

Increasing the Number of Conservation Projects Conducted
by Raising Awareness of Conservation Awards

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I am submitting herewith a Dissertation written by Julie M. Delger, entitled "Increasing the Number of Conservation Projects Conducted by Raising Awareness of Conservation Awards". I have examined the final copy of this report for format and content and recommend that it be accepted in partial fulfillment for the Degree of Doctor of Commissioner Science.

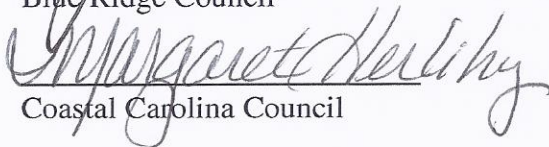


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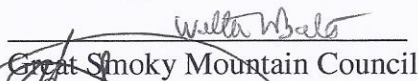
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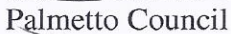
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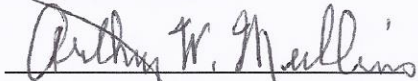
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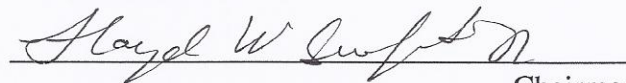


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ABSTRACT

This dissertation explains the need for a more environmentally aware and sensitive populace. The Boy Scouts of America is in a position to lead this change in thinking and acting, to help raise the awareness of the general public regarding good environmental ethics. However, before the Boy Scouts of America can effect changes outside of the organization, the environmental awareness of many within the organization must be elevated to a higher plane.

My interest in this topic stems from my youth. I grew up in Louisiana (the Pelican State, officially, but also known as the Bayou State and Sportsman's Paradise). My father was an avid outdoorsman, and he passed his love of the outdoors on to his children.

Presentations were given at several gatherings of Scouts and Scouters to familiarize them with awards available to them for work in conservation. A neighboring Council also promoted conservation awards and projects. The results of these efforts to raise awareness of conservation awards has resulted in an increase in the number of conservation awards earned in the neighboring council and in Indian Waters Council. The methods used to garner the limited success thus far observed will be continued in future, in an attempt to make conservation second nature in members of local councils of the Boy Scouts of America.

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Introduction

Is there a problem?

The question is, is there a real need to increase our conservation efforts, either locally or nationally? What about internationally? Isn't it enough that I do not litter and that I recycle items at home? I buy energy-efficient appliances and try my best to maximize fuel usage in my car. I encourage recycling and energy efficiency at my workplace. I have tried to correct the voiced opinions of others when they proclaim disdain for environmental concerns. One such sad example was my own sister, who stated that she saw no reason to leave the world in better shape than it was in for her. If I do these things, how much more effort must I expend to encourage or care for our natural world on a local, regional, national, or even on a global level? The earth seems to be getting along despite me, after all... need I worry about its state now or in the near future?

Examples abound of the results of human failure to consider the impact of their activities on the environment. Such lack of consideration of the natural world can lead to devastating consequences for present and future generations of people. The impact on wildlife and plant species, perhaps sadly, is even greater than it is on people. This fact may be considered unfortunate because loss of plant and animal species can decrease food sources available to people, as well as diminishing the beauty and diversity of the earth. Loss of species is devastating in countless ways; once one is gone, there is no recovering it. The loss is

irrevocable, and future generations will never see more than photographs or video of the lost species.

Conservation – “the official care, protection, or management of natural resources.”¹ This definition provides a basic idea of what we need to be about. The natural resources to be cared for, protected, and managed include water (both marine and fresh water), wild places, and animal life. Taking care of these natural resources helps to ensure clean drinking water and adequate food supply for the world’s burgeoning population. It has the additional benefit of increasing the loveliness of the world around us. The definition of resource of most relevance to this discussion is, “something that lies ready for use or that can be drawn upon for use or to take care of a need”.¹ The aforementioned resources must be conserved, or properly managed, if they are to remain ready for use by those who need them.

I grew up in Louisiana, just across the Mississippi River from New Orleans. Louisiana’s state bird is the brown pelican, which was declared endangered in 1970 under the Endangered Species Preservation Act.² This bird almost became extinct in my lifetime, but through conservation efforts it was finally removed from the endangered species list on November 11, 2009.²

I spent several weeks every year with my Father and brother living in a camp on the salt marsh in southern Louisiana. One day my Father and I went fishing. I looked up at the sky, and noticed something I had never seen before. There were little dark spots in the sky, which disappeared after a few seconds, then reappeared. I pointed them out to my Father, and asked about them. He told me that they were brown pelicans; when their backs were facing us, they

looked dark, but when their white undersides faced us they were practically invisible. I distinctly remember my joy at seeing something so new to me, yet formerly so prevalent in my home state that it was our state bird. I hope that individuals in the future are able to rediscover species as I had done that day, and I more fervently hope that they never witness the loss of a species.

