

The Lizara Lady

Join the Lizard Lady as she cuts her way through thick Caribbean forests searching for critically endangered St. Croix ground lizards. Hunted to extinction on the island of St. Croix by invasive species brought by colonizing farmers, these lizards are now only found on surrounding islands in the US Virgin Islands. Readers learn that a day in a life of a woman scientist can be anything but boring. Co-author Nicole F. Angeli *is* the Lizard Lady—can she help save these animals?



Arbordale Publishing offers so much more than a picture book. We open the door for children to explore the facts behind a story they love.

Thanks to Dr. Robert Powell, Professor of Biology at Avila University, for verifying the accuracy of the information in this book.

The For Creative Minds includes

- · St. Croix and Surrounding Islands
- · St. Croix Ground Lizards
- Adaptations
- · Dr. Nicole F. Angeli, Herpetologist
- · Invasive Species

Visit www.ArbordalePublishing.com for free resources and support: teaching activities; quizzes; reading levels; and alignment to Common Core, NGSS, and state standards.

Arbordale's interactive ebooks read aloud in both English and Spanish with word-highlighting and adjustable audio speed. Available for purchase online.

Award-winning nature author Jennifer Keats Curtis is frequently found among students and teachers, talking about literacy and conservation. In addition to The Lizard Lady, Jennifer has written After A While Crocodile (NSTA Outstanding Science Trade Book), The Lucky Litter, the Animal Helpers series, Baby Owl's Rescue, Kali's Story (Children's Choice Book Award), Salamander Season, Primate School, and Turtles In My Sandbox for Arbordale. She lives in Maryland with her family and a wide variety of pets. Visit her website at www.jenniferkeatscurtis.com.

Dr. Nicole F. Angeli is the Lizard Lady. While she has plenty of scientific papers to her name, this is her first children's picture book. Her work with St. Croix ground lizards took place while she was a student at Texas A&M University and a Smithsonian National Museum of Natural History Predoctoral Fellow. Yes, female scientists really do machete their way through forests! Visit her website at nicoleangeli1.wixsite.com/appliedconservation.

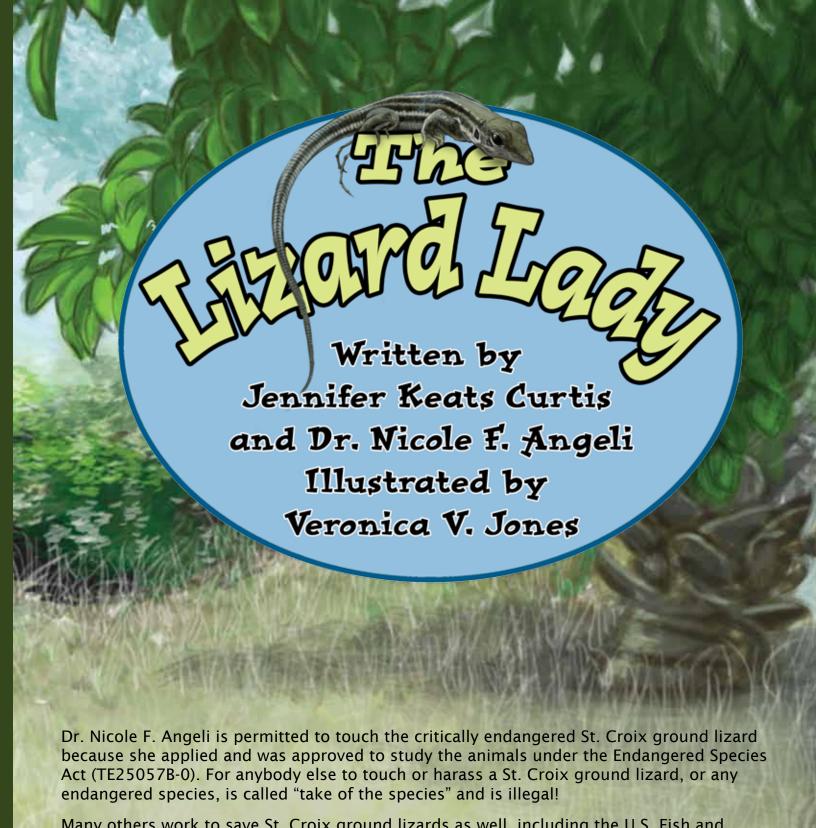
Veronica V. Jones is a freelance and children's book illustrator from the Northern Virginia area. After graduating from the Catholic University of America with a degree in engineering, she decided to follow her first love, art. Veronica began drawing for children in 2010. In addition to *The Lizard Lady*, Veronica has illustrated *Moonlight Crab Count* for Arbordale. Visit her website at www.vvjones.com.







