

MIAMI PINE ROCKLANDS COALITION

Get To Know Florida's

Pine Rockland Critters

Coloring Book

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You may download a **FREE** copy of this book and Power Point presentation at:
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Last but not least, I am also grateful for the God-given time in my busy life that allowed me to sit down for a little while and put together this small coloring book for the Miami Pine Rocklands Coalition.

M. Belén Valladares
Vice President
Miami Pine Rocklands Coalition



Preface

When I learned of the inhabitants of the Pine Rocklands, especially the Miami Tiger Beetle, our city's namesake, with an estimated population of no more than 100, yet virtually unknown to the general population, I felt my heart ache and fall to my stomach. I thought to myself, "This needs to be known! Every kid in this city needs to know that the Miami Tiger Beetle exists, wear a T-shirt with a BIG Miami Tiger Beetle, spreading the message 'Under 100 Miami Tiger Beetles left, save them!' and every parent and grandparent should have special moments with their child reading about this mighty tiny critter."

As I started researching, I felt I had discovered a treasure in our own backyard and felt the need to share it.

The Atala butterfly captured my heart long when I read an article and saw its picture on a coffee shop. I was captivated not only by its amazing beauty but by its spirit of survival. I knew that it was thought extinct for decades until a small colony was found in 1979, I wanted to see one in person.

For a period of about 5 years, every time I saw its host plant, the coontie, I would examine it like a crazy entomologist without a magnifying glass, looking for one. On my birthday, a couple of years back I was enjoying lunch with friends at a farm stand with a small, covered sitting area framed by coonties. I noticed a lot of movement in the plants, took a closer look and saw the most beautiful butterflies, black wings sprinkled with metallic blue dots and bright orange bodies, red caterpillars with big yellow dots, tons of eggs, see-through chrysalis hanging from the coonties! I was surrounded by Atalas! I felt it was a special birthday gift from Mother Nature to me!

When I learned there was a beetle called the Miami Tiger Beetles with only 100 left, I felt the need to tell stories and that's how the pages of this coloring book were born.

Other people have contributed significantly to this coloring book, especially artist Kim Heise who created the illustrations and "the village" of concerned experts.

We hope to educate our children for a better world, inform adults that can do something about the threats against these critters, and bring lots of quality time enjoying these pages!

M. Belén Valladares
Vice President/Writer
Miami Pine Rocklands Coalition



Miami Pine Rocklands Coalition President's Introduction

Step into Florida's Pine Rocklands, a place like no place else on earth.

Look around! The ground is made of craggy, ancient rocks. Limestone. An old sea bed because the entire area was underwater long, long ago.

Some of the ancient pines have burnt bark. That's because they're in a naturally occurring fire zone set off by lightning storms. Lightning fires burn out the underbrush without killing-off most animals or plants that live here. That's because they have adapted to survive the fires.

Pine rocklands are home to many endangered creatures. There's the Miami tiger beetle, all shiny green and blue and black. The beetles are only found in Miami and were once thought to be extinct. There may be just a few left, but they found a way to survive, only here.

Up in the sky, see the bald eagle, our Nation's symbol. Above the trees, you may see a Florida bonneted bat, one of the rarest mammals in the world. In the sandy soil, find a small Rim Rock crowned snake. It lives only in pine rocklands and tropical hardwood hammocks of Miami-Dade County and the Florida Keys.

What is the pine rocklands' biggest enemy? Real estate developers who want to build more homes, more offices, schools, and shopping centers for the growing numbers of new people moving into South Florida. New residents have never seen a pine rockland or know what it is. Or gotten wet hiking through the Everglades. Or been amazed at the beauty of the Big Cypress National Preserve.

They don't realize our precious pine rocklands are part of a natural system that helps clean the air and refresh the ground water.

They don't know that Mother Nature had it all planned out.

Cut down the pines, plow up and pave-over the rocklands...and you not only kill all the plants and animals there, you kill off yet another natural ecosystem that sustains our own life too.

"Save it, Don't Pave it."

