanctuary and the access points to the property. Also work with Life Net, so that they are already aware of ideal landing areas for their helicopter. These efforts will reduce response time and work to expedite the evacuation of patients in an emergency situation.

**Seek new grant funding.** Potential grants are listed in Table 8. It is recommended that grants be sought for the new rest room facility, parking area, website development, trail and boardwalk development, and invasive species removal.

Construct a new parking area with space for one bus. Installing a parking area that a bus can easily enter and exit is needed. To accommodate one bus (50 feet long and 20 feet wide with a wide turning radius) and approximately 10 cars (each space should be 20 feet long and 10 feet wide), a parking area roughly 130 feet long (running parallel to Middle Rd.) and 65 feet wide is needed. A civil engineer should be contacted to design a parking area that meets the needs of sanctuary visitors. A permit may be needed from the DEC since the parking lot will be in a state-designated wetland buffer zone. Once constructed, regular monitoring and maintenance, including snow removal and pothole repair will be necessary. The proposed location of the parking area is shown in Figure 6.

Improve signage at the sanctuary. Placing a larger entrance sign closer to the road (at the entrance of the new parking area) will make the sanctuary more visible to anyone coming to visit. This addition will allow emergency services to locate the sanctuary more quickly, reducing the response time of emergency personnel should an emergency occur. Installing a trailhead sign at the entrance to each trail will lessen any confusion and keep visitors from getting lost in the trail system. The trailhead signs should include the name, level of accessibility, and length of the trail, allowing visitors to plan and decide whether they will take a particular trail or not. An alternative to trailhead signs would be to include this same information on the main trailhead kiosk. In addition, directional signs should be placed at all trail intersections.

Add two to three new toilets near the new parking area. The two to three new toilets would accommodate large school and youth groups (the one existing pit toilet is not adequate). Having the bathrooms near the parking lot would allow guests to use them before they set out on trails. It is recommended that THT obtain a contract with a port-o-john company for the removal of waste from the facilities during the spring, summer, and fall. The other alternative is to install composting toilets; traditional pit toilets are not recommended due to the odor and location of the rest rooms at the entrance to the sanctuary.

**Table 8.** Grant sources.

<b>Government Grants</b>						
Grant	Institution	Use	Amount	Dates	Contact	
Recreational Trails Grant Program	NYSPRHP	Non-motorized diverse trail, to build and maintain trails for bikes, pedestrians, snow shoers. Non-motorized single use, for wetland boardwalk	Up to \$200K	Workshop s in summer, may not be funded in 2013	Jean Egenhofer (315) 492-1756	
Parks Program	NYSPRHP	Planning park facilities, trails, land management	~\$3K, up to \$400 K	Workshop s in summer	Jean Egenhofer (315) 492-1756	
Wetlands Program Development	EPA	Training, experiments and demonstrations of wetland management & protection	Unknown	Unknown	Kathleen Drake drake.kathleen @epa.gov	
5-Star Wetlands Restoration Program	EPA	Community-based restoration, stewardship, education, outreach	\$5K- 20K (~\$10K)	Unknown	Myra Price price.myra@ep a.gov	
North American Wetlands Conservation Act	U.S. Fish & Wildlife Service	Protection/enhancement of wetlands & upland habitats for wetland birds	< \$75K	10/31/13	Mitch Hartley mitch_hartley @fws.gov	
Keystone Initiative Grant	National Fish & Wildlife Service	Bird, wildlife & habitat conservation to allow species to live & migrate	Unknown	06/01/13 & 08/01/13	info@nfwf.org	
Youth Program	Jefferson County Youth Bureau	Materials, tools & travel for youth programming & skill development	\$50K total available	6/22/12	Ginny Harrington ginnyh@co.jeff erson.ny.us	
Military K-12	Dept. of Defense Edu. Activity	Projects that enhance core courses, support social & emotional needs	Unknown	Unknown	Connie Gillette connie.gillette @hq.dodea.edu	
Non-profit Grants						
Grant	Institution	Use	Amount	Dates	Contact	
The Education Grant	Northern NY Audubon Society	Development, operations and facilities for nature educational facilities	\$150- 1500	Unknown	nnya@nnya.org	
A. Eleanor Jackson Fund	Northern New York Community Foundation	Programs that meet community education, health and cultural needs/desires	<\$5K	April or August	Rande Richardson rande@nnycf.o	

*Improve trail marking.* Mark trails such that they are easy to follow in both directions. Remove the yellow markers since the yellow trail no longer exists. Furthermore, there are signs labeled Pond, Big Maples, and Pine Avenue; all of these different signs tend to be over whelming and somewhat confusing, and should be removed. These efforts will act to reduce the likelihood of a visitor getting lost within the sanctuary and make the area easier and more desirable to use.

*Update site map.* Currently there is no map of the sanctuary available for the public to see and use either online or in hard copy. An up-to-date trail map of the sanctuary should be created. The old map belonging to The North Country Bird Club has trails on it that are no longer found such as the yellow trails and the Everett Stone trail; these trails that have not been maintained

should be removed from the map. Use ArcGIS to create a map that shows topographic features, trail difficulty and accessibility, and trail lengths. An electronic copy of this map could easily be uploaded to Tug Hill Tomorrow's website for visitor use. In addition, a trail description might be helpful for guests to read and could be included on the back of the map.

