# The Evolution of Calpurnia Tate Study Guide

### The Evolution of Calpurnia Tate by Jacqueline Kelly

(c)2015 BookRags, Inc. All rights reserved.



### **Contents**

The Evolution of Calpurnia Tate Study Guide	1
Contents.	2
Plot Summary	3
Chapters 1 and 2	4
Chapters 3 and 4	6
Chapters 5 and 6	8
Chapters 7 and 8	9
Chapters 9 and 10	11
Chapters 11 and 12	13
Chapters 13 and 14	15
Chapters 15 and 16	17
Chapters 17 and 18	19
Chapters 19 and 20	20
Chapters 21 and 22	21
Chapters 23 and 24	23
Chapters 25 and 26	24
Chapters 27 and 28	26
Characters	27
Objects/Places	29
Themes	31
Style	33
Quotes	35
Topics for Discussion	41



### **Plot Summary**

The Evolution of Calpurnia Tate, by Jacqueline Kelly, is a novel set at the turn of the 20th century. The story follows six months in the life of young Calpurnia Tate, a smart, funny 11-year-old girl who is evolving along with the century as she tries to focus on exploring science and the natural world with her grandfather rather than learning the domestic arts her mother thinks she will need in her inevitable role as a wife and mother.

Calpurnia Virginia Tate — known as Callie or Callie Vee to her family — lives in a small Texas farming town with her parents, six brothers and grandfather. Although her grandfather is an imposing, somewhat scary figure, Callie forges a close relationship with him when she begins to share his interest in nature and science. Granddaddy takes her under his wing and teaches her about the scientific method and the importance of recording her observations, which she does in a special notebook bought for her by her oldest brother, Harry.

As the summer progresses, Callie and her grandfather make frequent trips to the San Marcos River, which runs through their farm, to look for specimens. On one such trip, they collect a sample of a vetch plant, and upon returning to his library to research it, Granddaddy begins to believe they might have discovered a new species. Together they get the plant photographed and send their evidence to the Smithsonian for verification.

As they wait for word about their discovery, Callie's mother begins forcing her to spend less time on science and more learning the domestic arts such as cooking and sewing, which she finds incredibly boring. However, her mother is insistent because she sees no possible future for her only daughter other than becoming a traditional wife and mother. Callie goes along as best she can, but continues to feel that she is different from other girls and hopes to have a different, wider future.

Several months after sending their letter, Callie and her grandfather receive word from the Smithsonian that they have indeed discovered a new species, which they can name after themselves as is customary. This finally captures the attention and admiration of the rest of the family, and Callie summons the nerve to reveal her hope of attending college and seeing the world rather than settling down to an early marriage.

Throughout the book, Charles Darwin's The Origin of the Species is woven into the plot, drawing parallels between Darwin's discoveries and Callie's own personal evolution. Callie and her family also experience several new inventions, including Coca Cola, the telephone and the automobile, all of which are embraced by her grandfather, who passes on to Callie his excitement at the prospects of the new century.



### Chapters 1 and 2

### **Chapters 1 and 2 Summary**

The Evolution of Calpurnia Tate, by Jacqueline Kelly, follows six months in the life of 11-year old Calpurnia Virginia Tate. Callie, or Callie Vee as she is sometimes called by her family, lives on a pecan and cotton farm in tiny Fentress, Texas with her family, including her parents, her six brothers and her grandfather. The year is 1899.

The book's first chapter sets the stage by identifying the main characters and telling the reader what their lives are like. It opens with Callie noting the terrible heat during a Texas summer. Most of her family sleeps during mid-day when the temperature is highest, but Callie sneaks off to the nearby river to cool off. She also plans to cool off by cutting her long hair one inch each week, hoping her mother will not notice. She is interested in nature and begins a notebook in which she records her observations. When she thinks she has discovered a new species of grasshopper, she goes to the library with her oldest brother, Harry, to research it. She asks for the book The Origin of the Species by Charles Darwin, but is told that the library doesn't have it because it is considered offensive. Callie eventually figures out that she has not discovered a new species after all, but when she tells her grandfather — an imposing man who intimidates her — about her experience, he is impressed. He takes her into his library, where no one is allowed, and gives her a book he keeps under lock and key — The Origin of the Species.

In Chapter 2, Callie's grandfather, an enthusiastic naturalist, invites her to go to the river with him to explore nature. He explains the scientific method to her, and they find an old hummingbird's nest — something quite rare — which he puts into a glass case for Callie to keep in her room. When they get home, her mother is angry that Callie has missed her piano lesson, but Callie thinks it was worth it. As the chapter ends, Callie is learning to observe nature more carefully and record her observations.

#### **Chapters 1 and 2 Analysis**

The book's first two chapters primarily serve as a set-up for the rest of the book. Callie is immediately painted as a free spirit with a mind of her own. Rather than following the lead of the rest of her family, she prefers to do things her own way by cooling off in the river rather than resting in the house to beat the heat, and her gentle but headstrong nature comes out in her plan to gradually cut her hair and hope no one notices. Being the only girl among seven children does not keep her from being active and enjoying the outdoors, and she takes it upon herself to begin studying nature.

Callie is a girl who goes after what she wants. When she wants to learn more about nature, she goes on a secret errand to the library even though she knows the book she wants to see is considered controversial and even forbidden. She is also the only one



among her siblings to approach their grandfather, of whom even the older boys are afraid. Their relationship begins when he takes her into his confidence and shows her the book that he keeps hidden in his private library, even giving it to her to read and setting up the closeness they will share. Their first outing together is marked by the discovery of a rare hummingbird's nest, symbolizing the unique and special relationship on which they are embarking. Although her grandfather has an extensive collection of specimens, he gives the nest to Callie to begin her own collection. He also begins to mentor her by teaching her the proper way to observe and experiment with nature and the importance of recording her observations, which foreshadows an important occurrence later in the novel.



### Chapters 3 and 4

### **Chapters 3 and 4 Summary**

Calpurnia's interest in science prompts her to study the nightly "possum wars" that take place on the back porch. A possum comes by to forage for kitchen scraps and is met by a cat. The possum then pretends to be dead and when the cat eventually walks away, the possum gets up and leaves. Calpurnia discusses this with her grandfather, and also asks him how he first became interested in science. He tells her that in 1865, he was commander of an infantry unit during the Civil War. One day he raised his hand in the air to signal his troops and a bat flew into it. He took the bat into his tent, where it stayed for several hours. It flew out during the night, but returned early the next morning and stayed in the tent. On the last day of the war, the troops came under heavy fire and there were many casualties, but her grandfather continued to be worried about what would happen to the bat, eventually realizing that he felt more for the bat than for the dead soldiers.

Chapter 4 describes Viola, the family's cook, and their pets. Viola has been with the family since before Harry was born. Callie says that she is light skinned because she is only a quarter Negro, and she lives in the old slave quarters near Grandfather's laboratory. She and Margaret, Callie's mother, get along well, and although they discuss upcoming meals, Margaret never interferes with Viola's work in the kitchen. The family is generous with Viola, giving her gifts in addition to her wages. Viola especially dotes on Harry, and she is also partial to Idabelle, the only cat allowed to come indoors, although she has little patience for the outside cats. The family also has a number of dogs, led by Ajax, the only dog allowed inside.

### **Chapters 3 and 4 Analysis**

Callie's relationship with her grandfather continues to evolve. She is the only member of the family to take an interest in his life, since the others essentially leave him alone and he seems to prefer that. Under her encouragement, he tells her the difficult story of the last days of the Civil War, including the extreme carnage of his troops' final battle. It was at that time that he realized how important nature would be in his life because even though he was disturbed by the deaths of his soldiers, he also felt great concern for the fate of the bat he had taken in. He treats Callie like an adult and does not think that, as a girl, she will be too delicate to hear such stories. This theme will be continued throughout the book.

