The Everglades National Park

Mother Nature's Future in the Wrong Hands

Christina Pope
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As the airboat came to a stop and the loud engine ceased, the driver began his narration about the Everglades. At first I listened intently making sure to take in every piece of information that the tour guide gave us about the Everglades. After a few minutes, however, my eyes and ears began to wander away from the tour guide as they focused in on the beauty and peacefulness of the Everglades that surrounded me. I was by no means bored by the tour guide's talk. Rather, I was taken in by something much larger than you or I: Mother Nature. As I retreated into my own world, I could only hear the quietness of the Everglades.

Looking around me, seeing nothing but miles of water, trees, and grass, I was in awe of this treasure that lay just outside of one of the largest urban centers in the United States; Miami. How is it possible that such an amazing form of Mother Nature could exist outside such a noisy and busy area? The answer was a bit foggy to me but I did recall learning about the Everglades as a protected natural area and a National Park. Even though I knew that what I saw in front of me was somehow protected at this current time, my eyes began to water up a bit. As I fought back the emotions, I realized why such sadness had come over me. At that moment, as I looked at the vastness of the Everglades, there was only one thought that crossed my mind: this amazing piece of Mother Nature may not exist in a few years. All at once I was angered by this thought until suddenly the loud engine of the airboat turned back on and we continued on our trip through the Everglades. I had decided that while we were still on the trip I was not going to think about what could come of the Everglades. Instead, I concentrated on what the Everglades is today and enjoying the serenity of it all.

Later on that evening during dinner, I shared my experience of the airboat tour through the Everglades with my family. I was so excited about the first day of class and the anticipation of the next class. After dinner while I was in my room listening to my music re-calling the day, my thoughts wandered back to the anger I felt when thinking about what may come of the Everglades and other natural areas like it. As much as I avoided coming to the topic of politics, I could not help but think about how different the environment could have been over the past four years if more pro-environment voters had taken their places at the booths in the 2000 Presidential election. Then I began to realize how the future of this nation's natural areas, such as the Everglades, could potentially be voted into the wrong hands again if we do not begin to take a stand to vote for someone who will protect our environment.

When talking to certain friends and relatives, I realize why our environment is in such danger of survival, and how leaders such as Bush count on the ignorance of followers such as those who simply make assumptions that are not supported by any considerable research about the environment. When I became angry about the thought of the possible disappearance of the Everglades in the future, I became angry because of what I have heard others say in regards to the environment. I once was having a discussion with two people very close to me on the need
for increased protection of the environment when I heard one of the most absurd and disturbing comments. As I was explaining how Bush has backed down on laws protecting trees in areas such as California, and how this is a huge detriment to our future and the environment, one of them said "Oh Christina, don't worry about the trees. There are always going to be plenty of trees because there are so many out there." In that one moment, my faith in the future of our environment was almost destroyed simply because I realized how misinformed and ignorant so many people are on this topic. There are many reasons for this ignorance including the influence of politicians, the lack of media on environmental issues, and most importantly the lack of interest and research done by the average person; ourselves. I then continued my discussion on Bush's environmental policies and other policies that have disabled this nation in more ways than one. The next topic that was brought up was the need for protection against terrorism and how Bush is fulfilling that duty. Once again, I came to another realization. I had always wondered how it was so easy for Bush to get away with all of the crimes against the environment that he has committed without anyone really making a huge to-do about it. My question was then answered. Bush has taken the events of 9/11 and the war on terrorism to such an extreme that he has blinded many Americans from all of the other important issues that are affecting us here at home, including the protection of this nation's natural areas. By constantly aiming the focus of Americans' concerns and fears on the war against terrorism, Bush has been able to easily remove many laws protecting the environment leading to a dismal future for this nation's natural areas such as the Everglades. All of this just so he can protect big business.

What Bush and others do not realize is that once there has been a huge loss to the environment and the natural areas have been destroyed, it is nearly impossible, if at all possible, to restore those areas to what they once were. Has anyone ever considered the affects on our health from not protecting the environment? An article in Sierra's Clubs 2004 September/October magazine gave some startling facts about this issue: the number of premature deaths caused each year by pollution from coal-burning power plants in the U.S. alone is 24,000; the number of nonfatal heart attacks caused each year by pollution from coal-burning plants also in the U.S. alone is 38,200, and the estimated number of Americans that get sick each year after swimming in waters polluted by sewage and storm-water runoff is 1,800,000. Are these figures not enough for people to finally begin protecting the environment? Are the lives of Americans and the protection of this nation's environment not important enough for Bush to at least keep into play the laws that were put into place by Clinton and other presidents in order to protect the environment? Unfortunately, for Bush and many other business loving citizens, it is not.

As my thoughts continue going round and round in circles about all of these issues concerning the environment and our future, I decided to sit down and use my first journal entry for IDH 4007 as a vehicle to express my intense opinions and feelings towards the need for more protection of our natural areas and the Everglades. Even though I have realized as I am writing that this may reach the eyes of only just a few people, it is better than sitting quietly and allowing the destruction of the Everglades and other natural areas to occur without my voice being heard. One could say that today's class in the Everglades has sparked a fuse inside of me that was always there but was just waiting to be lit.

I would like to close this journal entry by giving a timeline of events that start from the beginning of Bush's presidency up until the current time concerning decisions made about the environment. I believe that what one will make of these events will determine if Mother Nature's future lies in the wrong or right hands.
As we adjusted our binoculars before walking on the Anhinga Trail, I wondered if we would actually get to see anything exciting with our binoculars. Unfortunately, as the professor tried to help me adjust mine, we discovered that the new binoculars I had just purchased had double vision. Disappointed, I raised my hopes even higher that we would see something up close that we would not necessarily need the binoculars for. Headed down the path, we saw an Anhinga and a few other birds that stayed long enough for me to quickly borrow a friend's binoculars. Not far down the path from seeing the Anhinga, all of us quickly glanced over to the right in the bushes where we saw something move. One of our professors walked over to the bushes, bent over, and picked up a snake with his bare hands. It was a harmless snake, a Black Racer, but the capture of the snake still shocked us all. The professor calmly picked up the snake and began talking about it. At that moment, we were all excited that we had our very own Steve Erwin. I was excited that I was able to see something without needing a pair of binoculars. As our professor continued displaying the snake and trying to keep it from moving, the snake reached up and latched onto his finger for about five seconds until it let go. Our professor, of course, had no reaction as he again calmly waited for the snake to let go of his finger. Just barely breaking the skin, and a little blood, the professor eventually put the snake down as we all watched it slither away into the bushes.

At the moment that the snake took hold of our professor's hand, I couldn't help but wonder what was going through the snake's tiny brain. Was it "Geez this guy looks big, maybe if I bite him he will let me go," or was it "hmmm, this finger looks awfully tasty; I think I'll try a bite." What was the real reason for the snake biting our professor? Was it out of fear, curiousness, or hunger? Considering how small the snake was, most of us would assume that it was afraid and was protecting itself. But how can we be sure? We are not snakes. What makes humans think that they can even begin to presume they know why another species does something or what it is thinking? I know the answer that most will give: humans are of superior intelligence, therefore, they must be able to predict the thought process of something with a much inferior intelligence. I, however, ask the question: how can we be so sure if we have no way to communicate with another species on the same level?

As we continued our trip that Friday, I continued to ask myself the same question: I wonder what the animals that we were seeing were thinking about us? Take the alligator for example that we saw ever so closely as it stared us down during lunch, waiting for us to give him a bite of our food. Was he simply thinking "I know they will give me food because they have given me food before," or could he be thinking "maybe if they give me some of their lunch I can get close enough to have them for lunch." Once again, most of us came to the conclusion that because humans have fed the alligators in this area several times before, the alligator had become conditioned to expect little snacks from humans. This seems like a fair conclusion to me, but how do we really know that that was all the alligator wanted. How do we know he wasn't just curious about us? Yes we can easily say that through research and past experiences that that
was probably not the case, but can we really make that an absolute fact if we are not alligators? Experiencing this incident during lunch reminded me of the airboat tour that we took through the Everglades at Coopertown. The alligators were accustomed to the boats coming through there, and because of the previous ability to feed the alligators marshmallows, the alligators had come to expect that. My question then becomes: what were the people thinking who fed them? Yes it may be cute to feed an alligator marshmallows, but are we really thinking of the consequences?

Because humans have become so eager to claim that they can predict what another species is going to do or how it will react, we have put the animals as well as ourselves in more danger. I think that it is this exact behavior that leads to the decreasing numbers of some animals over time. For example, we separate different species of animals from each other so they won't kill each other. We can find an example of this happening here in South Florida. Several times we have heard on the news about a giant alligator that has been removed and transported to another place because of the possible threat it has on people and other animals such as possibly deer and other animals found in the wild. Isn't it possible that even the limited removal of these animals could have an affect on the reproduction of these animals? Is it not also possible that this could have an affect on the population growth of another animal due to the fact that those few alligators are not killing them for food anymore? Take the deer for example. The population growth of the species no longer being controlled by the alligator, such as deer, could then lead to a decrease in the population of sawgrass from there being more deer eating the sawgrass. The decrease in sawgrass could have an affect on another life form, and the chain of effects can just keep going on and on. How do we know that won't have a negative outcome in the long run?

Referring back to Audubon's journeys in the Everglades, I come across the conflict of not really being able to know what another species is thinking. In order to capture the beauty and innocence of some of the birds in the Everglades, Audubon kills some of them in order to paint them and have them represent life size figures of the birds. Audubon might have loved the birds so much that he wanted to make them immortal in his mind's eye, but did he think about the bird when he was doing that? I wonder what is going on in the minds of those who kill animals when they are actually killing them, whether the killing is for a noble or selfish reason. I think that many people, such as hunters, look upon animals as not having a thought process such as feelings or emotions. We automatically assume or want to believe that animals experience neither. I feel that this very belief has led to the endangerment and even extinction of many different species of animals. We cannot truly know what an animal is thinking or feeling unless we look through their eyes, and unfortunately that is not a possibility. How can humans begin to assume we can predict what an animal feels or if they have emotions if we have so much trouble understanding each other?

