

Saved

BY BLAKE CHRISMAN

6th GRADE STATE WINNER

Excel Academy Charter School | Annie Mun, Teacher
RIVERSIDE COUNTY

Illustrated by: Florin High School



Some people believe I am a heroine, but maybe I am just an ordinary mother. California farmers depend on members of my family all the time to protect their crops. I am a teeny tiny wasp, *Tamarixia radiata*. This is a glimpse into my life as a humble parasitic wasp.



When I buzzed around the citrus tree on the school playground, I swear the kids swatted me away, even though I'm minuscule and they could never actually see me.



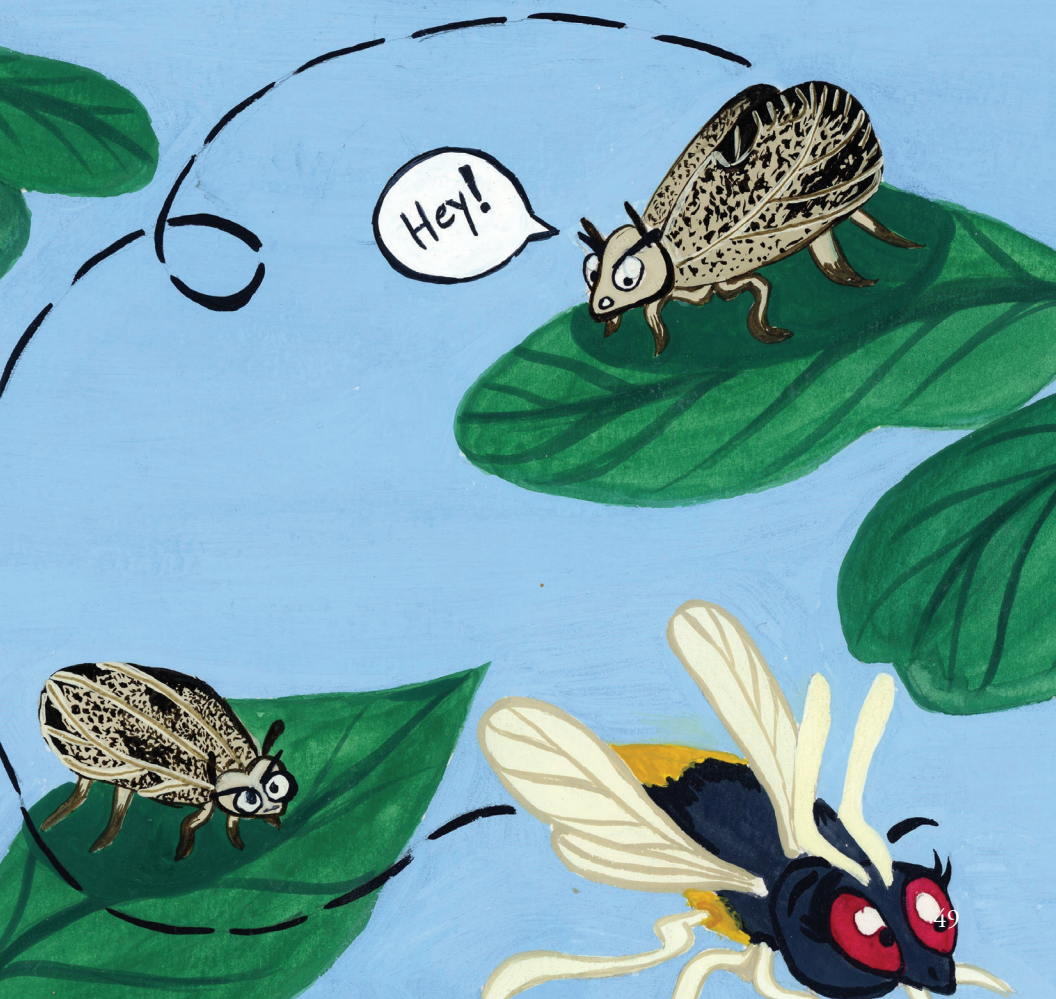
Was this all the thanks I got for saving the oranges that they eat for lunch? Also, why can't they play somewhere else? There is a perfectly empty soccer field over there. Why do they have to do it in my nesting zone? I'm stingless, so I can't even protect myself!



