

# PS – This is Bear Country



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This story was written for Junior 4-H youth in Florida to study the Pine Flatwoods ecosystem for the [Annual Forest Ecology Contest](#).

Note: While many of the events narrated in this story are fictional, the places, plants, and animals described are real, and facts about them are true. Special thanks go to Lara Colley and Kelly Hodoval for sharing true stories about encounters with black bears in Florida.

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[http://www.sfrc.ufl.edu/extension/4h/contest\\_home.html](http://www.sfrc.ufl.edu/extension/4h/contest_home.html)

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## A broken leg and a view of the trees

Dear Mona,

Well, I'm finally here! Ms. Robinson drove us all out into the [Ocala National Forest](#), and we spent the afternoon putting up our tents. There are fifteen of us. It would have been sixteen if you'd have been here too. It's too bad you broke your leg just two days before camp. But don't worry. There are computers at the learning center here, and I can email you every couple days to let you know what I see and what you're missing.



This is what you're missing right now: being surrounded by pine trees! There are slash pines and longleaf pines everywhere. They're tall and straight, and they're swaying slightly in the wind, but I don't see any pine cones on them right now, which is good, because those cones can be almost a foot long (on the longleaf at least; the slash pine cones are a bit smaller). Imagine if they fell from so high up, knocked loose by the wind. I wouldn't want to be hit by one of those!

Ms. Robinson says this is a pine flatwoods **ecosystem**, and it certainly is flat. The ground stretches straight out into the distance everywhere you look. If it weren't for the **understory** bushes and shrubs everywhere, I bet you could see for miles through the trees. I'll take a closer look at the bushes tomorrow and let you know what kinds there are.

I should go now. It's nearly dinner time. I'll write again soon with lots more exciting news. Until then, keep the weight off that broken leg!

Yours,  
CeCe

PS – Attached is a photo of the view between the trees.

### Vocabulary

Ecosystem	An ecosystem is an environment including all of the living creatures found in that area as well as all of the non-living parts of that area. This includes animals, birds, trees, insects and fungi, as well as the soil, water, rocks, air, minerals and dead matter.
Understory	The plants that make up the ground layer of a forest. Grasses, shrubs, bushes, seedlings and even small trees may be found in the understory.

## Look out for bears!

Dear CeCe,

If it weren't for your email, I would have been so bummed about not being at camp right now. I feel like I'm missing out on everything! I live right on the edge of the forest—you know, at the wildland-urban interface, but can you believe I've never been into the forest itself? And just when I finally had a chance, I broke my leg. Now I'm sitting at the window with my leg in its cast, propped up by cushions, staring out at the woods past my backyard. You, Ms. Robinson, Andy, Sam, and all the others are deep in there somewhere, having the time of your lives.



The smaller image is a left front black bear paw print, the larger a left back paw print.

Images from: <http://www.bear-tracker.com/bear.html>



I've been keeping busy though. I got Dad to set up a laptop on a small table so I can look up things from my bed even if I can't move around much, and I can learn things from here too. I've been doing some research, and guess what? I bet I know exactly what's in that understory of yours. Flatwoods ecosystem, right? So there must be blueberry bushes, and gallberry bushes, and also saw palmetto. And since its summer, I bet some of them are fruiting right now. Can you check?



Blueberries



Gallberries



Saw palmetto

Want to know something else cool? All those fruiting bushes provide food for wildlife. Turkeys, fox squirrels, raccoons, even black bears! I started reading about black bears and, did you know, they're mostly *vegetarian*? They get more than 80% of their food from plants. Guess which plants? All the ones in your flatwoods understory. Gallberries, blueberries, saw palmetto berries. They even eat acorns. Are there any oaks in your forest?

I wonder if you'll see any black bears while you're out there. Remember to take your camera with you, and thanks for keeping me updated!

Yours with a broken leg,  
Mona

PS – Attached is a sketch of a black bear's paw prints. You know, just in case.