My youth in Louisiana heightened my awareness of yet another endangered species there, the American alligator. When I was a child, alligators were endangered, and a large number of them were kept in a fenced-in area along the road to the camps. This area was comprised of marsh and waterways not contiguous with the bayou along which the camps were built, and in which we swam. “First listed as an endangered species in 1967, the American alligator was removed from the endangered species list in 1987 when the Fish and Wildlife Service pronounced the American alligator fully recovered. They are currently classified as a **threatened** species.”³

I remember swimming in the bayou when I was young, worrying about nothing more than water moccasin snakes. When I was a young teenager, maybe in 1978 or 1979, the authorities in Lake Judge Perez (the official name of the town, or collection of camps) heard that the alligators were to be removed from the endangered species list. With no more than a few weeks’ warning, they cut the chain link fence that separated the alligators from the main bayou. After that, my Father sat on the wharf and watched us swim, a revolver at his side in case a gator showed up. We kids (as kids do) thought we were invincible, and I never worried about the gators any more than lying on the wharf and peering underneath it to be sure there was no

alligator right there before I jumped into the water. Knowing that dogs are certainly fair game for gators, however, my dog never swam at the camp again.

Other species which have been considered endangered for most of my life include America's national symbol, the bald eagle, the ivory-billed woodpecker, and the whooping crane. The whooping crane population was estimated to be between 15,000-20,000 birds, until in 1941, only 15 birds remained.⁴ Loss of habitat and hunting were responsible for this dramatic decline in numbers. Now there are estimated to be less than 250 cranes extant.⁵ The bald eagle faced incredible losses due to hunting and DDT, much like the brown pelican to be discussed shortly. The ivory-billed woodpecker was thought to be extinct in the United States for much of the twentieth century, due to habitat loss, primarily; the last reported sighting of one of these birds was in 1944, but new sightings were reported in 2005.⁶

These species were endangered by cumulative acts of negligence or carelessness on the part of humans. In the case of the brown pelican, a combination of excessive hunting (for feathers) and pesticide use (DDT, which accumulated in the fish the pelicans ate and subsequently weakened the shells of their eggs so much that they no longer supported the weight of the enclosed embryo) caused the decimation of the species. In the case of the alligator, it was reckless and unlimited hunting for skins and meat. The basic cause of the dire straits in which each of these species almost expired completely was human inconsideration, or negligence, or disregard, or selfishness. All may have contributed.

One example of a natural disaster compounded by environmental neglect is Haiti. According to one source, intensive logging to increase land available for agriculture has

decreased forest coverage of the land area from 60% to less than 2%.⁷ This lack of forest cover contributed to extensive soil erosion, which further decreased arable land for food production. The loss of land for agriculture and the extreme poverty of the inhabitants led to increased population density, with insufficient available sanitary capabilities.

The net effect of Haitian deforestation is a decrease in sources of food and clean water, and sanitation problems leading to dysentery. The beaches and waterways are polluted with garbage and sewage, further reducing available food through massive fish kills.⁷ These consequences of long-standing environmental problems in Haiti have compounded the devastation incurred by the earthquake of January 12, 2010, and complicated the foreign assistance and recovery efforts in the wake of the natural disaster.⁷

Another example of environmental woe closer to home is the plight of the Miami blue butterfly, a species native to the state of Florida. Once so numerous as to be considered a nuisance by many residents, the butterfly's habitat has been so utterly diminished by human encroachment and hurricanes that it had recently been found only in one state park on a single island in the keys. Now even this last colony may be destroyed, and the species may become extinct because people have released former pet iguanas into the environment. The iguanas eat the leaves on which the butterflies lay their eggs.⁸ Conservationists in Florida hold out small but diminishing hope that the species may yet be rediscovered and saved.

These events are recent occurrences in our hemisphere alone. Many other disasters have occurred globally in a very short time. From January through April of 2010, one source listed 39 natural disasters worldwide, 21 of which were floods with or without landslides.⁹ These events

impact humans most often when problems such as deforestation (as in Haiti) or overcrowding, with resultant encroachment into inappropriate living areas occur. These and many other events indicate to me that our natural world and its inhabitants are not being taken care of. We have, thus far, been very poor stewards of our environment, with frequently catastrophic sequelae. I know that the Boy Scouts of America (BSA) has been a friend to the outdoors, and I perceive that Scouting has the potential to be part of the solution to our collective environmental woes.

How Do We Address The Problem?

The BSA has come a long way on the path of environmental stewardship. While BSA practices have evolved from those which are not so nature-friendly (trenching around tents, lopping tree limbs, making huge fires in newly-created fire pits, burning trash, and trooping through forests without regard to destruction of vegetation)¹⁰, the BSA has progressed to being proponents of environmental awareness (particularly by espousing and promoting the principles of Leave No Trace). These unfriendly-to-nature practices persisted in many areas until as late as the 1980's, and some may persist even to the present day.¹¹ According to this same source, land managers have not and still do not always welcome Boy Scout units to their parks and land, mainly because of the formerly accepted practices which were so contrary to good outdoor ethics. The BSA now encourages adhering to the Leave No Trace principles, which are, according to Kay, "should be part of any outdoor experience."¹¹ There is more that the BSA can do, however.