Chapter 4 establishes the family's relationship with its servants. Even though the Civil War has been over for many years, the family's black servants still function much as they did in the time of slavery. Viola lives in the former slave quarters, although the house has been improved significantly since those times. As in the days of slavery, in some ways Viola is treated much like a member of the household and even the family,



yet there is a clear separation. She is also both an authority figure for Callie and the other children, and a servant in their home. Callie knows no other way of life than to have Viola and her fellow servants working for her family.



### **Chapters 5 and 6**

### **Chapters 5 and 6 Summary**

Callie works with her grandfather in his laboratory, and he thinks he is making progress on developing a liquor made from pecans. He gives Callie a small taste of his latest batch, causing her to cough violently and begin to hiccup. She continues to hiccup during dinner, and her mother sends her to her room. While she is exiled there, her brother Travis brings her a kitten to keep her company, and her grandfather brings her a book and sneaks in a sandwich. Callie feels proud that she is the first among her siblings to taste alcohol, and later she learns that the health tonic her mother takes is 20 percent alcohol.

Chapter 6 explores Callie's hated piano lessons. She only takes lessons because her mother insists on it, and although Callie has never told her mother, the teacher, Miss Brown, strikes her hands with a ruler when she makes a mistake. She plays Stephen Foster songs for her father, Vivaldi for her grandfather, and Scott Joplin rags for her brothers, who love to dance to the modern music. Later the family gets a gramophone, which allows Callie to dance also. She is dismayed when she has to perform at her first piano recital, which involves an uncomfortable new dress and intricate styling of her hair. All the children are terrified, and Callie's best friend Lula even vomits, causing her to be barred from performing in future recitals. Callie's parents give in to her pleas and she, too, is allowed to hand out programs with Lulu rather than performing in the following year's recital.

### **Chapters 5 and 6 Analysis**

Callie's relationship with her grandfather deepens as he lets her in on his pecan liquor experiment. When he gives her a taste of the liquor, it is unclear whether he has forgotten that she is only 11 years old or simply has gained enough respect for her maturity to think she can handle it. The conspiratorial nature of their friendship, which began when he gave her the forbidden book to read, continues when he sneaks a sandwich to her in a hollowed-out book binding. The book's focus on the evolving role of women is highlighted when it is revealed that her mother's health tonic, which women of her time took to calm their nerves, is in truth an alcoholic beverage disguised as medicine.

The somewhat formal relationship between Callie and her mother comes into play in Chapter 6. Even though she knows her mother would probably disapprove, she is uncomfortable telling her that her piano teacher hits her hands with a ruler, and she is unable to protest with her mother and Viola spend hours fixing her hair before the recital. As a girl, Callie is forced to study piano even though her brothers are not.



### Chapters 7 and 8

### **Chapters 7 and 8 Summary**

Calpurnia is dismayed when Harry gets a girlfriend, Minerva Goodacre, who is visiting some relatives in the area. In addition to their age difference — he is 17 and she is 23 — Minerva attends the Independent Church, which Callie's parents look down on. In an attempt to destroy the relationship, Callie deviously brings this up at dinner, and her parents are very upset, as she hoped they would be. However, this causes Harry to become furious with Callie and when he begins treating her coldly, she realizes she has made a terrible mistake. Margaret invites Minerva and her family to dinner. When they arrive, Minerva is very friendly and polite, but is shallow, interested only in clothes and fashion. Grandfather takes her into his library to show her some of his specimens, and when they come out, Minerva seems upset and leaves abruptly. Harry is dismayed when she returns to her home in Austin a few days later with no explanation. Grandfather says that he had a talk with her, but doesn't reveal what was said. Harry is heartbroken and Callie resolves never to meddle again.

In hapter 8, Harry forgives Callie and she goes back to being his pet. Callie continues to spend time with her grandfather discussing naturalism, and she asks why he keeps a poorly-stuffed armadillo. He says it means a lot to him because it was his first attempt at taxidermy. Later he got better at it and sent a stuffed armadillo to Darwin, who in return sent him a cuttlefish preserved in liquid. Callie's brothers notice that she is spending a lot of time with Grandfather, but she doesn't want to share him with anyone. Although she promises to spend more time with her youngest brother, Jim Bowie, she realizes that she has changed and is now an explorer.

Callie and her grandfather return to the riverbank, this time taking a microscope. She is fascinated by what she sees when she puts a drop of water under the microscope. They find a wooly caterpillar, which Callie decides to take home and name Petey. Her brothers catch a huge catfish that Viola prepares for dinner, but Callie doesn't want to eat it because she is bothered by the size of the fish and the microscopic organisms she now knows live in the river.

### **Chapters 7 and 8 Analysis**

In Chapter 7, Callie realizes for the first time that her family's life might change at some point. Up until now, they have been a close, contained family unit, but the introduction of Minerva causes Callie to realize that Harry might someday get married and leave the household. This is very upsetting to her because she has always had a close relationship with Harry and enjoys being his pet. The prospect is so upsetting that, without considering Harry's feelings, she sets up a situation that she knows will cause a disturbance in the relationship. The situation also shows the narrow-mindedness of Callie's parents, since their objection to Minerva rests with the fact that she goes to a



church they consider inferior to theirs. Their narrow views on society will come into play later as they try to pigeonhole Callie into traditional female roles that she does not want and is not suited for. It is clear in this section that Callie has much more in common with her grandfather than an interest in science. Their scientific minds make them problem solvers, and although Callie's attempt at solving the problem of Minerva backfires on her, Grandfather's method is successful. The closeness of their relationship is evident from the fact that she now calls him Granddaddy while everyone else uses the more formal Grandfather.



### **Chapters 9 and 10**

### **Chapters 9 and 10 Summary**

Because she has been spending more time on science and less on piano practice, Callie must spend a couple of hours each day making up the time she has missed. When she is finally able to get back to her grandfather, she asks him what she should feed Petey, but he tells her to figure it out for herself and she does. Callie continues to write questions in her notebook, including whether caterpillars have a gender. This causes her to note that some species can choose their gender and if humans had that ability, she would choose to be a boy.

Callie quickly grows tired of cleaning Petey's jar and comments that he is not a very entertaining pet. Her grandfather tells her that he is not a pet, but a creature in the natural order of things. Eventually Petey spins a cocoon, and waiting impatiently for him to hatch causes her to think about life and death. When she asks Harry to take her to the next funeral in town, he asks what she talks about with their grandfather. She responds with a long list of topics involving science and the natural world. Petey eventually hatches and Callie is very disappointed because instead of a beautiful butterfly, he is a huge, ugly moth. She had planned to study it, but it is too big to keep because she doesn't have a large enough container, so although her grandfather suggests keeping it as a specimen, Callie lets it go.

As Chapter 10 opens, Callie notes that she and Lula Gates have been friends for many years and that Lula does beautiful needlework, unlike Callie. Three of Callie's brothers — 13-year-old Lamar, 14-year-old Sam Houston, and 10-year-old Travis — all confess to having a crush on Lula, and Callie agrees to keep their secret. One day, Lula notices Travis sitting alone at lunch and invites him to sit with Callie and herself. Later that day, they walk home from school together while Lamar and Sam Houston glare at them. While walking home the next day, Lamar calls Travis a baby in front of Lula, causing Travis to become upset and run home. When her mother asks Callie why Travis is upset, she is forced to tell her about his crush. Lamar and Sam Houston continue to compete for Lula's attention, prompting Callie to set up a schedule that enables each of the three boys to walk home with Lula and herself one day per week.

