ZIKA ZINE

THE STORY OF THREE Aedes mosquitoes AND THE ZIKA WITHIN THEM

Maurice

Hester

Zika

Wanda

L.S. GARDINER
UCAR CENTER FOR SCIENCE EDUCATION
<table>
<thead>
<tr>
<th>Part</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Who Do You Think You Are?</td>
<td>Hester’s sure that the others aren’t mosquitoes.</td>
</tr>
<tr>
<td>2</td>
<td>This Totally Bites</td>
<td>Wanda learns how to find someone to bite.</td>
</tr>
<tr>
<td>3</td>
<td>What’s for Dinner?</td>
<td>Maurice and Wanda dine in the meadow.</td>
</tr>
<tr>
<td>4</td>
<td>Maurice the Astronaut</td>
<td>Maurice thinks that NASA is interested in him.</td>
</tr>
<tr>
<td>5</td>
<td>What’s She Doing?</td>
<td>Hester &amp; Maurice observe a citizen scientist.</td>
</tr>
<tr>
<td>6</td>
<td>Don’t They Like Us?</td>
<td>Wanda nearly gets slapped.</td>
</tr>
<tr>
<td>7</td>
<td>Wanda Meets Zika</td>
<td>Wanda learns that she’s no longer alone.</td>
</tr>
<tr>
<td>8</td>
<td>What’s Your Pathogen?</td>
<td>An Anopheles mosquito comes to visit.</td>
</tr>
<tr>
<td>9</td>
<td>It Wasn’t Us!</td>
<td>Hester has a message for the humans.</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hi. I'm Hester and I'm a mosquito.

I'm Wanda and I'm a mosquito.

I'm also a mosquito.

You're not mosquitoes! I'm a mosquito!

Look, Hester! I found your baby book!

I am, too, a mosquito.

So am I!

I used to look so different.

Hester's Baby Book

She used to be so cute!

You looked just like me!
CONGRATULATIONS ON BECOMING AN ADULT, WANDA!

THANKS, HESTER. I LIKE BEING AN ADULT, BUT I'M NOT SURE HOW TO CHOOSE SOMEONE TO BITE.

I CAN GIVE YOU SOME POINTERS!

SEE THE LARGE PERSON IN DARK CLOTHING?

OH, YES!

I BET HIS BLOOD IS TASTY!

I'M DRAWN TO HIM.

THAT KID SMELLS NICE. SHE WOULD BE GREAT TO BITE.

YES, BUT LOOK AT THAT PERSON SLEEPING!

SPLAT!

THAT'S MOSQUITO NETTING. YOU CAN'T GET THROUGH. DIDN'T YOU READ THAT IN THE HANDBOOK?

WHAT'S THAT HORRIBLE SMELL?

OH NO! THAT GUY HAS DEET. LET'S GET OUT OF HERE!

insect repellent with DEET
YOU ARE INVITED!

WHAT: dinner!
WHO: Maurice & Wanda
WHERE: the meadow
WHEN: today!

LOOK AT ALL THE FLOWERS FULL OF NECTAR!
THANKS FOR INVITING ME TO DINNER!

WHAT'S ALL THIS STUFF ON MY LEG?
IT'S POLLEN, BRING IT TO ANOTHER FLOWER.

YUMMMMY TASTY!

THIS NECTAR IS YUMMY!
DELICIOUS!

I'M NOT HUNGRY ANYMORE, BUT I'M CRAVING SOMETHING ELSE...

OH, RIGHT.
YOU ALSO NEED BLOOD FOR YOUR EGGS. NECTAR WON'T BE ENOUGH.
What are you wearing, Maurice?

Haven’t you heard, Hester? NASA is interested in mosquitoes like us!

I want to be the first mosquito in the astronaut program.

Actually, NASA is interested in the warm, moist places where mosquitoes like to live.

There’s no mosquito space program?

I’m afraid not, Maurice. Sorry to disappoint you.

So, I’ll never be an astronaut?

No!

Oh well. At least they care about the places where we live!
Citizen scientist: a person who volunteers with science research – for example by making and recording observations.

The larvae that were sucked up find themselves on a white plate.

WHERE ARE WE?

WE'RE ON A PLATE!

IS SOMEONE GOING TO EAT US?

AND THEN...
It's time to identify the mosquitoes and figure out whether they're a species that carries diseases like Zika.

And then it's time to take images before uploading the data to Globe Observer.

I think she's counting us.

DRAT! She took the tire away!

What happens next? Find out in Part 6 of the Zika zine.
Phew! That was close. Humans don’t seem to like us.

I've heard them swear when you ladies bite.

But they must like us...

They create great places for us to live, like all these containers full of water.

We didn't always have containers. Our ancestors used to live in holes in trees.

How rustic.

If they give us places to live, then why do they try to slap me?
HI WANDA.
I’M ZIKA VIRUS.

REMEMBER THAT PERSON YOU BIT LAST NIGHT? I WAS IN THAT GUY’S BLOOD AND NOW I’M IN YOU.

AH! GROSS!

GET OUT!
I’M BIGGER THAN YOU AND I SAY, GET OUT OF ME NOW!

NO!
I’M NOT GETTING OUT. I MAY BE LITTLE BUT I’M POWERFUL. PEOPLE LIVE IN FEAR OF ME BECAUSE I MAKE THEM SICK.

AND NOW I CAN SPREAD TO OTHER PEOPLE YOU BITE.