<b>Vocabulary</b>	
<i>Vegetarian</i>	An animal that eats only plants to survive is a vegetarian.
<i>Wildland-urban interface</i>	The border between people's dwellings and natural, unoccupied land such as a forest. As people move further from city centers to make their homes, they move closer into forests, and the wildland-urban interface is the zone between these two areas.

## Scratches, stains, and a full stomach



Dear Mona,

I write to you with purple stains and scratches on my fingers. They don't call it a *scrub* understory for nothing—some of these plants are spiky and thorny, and they've scrubbed my skin raw. We walked through saw palmetto, wiregrass, and blackberry bushes. The saw palmetto stems are *serrated* like a saw, and their leaves are tough and fan-like. Ms. Robinson said that these are *very flammable* plants, able to re-grow from the ground after a fire. She also said they had deep roots and most of their trunk was underground, again to survive fires. I'll tell you about the fires some other time though. First, more about scratches and stains.



←Saw palmetto stems are edged with saw-like spines. Watch out for blackberry thorns→



The blackberry bushes, of course they were covered in thorns to protect the berries from being picked and eaten. We still ate them though—they were just too delicious let a few sharp pokes *discourage* us. So that's why my fingers are purple—it's the berry juice. We also picked and ate blueberries! There are blueberry bushes here, and sparkleberry bushes, which are a *native* Floridian blueberry species. There's a lot of food out in the flatwoods, if you know where to look.



Ms. Robinson pointed out to us how there weren't many species of *canopy*, or *upper story*, trees except the pines, but that the *midstory* and understory were both very diverse. We spotted some live oaks and some water oaks, and also sweetgum and eastern redcedar trees. The forest floor is littered with acorns produced by the oaks and the spiky seed pods of the sweetgum.

It's almost dinnertime, but I'm quite full already from nibbling on berries that we've picked while exploring the flatwoods. Ms. Robinson made a special point of identifying the different kinds of wild, *edible* plants here because she wanted us to realize how important this ecosystem was for supporting lots of other wildlife. Even the saw palmetto was producing fruit, black and olive-like, in bunches, which black bears apparently love.

Did you know there were black bears in this forest? I didn't, and now I'm very excited to catch sight of one, even though Andy insists there's no way we'll see any, because the fifteen of us are so noisy, and the black bears so shy. I think he must be wrong.

CeCe

PS – Attached is a picture of my blackberry juice stained fingers. Also pictures of some of plant *weaponry*.

PPS – I just received your email! Yes, of course I'll take a picture of the black bear for you. I'm going to be on the look-out.

### Vocabulary

<i>Canopy</i>	The leafy crown of a tree. In a forest the canopy includes all the upper parts of all the tall trees, which get most of the sun, and create most of the shade below them.
<i>Discourage</i>	To prevent or stop someone from doing something.
<i>Edible</i>	Something that can be safely eaten. Poisonous mushrooms are not edible.
<i>Flammable</i>	Something that very easily catches fire.
<i>Midstory</i>	The middle layer of trees in a forest. These are the trees that grow in the shade, under the canopy trees.
<i>Native</i>	An organism that is naturally found in an ecosystem. A native plant or animal has always been there. It did not arrive from somewhere else.
<i>Scrub</i>	An ecosystem with many low trees and bushes.
<i>Serrated</i>	An edge with many sharp, saw-like, jagged teeth.
<i>Upper story</i>	The topmost layer in a forest, composed of all the tall trees. The canopy forms the upper story in a forest.
<i>Weaponry</i>	A collection of sharp, defensive weapons.

## A very special bird

Dear CeCe,

I got so hungry while reading your letter. And then I looked up saw palmetto fruit and lost my *appetite* again. Someone wrote that it tasted like tobacco juice. Another person said it tasted like bitter medicine. But it seems these fruits were used by Seminole Indians a long time ago as a *staple food*. I didn't know that.

I'm glad you're as excited about looking for the Florida black bear as I am. I asked Dad to bring me some books from the library about black bears, and found out some more cool information about them. They're what's known as an *umbrella species*—they need so much land to move around in and feed from that protecting the *ecological range* of the black bear means that a lot of other animals also come under protection along with it. It's like the black bear becomes a guardian for a whole number of other species you see in the forest just by being there.

