

Leanne Ketner lketner@s.paulsmiths.edu 802-683-9215

Amount Requested: \$500

SPRING 2016 CAMPSUS SUSTAINABILITY FUND PROPOSAL

*Project Title: Paul Smith's College historical and natural
history interpretive exhibit-professionally designed
virtual sign*

Project Summary

Goal-To gain Paul Smith's College campus community support for my capstone by incorporating professionally designed virtual model of one of the signs into my final project.

Objectives-

- Complete a formative evaluation with students, faculty, and staff to evaluate the effectiveness of sign content and conceptual design.
- Design one of the six signs to first draft status (including first draft content, conceptual design hierarchy, initial photographs or illustrations, and preliminary color scheme, etc.) so that it is prepared to be turned into a virtual model by a professional graphic/exhibit designer.
- Present completed model to campus community on April 30th, 2016 as part of my capstone presentation.

Project Justification and Relevance- This is a proposal to help fund a piece of my capstone that will aid in gaining Paul Smith's College community support. My capstone involves creating a conceptual design for an interpretive trail guide that celebrates PSC heritage and the natural community on which it exists. The scope of my capstone will not involve seeing the exhibit to implementation. Rather I will be presenting my conceptual design, content, budget, and proposed steps to see the project to completion on Capstone Celebration Day April 30th, 2016. To help the audience better understand my vision for the exhibit I would like to hire Rob Carr, an interpretive exhibit designer from The Wild Center to create a virtual model of one of my six signs.

This project is relevant for Paul Smith's College today. It is a pivotal time in PSC history where many of those directly involved with its inception are no long with us and there is no easily accessed source of information that enlightens individuals with accurate historical background of PSC. Therefore, the result is misinformation and a direct lack of historical knowledge across the community. I propose that this must change. The Administration is utilizing this new slogan, "charting our future, embracing our heritage". In order to embrace one's heritage it must be known. My contribution is to create an interpretive exhibit that intertwines the history with the natural history of PSC to support the college's mission. This project aims to bring to life the heritage and natural history of the Paul Smiths area to engage and inspire current and future members of the Paul Smith's College community. The exhibit can also be a valuable resource in admissions by bringing to light some of the unique facts little known about what makes PSC what it is today.

Methods-

In short I will prepare the content, conceptual design, and formative evaluation of the signs. This will be done in preparation to be sent to Rob Carr professional exhibit designer who will take my concept and content to create a virtual model of what one of my signs will conceptually look like in place. Below you will find detailed summary of my steps for this project:

| Exhibit Design Phase Steps | |
|---|---|
| Theme | X |
| Goals/Objectives | X |
| Subthemes | X |
| Sign Locations | X |
| Content Development | X |
| Conceptual Design (Graphic Hierarchy) | X |
| 1 st Draft Text | X |
| Pictures and Illustrations | X |
| Prototype Signs (1 st Draft) | X |
| Fact Checking # 1 | X |
| Formative Evaluation | X |
| Budget | X |
| 2 nd Draft Signs | |
| Fact Checking #2 | |
| Final Draft Design and Text | |
| Copy Editing | |
| Proof Reading | |
| Printer Fabrication | |

Table 1- Shows modified steps of the exhibit design phase. Steps marked with an “x” represent those that will be completed in the scope of this capstone project.

There are several stages to creating an interpretive exhibit including *developing, implementation, and monitoring*. For the scope of this project the developing stage is of most concern. Methods will be adopted from those of Cowardin, Carter, Golet, & LaRoe (1979), Ham (1992), and Brochu and Merriman (2012), though interpretation is a dynamic process tailored to fit the content and may deviate from any one of these examples. This project is a collaborative effort and will include all aspects of the Paul Smith’s College campus community for input. There will be a total of six interpretive signs that will be strategically placed around the PSC campus to showcase place based areas of interest. Guidelines specific to self guided trails and interpretive signs found within Cowardin et. al. (1979) and Ham (1992) will be taken into special consideration.

Developing

The developing stage incorporates a multitude of steps (Table 1). Specific areas of concern are discussed in more detail including content, design, formative evaluation, and budget. It should be noted that the developing processes is not necessarily linear and several steps occur congruently.

Content

Content development includes background research, exhibit outline, sign outline, text formation for signs (several drafts), fact checking, and proof reading. First, background research, in the form of a literature review, was conducted to address two specific areas PSC history and natural history. The literature review is then analyzed and used to complete the overall exhibit outline and sign outlines. The overall exhibit outline includes a mission statement, an exhibit title, theme, goal(s), and objectives. These elements guide the entire exhibit developing process and are imperative to keeping information organized and concise.

Sign outlines are more detailed versions of overall exhibit outlines. Appendix A is a blank example of the worksheet created for each sign to be used as a tool for organizing the content. Title is the first portion of the worksheet and should be no more than eight to ten words in length, written in a way that is catchy and thematic to encourage the audience to read further through the sign. A theme, the second piece of the worksheet, is essential to the signs because it expresses a message, answers the “so what” question, and connects the tangibles to intangibles (Brochu & Merriman, 2012). People remember themes not facts and figures, is a common mantra of interpretation (Tilden, 1957; Knudson, Cable, & Beck, 2003; Brochu & Merriman, 2012). Objectives, the third piece of the worksheet, are specific and measurable evaluation tools that should address what you want the audience to do or know after engaging with your interpretive media (cite). These help to monitor the effectiveness of your interpretive media and as means of upholding the goal(s) written in the overall exhibit outline. Each sign will have three categories history, natural history, and student involvement today. In Appendix A you can see that each category is given its own section of the worksheet including elements such as subthemes, main points, and photos/illustrations. Subthemes should be more specific here and unique to each category. Main points can range from one to five but should be concise and directly relate to answering the “so what” of the themes. Keeping the main points restricted in this way will remove any unnecessary information. Photos/illustrations is the last section and is primarily for brainstorming what photos will be used and where they will be sourced. It is important to note that during this portion of the content development stage that any information gaps be recognized and addressed before continuing onto drafting the sign text.