Al Sunshine
President, Miami Pine Rocklands Coalition

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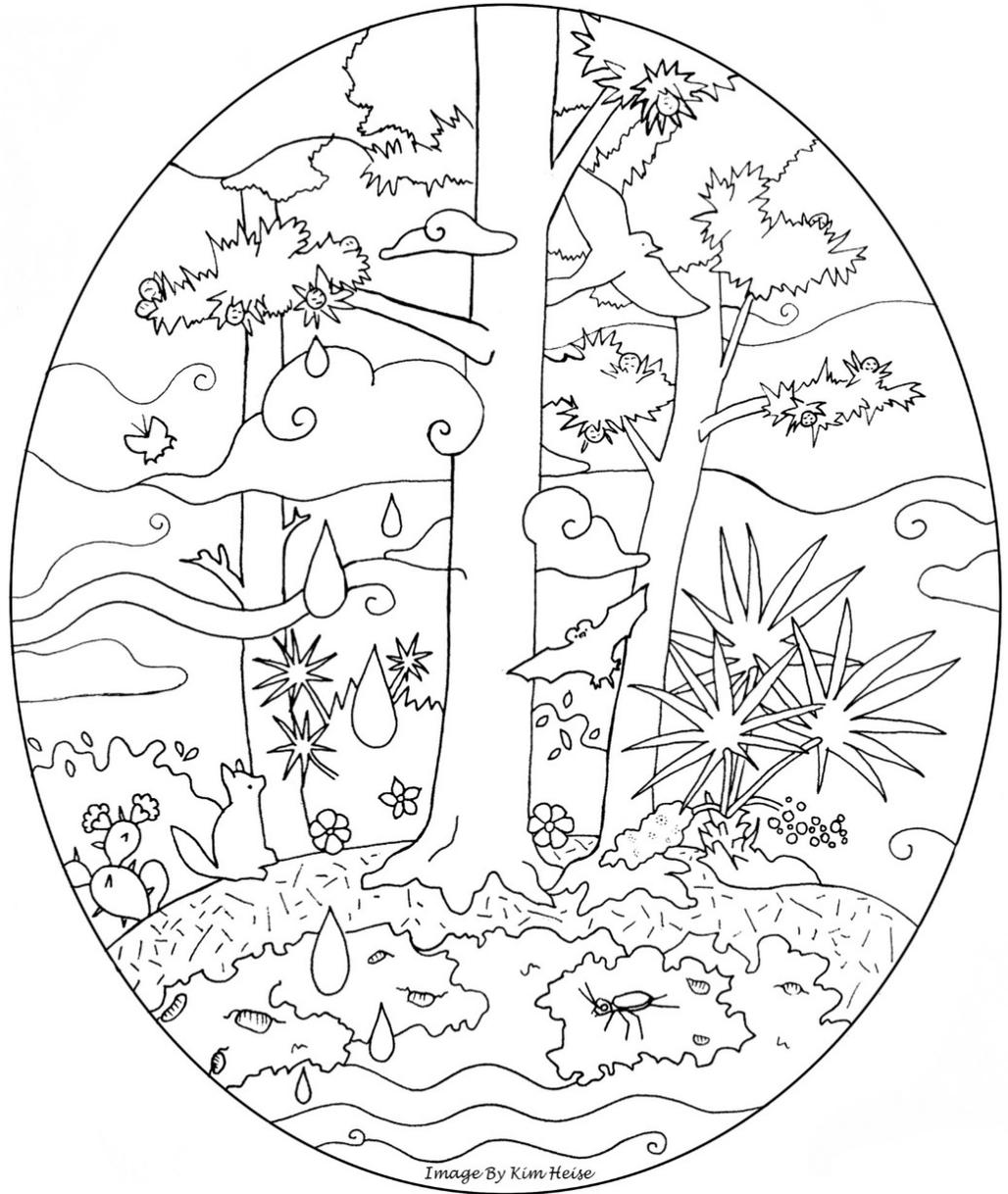
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What is a Pine Rockland? Why is it special? Who calls it home?

A pine rockland is an ecosystem unique to south Florida, the Bahamas and Cuba, and support very specialized inhabitants. These magical forests are invaluable and are an irreplaceable global treasure.