*House a first aid kit onsite.* Make a first aid kit available to all maintenance staff and volunteer groups. A small shed located in the amphitheater area could be used to house an emergency first aid kit, as well as program supplies.

**Installation of a callbox.** Joseph A. Blake Wildlife Sanctuary is somewhat remote, and in the event of an emergency it is imperative to notify emergency personnel as soon as possible. The instillation of a call box near the parking area will allow those without cell phones to place an emergency call, allowing emergency personnel to arrive on scene as soon as possible.

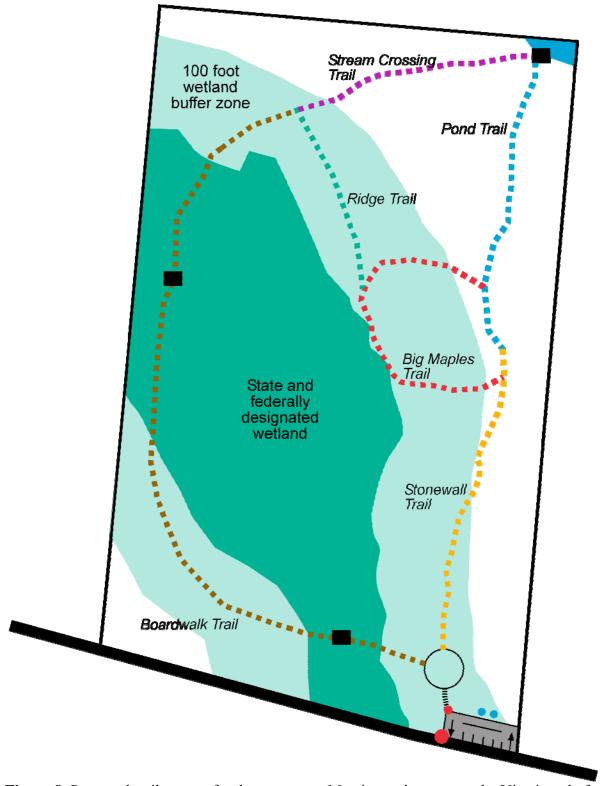
*Install an interpretive kiosk near the proposed parking area.* A multi-panel interpretive kiosk can better connect visitors to the site. It is recommended that the map panel on this kiosk be made of laminated paper initially so that map updates (as new trails are added) can be posted at low cost. Permanent panels can be made of more durable materials such as embedded fiberglass. The kiosk should include the following:

- One panel showing a color-coded trail map. All of the features on the map should be clearly marked so that visitors to the sanctuary will not get lost.
- Another panel could have interpretive information about the sanctuary such as history, native flora and fauna, and other features that are found in the sanctuary.
- If additional interpretive information is wanted, a small display case could be installed to give volunteers and employees a chance to share their views of the sanctuary through changeable themed displays. This case could be filled with interpretive props to enrich the visitor's experience and could also be used to showcase projects by classes that visit the site. Classes can be asked to create a small project based on their experience at the outdoor classroom which will inspire other groups that visit.
- A single brochure holder, containing paper copies of the trail map. Visitors should be encouraged to return their brochure to the holder after their hike so that it can be re-used.
- This kiosk could also be used to promote other natural areas and attractions, or recognize local sponsors.
- Incorporate a trailhead log for patrons to sign in and out of when they are using the sanctuary. Incorporate a different log for maintenance staff and volunteers to sign in and out of that outlines what maintenance or volunteer activity they are partaking in, what section of the sanctuary they are on, and when they expect to leave. These logs will work to keep track of patrons and staff and enable emergency personnel to determine if there are any persons on the property that may be lost or injured.

*Create a trail system.* A few new trails could be created on this site within the next five years (see Table 9 and Figure 8). When creating a new trail, the site should be monitored to protect the resource. To construct these new trails, volunteers will be needed. Exact routes of the trails need to be planned out and defined. A volunteer trail crew could be established from local high schools or Scout groups.

**Table 9.** Proposed trail system for the sanctuary.

Trail	Color	Length	Difficulty	Description
Name	markers			•
Pond Trail	Blue	unknown	easy	This forested walk leads you to the pond area. At the Pond is an overlook with seating to watch for birds and other wildlife. This trail also provides access to the Stream Crossing Trail.
Big Maples Trail	Red	unknown	easy	This is a loop trail which takes you to on a walk through the biggest maples on the site. There is always an opportunity to spot wildlife on this trail. You can also get a glimpse of the wetland areas off the trail. The Ridge Trail also meets up with this trail to continue your adventure.
Stream Crossing Trail (proposed)	Purple	unknown	moderate	Cross the stream located on the property and discover a new wildlife habitat. Listen to the sounds of the water and enjoy this moderately-easy walk through the woods. From this trail you can access to the Ridge Trail.
Ridge Trail (proposed)	Green	unknown	moderate	Experience the highest point in the sanctuary and overlook the wetlands on this trail. This trail connects the Big Maples Trail with the Stream Crossing and Boardwalk Trails.
Boardwalk Trail (proposed)	Brown	unknown	moderate	The Boardwalk Trail takes you over and through the wetlands. There is always the opportunity to discover the wildlife living in this area while you have a relaxing walk. This trail includes a walk through two different forested areas as well as over the wetlands.
Stonewall Trail (proposed)	Yellow	unknown	Easy	This trail runs parallel to an old stone wall on the property, remnants of this sanctuary's history as a farm. The trail connects the parking area with the Big Maples Trail.