Drafting the sign text parallels the creation of a graphical hierarchy. Text should be broken into sections that do not exceed 40-70 words. Guidelines for specific word count will be created in the graphical hierarchy. Interpretive writing should not exceed a 9th-10th grade reading comprehension level so that it can appeal to a wide variety of audiences (Cite). Once the first draft of text is complete it will be reviewed by my capstone mentor, appointed fact checkers, and an English faculty member at PSC. Their critiques will be taken under evaluation and implemented into a second draft of the text.

The second draft of text will be used during the formative evaluation prototype sign discussed later. Once surveys are collected and analyzed from the formative evaluation further editing of the sign text will occur. A second review of text by capstone mentor, appointed fact checkers, and English faculty members at PSC will take place at this point. It is at this point the written scope of this project will stop. Though I will note if this project were to be seen to completion, the written portion would undergo further scrutiny before being sent to the printer (Table 1).

Design

The primary portion of the conceptual design processes will be conducted by myself and guided/edited by a professional in the field of interpretive exhibit design. The signs will be adjusted to fit the themes, goals, and objectives of the project as well as uphold the interests of the Paul Smith's College community. Professional quality graphic design is an intensive process and for the scope of this project a first draft will be completed. The first step in design is to determine the dimensions of the sign and the shape it will take. From here a graphical hierarchy (basic design of where content, photos, captions, color scheme, accents, etc. will go) is created and the second draft of text can then be incorporated.

Formative Evaluation

There will be two formative evaluations conducted. The first occurs after the 1st draft of the interpretive signs has been completed. The evaluation will take two forms focus group and survey. Ten to twenty individuals not related with the project and that could potentially be an audience for the interpretive signs will be chosen as a focus group. Their role will be reading the signs and providing feedback on the clarity, message, and engagement of the sign to help further the effectiveness of the content and overall design. Signs will also be displayed in the library with short written surveys attached for one week. The goal is to receive at least 50 diverse (students, faculty, staff, visitors, alumni, local community) respondents in total for the first formative evaluation. The library is the chosen location for the sign viewing because it receives high amounts of traffic from students, faculty, and staff as well as admissions tours and local individuals.

The second evaluation will occur on capstone celebration day. Though the results of this evaluation will not be utilized in the capstone project they will be useful in continuing it after graduation. The second draft of the signs will be printed and posted in the library with the same paper surveys provided in the first formative evaluation. The goal is to receive at least 50 to 100 diverse (students, faculty, staff, visitors, alumni, local community) respondents.

Project Budget and Timeline

| Budget | |
|---|---------|
| Item | Cost |
| One sign virtual model designed by Rob Carr (cost ensued per design hour, quoted 4-6 hours) | \$480 |
| Print | \$20.00 |
| Total | \$500 |

- **Timeline-** Can be viewed below:

| Date Completion | Feb. 22 | Feb. 29 | Mar. 7 | Mar. 14 | Mar. 21 | Mar. 28 | Apr. 30 |
|--|------------|------------|-----------|------------|------------|------------|------------|
| Theme | | | | | | | |
| Subthemes | | | | | | | |
| Goals/Objectives | | | | | | | |
| Locations of Signs | | | | | | | |
| Content | | | | | | | |
| Development | | | | | | | |
| 1st Draft Text | | | | | | | |
| Conceptual Design (Graphic Hierarchy) | | | | | | | |
| Pictures and Illustrations | | | | | | | |
| Questions for Formative Evaluation | | | | | | | |
| Prototype Signs | | | | | | | |
| Formative Evaluation | | | | | | | |
| Formative Evaluation Sign Edits from | | | | | | | |
| Formative Evaluation | | | | | | | |
| 2nd Draft one sign | | | | | | | |
| Virtual Model (From Rob Carr) | | | | | | | |
| Capstone Presentation | | | | | | | |

Supporting Documentation

Literature Review

Interpretation

What is Interpretation

Interpretation is a common human characteristic that has aided us in processing and communicating information. There are many definitions of interpretation but the commonality among them is that interpretation is a way of explanation. Interpretation is an ancient practice thought to extend back to the time of early Romans and Greeks and even further through accounts by hunters, fisherman, and artists of the Middle East and Orient (Weaver, 1976). Through the ages it has been influenced by many fields including but not limited to religion, philosophy, natural sciences, education, literature, art, etc. (Weaver, 1976). Today the National Association for Interpretation has taken into account past influences and definitions stating that, "interpretation is a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource" (National Association for Interpretation , 2014).

Tangibles vs Intangibles

Humans possess a left and right side of the brain. The left side tends to be the intellectual/analytical portion and the right side is the emotional/expressive portion of the brain (Brochu & Merriman, 2012). Effective interpretive programs or exhibits will play to both sides of the brain appealing to the whole person (National Association for Interpretation , 2014; Tilden, 1957). A main aspect of interpretation is connecting tangibles with intangibles (left/right brain); something that is tangible is touchable, quantifiable. Intangible items include emotions, memories, ideologies (National Association for Interpretation , 2014).

Captive vs Non Captive audience

Audiences can take many forms. Two basic categories for audiences are captive and non-captive. Captive audiences can be described as formal and involuntary audiences that must be present for a fixed time (Ham, 1992; Brochu & Merriman, 2012). These audiences are often found in classrooms, job training, professional seminars, etc. Conversely non-captive audiences are often informal and voluntary who do not have to be present for a specific amount of time and do not have to pay attention (Ham, 1992; Brochu & Merriman, 2012). In the field of interpretation the audience is most always non-captive. This type of audience comes with its own set of challenges and requires that interpreters be effectively utilizing the six to fifteen principles noted earlier.

Value of Interpretation

Individuals

Benefits to individuals include educational, recreational, and inspirational benefits (Ham, 1992; Knudson et al., 2003). Educational benefits as discussed by Knudson et. al. (2003) have been extensively researched since the mid 1970's to show increased knowledge and changed perceptive in the given object or idea being interpreted. Individuals attend interpretive programs/exhibits because they find gaining place based knowledge to be meaningful and enjoyable (Tilden, 1957; Knudson et al., 2003; Brochu & Merriman, 2012). Sometimes interpreters in various fields will abide by some of the mandated public education learning outcomes, in this way teachers can more easily bring students to interpretive programs allowing them to experience more hands on education (Knudson et al., 2003). Various outlets for interpretation have also provided spaces for regular classes to be held and offered college credit for internships (Knudson et al., 2003). This link between school programs (formal education) and interpreters (informal education) is has been beneficial for all stake holders.

