

Water Creative Writing

Purpose

To read and discuss an example of a biographical essay about an environmental issue as a model for students' own writing.

Overview

This section will require students to read *The Last of the Falling Tide* by Florida writer Carl Hiassen, answer factual questions concerning the piece, and then create their own story about a natural place they know, and any environmental problems they may have noted.

Time

1 two-hour session for the reading and initial analysis of the creative writing piece given, and then assign the development of their own creative writing piece as a homework assignment.

Key Concepts

The Florida Keys is a complex ecosystem with ongoing environmental problems. Students can identify changes (both negative and positive) in their environment, and actively work as communicators and advocates for change. Science has a creative as well as objective aspect.

Skills

Essay reading
Reading comprehension
Creative writing
Biographical writing

Materials

The handouts are the only materials needed. Access to word processing software and internet would be useful for production of the writing and essay products.

Background

There is considerable creative writing associated with the environment, ranging from *Walden* by Henry David Thoreau to *Silent Spring* by Rachel Carson. Environmental health issues affect societies in terms of their histories, health, social structure, and economics. However, environmental issues also affect individuals. Individuals of all

ages can investigate and react constructively to remediate and prevent environmental problems.

The Florida Keys are a subtropical environmentally fragile area with highly endangered coral reefs and island environments, as well as extensive tourism and fishing industries. The Florida Keys, like many of our natural wilderness areas, is being rapidly degraded by a multitude of human activities, with profound effects on the ecosystems.

How do we know if an ecosystem has changed and if these changes can affect human and ecosystem environmental health? How much are these fragile ecosystems worth to us as a society? How do we know when we have restored them and to what level do we need to restore them to protect human and ecosystem health?

Procedure

The Florida Keys are a chain of coral islands and reefs stretching 75 miles south of Miami into the Caribbean. The Florida Keys represent a unique ecosystem both above and below their subtropical marine waters.

Read the following story entitled **Last of the Falling Tide** by Florida writer, Carl Hiassen, about his childhood and current experiences with the Florida Keys and their rapidly changing environment.

- What were the special aspects of the Florida Keys during the author's childhood?
- Describe the environmental problems that Hiassen has noted in the Florida Keys over the past 20 years.
- What are the special experiences that the Florida Keys can still offer according to Hiassen?
- What else could Hiassen do to protect what he loves about the Florida Keys?
- Write your own description of a natural place that you love. Describe the place and why you love it. If this place has changed, how has it changed and how do you feel about this change? What can you and others do to protect this place? You can write this as a short story, a letter, a journal/diary entry, an essay, a newspaper article, or a poem.

Further Investigation

Students can be asked to seek out other creative writing literature on environmental issues to read and present their book reports. Some recommended titles include:

Rachel Carson: *Silent Spring*
 Annie Dillard: *Pilgrim at Tinker Creek*
 Edward Abbey: *The Best of Abbey*
 Barbara Kingsolver: *Animal Dreams*
 Fred Bodsworth: *The Last of the Curlews*
 James Fenimore Cooper: *Last of the Mohicans*
 Jack London: *Call of the Wild*
 Willa Cather: *O Pioneer*
 Edgar Rice Burroughs: *Tarzan of the Apes*
 Mary Austin: *The Land of Little Rain*

Herman Melville: Moby Dick
Henry David Thoreau: Walden
Mark Twain: Life on the Mississippi
Walt Whitman: Leaves of Grass
Bradford Torrey: On Foot in Yosemite
John Muir: Steep Trails
Isabella Bird: Lady's Life in the Rocky Mountains

Students can adapt their own stories or book reports for newspapers or magazines or even put together a book of their stories to distribute to other students, family members, or others. They can write their representatives in Congress to express their opinion on the environmental issue(s) in their own neighborhood, accompanied by their story. They can create a website and post their stories as an environmental health writing project.

Student Assessment

Give the following creative writing components to each student as a guide to their creative writing products:

- ❖ Decide what facts are present in the creative writing piece
- ❖ Briefly summarize these facts, as well as sources of information and possible courses of action
- ❖ Decide whether to finish this story or create a story of your own neighborhood and a possible environmental health issue
- ❖ Create this story describing your feelings as well as facts
- ❖ Practice reading this story aloud in a convincing manner
- ❖ Be prepared to answer questions concerning your story

Assign points for the following components of the critical writing products:

- ❖ Were the facts correctly identified?
- ❖ Were these facts correctly summarized?
- ❖ Were there sources of information and possible courses of action presented?
- ❖ Did the creative writing story of the student describe how the student feels about their neighborhood and possible environmental health issue?
- ❖ Could the student answer questions from the audience about their story?