**Figure 8.** Proposed trail system for the sanctuary. Map is not drawn to scale. Viewing platforms are shown with black rectangles.

Install an overlook at the pond. A unique viewing area for bird watching, wildlife viewing, as well as just appreciating the scenery, is at the pond. The trail leading to the pond currently just ends. However, there is a large dirt mound located here on which an elevated platform would provide the perfect overlook of the pond area. Some of the brush from around the ponds edge will have to be removed to allow unobstructed viewing. The construction of this viewing platform will take time and funds, and a specialist may have to be hired to create this structure. This platform could be used as an educational stop on an interpretive program or tour.

Create a boardwalk through the wetlands. Currently there is no access to the wetland resources on the site. This is a unique habitat perfect for bird watching and educational opportunities. An example of a boardwalk can be found at the Paul Smith's visitor and interpretation center. Construction of this boardwalk would be would be a long term goal (5 years) as it will require significant funding. This is a labor intensive project and many approvals are need because of the wetland designation. Specialists will have to be hired for the construction of this boardwalk. Along the boardwalk, two wide viewing platforms are recommended. The platforms should be large enough to accommodate school groups of up to 30 students.

Implement monitoring and evaluation strategies to ensure the sanctuary is visually appealing and provides all necessary infrastructure. To monitor the visual appeal and availability of necessary infrastructure at the sanctuary, THT staff should reserve time each month to make observations of the site's visual appeal, and identify any necessary infrastructure that is missing or damaged. A procedure needs to be implemented to ensure that appropriate action is taken to address any hazards or other issues. Surveys available onsite should include space for visitors to make their own observations of the visual appeal of the site as well as any infrastructure they needed. THT staff should take these suggestions into consideration when improving the site.

# Goal #2: To provide educational opportunities on-site for school and youth groups.

Improve and create more interpretive spaces. Tearing down the lean-to that is falling apart and constructing a natural amphitheatre on a site closer to the proposed parking area will create a safer and better gathering place for interpretation. Logs, stumps, or boulders could be used as seating by embedding them within a hill that is facing the "stage". Observation areas along the trails (i.e., on the boardwalks and near the pond; see Figure 8) will allow for interpretation without blocking the trails. A flat area (the stage) adjacent to a small hill will need to be identified for this site.



Source: Nelson Waldorf School

Improve school outreach methods. Distributing an informative brochure to all of the local schools will generate awareness in the schools of the sanctuary. The brochure should include a general description of the sanctuary and its goals. Directions (or a map) and contact information should also be included should a teacher or the school decide to arrange for a program. All other information such as costs and policies for the programs must be included. The brochure should also include a general description of the program experience provided, as well as a list of the programs available by grade level and curriculum. A program registration form should be made available at the end of the brochure identifying how and where to submit the form. Creating a teacher's newsletter could be used to remind teachers about certain programs offered during the school year and to share interesting classroom activities if they are unable to make the trip to the sanctuary.

Build a series of educational programs for youth and school groups. In order to become an institution known for its educational programs, the Blake Sanctuary would benefit from working with local organizations and agencies that already offer programs for school-aged children. By working with Cornell Cooperative Extension of Jefferson County, the Zoo at Thompson Park, and the Department of Environmental Conservation, the staff can begin to make decisions about how best to create programs that will reach their desired audiences. Educational programs could be designed both for the use of youth groups as well as student groups. Local youth groups such as Watertown YMCA daycare, preschool, SACC and Child, Youth School & Service in Fort

Drum, as well as schools in both the Watertown and Carthage school districts will all benefit from educational programs. The sanctuary could focus on topics about natural science, biodiversity, human disruption of nature, and environmental preservation. The programs can be specialized based on age distribution. Classes designed for each age group would be different in order to help children better understand the knowledge. Getting in touch with the local school districts will allow for creating programs and lesson plans that aid and enrich school education. This will create more opportunities for teachers to bring their students to the sanctuary because the programs will be tied in with their lessons.

Create and offer guided tours. Visitors who would like to visit and learn about the sanctuary outside of a scheduled event or program and do not want to independently explore the trails would benefit from a guided tour. A guided tour could also help to elaborate on any of the interpretive signage found all around the sanctuary. These tours could also provide an opportunity for volunteers who are interested in interpretation to be able to gain experience in this field.