Individuals also benefit from interpretation though recreation and leisure. Though individuals do enjoy education, on leisure time many would prefer fun activities over instructional activities (Tilden, 1957; Knudson et al., 2003; Brochu & Merriman, 2012). Therefore interpretation should in some ways aim to be fun, entertaining, and enjoyable, "In a very real sense, interpreters provide the opportunity and context for pleasurable recreational experiences...They make the special significance to a place, thus deepening the experience" (Knudson et al., 2003).

Lastly individuals benefit from inspiration. Knudson et. al. (2003) and Cowardin et al. (1979) discusses the idea that interpretation can be good if it is fun, but it can be great if it evokes and uplifts emotional responses in audience. According to Tilden (1957), "The finest uses of national parks, or indeed any of the preserves that come within the range of interpretation work, lie ultimately in spiritual uplift." This aspect of interpretation, spiritual uplift, is the tip of Maslow's hierarchy of needs detailed below.

Society

According to Knudson et. al. interpretation benefits society in three ways, "information for democratic decision making, identity with our land and culture, an ethical sense of our place in history and our role in the world"(2003). First interpretation acts as a source for informing the public. To have a functioning democratic society the public must be educated so they can make informed decisions that dictate the future of the country. Interpretation has become a large role in this through the National Parks Service (Tilden, 1957). The second benefit that interpretation has to society is through aiding citizens in identifying with landscapes and their natural and cultural resources. This sense of place based connection and pride in these landscapes can unite the citizens of a nation; hopefully resulting in a greater appreciation for the natural and historical resources as to dissuade from their degradation (Knudson et al., 2003). Lastly interpretation benefits society by helping individuals to develop an ethical sense of their place and role in the world. They accomplish this through, "the historical perspective, the natural phenomena, and the ability to perceive them in context can touch the hearts and minds of people and change the story of our world" (Knudson, Cable, & Beck, 2003).

Other individuals such as Sharpe 1976 lists 11 benefits to interpretation which were mostly covered in the benefits outlined by Knudson et. al. (2003):

1. Interpretation contributes directly to the enrichment of visitor experiences.
 2. Interpretation makes visitors aware of their place in the total environment and gives them a better understanding of the complexities of coexisting with that environment.
 3. Interpretation may broaden the visitor's horizons beyond the park or forest boundary, giving a greater understanding of the total natural resources picture.
 4. Interpretation informs the public and an informed public may make wiser decisions on matters related to natural resources management.
 5. Interpretation may reduce the unnecessary destruction of park property, resulting in lower maintenance and replacement costs (Sharpe, 1976).
 6. Interpretation provides a means of moving people subtly from sensitive areas to sites that can better sustain heavy human impact, thus protecting the environment.
 7. Interpretation is a way to improve public image and establish public support.
 8. Interpretation may instill in visitors a sense of pride in their country or in the regions culture and heritage.
 9. Interpretation may assist in the successful promotion of parks where tourism is essential to an area's or country's economy.
 10. Interpretation may be effective in preserving a significant historic site or natural area by arousing citizen concern.
 11. Interpretation may motivate the public to take action to protect their environment in a sensible and logical way.
- (Sharpe, 1976)

Maslow's Hierarchy of Needs

Abraham Maslow conducted a human behavior study in 1954 and supported the hypothesis that people attend to their higher selves only if their basic intermediate needs were attended to first (National Association for Interpretation , 2014). His work was focused on looking at human motivations. The study has been represented as a hierarchy starting with physiological and progressing through safety, love/belonging, and esteem to self actualization (Brochu & Merriman, 2012).

Basic Needs include physiological, safety, and security. Maslow found that an individual will pay more attention to basic needs as long as they are not met, and so on and so forth with intermediate and growth needs (Knudson et al., 2003; Brochu & Merriman, 2012). Intermediate needs include love and belonging, esteem, knowledge. Growth Needs include understanding, aesthetic, self-actualization (National Association for Interpretation , 2014). There comes a point at which individuals may meet the basic and intermediate needs but because they have not met growth needs begin a state of despair, apathy, and alienation (Knudson et al., 2003).

Malsow's hierarchy is extremely useful to keep in mind when developing interpretive programs or exhibits. If you can attend to your visitors basic and or intermediate needs it gives them a greater opportunity of reaching their higher needs (Brochu & Merriman, 2012).

Learning Styles

It is to some extent common knowledge that individuals learn in different ways. There are four basic learning styles auditory, visual, verbal, and kinesthetic (Brochu & Merriman, 2012). As outlined by the Certified Interpretive Guide Training Workbook auditory learners must hear information (i.e. recording bird call, music, etc.), visual learners must see information (i.e. pictures, graphs, videos), verbal learners must read information (i.e. text, charts, quotes), and kinesthetic learners must interact with information (props, touch artifacts, etc). Effective interpretive programming or exhibits will aim to combine elements that play to all learning styles. This will give the program/exhibit life, interest, and a greater chance of your message getting across to the audience.

POETRY

POETRY is an acronym synthesized by the National Association of Interpretation from previous interpretive influences. POETRY stands for Purposeful, Organization, Enjoyable, Thematic, Relevant, You (Brochu & Merriman, 2012). In combination these criteria can make for a great interpretive program.