### **Chapters 9 and 10 Analysis**

Callie is increasingly realizing that she is different from other girls her age. She has little patience for practicing the piano and needlework, and she even begins to think that she would be a boy if she could make her own choice about the matter. She is also different from her siblings. While she is still close to Harry and he clearly adores her, he has no interest in the natural world and is quickly bored when she tells him about the things she and their grandfather talk about when they are together, although it is a topic Callie could talk about for hours.



Callie also learns a hard lesson about science and nature through her adoption of Petey the caterpillar. Her grandfather warns her about trying to treat him as a pet, but she is not deterred, yet she is dismayed when he turns out to be a moth rather than a butterfly. This parallels other events in the novel when Callie wants to spend her time studying science with her grandfather but is forced into the more mundane, monotonous tasks she is expected to learn in order to become a wife and mother one day. The sheer size of the moth represents the enormity of nature, since she cannot find a container large enough to hold it and must set it free again, as her grandfather knew. In Chapter 10, Callie's scientific problem-solving comes into play again when she resolves the issue of her brothers' competition over Lula's attention by establishing a schedule that gives everyone a little time with her.



### Chapters 11 and 12

### **Chapters 11 and 12 Summary**

Callie's mother sees Lula's excellent needlework and decides that Callie needs to practice more, so she insists that she begin knitting socks to give as Christmas gifts to her father, grandfather and all six brothers, much to Callie's dismay. After several hours of knitting, she goes to see her grandfather and learns, to her surprise, that he can knit. He tells her that during the war, men had to be self sufficient, so he learned many skills, including cooking, prompting a discussion about Viola, the family's cook. Callie says she doesn't understand how Viola can stand to spend all her time cooking, but Granddaddy says that it is all she knows and that she realizes she is fortunate to be a house servant rather than chopping cotton in the fields. In the laboratory, they begin studying a sample of a plant called vetch that they picked up on a recent trip to the riverbank and Granddaddy believes they might have discovered a new species. When he asks Callie where they found it so they can collect more samples, she discovers to her horror that she forgot to record the location as he'd taught her to do. He is understanding, but disappointed, and she vows to do whatever it takes to find the location.

After a night of no sleep and a day of being distracted at school, Callie finally recalls the location as she's walking home from school. She runs into the woods and after searching for three hours, finds the spot and collects what she thinks is the right specimen. She hopes it's the right one, because she is afraid that if her grandfather misses his opportunity to discover a new species because of her carelessness, it will end her relationship with him. After being punished for being late for dinner, she finds her grandfather sitting outdoors. Rather than being angry with her, he says it's a lovely evening and invites her to join him.

Chapter 12 opens on the following Saturday. Callie and her grandfather take the plant to a professional photographer to get pictures of it, and they also get one of the two of them with the plant. During the ride, he teaches her songs with naughty words, but they switch to hymns whenever other people come into view.

At dinner that night, Callie is upset over her family's lack of interest in their possible discovery. After dinner, she and Granddaddy go to the library and write a letter to the Smithsonian about their find.

### **Chapters 11 and 12 Analysis**

Callie's mother continues to ignore her daughter's disinterest in household matters and begins trying harder to force her into the mold expected of young girls. However, Callie sees yet another side of her grandfather when she learns that he knows how to knit and cook, things that would never be expected of a man. Again it is clear that Callie is the



only one in the family who really pays attention to him and asks questions about his life and interests.

Callie's relationship with her grandfather takes a turn when she realizes that her carelessness about labeling one of the plant specimens they have collected might cost him the opportunity to discover a new species. For the first time, she begins to fear that her relationship with him might end if she is not able to make things right, and she realizes how important he has become in her life. Even though he doesn't speak openly about the situation, he makes it clear that she is forgiven simply by asking her to join him outside on a nice evening, and he includes her as his equal in getting the specimen photographed and in writing to the Smithsonian about their find. Entrusting her with a high level of responsibility is in direct contrast to her mother's insistence that Callie spend her time learning to knit socks for the male members of the family.

The discovery of the new plant is an event that will continue to be important throughout the rest of the book, both in terms of the plot and Callie's relationship with her grandfather.



### Chapters 13 and 14

### **Chapters 13 and 14 Summary**

As they are waiting to hear from the Smithsonian, instead a letter comes from the photographer asking whether they have heard news about the plant. Granddaddy tells Callie to respond and she is thrilled to be writing scientific correspondence. When she takes the letter to the post office, she refuses to answer the clerk's questions about why she's writing these letters because she doesn't want people to laugh at her grandfather if they are wrong about the new species. She decides to keep busy with science, her special collections and school work.

In Chapter 14, Callie is taking good care of the plant and it begins to thrive. Trying to pass the time, she decides to take on a new experiment and goes outside to chop cotton. When Viola sees her, she becomes very upset and insists that she come inside. Viola tells her that she is a lady and her mother will want her to "come out" as a debutante. When Callie asks if her mother came out, Viola says that she didn't because her family's money had run out, then changes the subject. Callie puzzles over what it means to be a debutante, but doesn't want to ask her mother about it because she doesn't want to get her hopes up about Callie making her debut. She also wonders if her mother is disappointed in how she is turning out.

The next day, she finally broaches the subject with her mother, who confirms that she didn't come out because the war ruined many people financially, including her family. She and Callie discuss what coming out means and Callie sums it up by saying it means going to lots of parties to find a husband, and she doesn't like the sound of that. She thinks she might ask Granddaddy about it, but thinks she can imagine his views on the subject.

### **Chapters 13 and 14 Analysis**

The new plant is now of central importance and Granddaddy's confidence in Callie is clear when he entrusts its care to her. This stands in direct contrast to her mother's plans for Callie, which include only one thing — finding a good husband. It is clear that Callie has begun to evolve while her mother has not, because she is still clinging to the traditional roles for women and cannot envision any other kind of life for her daughter. Callie is also beginning to realize that her grandfather, despite his age, is more evolved than her parents, since she knows without asking that he would think being a debutante was a silly thing to do. Despite her status as a servant, Viola has more in common with Callie's mother than Callie herself does, as evidenced by her horror when she sees Callie chopping cotton.

Despite the fact that she is not at all interested in domestic matters, Callie realizes for the first time that her mother might actually be disappointed in her. Out of seven



children, her mother only has one daughter and Callie now sees that she is probably not what her mother had in mind, but she is headstrong and determined, so this knowledge doesn't deter her from her pursuit of science rather than domestic endeavors.



### Chapters 15 and 16

### **Chapters 15 and 16 Summary**

The time has come to pick the cotton and dozens of Negroes arrive to work. Everyone, even the children, are pressed into service in some way. Callie is jealous of her brothers because they get to run errands and are paid a penny for their work, while she must babysit the workers' babies and toddlers. When she complains about it, her father agrees to pay her a nickel, then she hires Sul Ross to do the work for her, paying him 2 cents of the 5 cents she's getting so she can spend time with Granddaddy. When her grandfather says she might turn out to be a woman of commerce and seems a bit disappointed, she makes it clear that she's committed to science.

In Chapter 16, everyone is excited because the town of Fentress is getting its first telephone line, which will be placed in the newspaper office. Granddaddy is very excited about this progress and thinks he might make money from it because he knew Alexander Graham Bell and once loaned him money, which he repaid by giving him stock in his company.

The town advertises for a female telephone operator between the ages of 17 and 24, stipulating that she must also be tall. She will receive room and board plus a salary of \$10 per week, which is unheard of. Callie wants the job and considers lying about her age, but realizes everyone in town knows her. The first operator who is hired quits immediately because she is afraid of the electrical circuit board, then someone else is hired, much to the envy of all the girls in town. Everyone in town gathers for the opening of the phone line, and Granddaddy tells Callie to remember this day because the old century is dying.

### **Chapters 15 and 16 Analysis**

In this section, Callie once again proves herself to be a modern, enterprising young woman who has evolved beyond her peers. She is assigned a traditional role for a girl — babysitting — and unlike her brothers, is not offered any money for her work. However, she turns the situation to her advantage by subcontracting the work to one of her brothers, which impresses her grandfather although he is relieved to learn that her interest remains in science.

