PARADISE CREEK NATURE PARK

Generating Interactive Signage

Global Sustainability, Spring 2013 Prof. Phoebe Crisman Workshop Leader: Rachel Stevens Team Members: Paige McDermott, Amy Syvrud, Jonathan Sheppard, Jennifer Bost, Heather Quante

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ABSTRACT

Environmental degradation poses an increasingly large threat to the future of our communities on both the local, regional and global scales. Our world community cannot continue to consume resources in current patterns or we will deplete our supply of natural resources faster than the replenishment rate. The buzz-word 'sustainability' emerged as a result of "significant concerns about the unintended social, environmental, and economic consequences of rapid population growth, economic growth and consumption of our natural resources." Sustainability suggests that everything we need to survive depends on our natural environment, and thus we must develop a method to exist in harmony with nature so that communities today and in the future can thrive (EPA). While there is a growing movement supporting sustainable initiatives at the individual and government levels, education programs are necessary to serve as a method to continue to spread the importance of creating sustainable practices.

Environmental education programs expose children to the idea of sustainability at a young impressionable age. Today many children grow up in environments where they have minimal meaningful opportunities to connect with the natural world because their activities isolate them from nature. Video games, TV, most extracurricular activities, and intense homework loads prevent children from developing a relationship with nature. However, cultivating this relationship with nature through environmental education has proven to: increase children's awareness about environmental issues, nurture a sense of appreciation and creativity towards nature, expand their intellectual development, cultivate them into adults with a dedication to environmental stewardship and help them better understand the connection between all living things (Mitchell). The Paradise Creek Nature Park (PCNP) seeks to provide children in the Portsmouth and Virginia Beach areas with access to a sustainable nature park where they can learn about environmental issues, cultivate an individual relationship with nature, and develop personal sustainable habits and goals.

Paradise Creek Nature Park presents an interesting dynamic where the sustainable nature park is located within industrial Portsmouth, Virginia. When our team set goals we decided that we wanted to focus on interpreting signage for the park in a creative way. The park sits on just 40 acres, and we did not want to overwhelm the park with typical signs and take away from the natural beauty. PCNP undertook a unique initiative to restore this portion of the Elizabeth River into a healthy urban river and we wanted our signs to reflect this unique nature of the park. Robin Dunbar, our point of contact from PCNP expressed a desire for interactive signs targeted towards children for the park. We wanted to work with the environment, and her vision, to create signs that coincided with the curriculum being planned by other workshops. These signs would also promote the environmental stewardship programs that PCNP hopes to extend to the surrounding communities.

Schools in the area are currently in the process of integrating environmental education into their curriculum, and our community partner mentioned that many will begin to work with the park as part of this initiative. Our research also indicates that a low socioeconomic neighborhood is located directly across the street from this park. Our group felt this park could provide a real asset to the neighborhood and offer a positive outlet for the children that builds community. Thus we wanted our signs to create a stimulating atmosphere that would allow children the ability to constructively interact with the park in different ways. We felt that creating an atmosphere where visitors leave with a feeling of responsibility towards the park, and the larger environment, would help ensure that the park becomes incorporated into the community in a positive way.

As a team we decided to each individually collect examples of interesting signage from other venues to create a portfolio to present to PCNP with potential options of how to sign the park in an innovative way. Over the course of the semester PCNP invested in signage for areas of the park, which left our group confused as to how to proceed. After email correspondence with Robin (see Appendix 1), we decided to proceed with creating ideas for interactive signage while leaving content relatively undecided so that PCNP could apply the ideas where they still needed signs in the future.

Ultimately we collected fifteen different signage options from internet research, and worked to create four we thought would be best suited to the requests of PCNP and also those which would be the most feasible to implement at this time. We have explained these four options: a backpack explorer program, natural rubbing plates, interactive species signage, and an advertising campaign in detail below. We have also included our other precedent research including bright colored memory signs, textural signs, illustrated informational and directional signs, and a 3-dimensional donor sign in the following appendices. We worked in conjunction with the Family Visitor Planning workshop and the Stewardship workshop to design signage options that would flow through different aspects of the park.