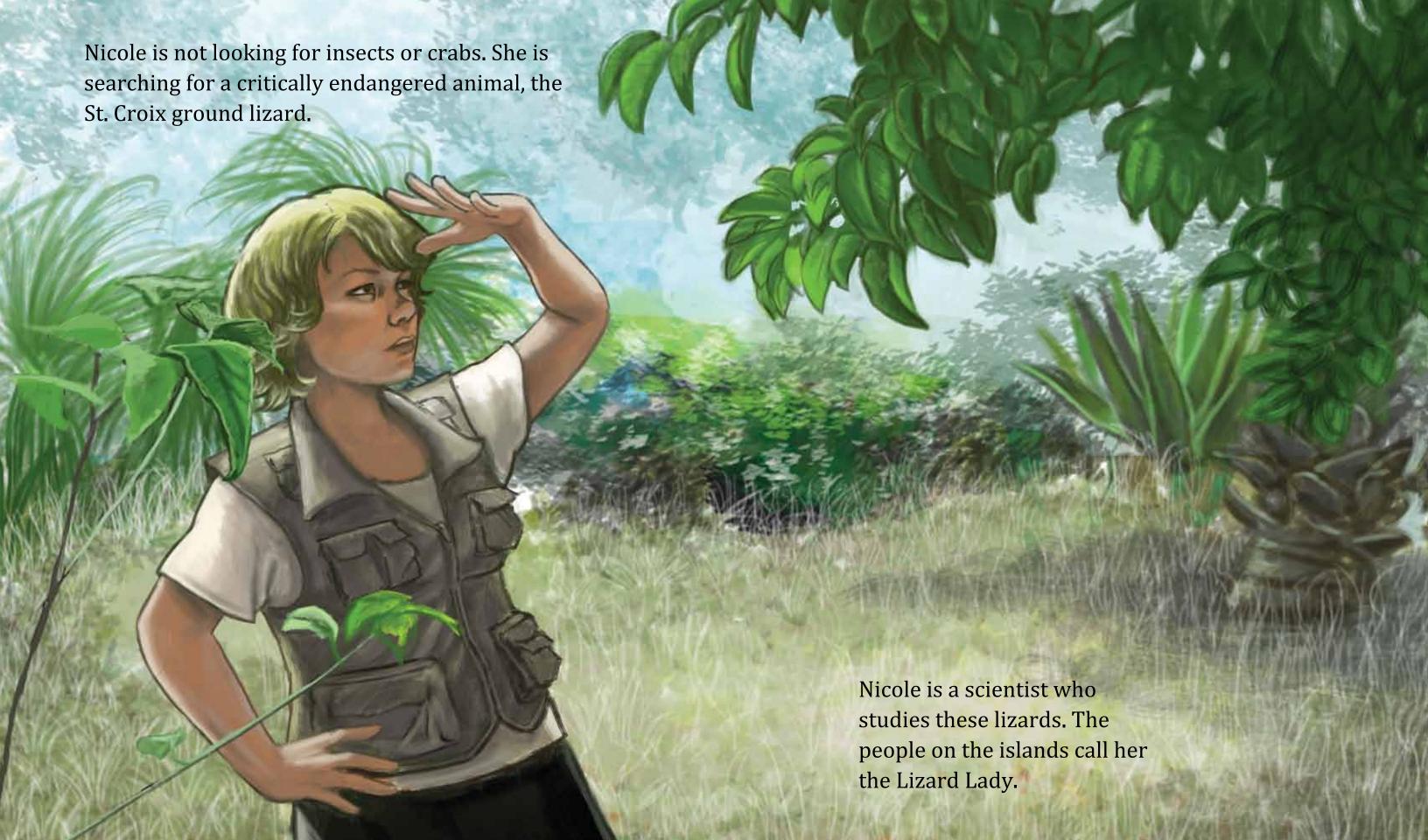
Jennifer Keats Curtis, Dr. Nicole F. Angeli, and Veronica V. Jones

