

Best Student Essays of The University of North Carolina at Pembroke

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ReVisions: Best Student Essays is a publication designed to celebrate the finest nonfiction work composed by undergraduate students at The University of North Carolina at Pembroke. This issue was copyedited, designed, and produced by the students in PRE 3450: Computer-Assisted Editing and Publication Design.

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Front: Kaylee Nguyen, John Lerma, Naly Yang; Back: La'eega Mathews, Michelle Hazen, Lauren Allen, Justin Walker, Sara Oswald

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Papers may cover any topic within any field of study at UNCP. We do not publish fiction or poetry. We encourage submissions from all fields and majors.

All submissions must be accompanied by a nomination form. Students should fill out the nomination form completely and sign it, granting permission to the editors to edit and publish the essay if accepted. Faculty members should comment briefly on the merits of the essay and any other elements that make it an excellent example of student work. Students and faculty should sign the form and submit it with the manuscript.

Manuscript requirements: no more than 3000 words in length, double-spaced, and conform to the MLA style manual. Do not include any names or identifying information on the essay itself; use the nomination form as a cover sheet. All essays will be read and judged in a blind selection process. If a sub-mission is chosen for publication, the author will be notified and asked to submit an electronic version, a photograph, and a brief biography.

Submissions to be considered for publication in the Spring 2009 issue will be accepted until Dec. 12, 2008. For further information, contact Dr. Susan Cannata, ETL Department, 119 Dial Humanities Bldg., (910) 521-6806, cannata@uncp.edu.

The cover photo, which shows the Lowry Bell Tower at sunset, was taken in December 2007 by Carolina Choi, a sophomore Education major with a concentration in Art.

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YOU'RE SO VAIN! You Probably think this Article Is about You! Don't You? Don't You?

By Ryan Chavis



Ryan Chavis is a senior majoring in Business Administration with concentrations in Marketing and Finance and minoring in Writing. A native of Pembroke, NC, Ryan is active in many organizations on campus and also works part-time at BB&T Centralized Collections in Lumberton, NC.

he surgeons on Nip/Tuck make it seem so easy. "Tell me what you don't like about yourself..." goes the opening line on the popular television series. I could mention a variety of things that I don't like about myself, such as my negative attitude or my penchant for procrastinating, but I would have never thought during my senior year of college that there would be such a strong disliking for my body that would eventually progress into so much dismay and aggravation. It seemed that every image of males I saw in the media, whether it was a Men's Health magazine preaching the benefits of a full body workout or a suggestive ad for Abercrombie and Fitch featuring a half-dressed guy and girl frolicking in a field, drilled the notion into my mind that society practically dictates that men attain a slim and muscular physique. The relentless stress and the constant negative emotion that came from the unsatisfactory perception of my own body boiled internally for many years as I saw these images around me. It was during the fall semester of my senior year that I finally found an answer to the seemingly unsolvable problem that plagued me.

Having a relatively slim-bodied profile, my fat, puffy chest is one part of my body that stood out noticeably from the rest for many years, and I was determined to make the problem go away through

exercise and dieting. Switching from calorie-laden soft drinks to pints of water on a daily basis, I lost a good amount of weight. Supplementing this switch was a regular weight-lifting routine incorporating exercises that worked all parts of the body. I put special emphasis on chest exercises. This blitz of chest presses, pectoral flies and pushups proved to be problematic. The building of muscle within the chest only exaggerated the problem, and instead of contouring the chest, it made the fat and tissue protrude even further. My family physician lent an ear, and seeing how distraught this condition made me feel, promptly phoned a plastic surgeon in Pinehurst to set up a consultation. Through my consult, I learned quickly that there was a medical term for "man-boobs" called gynecomastia, which is an enlargement of the chest in males as a result of the fluctuation of hormones during puberty (Triggs 105). The surgeon went over the many details of a liposuction procedure which included some nasty side-effects such as severe bleeding and sagging of the skin, and took pictures to submit to the insurance company. Within six weeks, I had discovered that insurance refused to pay for the surgery. They considered my case to be mild and therefore to not warrant any type of invasive surgery to correct it. It was after this rejection from the insurance company that the search became even more intense. I went back for a second go around for Dr. Pinehurst, but after months of hearing nothing from him or his staff, I went back to my family physician. After assuring him that my chest was just as flabby as before, he set out to find another plastic surgeon for round two of the battle against man boobs.

I traveled to Fayetteville for a consult. The ruling was the same as in Pinehurst, but the surgeon in Fayetteville referred me to his colleague in Winston-Salem because he lacked the special equipment to perform the surgery in his office. Who would have thought that shopping for a plastic surgeon would be so taxing? After beginning to feel as if I was being tossed around like a pack of Marlboros in a prison block, I made the trek to Wake Forest Baptist Hospital and found myself face to face with Dr. Marks. Dr. Marks said that he had performed many of the same type of procedures be-

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fore, but he was very blunt in stating that because I was older, insurance would more than likely refuse to pay for it because even though it was a medical condition, it was still considered by the insurance companies to be a purely cosmetic procedure. My parents, having seen me struggle with how uncomfortable gynecomastia made me feel, agreed to pay for the operation (around \$5,000), and within fifteen minutes, we had booked a date for the surgery. The moment of coming full circle was a feeling of unbridled freedom and I took many moments on the car ride home to ponder what my outlook on life will be post-surgery.

The anticipation was ripping away at me. I had already taken the sick days from work, and I scheduled the surgery to coincide with fall break to minimize the absences from my classes. Explaining to people what my plans were for fall break was the tricky part. "James," my marketing professor, asked me one day in his usual drawling voice in class, "What are your plans for fall break?" I paused for a moment before explaining that I would be "hanging out around Pembroke." The truth of the matter is that I was going to be so jacked up on Vicodin, that hanging out was all I would be able to do, but he didn't have to know that, and neither did anybody else.

Wednesday, October 17th finally comes after much anticipation, and I wake up at 5:30am so that I would have time to get ready and be at the hospital in Winston Salem by 10 am. Nurse Bernadette, quickly offering that I can call her "Bern" if I would like, instructs me to take out all piercings, visible and non-visible, and to strip my clothes off so that I may put on my hospital gown. To my relief, she allows me to keep my boxers on, so that I can avoid my bare ass hanging out should I succumb to drowsiness from medications and become completely unaware of my surroundings (please see Jack Nicholson in *Something's Gotta Give*).