In order to measure, assess, and document our work, we posted ideas we encountered on a shared Google document and included an analysis of the sign using a specific analysis template we designed for this purpose. Our method of analysis consisted of four parts. The first part was just a description of the sign or design. The second section was the method in which the sign was utilized. The third part was evaluating the appropriate target audience of each design, which could either consist of children, teens, adults, or families in general. The last part of the analysis was how the sign could be applied to the park.

INTRODUCTION

As part of the Paradise Creek Nature Park workshop within the Global Sustainability class at the University of Virginia, our project primarily addresses the environmental and social aspects of sustainability on a localized level. The Elizabeth River Project, established in 1993, is a non-profit environmental organization that works to make the Elizabeth River swimmable and fishable again while also improving community awareness about environmental degradation in the area. The Paradise Creek Nature Park is operated by the city of Portsmouth, where constituents have excitedly welcomed the park. The park opened in December 2012 and intends to add educational programs and facilities for K-12 school programs and family visits in the near future. The Elizabeth River Project seeks to foster a love for nature in children rather than encourage the fear of ecological deterioration that is often taught in school systems. The education facilities at PCNP will provide local public schools, youth organizations, and families with opportunities to enrich children's academic experiences. The Elizabeth River Project already has a successful education program with the Learning Barge, and ideas can be adapted from this program to also fit with the focus of the Paradise Creek Nature Park.

Our specific project focuses on creating signage to actively engage visitors in the history, ecology and sustainability of the park. Robin Dunbar, our point of contact at Paradise Creek expressed a desire for innovative ideas that draw on successful signage at other parks that include creative aspects. The park is not very large in size (40 acres), but there are numerous aspects to the park including a restored wetland, forested areas, and anticipated innovative playground and education facility. In addition to these park features, PCNP is surrounded by industrialized Portsmouth and wishes to include various aspects of this industrial history that can be seen from within the park. Our group designed park signage that PCNP could easily incorporate into the existing park features so that the signs did not overwhelm the relatively small size of the park but still provide information. See appendix 2 for a sample park map with proposed sign locations.

We expect to create signs for the purposes of directing, informing, and engaging visitors, among others. Our signs should incorporate the industrial history of the Portsmouth area and teach about the ecology of the park, as well as inform visitors about how to create sustainable habits in their own lives and serve as environmental stewards. We see our project overlapping with many others in the workshop. Signage designs can be implemented in conjunction with the innovative playground and environmental stewardship group proposals. Sign ideas may also overlap with the K-12 educational program and family visitor activity proposal because these stakeholders will be the ones interacting with our signage.

Targeting children as an audience about ways to live sustainably and appreciate nature is important because they are still impressionable. Through individual experiences we have come to the conclusion that children are receptive to new ideas, and generally interested in trying to improve humanity. Learning to live with reduced consumption and a greater respect for our natural environment is not easy because these lifestyles are dictated by our consumerist culture. However children, the leaders of the next generation, will lead the movement towards a more sustainable culture; thus we must target them with environmental education opportunities now. If we target education programs towards these children at young ages and continue to incorporate sustainable practices into education programs at every grade level, rather than just once or twice, we will create a much more environmentally and socially conscious generation. Engaging signage with pertinent information can play a pivotal role in shaping a child's educational experience at Paradise Creek Nature Park, and hopefully will influence their opinions about nature and their responsibility to create a sustainable lifestyle both today and for the future.

DESIGN AND IMPLEMENTATION

Chalkboard entrance creates visual interest and encourages visitor participation

An eye-catching entrance sign is very important to creating a welcoming and memorable experience at PCNP. We propose creating an interactive and literally green sign. This sign will serve as a visual element when visitors first arrive, but will also become an engaging element of the park journey after they complete a visit. Visitors can draw or write thoughts on the sign that correspond with the current "growing moss title" above the chalkboard. This encourages visitors to synthesize the information they learned within the park, and commit to developing a more sustainable habits in their personal lives.