Evolution continues to be a theme as the town of Fentress takes a step toward progress with the installation of its first telephone line. Furthermore, the job of operator is given to a woman, but it turns out to be essentially a form of slavery since the "room and board" is a cot next to the switchboard with meals delivered since the operator is expected to be at her post 24 hours a day in case a call comes in. The fact that a woman is being hired and paid for employment parallels Callie turning her babysitting assignment into a money-making enterprise.



It is becoming increasingly clear that despite his age, Callie's grandfather is the most progressive member of the family. His excitement over the phone line is enormous and he is the only person smiling in the photo of the townspeople on the day of the big opening. While everyone else looks somber, Callie looks pensive, demonstrating the fact that she is still in the process of learning, considering and forming her own opinions.



### Chapters 17 and 18

### **Chapters 17 and 18 Summary**

Callie's mother announces that she wants her to spend more time learning to cook, sew and perform other household tasks, but Callie considers these things boring and a waste of time. Her teacher also announces that all the girls will enter their handwork in the upcoming local fair. This upsets Callie because her work is so poor, so her mother insists that she work hard to improve, much to Callie's dismay. Later she overhears her parents talking about the fact that her grandfather is not the best influence on her, and they agree that she will spend less time with him and more time learning to perform a woman's household duties. Callie is dismayed. She always thought she was different from other girls and that her life would be different, but now she realizes that she is destined to a life of domestic slavery.

Chapter 18 brings the beginning of Callie's cooking lessons, starting with apple pies. After three disastrous tries at making pie crust, Viola takes over that job and instructs Callie to cut up the apples. She cuts her thumb, but eventually finishes three pies. When they are served at dinner that night, Callie realizes that making the pies had taken her all afternoon but they had been consumed in just a few minutes.

### **Chapters 17 and 18 Analysis**

Callie's evolution grinds to an abrupt halt in this section as she is forced to pull away from her grandfather and begin preparing to be a wife. When she overhears her parents' conversation, she hopes her father will step in and talk her mother out of her plan, but since the woman is traditionally in charge of all things domestic, he simply goes along. Even though she has a mind of her own, her young age, combined with the times, cause her to think her position is hopeless and that she will have no say over what her future holds. Even when she turns out to have no skills whatsoever in the kitchen, her mother and Viola are not deterred because their narrow world view dictates that all girls must learn certain skills and Callie is no different. Again because their views are so narrow and unevolved, her parents cannot see the positive influence her grandfather is having on her life because they can only see the fact that he is distracting her from falling into a young woman's traditional role.



### Chapters 19 and 20

### **Chapters 19 and 20 Summary**

Callie is sulking in her room and knitting a sock when Granddaddy calls and asks for her help. He thinks his pecan whiskey sample is ready to be checked. He observes it, smells it and then tastes it, and says it tastes like cat piss. However, he tells Callie that they should celebrate the failure because when an experiment succeeds, it ends, which is sad. Callie records the results in their log book, including the cat piss description.

In Chapter 20, Callie is continuing with her cycle of schoolwork, piano practice and cooking lessons, but tries to find time with her grandfather whenever she can. It is now October, the month when Callie, Lamar, Sul Ross and Sam Houston all celebrate their birthdays. To their dismay, their parents announce that rather than having a separate party for each of them, there will be one large party for all four. When the day for the party arrives, there is much food and entertainment, and all the children in town are invited. It is a huge success. During the party, Lula asks why Callie has been in such a bad mood recently and she confesses that she doesn't like sewing and cooking. She wants to do something different with her life and as she is talking to Lula, she realizes what she wants to do — go to the university.

A few days after the party, Granddaddy's gift for the children arrives. It is a huge parrot that turns out to be loud and irritable. Everyone in the family is afraid of the parrot and secretly wants to get rid of it. They finally are able to give it away when it makes a rude remark to one of their mother's guests.

### **Chapters 19 and 20 Analysis**

Callie's evolution takes a giant step during her conversation with Lula at the birthday party. She has long known that she wants something different from her life than simply falling into the role of wife and mother, but she has never clarified exactly what she wants that life to look like. It is only through speaking aloud for the first time about her frustrations with domestic chores that she comes to the realization that she wants to go to college. Shining a light on her differences from other girls, Lula responds not with support, but by pointing out that they don't know any women, including their teacher, who has gone to a university, but Callie has already taken a turn simply by articulating what she wants to do.

Her exploration of the scientific process also takes a step forward through the failed pecan liquor experiment. Her grandfather tells her that even a failed experiment teaches lessons and that sometimes the joy of continuing to explore surpasses the joy of making a discovery or finding the answer to a puzzle.



### Chapters 21 and 22

### **Chapters 21 and 22 Summary**

Harry begins dating Fern Spitty, Lula's cousin. This prompts Callie and Lula to have a conversation about marriage, and Callie insists that there is a law stipulating that husbands and wives must kiss each other. She also tells Lula that three of her brothers have a crush on her, and she advises her to choose Travis because he is the nicest. Callie has seen animals mating a few times, but is vague on the particulars of reproduction. She talks with Harry, who admits that he has kissed a girl but refuses to elaborate. He also assures Callie that no matter how she feels now, one day she will want a family and home of her own. She asks if he thinks she could be a teacher, telephone operator or scientist, but he thinks being a scientist is too far-fetched.

Callie decides that it's time to approach her grandfather and she asks him if women can be scientists. He tells her about several, such as Madame Curie. Callie is disappointed when their conversation is interrupted by her bedtime, but is happy to learn that she isn't the only one of her kind.

When Chapter 22 opens, Callie awakens to find that the temperature has dropped dramatically, which energizes everyone. Jumping rope for the first time in months, she realizes that she has grown so much over the past few months that she needs a longer rope.

Thanksgiving is coming soon but there is a problem with the family's three turkeys. Each year, one of the children is responsible for taking care of them and this year has been Travis' turn, but he loves all animals and has made pets of the turkeys so he is terribly upset when he realizes they will be killed and eaten. Callie soon realizes that the rotation has been changed — this should have been her year to care for the turkeys, but Harry admits that he talked her father out of it because she is a girl. She wonders if she could have handled it.

Since Travis is so upset, everyone tries to find a solution to the problem. They try to trade their turkeys for others, but can't find anyone who will trade with them. Callie approaches her grandfather with the issue, but he says this is simply a case of survival of the fittest. In the end, Callie and her grandfather secretly pluck a few tail feathers and dab some paint on the three turkeys and pass them off as being different, but as part of their deal, Callie must care for next year's birds.

### **Chapters 21 and 22 Analysis**

Although Callie is wise and mature in many ways, her age and the time in which she lives are apparent in her naive views of marriage and sex. Although she lives on a working farm and is aware that the family's animals give birth — and she has even seen a few mating — she has no real knowledge of the workings of sex, and she believes



that a husband and wife would not want to kiss each other if not forced to do so by law. This naivete is in direct contrast to the knowledge she is gaining about the natural world.

Although Harry is of Callie's generation, it is apparent that she is more evolved than he is when it comes to the role of women in society. While he concedes that it might be possible for her to become a teacher or even a telephone operator, he cannot envision a woman as a scientist and is certain that she will eventually come to her senses and want a more traditional life as a wife and mother. However, Callie is much relieved when her grandfather reveals that not only is it possible for a woman to be a scientist, there have been a number of notable ones.

The gender inequity of the times comes into play again regarding the issue of the turkeys, since Callie's turn to care for them has been bypassed because she is a girl and would be too sensitive, while it occurs to no one to skip Travis, who is by far the most sensitive of the seven children. Once again, Callie and her grandfather conspire to solve a problem by "disguising" the turkeys so Travis won't realize he is eating his former pets.