Educating its members and others about Leave No Trace principles is a commendable start to what the organization is capable of. There is a Master Educator for Leave No Trace in Indian Waters Council, and he recently held a training weekend at our council camp, Camp Barstow, October 1-2, 2012. During this weekend, 26 participants became Leave No Trace Trainers. Of these 26, two travelled from Tennessee to attend the training, two were Camp Barstow staff, and one of the council's professional staff attended.¹² These individuals are now authorized to teach the principles of Leave No Trace to adults and youth, and to serve as Leave No Trace Trainer Staff at Resident Camp. The Leave No Trace Trainer is part of the National Camp Standard; this Standard states that, for Cub Scout, Boy Scout, and Venturing resident camps, "At least one staff member has been trained as a Leave No Trace Trainer or Leave No Trace Master Trainer."¹³ Another Leave No Trace Trainer course is scheduled for the first weekend of October, 2012. Our council's Master Educator also plans for Indian Waters Council to host a Master Educator Training Course in the near future.¹²

Educating Scouts and Scouters about the many rewards of true environmental stewardship can have immediate and lasting effects. There are many ways to go about this endeavor; having a portion of the council web site devoted to conservation, presenting conservation topics at meetings of youth and adults, meeting individually with leaders to raise their awareness, and many other ways. Using printed documents, while familiar and easy to use for those of us who prefer holding paper in our hands to peering at a computer screen, is inherently contrary to the principles of good stewardship, as most of this paper ends up in landfills. The paper used also requires the felling of trees for the pulp. Although trees are a

renewable resource, not every landowner who sells trees for pulp or lumber plans to replace the trees harvested. The idea is to keep conservation and the environment in the Scouting public's eye, in a nutshell, using as environmentally-friendly means as possible.

Methods Employed To Raise Awareness

The BSA encourages its members to give back to others by providing service; to their family, their local communities, their Chartering organizations, and their country. Service is part of the Cub Scout promise, the Boy Scout Oath and Law (the Boy Scout Law is a principle of the Varsity Pledge and the Sea Scout's Oath), and the Venturing Oath. Service is at the very heart of the Order of the Arrow, the National Honor Society of the Boy Scouts of America. The Boy Scout slogan is "Do a Good Turn Daily"; this good turn can be for other people, for the community, or for the environment.

Service is an integral part of the BSA's self-identity. This is reflected in the current incentive to increase the quality of the program delivered to young people, Journey to Excellence. Service is one of the 13 parameters used to assess the quality of program in an individual unit. The more service projects a unit conducts, the higher their score on the Journey to Excellence Scorecard.

The minimum number of service projects required to earn the lowest level of achievement in this parameter, Bronze level, for 2011 was two for Cub Scout Packs, Venture Crews, and Sea Scout Ships; the number was four for Boy Scout Troops and Varsity Scout Teams. The number required to achieve Silver level in 2011 was three for Packs, Crews, and

Ships, while the same level for Troops and Teams required five projects. The number required for Gold level in 2011 was, for these same groups, four and six, respectively. These requirements remain unchanged for 2012.¹⁴ Service is thereby encouraged and rewarded. In discussing Journey to Excellence with one's units, a Commissioner might encourage conservation projects be performed in meeting this objective. After all, service to the environment is, at its heart, service to us all.

There are 1,507,601 Cub Scouts and 421,405 Cub Scout leaders; 792,202 Boy Scouts and 493,852 Boy Scout leaders; 59,863 Varsity Scouts and 22,806 Varsity Scout leaders; and 227,994 Venture Scouts and 61,080 Venture Scout leaders registered in the BSA.¹⁵ There are conservation awards available to all of these individuals through BSA programs, from Tiger Cub Scouts to Venture Scouts (Appendix A). Each of these awards requires the completion of a conservation project, in addition to other requirements. The difficulty and degree of environmental impact delivered by the project's completion increases with progression from Cub Scouting to Venturing, but even the least of these is preferable to no conservation project at all. Venture Scouts working toward one of these conservation awards must not only conduct a conservation project, but also conduct scientific investigation in the process, which seems an extraordinarily difficult proposition for individuals so young. These persons are receiving training and developing skills that will serve them well in their academic futures. These award programs have as an added benefit the increased awareness in our youth and their parents and other leaders of the need to be good environmental stewards.

The BSA conservation awards program started in 1914, when William T. Hornaday began an award he called the Wildlife Protection Medal.¹⁶ Many Scouts and Scouters have never heard of Dr. Hornaday, or they may have heard the name but know nothing about the man. William Temple Hornaday was born in 1854, and in 1886 he was the Chief Taxidermist of the US National Museum. While holding this position, he traveled to Montana as head of an expedition from the Smithsonian Institution whose purpose was to obtain specimens of the rapidly disappearing American bison for their collection. Dr. Hornaday, “haunted by the scattered skeletal remains of the millions of slaughtered bison that peppered the Eastern Montana Plains...fought to establish the National Zoological Park, which would provide sanctuary for bison and other endangered species, and a captive breeding program, which would result in the eventual reintroduction of the American bison to the wild”.¹⁷ This source called Dr. Hornaday an “accidental conservationist”, as he initially had no intention of saving a species. He was, however, overwhelmed by the evidence of destruction and waste laid before him in the course of his normal duties, and the experience made him resolute to change things for that species and others who might suffer the same threat, extinction. The same feeling of being haunted by such evidence afflicts me when I read about species facing severe endangerment or extinction, such as tigers, black rhinoceroses, or elephants (Asian and African).

The award established by Dr. Hornaday was not restricted to BSA members; indeed, it was not associated with the BSA at all until after Dr. Hornaday’s death in 1937, at which time it was renamed in honor of Dr. Hornaday and became a BSA award.¹⁸ There are several types of Hornaday awards; see Appendix A for a complete listing of the requirements for each award.