In examining the issue of "inhabiting others' lives," as we did in our second year honors course, I wish to conclude that the acknowledgment and acceptance of the limitations of the human race will lead to even greater discoveries. We must accept that we cannot possibly look through the eyes of another species. One cannot truly begin to examine and understand life until they admit that they will never be able to know everything there is to know or see what every living thing sees. I believe that this outlook could hopefully lead to the salvation and protection of the beautiful natural areas across the world such as the Everglades.
What is Great Art; what is Truth?

Christina Pope
IDH 4007
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I wonder what Clyde Butcher would say to me if I were to ask him to explain to me exactly how he feels when he is experiencing the Everglades and taking the amazing photographs of this beautiful place. Would his words come anywhere close to expressing his passion for the Everglades and other natural areas as his photographs do? Would his words be an even better explanation and expression of his feelings towards the Everglades than his photographs? How about Marjory Stoneman Douglas? What if I were to ask her to put her feelings and passion about the Everglades into a painting or into photographs? Would her works of visual art be a better representation of her connection with the Everglades than her literature? I think the better question is can any one person put their feelings for something into multiple forms such as verbal representation, literature, visual arts, or performing arts? You might have your occasional amazing talented person who can pretty much draw any painting, sing any song, or write any piece of literature and considered to be great at it. The reality is, however, that most people have their own individual way of expressing themselves whether it is in the form of art, literature, music, or in words. It all depends as to how they wish to transform their feelings and their passion.

When looking at Clyde Butcher's photographs in his gallery, I was overcome by being able to see and experience the passion he has for the Everglades. His work showed me an angle of the Everglades that I had never seen before. His photographs opened my eyes to seeing the Everglades in a different way. My question then is this: would his photographs be considered great art? Is Clyde Butcher a great artist?

Before I go on to answer this question from a personal point of view, it is important to address what great art, great literature, great music, etc really means. How can one truly define what great means in reference to something as subjective as art or literature for example? I have been in numerous art, music, dance, and literature classes where the teacher was actually able to give us a set of guidelines to determine whether or not a piece of art or literature was even considered art or literature, let alone being great. Unfortunately, in my path to discover how to determine what anything great is, I have found that none of these sets of guidelines were valid in helping me judge the piece of art.

This brings me to the discussion we had during our lunch at the Loop Road Environmental Education Center today. During our discussion of Killing Mister Watson, the question arose as to whether or not this novel was considered great literature or if Matthiessen was a great writer. That then led to our discussion of judging art. In our discussion, several classmates brought up to the plate their own set of guidelines to determine whether or not a piece of art or literature was great. When first listening to this discussion, I had great difficulty coming to my own conclusion because everything that every classmate said seemed to make sense. Only one problem: all of those guidelines put together would make it nearly impossible to judge a piece of art or literature because what a piece of art might be judged as great in one category could be judged as inadequate in another category. How could this problem possibly be solved? After taking in
what everyone had to say about art, I finally came to my own conclusion about what great art, literature, or music is. When thinking back through the times I had to judge something as subjective as art, the one thing that moved me to the point that I was able to say "that is a great work of art or music" was whether or not I could actually feel the creator's passion and emotions coming through the work, reaching out to me, grabbing me and saying "This is how I feel, this is what I see, and I want to share it with you so you can see the beauty the way I see it or feel it." Never once have I really concluded that a piece of music or art was great because it had a beautiful melody or was pretty to look at. In one way or another, the work moved me. I can best relate this to music because I am a singer and this is how I find music that I love. Because I judge things in this way, it is practically impossible to associate my tastes with one genre of music. I have found music that I have loved in the genres of country, pop, jazz, rock, alternative, new age, and the list goes on. The same applies to literature or the visual arts.

This guideline for judging art may not be as affective for everyone; however, for me it has seemed to allow the most subjectivity to come into play in judging a work of art, music, etc. This is important because I believe, and will always hold as a belief, that art, no matter what the form, is subjective. Art, music, dance, and literature are not sciences even though there are those who will find a scientific equation to explain how each works. The core, the roots of each, in my opinion, comes from the subjective and personal aspect of human beings. Without this aspect, art, music, and literature seem shallow and almost meaningless.

This brings me to the idea of truth. I believe that truth, if given an individual's subjective beliefs and emotions, can be found in any form that was created by that individual. Great art, in any form, holds the same concept as truth in my opinion. What is truth? How can we determine truth? Will we ever discover the complete and total truth about everything there is to know? I do not believe that is a possibility; however, I feel that an individual's attempt, using their passion and emotions, to discover truth is truth in and of itself. Just as art, truth is not concrete and cannot 100% judged to be the absolute, no questions asked, truth. Truth is found when experiencing one anoher's passions. Today, for me, truth was found through Zeke and his passion for the Everglades. Can Zeke paint an amazing painting, can he put his passion in music, and can he write an amazing piece of literature about his connection with the Everglades and be considered great? I think that as long as Zeke gave any one of these forms of art his true emotions and passion, it would be great because it is a representation of what Zeke sees and feels about the Everglades, and that in and of itself is great. Being able to look into his eyes and know that he loves this amazing creation, the Everglades, was truth for me.

The concept of truth is an apparent theme in Killing Mr. Watson by Peter Matthiessen. This novel discusses the life and death of a man known as E.J Watson back in the late 1800s to early 1900s. Watson was a man who traveled and lived in the ten thousand islands; a place where civilization had not yet come into full swing and laws, if there were any, were meant to be broken. Over several years, people kept dying in the areas surrounding Watson's presence. Some of these deaths were followed by Watson's disappearance, leaving the people of the ten thousand islands speculating that this man was killing people. The difficult part of the situation was that for most of the deaths, nobody had seen Watson commit the murders nor was there ever enough hard evidence to truly place the blame on him. The settlers of the ten thousand islands were still convinced that he was the one who committed the murders, and in the end they felt that he should be held responsible and hold the same fate as those he supposedly killed. In the end, Mr. Watson was unlawfully killed for the murders of several people, or was it just because of the murders?

In discussing the concept of truth from the novel during Professor Wisdom's lecture, it became apparent that no matter how hard we tried to pinpoint the murders on Watson, it could not be concluded with 100% certainty that he committed them. When the "lawyer" in the class was asked a question about the evidence leading to Mr. Watson for the murder of the Tuckers, he brought up the technology of today. Explaining that with today's technology we could analyze and determine who left the evidence at a murder scene, it came to my attention that many consider this hard evidence as fact, and truth. But how do we know that this evidence really
leads us to the truth of what happened, or who committed the murder or the crime? Yes it may be hard evidence proven by science, but how do we know that someone else did not plant that evidence and frame someone? How do we know that there was not a corrupt cop or forensic scientist that contaminated the evidence for personal motives? How do we ever really know? Because these acts are caused by people, and all humans have a subjective aspect to their personality, I would have to say that even though science points us in the right direction, it still does not lead us to the 100% truth. The mere representation of this evidence by a human being can sway the plausibility of the evidence, making something look like something that it isn't. Professor Wisdom said an interesting quote: "truth happens to an idea." This means that you do not create ideas based on truth. Because I am still searching for my own meaning for truth, I cannot agree nor disagree with this concept. I can say, however, that it makes more sense than simply looking to science and concrete facts for truth.

My personal resolve on the issues of great works of art and truth may not seem as concrete and sturdy as some may like, but it is as close to subjectivity that I can get without saying that a child who scribbles on a piece of paper because they lack the development of letters is a great artist. For me it is essential that as human beings, the subjective aspect of our lives must be a factor in any judgment that we make; whether it be art or truth. It is this subjectivity, passion, and emotion that make us human and not inhumane. With this personal insight, I leave you with two questions: what is great art; what is truth?
Despite the overall opinion of our class, I enjoyed Hugh Willoughby's *Across the Everglades*. The short history he provided and the description of his journey through mangroves and saw grass was both enlightening and entertaining. He offered insight into the historical part of Florida that we, in 2004, will never know of by first hand experience. Willoughby's journal was also the perfect handbook for an Everglades class canoe trip. From the intricate metaphors he weaves into his facts to the influence of opinion behind those facts, Willoughby's work captures the minds of his readers.

Perhaps the most interesting aspect of Willoughby's writing is that so much change has occurred in the past hundred years. His setting, though the very Everglades we travel through today, is an Everglades where saw grass was ten feet tall, and trails were no where to be found. His Florida, though located exactly where he left it, now has too many hotels, tourists, and residents to count. The change that has taken place in Florida was one that Willoughby foreshadowed, and one that we would not be able to fully comprehend without the writings of people like Willoughby. He captured the moment on paper for the future to see and gave us a means of comparison. He wrote about change in Florida over the course of a year since his previous visit. He mentioned that a big hotel and bustling tourists destroyed the picturesque and that Florida's "wilderness has been rudely marred by the hand of civilization" (62). I wonder what he would say today. The mere two thousand individuals he wrote about was a number no where near to the number of people who have since marred Florida. Like Willoughby, I regret change. And even though he said that he will not look at change from the sentimental point of view, there is no doubt that he continued to do so throughout his writings and that he hoped in some way, that readers would do the same. He did not suppress the "romance and poetry for the sterner, material welfare of fellowman" (63). Instead, he wrote with romance and poetry to attract the sentiments of his readers.