### Chapters 23 and 24

### **Chapters 23 and 24 Summary**

The time has come for the local fair and although none of her sewing examples are good, Callie's mother chooses one for the competition. All the children are excited because they have a little money to spend, and Callie thinks she might spend some of hers on a new drink — Coca Cola. Much to her surprise, Callie wins third place in her division, but she soon learns that there had only been three entries. Callie looks for her grandfather and finds him in a crowded, smoky tent where machinery is being exhibited. He has been there all day admiring the latest invention — an automobile. He tries to buy it but the owner refuses to sell it, so he decides he will order one for himself right away. As they emerge from the tent, Callie faints from all the smoke and Harry and Fern take her home. Viola serves tea, but Callie is dismissed so Harry can be alone with Fern. Callie likes Fern much better than Harry's first girlfriend.

As Chapter 24 begins, the rest of the family arrives home from the fair and Callie makes a show of being fine so her mother won't give her cod liver oil. Everyone is impressed with her ribbon, but Callie isn't sure if her mother knows there had only been three entries. Harry walks Fern home and Callie realizes that her parents approve of her, but wonders if the relationship will affect her mother's plans for Harry to go to the university. A few days later, Fern and her family come for tea and the children are banished from the house. Callie uses the opportunity to spend time with her grandfather and they talk about her grandmother, who died before she was born. She tells him that her sewing came in third of three entries, but he makes light of it.

### **Chapters 23 and 24 Analysis**

The book's theme of evolution is center stage in Chapter 23, but rather than focusing simply on Callie's personal changes, the focus is on the evolution of society. Items that are familiar in today's world — Coca Cola and the automobile — are brand new in 1899. Callie's grandfather again demonstrates that he is young at heart with his enthusiasm over seeing a car for the first time, and he even attempts to purchase it from its owner.

While Callie excels at the scientific research she conducts with her grandfather, her lack of domestic skills is on public display when her needlework is entered in the fair's competition. She hopes her mother won't realize that coming in third also means coming in last, but confesses this fact to her grandfather, who reacts with his usual gentle acceptance.



### Chapters 25 and 26

### **Chapters 25 and 26 Summary**

A few days before Christmas, the family manages to find a puny evergreen and they make decorations for it, including cotton bolls to represent snow, which they've heard of but never seen. They have invited the minister from their church for Christmas Eve dinner. He comes for dinner once a month and is the only guest Granddaddy enjoys, since they discuss religion vs. science. Callie would prefer to go to church with Viola because she likes the music and spirit she has heard coming from her church, but she knows this would never be allowed. After church, the family and Rev. Barker walk home and have dinner. Rev. Barker asks whether there has been any word about the plant. but Granddaddy says no, science takes time. Gifts are exchanged, including the socks Callie made for all the males in the family. Her skills have improved but still are not very good, so she suspects that the great praise she receives is a put-up job on the part of her mother. Granddaddy gets a box of Cuban cigars and Lamar wants the box but is afraid to ask. Callie convinces him to approach their grandfather and when he does, Granddaddy says he can have the box but calls him Travis. Callie receives hair ribbons, candy, a silver locket and, much to her dismay, a book called The Science of Housewifery.

Chapter 26 opens two days after Christmas when a telegram arrives for Granddaddy. It is from Washington, so Callie knows it is about the plant. She races to all their usual spots but can't find him anywhere and she thinks he has gotten tired of her and found new spots for exploring nature without her. She runs all over town, but still can't find him and when she returns home, she asks Viola if she is boring or an idiot. When Viola reassures her that she is neither, she realizes that Viola always tells her the truth and sees how important she has been in her life.

Callie eventually finds her grandfather in the laboratory and tells him about the telegram. When he asks what it says, she tells him that she didn't open it, but he says that she could have done so because they are partners. They return to the house to get the telegram, but they treat the occasion with great formality, going to the front door rather then entering through the kitchen. Grandfather takes the telegram and leaves with Callie to open it privately in the library. The message says that they have indeed discovered a new species and they can name it after themselves as is customary. The letter suggests the name vivia tateii.

Granddaddy responds to the news with great calm and says he thought he would die before making such a discovery. He doesn't mention the telegram during dinner and the rest of the family is very curious about what it said. As dinner is ending, he makes the announcement and invites Viola into the dining room to share a glass of port with the other adults. The announcement is greeted with enthusiastic cheers from the family and Callie's father makes a toast saying how proud he is. Granddaddy makes sure Callie is



included and refers to her as his only grandchild before correcting himself and saying she is his only granddaughter.

### **Chapters 25 and 26 Analysis**

The division between the races and between the family and its staff is evident when Callie thinks about her desire to go to church with Viola rather than to her own church. Her exuberant personality is attracted and better suited to the music and general spirit of Viola's church, but although her parents trust Viola to care for their children, they would never entertain the idea of letting one of them attend a black church with her.

Although Granddaddy is now a familiar and loving figure to Callie, he remains frightening and unapproachable to her brothers. That image isn't helped when he reveals that he doesn't know which of his grandsons is which, reflecting back to a passage early in the book when Callie wondered if he knew her name.

Despite Callie's aversion to and poor performance at household matters, her parents continue to ignore her individual personality and press onward in their effort to fit her into the mold they have established for her. Her excitement at receiving a book for Christmas, and her anticipation at seeing the word "science" as she takes off the wrapping paper, dissolves into dismay when she learns that the book is about cooking, cleaning and sewing. The book's title reflects a bit of irony, because it combines Callies' beloved science with the domestic chores she hates.

The arrival of the telegram brings both positive and negative feelings for Callie. She is excited that news has finally arrived, but is upset when she can't find her grandfather and fears that their relationship has changed because her cooking and sewing lessons have kept her from spending time with him. She is reassured when he lets her know that it would have been OK for her to have opened the telegram since they are partners, but feels left out again when he takes the telegram and leaves the room without her, before calling her to join him.

The verification of the new species finally prompts the family to gain a little respect for the work that Granddaddy does, and the strength of his relationship with Callie is demonstrated when he mistakenly refers to her as his only grandchild.



### Chapters 27 and 28

### **Chapters 27 and 28 Summary**

New Year's Eve arrives and the children are allowed to stay up to ring in the new year and the new millennium. Callie's father reassures them that rumors that the world will end at midnight are not true, and everyone must follow their annual tradition of making resolutions and announcing them to the family. Callie thinks carefully about hers, feeling torn between a desire to go on living together with her family and her desire for dramatic change and a life far beyond Fentress. When she announces her resolutions, they are actually a list of places and things she wants to see before she dies. Grandfather's resolution is to drive an automobile. As Callie looks around at her family, she realizes she is very blessed and that her grandfather is her greatest gift of all.

In the book's final chapter, Callie awakens early on New Year's Day with the sense that something is terribly wrong. Everything is silent and the light in her room looks different. When she gets up, she finds that the ground is covered with snow. She tiptoes downstairs and goes outdoors, wanting to enjoy this unheard-of event by herself for a few minutes. As she is outside running in the snow, the house begins to show its usual signs of morning life and she looks up to see her grandfather saluting her from an upstairs window.

### **Chapters 27 and 28 Analysis**

As the book draws to a close, Callie is at something of a crossroads. She realizes more and more how much she values her family and the life they have together, but she is torn because she wants more from life than what she can expect in Fentress, Texas. The evolution she has experienced in a relatively short time is evident when the family's New Year's resolutions are read. Callie's resolution from the previous year was to master darning and spinning, probably reflecting the desires of her mother more than her own. This year, she announces her desire to visit a wide range of places and see a wide range of things — the Grand Canyon, a kangaroo, the Eiffel Tower, and snow, for example. By reading her list to her family, she is declaring herself as an independent-spirited young woman with ideas of her own, and someone who is unlikely to conform to their traditional ideas of what a woman's life should consist of.