Have you seen any other wildlife? There are many endangered species in the flatwoods, I've been reading. The most exciting one, I think, is the red-cockaded woodpecker. It's not an umbrella species like the black bear, but it still performs a really important role in the ecosystem by *excavating* nesting cavities in old trees.

Imagine it, a tiny black and white bird, about 8 inches long, finding one of the oldest and largest trees in the forest, a hundred foot tall, 90 year old longleaf, and hammering away to make a nesting hole. That's one *dedicated* little bird! Not only that, they also try to protect their eggs from *predators* like yellow rat snakes by making smaller holes around their nesting cavity. These holes leak pine resin, making the bark sticky and gummy to *deter* climbing snakes from getting into the nest. They live in little groups, with a couple of adults and several older *siblings* to look after the newborns each year. Isn't that neat?

Eventually, when the red cockaded woodpeckers leave their nest hole, other animals move in to use it—everything from bees to bluebirds, lizards to mice, even larger woodpeckers, and sometimes owls and raccoons use old nesting cavities for *shelter*.

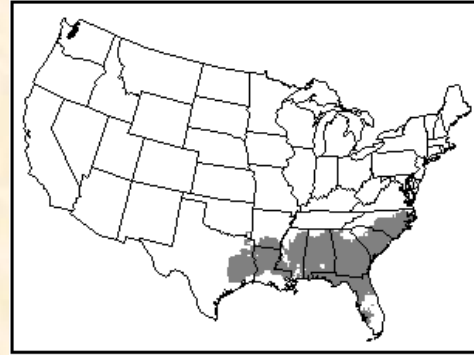
I hope you get to see some red-cockaded woodpeckers, although that might be hard. Their *habitat* grows smaller each year, since they depend on old longleaf pines for growth, and so many forests around here are *harvested* before the trees get to be very old.

Just in case though, I'm sending you a picture of a red cockaded woodpecker, for reference. Just remember, white cheeks, black head, and the males have tiny red streaks behind their eyes that are often hard to see.

Yours,  
Mona



Notice the vertical streaks of resin going down the trunk around the nest hole. This makes the bark surrounding the entrance to the nest hole sticky and slippery.



Above, the ecological range of the red-cockaded woodpecker.

Images from: [http://www.shawcreekbirdsupply.com/redcockaded\\_woodpecker\\_map.htm](http://www.shawcreekbirdsupply.com/redcockaded_woodpecker_map.htm)  
and [http://www.biologicaldiversity.org/campaigns/esa\\_works/profile\\_pages/RedcockadedWoodpecker.html](http://www.biologicaldiversity.org/campaigns/esa_works/profile_pages/RedcockadedWoodpecker.html)

### Vocabulary

<i>Appetite</i>	The feeling of wanting to eat.
<i>Dedicated</i>	Determined to do something.
<i>Deter</i>	To discourage or put someone off their goal.
<i>Ecological range</i>	The geographical area that an organism may be found in. Different organisms have different ecological ranges depending on their needs.
<i>Excavating</i>	Making holes in something.
<i>Habitat</i>	The geographical area that an organism lives in; in other words, it's home. An organism's natural habitat is usually found within its ecological range.
<i>Harvested</i>	Something that is gathered for human needs, such as apples, timber, and corn.
<i>Predators</i>	Organisms that survive by feeding upon, or preying, on other organisms.
<i>Shelter</i>	A place that protects organisms from heat, rain, wind, or predators.
<i>Siblings</i>	Sisters and brothers.
<i>Staple food</i>	The basic food that an animal needs to survive. Rice, wheat and corn are all staple foods for people. Meat, chocolate, and spices are not staple foods for us.
<i>Umbrella species</i>	An organism that, if protected in its natural environment, would ensure that all the other species found in that environment are protected as well.



## A nighttime chorus

Dear Mona,

I'm writing to you by the light of the moon. Why, you ask? Well, don't tell anybody, but since last night I've been sneaking off after dark to walk away from camp down the forest trail. I thought perhaps if I separated myself from the group, I'd have a better chance of spotting a bear. Besides, Andy was right. We *are* too noisy as a group. Half of the kids snore. Ms Robinson snores. And Andy snores *and* talks in his sleep.