I zipped away as I dodged the swatting. I hummed around a house near the school as the owner of the house was talking to a pest control official. I knew the problem. A huge orange tree was starting to wither, and I noticed it was sick with the most devastating citrus killer in the world, Huanglongbing. Huanglongbing was a sign of my favorite nesting place, inside an Asian citrus psyllid.



These plant-feeding insects spread the pathogenic bacterium that causes Huanglongbing disease. I darted over and skimmed around the leaves. Finally, I spotted the psyllids and got right to work. After laying a couple of eggs, one under each psyllid nymph, I decided to visit some other orange trees in the garden, knowing that my actions had prevented the psyllids from spreading Huanglongbing to the other trees in the garden and neighboring yards. The psyllids' bodies will become nutrients for my larvae. Once my newborns emerge, the psyllids won't be able to infect another citrus again.



While stopping to rest, I spied a mantis chowing down on a mosquito a few feet away. I also stared at some bees happily pollinating. A swallowtail fluttered gracefully through the garden, examining the orange tree I just saved. My mind was starting to relax when I realized that I was being pursued by an army of ants.



I jerked out of the way as the ants attacked and escaped just in the nick of time. I zig-zagged around the mantis and zoomed over the garden fence.



I hovered near another
orange tree and dove out
of the way of an interfering
crow that swooped near me.
The autumn leaves rustled
by as I stationed myself
on an evergreen near the
tan house.

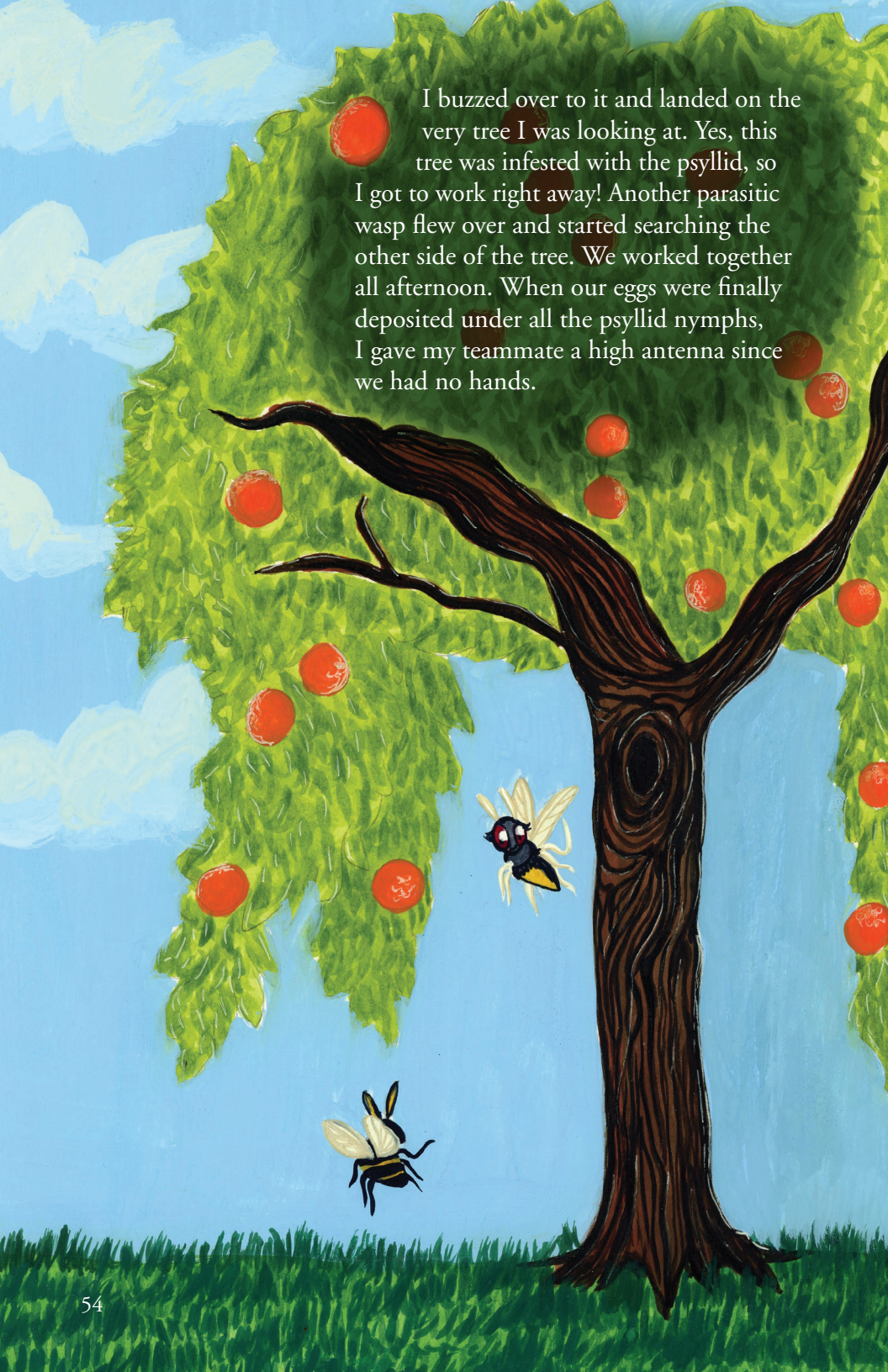
I watched hummingbirds, butterflies, and
carpenter bees travel from flower to flower
as they produced a deep hum.