Themes

Themes are the central ideas or concepts. In interpretation themes are, "all encompassing and the single most important element in the interpretive process" (Brochu & Merriman, 2012). A theme should accomplish two things answer the question "so what" and provide focus (Tilden, 1957; Ham, 1992; Brochu & Merriman, 2012). There are four components to an interpretive theme. These components are:

1. Interpretive themes should be stated as a short, simple, complete sentence that contains one main idea.
 2. Interpretive themes should reveal the overall purpose/message of your program or activity.
 3. Interpretive themes should be interestingly and motivationally worded.
 4. Interpretive themes should link tangibles to intangibles and universals.
- (Brochu & Merriman, 2012)

Field of Interpretation

Within recent history an entire occupational field has been dedicated to interpretation, employing between two to five million individuals within the United States (Brochu & Merriman, 2012). The field of interpretation did not take off as a recognized occupation until the late 1800's to early 1900's. A pivotal piece of literature, *Interpreting Our Heritage* written in 1957 by Freeman Tilden, served as one of the first guides to interpretation as a field. This field is vast encompassing history museums, national parks, monuments, nature centers, battlefields, zoos, aquariums, dance, theater, and much more (Tilden, 1957; Brochu & Merriman, 2012). Amongst these vast areas of the interpretation field two major topics arise and those are heritage and natural history/environment.

There are four major influences to the interpretive field Freeman Tilden, Sam H. Ham, Cable & Beck, and the National Association of Interpretation. The people/organizations listed are only parts to a much greater whole and the field of interpretation has had many influences from a variety of backgrounds.

Freedman Tilden is known commonly as the Father of Interpretation, because of his work *Interpreting Our Heritage* published in 1957. In his book he outlines six principles of effective interpretation. The six principles are as follows:

1. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
 2. Information, such as, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
 3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable.
 4. The chief aim of interpretation is not instruction, but provocation.
 5. Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.
 6. Interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate program.
- (Tilden, 1957; Brochu & Merriman, 2012)

These principles formed the underpinnings to modern day interpretation and illustrate the depth to interpretation as a practice. Tilden was also the first person to define interpretation. His definition was interpretation is, "An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information" (Tilden, 1957; National Association for Interpretation , 2014). This definition has morphed over the past half century through the various other influences on the field of interpretation listed above.

Cable & Beck took Tilden's six principles and expanded them into 15 principles to include such things as interpretive writing, passion, attracting support, quantity and quality of information, technology, and more (Brochu & Merriman, 2012). Today the National Association for Interpretation (NAI) has compiled all of these past influences into one common resource. The NAI holds annual conferences, produces various certificate programs, publishes a scientific journal on interpretation, as well as shares current news on interpretation related events.

Media of Interpretation

Interpretation can be expressed via many avenues including but not limited to programs, exhibits, self guided trails, and signs. All of these avenues of interpretation follow the same process of identifying themes, subthemes, goals, objectives, and supporting details (Brochu &

Merriman, 2012; Moscardo et al., 2007). No one way to express interpretation is the right or only way. Depending on the time and place one may be better suited for the task at hand. What good interpretation comes down to is following closely the principles outlined above but most of all, “the key ingredient in quality interpretation is the ability to excite, delight, and awaken the senses; in essence, interpretation connects the core of the human spirit— our beliefs, experiences, hopes, and dreams” (Moscardo et al., 2007).

For the scope of this project trail guides and interpretive signs will be the focus. Interpretive signs serve the same purpose of any interpretive program and that is to take data or facts and presents them in such a way that engages and educates an audience (Tilden, 1957; Ham, 1992; Moscardo et al., 2007; National Association for Interpretation , 2014). Audiences can dictate their own pace through the signs and it extends educational opportunities outside of programs. Interpretive signs relies heavily on stories as a vehicle for arriving to key points of the sign context (Ham, 1992; Moscardo et al., 2007)

It is important to consider the placements of the signs. Criteria to consider include location, position, spacing, lighting, crowd dynamics, and external influences (USDA Forest Service , n.d.). “...along trails, there tend to be natural stopping points and common decision points. This includes forks in the trail, lookouts, picnic and seating areas...If possible signs should be located close to these to maximize visibility and increase the likelihood of them being read” (as cited in Moscardo et al., 2007, p. 30).. Though it is important to make sure the signs blend with the natural surroundings if placed outdoors, “nature should always dominate, no matter how important the interpretive message” (Moscardo et al., 2007, p. 31). Outside there are more limitations to where signs can be located, but great opportunities for placed based education. One last consideration is that if the interpretive signs are organized chronologically it should be noted before people begin the exhibit as to reduce any confusion because, “Research indicates that visitors do not view exhibits in sequence” (Moscardo et al., 2007).

Before and after a sign is implemented there needs to be evaluation of its effectiveness, “The communication effectiveness of proposed interpretive signs must be evaluated before fabrication, so that necessary changes can be made without incurring major costs.” (USDA Forest Service , n.d.). Periodically after the signs have been implemented monitoring should occur to evaluate whether the message is being received and whether the exhibit has satisfied the audience’s needs (USDA Forest Service , n.d.).

Interpretation of heritage is based more in human cultures and traditions, though it is impossible to separate this topic fully from natural history/environmental interpretation. Environmental/natural history interpretation is in basic terms the processes or act of translating the technical information from the scientific fields into language that anyone can understand (Ham, 1992).

Paul Smith’s College History

Paul Smith’s College (PSC) is located in Paul Smiths, New York along the shore of Lower St. Regis Lake. PSC is a relatively young institution, but this does not deny it of a rich and long history.

PSC was named in honor of Apollos Smith, who founded the resort in the mid 1800's that once stood where the campus does now. The Paul Smith's Hotel Company was an icon in the Adirondacks for decades. Ahead of its time in almost every way for the Adirondacks the hotel had several stage coaches, a golf course, stable, electric company, casino, sawmill, telegraph, eventually an electric rail car and more. In the following section the history of PSC will be discussed starting with before Apollos Smith, early history, expansion, turn of the century, and college era.

Before Apollos Smith

It is imperative to keep in mind that Apollos Smith was not first person to inhabit the lands in which PSC sits today. Long before Apollos was a twinkle in his parent's eyes indigenous Americans who were a part of the Six Nations of the Iroquois Confederacy. Evidence of Native Americans in the Northern Adirondack Park is limited, "all the evidence tends to show, I think, that there was a temporary Indian settlement on the Indian Carry; but there is none to prove that there was one anywhere else." (Donaldson, 1977). It is thought that the Native Americans utilized the Adirondacks especially the northern Adirondacks as hunting and other resources during the more favorable seasons.