Anyway, I've found a spot quite a bit away from the camp close to a cypress pond. It's a really cool feature of these flatwoods. Most of the ground is sandy soil that drains fast and doesn't hold water.

But there are patches of land where there's more clay in the soil, which means that it can *retain* water and form ponds. So the cypress pond is the part of the flatwoods ecosystem where the trees change from dry soil lovers like the longleaf pines, to wet soil lovers like the pond cypress trees with their swollen bases, swamp tupelos with their broad oval leaves, and red maples. It's like a mini-swamp. There's also poison ivy in the cypress ponds, so I have to be careful not to touch any of the *ground cover* while crouching in my hiding spot.



Photo by Larry Korhna,

Yes, I know, I know, sneaking away from camp is not the wisest thing I could have done, but I really think I'm more likely to find a bear if I'm on my own, close to a potential *watering-hole*, than if I were stuck with all the others. It's mid-summer, after all. A bear's got to get thirsty and want a drink.

I wish you could hear the music here. As the sun sets, a chorus of night life starts up. There's crickets and cicadas and katydids of course, making chirpy insect music that sounds like a thousand broken whistles played on repeat. But especially here, where it's damper, there are also the sounds of frogs and toads. The oak toad, for instance, it sounds like a little bird going, "cheep-cheep-cheep-cheep-cheep-cheep." And then there's the pinewoods treefrog, which makes an insect-like rattling chirrup sound.

Ok, I'm going to stop writing and go back to my hiding spot. I'll keep watch for a couple of hours before heading back to sleep, and I'll add a PS if I happen to see a bear tonight.

Good night!

CeCe



Photo by J.D. Willson,

Oak toad



Photo by Chris Evans

Pinewoods treefrog

### Vocabulary

<i>Ground cover</i>	The herbs, grasses and other low growing plants that carpet the forest floor. Ground cover is a part of the forest understory.
<i>Retain</i>	To keep or hold on to.
<i>Watering-hole</i>	A place where water collects, like a pond or spring, where animals can come to drink when they are thirsty.



## Do not disturb the wildlife!

Dear *Reckless-Girl-Who-Is-Also-Known-As-CeCe*,

Some fun facts for you about the animals you mentioned:

- The oak toad is the smallest toad in the United States.
- The pinewoods tree frog has yellow spots on the undersides of its hind legs, but is otherwise rather dull colored for a tree frog.

Some fun facts about the animals you *failed* to mention:

- The eastern diamondback rattle snake is the largest rattler in the U.S., is quite *venomous*, and often will not rattle before it strikes.
- The pygmy rattlesnake, which feeds on frogs and mice, is also venomous, and has a rattle that sounds like a buzzing insect.



Eastern diamondback rattlesnake



Pygmy rattlesnake

Yes, there are snakes in the flatwoods. Didn't Ms. Robinson tell you? There are [black racers](#), which are skinny and black and get really nervous and will race away from you as soon as you stumble upon them. There are large, rare [indigo snakes](#) that often hide in the burrows of [Eastern gopher tortoises](#). And there are the rattlesnakes.

Now, I'm not telling you all this to scare you. Snakes are beautiful, and they keep other animal populations in check. The forest would be overrun by rodents and frogs and lizards if the snakes didn't *prey* on them. But you can't just go barging through the forest and trampling into their homes! You'll either scare them off, or you'll scare them into trying to defend themselves by biting you.



I don't know about you, but if you came creeping into *my* bedroom by moonlight, trying to find a black bear that is *camouflaged* in the darkness, I'd try to bite your ankle too, just because I was annoyed. So don't be surprised if a snake gets you either.

Or the poison ivy.

Please don't get hurt while going on this black bear hunt. In fact, I'd rather not have a picture of the bear at all, if it means you'll come back in one piece instead.