Along the same line, Willoughby wrote a poetically engaging defense for Native Americans. He indicated throughout his work that the United States Government was wrong to go "against a people who was willing to live in peace" (17), and he claimed that he would fight on their behalf if ever he had the opportunity (163). He attracted readers with vivid descriptions of the blood that runs through Native American veins and his description of the unsightly shanty that replaced the native's home. Willoughby's implementation of descriptive writing helped further his opinion throughout his work, and it is this aspect of *Across the Everglades* that allows modern day readers to associate the writing with the writer and thus bring the past into light. During class on Friday, some mentioned that they found Willoughby to be writing for attention and approval, because he knew that his work would be published. I find that regardless of his motives, the fact that he included Native American history within his work expresses his true sentiments.
Willoughby's descriptive sort of poetry continued throughout his work. Writing about deer and snakes silhouetted against the moonlight, he continually attracted the minds of the readers to the romance of the Everglades. At times, we share in his regret. When the dead snake he had forgotten about disturbed his sleep, his writing echoed regret at killing it. It was not just a snake, but a 'miserable' snake (151). Fishes with tails at each end were interesting to read about, and the beautiful aquarium that could be seen from the canoe was an aesthetically pleasing description. All in all, Willoughby was engaging, and if anything, I would have wanted him to give us more description for comparison.

*Across the Everglades* is a great asset for modern day explorers of Florida's Everglades, because the best part of Willoughby's *Across the Everglades* is the experience. We were able to experience a little of what Willoughby endured on his January journey last Friday. Willoughby wrote about an Everglades that we can only experience as it is today in comparison to what it once was. We did not have to deal with the saw grass that plagued Willoughby. It was not ten feet tall, and either way, the trail was already cleared of saw grass. We had markers to follow that allowed the trail to be a fun adventure rather than a dangerous one. With our packed lunch and the 'mile markers' to guide our way, we did not have to worry about getting lost and running out of food. We also did not have to cut through tree islands and find a dry place to sleep in the night. Our canoes were sturdy, and we were ignorant to the "effects of the terrible rubbing and scraping to which they had been subjected" (139). The most important difference between our journey and Willoughby's was that we canoed in the wet season while Willoughby worried about the water getting lower and lower every day in the dry season (147). We did not have to get out of our canoes and drag them across the Everglades. (Though I did get out of the canoe for the fun of it) We just canoed and were able to enjoy ourselves because of people like Willoughby who made the journey before us. I am certain that many who did not like Willoughby before their canoe trip at least admired him after. After one day of canoeing, my arms ached, by knees were bruised, and my face was tan. Willoughby canoed a lot longer than a day and through much harsher conditions.

I enjoyed reading Willoughby's *Across the Everglades*, and I enjoyed actually experiencing the Everglades even more. I can not wait to go canoeing again, dodging spider webs by ducking in the canoe, and fighting mangroves that refuse to let us through. I can not wait to sit back, relax, and enjoy laughing with everyone else in the poetic romance that is found... *Across the Everglades*. 
Realizing that the natural environment requires protection from the wiles of the human race, individuals have organized societies that work to support the protection of species around the globe. I have always loved and supported those that support the environment. So, when I would hear of the National Audubon Society, I instinctively pictured Audubon as a wildlife conservationist and someone I liked very much. I heard about Jean Jacques Audubon before this everglades course, and at least I thought I knew him very well. But my perception of Audubon always stemmed from his association to the society named after him, not from the writings of the man himself. Needless to say, I liked him very much when I knew less about him. Or so I thought...

Never have my feelings toward an individual fluctuated as much as they have in the past two weeks. Upon reading excerpts from Audubon's journals, I could not help but dislike certain aspects of the individual. How could any society uphold the name of a man who would shoot birds by the dozen and stick wire through them to paint them? Artists are supposed to appreciate the natural world, not destroy it. At the same time, how could he depict reality, if his specimens were manipulated into specific positions, positions that met the painter's eye and not reality at all? These thoughts and many more spiraled through my mind as my stomach squirmed in indignation of Audubon's atrocities. I was livid at the fact that the plentitude of living species he described are no longer plentiful today. I could not believe that a naturalist was among the first to contribute to the decline of the species of my home state. Even the name of his pilot, Egan, sent chills through me when Audubon wrote that Egan was the 'professional hunter of Sea Cows or Manatees for the Havana market'. I could not believe my eyes and cringed at the idea of reading any more about the famous Audubon expedition. In my mind, Audubon registered, not as a painter, but as a hunter, who was hell-bent on getting his studies done in time to meet the expectation of his American and European patrons. Dollar signs, not the sun, glittered in his eyes. I found myself rooting for one hundred and seventy-two year old birds, hoping that they would hear me and fly away before Audubon arrived. I even cheered when Audubon's troop lost the opportunity of killing pelicans because they made the mistake of not waiting until the birds rose from their nests. My emotions continued in this light throughout Audubon's "Best Writings", and the only critique I could think of was that Audubon was no conservationist at all. The only specie that I wanted to see with "extended wings in the agonies of death" was Audubon himself, who has long since been dead.

So, how did Audubon become the legendary world renowned painter considering he picked up a shot gun before he picked up a paint brush? When reading, I closed myself up to the answer and to any clue that would clear up the name of Audubon. I was extremely disappointed with this naturalist and refused to think otherwise. However, once class discussion began on Friday, my perception of Audubon was soon to take on a new perspective. Audubon took the shape of a true naturalist through the poetry of Robert Penn Warren, who, with one line, redeemed in my mind the renowned painter. "He put them where they are, and there we see them: In our imagination." Audubon is crucial to the history of the natural world because in his paintings and
journals he gave future generations a key to the doors of the past. He killed, but he also observed what no one before him ever noted. He found new species of birds and documented the rest in words and paint for the world to see. He gives readers and observers today the chance to see through his imagination. I rooted for the birds because they were real to me. Audubon wrote about them vividly, bringing them to life within my imagination. I felt as if I were beside him, seeing and experiencing Florida for the first time.

As I pick a title for this journal, I think of the silly childhood girl's habit of picking a flower and plucking off its petals one at a time saying, "He loves me, he loves me not". 'I like him, I like him not' describes my ambivalence toward Audubon. Class discussion led me to question my emotions, research, and refute or support my opinion. I did just that, and plucking each detail about Audubon one at a time, I realize that there are some facts I will always dislike, but some that I should always respect. Probing into the Romantic time period, I found that Romanticism “exalted individualism, subjectivism, irrationalism, imagination, emotions and nature - emotion over reason and senses over intellect” (HuntFor.com). Considering the definition at first glance, it fit perfectly with my distasteful perception of Audubon: He acted without reason and intellect! Of course, I only wanted to interpret it that way and jumped to the conclusion with my own superficial reasoning. Taking into account Audubon's heritage, class discussion, and my twelve years at a Christian school, I could not overlook one of the many elements that added to my dislike of Audubon's senseless killings: the religious fervor that says that humankind "will be masters over all life- the fish in the sea, the birds in the sky..." (Genesis 1:26). Taking this idea into account, Audubon's apparently senseless killings were rooted into ideology that seemingly justified his actions. I do not believe that his actions were justified, but I understand one of the reasons he acted as he did. In the end, it was Audubon's love for knowledge and his need to pass that knowledge on that captured my attention and my appreciation.
The Beauty of Interpretation

Catherine Torres
IDH 4007
Fall Semester 2004

There is something about walking thigh high through the Everglades that just makes for an exciting day. Watching an artistic interpretation of an Everglades experience, avoiding two turtles that were crossing the road, choosing a broom stick to use for balance, finding anoles trying to camouflage themselves against a bald cypress, identifying the grasshopper hanging from a saw grass, reaching down into the 'muck' for periphyton, chewing on saw grass, picking up and investigating apple snails, discovering sea weed and learning that it is actually Bladder Wart, making a necklace out of it, running into spider webs, encountering a big spider nursing her egg pouch, glaring at someone trying to 'hydrate' the spider, exploring bald cypress trees strung with snake skins, looking for a twig to hang backpacks on, searching for a knee to sit on to eat lunch or just eating lunch standing almost waist deep in water, arguing about the importance of not breaking parts off a tree, discussing the relevance of a literary classic, wanting to continue the adventure in the direction opposite of the cars, realizing that everyone else is heading toward the cars, hoping the day could last a little longer, and enjoying the little things already experienced, are what made Friday's Everglades class exciting.

It is funny how I try to describe a day in words and run out of words in the process. Even if we could pull words from languages all over the world and make up words when we run out, at some point, the words are not enough. If I have to point out only one thing that I realized in Friday's class, it is that words are not enough because they require interpretation (the emphasis of Ranger Maureen's lecture). Indeed, words are useless unless we understand them, and we can only understand them if we understand the language and the context of the word. I love to read literary works like Their Eyes Were Watching God, and I am an English major because of my love of words and detailed descriptions, but I find that what ultimately captures my attention is the picture painted by the words, or, in other words, my interpretation of those words. To me, the pictures painted by words are always pieces of nature, experiences, ideas, and emotions all swirled into a paragraph, a page, a paper, or a book.

The pictures painted throughout Their Eyes Were Watching God are made up of a little bit of each of these. Nature arrives with a "dust-bearing bee sink[ing] into the sanctum of a bloom" (11). Nature is the mule who "almost got fat" (58) and the birds feasting on its remains (62). Nature takes form through the 'saw-grass bloom', and the scurrying rabbits, possums, and snakes that foreshadow the approaching storm (155). The hurricane, the flood, the rabid dog, and death are all descriptions that paint a picture of nature to readers. Nature is a living entity that breathes life to Hurston's words, but it is our individual relationship with nature that gives us a basis for interpretation of those words. Some, who are distant from nature and would rather be at home watching TV than out in the Everglades, bypass the natural element of the book by saying, "Nice, but who cares?" Others, who have experienced nature with a different attitude, have a completely different interpretation.

Experiences, ideas, and emotions also help to create the overall effect of the words in the novel. A young girl experiences surprise when she realizes that she is not white like the other
children. She longs to be a tree in bloom and waits for the world to be made. She goes through the pain of losing her childhood and is thrown into a relationship without love. The readers travel with her through her experiences and share in her emotions. She becomes like the mule she felt sorry for, who "done had his disposition ruint wid mistreatment" (56). The story of Janie's character is just a story unless it is interpreted by readers. When readers add their own thoughts, emotions, and experiences, the words take on a completely different interpretation.