Establish monitoring and evaluation strategies for educational programs. THT staff who lead programs for groups at JABWS should be required to complete a post-program evaluation form that will assist in identifying the positive and negative aspects of their programs and potential improvements. These observations will need to be revisited when these programs are presented again to the public or school groups, as well as before developing new educational programs. THT staff will also need to keep record of school and youth groups that are provided with educational opportunities at the sanctuary throughout the year. The number of students in each school group, the length of the visit, and the educational programs provided for each school group need to be recorded. Comparing these records from year to year will help in evaluating the quantity and quality of educational programming THT provides at the JABWS.

# Goals #3: To make the sanctuary known within Lewis and Jefferson Counties as a place that offers a welcoming recreational and educational experience.

*Create a web page for the sanctuary on Tug Hill Tomorrow Land Trust's site.* A webpage dedicated specifically to the sanctuary will make it easier for visitors to find the information they need. The following options are recommended:

- A description and mission of the sanctuary clearly stating its goals for education;
- A list of programs and events to keep visitors up to date with what's going on;
- A volunteer page identifying options for volunteers would give those who are interested in being involved an idea of what they would be signing up for.
- A page for local teachers that contains contact information for planning a trip and lesson plans suited to the sanctuary's flora and fauna;
- An up-to-date trail map that allows visitors to plan their visit;
- General directions to the sanctuary from main routes;
- A page that promotes and advertises other similar areas and attractions, and recognizes local businesses and agencies that are sponsoring the sanctuary;
- A link that enables newsletter sign-ups; and
- Pictures of the sanctuary and the events that occur on the property.
- Links to regional recreational guides, news releases, or newsletters.

Get on the Tourism Map. The staff at the Blake Sanctuary wants to increase the sanctuary's visibility and marketability in the region. In order to do this, the staff could work with tourism organizations such as the Thousand Islands Regional Tourism Development Corporation, Great Lakes Seaway Trail, and the Greater Watertown-North Country Chamber of Commerce. By partnering with organizations that work to bring people to the area, the sanctuary can increase its attendance and make more people aware of the programs it offers.

Establish connections with Watertown City School District, Carthage Central School District and other surrounding schools. There are thirteen schools in the Watertown School District and the Carthage School District. As one of the Sanctuary's main goals is to provide educational opportunities, it is important to create connections with surrounding school districts. Promotional efforts should be made specifically towards this market. Using Tug Hill Tomorrow Land Trust's already established outreach connections, special announcements and fliers should be distributed to school officials and teachers. Children who visit the sanctuary for school fieldtrips could pass on information about their experience to their family and friends, thereby encouraging more potential visitors to the site.

*Create an online presence.* The Sanctuary should create a webpage within Tug Hill Tomorrow Land Trust's website (already discussed under goal #1). Different forms of electronic media should be utilized as well. Accounts on social networks such as Facebook and Twitter could be created for the Sanctuary. A staff blog could be created through various websites such as wordpress.com. The Sanctuary should also strive to be incorporated into other more well-known

promotional websites such as the Thousand Islands Tourism Bureau (http://www.visit1000islands.com), The Greater Watertown North Country Chamber of Commerce (http://watertownny.com/), and Trail Jefferson County (http://www.trailjeffersoncounty.com).

*Create promotional fliers.* A simple three-panel promotional flier should be created promoting the sanctuary. This flier should be placed at local attractions, businesses, parks, The Greater Watertown North Country Chamber of Commerce, and other properties that Tug Hill Tomorrow Land Trust owns. As more events and interpretive programs are created at the Sanctuary, different fliers should be created describing specific events or special programs.

**Reinforce connections with Fort Drum.** Because the sanctuary has a unique market for residents from Fort Drum, the Sanctuary should continue working with the Fort to create a stronger connection. To reinforce the connection, special events catering to active/inactive soldiers and their families should be hosted at the Sanctuary.

Gain more media coverage through TV, radio, and newspaper. To gain the attention of the primary target audience (residents within a 50 mile radius), the Sanctuary needs to have more coverage through local TV, radio, and newspaper. By preparing news releases, having interviews, and asking for more coverage by local stations and newspapers, more "buzz" about the Sanctuary will be created. Sending an updated calendar of events to these media outlets every month will ensure that they know about events happening at the Sanctuary.

**Plan family events.** Since families with children are one of the primary groups of visitors that the sanctuary would focus on, the sanctuary could organize family events that bring out both the parents and the children. The sanctuary could hold events with themes related to different events (e.g., Earth Day, bird migration) to encourage visitor participations.

*Organize beginner outdoor skills workshops.* Because the sanctuary allows certain outdoor sports such as mountain biking, snowshoeing, and cross-country skiing, the sanctuary could offer seasonal workshops for local residents (particularly young children) to enhance their outdoor recreational skills.

*Organize observation activities.* The wildlife sanctuary is known for bird watching. Therefore, in order to attract more wildlife observers to the site, the sanctuary could organize a get-together bird watching event annually to provide those observers an opportunity to share their interest with one another. Moreover, the sanctuary could organize observation activities during migration seasons.