Last of the Falling Tide

by Carl Hiaasen

(Taken from **The Wild Heart of Florida**. 1999. J. Ripple and S. Cerulean, eds. Pp. 91-98. Gainesville: University of Florida Press. With thanks to <http://ruby.fgcu.edu/courses/sstans/81469/s15intro.html>)

My father first took me to the Keys when I was six. He was a passionate deep-sea fisherman and had decided that I was old enough to join the hunt for blue marlin and sailfish.

The invitation was thrilling, but I had secret doubts about my suitability for big water. I suspected -- correctly, it turned out -- that I had not inherited my old man's cart-iron stomach.

But I wanted fiercely to experience the Keys. I'd wanted it since the day I'd seen an old photograph of my father, struggling to lift an amberjack that seemed nearly as tall as he was. The picture was taken in Key West around 1938, when my father was thirteen. He wore a white shirt and khaki pants, and with long tanned arms hoisted the fish for the camera. He looked as happy as I'd ever seen him.

Over the years, my father and grandfather told me so many stories that the Keys had become in my mind a mystical, Oz-like destination: a string of rough-cut jewels, trailing like a broken necklace from Florida's southernmost flank -- the water a dozen shades of blue and boiling with porpoises and gamefish; the infinite churning sky, streaked by pink spoonbills and gawky pelicans and elegant ospreys. This I had to see for myself.

On a summer morning we headed down U.S. 1, which was (and remains) the only road through the Keys. Although we lived in Fort Lauderdale, merely a hundred miles north, it might as well have been Minneapolis. The drive seemed to take forever. From the back seat I watched fruitlessly for evidence of paradise, but all I saw were trailer parks, gas pumps, bait shops, mom-and-pop diners, bleached out motels, and palm-thatched tourist sheds that sold spray-painted conch shells. My restlessness took the form of whining, and from the front seat my father and grandfather instructed me to settle down and be patient. The farther south we go (they promised), the better it gets.

We passed the charter docks at Bud n' Mary's, where the great Ted Williams occasionally could be found, and suddenly blue water appeared on both sides of the Overseas Highway. To the distant east was the full seep of the Atlantic, deep indigo stirred to a light, lazy chop. To the near west was Florida Bay, glassy and shallow, with knots of lush green mangroves freckled with roosting white herons. At the time, I didn't know the names of these islands, but they were Shell Key, Lignum Vitae, the Petersons, the Twin Keys, the Gophers -- places where I would spend, in coming years, hundreds upon hundreds of hours, none wasted.

The Keys never looked so enchanting as they did on that morning. As soon as we got to the morel, I grabbed a spinning rod from the car and made straight for the pier. Standing

at the brim of those velvet horizons, gulping the sharp salty air, I understood what my father and grandfather meant.

This was an honest-to-God wilderness, as pure and unspoiled and accessible as a boy could imagine. On my first trip to the Gulf Stream, I caught no marlin, only a bonito, but it pulled harder than anything I'd ever felt. It was a great day, made better by the fact that I'd managed to hold down my lunch.

The deep-running Atlantic was undeniably impressive, but the calm crystal flats of the backcountry intrigued me the most. To wade the banks was to enter a boundless natural aquarium: starfish, nurse sharks, eagle rays, barracuda, bonefish, permit, and tarpon, all swimming literally at your feet. The flats rippled with unique tidal energies -- sweltering, primeval, seemingly indomitable.

This was around 1959, and nobody considered the possibility the shoals of the Keys might be destroyed, and that it might happen within a single human generation. Unimaginable! Life flourished everywhere in this tropical embrace, from the buttonwood hammocks to the coral reefs. The sun was so warm and constant, the waters so wide and clear, the currents so strong. Destroyed -- how! By whom! Over centuries the Keys had survived droughts, floods, and the most ferocious of hurricanes. What was there to fear from man?