There is the Hornaday Unit Certificate, for units working together on a conservation project; the Hornaday Badge, for youth completing a conservation project equivalent in scope and difficulty to an Eagle Scout service project; the Hornaday Bronze or Silver Medal, for youth completing several such projects; the Hornaday Gold Badge, for adult Scouters dedicated to educating youth and adults about conservation at the district or council level for at least three years; the Gold Medal, awarded to an adult Scouter “for leadership to conservation at national or regional level over a lifetime (at least 20 years)”¹⁹ and the Hornaday Gold Certificate, for an adult, corporation, or organization not associated with Scouting who has made an outstanding contribution to youth conservation education.

The Unit Certificate, youth Hornaday Badge, and adult Gold Badge are all awarded by the local council, while the Hornaday Medals (youth Bronze and Silver Medals, and adult Gold Medal) and the Gold Certificate are awarded by the National Council.¹⁹ The Hornaday awards have no yearly limit, with the exception of the Gold Medal and the Gold Certificate; only six of each of these may be awarded annually.¹⁹ There have been approximately 1,100 medals awarded over the last 80 years.¹⁸ The BSA web site page on which Hornaday awards are discussed is subtitled, in reference to the Hornaday awards in general but the Medal in particular, “Think of it as an Olympic Medal Bestowed by the Earth.”¹⁶

There has only been one Hornaday Badge awarded to a youth member (Skyler Hutto) in Indian Waters Council, in 2006. This predates my involvement in Scouting, and predates the founding of a conservation committee in the council by several years. These awards are largely unknown by Scouters and youth in Indian Waters Council-553 (IWC), my home council. The

number of conservation projects performed by youth and units in IWC has been low. I believe that these two facts are positively correlative. My objective is to see an increase in the number of conservation projects completed in IWC, and a resultant increase in the number of conservation awards earned, by raising the awareness of Scouts and Scouters regarding the available conservation awards. I also hope to help others raise awareness and thereby increase conservation projects performed across South Carolina.

I participated in a Wood Badge course, SR-1037 in Mecklenburg County, North Carolina in 2010. The Course Director encouraged each participant to complete at least one of their ticket goals in a conservation-related topic. In trying to develop a suitable ticket goal for this course, I researched the history of conservation and conservation projects in my district (Catawba District, where I serve as a Unit Commissioner) and in Indian Waters Council. I found that very few projects had been completed, and that, other than the single Hornaday Badge awarded to a youth member in 2006, no conservation award had been earned in the Council with the exception of one adult having been awarded the Hornaday Gold Badge in recognition of his years of educating others in the field of biology and our natural environment. This person (Jerry Hilbish) was recognized with the Hornaday Gold Badge at our Council Awards Banquet on February 25, 2010. A second individual (Bruce Cannon) has since been awarded the Hornaday Gold Badge, on March 24, 2011. There are youth who have earned World Conservation awards, primarily as Cub Scouts, but the council does not keep a record of individuals who have earned that award.

As part of one of my Wood Badge ticket goals, I decided to prepare a presentation on the available conservation awards, including the group eligible and the requirements to earn the

award. I first delivered this presentation at a Catawba District Roundtable in the summer of 2010. The Roundtable was attended by approximately 25 Scouters. About half of these were Cub Scout leaders, and the other half were Boy Scout leaders. Of the Cub Scout leaders, most were Cubmasters or Pack Committee members, while the Boy Scout leaders tended to be either Scoutmasters or Assistant Scoutmasters. While the attendees at the meeting signed in on an attendance sheet, that information has been lost for follow-up, as the District Executive at the time kept the information and he has since left Scouting. I have, therefore, been unable to contact those in attendance to ascertain the impact of the presentation on their awareness of conservation and their interest in conducting conservation projects with their units (or in encouraging the youth they lead to conduct conservation projects). It is, unfortunately, probable that this presentation alone was insufficient to raise enough awareness about conservation to result in an increase in conservation projects performed in Catawba District.

I have delivered this presentation several times since that first roundtable, most notably at two consecutive University of Scouting gatherings in Indian Waters Council (2011 and 2012). At the first of these, I fielded many questions from the attendees regarding the types of projects suitable for Cub Scouts versus Boy Scouts. I heard from several friends involved in Cub Scouting afterward that their Packs had performed small conservation projects on their outings (on one outing to an area near a lake with a marina, the unit cleaned up trash around the marina and emptied trash receptacles there into a dumpster, to encourage people to use the trash cans; on another outing another unit cleaned up trash around a state park where they held an overnight

event). At the most recent University of Scouting, the questions were oriented more towards Boy Scouts, and specifically to the youth earning the Hornaday Badge or Medals.

In support of this presentation, I wrote a small “handbook” to help Scout leaders and youth discover the Conservation awards available, as well as to provide resources for conservation projects. These resources include project ideas and contact information for local, state, and federal agencies with which units can partner to effect conservation projects. This handbook is posted on the Indian Waters Council web site, under the Conservation link.²⁰ I discovered, whilst engaged in these efforts, that volunteers in Indian Waters Council recently started a Council Conservation Committee, officially founded in October 2009. I am the current Chairperson of the Conservation Committee.

