

# **ZOMBIE CRICKETS POSSESSED BY WATER WORMS**



## **A TALE OF LIFE, DEATH, AND MIND CONTROL**

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**A FULL MOON** rises over San Diego as the sun sets over the Pacific Ocean.



As darkness falls ...



... the nocturnal creatures of the urban canyon come to life.



On the patio of a house above the canyon, a party is just getting started.



The sounds of music, laughter, and clinking glasses float on the summer night air.



People gather at the edge of a garden pond, captivated by the shimmer of moonlight on the water.



They aren't the only ones drawn to the pond. Unseen by the party guests, a weird-looking insect with an enormous head stumbles across the ground. It's a **JERUSALEM CRICKET**...



... and it's headed **STRAIGHT FOR THE POND.**



Jerusalem Crickets don't swim. But this one can't be stopped.



It **PLUNGES BLINDLY** into the dark water.



Submerged, **ITS BODY JERKS FROM SIDE TO SIDE.** The bug can't help itself. Its movements are **UNDER THE CONTROL OF ANOTHER CREATURE**...



... a **HORSEHAIR WORM** that is about to escape from inside its unfortunate host.



Once it bursts through, the worm just keeps on coming, until its full 30 inches are free.

Oblivious to the destruction in its wake, the worm squirms off in search of a mate, its adult life just begun.

THE JERUSALEM CRICKET IS NOT SO LUCKY.

She gets lucky, and quickly finds a male who is all too happy to tie the knot . . .

How did a 30-inch-long worm end up inside a three-inch-long Jerusalem Cricket? To find out, we'll need to follow the worm on her search for a mate.

. . . literally. The worms are so long, mating can get them knotted up in a tangle.

The male provides droplets of sperm that fertilize the female's eggs. She lays 10 million of them, in long strands underwater.

That's a lot of eggs—but the Horsehair Worm's offspring have a nearly impossible challenge ahead. They start out in the water, and end up in the water. But in between, they have to make a detour onto land.

ONLY A FEW OF THEM WILL GET THERE.

Once fertilized, the eggs develop into wriggling larvae.

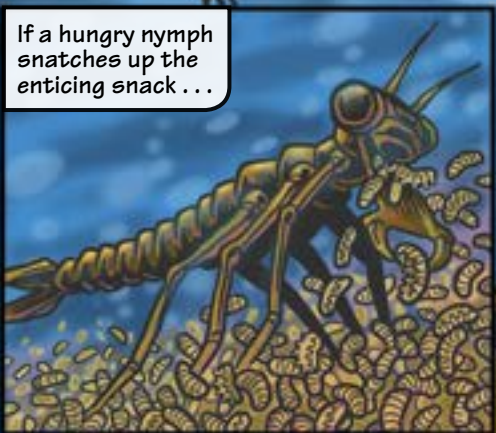
Millions of these will wind up as food for hungry fishes and snails.

This is good news for the larvae.