Lying on the operating table in preparation for surgery was interesting to say the least. Bern takes my left arm and begins prodding to find a suitable vein to inject an IV full of antibiotics. After many years of having blood drawn for allergy shots and various trips to the doctor's office, I explain that there is a wonderfully reliable and plump vein on the lower part of my right forearm. Bern keeps prodding my left arm, and having tried to inject the needle in two separate locations, finally switches to my right side and injects the IV into ole' faithful on her first attempt. Making sure to tape the tubing to my arm, she begins to cover my legs and strap me down with restraints so that both my arms are completely out to my sides and my lower body covered in blankets. There I am, arms flailed out as if to be crucified for the sake of vanity and as I look down helplessly, my eyes become fixated on a piece of medical machinery that looks like it originated from the depths of hell. A harsh metal contraption with dozens of numerical displays and tubes sits a couple of feet beyond the table, and I assume this would be the device that will be used for the liposuction procedure.

Enter the nurse anesthetist. I don't quite remember this man's name, but I do remember that he was far too perky and touchy-feely at 11 am. "Are you nervous? You don't look nervous?" he asks me, with his red hair and plump face staring down at me. "No, not really," I reply, stifling a look of aggravation. He walks over to a CD player in the back of the operating room. "I hope you like Sting", he explains as strains of "Don't Stand So Close to Me" by The Police begin to flood the room. Perhaps "Killing Me Softly" sung by Lauryn Hill would have been far more appropriate. "I'm going to give you something through your IV to help you relax," the anesthetist says. I was so relaxed that I only remember waking up in the recovery room swaddled in various bandages with my mother looking on.

Looking down at my chest, I didn't really notice anything visibly right away. After a few minutes, however, searing pain engulfed my chest. Tylox, which is a painkiller that is used to suppress moderate to severe pain, was injected into my bloodstream. Feeling completely subdued within a matter of seconds, Tylox is my new best friend. After becoming numb to the pain, I poked my head up out of the covers to examine the results. No immediate signs that the boobies were completely gone, but two drainage tubes were affixed to the sides of my chest. I couldn't tell exactly where in my chest cavity they had been placed, but the sight of two silicon tubes protruding from underneath blood soaked bandages was not a visual I was ready Ryan's writing voice really replicates his interesting take on the world. Writing with humor and frankness, he brings his reader into his essay in a most engaging way.

—Kim Gunter

You're So Vain!

to stomach. Bern shows my mother how to change my drainage tubes, which involves squeezing the blood and excess seepage that accumulates in the tube into a drainage cup that has to be emptied every so often. Nervousness set in immediately. I trust my mother but also know that she can be a bit clumsy, and the thought of her accidentally pulling too hard and yanking the tubing from within my chest scares me.

Thanks to one last shot of Tylox through the bloodstream, the three-hour car trip felt like only thirty minutes to me. To my surprise I am able to waddle steadily out of the car and onto the sidewalk and can move my upper body with some efficiency. The drainage tubing, as greatly beneficial to the healing process as it is, tends to be a bit unsightly as well. Bern had pinned them to my bandages to prevent them from being yanked out and they protruded quite a bit, and when I put a shirt on over them, it created quite an interesting profile. To be blunt, it looked like I had huge breasts. Isn't it ironic? Changing of the drainage tubes is something that I dreaded. With every pull of the tube, I could feel a burning sensation as the tubing underneath the skin moved around. I can't really do anything except lie around and eat as my father insists that calories aid in the healing process. After a couple of days of lying around watching scary movies on AMC and downing slices of Sweet Potato Pie, I began to feel restless, but I quickly sucked it up as the thought of having the bandages removed draws nearer, and I would be one step closer to the ultimate goal of a flatter chest.

The next week, I make the commute back to Winston Salem to have my drainage tubes taken out. Nurse Bern wasn't there. Instead it was another nurse who peeled the bandages from my skin. A week of being cocooned inside layers of blood-stained cloth isn't a pretty site as the bandages fall to my sides revealing a flat but still bruised chest. Dr. Marks came in to remove the tubes. "Do you like that?" he asks as I examine his handiwork. Pausing to look down at the dried blood on and around my chest, I manage to mumble out a "Yeah". He snips the suture that is holding a drainage tube on my left side of my chest and begins to slowly tug. I feel something moving inside of my chest. A lengthy plastic-looking grid with perforations is pulled from underneath my skin. *Oh shit.* The nurse assists in pulling the second tubing. The reaction is amplified and I almost fall over due to queasiness. The nurse, who lacked the warmth of Bern, quickly assured me that most patients have the same reaction when getting tubing removed. Thanks for the heads up.

My mission was accomplished, and I was quite pleased with the results. The surgeon informs me that I am to stay away from the gym for at least six weeks, and I am to keep the bandages on for another month. As much trouble as it is layering my chest up with multitudes of compression bandages, I am amazed at how many people comment on how something is "different" about me. Some co-workers and friends noticed that I was out for several days, but how does one go about covering up or explaining a cosmetic surgery procedure. One friend, who is as southern and oldfashioned as they come, made a priceless face when I mentioned that I was out of commission because I was having some routine, minimally invasive liposuction. I can imagine that in a town where high school football reins supreme, chicken and pastry is the staple of every Sunday supper and where patrons nearly shit their pants when they got wind that Pembroke was getting a Wal-Mart, this would come as a surprise that a boy was getting plastic surgery. I can imagine that other people would have had the same reaction, and I felt tempted to test the shock value of "lipo" on many of the other locals, but I decided not to indulge, as the newly found self-confidence is a breath of fresh air. I wore my fraternity letters the first time post-surgery on campus, and for once the appliqué stitched lettering is completely flat against my chest. It's great to know that I don't have to layer my clothing to make my chest appear flatter.

Lebron James smirks confidently on the cover of the November 2007 issue of *Men's Health*, and I thumb through the glossy pages skimming over workouts that would make nice additions to my trips to the gym. I'm half-way through the magazine and then I hit the article entitled "Custom Bodywork" which features a perfectly chiseled midsection along with a list of popular cosmetic procedures for men (Unger 162). Located across from the article is an advertisement for BioGe-

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netix, a "supplemental breakthrough" featuring a roided-up man with an impossibly lean physique. I silently wondered to myself how much money it would take to transform my body. My chest is flatter, but far from perfect. It lacks the definition and mass of the Abercrombie model. Pec implants. My stomach has a layer of baby-fat on it that's hiding those abs that are ready to pop out just in time for Spring Break. Maybe over Christmas holiday I can ask Santa for another bout of liposuction in lieu of a stocking stuffer. Then I realize, had I not been looking at these workout magazines and comparing myself with these waifs, I wouldn't have had to go through the searching, the money, the time and the pain in the first place. \checkmark

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The Big "R" in my Relationship

By Donna Gilchrist



Donna Gilchrist is a rising junior at UNCP. She majors in Chemistry and Biology and plans to go to graduate school. She is constantly motivated and often times entertained by her five delightful children. In the very few precious moments of spare time she manages to steal, Donna loves to read, do crossword puzzles, and just hang out with her kids and a good Disney movie. oes racism still exist in America? Is there a connection between our upbringing and our perception of race? Was the man I chose to spend the rest of my life with raised to be a racist and will he raise our children that way? Are we, am I, guilty of racism? Is the issue of racism powerful enough to pull us apart? Recent events in my life have had me contemplating these questions and many more like them.