In addition to delivering this presentation on several occasions, I conceived and created (with the help of my husband, Jeff G. Will, and one of my coworkers and her husband, Pat and Robert Smith, who assisted in the construction) a static display of the Conservation awards available to Scouts and Scouters (see Appendix B, which includes photographs of the static display’s four parts). On this display I included all of the merit badges required for the Hornaday Badge and/or Hornaday Bronze or Silver Medals for youth. I first used this display at the Conservation Committee’s booth at our Council Camporee in November, 2010, held at Richland Creek Farm in Saluda, SC.

This event was attended by approximately 1,500 Scouts and Scouters, and the Conservation Committee booth was visited by many of them. The different awards were described and explained to the visitors, and the Hornaday Unit Certificate, Badge, and Medals in

particular were explained. I asked for visitors' email addresses, which many gave on a notepad I had at the conservation booth. I sent each of these individuals an electronic version of the handbook I had written.

While I manned the booth, there were several youth who were interested in pursuing the Hornaday Badge, especially when they learned that a single project (if suitable) could be performed to earn both the Eagle Scout award and the Hornaday Badge. Most of them were unhappy to hear that several projects would need to be conducted in order to earn a Hornaday Medal, particularly the older Scouts. There was one young man, however, who, upon hearing how few Hornaday Silver Medals had ever been awarded, looked me straight in the eye and announced that he was going to earn one of them. I believe he may, given that he was at the time a 12 year old, and had already earned his Second Class rank.

While it was another opportunity to promote conservation awards, I was unable to attend the 2011 Indian Waters Council Camporee. I was at the Middle Tennessee Council College of Commissioner Science that weekend. I met with many Commissioners, and discussed conservation awards with them, which was, unfortunately, the extent of my efforts at that time.

A neighboring Council, Pee Dee Area Council, has no Conservation Committee but has several adults who are keenly interested in promoting conservation. Several of these adults have attended a special course at the Philmont Training Center, called Conservation USA. This course is held in September each year. Pee Dee Area Council has been very actively trying to encourage youth to earn Hornaday Badges and Medals. They held a "Hornaday Weekend" March 11-13, 2011, during which time they offered instruction and guidance (along with

registered Merit Badge Counselors) for all of the merit badges needed for the Hornaday Badge or Medals. Their total attendance was full (attendance was limited to 45 youth) , with many of the youth attending travelling from Indian Waters Council to participate. They have awarded five Conservation awards since January, 2011, including one Hornaday Badge, one Hornaday Unit Certificate, and three Hornaday Gold Badges.²¹

This year they held another Hornaday weekend, March 9-11, 2012, again offering instruction, guidance, and merit badge counselors for the 21 merit badges needed to earn either a Hornaday Badge or Hornaday Medal. Their attendance this year was again full (unsure of attendance limits for this year) , with many of those youth from Indian Waters Council. The attendance was high enough that no more Scouts could register after March 2, 2012.²²

The static display that I had created for the council Camporee in 2010 was loaned to several representatives from the Pee Dee Area Council, who used it in a display they had at Dixie Fellowship in April of 2011, the section gathering of the Order of the Arrow membership. They used the display to promote awareness of conservation awards to youth and adults of our entire section, which includes parts of South Carolina, North Carolina, and Georgia, as well as to promote their now annual Hornaday weekend. This display was also used at the Piedmont Appalachian College of Commissioner Science in 2011, and was set up in the main assembly room for other participants to look at.

Results to Date of Raising Awareness

The Scoutmaster of a Troop in Indian Waters Council contacted me on March 14 to discuss the Hornaday Badge and Hornaday Unit Certificate.²³ He and four youth from his Troop attended the Hornaday weekend held in the Pee Dee Area Council from March 9-11, 2012, and the four youth are all interested in working toward the Hornaday Badge. One of the youth has already completed his Eagle Scout project (it was not a conservation project), yet is willing to conduct another project to earn the Hornaday Badge. Two others have had their Eagle Scout projects approved (neither is a conservation project), but are ready to conduct conservation projects in addition to their Eagle Scout projects in order to earn the Hornaday Badge. These four youth also want to encourage their Troop to work toward the Hornaday Unit Certificate. I plan to meet with this Troop in the near future to help them better understand the Hornaday awards, and to help provide some preliminary guidance for the youth interested in earning the Hornaday Badge.

I have also been contacted by another Boy Scout leader inquiring about the Hornaday Unit Certificate.²⁴ He and his Troop plan to partner with a local Lions Club chapter to plant 200 trees. It is as yet unclear whether this project qualifies as either forestry and range management or as soil and water conservation. It may not qualify as either, and therefore be ineligible to earn the Hornaday Unit Certificate, but it will serve to help with erosion control and beautification of the area where the trees are to be planted. Our Council Conservation Committee is in the process of assigning a Hornaday Advisor to this Troop for their project.

The increase in numbers of youth interested in working towards the Hornaday Unit Certificate, Hornaday Badge, and possibly Medals, is encouraging, and is indicative of the positive effect of the increased effort to raise awareness of the awards that can be earned. The number of conservation projects performed not only in Indian Waters Council, but also in a neighboring Council (Pee Dee Area Council) is quite likely to increase as more youth try to earn a Hornaday Badge, Hornaday Medal, or the Hornaday Unit Certificate.

