“the case of the vanishing bees”
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Lauren Weinstein — writer and artist
The Case of the Vanishing Bees
R. Kikuo Johnson — writer and artist
Sounds in the Silence
Rick Veitch — writer and artist
Todd Klein — letterer
Design Your Own Ugly Animal!
Lauren Weinstein — writer and artist
And now, with two months of winter yet to go, a hint of spring is in the air.

...But his style has earned him the nickname Casanova.

The older wolf and his mate do not welcome the interloper who longs to join the Druids.

A lone black wolf is coming to call on the Druids. His official name, bestowed by the researchers, is 302.

Their daughter, however, can barely contain herself.

The most notorious flirt in Yellowstone.

Finally, the old man has had enough—and 301 bears a hasty retreat.

If it were up to her, 302 would be welcomed into the clan.

...But it is not up to her.

He's more of a lover, not a fighter.
What is the creepiest animal in the ocean?

Animals evolve weird traits to help them survive underwater!

There are many animals that live in obscure parts of the sea that we know hardly anything about.

Sea serpent stories probably come from ogrefish sightings. They can grow up to 50 feet, making them the longest bony fish alive. Darkfish rarely come to the surface except when they are sick or dying. The first one to be filmed alive was in 2002.

The Japanese frilled shark was thought to be extinct until a sick one surfaced January 1st 2007.

The goblin shark’s liver can take up to 25% of its body weight. No one knows why.

In the deep sea where there is no sunlight and limited food, creatures have some of the strangest adaptations...

A gulper eel can unhinge its jaw to eat fish as big as itself!

The whale’s carcass below appears to be moving like a zombie!

In reality hundreds of hagfish have wriggled inside to feast on the decaying flesh!

They don’t have jaws. Instead they eat carrion with rasping tongues.

Hagfish can tie themselves into knots to help grab onto their food.

When threatened, hagfish secrete immense amounts of slime out of glands on their sides.

Their slime is such a potent defense that they have hardly any predators.

Hagfish are born with both male and female sex organs and become either gender later in life.

They have existed for 300 million years.

This anglerfish attracts its prey with bioluminescent lures.

Bioluminescent animals create their own light by hosting glowing bacteria in organs called esca.

The fangtooth or ogrefish is dark-colored so it won’t reflect bioluminescence from other fish.

The tube-eye fish sips water through its mouth like a straw.
THE CASE OF THE VANISHING BEES

WHEN COMMERCIAL BEEKEEPER, DAVID HACKENBERG, ARRIVED IN FLORIDA TO PICK UP HIS HIVES, HE WAS FACED WITH A CRISIS...

HIVE AFTER HIVE WAS FULL OF HONEY—THERE WAS PLENTY OF FOOD...

CLARVES WERE LEFT IN THEIR CELLS UNATTENDED... THERE WERE NO SIGNS OF MOTH, BEETLES, OR OTHER HIVE PESTS...

AND STRANGEST OF ALL, THERE WERE NO DEAD BEES.

IT'S LIKE SOMEONE SWEEP OUT THE BOXES!

IN THE FALL OF 2006, SOON AFTER HACKENBERG'S DISCOVERY, SIMILAR REPORTS POURED IN FROM ALL OVER THE WORLD.

"COLONY COLLAPSE DISORDERED," AS IT WAS DUBBED, ENTERED AS A GLOBAL CRISIS WITH MUCH HOPE AT STAGE THAT THE HONEY SUPPLY—COMMERCIAL HONEYBEES POLLINATE A THIRD OF OUR CROPS.

IN FLORIDA, BEEKEEPERS REFUSED SERVICE TO FARMS USING CERTAIN PESTICIDES

SEARS FOR HALF THE YEAR.

MEANS TO GUARANTEED THE SICK.

NO WAY TO QUARANTINE THE SICK.

ANIMALS, DIET OF CORN SYRUP.

DISEASE SPREAD IN TRANSPORT.

ANOTHER YEAR COULD PUT MANY BEEKEEPERS OUT OF BUSINESS AND RESULT IN POOR CROP YIELDS OR FAILURES.

THE SEARCH FOR A CURE FOR C.O.C.D. IS A RACE AGAINST TIME.

IT SEEMED THAT THE BEE'S IMMUNE SYSTEMS HAD BEEN WEAKENED, BUT THE CAUSE REMAINED A MYSTERY.