The worst, as it turned out. The population of Miami exploded during the next three decades, and urban blight metastasized straight down Highway 1, bringing crowds, crime, garbage, and big city indifference to the Keys. The quaint and proud opportunism of the islands was replaced by an unrelenting hunger to dredge, subdivide, pave, build, and sell. It was tawdry, sad, and probably inevitable. By the 1980s, southeast Florida was home to four million souls, increasingly frenetic and determined to recreate at all costs. Where else would they go but the Keys!

I was one of them. A few years ago, I bought a stilt house in a hammock near Islamorada. It's significant to note that Ted Williams, his timing still flawless, had already sold his place and fled Monroe County. The stampede of humanity was too much for him. My own friends gingerly questioned why a person would move to the Keys at a time when smart people were bailing out. Maybe there was a sentimental component to my decision -- why after all, does one sit with a dying relative! Duty! Guilt! Nostalgia! Maybe there was more.

Certainly, I had no illusions about what was happening. As a journalist, I've written plenty about the rape of the Keys and the fast-buck mentality that incites it. On Big Pine, for instance, the federal government is doggedly buying up land to save the diminutive Key deer from extinction. Pro-growth factions have retaliated with lawsuits, high-powered lobbying, and old-fashioned venom. Road signs that alert motorists to deer crossings are routinely defaced--crosshairs painted over the emblem of a leaping buck. As dispiriting as such cretinous behavior might be, the Keys also breed a devoted and tenacious species of environmentalist. About ten years ago, the hardwood forests and coral shores of North Key Largo were in danger of being bulldozed and dynamited into a series of huge condominium resorts. If completed, the developments would have brought as many as sixty thousand residents (and their speedboats) to a narrow belt of hammock situated between a national wildlife refuge and North America's only living barrier reef. You'd have been hard-pressed to find a more catastrophic location for a

massive condo village. But local conservation groups banded together in opposition, and dragged slow-moving regulatory agencies into the battle. One by one, the seaside resort projects collapsed; today, much of North Key Largo has been purchased by the state for preservation.

That was a rare victory, but it made many of us believe that what was left of the Keys could be saved. To give up would be unthinkable, cowardly, and immoral.

So I arrived to find the stores, tackle shops, restaurants, and highway jammed, even in the deadening heat of summer. This depressing state of affairs also applied to the bonefish flats and tarpon lanes. Raging and cursing, I've managed to cope; friendly fishing guides generously help me avoid congested waters, and I've marked a few hidden spots of my own. There are still plenty of fine fish to be caught.

Of course it's not the same place I knew as a boy. The best of it is gone forever. But if one knows where to look, and which tides to ride, it's still possible to be the only human in sight, to drift along crescent banks while schools of bottle-nosed dolphins roll and play ahead of your bow. These luminous moments become more rare with each tick of nature's clock. The Keys are in desperate trouble. Not long ago I drove south past Bud n' Mary's and, on both sides of the Overseas Highway, the water was the color of bile -- algae emptying from Florida Bay to the sea. A foul stain has settled around Shell Key. Lignum Vitae, the Petersons; on the falling tides it bleeds through the channels to the ocean. At the fishing docks, the talk is of little else. The old guides are sickened, the young ones are angry, and all of them are frightened for tomorrow. Wherever the cloud of algae appears, sea life vanishes. That which cannot flee, dies. Already the baby lobsters have disappeared from Florida Bay, spelling future disaster for commercial crawfishermen.

Smaller blooms are not uncommon in the summer months, but the water ordinarily clears as soon as temperatures drop. Not in recent years. The chilliest days have failed to stop the spread of the milky green-brown crud. As I write this, about 450 square miles in the heart of the bay, Everglades National Park, is essentially dead. From the air, the sight is heartbreaking. If the algae continues to spill out to sea, it will smother the coral reefs, which require sunlight to survive.

For years, bureaucrats and politicians beholden to Big Agriculture have insisted that the "decline" of Florida Bay is unconnected to the egregious flood-control practices that have transfigured the lower Everglades. But this much dirty water was impossible to ignore. The algae bloom in Florida Bay became so vast and unsightly that tourists began to complain, prompting Florida's leaders to exhibit the first official signs of alarm. Assorted agencies, departments, and task forces are holding emergency sessions to discuss the crisis. A local congressman is asking that \$3 million be set aside for more research. From Tallahassee to Key West, establishment voices are demanding swift action to replenish the bay, preferably before next winter's tourist season.