Zora Neal Hurston, like most writers, does not visibly say why or what she means to write about in the course of the novel. Of course, biographies and interviews usually clue readers into the suggested meaning, but either way, readers take words and apply their own interpretation. There is the feminist interpretation, the black interpretation, Biblical interpretation, psychological interpretation, etc... and even a combination of all. In the end, however, the author gives readers words and we, in turn, apply our own interpretation based on our personal experiences. That is the beauty of words and interpretation.

So, the enthusiasm I feel when walking through the Everglades is part of who I am and how I interpret. Not everyone interprets in the same way or has the knowledge or experience necessary for interpretation, which is why we need individuals like Ranger Maureen, who shares her interpretation of nature with others, hoping that they too can see beauty in it or at least understand the importance of it. (We all need water to survive!)

I had several encounters with classmates during this last class that made me realize that interpretation has everything to do with the individual. It appalled me when someone actually tried to drown the spider that I was admiring! Needless to say, no one picked on the spider again... I even picked a spider off of someone's shirt, to 'set it free' on a bald cypress, only to have someone else knock the spider out of my hand with a notebook. We were definitely not on the same page of interpretation. I saw the spider as a creature needing help before it was squashed. The other person saw the little bitty spider as a threat that needed to be eliminated... It is pretty funny now that I think about it, though I definitely did not find it funny at the time. Interpretation can be quite entertaining as well as confusing. But then again, that is my interpretation of interpretation.
The following is an account of my experience at the Everglades and the days prior to the 1st class.

"Beware of the Everglades!" vehemently warns my friend, Juliette. "Whatever you do, run and do not look back! Vultures, snakes, and worst of all, ten foot alligators are waiting to attack their unsuspecting prey. Lynette, that includes you! Never stick your hand into the water and never walk alone. Never make contact with the wildlife, especially the snapping ten foot alligators. Those are the same alligators that will pull you into the water and bite your leg off, like in that movie Lake Placid. So remember Lynette, avoid the Everglades at all costs, unless you want to come back with a missing limb."

Only having been to the Everglades once before, many, many moons ago, I imagine the possibilities of the danger I could encounter. What if I fall into a patch of Saw grass or what if a mother alligator attempts to feed me to her babies that are hungrily waiting around the corner? The days leading up to the first class not only brought excitement, but deep down inside, there was something else growing. At first, I was unsure of what it was. In the days prior to our first Everglades visit, there was only one word that could be associated with what was growing inside of me: It. Whatever it was, It continued to grow and eat away at my insides. The suspense and tension that lingered fed It. As the days continued on, friends and family also continued to feed It necessary nutrients to help It grow. I must admit that I was partly to blame, in that I allowed It to be fed and by participating in the feeding rituals. It was born on the night of September 9, 2004, the night before my first class meeting.

The birth of It coincided with a dream that I had the same night. The dream started on a long desolate road, taking me farther and farther away from civilization. I slowly watched the building behind me shrink in size. Before I knew it, the road that I traveled on was bordered by murky water on both sides and the only company that I had was that of oversized birds hovering in the horizon. For a second, it seemed as though I had gone back in time. As I continued along the road, I came across an alligator, like the ones that J uliette had warned me about. To make matters worse there was a multicolored snake, about as large as the alligator, hooked onto its tail. I was so horrified at the sight that I nearly ran off into the road. "Ahhhhh" I screamed! I caught myself just in time. I sped past the two as fast as I could. After driving for what seemed like eternity I came across a rest stop and stopped hoping to find some help. I pulled in to the parking lot, opened my door and as I was about to step out I was nearly attacked by alligators. Just a minute before, the parking lot seemed empty and out of nowhere an alligator infestation emerged. I did not close my door in time. Within seconds I was being dragged out of my car by several baby alligators. Despite kicking and screaming, they showed no mercy. They pulled and pulled and before I knew it, I was face to face with the largest alligator I have ever seen. Its jaws slowly opened as it lunged towards me. "Noooooo" I hollered, as I jumped up from my nightmare. I convinced myself that it was just a nightmare. It was with this dream that I realized what It was. It was fear, the fear of the Everglades, and
most of all, of the large, snapping alligators. My fear lingered through the night but I awoke the next morning, ready to fight it head on.

On September 10, 2004, my journey to University Park began. The combination of excitement and fear returned. I was enlightened on the history of the Everglades, much of which I did not know despite having lived in Florida nearly all my life. After taking a short lunch break, my time to face my fear was right around the corner. Coopertown Airboat Rides was our next destination. At first sight, the place reminded me of a small, rural town store. I must admit I was at ease until I walked past the picnic table area. My heart rate began to accelerate at once. Right in front of me was the terror from my dream the night before: a ten foot alligator. An alligator like the ones I had been warned about, or so it seemed. It did not move, so I assumed it was asleep and escaped to the airboat while I still could. I took my first ride on an airboat, into the Everglades, so understandably I was a little scared. I said to myself, “there are at least 20 other people on this airboat, so what are my chances of getting eaten first?” I held on tightly and enjoyed the ride. I must admit that the scenery was breathtaking. It was unlike any that I have seen up close or in person. There was not an alligator in sight, just a few birds and some mosquito fish. So I was able to calm down a little. The baby named fear did not seem as big or important out in the open “river of grass”. Compared to the crazy streets of Miami, I actually felt safe. I even felt safe enough to go into the water. Yes, I did it and it was great! The tour took us into deeper waters. Once again I was faced with an alligator, which happened to approach my side of the boat. A vision of the alligator jumping in to the airboat appeared in my head, so I scooted away from the edge of the airboat. To my surprise, it swam right past us. We approached another, and yet another. They all did the same thing. They stopped in the middle of the water for a few seconds and swam out of the way. I was amazed. The ride ended without any major scares.

On land, a smaller alligator was passed around. I briefly touched it. I figured now would be the time to test the rumors. Would the alligator snap somebody's finger off? The alligator barely moved while being passed around. I figured, I might as well try holding the alligator too. The gator was passed to me. At that moment, a beam of sunlight began to shine onto me. I think I even heard opera music in the background. In all of my five minutes of holding the alligator, not a thing happened. Wow! In the short time while out in the Everglades, I realized that there was no real reason for me to fear those creatures. While it is obvious that they are not harmless creatures, I realized that I should not completely fear them either. I made it out with all my limbs intact, so I guess the trip wasn't so bad. It was with this trip that the death of "It" occurred.
The fresh wound didn't seem like it would be such a problem until I saw the blood trickling out. Sure, when I had cut my self by grabbing a piece of saw palmetto, I felt my skin ripping and quickly retracted my right hand. However, my want for adventure to explore the tree island overcame the small bit of pain I felt. An adrenaline rush helped me overcome all of the annoyances pushing through the dense brim of the island, like palmetto leaves and spider webs, as well as the myriad of other obstacles upon finally penetrating.

First there was the ground that wasn't as firm as I thought it was; my right sneaker falling victim to the deceptive scattered branches that littered the floor, probably only inches thick, allowing water to creep in and wet my sock. Then there were the dead branches that I tried to use as a bridge to avoid this, which snapped under my overbearing 150 pounds. And of course every branch was connected to the last by a series of intricate spider webs; every one I ducked to get under just happened to have a neighbor right underneath. The list goes on. But the small wound where the palm of my hand met my thumb didn't seem like it would be a big deal until I was back in the boat. I didn't realize that it would trigger such intense emotions and drag me so deep into a pit of despair.

Sitting there, about to row towards the professors, a bead of sweat dripped into the wound. Not only did I realize that this tiny cut would be a bother until it scabbed, but the pain of a half a day's rowing suddenly caught up. Then I realized that the "adventure" of walking through the tree island had felt more like a difficult mission than the fun time I had expected. This got me really upset.

Here I thought I was doing so well, because I had canoed various times before, and I had walked through equally difficult vegetation. So why was I so upset? Why was I so damaged, and in so much pain? I wanted to scream! Instead I let out my frustrations on the mosquitoes, swatting them away while my canoe partner fought his way back into the canoe. These mosquitoes, coupled with my aforementioned frustrations made me wonder how the Native Americans were able to so easily navigate through this type of environment. But more specifically, it made me think about something I had read in the Willoughby text. Willoughby was discussing an earlier expedition through the Everglades, where an older Seminole woman told the a member of the group, desperate for food, "...that he could get to Miami and back in twenty-four hours, if an Indian took him." (Willoughby, pg. 32)

It seems outrageous, especially considering my present aches and pains, but it also reminded me of another series of books I had read. This series, by Orson Scott Card, details the story of a boy in the late 1700's-early 1800's in America with magical powers. This fantasy series has a different version of history, where the Native Americans were never pushed west or forced into reservations, but instead occupied all lands west of the Mississippi River on their own volition, covering the river with a fog to protect from invasions. The main character, Alvin, learns how to run with the Native Americans' "greensong". This "greensong" enabled him to run like "...the
red man ran...hearing the greensong of the living woodland...not thinking where to step...no sticks breaking when he stepped..." until he became "...part of the living forest....Like a Red man, who could run forever through the deep forest, never needing rest, covering hundreds of miles in a single day." (Card, Prentice Alvin, p. 52) The sixth book describes the song as being the collaboration of wind, trees, animals, heartbeats...basically anything with life. In this instance, it is described by someone who learned to hear it without a Native American teacher like Alvin had. Alvin had taught him to hear it, although he could only faintly do so without Alvin around.

So this all led me to wonder if it could be true: is there a sort of "greensong" I could tap into? Granted, I can easily separate fantasy from reality: but Card researched Native American writings for years before writing the books. And the Willoughby text served as another example of this ability, however not quite so explicitly stated. So what else could I do but wonder of its possibility?