HOW'S IT LOOK DOC?

HMM...
I'D NEVER ACTUALLY HEARD A HONEY BEE IN THE WILD, MUCH LESS SEEN ONE.

MAYBE THAT'S WHY MY HEART WAS POUNDING WHEN I TRIED TO COLLECT IT.

MAYBE THAT'S WHY I DIDN'T HEAR THE LONER SNEAKING UP.

THAT'S A BEE, YOU DORK!

I'VE GOT TO CATCH IT AND BRING IT TO THE OLD MAN!

WELL, YOU CAN'T. THIS IS MY PATCH.

EVERYTHIN' AROUND THE STADIUM BELONGS TO ME.

I WAS COLLECTING POLLEN.

JUST LIKE THE BEE.

HEY! OWW! AHHH... AHH... AHH...

THAT PARTICULAR SPECIES IS CALLED RASWEEZ, NASTY. ISN'T IT ?

CHOOD! AH-CHOO! HEY... WHAT... TCHOO!

GET YOUR THIEVIN' HANDS OFF MY DRIPPER!

AHH!

A LONER, HUH? NO CLAN?

I LIKE BEIN' ON MY OWN. WHAT'S IT TO YA?

WHAT WERE YOU TRY'NA STEAL? SOMETHIN' BOBBLE?

EVEN SO, WE LOVED HIM DEARLY.

HE TAUGHT US ABOUT FLOWERS.

HOW EVERYTHING CHANGED WHEN THEY ALL SUDDENLY VANISHED.

AND WHY.

WE'D ALL BEEN LONERS, SCAVENGING FOR FOOD IN THE GREAT RUINS BEFORE JOINING HIS CLAN.

STORY & ART: RICK VEITCH • LETTERING: TODD KLEIN • EDITOR: DAVID REISMAN
I think you know more about that bee than you're letting on.
What have you got in here?
Hey... wha-choo! Get outta my... ahh-choo!

What's this?
It looks kind of like pictures I've seen in the old man's books!
Have a heart! Ha-choo! It's all I got to eat... what-choo!

Come on, you need to meet my clan.
I'm not meeting anybody. Sewr? And you can't make me.

This loner giving you a problem, Edie?

Til the lower brought in that lumpy little apple...
You know... I've always feared I'd never see one of these again.

Where'd you find it, son?
Why should I tell you your food's hard to come by out there in the ruins.

It's a terrible situation, so we band together to make the best of it.
Sit with us and share what we have. All I ask is that you listen to my story.

It seems like I've been hungry my whole life.

Did you know that food used to be so plentiful, some people worried about getting fat?

When I was your age, potatoes, tomatoes, corn, like everyone else, I took the miracle of their existence for granted.

I remember eating apples, pears, tomatoes, corn, like everyone else, I took the miracle of their existence for granted.

It was a bounty that was produced by flowering plants, which require pollination to propagate.

And it was bees that had ensured their reproduction and survival for millions of years.

I was training as an entomologist, studying how hives might be affected by climate change and chemicals in the environment.

Then a disastrous colony collapse disorder struck, wiping out almost all the world's bees in less than a year!

The old man taught us to raise goats and which mushrooms were safe to forage.

I never found something, it might be a fruit!

Does it get lonely with no friends?
We've found something. It might be a fruit!

Yet, nothing ever seemed to brighten his oppressive mood.

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He's the stubborn type, Alan.

Uhhh... you're her clan?

That's right. What say we all take a little walk so you can meet the old man?

He's always kind of bad, but you'll like him.

Well... that stew smells pretty good.

When I was your age, potatoes, tomatoes, corn, like everyone else, I took the miracle of their existence for granted.

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Then a disastrous colony collapse disorder struck, wiping out almost all the world's bees in less than a year!
"I wasn't much older than you and I was suddenly on the front lines. We tried to find a cure for the problem, but we were too late.

Hand pollination couldn't begin to replace the work the bees did. In less than a year industrial agriculture completely failed.

People were starving. Governments fell. Civilization collapsed like a house of cards.

"After the worst, I kept working on my own. Somehow I succeeded in breeding a handful of queens that were potentially immune to the disorder.

"I seeded one here fifteen years ago, hoping against hope she would survive to establish a healthy hive.