Don't do anything silly,  
Mona-Who-Is-Worried-For-Your-Safety



Eastern gopher tortoise



The burrow of a gopher tortoise. Many other animals seek shelter in these burrows.

### Vocabulary

<i>Camouflaged</i>	Disguised to blend in with the environment and become almost invisible.
<i>Prey</i>	To prey on something is to hunt down and feed on it. Predators prey on other animals. The animals they hunt down are called prey.
<i>Reckless</i>	Someone who takes too many risks and gets him/herself into danger is reckless
<i>Venomous</i>	Something that is poisonous. Venomous animals make venom, or poison, to protect themselves from predators. They may bite or sting to transfer venom to an attacker, or they may have poisonous skin.

## A lesson is learned

Dear Mona-Who-Pretends-To-Be-My-Mom,

Well, Ms. Robinson wasn't too happy with what I did either. She caught me sneaking out of camp last night and reminded me of the snakes. Actually, she did more than that. She told me there was a time and place for adventures, and that time was not at midnight, and that place was not in a national forest that is meant to be a safe place for animals and plants.

She said, "Look at this, CeCe, look at all this underfoot. Do you think this is just grass? No, it's not. It's a young longleaf pine, a little sapling that wants to take the next 50-100 years to reach the canopy. Do you think it'll be helped any by your boots stomping it into the ground at night? And this, this here is [deertongue](#). In the dark, would you have known you crushing its leaves underfoot—leaves that smell like vanilla, by the way? Would you have noticed that poison ivy over there, yes, that creeping vine that's growing straight up the tree trunk, did you know that poison ivy also grows up trees and not just on the ground? Did you lean on any trees while you were hiding out by that cypress pond? You've probably scent-marked them too, now, and warned the bear away. And what if you'd tripped on a gopher tortoise hole? What then?"



Long-leaf pine in the grass

Mona, I've never heard one person list so many ways in which I could either trip, snap, pull up, push down, break, crush, sink into, fall on top of, be bitten by, trample into the earth or just plain lose myself in the forest. Ms. Robinson has a wild imagination for all the things that could possibly go wrong just by people not knowing what they're getting into when they go adventuring.



Photo by Amy Ferriter

UGA1461045

The shiny red berries of the Brazilian peppertree are very attractive to wildlife.

Then she said it wasn't really that she was afraid that I would be *destructive* on purpose, it's just that the flatwoods have already suffered so much damage at the hands of people who didn't really know any better. As a whole, the flatwoods are shrinking, she said, because of development. The forest gets more *fragmented* every year as people build roads into and around it. And they've accidentally let loose *invasive* plants from their backyards into the wild—things like [Brazilian peppertree](#), a plant whose red berries are so delicious-looking that birds and animals rush to eat them, spreading their seeds further and further into the forest each year as they do. And then there's fire. Or lack of fire, rather.



Back in the old days, the pine flatwoods were a *fire-maintained ecosystem*. The tough, fire-adapted plants like longleaf pines and saw palmetto would survive frequent burns, but a lot of the other shrubs and trees would be killed. That's why the forest has such an open look to it—the fire acts as a natural lawn mower, or tree mower, if you will. It's the openness of the habitat that allows so *many unique species* to live here—the red cockaded woodpecker and the gopher tortoise depend on the *sparseness* of the mid and understory to find food, make homes, and watch for predators.

Since people live so close to the forest now, and they are concerned about their homes being destroyed by fire, it's often that fires are *suppressed* instead of allowed to run their course, and without fire to remove excess trees, the forest just gets more crowded and unhealthy.

And here I am, trying to find the *elusive* Florida black bear in such a place. The odds of my finding a bear aren't lessened by the fact that Andy snores and talks in his sleep, they're lessened because there's not much of their habitat left, and I'm making it just a little bit more crowded by trying to stake out a watering hole at night.

Sigh.

You live in the wildland-urban interface, don't you? How do you and your family deal with being a good neighbor to the forest?