**Conduct photography contests.** The sanctuary could hold photography contests that celebrate the beauty of the sanctuary. This type of contest would encourage both existing and potential visitors (particularly wildlife observers) to visit the site, and provide the opportunity for visitors to discover the uniqueness of the sanctuary.

*Increase community involvement.* Hosting large community events will create a bond between people and the Sanctuary. A local contest can be held asking for community members to design a logo for the Sanctuary. Distributing fliers and informing specific community groups of volunteer assistance needs and of events will also increase community involvement.

Host booth at the Jefferson County Fair. Once a year at the Jefferson County Fair, THT should host a booth promoting its organization and the Sanctuary. At this booth, there should be either a craft or short interpretive activity for younger kids. Take-a-ways such as flyers and possibly merchandise should be available.

Monitor visitation and visitor experiences. Due to a lack of permanent THT staff working specifically onsite, visitor monitoring strategies should require minimum staff time to implement. Random surveys of community members in Lewis and Jefferson Counties can be used to evaluate their familiarity with and visitation to the sanctuary, as well as the effectiveness of marketing in the surrounding communities. To monitor visitation, a trail register can be installed onsite that the visitors are encouraged to sign. The register should ask for the visitors' location of residence and date of visit. This information can also be used to analyze marketing efforts in the nearby counties. THT staff can also make weekly direct observations for a couple of hours or an afternoon, counting visitors and observing their age, gender, etc. Surveys will be very useful to evaluate visitor experience. These surveys will ask the visitors about both positive and negative experiences they had during their visit, if they have visited the sanctuary before, if they plan to visit again, and suggestions they have for improvement. An on-site will require a simple waterproof container for the surveys and a dropbox for completed ones. THT staff will need to collect these surveys, preferably weekly or biweekly and analyze the responses to identify any needed changes. Surveys with similar questions will also be needed for school groups, and will be helpful in monitoring the experiences of both students and teachers.

# Goals #4: To practice sustainable forest management in a way that is compatible with recreation and education efforts, but does not compromise the sanctuary's natural setting.

Create a comprehensive conservation plan. As the sanctuary grows, the staff needs to create a conservation plan that includes short term and long term goals. This plan should include forest management and invasive species control components. They need to decide how they best want to protect the land and resources of the Blake Sanctuary. By creating such a plan, the sanctuary will be able to better direct volunteer efforts and donated monies. In order to create a conservation plan, the staff would benefit from contacting Ducks Unlimited, The Nature Conservancy, and the Department of Environmental Conservation. Partnering with these organizations and agencies would give the staff access to expertise in the field as they make decisions about the sanctuary's future.

*Inventory and manage invasive species.* Conduct an inventory of plant species throughout the sanctuary to determine the area compromised by invasive plant species. This will allow staff to get a sense of the management actions that will need to be carried out. Schedule regular volunteer work days, and determine who can perform necessary work such as plants pulls, herbicide application, and chainsaw operation.

*Utilize sustainable forestry practices.* The sanctuary's woodlands are home to beautiful maple forests. However, many trees adjacent to the trails are in poor condition and pose a safety hazard to visitors. Sustainable forestry practices should be implemented to encourage regeneration in the understory and to improve tree health.

Find out more about the orchid observed in the past on the site. The orchid could still be there, as many orchids do not flower every year. By finding out the name of the orchid, Tug Hill Tomorrow will know if it is an endangered or threatened species. If it is an endangered species, action needs to be taken to give the orchid good habitat to continue to thrive. If it is an endangered orchid, create a plan to maintain the habitat within one year.

*Use sugar maples for maple syrup production.* The sanctuary historically was used for maple sugar production. On-site sugaring (using traditional methods) could be used for educational purposes. Assistance of volunteers or interns would be needed to upkeep the sugar bush and provide educational programs.

*Formalize trash removal policy.* The sanctuary should maintain the currently utilized carry in/carry out trash removal policy. Signage publicizing this policy should be displayed in high traffic areas (i.e., near the parking lot or at the beginning of trails).

Monitor sustainable forest management at the sanctuary, and its incorporation into recreation and education efforts. Long-term monitoring accomplished by direct observations, annual wildlife and habitat inventories, and evaluation by THT staff will identify any impacts of sustainable forest management on the sanctuary's natural setting. A consistent and efficient method to report and manage any of these impacts identified either by personal observation or by

the inventories needs to be implemented. THT staff will need to keep record of their efforts to incorporate their management strategies into recreation and education at the sanctuary, along with any impacts these strategies have on these recreation and education efforts. THT staff should evaluate this record annually to determine if the management practices onsite were successfully implemented in cooperation with their recreation and education efforts.