Early History

Apollos Smith was born and raised in the rolling hills of Milton, Vermont on August 20, 1825, where he resided until his the age of 16 (Collins, The Biography and Funny Sayings of Paul Smith, 1965; Surprenant, Images of America Paul Smith's Adirondack Hotel and College , 2009). During his childhood he received some formal education, but was never known to be an advocate for it (Collins, The Biography and Funny Sayings of Paul Smith, 1965). For the next four years Paul worked on canal boats throughout the warmer months and was forced to return to logging for his family's lumber and sawmill business in the winters (Surprenant, Images of America Paul Smith's Adirondack Hotel and College , 2009; Collins, The Biography and Funny Sayings of Paul Smith, 1965).

Paul didn't particularly enjoy the family business and at the age of 20 instead of heading back to Vermont after the waterways froze, decided to go west (Surprenant, 2009; Collins, 1965). This was not Paul's first adventure into northern New York and in his previous travels became familiar with the wildlife and terrain (Collins, The Biography and Funny Sayings of Paul Smith, 1965). His pursuit now was of hunting, fishing, and trapping as a means for supplementing the family income (Surprenant, 2009). By 1848 he decided to rent a house near Loon Lake to kick off his guiding business (Collins, The Biography and Funny Sayings of Paul Smith, 1965). His parents came to help in the process and soon Paul purchased land on the North Branch of the Saranac River and began construction of Hunter's Home (Collins, 1965; Surprenant, 2009). In 1952 construction was completed and the doors opened (Collins, The Biography and Funny Sayings of Paul Smith, 1965). For six years this is where Paul ran his guide business out of and created a distinguishable reputation (Collins, 1965; Surprenant, 2009).

Entrepreneurial in spirit as Paul was, another property entered his sites towards the end of the 1850's, a 50 acre plot on the shore of Lower St. Regis Lake (Collins, The Biography and Funny

Sayings of Paul Smith, 1965). It cost \$6.00 an acre and with a loan from Dr. Hezekiah B. Loomis he began construction for the new hotel in 1858.

Life wasn't all business for Paul and during this time period he had met Lydia Helen Martin (Collins, 1965; Surprenant, 2009). They were both wonderful dancers, and it was on the dance floor where their love began (Collins, The Biography and Funny Sayings of Paul Smith, 1965). Lydia was a well educated woman for her time and had studied at the Miss Willard's Seminary in Troy, New York before meeting Paul (Collins, The Biography and Funny Sayings of Paul Smith, 1965). "The story is told that during the winter when he was building at St. Regis Lake, each week-end he traveled the 20 miles on snowshoes to visit Lydia at Franklin Falls" (Collins, The Biography and Funny Sayings of Paul Smith, 1965). They were married soon after in 1959 and went on to have three sons:

The eldest born March 4, 1861 was named Henry B. L. Smith, after Dr. H. B. Loomis. The next son, born June 4, 1862, was named Phelps, after Paul's father, while the youngest, born several years later on August 3, 1871 was named Apollos A. Smith, Jr., who like his father became known as Paul (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

The original hotel was made to specifications by Dr. Loomis to be fit for families, it contained 17 rooms with a large living room (Collins, The Biography and Funny Sayings of Paul Smith, 1965). At this point Paul and Lydia named the hotel the St. Regis Lake House. As in many rural communities there was no municipal water supply. To combat this problem water used to run the hotel was piped from Heron Marsh (where the PSC Visitors Interpretive Center is located), "in the 1850s, Levi Rice built a small sawmill dam on the marsh outlet. The resulting reservoir served as the water supply for the Paul Smith's Hotel until the dam was dismantled in 1920" (Paul Smith's College, 2012). The area surrounding the Paul Smith's Hotel was rich in natural resources and beauty which would see great influxes of people over the following century.

Early on Paul conducted most of the guide work himself, working long hours before the hotel began to expand. Without a doubt he was a people person. This trait is half of what made the hotel successful (Lydia was the other half) (Surprenant, 2009). He embodied this uncanny ability to connect with, entertain, educate, and inspire his guests to keep them coming back to Lower St. Regis Lake (Collins, 1977; Surprenant, 2009)

Many people do not give Lydia Smith the credit she deserves for her role in making the hotel a success (Surprenant, 2009). Lydia not only ran the kitchen, housing, guest needs, but also kept meticulous books and records of the hotel business deals (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

The Civil War (1861-1865) marked the beginning of prosperous times for the hotel (Collins, The Biography and Funny Sayings of Paul Smith, 1965). At this point Paul's reputation and clientele have grown to include several wealthy individuals who were able to buy their way out of the war, all the while living the good life at the St. Regis Lake House (Collins, The Biography and

Funny Sayings of Paul Smith, 1965). It was said that, "the excellent food and fine hunting conditions kept the place so busy that by the end of the war, Paul was able to pay off the mortgage to Dr. Loomis and was \$50,000 to the good" (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

Stage Coach

From the mid to late 1800's stage-coach was the main source of transportation for not only people but mail, medicine, and news (Collins, 1977). Drivers of the stagecoach often faced dangerous road conditions and the position required drivers to remain collected under pressure (Collins, 1977). Roads were narrow, windy, rough, susceptible to extreme rutting and had to take the path of least resistance due to lack of machinery (Collins, 1977). "Passengers used long coats and covered their heads with hats and veils to protect themselves from the elements and the inevitable dust when the season was dry" (Collins, 1977). Below are three stories to help describe the usage of the stage coaches:

Fast Horses

"Some of the horses he took delight in driving were the Robin horse, the chestnut trotters, the Dart mare and the little black ponies, Ralph and Harry, and no better, kinder or prettier team than they ever travelled the roads. A long time ago Paul thought he would see how fast time he could make from the Point of Rocks Station near Ausable Forks up to his place with this team. He had a friend with him, one of his guests. The blacks were attached to a light rig and needed no urging. Paul gave them a free rein... I have forgotten the time he made, but he broke the record and set a pace that never has been equaled. The little blacks were pretty well warmed up when they reached home, and when Mrs. Smith heard of it she delivered a free lecture for Paul's benefit." (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

George Meserve:

George was one of the most famous stage coach drivers of the Paul Smith's Hotel (Collins, 1977). Very much like Paul, he had a distinctly odd character but love for horses and entertaining a crowd.