To build the sign PCNP could use recycled materials, such as old bricks or wood, to construct a wall at the entrance of the park. The chalkboard stripe can easily be added, and repainted as needed. The sign title is composed of grown moss. With a simple mixture of moss, water, and buttermilk, one can make a "growing paint." To apply, all that is needed is a paintbrush, water and time before the title starts to appear. This moss title creates living graffiti that embodies the creative sustainability that PCNP strives to create. However,

the climate in Portsmouth, VA may not be suitable for growing moss year-round and thus a more permanent title element may need to be added to the



Figure 1: Virtual Simulation of chalkboard sign to engage visitors in the material learned within the park.

chalkboard to maintain the engaging element for visitors. In light of this challenge, we still recommend that PCNP look to incorporate native plant species into the sign because it creates a perceived unity between nature and man-made elements of the park.

Assuming the materials can be easily located, this project is also relatively low cost. Recycled bricks or wood left from previous construction projects are ideal; however, new bricks are low cost and range in price from location to location. Chalkboard paint is also relatively low cost ranging from ten to fifteen dollars for a bucket and it can easily be repainted as time and weather wear it away. The moss mixture may only cost about \$3.50 for the gallon of buttermilk and water, while moss is plentiful in nature. (See 3 for simulation).

Backpack ranger program reduces need for physical signs and incentivizes children to learn

The educational director of PCNP mentioned the idea of "mobile signage" multiple times; this was also stressed during our workshop critiques. Paradise Creek Nature Park is sponsored by the Elizabeth River Project, which also operates the Learning Barge. Both the Learning Barge and Paradise Creek Nature Park intend to expose both children and adults to the importance of balancing industrialized human activities and the preservation of the natural estuarine environment of the Elizabeth River. The Learning Barge has an established program that serves over 1.6 million people and includes interactive and hands-on exhibits about the ecology, human impact on the ecology, restoration efforts and environmental stewardship. Programs cater to regular classroom visitors as well as individual trips. One creative example of "signage" from the Learning Barge was a deck of cards with pictures and information about various sustainable aspects of the barge. Visitors were encouraged to match the picture with the part of the barge and read the description to understand more about its function or impact in the environment.

Mobile signage carries over well in Paradise Creek Nature Park because of the relatively small size of the park. By creating "signs" that could move around the park with the visitors, the park minimizes the distraction and crowding that comes with a barrage of informational signs throughout the park. Rather than copy the deck of cards from the Learning Barge, we looked to find another type of mobile signage. The Shenandoah National Park currently runs a Junior Ranger program that utilizes a backpack learning program to educate about the park. The park ranger program rents backpacks to family visitors that include magnifying glasses, trail guides, five field guides to enhance understanding of various plant and animal species, and an interactive educational booklet for the child to fill out. These backpacks can be rented daily, but the booklets are available for free. While we think the backpacks would be a neat program to be implemented in conjunction with the K-12 Educational Curriculum Planning group, the interactive booklet could be implemented individually as well. Appendix 4 provides more in-depth visual examples from the Shenandoah ranger booklet program that could be adapted to fit the goals of PCNP.



Figure 2 Sample pages from Shenandoah National Park Ranger booklet showing species comparison and plant identification activities.

These booklets can be filled with information about different parts of the park, ranging from the forested area to the wetlands, including both plant and animal species. In addition to information, the activities within the booklet should teach children to think about environmental stewardship and how they can incorporate environmentally friendly practices into their everyday lives. Similar to the Shenandoah program, PCNP could provide incentives for children to complete these programs with stickers and badges for different completed activities. In

this way, scout groups would attend the park rather than just families and classroom groups.

This type of signage allows for flexibility on the part of PCNP and visitors. By providing most educational information in a booklet, children are encouraged to pick areas most interesting to them; instead of just reading and moving on, they are required to process and incorporate the knowledge they learn through the

activities. In addition, this booklet serves as a way to connect the other types of signage we recommend for the park, creating a cohesive and clear journey for visitors to PCNP. This is in line with PCNP and the Elizabeth River Project's desire to make students more aware of their environmental impact and how they can improve their relationship with the environment. This type of signage can be implemented for relatively low cost depending on the quality of printing desired, and is also flexible as the information be updated regularly as the park matures. Updating a paper booklet is much cheaper than redesigning physical signs throughout the park.

A variety of other interactive signage is included in this paper that can be incorporated within the book - primarily the rubbing stations, footprint tracks, and chalkboard feature. This type of integrative signage is important because it asks children to synthesize and apply everything learned at the park.