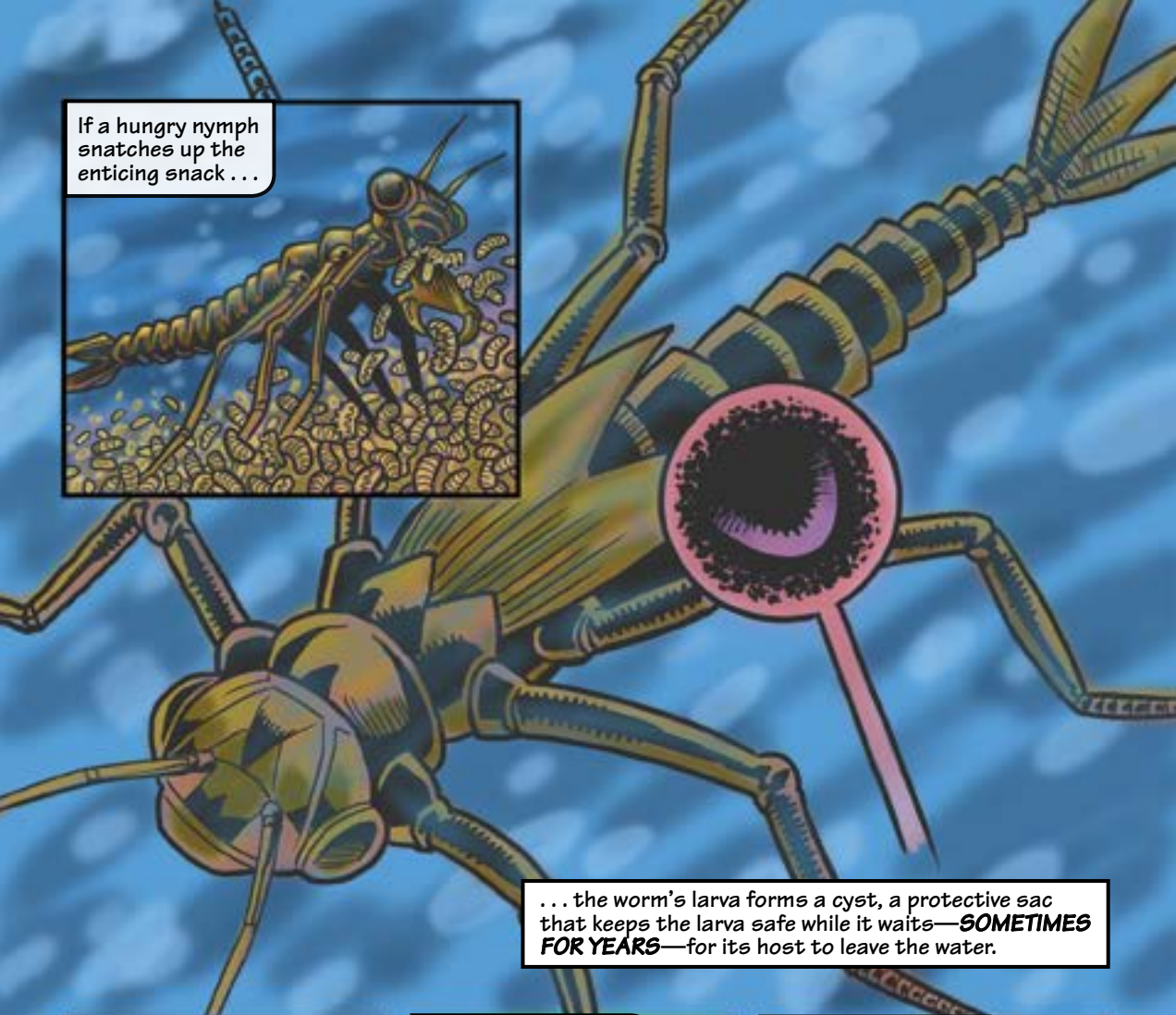
IT'S A TICKET OUT OF THE WATER.

But a lucky few will look **TASTY** to a Damselfly nymph—an immature Damselfly.





If a hungry nymph snatches up the enticing snack...



... the worm's larva forms a cyst, a protective sac that keeps the larva safe while it waits—**SOMETIMES FOR YEARS**—for its host to leave the water.



When the Damselfly nymph is finally mature...



... it climbs ashore.

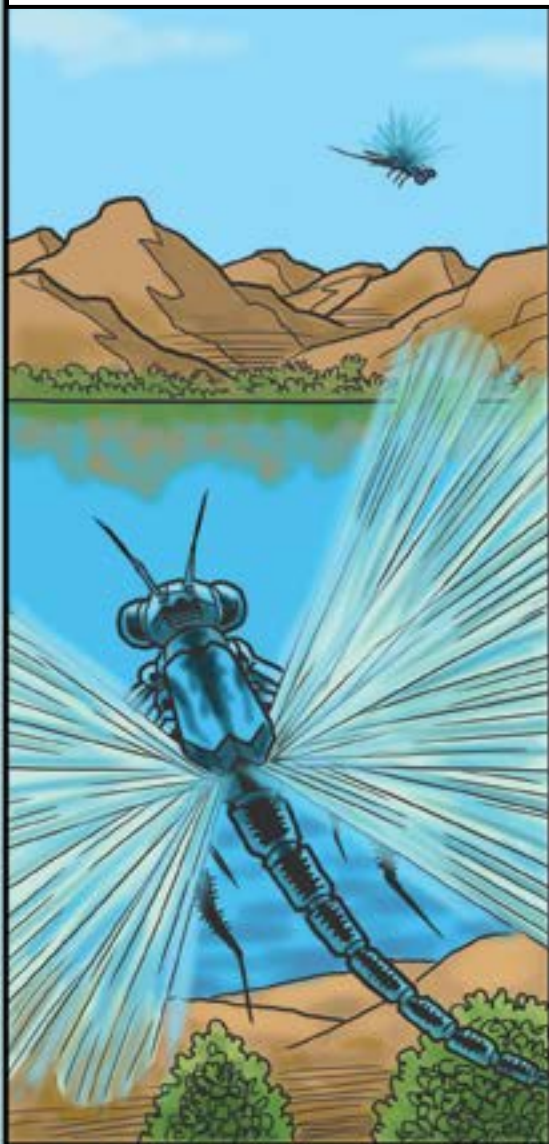


Its old exoskeleton splits open, and a beautiful blue adult emerges.

In half an hour, he's ready to fly away.



Compared with the aquatic life, a Damselfly's life on the wing is short. This one is lucky—he escapes being eaten by birds long enough find a mate.