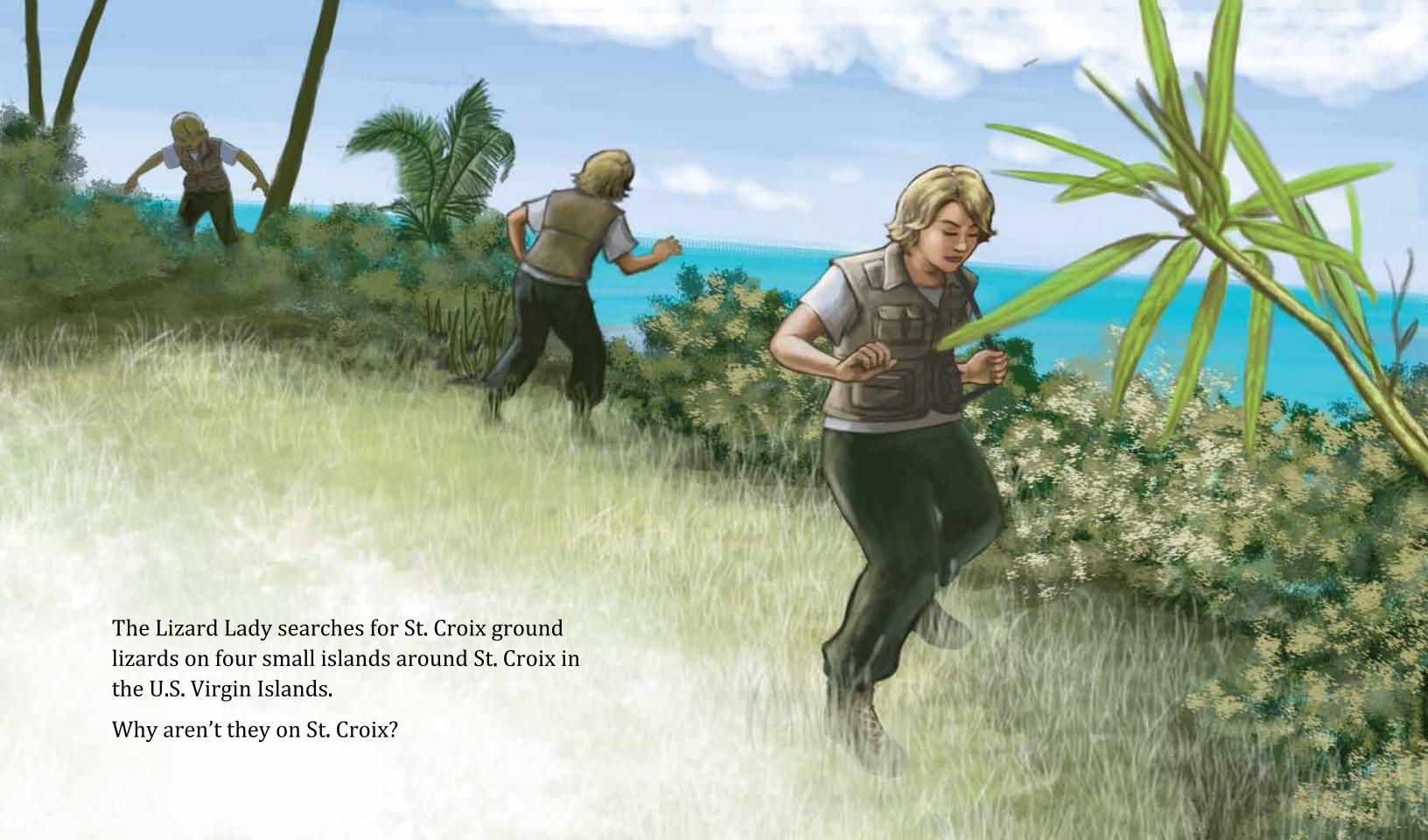


Many others work to save St. Croix ground lizards as well, including the U.S. Fish and Wildlife Service's Caribbean Ecological Services and Refuges, Texas A&M University, the Virgin Islands Department of Planning and Natural Resources, and the U.S. National Park Service. Conservation biology is largely about teamwork!









For Creative Minds

This section may be photocopied or printed from our website by the owner of this book for educational, non-commercial use. Cross-curricular teaching activities for use at home or in the classroom, interactive guizzes, and more are available online.

Visit www.ArbordalePublishing.com to explore additional resources.

St. Croix and Surrounding Islands



The Caribbean is a sea between North and South America. St. Croix is one of more than 7,000 islands in the Caribbean Sea.

There are 28 island countries in the Caribbean. But St. Croix is not an independent country. It is part of the US Virgin Islands, a territory of the United States. Puerto Rico is also a US territory.



Map Questions

1. The Dominican Republic is on the same island as what other country?

- 2. What ocean is to the east of the Caribbean Sea?
- 3. What country is just south of Florida?
- 4. What island or cay is south of St. Croix?
- 5. Where is Buck Island in relation to St. Croix?

BUCK ISLAND ST. CROIX RUTH ISLAND

St. Croix Ground Lizards

The St. Croix ground lizard is a St. Croix native. In fact, these lizards are **endemic** to St. Croix. That means that they are not naturally found anywhere in the world except for St. Croix.