The soil in Florida's pine rocklands is mostly limestone rock, a light porous rock, vestige of an ancient seafloor formed over millennia and made up of calcium carbonate that settled out of ancient seas. A special type of pine, called the slash pine, and a multitude of animals and plants have evolved here over time and thrive in this rocky place, living and growing directly on the limestone rock.



Limestone has naturally occurring crevices, forming small holes, like Swiss cheese, and creating ideal homes for small creatures like the tiny Rim Rock crowned snake, sometimes called the Miami Rim Rock crowned snake because it lives only on the rock ridge in Miami-Dade County and in the Florida Keys.

Because pine rocklands are so rare, many of their inhabitants are state or federally protected. In this book you will get to know a few of the critters that call them home!

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A Flaming Environment

Fire is an essential part of pine rockland habitats. The tree canopy is thinned out every few years by naturally occurring fires. Sunlight penetrates down to the ground better through the scant canopy, benefiting the baby pine trees and plants growing in the lower levels. The plants around here are adapted to survive fire and the branches of slash pines that form the canopy are very high, making it hard for flames to reach them.

The sparse canopy also offers valuable conditions to its dwellers. For example, the Florida bonneted bat, the largest bat in Florida, is able to fly through it without crashing into big branches, not to mention the migrating birds that find food and shelter in this place during their long migratory journeys in spring and fall.

Florida is ground zero for non-native plants bought in from many different places in the world. These plants are called invasive plants and some of them have the tendency to crowd out native species. Fire keeps invasive vegetation from outcompeting the natives that would otherwise die out.

Pine rockland fires occur naturally when lightning strikes the area, but now people have moved in so close to pine rocklands that resource managers now implement controlled fires to keep them healthy. These planned fires are called “prescribed burns.”



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Bartram's Scrub-Hairstreak Butterfly



The Bartram's scrub-hairstreak butterfly host plant is the pineland croton. It grows in clearings on the rocky soils of southeast Florida and the Florida Keys. Like other plants in the area, pineland crotons need fire to keep their space clear for healthy development. This butterfly never flies too far away from its home and it gets its name from the Bartrams, a family that made it its business to write about the plants and animals observed through the family's travels. There are only a few hundred of these butterflies remaining in their limited habitat. The tiny butterfly is very rare and listed as a federally endangered species by the U.S. Fish and Wildlife Service.

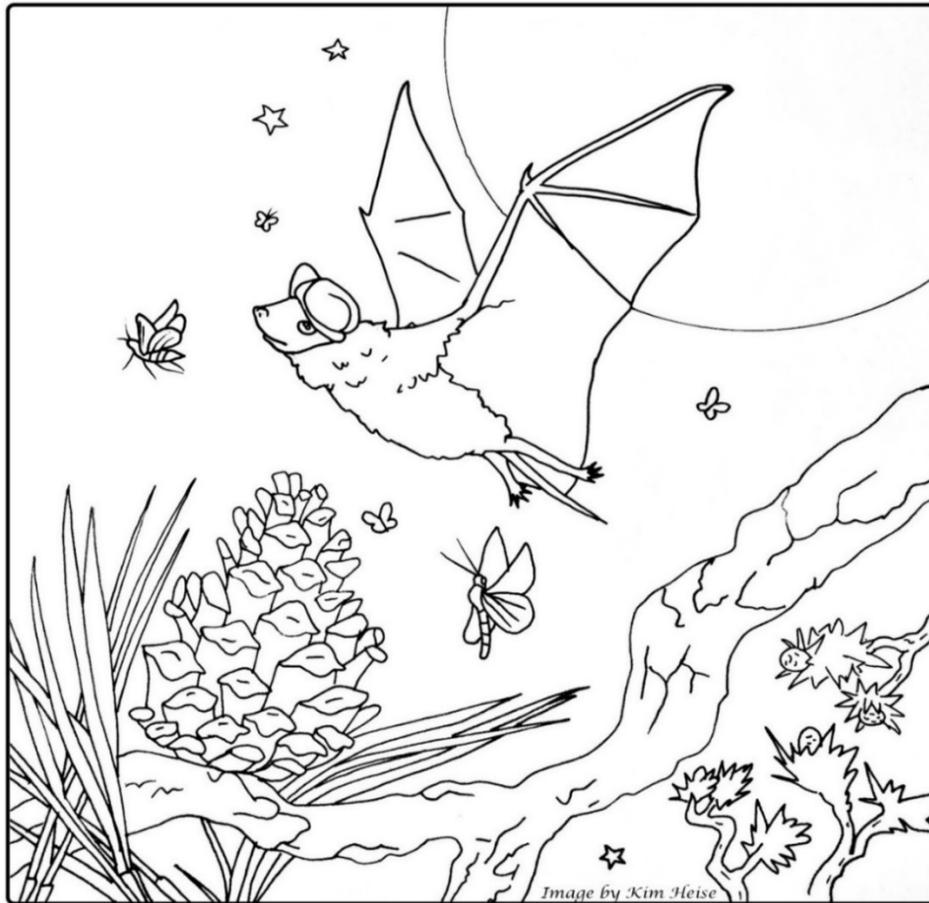
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Florida Bonneted Bat