However, there I was, clearly the typical white man, suffering through the pains of being an intruder in this land instead of part of it. Could I be like Alvin? Could I learn this Native American way of connecting to the earth so much to become a part of it? This had been a focus of many of my past meditations. Sometimes I would go to Kendall Indian Hammocks Park and try to tap in; but the little "forest" area of the park was still close enough to the main roads that car sounds interrupted any chance I had to fall deep enough into a meditative state. Perhaps it would take coming out to the Everglades, finding a spot where I could be alone, and maybe I could hear a faint note of this song. I even thought, getting ready to row, about staying after class to do so.

But then I realized that I would have to work that night, and I felt the frustration building again. Then I remembered something else from the text. The books that I had read covered the span of about twenty three years. And even when Alvin first learned the "greensong", America was quickly expanding, destroying the natural world to make way for paved roads and massive cities. By the sixth book Alvin had to struggle a bit to hear the song, even in the thickest forests. So how would I, devoid of any contact with any Native American with the potential for knowledge about the "greensong", ever be able to tap into this music of the land? As distant as parts of the Everglades are from any sounds of the city, there are still many man made roads and borrow pits that are probably far closer than any roads that interrupted Alvin's ability to hear the song. At that moment, grabbing my oar in an odd way, so as to not let my wound touch it, another little bit of the dreamer in me died.

Bibliography
"We have to be careful. We have a slough slog virgin in the back." When one of my professors said this, I said to myself, "Oh lord, what have I gotten myself into?!" In the previous class, I had to miss the second of half due to family vacation plans, making me miss the slog in Pa-Hay-Okee. I was a little upset I had to miss it just because I did not want to be different from anyone else in the class, but I must admit I was a bit glad because I hate water. So when we were having lunch and find out that we would do a "minor slog" at the Clyde Butcher studio I had a conniption. Where is this photography studio that a slog is actually possible?

Surprisingly enough, it was one of the best times I have had in class all semester. I could not help but remember Ranger Maureen's interpretation speech. How when you undergo events differently, sure, it may seem odd, but it allows you to experience it in a way you normally would not, which hence enables you to construe things in a unique way.

Going to class every other week, people often ask me where I am going, and I normally just answer, "going to the Everglades." We drive, meet, discuss, interact a bit, and go home. Granted, we have done some interesting things, but never did I imagine that I would literally be in the Everglades. We were sticking to the ground beneath us, in the wilderness, nothing surrounding us but nature; I felt so outdoorsy. But what of puzzled me a little still was "normal" people who would actually do this every day of their lives.

When we got to the Clyde Butcher studio, and met the receptionist, I was surprised to see her. Someone who looked as pretty and trendy as her, you would not expect to see out in the middle of no where; let alone actually living there! You would expect to see biologists, ecologists, and other such scientists, but not some dainty young lady. A few of us actually made a joke about her, correlating to the Matthiessen book, saying that she was trying to run away from her past and just hiding out. I mean that place does not even have a city assigned to it! You would think that someone who looked like an outcast or vagabond would be the only person who lived out there, someone "country" or hill-billy, someone with an odd name, someone like, well, Zeke, our slough slog guide.

Do not get me wrong, he is a super amicable person, but for a little while there, it did look like a bad swamp mystery: a group of students go on a tour in the Everglades and no one makes it out except the odd tour guide. It honestly did not help keep my nerves at ease. But I had to do it, and, as our professors say in their syllabus, "without whining." Boy, was that a test!

Stepping in I had A LOT of reservations, and especially being the last one, I was whining a heck of a lot more. The water was dingy and cold, and I was scared to walk into a spider wed or fall into a sink hole. I was barely concentrating on anything anyone was saying, because, as I
said in my last journal, I HATE water; it terrifies me. And sure, the water is only about two feet high, but still. It was nasty, filthy water, and all I kept thinking about was that movie Anaconda. Not to mention Robert was not helping my cause, fearing some random creature would pop out and bite him.

As we walked along, the classmates that were in front of me reassured me that it was going to be alright, and that it was nothing compared to the slough slog I missed. Stopping for identifications so often allowed (well, more like forced) me to stop and look around. At first, I must admit, I was doing so out of pure paranoia to try to be aware of my surroundings, but eventually, I actually got pretty comfortable. It gave me the opportunity to soak in the beauty of nature. I was picking things up, joking around, asking identification questions, and, get this, actually enjoying myself! I know, what a surprise, huh? I was actually a little bitter I was not able to go to the full slough slog in the previous class. For a moment, I understood why the receptionist actually chose to live here.

Having this experience, especially near the end of the semester, I believe has allowed me to realize the great transition of opinions I have had. At the start of the semester, I thought there would be absolutely no way I would pass this class. Now, I do not think I would be as happy and enthusiastic about learning in another section. We have done so much in only a few weeks. I have learned so much: about the Everglades, my classmates, and definitely about myself. Most importantly has been my perspective, outlook, and interpretation of the Everglades. This class was the pinnacle of my experience. Yes, we have more classes to come, but it has given me that different perspective of appreciation.

Sure, in class we have gone into the pinelands, walked into the hammocks, and canoed around the mangroves. And, yes, we have touched, seen, smelled, heard, and even tasted the Everglades. But to be completely surrounded by and literally doused with this remarkable environment was something out of this world! Who would have thought that walking through the nasty, sticky muck would be so awe inspiring?

In my second entry, I spoke about the "shock and awe" factor of the Everglades; how I took for granted, and overestimated, all the wonders in this national park. But now, after being submerged in it, I have come to the full realization of what is is. It is simple, yet complex. It is chaotic, yet orderly. It is unattractive, yet beautiful. There truly are "no other Everglades in the world."
The Everglades National Park

FIU IDH 4007

Mosquito Fest

Sabrina Sosa

IDH 4007

Fall Semester 2004

I felt a small tickle on my arm. It turned into a pinching itch. I looked at my vulnerable white arm to find a small black-striped mosquito harassing my clean flesh for the perfect spot to strike. At the speed of light it was already injecting my skin and by the time I looked, it had conquered my blood.

Mosquitoes, mosquitoes, mosquitoes! Aaaahhhh! They can drive anyone crazy. Walking through the hammocks, not even the insect repellent will save you. I just don't get it. I'm sacrificing my skin by wearing insect repellant with deet (which melts plastic) and these salt water monsters still managed and dared to pinch and penetrate though my skin, sucking my blood out of me. One of my classmates told me a mosquito secret. She said if I pulled my skin, stretching it in opposite ways while a mosquito is biting me, its stinger would get trapped in the skin and it would explode. I wondered how on Earth this was possible until she taught me that the mosquito would continue to draw blood as an attempt to get out. I trusted that she was correct because she works with the Everglades and she has done this herself.

I was so amazed with this information that I couldn't wait to burst one of those little nuisances myself. It's weird because I don't ever kill insects. I don't have the heart to. I believe that just like humans they have their own lives and have the right to live. I don't even kill flies. I guess that is because they don't bite or physically pester me. Every once in a while I'll find a lizard roaming in my house. When I find myself in a situation like this, I'll open the nearest window or door and push or lead it out with a broom. Small lizards I actually catch with my bare hands. Besides, I'm happy they eat flies and lizards. I don't support or use bug spray (I think it's completely cruel).

So, back to mosquitoes: Going through the Bid Cypress Swamp, Lynette and I were trying to let mosquitoes bite us so we would be able to pop them. We weren't fortunate though. I for one, couldn't deal with the fact that I was going to be left with a red bump, not to mention it would really bother me itching like crazy for a couple of days. I couldn't even handle letting them get near me and if they did, I would try to splat them by slapping them against my body. At times I looked a little ridiculous. It looked like I was just hitting myself. Lynette didn't succeed either. She was worse off than me by far. She let all of them bite her, but she couldn't get them stuck in her skin. She came near to it once. Her closest encounter was trapping one, but didn't give it enough time to suck enough blood for it to burst. She got all nervous and let go of her stretched skin too early.

Everywhere we went, I got bitten. It was absolutely ridiculous. I would have enjoyed myself a lot more if it wasn't for those darn manic blood-suckers. The entire class even had to switch locations from the hammocks, where we were going to discuss *Killing Mr. Watson*, to the front of the education center, which was less polluted with mosquitoes.

I find them intolerable, uncontrollable, obsessive, compulsive, annoying, and pointless (only
the female ones because they are the ones that bite). A mosquito is worthless. It only serves as the food for spiders, frogs, lizards, and other insects, but those named above also have other sources of food. Think of it, we can live perfectly without these meaningless insects. I wish the female ones didn't exist or better yet, didn't bite. But if there aren't any females then they would be extinct because the males wouldn't be able to reproduce. I say let's get rid of them all! Even if we wanted that to happen, how would we make them disappear? I don't think that can happen, being that their eggs are so small and hard to reach in the water.

I can't believe those blood-biting scavengers got to me. I had jeans on and repellent and they still bit me. I got six bites on the back of my right arm and three on my knuckles. On the back of my left arm I had four and my hand had three. Some bites were different shapes and some were smaller than others. I think I was also attacked by "no-see-um" sand flies.

I felt so deceived (by the repellent). I felt so powerless. It was I against the mosquito and it beat me. Who would think that an insect that is so easily killed, so small, and so fragile had the control over humans? My bites look ridiculous. It's crazy because I didn't even get my arms in the water, so it couldn't have been that the repellent cream rubbed off.