Relying on the help of young people like yourself, I've been searching ever since for a sign that the bees might be rebounding.

But so far... Nothing, until you arrived with this little apple.

You see, apple trees are a flowering species. They can't produce fruit like this without a hive nearby.

This sounds like marmalade. Jumbo.

I got everything I need in my patch. Think I care if humans die off?

Why should it matter to me what happens to anyone... else?

The old man suffered from depression, but he still understood human nature.

He knew that, deep down, we all yearn to be part of something bigger.

That buzzing—do you hear it? Where's it coming from?

Up in the rafters—look!

Dear God! A hive! And it's huge!

I call 'em drippers 'cause they drip this stuff that tastes really good.

Mmmmm! Is this the honey you taught us about?

Yes! They're back!

There's more good stuff to eat out here.

The day we found the bees, the old man himself was transformed.

It was as if the weight of the world was lifted from his shoulders.

The end."
DESIGN YOUR OWN
UGLY ANIMAL!

But first let’s look at why
we see some animal traits
as ugly and others as cute.

This makes evolutionary
sense. Since human babies
are some of the most
helpless in the animal
kingdom,

A newborn baby cannot hold
up its own head to nurse.

Animals that are un-baby-like—slim,
weirdly proportioned,
or scarily prehistoric—may be revolting to us.

We are more likely to
save endangered cute
animals than ugly ones!

As a result, we are
prejudiced against creepy
and homely creatures!

Traits that we find ugly
may be very useful in nature.

The gooey body of the blobfish
helps keep it buoyant as it
floats along the sea floor.

Choose from a wide array of grotesque faces!

Peanut-headed bugs,
predators mistake its
peanut-shaped
head for a lizard’s.

Proboscis monkey:
Females prefer the males with the
biggest noses.

A babirusa: Upper tusks
shiel the male’s
face when fighting with the lower ones.

The warthog:

And here are some unattractive bodies:

A lappet-wrinkle-faced
naked mole rat

Perhaps could: Burrow underground,
have snar to get around
and use its beak
to eat carrion.

Create your own useful but
grotesque animal
adaptation: Here’s an example...

Now make your own!

Major corporate support for NATURE is provided by Canon U.S.A., Inc. and Toyota. Additional support is provided by the Corporation for Public Broadcasting and the nation’s public television stations.

thirteen.org pbs.org
“This is what the East Coast looked like after last week’s monster blackout…”

Brought on by the country’s ever-increasing demand for electricity to power our air-conditioners, refrigerators, televisions, and lightbulbs during the August heat wave.

Sighs! Power plants blackouts, carbon dioxide, global warming… when will it all end? I mean, look at all this energy waste—right here in my own home!

But other than just sitting in the dark, what can I do about it?

Soon...

Aha!

Mom, dad—every American home replaces just one traditional bulb with a compact fluorescent lightbulb, we could save enough energy to light more than three million homes for a year.

And...

And thus...

Then... CFLs use about 75 percent less energy than standard incandescent bulbs—and last up to ten times longer. They produce less heat, and come in just about every shape to fit almost any fixture.

So you see, if the whole neighborhood exchanged our existing bulbs for CFLs, that’ll be a lot cheaper than building new power plants—and buying fuel in such a volatile market.

And we’ve teamed up with the local energy provider to make the swap for free. Just sign here and we’ll get started...

Saras bright idea is helping to preserve the environment.

And because CFLs reduce demand on power plants, they save more than $600 million in energy costs per year, that prevents greenhouse gases equivalent to the pollution of more than 800,000 cars!

We can start by replacing just one bulb in our house with a CFL!

Find out more by visiting www.pbs.org/wnet/nature/planetkeepers/howtohelp

2007 Josh Neufeld

Joel Sartore/NGS Image Collection

Joel Sartore/NGS Image Collection
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NATURE Schedule
October – December 2007

October  7  Andes: The Dragon’s Back
October 14  The Good, The Bad, and The Grizzly
October 21  Supersize Crocs
October 28  Silence of the Bees
November 4  In the Valley of the Wolves
November 11  The Cheetah Orphans
November 18  The Beauty of Ugly
November 25  From Orphan to King
December  2  The Best of NATURE — 25 Years
December  9  Ravens
December 16  Violent Hawaii
December 23  Christmas in Yellowstone
December 30  The Seedy Side of Plants