On the way home from the airport after a business trip, my husband and I had pulled onto the shoulder of the freeway and police cars proceeded to surround us. Several white policemen streamed from the cars, guns drawn, demanding that my husband step away from the vehicle with his hands up where they could be seen. Without a word of explanation, he was shoved onto the trunk of the car, handcuffed and taken directly to the police station. Meanwhile, I was pulled from our truck and forced into the back of a squad car. We found out later that my husband matched the description of a suspect in a rape case involving a young white girl.

During later discussions between my husband and me, he immediately labeled this a racially motivated incident. In defense of his position he pointed out that he had been pulled over only because he was a black male driving a luxury SUV supposedly behaving "suspiciously" on the shoulder of the freeway at night (he was going through his luggage to get a gift for me that I couldn't wait to see). The part of me that wanted to dismiss this as my husband over-reacting had been forever silenced by what we had been victims of. I could no longer say that he was not justified in feeling the way he did.

Although that was my first experience of such blatantly obvious racism, I had frequently heard my husband talk about what it meant to be a black man today in America. His position had always been that race came into play a lot more than I was willing to admit. He argued that he had to deal with issues of race when it came to providing for his family, on his job of seven years, and in everyday situations. I would always credit his argument to his upbringing. He would describe a scenario (white people crossing the street to avoid him, being pulled over in predominately white neighborhoods or trying to be a Good Samaritan only to have the police called) and I could relate, not to him, but to his so-called offenders.

Before the incident I could not process the information that he was giving me as racially motivated because in most of the cases I would have done the same thing. Frequently I would walk down the street and try to avoid young black men, especially if their pants were sagging, they were wearing a white undershirt and they had gold fronts on their teeth. I am guilty of noticing tricked out cars with tinted windows and loud stereos, labeling them suspicious, and calling 9-1-1. I have even refused assistance from certain black males if they looked a certain way. How then could I consider these acts racist, when I practice them myself?

I was forced to come to terms with the big "R" in my relationship. I existed under the misconception that racism no longer existed in this country. Despite recent incidences of racial profiling in the wake of September 11 and the prosecution of former KKK members for crimes of their youth (Lehrer), I believed that overall America had made progress on the racial front. I thought that we had become educated to the point that we had achieved unity that allowed us to exist cohesively and progressively to the benefit of all mankind. What I've

Donna Gilchrist

come to realize is that I was in denial about the big "R" in my relationship with my spouse and that we could be dangerously close to becoming a statistic.

Statistics compiled by the Administration for Children and Families show that the rate of separation and divorce among African Americans has increased exponentially, and one of the leading factors specific to these couples are experiences of racism, which lead to economic and social distress. According to an article by Jaslean J. LaTaillade, continued experiences of racism and discrimination have been named a major stressor in the relationships of African Americans (342).

Persistent exposure to racism created a schism in my relationship because it increased our sensitivity to other stressful events, which increased negative perceptions of our relationship and increased the likelihood that a discussion about whether or not something was a racial incident would end as an argument. According to Shelby Steele, America has a problem with discussing its racial problems because such a discussion tends to lead to a debate about one's personal and political beliefs (272).

As a group, African Americans demonstrate great diversity in physical characteristics (skin color, hair texture), cultures of origin, social and economic status, and educational achievement. These characteristics have been associated with differences in racial experiences with persons within as well as outside their ethnic group (LaTaillade 350).

Although we were both raised in small towns in the rural south not three miles from each other, my husband and I have vastly different backgrounds. My parents both owned their own businesses, but his parents worked in a factory. He went to a racist high school in a racist town; I did not. He worked summers on the farms of local white farmers; I worked at my mom's salon. As a result of our backgrounds (his smeared by racial tensions and mine clear of any racial implications or incidents), my husband and I react to situations differently. He feels that I am in denial about what is really going on in the world, and I feel that sometimes as African Americans we overplay the race card. His assumption is that when I say that my view of life, which is based on my life experiences, is better for our children than his, that I am belittling his upbringing, thus his parents.

Although both African American men and women experience racism, black men are more likely to have experiences that threaten their chances of reaching adulthood (e.g., police brutality, gang violence) (LaTaillade 351). In response to racial incidents, both real and perceived, black couples become frustrated with each other and engage in mutual blaming stemming from a belief that one partner is unsympathetic and unsupportive of the other's pain and frustration. It is not uncommon for black males to believe that they experience more difficulties due to their race and gender. Consequently black men and women exhibit conflicting perspectives on racism and race-related experiences (LaTaillade 351).

My greatest concern was that my husband was perpetuating racism based on a series of seemingly mundane incidents (being followed around in department stores, having assumptions made about his taste when he asks if there is an item in stock, phoning ahead for a table, being told there was one available, and then having to wait once we actually got into the restaurant) and that our children would pick up on this. Ordinarily, I would not be able to understand why any of those things should bother a person, but after being the victim of racial discrimination it is hard not to categorize those incidences as anything but such. According to Steele the fact that the outcome of many commonplace tasks, hailing a cab in NYC after dark and seemingly routine traffic stops, is directly linked to an individual's assessment of racism in America means there is still a very real issue of racism (272).

Several people, including myself, have vastly underestimated the extent to which racism exists in American life until they come face to face with a situation that forces them to realize that racism is alive and although not always blatant, smoldering just under many surfaces. Much like Steele "I could identify with a wider range of American ideas and possibilities when I thought they were no longer tainted by racism" (271). Although society has become cleverer at covering up its racist attitude, at times I question how successful any pursuit of the "American Dream" can be in a society that is clearly still racist, and I worry about what that means to the future of our youth. Donna writes with an honest and strong voice, and there are other shows of strength as well: a courageous questioning of her values and experiences, as well as those of people she loves.

—Cyndi Miecznikowski

The Big "R" in my Relationship

Since that fateful freeway incident, I am convinced that I was doing my children a disservice by not allowing my husband to prepare them for racism, and we have since taken steps to educate them on the subject. I assumed that by sheltering them from racism and by not teaching them about the dangers of racism, I was keeping them from any exposure to it. I was heartbroken to learn that my thirteen-year-old son had a teacher a few years ago that he thought to be racist. I was further saddened when he proceeded to defend his position with valid points that no child should be able to make. Countee Cullen illustrates in his poem, "Incident," how such incidents can have lasting effects on a child when he describes a seven month trip to Baltimore when he was a child of which all he remembered was being called a "Nigger" by a white child (278).