Even though they really bothered me, I am over it now. I have two more classes in the Everglades and as much as I hate the mosquitoes, it's still worth going to explore its wonderful ecosystem. I have enjoyed this class so much. It has brought an entire new experience to me. I have learned to appreciate nature in a different and more positive way. I see how every little living creature plays a big part in making the ecosystem (even the mosquitoes) and I take back what I said about their extinction. They do serve a purpose in the ecosystem. They pollinate many plants and serve as a big part of the food chain. We humans just have to deal with staying away from them. After all, we are the ones in their natural habitat.
At first, it was a little awkward, but after I got accustomed to keeping my eyes closed in front of the whole class, I could relax and just listen. The many times I had previously visited the Everglades, it had never occurred to me that one very important aspect of the Everglades is the calming sounds it produces. I then remembered that many people come to the Everglades not to learn about it or enjoy its views, but to get away from the chaos of the city. With my eyes closed and my classmates quiet, I felt I was by myself. Nothing could come between me and the nature surrounding me. I heard a little bird in the distance, its chirp muffled by the leaves fiercely rustling in the wind; it reminded me of one of those CDs that people buy to relax or fall asleep. This "CD," though, would never be heard again: in my mind I had captured the unique music made by nature at that precise moment. When I got home, I locked myself in the bathroom, turned the light off, and closed my eyes once more. I wanted to see if I could remember those sounds: I knew they would make me eager to return to class in two weeks. My experiment was a success.

I can only imagine the feelings of the first explorers of the Everglades when they got to these majestic lands. Native Americans had already been living there for millennia when the Everglades was "discovered," and had grown accustomed to the music it made. Yet, the new explorers probably had not seen or heard anything similar in their lives. When they closed their eyes, they would have heard nature yet untouched by the hands of humankind: hundreds, maybe even thousands, of birds calling each other, alligators bellowing under a cool shade, frogs imitating crickets and pigs, and, of course, the soft wind making waves on the sawgrass and then softly cooling their faces. It must have been glorious! Most of these things can still be heard today, but less frequently. As people hunted down animals, drained the Everglades, and developed cities, they took away many key elements of this ecosystem. Some, like the birds, are still struggling to achieve stable numbers of population that would guarantee the survival of future generations of their species.

When Audubon set foot in South Florida to study the different species of birds he observed "great flocks of wading birds flying overhead toward their evening roosts .... They appeared in such numbers to actually block out the light from the sun for some time." 1 It seems unimaginable nowadays that the number of birds would eclipse the sun in such a way. In the late 19th and early 20th centuries, wearing bird's feathers on hats became very fashionable. Of course, in order to acquire these feathers, hunters would have to kill the birds, pluck the feathers out, and (as we learned in *Killing Mister Watson*) very often leave the birds' corpses rotting on the ground. This business became very profitable: In the first half of the 20th century certain types of feathers were worth more than their weight in gold. The more beautiful plumes are always acquired during the birds' mating season. By displaying exquisite, delicate plumes, males would attract females and keep their species going. It is not surprising to discover that this season was also the bird hunter's favorite. Upon acquiring the feathers of adult, mating birds, these hunters not only killed the adults, but left the chicks to starve to death. Very often, vultures would get to the chicks before they could die and ate them alive, piece by piece.
Obviously, most of the wealthy women displaying these feathers on their hats could not even imagine the damage they were causing to an entire ecosystem. Thankfully, fashions changed and plume-wearing decreased. The Everglades, though, had already suffered so many losses of its birds and habitats, that even today one cannot hope to see or hear but less than ten percent of the number of birds there existed at the beginning of the 1900s. The mellifluous music I heard on Friday while closing my eyes was devoid of many bird songs that would have been around me had humans never tampered with this fragile ecosystem.

Other animals have suffered similar fates. Alligators, for example, were hunted for decades not only for their meat, but for their pelts. The thick skin from their bodies made excellent and durable purses, boots, and belts. Baby alligators were very often skinned and used whole, head and all, to adorn purses. Their eyes replaced by little glass balls so as not to show their pain and suffering. Fortunately, alligator hunting was eventually banned when the Everglades National Park was established. What would have been the future of these regal reptiles without the Park? Sixty years ago alligators were extremely rare. Even scientists, researching the Everglades would have trouble finding them. Daniel Beard, in his accounts, wrote that in a year and a half of constant research in the Everglades, he only found four adult alligators. Nowadays, alligators are considered the rare success story of the Everglades since there are more than a million living. Yet, people still do not seem to understand that animals need their skins to exist. We do not have the right to take an indispensable part of the body to luxuriate ourselves. Fur coats, crocodile shoes, and leather purses are still being made and sold. It might change some minds if, along with the purchase, the customer had to take home the offspring of the animals killed to care for them or the bloody remains of the skinned corpses. Maybe then people would see the harsh reality of using nature to meet our wants.

It is disheartening to think of all the damage that humans have caused to the Everglades. Couldn't Governor Broward, for example, put profits aside and for a moment close his eyes to listen to the sounds around him? Maybe if he had, he would have discovered that those sounds would never be replicated out of the Everglades once the Everglades were gone. Maybe someone else would have ruined the ecosystem anyway. We always try to manipulate nature not only to serve our needs, but mostly our wants. It seems very hard for many people to let nature take its course. I wonder oftentimes if my children will ever get to enjoy the little that is left of the Everglades. Will they, one day, come to the same spot I was standing, close their eyes, and listen to nature as it was intended to be?

1 Proby, Kathryn Hall. *Audubon in Florida. With Selections from the Writings of John James Audubon*. University of Miami, Coral Gables, FL. 1974
I went to do my Thanksgiving shopping on Monday. I figured that if I bought the turkey, turkey stuffing, and pumpkin pie at the beginning of the week, I would avoid the long lines that build up in supermarkets the day before Thanksgiving, while not having to freeze and unfreeze the turkey. I was in aisle 4, trying to decide whether my family would prefer microwaveable Stove Top stuffing or the kind you actually insert into the turkey's insides when I remembered that I also had to get canned cranberry sauce... my favorite! I quickly grabbed the Stove Top and headed to another aisle when, right next to the coconut milk, eagerly waiting for me to notice them, were six cans of tamarind nectar. I just had to grab the 12-ounce cans to read the words: "Excellent source of Vitamin C!" It is amazing how I had never noticed the tamarind nectar cans, yet every time I go to the supermarket I see the coconut milk. I know that if Dr. Graham had never pointed out the Tamarind tree in class, the tamarind nectar cans would have never popped out at me.

My mind wandered off to last Friday, when I stuffed an unripe tamarind seed in my mouth. It tasted like hard lime candy and I did not like it. How easy it is, I wondered, to go to a supermarket where everything is ripe and ready for you to buy! Even the water comes pre-packaged in attractive bottles. Living on a mangrove island in the Ten-Thousand Islands must have been frustrating. The water had to be collected, drop by drop, in a high-maintenance cistern, the fruit and vegetables had to be gathered after they had taken their time to get ripe, even the sugar had to be grown in canes, collected, and then made into syrup: it did not come in convenient 1-lb or 5-lbs bags. Just imagine how labor intensive a meal such as the one in Thanksgiving would have been! I can just imagine Mister Watson working the land where the sugar cane is growing, while Netta scrapes the salt off the Black Mangrove leaves to flavor the mashed potatoes, and the Frenchman gathers some Agave plants to make tequila. Meanwhile, turkeys brought from Key West are running wild, waiting for their death in a few months.

It is no wonder that Mister Watson was very well respected when it came to growing crops. According to his neighbors, he could make anything grow from the ground. At a time when preservatives were not used to transport foods for long distances, locally-grown foods were a necessity. Mister Watson could provide for these... especially for the sugar syrup. Many times, as I was reading the novel, I admired Mister Watson for this talent. He would work hard alongside his employees, making sure the plants grew plentiful. However, who should really take credit for Mr. Watson's success were the Calusa Indians. By piling up shells for centuries, they were able to raise the land. Mangroves settled on these higher grounds... and soil built up for plants to grow some more.

It is astonishing how the hard efforts of the Calusa Indians are still being appreciated today. Even last Friday's class made use of them on Friday. We were walking on the shells Calusas thoughtfully piled up many generations ago. What would the West coast of Florida, especially the Ten Thousand Island area look like had the Calusa Indians not inhabited that area? We would not have had the same field trip on Friday: we probably would have had to visit a
different place. I would not have tried the tamarind, and never noticed those tamarind nectar cans, sitting patiently, waiting for someone to notice them in aisle 4. Every single shell under my feet was hundreds of years old. Every shell had once been a living being, and was probably put there by a Calusa Indian. Then the oysters had given part of themselves (nutrients, support) to help other organisms grow: other insects, other plants, and the animals living off those plants. The town of Chokoloskee would not even exist! And the Frenchman in Killing Mister Watson would not have had anything to look for. Those shell mounds with treasures he was desperately trying to discover would have never existed. The Calusa Indians, without their knowledge or consent, made the story of Mister Watson simply by creating mounds of oyster shells.

When I look at it this way, I have no choice but to accept how influential humans are on the environment and the future of other beings. As the Calusa Indians changed their environment by piling up oyster shells in order to survive, we are changing the environment of the Everglades by taking over much of it and changing it into houses and buildings. We are adding nutrients to the water because we need to fertilize our food. We are blocking off the natural water flow. When the Calusa Indians made their shell mounds, they were not considered to be destroying their environment. They were considered to be adapting to their environment. Are we not, also, adapting to our environment? Aren't we creating novels thanks to our actions on the environment? Carl Hiaasen, for example, uses phosphorus contamination in the water of the Everglades as a very important factor in one of his novels. It is as if every change humans make to the environment is creating a piece of history by changing the future. After all, if things were left the same way forever, there would be nothing new to talk about.