Using an online printing company to generate a rough budget for this project, we propose the total cost to print 250 8-page booklets sized 5.5x8.5 to cost around \$500.00. This means that each booklet costs only \$2, which is relatively low for the benefit received from the children. The revenues received from selling promotional material about the park could potentially cover these costs. There would be additional cost if the park were to provide stickers and patches for different level of activity completion.



Rubbing plates engage children with native plant species

Figure 3: Example of relief rubbings that can be purchased online. For more information on purchase see Appendix 4.

When attempting to teach children about nature and their environment, one of the most effective wavs to engage them is to provide something tangible to interact with. In this vein, wildlife found in the park will be more relevant to visiting children if they can create their own relief rubbings of the wildlife. Relief rubbings are plates with raised designs that can be covered in paper and rubbed with a crayon to produce a picture. Figure 3 shows an example of relief rubbing plates. Rubbing plates could be scattered on signage throughout the park and depict wetland grasses and plants,

leaves from trees in the forest, and footprints and figures of animals and birds that are found in the park. Children would then be tasked with finding all of the rubbing plates and using crayons to collect each design on paper. For example, they might collect rubbings of an osprey, a box turtle, a bald eagle, marsh grass, and an oak leaf. Children enjoy coloring and creation, as well as scavenger hunts and collecting, so this would provide motivation for them to visit all of the signs in the park and learn about all of the wildlife. Additionally, at the end of their visit they can take home colorful rubbings of everything they learned about, which would serve as a reminder of what they learned and the fun they had at the park. They can also share their rubbings with others, which will inspire more people to come to the park and create their own pictures.

Besides provoking interest in children, the rubbing plates will be informational for both children and adults. Providing labeled visuals of native plants, birds, animals, and footprints will help visitors identify any wildlife they might see at the park, and the rubbings they take home can be used as a reference guide on future visits.

To implement the nature relief rubbings, raised rubber plates with the desired designs would need to be

purchased and attached to signs throughout the park. The plates can be purchased at reasonable prices from many companies; for example, a set of leaves from 16 species of tree can be purchased for \$10. The bulk of the budget in the implementation of this design would be in attaching the rubbing plates to existing or future posts or other signage, as well as providing paper, crayons, and a list of the rubbing plates to children upon entrance to the park. If we estimate that a cubic yard of concrete costs \$150, a 4' by 60' length pathway stamped with the footprints of one animal would require a budget of about \$460. The list of rubbings could be incorporated into the booklet discussed in the backpack ranger program. See appendix 5 for rubbing plate visuals and sources.

Interactive species signage connects visiting children with surrounding wildlife

Fostering interaction between children and the surrounding environment and informing the local population about the species that surround them creates a significant bond between the two. Most adults have already formulated opinions about our world, and developed habits they are unwilling to change quickly because they are ingrained in their lifestyle. Although parents have significant influence over their children's development of a worldview, kids are still more malleable than adults when it comes to believing in the importance of environmental sustainability. In some situations children are even able to encourage their parents to change family habits and embody more sustainable practices. Therefore, signage that engages young people is important for two reasons: the function of any park should be to make nature accessible for young people, and the likelihood of sustainability will increase if children develop a connection with the environment.

One of the best ways to engage children in the species surrounding them is to create signs in the shape and style of those species. In particular, local crustaceans provide a simple way to do this. A sign could be on the inside of a large model of a local crustacean which could open with a hinge, allowing children to discover facts about local species through their own labor. This would, in turn, foster a positive sense of responsibility for local species in youth population.



Figure 4: Simulation of osprey eggs along wetland path. See appendix 5 for enlarged images of egg content and additional visual simulations of interactive species signage.

Another idea to sustain human-animal interaction is to create signage in the shape of a local animal, with buttons and levers attached to the sign. Pushing a button or pulling a lever would cause a wing to flap or a leg to move, revealing an interesting fact about the critter. Within PCNP this could be done with osprey, a local species that can often be spotted in the wetland area. Osprev eggs could be placed along a path where children proceed from egg to egg to learn various facts and ultimately discover the animal. Figure 4 provides a visual simulation of osprey egg signs in the wetland portion of PCNP. This type of signage could culminate with a model osprey nest that could serve a dual purpose of informational and also part of the incorporative playground.