So yes, racism is alive and well in America, but no I am not a racist and neither is my husband; we are realists. He understands that I am blessed to have been spared the pain of racial discrimination in my past, and I understand that he is lucky to have come to terms with the racial discrimination in his. Racism is not a weapon that can destroy us but a tool that can educate us.

My husband and I have taken preventive measures to ensure that it has no power over our-

relationship, our children, and our lives. Our increased understanding and empathy of the others' perspectives has strengthened our relationship. We understand that we are defined neither by my husbands racial past, nor our shared racial experience but strengthened by the knowledge that we have the power to educate our children so that they are not blindsided by racism.

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KINDRED COMPANIONS

By Emily Howden

he English Pointer trembles each time his truck pulls into the drive, and she hides by slouching her body as close to the ground as possible. She knows not to lick her owner or nudge him with her wet nose. She shows him her submission, and sometimes he leaves her be. Other times, she's not so lucky. She wags her tail a lot, but never, ever wags her tail in front of him. Wagging her tail gets her ignored, punched, kicked, and abandoned. So she keeps her tail between her hind legs as much as she can help it. She doesn't bite him. She tried that once, and he didn't let her get away with it. She hunches her body and licks her wounds, keeping her teeth to herself.

The sixteen-year-old girl trembles each time he approaches her with that menacing look on his face, and she slouches her shoulders forward, keeping her eyes from locking with his. She knows not to place her hand on her boyfriend's arm or rub her face against his. She shows him her submission by keeping her mouth shut, and sometimes he leaves her be. Other times, she's not so lucky. She cries a lot, but never, ever cries in front of him. Crying gets her ignored, reprimanded, left, and dumped. So she tries not to cry as much as she can help it. She doesn't resist him. She tried that once, and he didn't let her get away with it. She closes her eyes and keeps quiet, keeping her hands to herself.

Sometimes her owner can be really nice. He'll toss her a table scrap or pat her on the back. She wags her tail, and she licks his hand because she knows it's safe. His voice is different when he's in a nice mood; it's softer, gentler. His movements are softer and gentler too. His touch isn't painful; his hands aren't full of wrath. These are days when he tosses a ball to her in the yard or lets her out of her five-by-five fenced area to run. These are the days she lives for, days when her tail wags freely because her owner loves her.

Sometimes her boyfriend can be really nice. He'll bring her a bouquet of flowers or kiss her on the cheek. She smiles, and she reaches for his hand because she knows it's safe. His voice is different when he's in a nice mood; it's softer, gentler. His movements are softer and gentler too. His touch isn't painful; his hands aren't full of wrath. These are days when he scoops her up in his arms or takes



her out to a romantic restaurant. These are the days she lives for, days when she can smile freely because her boyfriend loves her.

When she starts showing the nice days stop coming. Her belly swells with new life, and her owner grabs her by the neck and tosses her out of her crate. His voice bellows angrily; she lowers her tail between her hind legs and hovers a few feet from him. He tosses a rock at her, and she whimpers when it smacks her gut. He leaves her in the yard

When he starts cheating on her the nice days stop coming. Her words swell with accusations, and her boyfriend grabs her arm and waves his beer in front of her face. His voice bellows angrily; she slouches her shoulders and stares at the ground a few feet from him. He swings the bottle towards her, and she whimpers when the cold beer smacks her face. He leaves her standing there.

After a few years, the English Pointer's owner discards her when he drives her to the pound in the back of his pick-up. Her fear of humans deems her an unsuccessful candidate for adoption. Project Pet Adoption removes her from the pound, where she is in line to be euthanized.

After a few years, the young girl's boyfriend discards her when he dumps her over the phone. Her fear of men deems her an unsuccessful candidate for dating. She removes herself from college, Emily Howden is a senior at UNCP who is graduating this spring with a double major in Biology and English. Fascinated by veterinary science and the human-canine bond alike, Emily aspires to become a doctor of veterinary medicine and be an ambassador for the welfare of the canine species. She has recently been accepted into North Carolina State's College of Veterinary Medicine.

KINDRED COMPANIONS

where she is struggling to overcome the pain of her past.

The English Pointer is named "Fancy" by Project Pet Adoption and led into a boarding facility, where Emily, a nineteen-year-old kennel worker, begins working a month earlier. Head low to the ground, Fancy shuffles behind the Project Pet Adoption worker and slips into her designated cage. Vertebrae visible, hip bones projecting through an almost transparent layer of skin, she huddles in the corner of her cage, peering cautiously through the chain link door. Her back hip is marked with an open wound and her tits are swollen.

Emily stares at the skinniest dog she has ever laid her eyes on, and her eyes fall to her own thinning body. As she observes the wincing canine, huddling in the corner of her cage, she remembers her secret retreat when she was sixteen: Second floor restroom, back stall, on the right. When her dark secrets well within her, she retreats from the classrooms and the hallways to this secret place she enters the stall and lowers herself to the floor, head between her knees. Only there, do her tears fall, huddled in the corner.

The first time a kennel worker comes to guide Fancy outside to do her business, she nips at her and curls up in the back of the cage. The kennel workers avoid the cage-protective pointer in the same way that the undergraduate boys avoided approaching the uptight, bitchy college girl named Emily before she drops out. Fancy learns to protect herself by keeping humans at a distance, and Emily learns to protect herself by maintaining an unapproachable persona in the presence of men.

Emily waits until the other workers are out of Fancy's sight before crawling, very slowly, into Fancy's cage. She sits down in the cage, her back against the door, and waits. She slouches her shoulders, keeping her height shorter than Fancy's, and softly speaks to her in a slow tone. Gradually, she notices the tension in Fancy's body relax and the distance between their bodies decrease. Emily maintains her position, having no intention of startling Fancy or pushing any physical interaction upon her. Emily hated the way college guys would eagerly wrap their arms around her in passing or feel the need to lean in and breathe in her face when talking. She especially despised the men who asserted their masculine prowess at fraternity parties by grabbing her breasts or slapping her ass. No, she won't push Fancy; she won't remind her of the human who harmed her. She will wait.

Fancy's front legs stretch slowly in Emily's direction, her eyes continually examining the human's face. After a half hour of her soft words and Fancy's measured movement in Emily's direction, Fancy nudges her hand with her nose and offers a few reserved licks. Emily slips the lead over her head, and they head towards the yard together.

Fancy trembles and darts in the opposite direction each time she hears a pick-up drive by. The sound and sight of the pick-up makes her remember. The memory takes her over, and she writhes with fear. Leery of doorways, Fancy peers into adjacent rooms before entering them. Thunderstorms fill her with agonizing terror, and even when she manages to get her entire forty pound body into Emily's arms, she still shakes. The deep, masculine tone of Emily's father's voice sends Fancy into panic mode. She doesn't realize that he is a gentle, dog-loving man. He is a man, and she fears him.