# Goals #5: To link the sanctuary to other natural destinations, businesses, and events within a 50-mile radius.

*Directional signs to the sanctuary.* Installing road signs that direct visitors to the sanctuary is essential, and should be placed along major routes that lead to the sanctuary. The NYSDOT should be contacted for assistance with installation. Signs should be placed as follows:

- From Watertown (West): When Rt. 12 divides and becomes Rt. 12 southbound and Rt. 126 eastbound, there needs to be a directional sign that directs visitors east through Rt. 126. Visitors can also access the sanctuary from Rt. 12, but it is a longer trip using Rt. 12 and for the sake of simplicity, directional signs should focus on one clear route. Where Rt. 126 meets Old State Street Road and County Road 49, there needs to be two signs on each turn that direct the visitor southbound to Middle Road. This may be the most confusing part of the trip for a visitor, so in case of a wrong turn, before the visitor makes a turn onto Overlook Drive, there should be an additional directional sign that will lead them instead to Middle Road. Once a visitor is on Middle Road, they will drive right to the sanctuary. In total, it is recommended that there be four directional signs for visitors traveling westbound from Watertown.
- From Carthage (East): Where Rt. 26 meets Rt. 126, there needs to be a directional sign that directs visitors to the west down Rt. 126. There are several potential turns a visitor can make to meet Middle Road. For ease of travel, there should be a directional sign for Bach Road traveling southbound. To connect Bach Road and Middle Road, there is a quick right onto County Road 163 and quick left onto Middle Road. These turns will require two directional signs. In total, traveling from the east will require four directional signs.

The sanctuary will need to apply for a road sign permit from New York State. This website provides detailed instructions on how to do so: http://www.dos.ny.gov/lg/publications/Municipal Control of Signs.pdf.

**Bike accessibility from west (Watertown) and east (Carthage).** State Street (Rt. 126) is bike friendly using the shoulder of roads. A minor concern in the assessment was Middle Road and its potential for bike use. After assessment, there is no recommended change in applying to create a bike path on the shoulder. Financial resources should rather be directed to the sanctuary itself because Middle Road is a low-traffic road and does provide adequate shoulder room for bicyclists to reach the sanctuary safely.

*Invest in Merchandise Production.* Merchandise with the sanctuary's name on it is a great way to advertise and gain visitors. If sold at events the sanctuary holds, it could provide extra revenue for maintenance and other miscellaneous expenses. This could attract local business sponsorship because the names of sponsors could be put on the backs of the t-shirts sold. This recommendation serves to further get the name of the Joseph A. Blake Sanctuary out there and is mutually beneficial for the businesses that partake.

Arrange Sanctuary Promotion Event. An event that brings local residents and businesses together in nature is a great way to increase local involvement. The sanctuary could hold an event where they invite local businesses and community members out to the sanctuary for the day to clear trails and enjoy recreational time out in nature. The goal is for businesses to understand the sanctuary's potential to encourage financial support. This event could end with a barbecue to increase publicity and general awareness. Local businesses could display posters in store windows to advertise the event. Local newspapers such as the Watertown Daily Times could run an ad to attract people to the event. Throughout the day, it would be nice if local businesses pledged what they were going to do to help the sanctuary, as a vote of confidence for the organization as well as a way to restore faith in community members that businesses and environmental organizations can work together. This enhances the reputation of the businesses while benefiting the wildlife sanctuary.

**Donations.** Another effective way for Joseph A. Blake, Jr. Wildlife Sanctuary to raise money for signage and trail development is to ask for donations. This is a win-win for the business and sanctuary because the business looks good for helping out an environmental organization, and the sanctuary gains the obvious benefit of an improved space for visitors and wildlife.

**Door-to-door campaigning.** It would be beneficial for businesses to invest in the sanctuary if their business name is listed on sanctuary materials (e.g., brochure, kiosk, website). Business owners can be very busy. To ensure the ability of THT staff to reach out to business owners, it would be beneficial to have personal contact with business owners, or to leave brochures and similar media at businesses to get the message out that the sanctuary needs help. In-person meetings would be preferable because it makes things more personal and puts a face to the organization.

Partner with community organizations for financial and publicity support. Kiwanis and Rotary Clubs are great resources for financial donations and publicity. These clubs aim to support the community and its needs, and their members are usually active in the community in other ways, such as through churches and local businesses. If the staff at the sanctuary approaches representatives from the different clubs, they will most likely be able to make a presentation at a meeting. By conveying the importance of the land and its programs, the sanctuary will have a chance to obtain support from these clubs.

Inclusion of sanctuary in Watertown Walking Trails series. Contact with the Watertown Parks and Recreation at (315)785-7775 is needed to have the sanctuary included as a walking trail. The "Walking Trails" consist of seven advertised trails, with locations including Thompson Park, Bicentennial Park, and the Alex Duffy Fairgrounds. By creating this connection, the sanctuary can be quickly and easily posted on the Watertown website as an additional trail in the series. Being that this particular attraction is advertised to an audience in search of a scenic, peaceful, outdoor walk, it's easy to envision the walking trail's visitors as being the perfect target audience for the sanctuary. Also recommended is to try and make some type of joint brochure between Watertown and the sanctuary to advertise and map the walking trails and their locations in relation to one another.

Have sanctuary identified as a stop along the Olympic Scenic Byway. Contact the Adirondack North Country Association at (518) 891-6200 about becoming a stop along the Olympic Scenic Byway Trail. This trail runs along Route 3, going from Sackets Harbor to Lake Champlain and passes through the high peaks region, and is about 170 miles long. This particular Scenic Byway is commonly utilized by cyclists and passes right through Watertown. It's not difficult to imagine drawing in this cycling audience to appreciate not only the available biking trails at the sanctuary, but also the peaceful country ride to get there.