Those shell mounds left many years ago by Native Americans changed the way I looked at a can of nectar last Monday. How will my actions change someone's perspective a hundred years from today?
I do not really remember when this feeling started. Perhaps it started right away, during the first day of class. It is a sensation that accompanies me all the time. Frequently, in many places of Miami, I encounter remnants of nature, little pockets of life that reminds me of the Everglades. It happens when I go to Publix at Forest Lakes in West Kendall and I glimpse at the shrubs that are in the parking lot, and I know that those shrubs are not just shrubs, they are coco plums. And the trees, located a little further away, closer to Blockbusters, are not just simple trees; they are Gumbo Limbos and Strangler figs. At Bayside, downtown, the pelicans are not just pelicans they are Brown pelicans and on the FIU Biscayne campus the pelicans are White pelicans, at least the ones I saw. The mangroves that line the Biscayne campus Bay are predominately red, but I see scattered black and white mangroves too. And when I'm driving down the Palmetto expressway I wonder if the vultures that are flying high above are black vultures or turkey vultures, but they are too far away for me to know. (Please, no bird watching while driving, you may cause an accident).

Definitely, the Everglades recollections are consistently around me, and since I have been taking The Everglades class, the way I perceive and feel Miami has changed completely. It is like having x-ray vision. If I see a red mangrove on FIU Biscayne campus, my recollection goes much further than recognizing and remembering the name of that mangrove, in addition, the properties of the red mangrove also appear in my mind: "it has prop roots and drops roots from branches and the upper stem. The roots are extended only a few inches into the soil, and normally, the red mangrove is the one that grows closest to the water." Today, I feel much more connected to Miami, I understand and enjoy it like never before. There has occurred a change in how I perceive my surroundings and how I interact with it and not only from an environmentalist perception, but from an urban perception too. To learn how Miami functions helped me to be more receptive and interested in the issues that affect it, such as quality of potable water, flooding, water economy or salt-water intrusion into the Biscayne aquifer among others concerns.

Lately, I was often thinking about the complete restoration of the original Everglades itinerary; an Everglades that slowly flows from the Kissimmee River to Florida Bay without interruptions. Today that seems an idealistic thought, especially after the facts presented by Jana Newman, a Senior Supervising Environmental Scientist, during our visit to the South Florida Water Management District. She said that the major impediment to the original restoration is the erosion of the soil done by the continuous farming of the Everglades Agricultural Area. In ten years there will not be enough soil left to cultivate, and farming will be abandoned. The current farming practice is converting the Agricultural Area into a basin, and if the waters of lake Okeechobee were let to flow freely, the result would be another lake and not the intended shallow flow of the original river. I was completely disappointed and probably in denial to the facts that Dr. Newman was presenting to us. "Is she on our side?" I asked myself and was suspicious for a moment. The
South Florida Water Management District has symbolized the power of man over nature, the power over the degraded Everglades. Later, she said that probably real state development was a real possibility to supplant the farming in the Everglades Agricultural Area, and then, all my dreams about the complete Everglades restoration fell apart. For a moment I thought of what our Everglades class was all about. It's about man's development and his continuous battle against his natural environment. It's about human perception in relation to nature, and how this perception continuously changes from generation to generation. It's about economics and its powerful influence. It's about politics and its corruption. It's about human awareness of its errors. But overall, it's about man's responsibility towards their environment, a crucial element of human survival.

I felt the disappointment in other students too, and I overheard a conversation that said, "If we flood the Everglades Agricultural Area, a new peat would grow over time, the same as they grow in the canals, and the shallow river in the future would be constituted again." I don't know if that could be feasible and if it were, there are so many detractors to that idea, such as the farmers and the residents of two cities that are situated on the southern rim of lake Okeechobee.

Last semester during our slough slog experience our guide, Ranger Alan Scott, explained to us how the water level in the Everglades is controlled by the hand of man. He told us that one of the problems that The Everglades faces is that we do not know how to mimic the water levels of the original water flow. Consequently, the wildlife in the park was considerably reduced and the animal species that highly depend on the right water levels such as the snail kite and the wood stork were considered in danger of extinction. Today, it seems that the only solution to keep restoring The Everglades is The Comprehensive Everglades Restoration Plan, a thirty-year project that will restore much of the remaining Everglades to a free flowing system. The hand of man will still be controlling the water flow, and that is something that makes me be worry about the future of The Everglades.
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How many times have you just finished washing your car and, while you are driving down the highway all you hear is PLOP followed by juicy, white feces splattered on your windshield. Or how furious does one get when a pile of Miss FooFoo's dog crap that your neighbor neglected to pick up a couple of hours ago encompasses your shirt and Levis jeans, while mowing the front yard. I know that I get royally upset when I see bird bombs on my car after I just finished washing it a few hours ago, or when I step in a fresh pile of Miss FooFoo's poo poo! But who ever puts themselves in the animal's point of view? Who ever thinks about the fact that we are paving over all the land and cutting down all the trees that provide oxygen for our lungs and homes for the aviators? Let me tell you what, if I was a bird, I would crap all over your shiny car and as a matter of fact, I would drop a load right on your new 2003 World Champions Florida Marlins baseball cap too! Dirtbags!

Many times I have stopped and yelled at people who are driving in my car when they are about to throw things out of the window. I don't hate, because that is an extremely powerful word, but I do despise the fact that people don't have a problem with throwing their garbage wherever they please. Just because you finished eating your triple quarter-pounder with cheese, lettuce, tomatoes, pickles and extra mayonnaise thirty seconds ago from whatever atherosclerosis causing grease pit, doesn't mean you can take your filthy napkin and paper bag and toss it out the window like your John Elway! It seems like the majority of humankind either does not care or does not realize that the trash is either going to sit there on the side of the road or is going to be picked up by some nature nurturing chump like myself. It is absolutely horrible that people litter the land with Styrofoam cups, plastic glasses, and beer bottles that would take centuries to degrade.

Mothers and fathers are forever talking about how they want their children to have it better than they did, and how they want to give their children everything within their power. But yet these ignorant individuals continuously dispose of their trash wherever and whenever they want. By the time my children are of age to realize how absolutely disgusting the world is where mankind has placed his disease ridden feet upon the soil, it will be too late. Styrofoam, automobile oil, bottles, cans, paper, pots, knives, cigarette packages, computer printers, tires, and even toilet bowls were all retrieved from an Everglades National Park cleanup expedition this week and shipped to landfills. Come on!! First of all it is a national park. And secondly, who the hell is going to carry their old toilet bowl out of the remodeled bathroom, into the car, drive all the way into the Everglades, carry it another fifty feet, and then dump it into a canal? What kind of moron does this? Does he/she not realize that the garbage trucks and men visit everyone's yard once and even sometimes twice a week to pick up this trash!
For the last few minutes I have been trying to put myself into the shoes of a litterbug in order to justify their reasons for polluting our planet, but was unable to come to any reasonable conclusion. So what if the newer cars don't have ashtrays! Stop polluting your lungs with the filth from the cancer sticks. Ohh, Ohh, the bag was leaking on my pants. Well you shouldn't have put the Wendys' chili in the bag without finishing it or without putting the top back on idiot. Ahh, ahh, the trash collectors wouldn't take the refrigerator. Rent a truck, take it to the dump, and drop it off. It's simple. There are always ways around not dispersing your filth throughout the world. I have been told throughout my twenty one years of life that patience is a virtue. Be virtuous. Save the scenery for your children and your children's children. I know that I don't want my children to view the world as a disgusting dwelling. So, if I see you tossing your trash out of the window again, forget about the birds dude. I am taking a crap on your car! Try me.
The Everglades National Park
FIU IDH 4007

Falling Down

Melissa Petersen
IDH 4007
Spring Semester 2004

Over the past eight months that I have been studying in the Everglades I have participated in a wide variety of activities. I have canoed through the Nine Mile Pond and Florida Bay; done a slough slog into a cypress dome; walked the Gumbo Limbo and Anhinga trails (among others); picnicked in a slash pine forest and biked through Shark Valley. And that is to name but a few of our class’ activities. Each of the activities has broadened my knowledge and understanding of this diverse landscape. I have had the opportunity to look at the Everglades from a variety of different perspectives and this past week was no exception.

But before I get to this past weeks adventure, I want to tell you about one from a few months ago; a canoe trip. Well, actually two canoe trips. I have done one in Nine Mile Pond and one in Florida Bay and the most poignant recollection I have of both of these trips (beside the aching of my very out of shape muscles) is that of the clear water. Not to sound like an ad for bottled water but, the water was so clear we could see straight through to the bottom. When we were in Nine Mile Pond the periphyton were as visible as though they were inches from our faces. The water was a far cry from the vision of swampy, murky, pestilent water which was espoused by Governor Bonaparte Broward in the early 1900’s. Mind you, it is an impression of the Everglades that still persists today.

In Florida Bay, the water quality was no different. Although many of the areas we canoed through were deeper than Nine Mile Pond and we could not see the Bay floor, the shallower areas were just as clear and beautiful, offering us views of countless little fish. Even now the image I see when I think of that Bay is the broad expanse of clear blue/green water. What I encountered this past week was completely different from these canoe trips.

This week I participated in an Everglades clean-up. Like a chain-gang my classmates, professors and I walked the edges of roads and canals (which are popular fishing spots) picking up trash. Nasty, stinky, disgusting crap including fishing line, prophylactics, feminine napkins, beer bottles (lots of beer bottles), paper plates, styrofoam cups, plastic bags and even a toilet. I bring up the toilet because from what I saw this week it is hard to shake the impression that the fishermen who frequent the areas we worked on this week probably treat their toilets better than their favorite fishing holes. I doubt they would throw half the stuff we found in the water and on the banks of the water into their toilets for fear of plugging up their plumbing and septic tanks. Never mind the fact that the waters which they are throwing trash into are part of the bigger South Florida plumbing system.

The water I saw this week was just about the antithesis of the water in Nine Mile Pond and Florida Bay. It was murky and polluted and gross. I can tell you that for a fact because I
happened to have accidentally taken a nose dive into it. Now this is not the first time I have entered into the waters of the Florida Everglades. I have been on a slough slog into a cypress dome and have jumped off an airboat to wade though the muck before. And like on the canoe trips, the water surrounding me was clean. Sure there was peat and marl above the limestone floor but the water was still clean and clear. I never felt as though I was in someone's trash can on these occasions. The same can not be said for the water I fell into this week. Never before have I ached for a shower in my life!