This endangered bat gets its name from its big ears that resemble a bonnet or hat. It's Florida's largest bat and needs a lot of space to roam. The pine rockland canopy, trimmed by fire, makes the perfect obstacle-free flying space they enjoy. Bonneted bats eat their weight in bugs every night.

They live in the last remaining pine rocklands, mangrove forests, and hardwood swamps in southeastern and southwestern Florida. Bonneted bats are very rare and difficult to see, but Zoo Miami has reported recording their sounds in the zoo as well as the pine rocklands next to the zoo.

Coral Gables residents have also reported seeing and hearing them in the large banyan trees around the Granada golf course, where people now gather to see or hear them on clear nights. You can contact the bat squad if you wish to participate. www.MiamiBatSquad.com.

A baby Bonneted bat was rescued and named 'Bruce'. He is doing well at the Zoo Miami veterinary hospital. You can see a You Tube video at: https://www.youtube.com/watch?v=q16tfhp_Kk4.

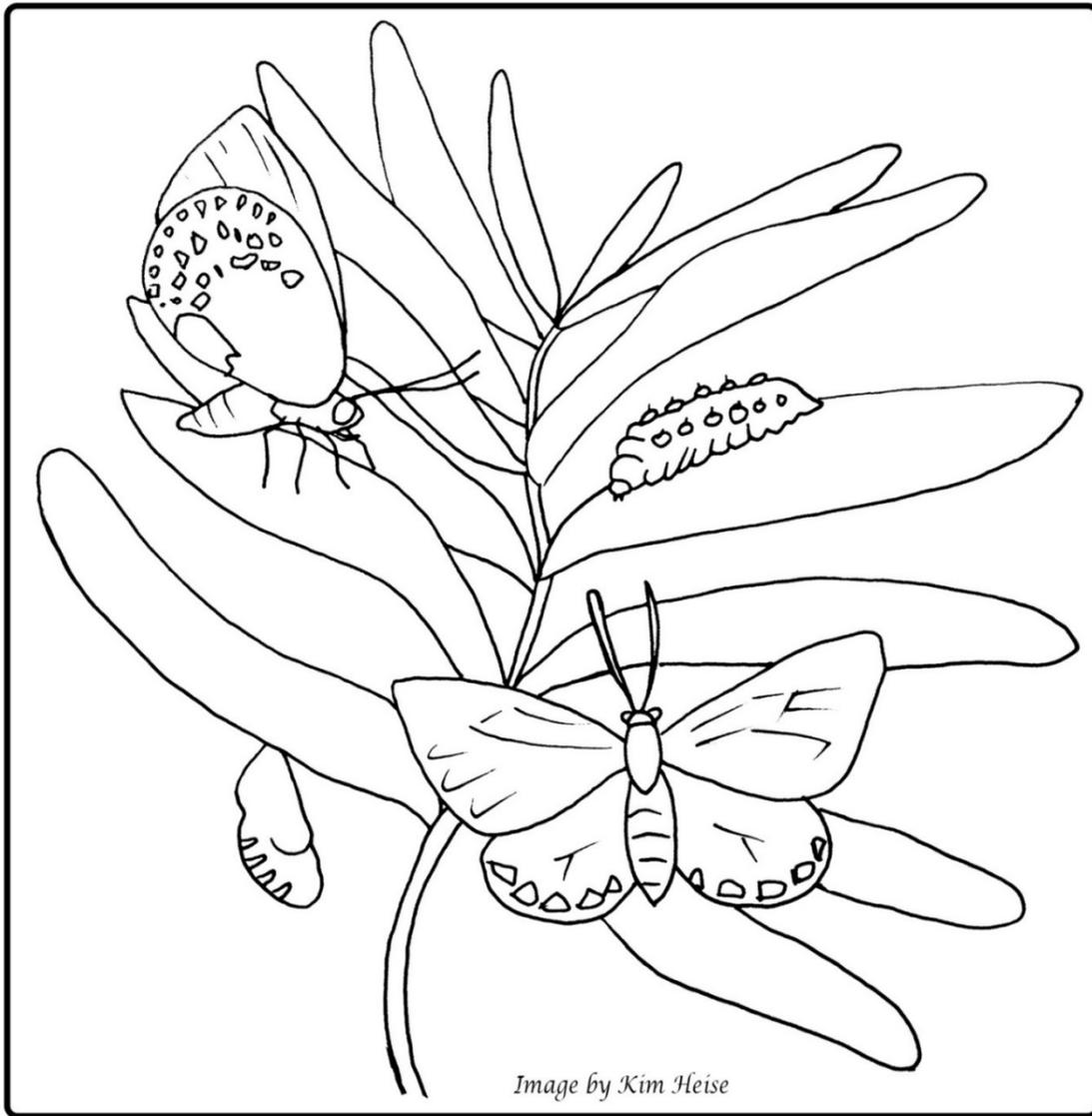
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Atala Butterfly