I FEEL SO USED.

IT’S NOT JUST WANDA.

MANY Aedes mosquitoes have Zika inside them.

WHEN IT’S STORMY, THERE ARE MORE PLACES FOR MOSQUITO EGGS. WITH MORE MOSQUITOES, ZIKA CAN SPREAD FASTER AND MAKE MORE PEOPLE SICK.
I WISH YOU WOULD GO AWAY, ZIKA.

NOPE! I WON'T.

HI! I'M AN ANOPHELES MOSQUITO.

HI! I'M PLASMODIUM.

YOU HAVE A VIRUS, TOO?

NO, I HAVE A PARASITE, NOT A VIRUS.

A PARASITE IS A SINGLE CELLED LIVING THING. ZIKA IS A VIRUS, SO IT CAN'T EXIST ON ITS OWN.

DOES YOUR PLASMODIUM MAKE PEOPLE SICK?

YES, IT GIVES THEM MALARIA. I FEEL BAD ABOUT THAT, BUT I NEED BLOOD FOR MY EGGS.

MALARIA SYMPTOMS
FEVER
CHILLS
SWEATS
HEADACHE
NAUSEA
VOMITING
ACHES AND PAINS

ZIKA SYMPTOMS
FEVER
RASH
HEADACHE
JOINT PAIN
RED EYES
ACHES AND PAINS

THE ZIKA IN ME MAKES PEOPLE SICK WHEN I BITE THEM, TOO.

THIS IS HORRIBLE. IS THERE ANY WAY TO STOP THEM?
**IT WASN'T US!**  Zika Zine Part 9

WANDA, LOOK! THEY ARE TAKING THE CONTAINERS AWAY!

OH NO! WE NEED THOSE FOR OUR EGGS AND LARVAE!

BUT WE ARE IMPORTANT. EVEN NASA THINKS WE ARE!

IS THAT WHY YOU'RE WEARING YOUR SPACESUIT, MAURICE?

IT'S COMFY!

Oh no! We n/e_Ed those for our e/g_Gs and larvae!

But we are important. Even NASA thinks we are!

Is that why you're wearing your spacesuit, Maurice?

Why are they doing this, Wanda?

I think I know why.

Don't tell them!

Who said that?

Why are they doing this, Wanda?

I think I know why.

Don't tell them!

Who said that?

The Zika inside us is making people sick.

That's not our fault!

Hi! It's me, Zika.

I'll write them a letter explaining everything.

I don't think that's going to work, Hester.

I think it's very polite.

I don't think that's going to work, Hester.

It couldn't hurt!

I think it's very polite.

Dear humans, My friends and I didn't mean to make you sick. It was the Zika, not us. We look forward to biting you in the future.

Sincerely, Hester, Aedes mosquito
Credits

CREATED BY: L.S. GARDINER (UCAR CENTER FOR SCIENCE EDUCATION)

SCIENCE REVIEW BY: RUSSANNE D. LOW (IGES)

TRANSLATION AND REVIEW COORDINATION:
EMILY SNODE-BRENNEMAN (UCAR CENTER FOR SCIENCE EDUCATION)

WEBSITE PROGRAMMER:
SHARON CLARK (UCAR CENTER FOR SCIENCE EDUCATION)

ADMINISTRATION:
NATALIE PONSFORD (UCAR CENTER FOR SCIENCE EDUCATION)

LAYOUT SUPPORT: MOIRA KENNEDY

GLOBE IMPLEMENTATION OFFICE MOSQUITO TEAM:
KRISTIN WEGNER, SARA HERRIN, JAMILLA ROCKETTE

THANKS TO THE FOLLOWING PEOPLE FOR PROVIDING FEEDBACK ABOUT ZIKA ZINE CONCEPTS AND STORIES:
DARLENE CAVALIER (SCISTARTER), HOLLI KOHL (SSAI/NASA), ALLISON LEIDNER (NASA), RUSSANNE D. LOW (IGES), JULIE MALMBERG (UCAR GIO), JOHN MCLAUGHLIN (NOAA), NOAH NEWMAN (COLORADO CLIMATE CENTER), JOHN RISTVEY (UCAR CENTER FOR SCIENCE EDUCATION), THERESA SCHWERIN (IGES), AND CASSIE SOEFFING (IGES)

THE ZIKA ZINE IS AN OUTREACH EFFORT OF THE GLOBE ZIKA EDUCATION AND PREVENTION PROJECT, AN INITIATIVE OF THE GLOBE IMPLEMENTATION OFFICE IN PARTNERSHIP WITH THE US DEPARTMENT OF STATE.
The fictional mosquitoes in the Zika Zine do the same sorts of things as real Aedes mosquitoes, which carry Zika virus.

Read the Zine, learn how Aedes mosquitoes live, and you'll understand how to reduce the number of places where mosquitoes can survive.

You'll also find out how citizen scientists are helping NASA by documenting mosquito habitats with GLOBE Observer.

Learn more about GLOBE Observer: observer.globe.gov

The Zika Zine is an outreach effort of the GLOBE Zika Education and Prevention Project, an initiative of the GLOBE Implementation Office in partnership with the US Department of State.

Find out more: globe.gov/mosquitoes

The Zika Zine is freely available in ten languages from the website of the UCAR Center for Science Education.

Download the Zine: scied.ucar.edu/zikazine

© 2019 University Corporation for Atmospheric Research All Rights Reserved