"One of his tricks was to let the horses take it real easy for several miles back from a scheduled stop so that he could make a final burst of speed as he would pull up to the hotel. He had a pair of white buckskin gloves that he would don for this final burst of speed. Sometimes he would also announce his arrival with a thundering blast on the coach horn."

"The story goes that the famous showman, P.T. Barnum, suggested to Paul Smith that he acquire six matched white horses for his stage line to use on the last part of his run from Plattsburgh. Paul liked the idea and was

delighted with the results. It was a most impressive sight to see the newly painted and varnished coach draw up to the hotel with those six white horses. George Meserve also liked the show he made and was always ready to add some little touches of his own.”

Electric Rail Car:

“The story goes that when the first train came through the area it made a stop for Paul Smith’s at a station now known as Gabriels. Here guests were met on the morning train by a coach drawn by six blacks and in the evening by six white horses. Each drip brought the guests past the hotel gardens (near the Episcopal Church) so that they might see for themselves the fresh vegetables that would be served to them later in the dining room.” (Collins, 1965)

Expansion

Paul Smith became the icon of the Paul Smith’s Hotel. He was the go to guy who entertained guests on the porches, guided hunts and hikes, attended to the aesthetic needs of the guests (Surprenant, 2009). Many guests returned to the hotel each season was because of their adoration of “Uncle Paul” and love for the all the Adirondacks had to offer (Collins, The Biography and Funny Sayings of Paul Smith, 1965; Surprenant, Images of America Paul Smith's Adirondack Hotel and College , 2009). And it was during this point in the hotel’s growth that Paul and Lydia began to transition to more managerial roles (Surprenant, 2009). They functioned as a team, but Paul primarily worked in the area of guest services and Lydia took over operations (Surprenant, 2009).

After the Civil War and approaching the 1880’s the Paul and Lydia began purchasing land. An attest to Lydia’s skills, “in 1887 she purchased 10,000 acres of land around the St. Regis chain of lakes. In 1880, 4,000 acres more were added, and \$20,000 was paid for an additional 13,000 in 1891. She anticipated that the wealthy visitors to the hotel would be interested in owning their own waterfront lots in the mountains. She was correct...” (Surprenant, 2009). In all Lydia and Paul had purchased, “more than 30,000 acres including ten lakes, the waters and shores of which he owned entirely” (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

Coupled with the beginning of a rapid expansion was tragedy. Both Henry B. L. Smith and Lydia passed away that year (Collins, 1965; Surprenant, 2009). This left the hotel operations to be run by Paul and Phelps (Surprenant, 2009). Through the 1890’s and into the turn of the century the Paul Smith’s Hotel became one of the most extravagant resorts in the Adirondacks (Collins, The Biography and Funny Sayings of Paul Smith, 1965). Some of the features of the hotel included:

A new store was built, as were several shop facilities, two dormitories for the help, a stable for 60 horses, a four story warehouse, a boiler house, launch house, laundry, woodsheds, saw mill, planning mill, and an office building with winter quarters overhead for the family. A beautiful casino

building was constructed on the lake shore with a stock exchange office and direct wire to the New York Exchange, bowling alley, pool room, grill room and kitchen. There were sleeping rooms on the third floor and boat slips on the ground floor level (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

In 1905 Paul and Phelps created the Paul Smith's Electric Light and Power Company that would end up supplying power to Bloomingdale, Paul Smith's, and Saranac Lake (Collins, 1965; Surprenant, 2009). To do this they purchased Franklin Falls to establish a power plant. Soon after they purchased the water power rights to Union Falls and began purchasing the land in between that the dam would have flooded (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

Without hesitation in 1906 Paul and Phelps build a seven mile railroad from Paul Smiths to Lake Clear. This railroad was extremely unique in that "It was the first and only electric railroad ever constructed in the Adirondacks" (Collins, The Biography and Funny Sayings of Paul Smith, 1965). Now any visitors to the hotel could enjoy the last stretch before the hotel in state of the art comfort in a still rural part of New York.

The Paul Smith's Hotel was one of a kind. Over the years it had innumerable wealthy and prestigious guests, "Presidents Grover Cleveland, Harrison, Teddy Roosevelt, Calvin Coolidge, as well as P.T. Barnum, E. H. Harriman of railroad fame and many others from every walk of life. Many of the cottages carry the names of the early occupants: Loomis, Morgan, McAlpin, Kellogg and others are names well known to everyone" (Collins, The Biography and Funny Sayings of Paul Smith, 1965).

Apollos Smith passed away in 1912 (Collins, 1965; Surprenant, 2009). He lived to be 87 years old and through that life was able to build a legacy that lives on today. After the death the hotel was successful for another decade, but the 20's brought hardships with changes in society and the stock market crash (Surprenant, 2009). What lead to the ultimate closing of the resort was a fire that burned the main hotel along with several other buildings on the property (Surprenant, 2009). Phelps passed away in 1937 before stock market rebounded enough to be able to rebuild (Surprenant, 2009).

His lifetime spanned the long transition from oxen to automobile, from corduroy to macadam, from hardship to luxury. He hewed his fortune and his fame out of primeval wilderness and he compassed the former without tarnishing the latter. He lived and died respected and loved by young and old, rich and poor alike. In the early days of his hotel his name is said to have been more frequently printed and more frequently spoken than any other in the state. I have heard it fall from the lips of high and low for many years, but I have never heard it coupled with malice or reproach (Donaldson, 1977).

Paul Smith's College of Arts and Sciences

In his last will and testament Phelps left his estate to be transformed into an institution of higher learning to be known as Paul Smith's College in honor of Apollos Smith (Collins, The Biography and Funny Sayings of Paul Smith, 1965; Surprenant, Images of America Paul Smith's Adirondack Hotel and College , 2009). World War II was around the corner after Phelps's death and 1946 was the first class of Paul Smith's College and at the time the school was graduating students with associates degrees (Collins, 1965).