The Atala butterfly's wings are black, speckled with iridescent blue and have a bright orange spot to match their striking bright orange abdomen. Males are either Caribbean blue or teal green on the inner fore and hindwings and females are always royal blue on the upper wing only. The drought and moderately salt-tolerant coontie is the only native host plant for the Atala caterpillar, which is red with rows of yellow spots. While in the caterpillar stage, the Atala butterfly eats the coontie. The coontie's natural toxins make the caterpillar poisonous to predators, who have learned to avoid these brightly colored beauties.

The butterfly was named for Atala, the Native American heroine of a novel. Atalas are imperiled and live in Pine Rocklands and were once thought to be extinct. People can help the Atala survive by planting coonties and other native plants that provide food and shelter. Native plants are easy to care for, they don't require watering or don't require spraying.

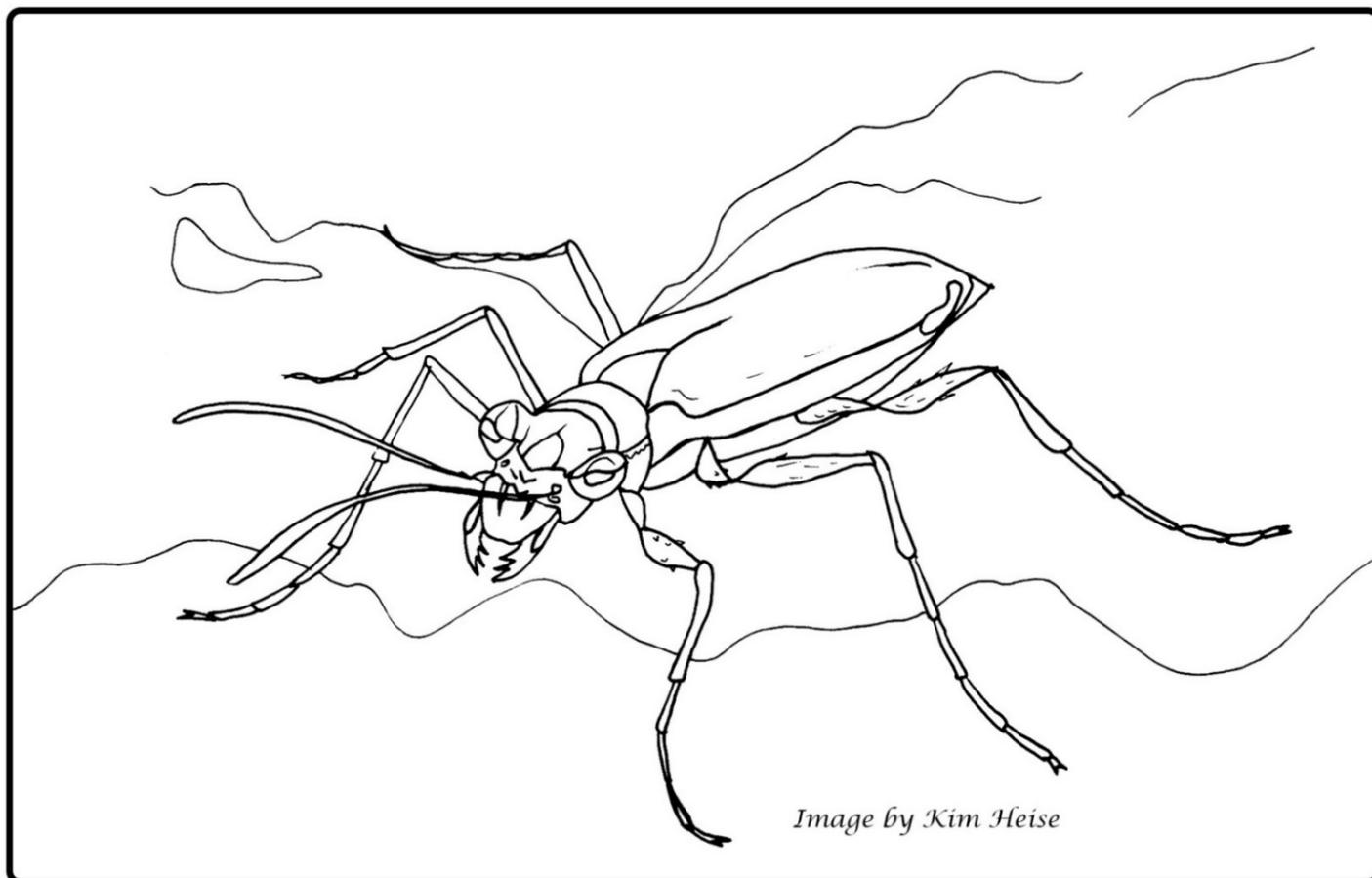
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Miami Tiger Beetle



The tiny Miami tiger beetle is the real hero of the pine rocklands. These guys disappeared for over 70 years until 2007 when scientists rediscovered the Miami tiger beetle in the Richmond Pine Rocklands of Miami, Florida.

Miami tiger beetles are fierce predators, hence the name “tiger.” The larvae live in tiny burrows in the sunny and sandy spots found in pine rocklands. One of their favorite foods are ants, and they quietly watch for them from their burrows, then jump out at lighting speed, so fast your eyes only see the prey disappear in a flash. Then they devour them in a split second with their strong powerful jaws. Though tiny, they are some of the fastest animals on Earth. Miami tiger beetles are seasonal and can only be seen from May through October. They hide out in their small, secluded shelters the rest of the year. Adult Miami Tiger Beetles are a bright iridescent green, which helps them blend in with their pine rockland habitat. Sadly, only 38 were spotted the last time they were counted in 2014 and it is believed there are fewer than 100 left alive today. Human beings alone have the power to keep the species alive by protecting their only known home: The Richmond Pine Rocklands in Miami.

You can watch a tiger beetle YouTube video at: <https://www.youtube.com/watch?v=s9Aoe3DiFdA>.