As chair of Indian Waters Conservation Committee, I have fielded inquiries from Scouts and Scouters in Indian Waters Council about the type of project that would be appropriate as a Hornaday project. I asked the other members of Indian Waters' Conservation Committee about this, but none had a clear idea of how rigorously such a project should be evaluated. We as a committee were wary of setting the bar either too high or too low for our youth; if we approved a project for the badge, but the youth went on to conduct more projects and apply for a medal, we were concerned about the National Hornaday Committee possibly deciding that the first project was not worthy. We were worried about inadvertently hindering rather than helping our youth.

In an effort to better understand what sort of project would be appropriate, I obtained the name and contact information for a young man who had earned a Hornaday Silver Medal, so as to pose this question to him. His response was that if the project was approved by the District Advancement Committee for an Eagle Scout project, it should be suitable as a Hornaday project as well.²⁵ He reiterated the BSA's recommendation that a youth have a Hornaday Advisor to work with and consult as project planning and implementation proceed.

In 2011, a Boy Scout Troop in Indian Waters Council earned the Hornaday Unit Certificate for a project involving building and installing nest boxes for fox squirrels at a local military installation, as well as counting the individual squirrels observed. Fox squirrels are not endangered, but are rather considered secure by South Carolina's Department of Natural resources.²⁶ There is, however, some concern regarding loss of suitable habitat for this species due to deforestation and replacement of their preferred species of trees by less preferred trees, and due to urban sprawl.²⁶ The project completed by this unit was consistent with the goals of the Department of Natural Resources for this species, especially the specimen count.

A young man who is a member of one of the Troops that I serve as Unit Commissioner has completed his Eagle Scout service project. This project was a conservation project, in the category of soil and water conservation. He has earned most of the required merit badges to also earn a Hornaday Badge. He will earn the Hornaday Badge upon completion of the few merit badges he currently lacks, and upon approval by the Hornaday Advisors on the Indian Waters Council Conservation Committee. After he earns the award, it will be presented at his Troop's next Court of Honor, again at the 2013 Catawba District Awards Banquet, and again at the Council's 2013 Awards Banquet. This should provide some impetus to others interested in working toward the Hornaday Badge, given that it will be the first one earned in council since 2006, and only the second one ever earned in our council. The small amount of award envy prevalent in some Scouts will only help ensure that more Hornaday Badges and Medals are pursued.

Future Efforts Being Considered to Raise Awareness

Some of the methods previously used to raise awareness at the district and council levels will be continued. These methods include presentation of available conservation awards at our council University of Scouting and at district Roundtables. I also plan to present this information at an area College of Commissioner Science (Piedmont- Appalachian College of Commissioner Science, 2012). The static display used at the Council Camporee in 2010 will be put on display at future Council and District Camporees, as well as at our yearly University of Scouting events. This display will be used at the 2012 Piedmont- Appalachian College of Commissioner Science, as an adjunct visual aid during my presentation there, but also for casual review by others attending the college. It may also be set up at the Council Service Center or Scout Shop, space permitting. The display is to be given to Indian Waters Council once a single finishing touch is added (a small plaque explaining what the display is for, and who made it and donated it to the council).

The Indian Waters Council Conservation Committee has discussed holding a Hornaday Weekend for Boy Scouts, during which time we will have merit badge counselors available to help youth work toward earning the merit badges required to earn the Hornaday Badge and Medals. We also plan to have a conservation project conducted during the weekend, which will likely be held at our council camp, Camp Barstow. We have also discussed having a Conservation Work Day for Cub Scouts, to help them learn about conservation and work toward conservation awards for which they are eligible. This event may be held at Camp Barstow, or possibly at a local state park. These events will help promote conservation in our council, and

will increase the number of conservation projects performed in council. The Cub Scout work day has the potential to strengthen the relationship between the South Carolina Park Service and the BSA, provided any project performed is conducted well and the park served sees tangible benefit to the partnership.

Presenting any conservation awards earned at Courts of Honor and at District and Council Awards Banquets helps raise awareness of these awards among the Scouting public at large. This may make others curious about the awards, and serve to increase interest in earning them by youth and adult leaders alike.

I can claim no credit for it, but additional Leave No Trace Trainer courses and, possibly, a Leave No Trace Master Educator course hosted by Indian Waters Council will further help to raise awareness of sound environmental ethics. The National Camp Standard requirement that at least one staff member be a Leave No Trace Trainer is helpful as well.

Discussion

While these methods of raising awareness of the available conservation awards may seem logical, even intuitive, they had not heretofore been attempted in Catawba District or in Indian Waters Council. The best way to increase the number of conservation projects performed in my district and council is by raising awareness, in my opinion. This has been borne out, as evidenced by the recent awarding of one Hornaday Certificate, the conduction of one project for the Hornaday Badge, and the planning for four more Hornaday Badge projects and two more

Hornaday Unit Certificate projects. The conservation awards available to Scouts and Scouters helps provide incentive to these individuals, in the event that doing good for the environment is an insufficient motivator for them. Bringing to the public's attention the results of poor environmental stewardship, while it may motivate some individuals to act on behalf of the environment, seems to elicit only sad pity in many, who may only say, "What a shame", or, "Something should be done", but little action is the result of such platitudes. A more proactive and engaging approach is needed.

The BSA conservation awards, if truly understood and pursued by the general Scouting community, could make a huge difference in our environment. Given the sheer numbers of Scouts of all ages, and the numbers of adults leading and serving them, if even a fraction of these youth and their leaders undertook to earn any of the BSA conservation awards, the effect on our natural world would be dramatic.