St. Croix ground lizards currently live on four islands: Protestant Cay, Green Cay, Ruth Island and Buck Island. Long ago, Protestant Cay and Green Cay were part of the island of St. Croix. These two cays are part of the lizards' natural habitat. The lizards live on Ruth Island and Buck Island only because they have been taken there by people. This is called a conservation translocation.

These lizards are critically endangered. If we do not help them, they could become extinct.

Adaptations

Adaptations are changes that allow some animals to survive better than other animals in their environment. Physical adaptations affect the animals' bodies. Animal parents pass these adaptations on to their young. The young animals grow up and pass their adaptations on to kids of their own. Behavioral adaptations affect the way the animals act.

Like many other animals, St. Croix ground lizards use physical and behavioral adaptations to search for food and avoid predators. Sort the following traits into physical or behavioral.

1.

St. Croix ground lizards have light brown, dark brown, and white stripes down their back. This pattern helps the lizards hide in the leaves.

St. Croix ground lizards race into underground burrows to hide from predators.

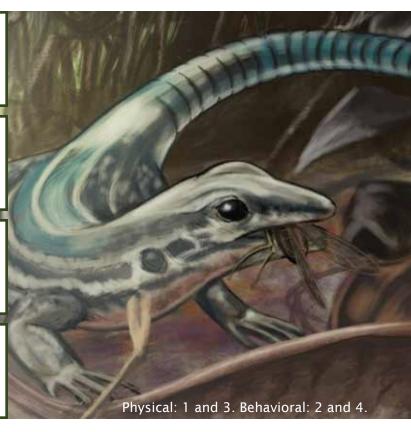
2

3.

St. Croix ground lizards have a forked tongue to smell things around them.

St. Croix ground lizards sniff the ground to find food or other lizards.



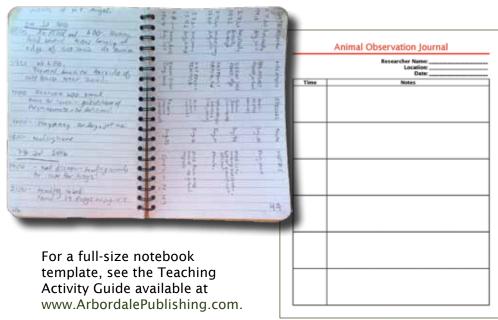


Dr. Nicole F. Angeli, Herpetologist

As a girl, I wanted to be an explorer! I loved discovering everything in the great outdoors. I never wanted to be inside. I'd forage for insects, animals, and berries and look for sticks to whittle. I always knew that I'd become a scientist but what kind? In school, I learned that I didn't want to be in a lab. I wanted to be outside. Being a herpetologist—a scientist who studies reptiles and amphibians—allows me to spend most of my time outdoors. My passion is conserving animals. I love learning why some species survive while others go extinct and figuring out ways to save threatened animals, like the St. Croix ground lizard.

Even on weekends, I am a herpetologist. Anyone can be a herpetologist. All you need is an interest in reptiles and amphibians and a notebook! Open your notebook, and create columns for the date, weather, place, species, photo ID, and notes on the right-hand page. Keep the left hand page for your notes. On each page, write the date and location across the top. Then write about the amphibians and reptiles you see.

-Dr. Nicole F. Angeli





If you like working in groups, check out a club near you so that you can detect, identify, and manage yourself safely around scaly and slimy friends. The Society for the Study of Amphibians and Reptiles (www.ssarherps.org) keeps an updated list of local herpetological societies. Contact them to learn more.

Invasive Species

In the late 1800s, farmers in St. Croix brought Indian mongooses to get rid of rats on the island. These small, furry mammals might be cute, but they are among the top ten most harmful **invasive species**. Invasive species are not native animals. They cause problems for native animals or the environment.

Mongooses are predators, and they are destructive. They have eaten so many St. Croix ground lizards that we are in danger of losing this species forever. Mongooses also chomp down on the eggs of lots of other animals, like sea turtles and sea birds.

Today, mongooses live on about 99% of the land in the Caribbean. They are mostly found on the larger islands. We can conserve native animals by helping them move to small islands without any mongooses.

Invasive Species often

- hunt native species
- reproduce quickly
- spread out to cover a wide territory
- can live in many different types of habitats
- are often introduced to an area by humans





Dr. Angeli and her team have come up with ways to save the St. Croix ground lizard from extinction. They need to be creative to find conservation methods that don't cost a lot of money. They find or create areas where no mongooses live or where mongooses are separated from the lizards by a fence. In the future, Dr. Angeli hopes to return the St. Croix ground lizards to St. Croix.