Create a regional trail. Creating a Watertown Outdoor Regional Trail is recommended as a day tour off of the Olympic Trail. This regional trail would connect some of the large outdoor attractions within the area and provide an opportunity for locals to appreciate the great outdoors within their own community. This trail would consist of a joint program between the NYS Zoo at Thompson Park (315)782-6180, the Dry Hill Ski Area (315)782-8584, the Pinckney State Forest (315)376-3521 (NYS DEC), and the sanctuary. By connecting these four sites, all within 20 minutes of each other, collaborative promotions and events could be developed. Also, at a time when getting your family out into the fresh air is becoming more of a concern in the public eye, these sites could provide a fun, family-oriented trail. A promotional brochure and/or website, potentially funded by local sponsoring businesses and attractions, would be needed.

Survey visitors to identify success of linking sanctuary to other nearby natural destinations. THT staff should create and implement surveys for visitors at the sanctuary that will determine if they plan to visit the other destinations the sanctuary is linked to. Also, it would be beneficial if staff at these other destinations survey their visitors to find out if they are planning on visiting the sanctuary. This strategy will determine if the sanctuary has been successfully linked to other nearby natural destinations. This will be especially important to do after the onset of efforts to link the sanctuary to these destinations to be sure that their marketing strategies are successful.

# Goals #6: To establish a strong and committed volunteer base that assists with facility development, maintenance, and education.

**Develop a comprehensive staff and volunteer plan.** This plan should specify the roles and responsibilities of staff and volunteers in order to streamline operations and clarify the roles and responsibilities of staff, board members, and volunteers. The Land Protection Manager should be the staff member responsible for the drafting of this management plan. Some components to include in this plan are:

- A detailed list of all volunteer tasks. This list should include all applicable opportunities for which individuals or groups may offer their assistance. This list should be posted in a place where it is easily assessable to the public, such as on a web page, or within a newsletter or pamphlet of some sort.
- A detailed list of the responsibilities of hired staff at the sanctuary.
- A set work schedule for both hired staff and volunteers to monitor the sanctuary for trail maintenance, hazards, and other management issues. This monitoring will be aimed at ensuring proper use of the sanctuary by visitors, removing any litter on trails, and identifying any potential hazards. Trail conditions, such as increased erosion or accumulation of water, should be noted so as to plan for trail repair. Monitoring will also ensure the safety of users through identifying and removing hazard trees and other threats to the safety of visitors on an ongoing basis. A set schedule will allow the staff of the Tug Hill Tomorrow Land Trust to know who will be responsible on any given day for ensuring the safety of visitors.
- A description of reporting procedures to be used by volunteers and staff. If hazards or other concerns are noted by volunteers, a process for reporting these issues to appropriate staff is needed. If an online database that staff and volunteers can use to input information related to sanctuary conditions and maintenance and management issues is created, the website address for the website should be included in the staff and volunteer plan.

Form a new committee to address decisions within the Sanctuary. Property ownership intended for public use brings about new problems for an organization. Decisions for the sanctuary will need to be made on a more regular basis. Currently, the Stewardship Committee has been responsible for making decisions regarding the sanctuary. This responsibility may be too much for a committee established to address decisions of land managed by private owners in trust with the THT. A new committee can be created to focus specifically on the sanctuary property to allow decisions to be made in a more timely fashion. If the THT believes the Stewardship Committee is capable of the necessary decision making regarding the sanctuary, a separate set of meeting times should be established to focus solely on the sanctuary.

**Partner with community organizations for volunteer support.** To help with the sanctuary's initial and ongoing maintenance needs, the staff should contact local youth programs to recruit volunteers. For those groups that the sanctuary is already in contact with, efforts should be increased to offer youth more opportunities to work in the sanctuary. The staff could work more with local Boy and Girl Scout troops, the Fort Drum Youth Center, and the Watertown High School extracurricular activity clubs to get more youth involved. Encouraging youth to volunteer

at the sanctuary fulfills a number of goals: the needed maintenance work will get done, youth will be engaged in active community service, more people will become aware of the sanctuary, and those who are involved in the work will feel a sense of ownership over their work and they will be more likely to come back and visit.

Consider future staffing requirements. While the current hired staff is content with their workload, increased use of the sanctuary will likely increase their responsibilities. While it is not believed this is will be overwhelming in the near future, it may present an increasing problem in several years. As a result, the current staff should research and apply for available grant money and determine what new roles will best assist in the management of the Sanctuary (e.g., a sanctuary director). Being proactive in obtaining new funding sources will make things easier in the future when new staff becomes necessary.

Engage general members of the Watertown, Carthage, and Fort Drum communities. Publicize the sanctuary in a manner that will spark community interest and support, essential to acquiring potential volunteers. Utilizing local media outlets such as the Watertown Daily Times could be a great means of publicity. The Watertown Daily Times could potentially write an article concerning the sanctuary and its volunteer needs. Establishing these connections to the community will bring new individuals on board.