Another way to provide a tangible, engaging representation of Paradise Creek Nature Park

wildlife is to place animal footprints along concrete paths in the park. The paths could be stamped with the footprints of iconic native species, such as fox, great blue heron, and snowy egret. Appendix 6 includes a graphic simulation of a stamped fox trail path for the wooded area of PCNP. Children could walk along the path in the footsteps of these animals; connecting and identifying with the creatures present in the ecosystem, as well as learning what the prints look like in order to identify any animal tracks found in other areas of the park. Rubber replicas of many bird and animal tracks can be purchased for \$10 each, and would simply need to be stamped into concrete as it is poured. A sign could be placed next to the path or etched directly into the concrete that identifies which species the footprints belong to.

"Advertising" Campaign to raise awareness about park and promote environmental stewardship in surrounding community



Figure 5 Decommissioned crane serves to advertise PCNP by road entrance

Signage can be interpreted in many different ways and an expanded form of signage is advertising. In order for signs to be useful at the park, people need to first be attracted to come to the park. We did a Google-earth search of the park and surrounding areas and found that the entrance was not very well marked or distinguished from the surrounding area. At this point PCNP needs signage that will raise awareness about the existence of the park and attract people to come visit. A piece of a decommissioned industrial crane is available for use at the park. With this, the impacts of industry on the Elizabeth River and Portsmouth area could be demonstrated. This crane is a statement piece, and may not be easily incorporated within the wetland and wooded area of the park, which are primarily dedicated to activities and learning opportunities for visitors. Rather, the crane can be used to create a unique entrance sign placed along the road at the entrance to draw visitors who may be passing by. This incorporates the industrial history of the

area in a way that does not take away from the natural and restored elements visitors should focus on once inside the park. Figure 5 shows a graphic simulation of a "Paradise Creek Nature Park" sign and logo suspended from the neck of a crane.

We also suggest that PCNP create and sell "Paradise Creek Nature Park" t-shirts and visors to capitalize on word of mouth advertising. As people wear this merchandise around their community, more and more people will become aware of the park, increasing visitor rates. The proceeds from these purchases can go toward further development of the park, funding signage and improving the educational programming of the park. Appendix 7 includes basic mock-ups of t-shirts and visors with PCNP logo with pricing options.

CONCLUSION

Throughout the semester, we researched design ideas for park signage. We created a specific template that included questions about precedent, target audience, method for sign implementation, and application for PCNP to make our individual research accessible to everyone in the group. This common template for each idea allowed us to easily assess the different design ideas and choose those most useful in PCNP.

We then collaborated as a group to discuss and gather our most effective and creative ideas from the precedent research. The park already has signs that appeal more to adults, including donor signage and small plaques with information about different species. We decided to focus on signs that mostly appealed

to children, as PCNP currently lacks interactive children's signs. These are the designs included in the body of the report. For these specific examples, each design was customized to the park using original drawings in order to provide a better visual for the PCNP planners.

The rest of the designs are included in the appendices, with the original analysis template included for each. While we do not see these signs as being well suited for PCNP at this time, they are included as a resource for PCNP to review and implement because PCNP has the best understanding of their own needs. Without specific input on sign content, we focused on general artistic aspects. The park can then utilize our designs and include the information they feel is most pertinent within the provided framework. Native flora and fauna were researched and included in some sign designs to give accurate examples of signage ideas relevant to the park.

The future of park signage and design implementation is in the Paradise Creek Nature Park's hands. With our ideas as a base, park management can choose the signage most applicable to their needs and resources. Going forward, our role with the PCNP is to serve as creative stimulation for innovative strategies and designs.

FUTURE WORK

PCNP must first decide what information is still lacking in their signage, then decide how this content should be incorporated into the designs and formats we have suggested. This must take place in a fairly short time frame, so that the most important information is installed in time for the opening of Paradise Creek Nature Park on June 22, 2013.

The children's booklet is a good choice for initial implementation in the short term because printing and distributing these booklets is quick, inexpensive and effective at addressing many of the park's signage goals. They would simultaneously provide information about ecosystems in the park, engage children (an important target demographic), and provide take-home materials, which work as advertising to local residents. In the long term, depending on budget and goals, more permanent installations should be implemented, such as the wildlife footprint sidewalk and moss wall. Though these projects require more time and resources to implement, they will create a real impact on park visitors. We have also included additional signage options from precedent research in Appendix 8 as a reference portfolio for future projects within PCNP.