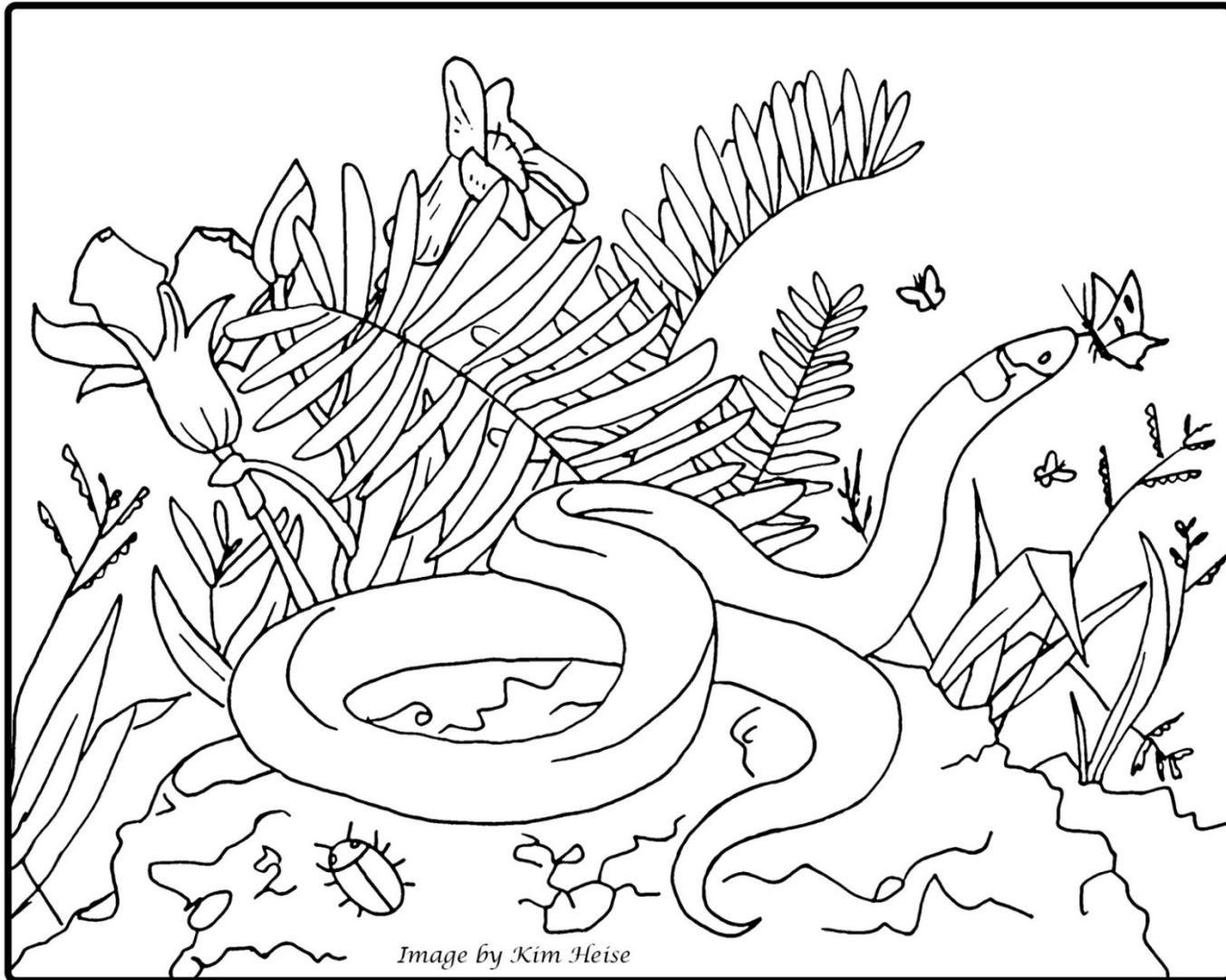
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Rim Rock Crowned Snake



The Rim Rock crowned snake is a very rare species of snake found only in Miami-Dade and Monroe counties. The Rim Rock crowned snake is a tiny, 10 inch long snake named after the Miami Rim Rock formation. It has a black head with a tan to light brown body. It is not known how many remain.