In the final chapter, Callie awakens to find snow on the ground, something unheard of in Texas. The snow represents evolution and change — a new year, a new millennium, a new Callie, a world in which things change and anything is possible.



### **Characters**

### **Calpurnia Virginia Tate**

Calpurnia Tate, the book's main character, is an 11-year-old girl who lives on a Texas farm with her parents, six brothers and unapproachable grandfather. She has always known that she is different from other girls because she has no interest in cooking, sewing and the other pursuits expected of women in her time, but she discovers her real passion when she develops an interest in exploring nature and science. This leads to an increasingly close, life-changing relationship with her grandfather, who is an avid naturalist.

Callie is funny, headstrong and determined. She uses her scientific mind to solve everyday problems in inventive ways, but her proper upbringing leaves her without the ability to fight back when her mother forces her to spend less time with her grandfather and more time learning the domestic skills she will need in her inevitable role as a wife and mother. Still, Callie carves out time for her own pursuits, including working with her grandfather to get recognition for a new species of plant they think they have discovered. Through the course of the book, she learns to use her voice to articulate what she hopes to get from her life.

#### **Walter Tate**

Walter Tate is Callie's grandfather and head of the Tate family. While he spent most of his life running the family's cotton and pecan farm, he has now turned those duties over to his son and spends his time pursuing his interest in nature and science. He is seen as somewhat surly and unapproachable, but Callie discovers a different side of him when they begin spending time together after she takes up his interest in nature. Gradually, he reveals more about his experiences during the Civil War and some surprising skills he picked up along the way.

Despite his age, in some ways Walter is the youngest character in the book. While his son and daughter-in-law are stuck in the past with ideas that are becoming outdated, Walter embraces new technology such as the automobile and telephone as the 20th century approaches, and he passes that enthusiasm down to Callie along with his knowledge of science and nature.

#### **Alfred and Margaret Tate**

Alfred and Margaret Tate are Callie's parents. Alfred runs the family businesses — a cotton and pecan farm and the town's cotton gin — and Margaret assumes the traditional role as head of all domestic issues, including the responsibility of teaching her only daughter the arts of cooking, sewing and becoming a traditional wife and mother.



## Harry, Sam Houston, Lamar, Travis, Sul Ross, and Jim Bowie T

These are Callie's brothers and only siblings. Harry, Sam Houston and Lamar are older than Callie, while Travis, Sul Ross and Jim Bowie are younger.

#### Viola

Viola is the Tate family's cook. She has been with the family for many years, lives in the farm's former slave quarters, and rules the kitchen with an iron hand.

#### **Lula Gates**

Lula Gates is Callie's best friend. She is a pretty blonde who does excellent needlework and is the subject of a crush by three of Callie's brothers.

#### **Miss Brown**

Miss Brown is Callie's piano teacher.

#### **Minerva Goodacre**

Minerva Goodacre is Harry's first girlfriend, whom Callie fears will take her place with her beloved oldest brother.



### **Objects/Places**

#### Fentress, Texas

Fentress is a small town in rural Texas where Callie and her family live.

#### San Marcos River

The San Marcos River runs through the Tate family's farm and is the scene of much of Callie and Walter's scientific exploration.

### The Origin of the Species

The Origin of the Species is an influential book on evolution by Charles Darwin. It becomes a factor in the book when Callie's grandfather gives her his secret copy to read and is symbolic of her own evolution throughout the course of the novel.

#### The Plant

The plant is a piece of vetch (a twining plant) that Callie and her grandfather think might be a previously-undiscovered species.

#### **Cotton Gin**

The cotton gin is a machine for processing raw cotton and is one of the businesses owned by the Tate family.

### Petey

Petey is a caterpillar found by Callie and kept as a pet until he turns into a moth rather than the butterfly she had expected.

### **Telephone Line**

During the course of the novel, Fentress gets its first telephone line, which leads to much excitement in the community.



#### Coca Cola

At the time in which the novel is set, Coca Cola has just been developed and Callie tastes it for the first time at a local fair.

#### The Notebook

Early in the book, Callie begins recording her observations of the natural world. Her brother Harry buys her a special notebook in which she records her observations and also questions about nature and science.

#### **Short Hoe**

A short hoe is an implement for harvesting cotton. Because it is hard on the body, Callie's father has banned its use on their farm.

#### The Bat

During the final days of the Civil War, Callie's grandfather adopted a bat that lived in his tent for a few days, prompting his lifelong passion for the natural world.

### Rig

A rig is a horse-drawn vehicle used for transportation by the Tate family and others of that time.



### **Themes**

#### **Evolution**

As its title suggests, the primary theme of this novel is evolution. Charles Darwin's The Origin of the Species, an important book of the time on evolution, is a significant influence on Calpurnia as she begins her foray into science and nature, and quotations from the book begin each chapter.

The theme is carried out in a number of ways throughout the book. Callie herself evolves significantly during the six months in which the book takes place. She begins as a child and emerges as a maturing young woman who is searching for her place in the world and beginning to succeed at finding it. Through her growing interest in science and nature, Callie learns from her grandfather and her own experimentation about evolution in the natural world, and at the same time she begins to evolve from a girl who is expected to marry young and focus on taking care of a husband, children and house, to one who has bigger, broader plans for her life. As the book progresses, she is able to respectfully make her parents aware that she is not like other girls her age and her plans include going to college and seeing the world, as opposed to the narrow, traditional life they assume she will want.

As the book takes place exactly at the turn of the century, the author carries out the theme of evolution by showing how the world itself is changing. At the Fentress Fair, Callie and her family get their first taste of the exciting new drink Coca Cola, and their first glimpse of an automobile, which Callie refers to as a carriage without a horse. Earlier, the family gets its first electric fan and the tiny town of Fentress gets its first telephone line and takes the unprecedented step of hiring a woman as its operator. These changes are enthusiastically embraced by Callie's grandfather, whose scientific interest in evolution extends to a passion for seeing progress in society and the exciting potential of a new century.

### **Generational Differences**

Second only to evolution, generational differences — and sometimes similarities — is a primary theme of The Evolution of Calpurnia Tate. Early in the book, Callie begins to forge a close relationship with her grandfather despite the difference in their ages and his reputation for being remote and somewhat frightening. Through that relationship, Callie learns many things about him, including his experiences during the Civil War and some surprising skills that he possesses, and the two bond over their shared interest in science and nature.

As much as she and her grandfather share in common, Callie and her mother could not be more different. Margaret remains stuck in the past, expecting her daughter to want the same kind of life she has as a wife, mother, and "domestic artist." Callie, on the



other hand, is already a child of the new century. She hatches the idea of going to college even though she does not know any women, including her own teacher, who have done so, and she becomes claustrophobic at the thought of leading the monotonous life her mother leads.

Although their age difference is greater, Callie has more in common with her grandfather than with her parents. While they are content with society as it currently exists, Callie shares her grandfather's excitement about the possibilities of the future and sees the potential for a different kind of life for herself.

### The Evolving Role of Women

As Callie begins to form her own opinions through her interest in science, the changing role of women in society becomes a central theme of the book. Callie's mother is content with her role as a wife, mother and homemaker, and she is determined to train her only daughter in the skills needed for that kind of life even though Callie shows no interest in or aptitude for cooking and sewing. Even though she feels different from other girls her age, including her friend Lula, already an excellent seamstress, Callie doesn't know whether a different kind of life is possible for her.

She begins to see possibilities when the town gets its first telephone line and hires a young woman as its operator. It is unprecedented to hire a woman and pay her a salary, and all the girls in town are impressed and envious. Although she covets the job at first, Callie soon realizes that this particular position is as much of a form of slavery as being a homemaker would be, since the operator is given a cot next to the switchboard and is expected to be on the job 24 hours a day.