Emily trembles and darts in the opposite direction each time she comes in contact with anyone who resembles her ex-boyfriend. The sight of a curly-haired blonde and the smell of Abercrombie cologne makes her remember. The memory takes her over, and she writhes with fear. Leery of being alone with a male stranger, Emily peers into public hallways and parking lots before entering them. Any contact from her ex-boyfriend fills her with agonizing terror, and even when she manages to block his email address and change her cell phone number, she still shakes at the mention of his name. The soft, affectionate nature of her new boyfriend sends Emily into panic mode. She doesn't realize that he is a gentle, woman-respecting man. He is a man, and she fears him.

At first, Emily is the only person Fancy trusts. Emily doesn't demand physical contact or push her into socialization that she isn't ready for. Fancy spends a lot of time hiding in her crate, especially when strangers are nearby. But she doesn't spend all of her time hiding. Emily takes her to a lake and they swim together. Fancy loves to chase the ducks. Sometimes

After several versions of this essay, Emily realized that it wasn't canine therapy or human/dog connections in the abstract that she wanted to discuss but her own remarkable journey—hers and Fancy's. She writes with great creativity and precision.

—Kim Gunter

Emily Howden

Emily lets her off the leash and she gallops freely. Her back stretches out and her tail rises; unrestrained by fear, she allows her nose to sniff the air and her legs to stretch out before her.

At first, dogs are the only creatures Emily trusts. They don't demand sexual contact or push her into socialization that she isn't ready for. Emily spends a lot of time hiding her shame, especially from other human beings. But she doesn't spend all her time hiding. Emily takes Fancy to a lake and they swim together. Emily loves the sun on her skin. Sometimes Emily lies on the dock and she peers up at the sky. Her back stretches and she lets her hair fall between the boards; unrestrained by fear, she allows herself to lie beneath the sun in her bikini and her legs stretch out before her.

Fancy splashes into the river followed by her new family, a young couple that adopts her from Project Pet Adoption. They comment later about her extreme love for water, and when Emily hears this, she smiles. They re-name her "Anna" and express their lack of understanding for how anyone could give up such a beautiful, good-natured dog. When Fancy meets her new family she is twenty pounds heavier than when she arrived at the kennel, and the wound on her hip has healed, her tits no longer swollen. Her tail wags freely when Emily returns her to Project Pet Adoption, and she darts through doorways like a puppy on a mission. She is still cautious of men, but grows to

trust them with time and patience.

Emily walks down the aisle accompanied by her brother, her eyes locked with her best friend's a few yards ahead. The guests comment later about her outward expression of joy that evening, and when Emily hears this, she smiles. They celebrate with her and her new husband, and she lacks any thoughts of her ex-boyfriend. When Emily marries her husband she is fifteen pounds heavier than the day she met Fancy at the kennel, and her wounds are healing, her fear of men no longer active. She laughs freely when her husband reaches down to remove the garter from her thigh, and she lets his fingers wiggle across her knee cap. She is still cautious of men, but grows to trust them with time and patience. ***

Fancy pokes her nose against Emily's cheek when she leans down and wraps her arms around her. Tears stream down Emily's face as she kisses Fancy's snout, and Fancy licks them off her face generously. A few hours after Emily returns Fancy to Project Pet Adoption, she is adopted by her new family. Emily's fiancé squeezes her shoulder as they exit the building, and Emily wipes the tears from her face. Two years later, shortly before their wedding ceremony, they adopt a homeless Pointer from the local shelter and name her "Sadie." 50

Hide and Seek

Internet and the second second

Nina Thao is a freshman who enjoys spending time with her family and friends. She is very proud of her heritage. In 1883, millions of Hmong, an Asian ethnic group, migrated from the south of China into Southeast Asia, especially into Laos (McCall). Hmong are accustomed to the farming life and living in small homes made of bamboo. According to the encyclopedia *Southeast Asia*, the Hmong have incorporated pieces of Vietnamese, Laotian, and Christian life styles into their culture. Living in poverty, the Hmong used their language to pass their history from generation to generation. In *Social Studies*, McCall explains, Hmong have been "orally" passing down their histories. It was not until 1950 that the Hmong were introduced to recording history on paper.

The Hmong farmers in Southeast Asia had their lives transformed by the Vietnam War, which began as a conflict between communists and occupying forces from France. Keat Gin explains, "During the Colonization of Tokin (1883-1954), a number of Hmong decided to join the Vietnamese nationalists and communists, whereas many Christianized Hmong sided with the French" (597). Soon the Hmong were dragged into the Vietnam War, which dispersed the Hmong people and their culture. My mother, Kao Her, who was a Hmong refugee, often speaks about the hardship in Laos and how difficult it was to be a victim of the war. She begins by speaking about the Vietnam War and how it changed her life forever.

By Nina Thao

By the 1950s, the Hmong and people of Laos were in the middle of the war. It was South Vietnam against communists, as well as the Americans who decided to join forces with the South Vietnamese to overcome communism. Being defeated more and more each day, the Americans began to recruit Hmong men. The Hmong were promised a place of their own to live, a non-communist government in Laos and Vietnam, and American trading. Striving for a better lifestyle and thirsty for freedom from communism, they accepted. About 35,000 Hmong men formed the "secret army" that were opposed to the Pathet Lao communists. Another mission the "secret army" had was to save American pilots who had their planes shot down into the jungles (Nakashima 1). As the war ended in the early 1970s and the Americans pulled out of the war, the Hmong became helpless. Several Hmong attempted to stay clear of the war, but they were still being attacked as victims (Gin 597). In 1975, the Americans pulled out of Laos and Vietnam, leaving the Hmong as "targets of genocide" by the communists (Tatman 223). The ones who stayed in Laos moved into the jungles, and many are still living there. Other Hmong had no choice but to escape to Thailand into refugee camps, awaiting the sign that it was secure enough to go back to Laos and Vietnam (McCall 2). One third of the Hmong population stayed in Laos, one third survived the journey to Thailand and lived in the refugee camps, and the rest died during the war.

At the age of two, my mother Kao moved with her family from one city in Laos to another because of numerous attacks from the enemies. She remembers one evening when her grandmother gave her a blanket and a pack of rice. Her grandmother told her to keep those two things close to her and never leave them behind. As a child Kao did not understand why she had to do it, but she knew it was in her best interest to listen to the elders and do as she was told. Every night in the jungle she would take out the pack of rice and eat a bit. She would then take out her blanket and wrap herself in it and go to sleep for the next day's journey to find a safe city to live in. One child states, in *The Washington Post*, that living in the jungle

NINA THAO

was not easy. Every night he would lie down on a big banana leaf in the dirt; this was his bed for the night (Nakashima 3). Why she was hiding from Pathet Laos was not easily explained to little Kao.