LESSONS LEARNED AND BARRIERS TO SUCCESS

Any kind of large-scale community project like the Paradise Creek Nature Park will have many barriers to success, both from the perspective of the park as a whole and our signage group in particular. One of the biggest barriers to success at the park level is the local neighborhood. The possibility exists for the park to become a haven for illegal activity after dark; in this situation, the net effect of the park would likely be negative. When combined with the amount of work required to make the park environmentally palatable, the PCNP faces significant challenges due to the natural setting. However, building a park like Paradise Creek in a "rougher" area of town has transformative potential for the community, particularly the youth. Paradise Creek can serve as a community-gathering place, giving community members a common place to connect with each other and the environment. Engaging signage should mesh with the activities, lesson plans and playground designed by other workshops to create a unique environment where children have the potential to learn and constructively explore nature. The park, therefore, can serve as a positive outlet for at risk youth by giving them a cause—environmental stewardship—to personally champion.

The barriers to success our group has faced have been less significant than this overarching challenge for

the park. Differing timelines for our class and PCNP were the biggest challenge. The park officially opens on June 22, and our class officially ends on May 4th. PCNP understandably wanted signage for opening day, but our group was unable to provide ideas for interactive signage far enough in advance to be created for opening day. This miscommunication was not discovered until midway through the semester, when we learned from a classmate's visit that there was already signage in place. Designing new signage at this point was difficult, especially because the PCNP is a small park, and we did not know which kinds of signs had already been created. Without a budget or specific guidance about the desired number and content of signs, it was difficult to definitively suggest signs to PCNP. At this point we contacted our partner, Robin Dunbar; based on her responses, we refocused our project to designing creative signage with minimal content that can be implemented in the future for a wide variety of uses. These signs can be changed around based on what the PCNP needs. Without more direction, we were unable to move away from general signage into specific.

For future projects of this kind, where signage is a major piece of a project, it might make sense to consolidate the entire signage group into other groups. As the in-class brainstorming session showed, many other groups viewed signage as important to their own projects. While a group dedicated to coordinating signage amongst the other groups would be useful, without guidance or a budget we are only left to impose our ideas on the class at large. Our ideas might not fit the goals of individual groups, and redundancies are likely. This is not to lay the blame on PCNP; it just worked out that our deadlines did not align well.

Appendix 1: Email Correspondence with Robin Dunbar from March 19, 2013

Paige McDermott To: rdunbar@elizabethriver.org	March 19, 2013 11:39 AM Hide Details
Cc: Rachel Stevens	Sent Mail
UVA Paradise Creek Nature Park Signage	Continual
Hi Robin,	
My group is working on designing signage for the park, but in pictures from one already considerable signage (entrance, donor, plant identification) in the park	
We were wondering what other types of signs you thought were needed and w Also do you have content information for these signs that we could incorporate How many signs are you looking for in the park? We know it is relatively small signs.	with some of the neat designs we have found?
We have ideas for interactive signs, but we don't know what kind of content you represent the values of the park, and we feel that you would have the best und have any ideas that you would like for us to further explore.	
We look forward to hearing back from you.	
Best,	
 Paige McDermott	
University of Virginia 2015	
	March 21, 2013 8:26 A
io: Paige McDermott	
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Appendix 2: Map of Paradise Creek Nature Park with proposed sign locations

PARADISE CREEK NATURE PARK



Appendix 3: Images of moss and chalkboard combination sign with graphic detailing process to create the mixture.