Yours, less recklessly,  
CeCe

### Vocabulary

<i>Destructive</i>	Something that has the ability to destroy, disturb or ruin other things.
<i>Elusive</i>	Hard to find. Secretive.
<i>Fire-maintained</i>	An ecosystem is fire-maintained when the plants and animals that live there are adapted to and depend upon fire to burn through the land every so often to ensure their continued health and growth.
<i>Fragmented</i>	Broken up into smaller pieces. Fragmented land is land that has been divided up by roads, parks, farms, and houses so that an animal often cannot travel from one place to another other without having to cross through land occupied by people.
<i>Invasive</i>	An organism that does not belong in a particular environment but has moved there or been introduced there accidentally from its original home, where it was a native.
<i>Sparseness</i>	Where things are thinly spread out, with lots of space between them.
<i>Suppressed</i>	Kept in control or kept in check. Prevented from going about its normal business.



## Unexpected neighbors

Aww, poor CeCe, don't be too upset.

You learned some important things by being silly, and now you're wiser and more respectful, and now you know about Brazilian pepper. We had one of those trees in our backyard when we moved here, and Mom made Dad pull it out because it's such a terrible invasive.

So that's one way that we're a good neighbor—we try not to let invasive plants escape into the forest. We also live in a neighborhood that's well-informed about the importance of fire for the pine flatwood ecosystems, and also [the potential dangers](#) of it. All the houses in our community are [fire-wise](#), which means that we keep our backyards clear of too much undergrowth and don't plant too many things that can carry fire from the forest to our house. And we know that [when we smell fire or see smoke in the forest](#), we can call and check that it's a prescribed fire that forest officials are in control of, and not a *wildfire*.



Image from: <http://edis.ifas.ufl.edu/fro76>

A fire-wise home keeps a clear distance between the house, garden, and other landscape features, and the forest surrounding it.

We also try to be careful not to attract wildlife to our homes. Funny story—my mother's brother Julius was a complete packrat. He lived on the other side of town, and his house was overrun with things he'd collected over the years. And his garden was overrun with plants he'd just let grow wild. My Mom swears there used to be a car in the garden, but Dad said he never saw one. Apparently it was very well disguised as an overgrown shrub. The house itself was very well disguised as an overgrown forest, like the ones from the fairy tales, with low hanging live oak branches that almost completely hid the house from the street.

One evening, my Uncle Julius heard a loud banging on his roof, and thought maybe one of the live oak branches had broken off after being weakened by a storm. But the banging just went on and on. Lots of tree branches? Perhaps a hail storm? Uncle Julius was a funny old guy, and he just sat inside the house imagining all the possible things that could be making those noises on the roof. "Oh, I'll bet it's the squirrels dancing," he finally decided, and then went to bed.

This went on for a couple of weeks, and Uncle Julius got used to the idea of his dancing squirrels, when, one night, he heard loud knocks in addition to the banging on the roof. "Ah, I think that'd be the door," he finally thought to himself, and went to answer it. Standing on his doorstep was a police officer who said, "Sir, are you aware that you have a black bear walking across your roof?"

It turns out Uncle Julius's garden was so overgrown that a black bear had just wandered out of the forest into it and decided to make it his new home. After all, there was a compost bin to *rummage* in, and a rooftop littered with acorns that the bear could chomp on if he just climbed onto the overgrown car and leapt from that onto the roof.

A hungry bear is an *agile* bear and a *resourceful* one. Funny as it is, it's a bit of a sad story isn't it? Black bears are shy, and don't want to cross paths with people, but having to share the land means we sometimes *encroach* on each others' properties. We've built into the edges of the Ocala National Forest, and the animals sometimes move into the edges of our homes as well.

Yours from the edge of the woods,  
Mona

#### Vocabulary

<i>Agile</i>	Graceful and fast-moving. Gymnasts and dancers can be very agile. So can dolphins and monkeys.
<i>Encroach</i>	To invade someone else's personal space.
<i>Resourceful</i>	Clever and able to find creative solutions to problems.
<i>Rummage</i>	To search around inside something.
<i>Wildfire</i>	A fire that burns uncontrollably through a natural environment.