At age five, Kao's mother passed away, leaving twelve children in the hands of their father. The children had no time to grieve for their mother's death, for they were still in the middle of a war. After being attacked five to six times in a year, Kao's father decided it was time to move to a place called Pond of Deer. Growing up there, Kao took care of her younger siblings and at the same time she went into a nearby city and sold items to pay for her older brothers' fees to attend school. Kao and her family became used to the fact that they had to move to a different city every time they were being attacked. It was in her father's best interest to lead his children into Thailand, where the Americans had refugee camps for the Hmong.

Kao's whole childhood and teenage years were spent running away from enemies and living briefly in each town or city. When she was twenty, she and her family followed a group of Hmong farmers in a journey towards the border of Thailand. Half way there, the Vietnamese, who were still fighting for communism, attacked the refugees and killed the majority of the Hmong right on the streets. Scared by this terrifying attack, Kao's father never planned to go to Thailand again. Kao was tired of running away from the enemies and was starting to feel helpless. She talked with her father about letting her and several of her siblings go to the city of Na Xue, which was on the border to Thailand. Her father gave her a traditional silver necklace made by his own hands and told her to sell it once she was in the town, for food to keep them strong on their journey. Kao and her two younger sisters followed her cousin into the town, Na Xue. But neither of her sisters wanted to leave Laos because they knew if they were caught leaving they would be killed. Bravely, Kao did not care anymore if she died, so she then bought a ticket for a boat ride across the famous Mekong River into Thailand, bringing herself a step closer to her freedom.

Weeping with joy, Kao found her oldest brother, starving to death, living with her uncle in the refugee camp. Once she settled down in the new cramped room that was reserved for her, she and her brother went to the store and bought him some food with the money she had left over. The Americans finally fed the Hmong who lived in the refugee camp when the refugees were half way dead. My mother and her brother were among the refugees who were lucky enough to live on the little money they had for food.

After six months, Kao moved to another refugee camp, where her other brother had escaped to. It took her a whole day on the bus to reach the second refugee camp in Thailand. There, her brother notified her that he and his own family were leaving to go to the United States. That night, she said her goodbyes and stayed in the house that he and his family were living in. In The Journal of American Folklore, Peterson founded that many of the refugees stayed in the camps for over 10 years waiting for approval to live in foreign countries (7). In this second camp Kao felt that it was roomier and there were many ways to work for money or to grow crops. While living there, she met her future husband, my father Wang Nhia Thao. They married and lived in the camp for three more years. In 1979, my father, as a former Viet Con, was able to receive approval to leave Asia and go to any foreign country he wished to live in. He chose the United States, so my parents and my oldest brother (only age 2) received free airplane tickets to the United States to live a new life.

In America, my parents and my oldest brother, Decha, lived in Los Angeles, California. Kao again met her older brother, who had come three years before she did. He gave them a place to stay for a night or two with another Hmong family that were there for a month already. In just a week, her brother found them a house and gave them a tour of the city. The following day her brother picked them up from their new home and took them to get their Green Cards so they could stay in the United States as long as they wanted to. Their life changed from farmers in the mountains of Laos to students in the United States, learning English and becoming citizens. My father graduated and started work; as for my mother, she dropped out of high school to stay with her children. It was difficult to build a new life in a new place from scratch.

As Nina narrates her mother's difficult life journey with moving understatement, she evokes a family, a culture, and the modern refugee experience.

—Monika Brown

HIDE AND SEEK

Approximately 140,000 Hmong people came to America (Nakashima 2). Kao's father and siblings soon followed her to the United States, year after year, until each one that wanted to leave the refugee camps was there with her. Three of her brothers and two of her sisters now live in the United States, some in Wisconsin, Minnesota, California, and North Carolina. The middle child and the youngest child in her family stayed behind living in poverty in Laos. The second youngest of the twelve children now lives in France with her own family. Ten years after Kao had been living comfortably in United States, her father was accepted into the United States. In the Hmong culture the parents live with either the oldest or youngest son, so her father lived with her oldest brother, the first one to be in the United States. When Kao met her father it was as if he came back from the dead. She cried out with joy and told her father that if he had never made her that necklace, she would have never gotten to where she is now. Seeing one of your family members, after many years without their presence, is a feeling that is unimaginable.

Many Hmong had the same feelings when they found their family members again. In *The Washington Post*, Nakashima describes how the war destroyed a man's family. His two siblings and parents were killed, leaving only him and his brother. When the brothers met again, they cried and updated each other on their lives that changed drastically after the war. One of the brothers lives in Minnesota and has a small business while the other brother is still dodging bullets in the jungle of Laos (Nakashima 3). The war changed us for the better and for the worse.

Every Hmong in the United States has a tragic story to tell about the Vietnam War. To be able to move on in life, many decided to put the past behind them for their children's sake. The Hmong are where they are now because of that war. Some of us put behind our tragedies and found a way to live a better life; others still linger in the war which supposedly ended thirty years ago. The Hmong in America are still trying to find out ways to save those in Laos who are not lucky enough to live a better life (Yang 5). Growing up I became more and more exposed to the history of the Hmong. I realized I could not change the past but I can help our people, the Hmong, speak out about how much we were hurt and how many people we lost in the Vietnam War. We are orphans of Asia, and now only want to belong in our new countries. Hopefully we can have a history of happiness sometime in the future. $\varsigma \circ$

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Wetland Mitigation

By Kathy Trotter

any people have been raised to think of wetlands as places that do not have any value and, in some cases, even feared them because it was thought that they were full of snakes, were mosquito-infested, and harbored other creepy-crawly animals. In the past two decades, the view of wetlands has slowly changed. Their benefits are being appreciated and protection for them has been implemented through environmental protection laws and the 'no-net-loss' policy. This paper will look at the history of wetlands in the United States, their function and value, the governmental agencies responsible for their protection, wetland mitigation process and banking, and the question of whether wetland mitigation masks wetland loss.

History of Wetlands

In the United States, it is estimated that before European settlers arrived, wetlands covered 11% of the land mass, or 1,586,367 square kilometers. Since that time, wetlands have been on the decline, with 54% of them having been altered or destroyed due to some type of anthropogenic disturbance. Carolina Bays, the elliptically shaped shallow depressions that exist from Maryland to Florida, are considered wetlands. History reflects that approximately 80% of the 2,651,500 mineral soil Carolina Bays surveyed had been substantially impacted (Menzel et al. 2005). In the Southern Great Plains, 69% of wetlands have been converted to agricultural uses such as grazing or the production of crops. Draining, ditching, and filling with dredged material was a common practice in order to change wetlands into agricultural landscapes. Landowners interested in converting such "wasteland" into cropland were offered technical assistance from the federal government (Cech 2005). Agriculture production was not the only reason for the decline of wetlands. Many wetlands were degraded or altered so that highways, roads, and development could be constructed. Wetland loss also occurs naturally through erosion, sea-level rise, droughts, and hurricanes, but humans have had the most impact on their degradation.