Appendix 4: Shenandoah National Park "Junior Ranger Program"



Images above display the content of Ranger Backpack and child conducting a field drawing. This backpack includes magnifying glass, binoculars, 5 field guides, historical information packet and the interactive junior ranger booklet to be filled out by the child

Link to PDF Junior Ranger interactive booklet for more sample pages: http://www.nps.gov/shen/forkids/upload/SNP_JrRanger_book.pdf

Booklet Cost Estimate via http://www.uprinting.com/bulk-booklet-printing.html:

Page Size	
5.5" x 8.5"	4
Paper for Inside Pages	
80 lb. Paper Matte	
Cover Paper	
80 lb. Paper Matte	
Pages	
12 pp (Cover = 4, Inside = 8)	
Binding	
Saddle-Stitched	
Binding Placement	
Left Side Binding	
Quantity	
250	
Print Turnaround 👩	
6 Business Days	;
Printing Cost	\$ <mark>5</mark> 45.46
Ship to 23701 (Change)	
4 Day Transit \$ 15.71	*
Discount	- \$ 54.55
Shipping	\$ 15.71
Estimated Total	\$ 506.62

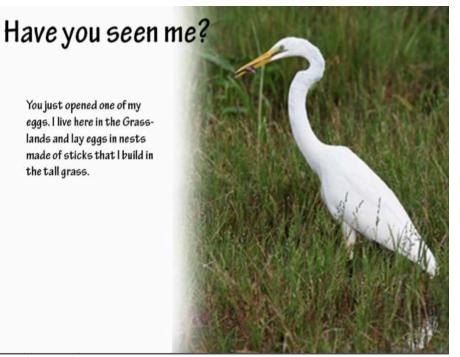
Appendix 5: Rubbing Plates



The above picture shows rubber rubbing plates of various tree leaves (right) as well as the designs that they produce on paper (left). Source: <u>http://www.gardeningwithkids.org/nature-rubbing-plates-set.html</u>

Rubbing plates for animal tracks, birds, trees, insects, and more can be purchased from http://www.acornnaturalists.com/store/Science-and-Nature-Rubbing-Plate-Kits-C704.aspx

Appendix 6: Discovery eggs in wetland area, and footprint tracks along wooded paths



Egg Content 1

You just met our mom. We are pretty new here. We just hatched out of the egg you opened up. Soon we will grow our long feathers until our wings are 55 inches long, just like mom. For now we will just stick to the nest and let her bring us the fish



Egg Content 2



Looks like mom just caught some dinner. YUM! Hike fish, but sometimes we eat snakes or frogs too

Do you Know what kind of bird we are? We are called Great Egrets. A long time ago women used wore our feathers in their hats, but we like our feathers just where they are, don't you?



Egg Content 3



Fox track path simulation within Paradise Creek Nature Park.

Precedent:



This is an example of a footprint path implemented in La Quinta, California using the tracks of native wildlife. Source: <u>http://www.la-quinta.org/Index.aspx?page=231</u>

Models of animal footprints can be purchased from many websites, including <u>http://www.nature-watch.com/%C2%A0-tracks-c-160_195.html?filter_category_id=158</u>

Precedent:



http://www.designer-daily.com/cool-and-creative-guerilla-marketing-campaigns-13471

Appendix 7: Advertising Campaign



T-shirt and visor mock-up from customink.com, that PCNP can use as a sample design for park merchandise.



Using an online t-shirt design website, we got a quick quote on t-shirts that used 3 printing colors (gold, blue, and black for the paradise creek logo). For an order of 50 t-shirts, the cost would come to about \$400.00, which is \$8.00 per t-shirt. The park could then sell the shirts for \$15.00 and make a \$350.00 profit that can go towards furthering park development. The pricing for the visors is similar.

Appendix 8: Additional Signage Precedent Research that was unused in best option section of this proposal

- 1. Making Fun Memories Sign



Source: http://tadcarpenter.com/work/design/ By Tad Carpenter

Description: People like signs that they can create memories with. For example, signs that allow them to pose with their families and friends.

How Can it be Applied in PCNP: We could have a sign that says "I pledge to live more sustainably!" And people could pose in front of it and keep the picture as a keepsake of their times at the park and as a reminder to be more sustainable! It could be put at the entrance/exit of the park where people come and go so that they can snap a family picture together before the kids run off and everyone goes to explore the park.

Target Audience within PCNP: All visitors of the park of every age. Families, teens, children.

2. Texturally Interactive Sign



Where Is this Sign: Mount Rainer National Park, WA Source: http://inkinthebranches.com/2013/01/05/mount-rainier-to-mount-st-helens-2/

Description: Textual representations of objects/species in the park. Or overview of the shape and areas that make up the park.

Method: People can connect with the park through their senses.