But the airborne life is tiring and stressful. After just three weeks out of the pond, the Damselfly's lifeless blue body drifts to the ground.



But safely hidden in its cyst, **THE HORSEHAIR WORM LARVA IS ALIVE AND WELL.**



A few days later . . . a homeowner prepares a new bed for his drought-resistant plants.



As he works his trowel into the soil . . .

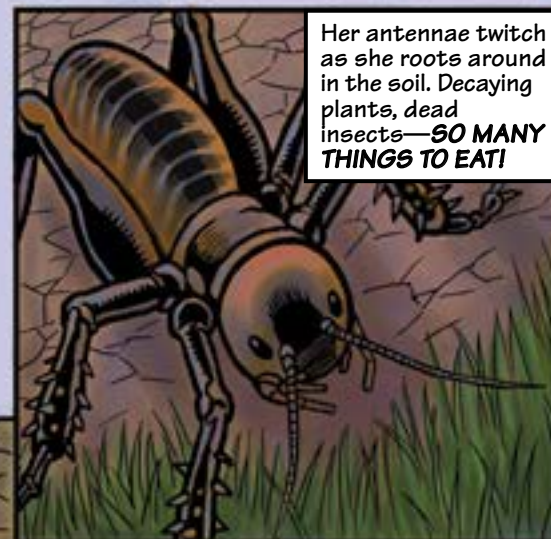


. . . he barely notices the dead Damselfly before she is buried by his digging.

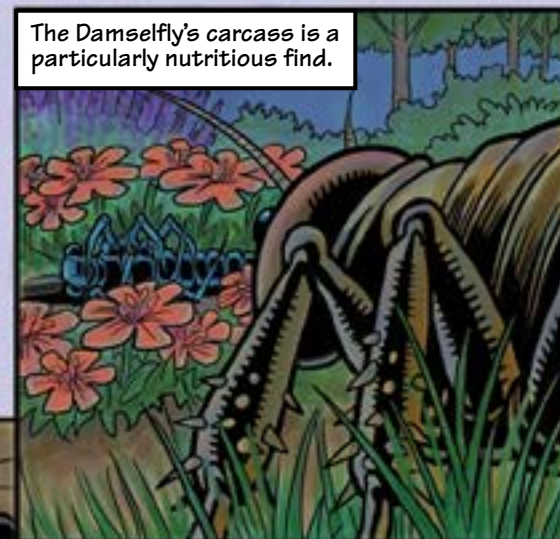


That night, a hungry Jerusalem Cricket comes out to forage.

Her antennae twitch as she roots around in the soil. Decaying plants, dead insects—**SO MANY THINGS TO EAT!**



The Damselfly's carcass is a particularly nutritious find.



She has no idea that it comes with a **PRIZE** inside.



But this prize is a Horsehair Worm that will seal her fate. The worm just got lucky again—

**IT HAS FOUND ITS FINAL HOST.**



The time has finally come for the worm to complete its journey. But first, it has to **BLAST ITS WAY** out of the cyst it has called home for so long ...



... and into the Jerusalem Cricket's body cavity.



Sapping nutrients from its host, the worm **GROWS** ...



... **AND GROWS, AND GROWS.** But it doesn't weaken the cricket. It needs to keep the cricket strong enough to serve its purposes.

Within a few months, though ...

**... THE WORM HAS FILLED THE CRICKET'S BODY CAVITY COMPLETELY.**



For its final and greatest act, the worm turns to **MIND CONTROL.**



One night, sensing that the time has come to be free ...



... the worm switches on genes that produce chemical signals that go **STRAIGHT TO THE CRICKET'S BRAIN.**