The water I fell into was disgusting. In fact that was the reason why I was there. When I fell in I was straddling a small bridge and using a pole to fish out garbage from the water. Don't ask me how, but I lost my balance and fell over the bridge hitting a drain pipe on the way down. Needless to say when all was said and done I was totally embarrassed and filthy; having swum through a lot of trash to get out of the water. In addition to that I was a bit banged up and bruised from the fall. As I lay in bed all weekend it dawned on me that in the context of where I fell, my aches and pains were very insignificant. The quality of the water I fell into is not.

The Ranger who oversaw our clean-up project bluntly told us that the Park is unable to monitor these areas and keep them clean. They simply do not have the man power to clean-up after the fishermen nor to even keep trash receptacles in these areas because they have no one to empty them. I believe he said that there is only one Maintenance Man for the entire Eastern Everglades. They have to rely upon volunteer groups such as ours to clean these areas because apparently the fishermen can not be counted on to pick up their own refuse.

Not only is this fragile eco-system being polluted by agricultural run-off and constantly infringed upon by urban sprawl, but it is also being dumped in by fishermen and God only knows who else. Is there any end to the degradation of the Everglades? I am sure that I can say that I am not the only one in my class who fell in love with this place during the Fall Semester (just as I was supposed to) and I am probably not the only one who has found this current semester to be thoroughly depressing. Why? Well, because the situation seems so bleak and the politics so backward. It is shameful that the future of an entire eco-system is subject to the political whims of whoever holds the political office of Governor.

I do not mean to blame everything on the Governor because he is but one of the players in this game. As we learned from the South Florida Water Management District (another of the major players) there are many other outside influences that affect the life of the Everglades including the SFWMD, The Department of Environmental Protection, the Miccosukee Tribe, the Army Corps of Engineers (yes they are still playing a part), Congress, the Florida Legislature, the Sugar Industry, and let's not forget the taxpayers.

Sounds complicated, doesn't it? Well it is, and it is overwhelming. It is hard to tell where to begin or what to do to make the situation in the Everglades better. CERP certainly isn't the answer; at least I don't think so. There are positive things in that plan, but it assumes that the agricultural run off (phosphorous) problem has already been alleviated and it also proposes a system of ASR wells to provide water for an urban sprawl of 15 million people. Never mind the fact that much like the canals in the 1800's, the environmental impact of the ASR wells is all but unknown!

What are you going to do? Well, despite a little tumble over a bridge, I would say that one of the best things any individual can do is get in their car and drive to the Everglades with a garbage bag and a pair of work gloves. We can not individually change the entire political climate and bureaucracy surrounding the Everglades or satisfy the interests of all of the party's involved in the future of the Everglades. Likewise, we can't always canoe in Florida Bay. Sometimes, to make a
difference, you have to swim through the murky, polluted waters full of garbage.
It was as if the class had just stepped out onto the moon the way the limestone craters pockmarked the area's surface. It looked most uninhabitable indeed! Yet, here and there tufts of sawgrass had naturally reseeded and sprung up to reclaim the land. Like the American flag hoisted in place by Neil Armstrong on the moon, the tufts of sawgrass seemed to be saying, "One small step for sawgrass, one giant leap for the Everglades ecosystem!" Indeed, to witness the success of the Hole-in-the-Donut Restoration Project is like being the captain of a boat lost at sea catching a break in the fog long enough to glimpse a beacon's light before it becomes shrouded again in the mist of politics, economics and bureaucracy. Yet, that brief glimpse of light is enough to encourage even me, an increasingly cynical and apathetic environmentalist, to trudge on.

Before this seemingly barren lunar landscape emerged, the first invasive exotic species to colonize what would later be called the Hole-in-the-Donut area were a group of Homosapiens sapiens subsp. agricultis, otherwise known as farmers. After the last of the farmers left in the early 1970s, they left behind a rock-plowed, slightly elevated patch of land pregnant with nutrients otherwise not known in the mesic prairie wetlands that originally occupied this space. Thus, the scene was set for one of the most destructive vegetative invasions seen in the Everglades ecosystem thus far. The army came from Brazil and was crafty enough to get its enemy to use its own resources to advance its invasion. Its weapon: clusters of bright red berries that enticed the likes of Florida's state bird the mockingbird, cedar waxwings, and especially migrating robins (1) to come in for a meal and then disperse its seeds into uncolonized territories possibly miles away from the parent plant. This plant, a common roadside attraction now in south Florida, is called Brazilian pepper.

Also known by the misleading name Florida holly, since in the past its winter fruiting habit allowed its branches to be used to make holiday decorations, botanists refer to Brazilian pepper by its scientific name, Schinus terebinthifolius Raddi. Properly pronounced "sky-nus" the generic name comes from the Greek word for the mastic tree while the species epithet is derived from the Latin word for turpentine (terebinth) plus leaf (folium) (2). Aptly named (if you're in doubt, just crunch up a few leaves to see what I mean), Schinus belongs to the same resin-bearing plant family that brings us cashews, pistachios, mangoes, lacquers, and poison ivy. And, indeed, not only has this plant proven detrimental to native plant populations, it has also been known to cause skin irritations and rashes upon handling as well as respiratory complaints and hayfever symptoms while blooming.

According to Julia Morton, seeds of Brazilian pepper first arrived in Washington, DC in 1899 with the...
seeds or seedlings grown from them sent to the Plant Introduction Station in Miami where some plants were distributed locally (3). But according to Richard W. Workman, Administrative Director of the Sanibel-Captiva Conservation Foundation, Brazilian pepper was first introduced in Florida in 1891 by Reasoner's Tropical Nursery in Bradenton (4). Regardless of the exact dates, both writers probably would agree that Brazilian pepper got its foot in the door in Florida when a doctor named Dr. George Stone living in Punta Gorda grew seedlings from seeds he had acquired from somewhere in Brazil. In Volume I of the 1944 edition of My Garden In Florida written by Dr. Henry Nehrling, Dr. Stone is reported to have "distributed these seedlings freely among his friends, and plant lovers, and many were planted out along the city streets." (5). Nehrling goes on to comment on his admiration for "the unique beauty of a fine specimen in full fruit," suggesting that "It ought to be in every garden in Florida." (6).

Little could Nehrling foresee, though, that by the early 1970's most natural area land managers would become all too familiar with the destructive growing behaviors of his uniquely beautiful plant and had initiated efforts to control its spread (7). Such aggressiveness in growth even led University of Florida botanist Jack Ewel in 1978 to question whether or not Brazilian pepper was not the perfect weed:

Schinus terebinthifolius has many characteristics possessed by other weedy pioneer species: it grows rapidly; it is a prolific seed producer; its foliage flushes nearly continuously; it coppices vigorously, and it tolerates a wide range of site conditions. As a weed tree, however, it is nearly unique in terms of the broad spectrum of characteristics which it also possesses which are more typical of mature ecosystem species: it produces relatively large, animal-dispersed seeds; it has relatively large cotyledons which aid in seedling survival; it is dioecious; it is insect pollinated; its seedlings are remarkably capable of survival in shade conditions, and its reproductive activity is remarkably synchronous and compressed into a very short period (8).

In this same paper, Ewel, whose valuable research on the ecology of Brazilian pepper at that time was being conducted in the Hole-in-the-Donut, goes on to propose possible control strategies. Interestingly enough he proposes:

One possibility is to completely devastate the Schinus-dominated stands (by bulldozing and burning, perhaps) and encourage recolonization by desirable species. Such scorched-earth approaches to ecosystem management are, however, not in keeping with the philosophies of most natural reserves, parks and wildlife units. Furthermore, drastic site disturbance creates the near-perfect habitat for Schinus reinvasion: a rabbit-in-the-briar-patch situation (9)!

Yet, in 1989 a pilot project conducted on 24 hectares in the Hole-in-the-Donut showed that the only way to completely get rid of the established Brazilian pepper forests and return them to their original mesic prairie wetlands status was to bulldoze the above ground parts and remove the entire growing substrate down to bare limestone rock. Otherwise, the study showed that if any soil was left behind recolonization of Brazilian pepper was inevitable. Basically, this strategy works by returning the land to its normal elevation and nutrient levels which in turn has an effect on the area's hydroperiod allowing it to remain underwater for longer periods of time during the wet season. Under these nutrient deficient, wet conditions it appears that Brazilian pepper seedlings are unable to grow.

The results from this pilot study finally had latched upon an eradication strategy that worked and in 1993 this strategy was embodied in the Hole-in-the-Donut Restoration Project and commenced. The restoration project basically involves, as our class witnessed, bulldozing large areas of Brazilian pepper trees down, mulching and then piling them up at specific sites, and lastly scraping the substrate down to bare rock.
creating the lunar-looking surface described in the beginning of this paper. After observing the whole scheme in action, the first thing I can think of to say is that it is truly amazing and almost unfathomable to think that one species of plant could require so much heavy equipment to eliminate! It also poignantly illustrates just how serious the problem of invasive exotic plant species really can get.

Currently, all one needs to do is drive along any of the many canals that traverse the southern half of Florida to see just how prolific Brazilian pepper can be. And, perhaps, on one of these drives, one might ponder what strategy needs to be employed to eradicate these trees? This is a good question indeed, for unlike Everglades National Park, there is no intention of restoring the many canal-lined housing subdivisions back to their original status, and it is obvious that bulldozing, mulching, and scraping is not a viable option! One could even question why it would be necessary to remove these plants at all seeing that most vegetation used in landscaping these new topographic additions is non-native as well. And again, the answer brings us full circle around to the role the Everglades ecosystem plays as a life support system to the citizens of south Florida and the health of which allows us to keep enjoying the quality of life we currently are experiencing. But, unfortunately, like breathing, this all too often seems only to be taken for granted.

References