Recruit student volunteers from nearby colleges/universities. Tapping into the network of local universities may be a useful endeavor in not only acquiring great volunteers, but also in publicizing the sanctuary for higher educational purposes. College students look for opportunities for community involvement, and to add to their resume. SUNY-ESF specifically has on campus clubs and groups which may be interested in volunteering: The Bob Marshall Club, The Forestry Club, The ESF Woodsman Team, and the Wildlife Society. Other universities such as Lemoyne and Onondaga Community College in Syracuse, North County Community College, and Columbia College in Fort Drum, Jefferson Community College, and Empire State College in Watertown are all candidates as a potential volunteer base.

Involve youth volunteers from local schools, youth groups, and community youth programs. Obtain assistance from youth via local schools within Carthage, Fort Drum, and Watertown. Schools include the West Carthage Elementary School, Carthage Senior High School, Indian River Central High School, etc. Educators at these schools may be approached with volunteer opportunities and may even mention the sanctuary's education program. Teachers may also be recruited as volunteers; they may make great tour guides! Boy and Girl Scout troops along with youth groups such as YMCA and The Fort Drum CYSS Youth Program should also be considered.

*Organize a one day training program for volunteers.* For all interested volunteers, a training session should be held annually, or as needed. The program should include the necessary tools and information to be a successful volunteer. The session should include a tour of the sanctuary, making sure to show the volunteers all of the trails, where the predominant natural areas such as the wetlands, and the location of restrooms, and parking area. Giving the volunteers a sense of the sanctuary lay out will be important in assuring volunteer success.

Create a "Volunteer Information Booklet" for all interested volunteers. This booklet should include all the information about the sanctuary that any volunteer may need. This booklet can be used to let potential volunteers know that they are welcome to participate in whatever aspect of volunteer work they are interested. Within the booklet, different volunteer tasks should be discussed in full, ranging from descriptions of how tours should be operated, to how to deal with trail maintenance. The mission of the sanctuary along with any other additional information that may seem relevant should also be included. Operating procedures (e.g., name of volunteer coordinator, getting reimbursements for program supplies, what to do in an emergency, etc.) should be included. A map of the sanctuary should be included to show the trails, facilities, parking, and the location of specific ecological areas, such as the wetlands, specific tree stands, etc. This booklet should be made available online to promote volunteer assistance, adn should be given out during volunteer trainings in hard copy.

Create a volunteer appreciation program. When individuals are taking the time out of their busy schedules to volunteer, it is important for the organization to show their appreciation. This does not have to be an extensive or expensive endeavor, but it should be an integral part of the volunteer program at the sanctuary. Thank you notes for example are an excellent way to show volunteers that they are valued through a personal note of praise. Sending out a thank you note is extremely inexpensive and definitely meaningful. Another great way to thank volunteers could be to organize an appreciation event such as a dinner/lunch. A public thank you may also be rewarding to volunteers, this can be accomplished through running an ad in the paper listing all of their names and including a short thank you blurb. Another incentive provided to volunteers may include some sort of "gear" such as hats, t-shirts, or sweatshirts that have the Joseph A. Blake, Jr. Wildlife Sanctuary or the Tug Hill Tomorrow logo on it. The volunteers may wear this while giving tours within the sanctuary or just to wear around town.

*Utilize the Sanctuary for meetings and fundraisers.* Using the new property to host informal meetings and fundraisers will help to better introduce the property to the organizational structure as well as the potential donors. An increased presence of managers in the sanctuary will help them better identify with the property and make decisions in the best interest of the property. It will also assist with fundraising by presenting potential donors with an image of how their contributions will be spent.

Join Professional Associations. Tug Hill Tomorrow Land Trust is experienced with land ownership. Since JABWS is the organization's first owned and operated property, THTLT would benefit from the advice and assistance of a professional network. While there are several groups to choose from, the Association of Nature Center Administrators (ANCA) is recommended. Their website can be found at http://www.natctr.org. ANCA is professional venue that helps nature center managers network, gather at summits and distributes publications about successfully managing nature-related property (ANCA, http://www.natctr.org). Membership for this group is \$110-200 per year (depending on the number of staff members involved) and all the previously listed services are included. The organization also offers professional consultation that members have the option to purchase. Among the services, ANCA consultants offer expert advice and help with fundraising for nature center operations and programs. While membership requires a small monetary investment, the return on investment (ROI) is likely to be quite high. Not only will ANCA know about many applicable grants and have ideas for novel, effective

fundraising, but the association can also offer assistance in the application process and help network for THTLT.

Employ an annual evaluation of the sanctuary's volunteer base. As a part of this evaluation, THT staff should identify the number of volunteers who assist at the sanctuary, their responsibilities, if these responsibilities were fulfilled, the amount of time and frequency they volunteer, and if the volunteers' time is being used effectively and efficiently. Speaking with the volunteers about their experiences and satisfaction with the sanctuary needs to be included in this evaluation. A method for addressing issues and implementing improvements needs to be established.

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