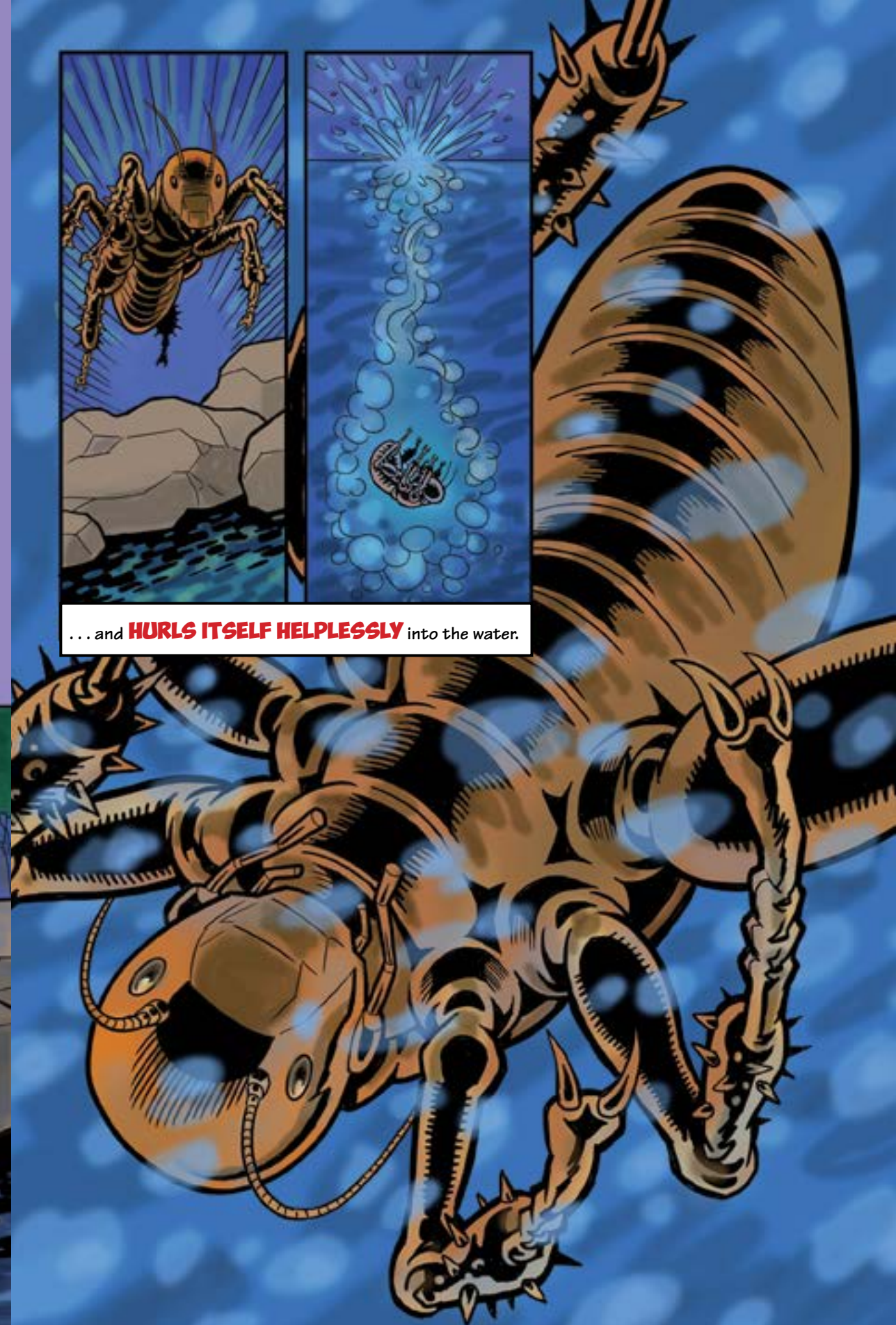
The message:  
**GET TO WATER, AND FAST!**



The cricket's brain has no way of knowing that these signals are actually coming from a worm **INSIDE ITS BODY**. So like a programmed robot, it stops what it was doing, heads for the pond . . .



. . . and **HURLS ITSELF HELPLESSLY** into the water.





Under the worm's control, the cricket **THRASHES AND WRITHES.**  
**NOTHING CAN STOP THE OUTCOME NOW.**



Having beaten all the odds, the full-sized worm  
**BURSTS FROM THE CRICKET'S BODY.**



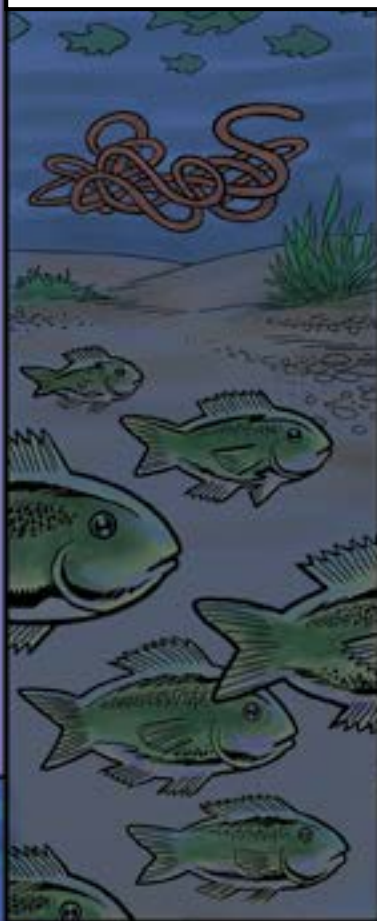
It wriggles its way out, a  
whopping 30 inches long ...



... leaving its host to drown ...



... and swims away, in search  
of another of its own kind ...



... to start the cycle  
of life, death, and  
**MIND CONTROL**  
all over again.