As if it was as easy as turning a spigot. It's not. Florida Bay historically was a brackish estuary, fed by a dependable, unimpeded flow of fresh water from the Everglades. As the state's population grew, the water from the glades was purloined and diverted through a network of deep manmade canals. This was done exclusively to benefit farmers, developers, and newborn cities, with no thought whatsoever to the profound long-term consequences. To this day, the golf courses of South Florida are more

assiduously tended than the Everglades. Nature's plumbing has been rejiggered so that farms and cattle ranches can tap into the Everglades at will, use the water, then dump it back as waste. Florida's famous river of grass is being used not only as a fountain, but as a toilet.

The high-tech siphoning of the Everglades begins below Lake Okeechobee, at the sugarcane fields, and continues down to the tomato farms and avocado orchards of southern Dade County. The capture is so efficient that only 10 percent of the fresh water naturally destined for Florida Bay ever gets there. Many scientists believe this is why the bay is so sick. Without a seasonal flow from the East Everglades, the bay water has gotten saltier and saltier.

Several years of drought accelerated the transformation from estuary to hyper-saline lagoon. By the mid-1980s, rich beds of turtle grass had begun to die and decompose, leaving bald patches on the bottom. The rotting grass became a nutrient for aquatic algae, which bloomed extravagantly in the salty, overheated pond. The algae, in turn, blocked so much sunlight that it killed the sponges and other marine organisms. The bay started turning to mud. Each year it looks worse.

Now it's early spring and the algae continues its spread. A steamy summer promises an eruption of new growth; airplane pilots and boat captains already report that bilious mile-wide puddles of the stuff have drifted out of the bay toward the pristine Gulf banks of the Lower Keys. Meanwhile, in the Upper Keys, floating clumps of dead sponges can be found from Flamingo to Long Key.

What can be done to save Florida Bay? Many experts say the most urgent priority is reviving the freshwater flow through Taylor Slough, which drains from the Everglades into the northeast part of the bay. A new trickle has been promised; getting more water will require taking it from Dade farmers and developers, who have powerful political allies in Tallahassee. And restoring now is only part of the prescription -- the water coming to the bay also must be free of phosphates and pesticides, and its arrival must be timed for the dry winter months. Too much fresh water can be just as lethal as too little, especially during the rainy season.

It doesn't take a marine biologist to know that tropical waters aren't supposed to look like bean soup, or smell like rotted mulch. These are not signs of a healthy ecosystem. Maybe the algae will die naturally, drowned by heavy summer rains, or blown out to the Gulf of Mexico by tropical storms.

Yet even if we awake tomorrow and the stuff is gone, it's only a temporary reprieve. For the killer algae is but one symptom of many threats to the Florida Keys, each resulting from the uncontrolled invasion of man.

Runoff and sewage from high-density condos and hotels poison invisibly. Offshore, rusty freighters plow into the reef while pleasure boats drag heavy anchors across the delicate corals in the backcountry, manic water bikers and macho speedboaters frighten wading birds from their nests in the mangroves, disrupting centuries-old breeding patterns. Turtle grass beds -- a crucial nursery of the marine life chain--are gouged, shorn, and crisscrossed by propeller ditches.

This is not what I want to show my son.

I first brought him here when he was a youngster, and I probably spent too much time telling him how splendid it used to be, before the greedy bastards ruined it. My boy listened but he also kept his eyes on the water -- and fell in love with the place, prop scars and all. He got his first bonefish at age seven, and a big tarpon on a fly at age sixteen. He spends every spare moment here, including precious college vacations. On a recent spring morning when many of his classmates were slugging down Budweisers on the beach at Daytona, my kid was wading the flats of Long Key, scouting for tailing fish.

Battered, ragged, and long past their prime, the Keys continue to enchant and seduce. I can't blame my son for his weak heart, because there's still nothing as gorgeous as a calm dawn at Ninemile Bank, or a sunset in the Marquesas. The truth is, I always wanted him to love the Keys as much as I did, and as much as my father and grandfather before me. But if my son was to grow up fighting to save this place, he also needed to feel the sorrow and anger that come with watching something precious be destroyed.

He does feel these things, deeply, and that gives me a jolt of hope. The kid is damn angry about what's happening down here. Maybe angrier than his old man.