## A memory worth saving

Dear Mona,

This is Andy. I am writing to you as CeCe's captive slave—ouch! ouch! she's kicking my shin—as CeCe's assistant, secretary and right hand man. Literally. I'm her right hand man at the moment because CeCe's gone and sprained her right wrist. Who manages to trip and fall in the flatwoods? I mean, it's not like there are any hills to fall off, or valleys to fall into, and hardly enough ground cover for a person who's walking with his eyes open to trip—ok, ok, she wants me to type as she dictates:

Mona, sorry, Andy's just being a bum. Don't worry about the wrist. I just put all my weight on it to brace my fall, and it kind of got caught in a weird angle. Ms. Robinson's wrapped it up and we'll get some ice for it from the gas station on our way out. Luckily I hurt myself on the *last* day here, instead of the first.

But what a last day! You won't believe what we saw—not just one, but four Florida black bears, a mama and her three cubs! We were walking through the trails when suddenly Ms. Robinson stopped and pointed into the pine trees, saying, "Hush!"

We all gasped and then shushed ourselves. Three little bear cubs were in high up in a young pine tree and their mom was right below them, one paw on a branch, the other raised as if she were either going to climb up or climb down.

We all froze. Even the bears froze. Mama looked at us for a long moment, and then looked back up at the bear cubs. We just *knew* what she was thinking:

"You kids better come down right this minute, because we need to leave. Right this minute, you hear?"

And two of the cubs immediately started to scamper down.

This was when I realized I didn't have my camera on me, I'd left it at a clearing several feet away. I turned and tried to run as softly and quickly as I could, so I wouldn't scare the bears, but would also be able to return in time to get their picture, and I tripped over a tree root. Silly mistake.





Anyway, I rushed back as soon as I got my camera—

Sorry, Andy here again. I have to butt in and say, I think it's pretty brave of CeCe not to have cried out when she hurt her hand, and to have ignored the pain while taking pictures. Good job, CeCe.



—*anyway*, I had my camera, and got back in time to snap the picture I've attached to the email. I like to imagine Mama saying, "Child, you better get down from that tree right this minute, I'm not playing games, buster," through clenched teeth. Meanwhile, the little third cub is saying, "I—I can't do it. I—I can't get down, I just can't. Mama, I don't think I can get down. I'm stuck, Mama. I just can't get down."

Because the third little cub just didn't know how to get down, we were able to watch the family for about five minutes while Mama stood nervously on guard. Finally, the cub sort of tumbled out of the tree to join its brothers. Mama Bear immediately nudged the cubs into a quick trot and they disappeared into the woods.

We didn't follow. We all sighed, like we'd been holding our breath together for the past five minutes. When at last we couldn't see the bears anymore, the silence was broken and we laughed and laughed.

And then I happened to mention that perhaps my wrist was a little sprained.

So that's it. I got my black bear picture for you, and now we're all returning. I'll see you soon, and you can tell me all about how to properly rest while injured, and I can tell you everything else I forgot to mention while we were exploring the forest.

Yours,  
CeCe

PS – Andy says, "See you soon too. You totally missed out on an awesome trip. How did you manage to break your leg anyway?"

PPS – You don't have to answer that.

## Summary

Pine flatwoods represent a unique and valuable ecosystem type in Florida. In addition to the useful products that are made from the trees growing in flatwoods many species of wildlife benefit from the natural food resources and cover that flatwoods provide. Several threatened or endangered species of animals may be found in these ecosystems. Pine flatwoods are fire-dependent and rely on regular burning to maintain the open structure and composition of the original plant communities. These habitats have been altered or influenced by humans more than any other ecosystem type in the State.

## Places to visit

Pine flatwoods are found scattered throughout Florida. They are especially common in flat, sandy central and northern regions of the state. The Apalachicola, Ocala, and Osceola National Forests are among the sites to visit in order to explore natural pine flatwoods. Tosohatchee State Reserve and Oscar Scherer State Recreation Area also have flatwoods ecosystems. Pine rocklands, a southern variation of pine flatwoods, can be seen at Everglades National Park, Fakahatchee Strand State Preserve, and Big Cypress National Preserve.