Encouraging units to conduct conservation projects as their service projects in meeting Journey to Excellence requirements can help. Of the four units I serve as Unit Commissioner, three earned Gold level in Journey to Excellence in 2011, and the fourth unit earned Silver. This last unit was disappointed that they had not performed as well as they had hoped, and they plan to strive to achieve Gold level in 2012. One of the areas in which they did not perform as well as they had hoped was in the service projects category. I have been discussing possible conservation projects that could be conducted during their outings with the unit's leadership, in an effort to help them meet their goal for this year.

It is evident to me that the best hope of altering the mentality of Scouts and Scouters alike to be more environmentally conscious is by raising their awareness. The plethora of conservation awards offered by the Boy Scouts of America is a powerful tool to motivate these individuals. As one of my instructors at the course I attended at the Philmont Training Center in June of 2011 told us, "Behavior that is rewarded is repeated."²⁷

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Appendix A: Conservation Awards with Requirements

World Conservation Awards

Cub Scout World Conservation Awards: the following requirements plus participation in a den or pack conservation project.

Wolf Cub: Complete Achievement #7, *Your Living World*, and complete all arrow points in two of three electives - #13, *Birds*; #15, *Grow Something*; #19, *Fishing*.

Bear Cub: Complete Achievement #5, *Sharing Your World with Wildlife*, and complete all arrow points in two of three electives - #2, *Weather*; #12, *Nature Crafts*; #15, *Water and Soil Conservation*.

Webelos: Earn all three activity badges – *Forester*, *Naturalist*, and *Outdoorsman*.

Boy Scout World Conservation Award: in addition to completing a conservation project, earn the Environmental Science, Citizenship in the World, and either the Soil and Water Conservation or Fish and Wildlife Management merit badges.

World Conservation Award for Venturing and Sea Scouts:

- Complete the **Ecology elective for the Ranger award**.
- Explain the basic natural systems, cycles, and changes over time and how they are evidenced in a watershed near where you live. Include the four basic elements, land use patterns, and at least six different species in your analysis and how they have changed over time. Discuss both biological and physical components.
- Describe at least four environmental study areas near where you live. Include the reasons for selecting these areas, their boundaries, user groups, past inventories, any outside forces that interact with them, and a list of what things could be studied at each of them.
- Plan a field trip to each of the above areas, including detailed plans for conducting various investigations. Follow all of the requirements such as trip permits, safety plans, transportation plans, equipment needs, etc.
- Under the guidance of a natural resources professional, carry out an investigation of an ecological subject approved by your Advisor. Inventory and map the area. Conduct a detailed investigation providing specific data for a specific topic.

- Document and present your findings to your crew, another crew, a Cub or Boy Scout group, or another group.
- Teach others in your crew, another crew, a Cub or Boy Scout group, or another group how to carry out an ecological investigation. Use steps 3 and 4 above with the group so that they may also learn by doing.
- Show the relationships of global events and conditions, both political and environmental, to the areas that you described in steps 1 and 2 above.
- Determine how conditions in your local area also appear in other areas around the world.
- Describe some of the interrelationships between people and our natural resources that affect our global environment.
- Teach others in your crew, another crew, a Cub Scout or Boy Scout group, or another group about the interconnectivity that we all have with each other and our environment.

Leave No Trace

Cub Scouts: Discuss with your leader or parent/guardian the importance of the Leave No Trace front-country guidelines.

- On three separate outings, practice the frontcountry guidelines of Leave No Trace.
- Boys in a Tiger Cub den complete the activities for Achievement 5, Let's Go Outdoors
- Boys in a Wolf den complete Requirement 7, Your Living World
- Boys in a Bear den complete Requirement 12, Family Outdoor Adventures
- Boys in a Webelos den earn the Outdoorsman activity badge.
- Participate in a Leave No Trace-related service project.
- Promise to practice the Leave No Trace front-country guidelines by signing the Cub Scout Leave No Trace Pledge.

Draw a poster to illustrate the Leave No Trace front-country guidelines and display it at a pack meeting.

Boy Scouts:

1. Recite and explain in your own words the principles of Leave No Trace, and discuss how an ethical guideline differs from a rule.

2. On three separate camping trips with your troop or team, demonstrate and practice the Leave No Trace skills appropriate to the trip.
3. Earn the Camping and Environmental Science merit badges.
4. Participate in a Leave No Trace-related service project that reduces or rehabilitates recreational impacts. Discuss with your troop or team which recreational impacts were involved with the project.
5. Give a 10-minute presentation on a Leave No Trace topic approved by your unit leader to a Scouting unit or other interested group.
6. Teach a Leave No Trace-related skill to a Scouting unit or other interested group.