Paul Smiths, NY Natural History

The Adirondack Park is located in northern New York extending through St. Lawrence, Franklin, Clinton, Essex, Warren, Saratoga, Fulton, Herkimer, Oneida, Lewis and Hamilton counties. The Adirondacks are characterized by the High Peaks and vast expanses of "wilderness". It has been a place for recreation, refuge, adventure, challenge, and wonderment for countless individuals over the past several centuries. "The Adirondack Park is located within a day's drive of approximately 30 percent of the North American human population and represents a major recreational resource" (SUNY ESF, 2015 a).

The Adirondacks were a frontier in the early and mid 1800's. As access became easier into these seemingly wild lands resource exploitation ensued. This idea of a frontier lead to the exploitation of resources in the 1870's to 1890's such as White Pine and Hemlock (SUNY ESF, 2015 a). Clear-cutting and overharvesting of game species are a few examples of such exploitation of resources. Such actions is what made an organization like Adirondack Park Agency (APA) necessary at the time.

The park is unique in that people own land and live within the boundaries of the park. The distribution privately owned/publically owned property is roughly 50/50. Though there are regulations set forth by the APA that determine how people interact with and inside the park.

Despite degradation that occurred the 1800's the Adirondack Park has made an amazing rebound. Today it is still enjoyed in many of the same was recreationally as it was.

Geology

The Adirondacks are distinguished by the 46 High Peaks. The Adirondack mountains formed roughly five million years ago, but the rocks that it consists of are dated to one billion years ago (Adirondack Park Agency, 2015). The mountains of the Adirondacks are unique in that they formed as a dome rather than a long range (Adirondack Park Agency, 2015). These mountains extend 160 miles in width and one mile high (Adirondack Park Agency, 2015). The highly diverse topography has created habitat for a diverse array of organisms.

How the Adirondacks look today was greatly influenced by the formation of continental and alpine glaciers roughly 250,000 years ago (Adirondack Park Agency, 2015). A glacier by definition is, "an extended mass of ice formed from snow falling and accumulating over the years and moving very slowly, either descending from high mountains, as in valley glaciers, or moving outward from centers of accumulation, as in continental glaciers" (Dictionary.com,

2015). These glaciers were made possible by a drop in global temperatures by several degrees allowing for summer snow accumulation near the poles (Adirondack Park Agency, 2015).

As these glaciers compressed they began to move southward into the Adirondack park under immense pressure (Adirondack Park Agency, 2015). As the glaciers moved they scrapped the soil and rocks off of the surface dragging the debris as it moved, scouring the landscape (Adirondack Park Agency, 2015; Bennett & Glasser, 2009). Around 10,000 years ago the glacier retreated dropping iceberg size ice chunks onto the land surface (Adirondack Park Agency, 2015). These massive portions of ice would melt creating kettle holes and ponds (Adirondack Park Agency, 2015; Bennett & Glasser, 2009). A majority of the small ponds and wetlands in the Adirondacks were formed from kettle ponds (Adirondack Park Agency, 2015).

Glaciers also deposited till and outwash. Glacial till is the deposition of debris (boulders, stones, sand, etc) from a glacier onto a land surface that has not been transported by melted water (Adirondack Park Agency, 2015; Brady & Weil, 2010). Often these debris are angular in structure (Adirondack Park Agency, 2015; Brady & Weil, 2010). Glacial outwash is the deposition of debris (boulders, stones, sand, etc.) through meltwater streams which deposited the heavier debris first and the lighter debris farther downstream (Adirondack Park Agency, 2015; Brady & Weil, 2010). The direction of these streams would change often creating layered deposition especially in the lower elevations (Adirondack Park Agency, 2015).

Today you can see the effects of the glaciers as you walk through the forests and see randomly deposited boulders the size of a bus, or when you dig a pit in the ground and inspect the soil horizons, or when you hike a peak and examine the scarification.

Lake Ecosystems

The Adirondacks are characterized by their extensive lake and river systems. There are roughly 30,000 miles of rivers and streams as well as around 3,000 lakes and ponds (Adirondack Regional Tourism Council , 2015). These waterways are central ecosystems to the park. Lower St. Regis Lake where PSC is located has an area of 2.24 square miles (Kelting & Laxon, 2014). It has experienced significant use throughout the past two centuries from a damn, to tourism, to pollution of phosphorous. The Adirondack Watershed Institute has been monitoring the lake for the past 13 years (Kelting & Laxon, 2014).

Forest Ecosystems

The Adirondack Park has varying forested ecosystems ranging from northern hardwoods to alpine communities. Ecosystems in the Adirondacks are unique in that they function as a transition zone between eastern deciduous and boreal ecosystems (SUNY ESF, 2015 a).

Alpine

The alpine zone is a non-forested ecosystem prominently dominated by exposed rock surfaces with lichens and mosses, more specifically some species in the Adirondacks include alpine

bilberry, Lapland rosebay, alpine holygrass, etc (SUNY ESF, 2015 b). This type of ecosystem is only found on 11 of the Adirondack high peaks accounting for only 85 acres (SUNY ESF, 2015 b).

Mountain-Conifer

This forest ecosystem is usually found on steep slopes of poor soils between elevations of 2800-3000 feet (SUNY ESF, 2015 b). It is dominated by coniferous species such as black spruce, balsam fir, and red spruce though this does not exclude all hardwoods such as paper-birch, yellow birch, and American mountain-ash (SUNY ESF, 2015 b). The understory is variable in composition ranging from patchy exposed rock to lichens and mosses to partially decomposed leaf/needle litter (SUNY ESF, 2015 b). In these high elevations in the Adirondacks some herbaceous plants persist such as, “wood sorrel, bunchberry, clintonia, and spinulose woodfern” (SUNY ESF, 2015 b).

Hardwood-Conifer

Below the mountain-conifer range are the more hardwood-conifer stands. The elevation range is between 2500-2800 ft. (SUNY ESF, 2015 b). Dominant species are red spruce, eastern hemlock, sugar maple, yellow birch, and American beech (SUNY ESF, 2015 b). These sites differ from mixed wood stands in this area because of few red maples (SUNY ESF, 2015 b). It is common for there to be outcrops and rock edges with shallower soils (SUNY ESF, 2015 b).