To extraordinary teachers, Rebecca Dobson, Krystal Schlissler and Erin Johnson, who so willingly share their knowledge in and out of the classroom.—JKC

To my nephews, Joseph and Michael. That they may have the sturdy, educational, and marvelous upbringing that their grandparents gave to my sister and me.—NFA

For my wonderful supportive family.—VVJ

Thanks to Dr. Robert Powell, Professor of Biology at Avila University, for verifying the accuracy of the information in this book.

Library of Congress Cataloging-in-Publication Data

Names: Curtis, Jennifer Keats, author. | Angeli, Nicole F., author. | Jones, Veronica, illustrator.

Title: The lizard lady / by Jennifer Keats Curtis and Dr. Nicole F. Angeli; illustrated by Veronica V. Jones.

Description: Mount Pleasant, [South Carolina]: Arbordale, [2018] | Audience:

Ages 4-8. | Audience: K to grade 3. | Includes bibliographical references.

Identifiers: LCCN 2017040946 (print) | LCCN 2017049453 (ebook) | ISBN 9781607183150 (English Downloadable eBook) | ISBN 9781607183174 (English

Interactive Dual-Language eBook) | ISBN 9781607183167 (Spanish

Downloadable eBook) | ISBN 9781607183181 (Spanish Interactive

Dual-Language eBook) | ISBN 9781607180661 (english hardcover) | ISBN

9781607180913 (english pbk.) | ISBN 9781607183112 (spanish pbk.)

Subjects: LCSH: Angeli, Nicole F.--Juvenile literature.

Herpetologists--Juvenile literature. | Women scientists--United States

Virgin Islands--Juvenile literature. | Ameiva--Conservation--Juvenile

literature. | Rare reptiles--Conservation--United States Virgin

Islands--Saint Croix--Juvenile literature. | Saint Croix (United States

Virgin Islands)--Juvenile literature.

Classification: LCC QL31.A5845 (ebook) | LCC QL31.A5845 C87 2018 (print) |

DDC 333.95/72097297/22--dc23

LC record available at https://lccn.loc.gov/2017040946

Translated into Spanish: La dama de las Siguanas

Lexile® Level: 830L

key phrases: Environmental education, helping animals, threatened and endangered species, conservation, scientist, women in STEM,

Bibliography:

Angeli, N. F. Ameiva polops (Saint Croix Ameiva). 2013. Conservation. Caribbean Herpetology 45 (1).

Angeli, N. F., K. Auer, N. Schwartz, Z. Westfall, C. Pollock, I. Lundgren, and Z. Hillis-Starr. 2013. Ameiva polops (St. Croix Ground Lizard) Behavior. Herpetological Review 44 (3): 504.

Fitzgerald, L., Treglia, M., Angeli, N., Hibbitts, T., Leavitt, D., Subalusky, A., Lundgren, L., and Hillis-Starr, Z. 2015. Determinants of successful establishment and post-translocation dispersal of a new population of the critically endangered St. Croix ground lizard (Ameiva polops). Restoration Ecology. 23(5): 776-786.

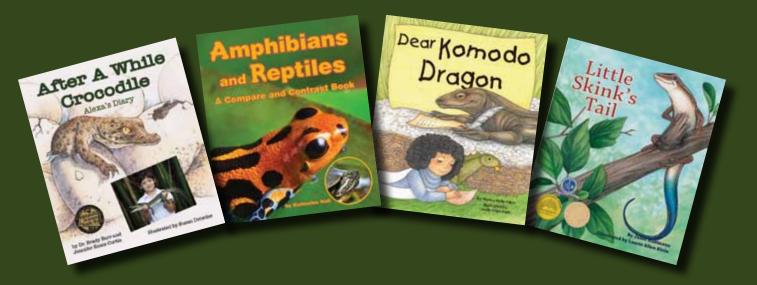
Text Copyright 2018 © by Jennifer Keats Curtis and Dr. Nicole F. Angeli Illustration Copyright 2018 © by Veronica V. Jones

The "For Creative Minds" educational section may be copied by the owner for personal use or by educators using copies in classroom settings.

Arbordale Publishing Mt. Pleasant, SC 29464 www.ArbordalePublishing.com



If you enjoy this book, look for other Arbordale books that may be of interest:



"The lizards of St Croix are in danger of extinction, but scientists are trying to save them. This wonderful little book clearly explains both the problem and the solution."

 Rick Shine, President of the Society for the Study of Amphibians and Reptiles

Includes 4 pages of
learning activities.
Look for more free activities
online at
ArbordalePublishing.com