How Can it be Applied in PCNP: We could have a 3-D representation of the park with the wetlands and forest so people can see and feel a whole overview of what's going on before actually going in to explore it. Target Audience within PCNP: All visitors to the park.

3. Illustrated Informational Sign



Where: Chula Vista Nature Park, San Diego, CA

Source:

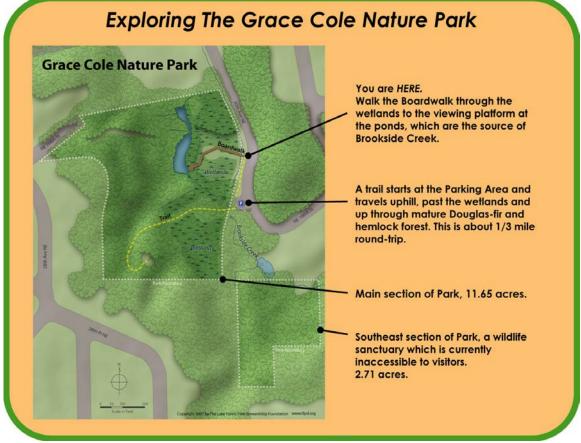
http://www.bcx.org/photos/places/natureparks/chulavista/exhibits/T.Chula_Vista_Nature_Park_20101016_1 03022_BCY_0842.jpg

Description: Descriptions of local wildlife, in words and pictures.

Method: People should be able to see accurate drawings of the local wildlife to help them better connect with the park. Little kids like to learn about small animals.

How it can be applied to PCNP: Descriptions of local wildlife are important, and will improve local engagement with the project.

4. Directional Park Signage



Where: Grace Cole Nature Park, Lake Forest Park, WA Source:

http://www.lfpsf.org/colenaturepark/signs/Resources/MapSign4.jpg

Description: General descriptive sign of the where a person is in the park.

Method: People should have a general overview of the park, and be told where they are occasionally, even though the park isn't that big.

How it can be applied to PCNP: Pretty self-explanatory, we should have at least a few of these signs.

5. Donor Recognition Signage



Where Is this Sign: Behrends

Source: donor-recognition-ideas

Description: I like these signs because they present the information of who donated, but in a way that would more naturally flow with the rest of the park rather than being a boring sign with a list of donors plastered to the inside of a building. This type of donor sign could be outside and a focal point of the park, especially if it is 3-d and built to resemble an actual tree -- it could potentially even double as something for kids to play on if done in a certain way.

How Can it be Applied in PCNP: Robin mentioned the need for donor signage to feature those who helped make PCNP a reality. I think this can be more exciting than just a list on the side of the building. Robin also mentioned the desire to use part of the deconstructed crane in a sign. I think combining the donor signage, a natural element (like the tree design in the images - but maybe 3-d) would better represent the ideas of the park while also tying in an element of the community - where many of the donors are from. The donor names could be etched into the metal leaves and there could be various levels if desired to distinguish donor amounts.

Target Audience within PCNP: all ages could benefit from this type of sign, mainly recognizing those who helped make the park possible.



6. Informational Wetland Sign:

Where Is this Sign: South Los Angeles Wetlands Park, a restored wetland that opened last year

Source: http://www.kcet.org/socal/departures/landofsunshine/la-river/wetlands-opens-in-south-los-angeles.html

Description: These signs are attractive, eye-catching, and colorful while still looking more natural rather than jarring/artificial. They clearly present information on the importance of the created habitats and the type of wildlife that lives there.

How Can it be Applied in PCNP: There could be a separate sign covering each of the types of habitats in the forest and wetlands. Simplified images of the plants and animals found in the habitats (like the marsh plants shown on the sign in the example) could be used by parkgoers to aid in the identification of plants, birds, etc. in the park. Perhaps each habitat sign could have a different color, different plant or animal depicted, and a different children's activity to encourage people to travel around the park to find all of the signs.

Target Audience within PCNP: Children and adults

Additional Sources

- Mitchell, Deborah. "Promote Environmental Education for Children." *Volunteer Guide*. N.p., n.d. Web. 1 May 2013. <www.volunteerguide.org/hours/service-projects/environmental-education >.
- "Sustainability." US Environmental Protection Agency. N.p., n.d. Web. 1 May 2013. <epa.gov/sustainability/basicinfo.htm >.