Adult Award Requirements:

1. Recite and explain in your own words the principles of Leave No Trace, and discuss how an ethical guideline differs from a rule.
2. On each of the three camping trips in Scout requirement 2, discuss with your troop or team the impact problems encountered and the methods the unit used to eliminate or at least minimize those impacts.
3. Read chapters 7 through 10 (Leaving No Trace), chapter 27 (Understanding Nature), and chapter 34 (Being Good Stewards of Our Resources) in the BSA Fieldbook. Share with another adult leader what you learned.
4. Actively assist (train, advise, and supervise) a Scout in planning, organizing, and leading a Leave No Trace service project that reduces or rehabilitates recreational impacts.
5. Assist at least three Scouts in earning the Leave No Trace Achievement Award.
6. Teach a Leave No Trace-related skill to a Scouting unit or other interested group.
7. Cub Scout leaders: Discuss with your den's Cub Scouts or your pack's leaders the importance of the Leave No Trace front-country guidelines.
 1. On three separate outings demonstrate and practice the front-country guidelines of Leave No Trace.
 2. Participate in presenting a den, pack, district, or council awareness session on Leave No Trace front-country guidelines.
 3. Participate in a Leave No Trace-related service project.
 4. Commit yourself to the Leave No Trace front-country guidelines by signing the Cub Scout Leave No Trace Pledge.
 5. Assist at least three boys in earning Cub Scouting's Leave No Trace Awareness Award.

Hometown USA awards (Boy Scouts only)

- Merit badges - Earn three merit badges from this list: Citizenship in the Community, Communications, Environmental Science, Fish and Wildlife Management, Forestry, Gardening, Geology, Landscape Architecture, Nature, Plant Science, Public Speaking, Soil and Water Conservation.
- Community Service Project – should involve a minimum of eight hours of time, two of which must involve management planning, with the other six in carrying out the project. It should help keep America beautiful and benefit the community either physically or financially.

Conservation Good Turn – all levels of Scouting, youth and adults.

- The Scouting unit contacts a conservation agency and offers to carry out a Good Turn project.
- The agency identifies a worthwhile and needed project that the unit can accomplish.
- Working together in the local community, the unit and the agency plan the details and establish the date, time, and location for carrying out the project.

Hornaday Awards - Seven types of Hornaday awards are available. The local council may present the William T. Hornaday Unit Certificate, the Hornaday Badge, or the Hornaday Gold Badge to adult Scouters. The National Council confers the Bronze and Silver Medals, the Gold Medal, and the Gold Certificate

Hornaday Unit Award - A Hornaday Unit Certificate is awarded to a troop or team of five or more Boy Scouts or Varsity Scouts for a unique, substantial conservation project. At least 60 percent of the registered unit members must participate. These units may be nominated, or they may apply to their BSA local council for recognition.

William T. Hornaday Badge – Boy Scouts, Varsity Scouts, Venturers. Three of the merit badges in Group I and two badges in Group II must be earned, in addition to carrying out a conservation project. Sub-appendix A lists the merit badges by group, and Sub-appendix B lists the Hornaday project categories.

William T. Hornaday Bronze Medal - Scouts need to earn four Merit Badges from Group I and two Merit Badges from Group II. One of the four Merit Badges from Group I must be Environmental Science. The Scout must also plan, lead, and carry out three substantial conservation projects, each from a different category. When completed, the Scout will send in a *neat* binder to the National Committee, which meets a few times each year to discuss recipients. There are no limits on the number of Bronze Medals awarded each year.

William T. Hornaday Silver Medal - Scouts need to earn all six Merit Badges from Group I and three Merit Badges from Group II. The Scout must also plan, lead, and carry out four substantial conservation projects, each from a different category. When completed, the Scout will send in a *neat* binder to the National Committee, which meets a few times a year to discuss recipients. A Scout who applies for the Silver Medal but fails to receive it may receive the Bronze Medal instead.

Both awards include the medal (Bronze or Silver), a certificate, and an embroidered square knot.

Adult Hornaday Awards –

Gold Badge. A Gold Badge is awarded to an adult who has made significant contributions to resource conservation at the Council level. This includes helping others in learning about resource conservation. The Badge is awarded by the Council Committee.

Gold Medal. A Gold Medal is the highest form of recognition for an Adult in conservation. Those adults who earn a Gold Medal have typically made contributions to

conservation at the national level for 20 years or more. The Medal is awarded by the Council. The number of Gold Medals awarded each year is limited to six.

William T. Hornaday Gold Certificate. This conservation award is granted to organizations or individuals by the National Council of the Boy Scouts of America. Nominations are accepted from any recognized conservation or environmental protection organization. The organization or individual should have demonstrated leadership and a commitment to the education of youth on a regional, national, or international level reflecting the natural resource conservation and environmental improvement mission of the William T. Hornaday Awards program.

Increasing the Number of Conservation Projects

Sub-appendix A

Merit Badges for the Hornaday Awards for Boy Scouts

Group I

- Energy
- Environmental Science
- Fish and Wildlife Management
- Forestry
- Public Health
- Soil and Water Conservation

Group II

- Bird Study
- Fishing
- Fly Fishing
- Gardening
- Geology
- Insect Study
- Landscape Architecture
- Mammal Study
- Nature
- Nuclear Science
- Oceanography
- Plant Study
- Pulp and Paper
- Reptile and Amphibian Study
- Weather

Appendix B

Static display of Conservation Awards and
Merit Badges Required for Hornaday Badge and Medals



Conservation Awards

Merit Badges Required for
Hornaday Badge and Medals



Hornaday Badges and Medals



Hornaday Unit Certificate

Increasing the Number of Conservation Projects

Sub-appendix B

Hornaday project categories

Energy conservation

Soil and water conservation

Fish and wildlife management

Forestry and range management

Air and water pollution control

Resource recovery (recycling)

Hazardous material disposal and management

Invasive species control