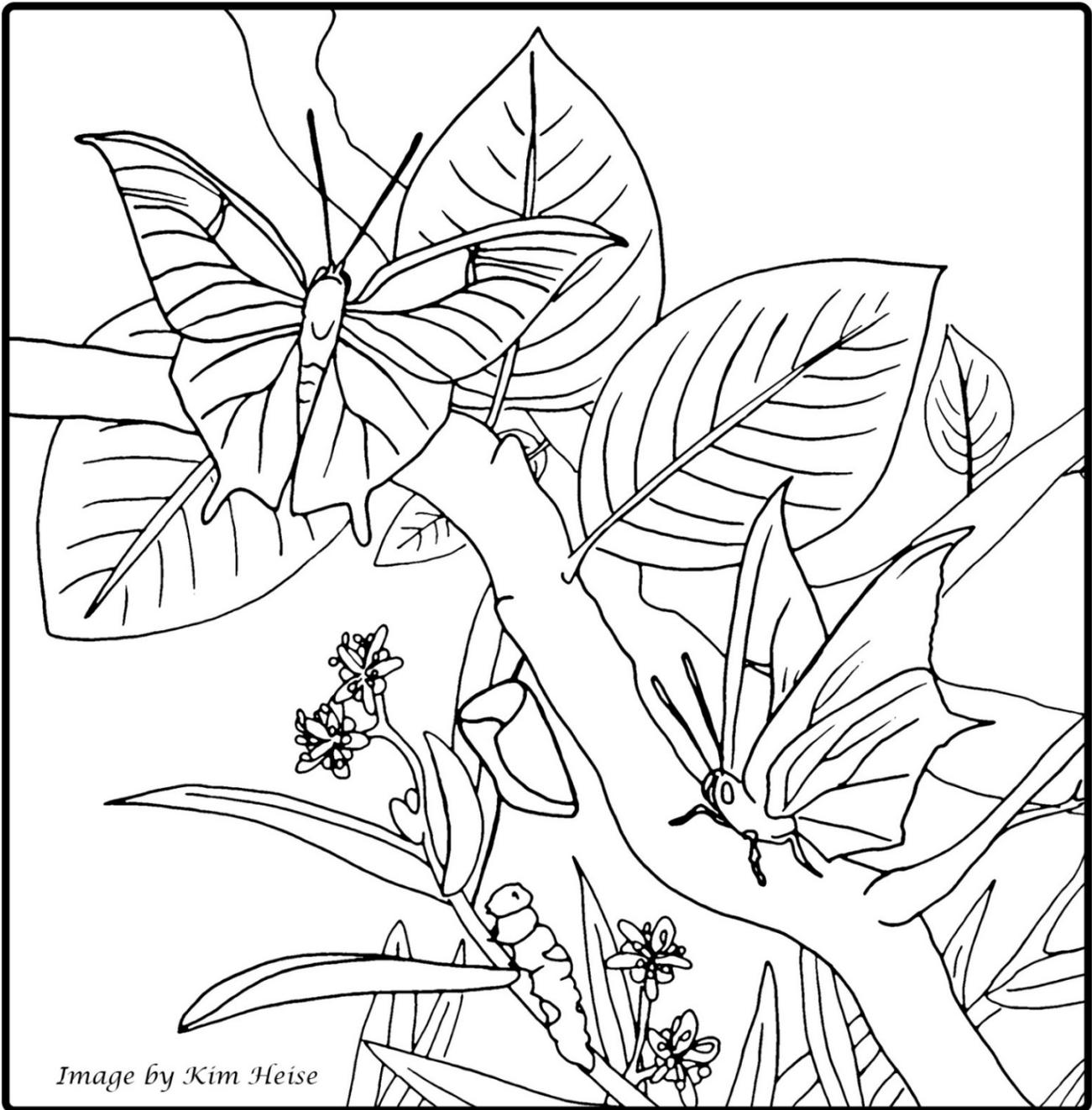
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Florida Leafwing Butterfly



This beautifully camouflaged pine rockland butterfly's closed wings look like dried leaves on the outside but when they open up they have bright red-orange-brown colors on the inside. Its only home is the pine rockland habitat remaining inside Everglades National Park. Its host plant is the pineland croton.

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