Northern Hardwoods

The Northern Hardwood forests take on a variety of compositions and structures (National Wildlife Federation, 2015; SUNY ESF, 2015 b). These ecosystems can range from hardwoods to boreal to a mixture in between (National Wildlife Federation, 2015). In the Adirondacks northern hardwoods occur roughly up to 2,500 ft in elevation (SUNY ESF, 2015 b). Common species include sugar maple, beech, yellow birch, red spruce, white pine, ash, black cherry, red maple, eastern hemlock and more (National Wildlife Federation, 2015; SUNY ESF, 2015 b). Understory vegetation is usually characterized by shade tolerant species and ground cover such as club mosses, ferns, and other herbaceous plants (SUNY ESF, 2015 b). These ecosystems support a variety of wildlife including moose, white tail deer, black bear, pine marten, red squirrels, and the [bald eagle](#) just to name a few (SUNY ESF, 2015 b; National Wildlife Federation, 2015).

Lowland Conifer

Lowland conifer stands are usually found next to lakes, wetlands, or streams in areas that are inconsistently drained (SUNY ESF, 2015 b). Stands are usually even aged and dominated by balsam fir and red spruce with some white pine and paper birch (SUNY ESF, 2015 b). Much different from the northern hardwoods in that the understory is usually coated in needles but lacks vegetation. Understory vegetation can include sphagnum mosses and some shade tolerant seedlings (SUNY ESF, 2015 b).

Wetland ecosystems

Wetlands are a defining ecosystem in the Adirondack Park. A wetland is defined as a landscape area where the water has accumulated to play a dominant role in determining the soil development, vegetation composition, and animal communities (Cowardin, Carter, Golet, &

LaRoe, 1979; Adirondack Park Agency, 2015). There are three basic types of wetlands marshes, bogs, and swamps which can be characterized by their vegetation structure and the depth, duration, and frequency of water levels (Adirondack Park Agency, 2015). Wetlands transitional areas between aquatic and terrestrial areas (Cowardin, Carter, Golet, & LaRoe, 1979). The various types of wetlands do not exist independently and often are a part of a larger complex in which their extents overlap (Adirondack Park Agency, 2015). According to the Adirondack Park Agency (2015) 14% of the Adirondack Park land surface is in the form of wetlands.

Wetlands are extremely valuable to natural processes, organisms, and human settlements. For one thing wetlands act as water flow moderators which can slow down the force of water moving across landscapes ultimately reducing erosion and flash flooding (Adirondack Park Agency, 2015; Environmental Protection Agency , 2013). In addition to slowing down the water flow wetlands can purify the water as it infiltrates through the soils (Adirondack Park Agency, 2015; Environmental Protection Agency , 2013). Wetlands are diverse ecosystems that provide a variety of Adirondack organisms habitat (Adirondack Park Agency, 2015; Environmental Protection Agency , 2013).

Marshes

Marshes are the wettest of the various wetland types in the Adirondack Park ranging in depth from a few inches to six or more feet (Adirondack Park Agency, 2015). They are characterized by such dominant vegetation as sedges, cattails, lily pads, and other herbaceous plants (Environmental Protection Agency , 2013; Paul Smith's College, 2012). These ecosystems are highly productive (Environmental Protection Agency , 2013; Adirondack Park Agency, 2015; Paul Smith's College, 2012) and according to the Environmental Protection Agency (2013), "marshes sustain a diversity of life that is way out of proportion with its size."

Marshes provide excellent habitat for a variety of organisms. Small mammals such as muskrats, otters, and beavers are commonly found in non-tidal marshes (Environmental Protection Agency , 2013; Paul Smith's College, 2012). Birds are also commonly found in marsh ecosystems, types scene in Paul Smiths, New York include but are not limited to Great Blue Herons, a variety of ducks (Ring-necked Duck, American Black Duck, Common Merganser, Wood Duck, and Mallard), Red-winged Blackbirds, Swamp Sparrows, American Bittern, Common Yellowthroat, and Black-capped Chickadee (Environmental Protection Agency , 2013; Paul Smith's College, 2012).

Bogs

Bogs are distinct for the other wetland types in that the water levels in bogs rely on precipitation rather than on groundwater, run-off, or streams (Adirondack Park Agency, 2015; Environmental Protection Agency , 2013). Bogs tend to be low in nutrients and receive a majority of their inputs from windblown nutrients (Adirondack Park Agency, 2015; Environmental Protection Agency , 2013). Characterized by Sphagnum moss as a dominant vegetation bogs are easier identify (Adirondack Park Agency, 2015; Environmental Protection Agency , 2013). Bogs also are highly acidic due in part to the thick mat of sphagnum mosses; such environments are not favorable for decomposers and sphagnum mosses accumulate from the bottom up with other partially decomposed bog plants such as leatherleaf, bog laurel, cranberry, and Labrador tea (Adirondack Park Agency, 2015; Environmental Protection Agency , 2013). Growing conditions do change over succession and eventually bogs can give way to

tamaracks and black spruce and eventually to a forest of spruce and fir (Adirondack Park Agency, 2015).

Swamps

Swamps are wetland areas that are dominated by woody vegetation (Adirondack Park Agency, 2015; Environmental Protection Agency, 2013). Soils are usually saturated and flooding may occur but water levels are usually only several inches deep (Adirondack Park Agency, 2015). Swamps can either be wooded or shrub swamps. The shrub swamps are often located along river banks, floodplains, and poorly drained lowlands (Adirondack Park Agency, 2015). Such areas do not have the environmental conditions suited to mature trees (Adirondack Park Agency, 2015).

Wooded swamps characteristically contain mature, water tolerant tree species of either coniferous or deciduous varieties (Adirondack Park Agency, 2015; Paul Smith's College, 2012). Near Paul Smiths, New York the wooded swamps are primarily composed of, "conifers such as balsam fir, black spruce, tamarack, and white cedar" (Adirondack Park Agency, 2015). Other vegetation found in swamps near Paul Smiths, New York include Common Wood Sorrel, Goldthread, as well as ferns and mosses (Paul Smith's College, 2012). Other organisms found in swamps near Paul Smiths, New York include birds such as the Golden-crowned Kinglet, Winter Wren, and Nashville Warbler (Paul Smith's College, 2012).

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