Callie's horizons begin to expand when she learns that there have been several successful female scientists, and she boldly announces that she plans to attend college — another unprecedented event — and see the world rather than settling down with a family. Although her mother and some of her friends remain committed to traditional roles, the reader is left with the impression that Callie will succeed in forging a different life for herself, with the encouragement of her grandfather and possibly some of her brothers.



### **Style**

#### **Point of View**

The book is told from the point of view of a first person narrator, Calpurnia Tate, the novel's main character. This style is appropriate because it gives the reader the advantage of knowing exactly what Callie is thinking and feeling about the events that happen to her throughout the book. It also provides valuable insights into Callie's sense of humor and her growth and development as the book progresses.

The narrator is not omniscient. While the reader knows all of Callie's thoughts, we know only what she is able to observe about the other characters.

The story is told through exposition interspersed with generous amounts of dialogue. This enables the reader to get occasional glimpses into the minds of the book's other characters and a sense of their personalities aside from Callie's descriptions.

### Setting

The book is set in Fentress, Texas, a small rural town on the San Marcos River. Most of the scenes take place on the Tate family's cotton and pecan farm, both in the house and on the surrounding property. Many of the scenes between Callie and her grandfather are set on the banks of the river, where they often venture to observe nature and collect samples for further study. The grandfather also has a library within the main house that contains his vast collection of books, some science exhibits, and other memorabilia. It is his sacred space and no one but Callie ever dares to enter it. He has also developed a laboratory in one of the farm's out-buildings. This is where he and Callie conduct various science experiments, including his effort to develop a liquor made from pecans.

Other scenes take place in various locations throughout the town of Fentress, including the post office, the newspaper office where the town's first telephone line is located, and a photography studio. A pivotal scene takes place at the town's annual fair, where Callie and her family see an automobile for the first time. Although Callie frequently mentions going to school, no scenes actually take place there.

### Language and Meaning

The book's language is straightforward with a friendly, approachable style comfortable for all reading audiences. It is appropriate for the narrator, an 11-year-old girl living at the turn of the 20th century, and it reveals Callie's intelligence and sharp wit.

Although the book is easy to read, the time period in which it is set necessitates the use of some words with which modern readers might not be immediately familiar, such as rig



and milliner. In addition, some of the dialogue seems formal and stilted by today's standards, but is an accurate reflection of the time in which the novel takes place.

The author takes care to make the dialogue appropriate for each speaker. The grandfather and parents speak in more formal tones while Callie's younger siblings use more childish words, some of which they mispronounce.

#### **Structure**

The book consists of 28 chapters of varying lengths. Each chapter has a title that is descriptive of its contents, and each begins with a short quotation from Darwin's The Origin of the Species, a book that is an important part of the novel's plot.

While most chapters serve to move the plot forward, a few are simply introductions to or descriptions of various characters or events. For example, one early chapter is devoted to Viola, the family's cook, and its pets.

The book takes place over the course of a six month period ranging from mid-summer 1899 to New Year's Day 1900. It moves along at a regular pace, with most of the story taking place during the summer months and only a few chapters at the end devoted to the final months of the year. There is little drama and no twists; the book is a gentle, entertaining description of the daily events in the life of a young girl facing the turn of the century and the evolution of her own personality and life.



### **Quotes**

"The old man had fierce tufty eyebrows of his own, rather like a dragon's, and he was altogether too imposing a figure for me to have clambered on as an infant. He had never spoken to me directly that I remembered, and I wasn't entirely convinced he knew my name."

Page 9

"He extracted a book covered in rich green morocco leather handsomely tipped with gold. He polished it with his sleeve, although I could see no dust on it. Ceremoniously, he bowed and offered it to me. I looked at it. The Origin of the Species. Here, in my own house. I received it in both my hands. He smiled. Thus began my relationship with Granddaddy.'

Page 21

"And me, Calpurnia, with a name I'd hated all my life, why . . . why, it was a fine name, it was music, it was poetry. It was . . . it was incredibly annoying that no one in my family had bothered to tell me any of this. So, then, Calpurnia would do."

Page 27

"I was overcome with sadness as I bid goodbye to my bat. Yet earlier I had set fire to a mountain of arms and legs and felt nothing. I had thrown the boy from Elgin into a trench with all the others. And I felt nothing."

Page 46

"When that did happen, they — the dogs — sheepishly excused themselves from the scene and slunk out of reach under the porch. Sometimes they nosed around the laboratory, and although Granddaddy seemed fond of them, he never let them in. Come to think of it, he didn't let any humans in either, except for me."

Page 53

"Mother frequently had to resort to a couple of tablespoons of her Lydia Pinkham's. Sul Ross once asked Mother if I would also get to drink Lydia Pinkham's when I grew up to be a lady, and she replied mysteriously, 'I hope Callie won't need it."

Page 64

"I don't remember much more about the day. I managed to blot it out. But I do remember vowing in the wagon on the way home that I would never do it again. I told Mother and Father this, and there must have been something in my voice because, the next year, despite Miss Brown's formidable efforts, I handed out the programs, along with Lula, who was barred for life from playing in the recital."

Page 72

"I looked around at my family and felt a great wave of tenderness for them. They were all innocents playing out their unsuspecting parts. I wanted to preserve the moment and



tuck it away, folded and sealed forever in my memory. Any second it was about to end." Page 87

"Harry did not get dosed with the stinking oil. Instead, he was drenched with confusion and sadness when his letters to Miss Goodacre were returned unopened. He stumbled about the house for days like one of the walking wounded. It was pitiful. I tended my own stupendous bruise through its lurid healing colors and vowed to resign my commission as a meddler."

Page 93

"But I had so much work to do following that singular day when, floating in the river and looking at the sky. I'd been struck by a thunderbolt of understanding about grasshoppers and — really — the world itself. By the time I'd clambered up the riverbank, I had been transformed into an explorer, and the first thing I'd discovered was another member of my own odd species living at the other end of the hall. There was a living treasure under our roof, and none of my brothers could see him."

Page 102

"He led Ajax away, and when they were both out of sight I inspected the turtle. Why had it allowed itself to be captured by such a large, dumb land creature? Was it old? Was it sick? There was nothing obviously wrong with it. It looked like every other turtle in the river. Maybe it was simply stupid. Maybe it was better that it died so it wouldn't produce more generations of stupid baby turtles. But too late, I had interfered and thus made myself responsible for its safety. Wondering if I was, in my own small way, promoting the survival of the unfittest, I pushed it into the water, where it disappeared in a wink." Page 107-108

"He said, 'I suppose you could touch him and find out. Which raises an interesting point: How far are you willing to go in the name of science? This is something for you to ponder."

Page 109

"With that, I decided that I had analyzed the matter enough and did my best to think no more about it. Still, for months after that, when I stepped into the river, I thought of that Leviathan at one end of the scale waiting to mutilate me and the swarming microscopic creatures at the other end waiting to insinuate themselves. It was too bad, but sometimes a little knowledge could ruin your whole day, or at least take off some of the shine."

Page 111

"When I mentioned this to Granddaddy, he chastised me by saying, 'Remember, Calpurnia, Petey is not your pet. He is a creature in the natural order of things. While it is easy to be more interested in the higher-order animals, and I must confess I myself am guilty of this weakness, it doesn't mean we can neglect our study of the lower



orders. To do so indicates a lack of purpose and a shallowness of scholarship." Page 116

"It's all Viola knows,' he said. 'And when something is all you know, it's easy to stand it. There is one other thing she knows: Her life could be much harder. Viola is 'house' instead of 'field.' She has aunts and uncles in Bastrop chopping cotton with the short hoe and pulling the long sack.""