What is a Wetland?

In accordance with the Army Corps of Engineer's 1987 manual, three characteristics must be met in order for land to be classified as a wetland: hydrology, soils, and vegetation (Environmental Laboratory 1987). Hydrology is an inundation of water, either permanently or temporarily, that covers the surface of the land. This water source can be ground water, precipitation, flooding, or tides. Soils that are found in wetlands are referred to as hydric soils. Hydric soils are higher in soil organic matter and have been saturated with water over a period sufficient to develop anaerobic conditions. Hydrophytic vegetation has physiological adaptations for the anaerobic conditions that are found in hydric soils and the wetland hydrologic condition. Wetlands are recognized as having the presence of water at the surface or root zone, unique soils that have been formed by anaerobic conditions, and vegetation that is adapted to wet conditions such as cattails and cypress trees.

Wetland Function and Value

There are several types of wetland ecosystems, such as salt marshes, Carolina Bays, fens, pocosins, and swamps, to name a few. It is estimated that the annual global economic value of wetlands is 4.9 trillion dollars per year, placing it third in Kathy Trotter is a senior majoring in Environmental Science. She hopes to help the earth out in some way.

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value when compared with the other world ecosystems of coastal areas and open ocean; respectively, coastal areas and open ocean have an economic value of 12.6 trillion and 8.4 trillion dollars per year (Primack 2002). Wetlands function as sponges during rain events and store water that, in turn, is slowly released, a process that reduces flooding. Salt marshes of the North Carolina sounds and mangroves of Florida act as barriers to the mainland, lessening wave action and reducing erosion. Wetlands provide nutrient cycling, sediment removal, and the removal of pollutants such as heavy metals. The Green Swamp of North Carolina is the headwaters of the Waccamaw River, which parallels the Carolina coast and provides drinking water for Myrtle Beach. There is much concern about the approved Permit 404 that is allowing the placement of a mega dump in the Green Swamp, where it will service a 160-kilometer radius.

Hunting and fishing in wetlands provide recreation, subsistence, and income for some people. People also value aesthetic attributes, such as the black water rivers that course through these areas, and they value the wildlife. Many endangered and threatened species of plants and animal are associated with wetlands. Sixty-eight percent of threatened or endangered birds in the United States inhabit wetlands (Mitsch and Gosselink 2000). One important endangered species that visits the swampy zones of North Carolina's coastal plains is the whooping crane. It is not hard to believe that "the loss and degradation of numerous wetlands have presumably resulted in the concomitant loss of species abundance and diversity, with ramifications for ecosystem functioning" (Gibbons et al. 2006). Serious consequences can result, such as increased flooding, a decline in the water quality, and a loss of natural beauty.

Governing Agencies

In 1972, Congress enacted the Clean Water Act in response to recognizing that the nation's waters were being degraded. The objective of the Act is to maintain and restore the chemical, physical, and biological integrity of the waters of the United States (Environmental Laboratory 1987). The Environmental Protection Agency and the Army Corps of Engineers jointly work together in regulation of the Clean Water Act. Section 404 of the Act also allows the Army Corps of Engineers to issue permits that allow dredge or placement of fill material into the nation's waters, which include wetlands. In the late 1980s, the "no-net-loss" policy for wetlands was adopted (and is endorsed by the current President); it introduced wetland mitigation as the leading tool in combating wetland loss in the United States (Balcombe et al. 2005). In order to clarify the goals of the Clean Water Act, both the Environmental Protection Agency and the Army Corps of Engineers signed a Memorandum of Agreement in 1990 that defined mitigation as replacement of lost functions as well as acreage (Hoeltje and Cole 2006). The implementation of the Clean Water Act and the Memorandum of Agreement slowed the conversion of wetlands to agriculture from an initial rate of 184,131 hectares annually in the mid-1950s to the mid-1970s, to 50,66 hectares annually in the decade from 1982-1992 (Brown and Lant 1999).

Wetland Mitigation

For any proposed project that a person or agency wishes to initiate that involves the discharge of a wetland, one must follow a three-step process, which is referred to as mitigation sequencing. The first of these processes is to make every effort to avoid the wetland, meaning that every attempt should be made to make alternative or less adverse impacts, such as moving the route of a proposed road to go around instead of through a wetland. If avoidance cannot be achieved, the second step is to minimize adverse effects on the wetland; such efforts that should be taken include changing the angle in which a future building will be sitting on a lot. The third step is to compensate through compensatory mitigation for all unavoidable adverse impacts. The Army Corps of Engineers determines the form and amount of compensatory mitigation, defined as "the restoration, creation, enhancement, or in exceptional cases preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable impacts" (U.S. ACE 2002).

Compensatory mitigation is decided prior to disturbance of the wetland; the permittee has three mechanisms in which to accomplish mitiga-

development. As Kathy reveals in her paper, however, wetland mitigation is contributing to declines in wetlands. Her paper uses examples from North Carolina and elsewhere to demonstrate the "holes" in the laws and is an excellent review and synthesis of the literature on the subject. -Lisa Kelly

In 1989, President George H.

W. Bush announced that his

administration was adopt-

ing a "no net loss" policy, in

order to stop the enormous

States, which resulted from

loss of wetlands in the United

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tion. The first of these mechanisms is to project specific mitigation; the permittee ensures that the mitigation occurs and is ultimately responsible for its success. The second is mitigation banking, which is the restoration, creation, enhancement, or preservation of a wetland that has, in turn, had a value created in terms of a credit. This credit can then be used for any compensatory mitigation of future projects, and the bank sponsor is responsible for the success of the mitigation. The third mechanism is in-lieu-fee mitigation; funds are provided to a public agency or non-profit organizations that are in-lieu-fee sponsors and these funds are used to purchase credits from a mitigation bank or projectspecific mitigation occurs.

Does Wetland Mitigation Mask Wetland Loss?

Federal programs and policy for both private landowner and federal lands are encouraging compensatory mitigation through the methods of restoration and creation. However, the question is whether these mitigated wetlands really "count" as wetlands. A comparison of natural wetlands and created or restored wetlands will be done using the three characteristics of hydrology, hydrophytic vegetation, and hydric soils.