As dusk started approaching, I flitted over to a crack under the rusty eaves of the ancient house. There, I held onto the rough wall as I shut my eyes and tried to drift off. One citrus psyllid jumped over the fence. Two psyllids jumped over the fence. Three psyllids jumped over the fence. Four psyllids jumped over the fence. Parasitic wasps like me just don't sleep.

Overnight, I thought of a plan to save more of California's prized citrus fruits. As soon as dawn broke, I flew as high as my little wings could take me. I finally spotted a truck with the words "Oranges, Grapefruits, Lemons, Pomelos" plastered on the tailgate. That was it! I shot over, assuming it was heading to a citrus orchard, and landed inside the bed of the pickup where I shuffled around until I saw rows of trees in the distance. The small oranges twinkled like diamonds in the sun's rays. As the truck rumbled close enough for me to fly over, I alighted, so I flew into the air and made out the slightest bit of yellow on a tree far away.





I buzzed over to it and landed on the very tree I was looking at. Yes, this tree was infested with the psyllid, so I got to work right away! Another parasitic wasp flew over and started searching the other side of the tree. We worked together all afternoon. When our eggs were finally deposited under all the psyllid nymphs, I gave my teammate a high antenna since we had no hands.



I waved goodbye as I found a hole in a tree adjacent to the one that we saved. As I climbed in, I thought about how I could save the world tomorrow.





ABOUT THE AUTHOR

Blake Chrisman

11 years old

Blake has been interested in insects and arachnids since he was two years old. Three things inspired him to write *Saved*: his dream of being an entomologist, a pet praying mantis, and his desire to show the beneficial side of certain creatures.

The writing process evolved from writing about a boy who thought it was unfair that bugs were often seen as a nuisance, to writing from the actual insect's point of view. He decided to write specifically about the *Tamarixia radiata* wasp when a news article about the insect caught his eye, and he learned that they helped protect citrus trees.

Blake is most looking forward to seeing his story published so that more people can read and acknowledge that certain insects can be very beneficial to agriculture.



ABOUT THE ILLUSTRATORS

Chloe Yang & Abrar Abdulhadi

Florin High School | Alexandra Pease, Art Teacher

Florin High School seniors Chloe and Abrar had no idea the minuscule parasitic wasp *Tamarixia radiata* existed until they illustrated the story *Saved*. Their illustration process started with research. They wanted accurate impressions and colors for all the story's insects, birds, and orange trees. The next step was to divide the story into ten sections and master drawing the main character, the tiny wasp. One student did the initial sketching and final drawings while the other did the coloring utilizing watercolors and gouache. Their goal was to make the drawings as welcoming to a child's eyes as possible. They wanted the illustrations to look fun and have fun while creating them. Both students loved the story, its sense of joy, accomplishment, and the fact that the tiny wasp not only saves trees but ponders saving the world!