Page 157

"I don't want to hear about that old man. That old man losing his mind, and now you losing yours.' She muttered and prodded me all the way back to the house, 'Little girl chopping cotton. White girl chopping cotton. Tate girl chopping cotton. Lord help me." Page 190

"I sat in my room and looked out at the trees and paid the matter some mind, turning it this way and that. I hadn't intended to be this way. Could I be blamed for my nature?" Page 192

"Granddaddy murmured to me, 'Do you realize what this means, Calpurnia? The days of whale oil and coal dust are over. The old century is dying, even as we watch. Remember this day."

Page 208

"When we later saw a copy of the photograph, most of the faces were solemn and severe. I looked pensive. The only smiling face was that of Granddaddy, grinning away like the Cheshire Cat."

Page 209

"But my mother's life was a never-ending round of maintenance. Not one single thing did she ever achieve but that it had to be done all over again, one day or one week or one season later. Oh, the monotony."

Page 213

"I had never classified myself with other girls. I was not of their species; I was different. I had never thought my future would be like theirs. But now I knew this was untrue, and that I was exactly like other girls. I was expected to hand over my life to a house, a husband, children. It was intended that I give up my nature studies, my Notebook, my beloved river. There was a wicked point to all the sewing and cooking that they were trying to impress upon me, the tedious lessons I had been spurning and ducking. I went hot and cold all over. My life did not lie with the Plant after all. My life was forfeit. Why hadn't I seen it? I was trapped. A coyote with her paw in the trap." Pages 219-220

"It means that we should celebrate today's failure because it is a clear sign that our voyage of discovery is not yet over. The day the experiment succeeds is the day the experiment ends. And I inevitably find that the sadness of ending outweighs the celebration of success."

Page 234



"And then it came to me, like the first shocking glimpse of the sun's disk rising over the horizon, what it was I did want to do. It was so obvious that I wondered why I hadn't seen it before. I only had to say it aloud. Did I have the courage to do that? To reveal it in the open air? Maybe I should try it out in front of Lula to see how it sounded. "I think,' I said, then stopped. 'I think maybe I want to go to the university." Page 241

"Although I knew the fireflies would return in a year, it felt like the extinction of a species. How sad to be the last of your kind, flashing your signal in the dark, alone, to nothingness. But I was not alone, was I? I had learned that there were others of my kind out there."

Page 258

"Diphtheria, polio, typhus lurked everywhere, and we had no weapons against them, although living in the country instead of Austin gave us some protection."

Page 262

"I wondered why he wasn't relieved of turkey duty and given something else to do instead. I guess it's because once you were assigned a chore you did it. We lived daily with the birth and death of every kind of animal, and we were expected to get used to it, or at least the boys were. Tender sensibilities didn't enter into it; life was hard, but life for animals on a working farm was harder. And a whole lot shorter."

Page 268

"I surveyed the entries suspiciously. Yep, there were three. Even though I knew full well that I wasn't any good at tatting, having this fact confirmed by strangers was not pleasant. So much for my future in lace making, I thought sourly. Of course, I had absolutely no interest in going down that particular path, but now that others had said I couldn't, I felt oddly unhappy. And if there was to be no Science for me, and no Domestic Arts either, what was left? Where was my place in the world?" Pages 279-280

"Finally, just when I thought I would pass out, I shoved my way through the last ring of spectators and there it was, in all its dazzling glory, something never seen before: a carriage without a horse."

Page 284

"Why waste time 'playing,' as I'd been ordered, when I could spend some valuable time with Granddaddy? He didn't find me dangerous when I wondered about something. In fact, he encouraged it."

Page 294

"I stood there trying to catch my breath. And suddenly I felt exhausted and overwhelmed. I felt . . . abandoned. What had happened to our time together? How had I let it get away? Why hadn't I fought for it? And where was he, on this, the day of all days? I had always been able to find him when I needed him. And now he'd gone off collecting somewhere other than our regular haunts, somewhere I didn't know about



and where I couldn't find him. Somewhere secret. Somewhere private. Collecting without me."

Pages 311-312

"I realized that I had always counted on her for other things besides food. Viola had never lied to me. She would not lie to me now. I went over to her and put my arms around her waist and hugged her. I was freshly amazed at the lightness of her person, her tiny bird bones. It was interesting that such a slight frame could contain so large a person."

Page 316

"Heavens, Calpurnia, I thought you might have opened it because we're partners in this endeavor, are we not?"

Page 317

"He pressed the telegram between his hands and turned and walked out. Our collective mouths flopped open, we were that shocked. The unfairness of it, depriving us of this once-in-a-lifetime moment. Who could bear it? How could he do this to us? How could he do this to me?

"'Calpurnia,' he called from the hallway, 'are you not coming?"'
Page 319

"I stood up and went to him. I tried to hand him the telegram, but he said, 'You keep it. Press it in your Notebook.""
Page 323

"Father spoke. 'To our good health, to our continuing prosperity and, on this grand occasion, to Grandfather and his scientific endeavors. I must admit that there were times when I wondered about the way you spend your time, but you have proven it to be all worth the while. We are a proud family tonight!"

Page 325

"'Pardon me,' said Granddaddy, catching his mistake and bowing. 'I meant, of course, my only granddaughter.' He calmly drank and then sat down. My brothers were in a snit, but I didn't care. My heart pumped gladness through my veins. I was all to him, wasn't I? And he was all to me."

Page 326

"Part of me wanted our lives to go on as they always had, with all of us living together in our teeming old house. The other part of me yearned for desperate and dramatic change, to leave Fentress far behind. What good was it to have a hairy vetch 'mootant' named after me, if my whole life was to be spent in Caldwell County, bounded by Lockhart and San Marcos, pecan trees and cotton fields? Granddaddy had told me I could make whatever I wished of my life. Some days I believed him, and other days I did not."

Page 328



"And there was my grandfather, adding his low baritone in sad, sweet harmony to the music, his long beard glinting in the firelight. We had been so close to missing each other, he and I. He had turned out to be the greatest gift of all."

Page 333

"And there it was: a perfect blanket of white covering the lawn, the trees, the road, as far as I could see, all absolutely unbroken, untouched, and still. Snow. It had to be snow." Page 335

"I turned and walked back toward the house. It was the first morning of the first day of the new century. Snow blanketed the ground. Anything was possible." Page 338



### **Topics for Discussion**

How do you interpret the fact that Callie's grandfather said he had more feeling for the bat than for the soldiers who had died around him? Why did he feel that way? Does this make him a bad person? How does it relate to his general personality and his interest in the natural world?

Discuss the meaning of the quotes at the beginning of each chapter. How are they important to the book as a whole? Choose three chapters and describe how the quote relates to the content of the accompanying chapter.

Discuss the differences between Callie's relationships with her mother and with her grandfather. In addition to their shared interest in science and nature, what do Callie and her grandfather have in common? How does his treatment of her differ from that of her parents, particularly her mother?

Why is Callie so upset when she realizes that she has forgotten to label the plant specimen properly? How and why does she think this honest mistake will affect her relationship with her grandfather?

What is the significance of Petey the caterpillar to Callie's scientific study and her personal evolution? Discuss at least two things she learns from the experience.

As the title suggests, the book's overarching theme is evolution. Name three ways in which the theme is played out in the book and discuss in detail.

Callie's grandfather is significantly older than any of the book's other characters, but in many ways he seems younger than some of them. How does he show his enthusiasm for life? How does he continue to lead and influence the family even though he has stepped away from the business and spends most of his time alone or with Callie? In what ways does he apply scientific principles to everyday life and problem solving?

Discuss the symbolism of the snow that appears in the book's final chapter.

Why is Callie so upset about Harry's relationship with Minerva Goodacre? What is the effect of her meddling in it? How and why do her feelings toward Fern differ when Harry begins dating her?