One important factor in the replacement of wetland function is hydrophytic vegetation. Vegetation not only determines water chemistry, but it affects the abundance and distribution of wildlife and invertebrate communities (Balcombe et al. 2005). To determine whether hydrophytic vegetation could be created, 11 mitigated wetland sites and four natural wetland sites were compared using species richness, diversity, and cover. The proportion of hydrophytic vegetation found at the mitigation site was 83.8% and at the natural wetland site was 94.3%. A comparison of both the mitigated wetland sites and natural wetland sites showed indeed that hydrophytic vegetation standards set by the Army Corps of Engineer Wetland Delineation Manual of 1987 had been met (Balcombe et al. 2005). However, species richness and diversity were significantly different between mitigated and natural sites with a P-value of less than 0.05 for each (Balcombe et al. 2005). The mitigated wetland sites had younger woody vegetation, higher numbers of non-native species, such as purple loosestrife, clover, and crown vetch, as well as the presence of invasives such as teasel and sericia. Mature, natural wetlands sites are more stable in vegetative composition and have better adapted species than mitigated sites. Natural wetlands species have had more time to allow the well-adapted species to exclude the less well-adapted species (Balcombe et al. 2005).

Restoring the hydrology of a wetland is important because hydrology is often thought of as the key component in nutrient cycling, pH level, redox status, community composition, and wetland development (Bruland el al. 2003). A comparison of two restored wetlands with two natural wetlands was done using monitoring wells, temperature, monthly precipitation, and also by monitoring the chemical composition. The conclusion was that in spite of 30 years of intensive drainage and agricultural land-use, wetland hydrology was quickly and effectively reestablished in the restored wetland by filling the ditches (Bruland el al. 2003).

A third comparison examined whether soils of created or restored wetlands can meet the same level of function as natural wetlands. In North Carolina, 11 created/restored wetlands were paired with their similar, natural wetlands. With regard to the soil organic content, the conclusion was that the created/restored sites had significantly less soil organic matter—11.8 percent—compared with their paired natural wetland sites—28.9 percent (Bruland and Richardson 2004).

Although the restored wetlands were lower in soil organic matter, when determining what sites should be used in restoring wetlands, priority should be given to those that contain histosol type soils. These soils have the ability to "jump-start" the restoration effort due to the energy sources of microbes they contain (Bruland and Richardson 2004). Creating wetlands should be the last choice for mitigation purposes, due to the time that it takes for the formation of hydric soils. In a study conducted on the restoration of Carolina Bays, it was found that bat activity increased one year after the restoration, proving that restoration is an important conservation tool (Menzel 2005).

These three studies show that although you can create a wetland by establishing hydrophytic vegetation (done by seed dispersal or manually

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planting) and hydrology, as well as by plugging the ditches, these efforts just make it look like a wetland. The created wetland is still missing one major component: hydric soils. Therefore, for mitigation purposes, created wetlands should not be used for mitigation crediting. In addition, even though at face value the study on hydrophytic vegetation met the parameter set in accordance with the Army Corps of Engineers determination of a wetland, it also showed a significant difference in diversity and species richness. This means that until the restored wetland can meet the same diversity and species richness, it should not be used in wetland mitigation for crediting purposes.

A report by the U.S. Fish and Wildlife Service, The Status and Trends of Wetlands in the Conterminous United States (1998 to 2004), shows that the nation is meeting its wetland goals (President Bush's no-net-loss policy). For the first time, net wetland gains achieved through the contribution of restoration and creation activities surpassed net wetland losses (Dahl 2006). This report is misleading in that it does not take into account the function or quality of the wetland. In addition, the Army Corps of Engineers' own data are suspect; they inflate their data by "counting preserved wetlands and uplands, and in some cases, even counting land that has been avoided for development" (e.g. when a developer destroys five acres of a ten acre wetland, the Corps may count this a 10-acre gain) (Sibbing 2003).

The U.S. Government Accountability Office (GAO) released a report in 2005 that stated that the Army Corps of Engineers "had limited oversight of compensatory mitigation" (GAO 2005). The guidance given by the Army Corps of Engineers calls for those who perform mitigation to submit periodic monitoring reports and to perform inspection of the mitigation sites (GAO 2005). However, the guidance was vague in that the Army Corps of Engineers seemed to be interested only in "substantial mitigation," although it did not provide a definition of what this term means (GAO 2005). Another section of the guidelines stated that officials were supposed to conduct large numbers of compliance inspections. Then in another section, this was contradicted, and inspections were given a low priority, which led to confusion of Corps officials (GAO 2005). Little compensatory mitigation oversight was conducted by any of the seven Army Corps of Engineers districts. Inspection of the files by the GAO found that those dealing with compensatory mitigation showed that among 89 files that required monitoring, only 21 contained some type of report. The GAO stated that of the 152 permit files, only 15 percent showed that the Corps had performed a compliance inspection (GAO 2005). The Army Corps of Engineers failed in oversight by failing to conduct compliance inspections and follow-up to ensure that required reports of mitigation banking and in-lieu-fee mitigation were submitted by permittees. The Army Corps of Engineers has the enforcement tools necessary to ensure that compliance is met. Nevertheless, due to their own failure to specify the compensatory mitigation in the permits, no legal action for noncompliance could be taken.

Solutions

The mitigation of wetlands has become an important tool, but to meet the no-net-loss policy and to ensure that the wetlands of this nation are preserved for future generations, the Army Corps of Engineers has to enforce the standards. One method to ensure this may be to develop a branch in the government, possibly to have oversight of ongoing mitigation on a full time basis. All efforts should be focused on the restoration of wetlands; creating a wetland should be out of the question. The creation of a wetland should only be used to replace those wetlands that have been irrevocably destroyed, such as those lost for development and roads. Incorporating the tools of remotely sensed satellite data combined with GIS has proved to be an approach that is successful in measuring the broad scale of landscape patterns and correlating such patterns with ecological functional changes (Kelly 2001). Remote sensing satellite with GIS could be instrumental in monitoring to ensure that we are not chipping away at wetlands, that we can actually watch the whole landscape and not just that one corner that someone wants for a parking lot. More grant money could be provided to study specific gains or loss of wetlands. Standards should be developed to ensure that when mitigation oc-

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curs (e.g., when a marsh is lost), that we gain a wetland (marsh) in return. A final solution is to develop incentives (e.g., tax breaks) for landowners with wetlands to pay them for the services their wetlands provide.

Conclusion

Created wetlands do not function in the same way as natural or restored wetlands. It has been established that wetlands provide the services of flood control, erosion control, and nutrient cycling. Without naturally functioning wetlands, the human race will pay a large monetary price. Eventually, money will not be able to fix the problem. Constantly chipping away at wetlands and other natural resources, with the idea that we can swap them out through mitigation, is an idea that needs to change. It took the Earth millions of years to evolve life, much longer than the brief time that we have been here. Instead of trying to change the landscape around us, we need to change *to* the landscape and learn to live with it. \mathfrak{CO}

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