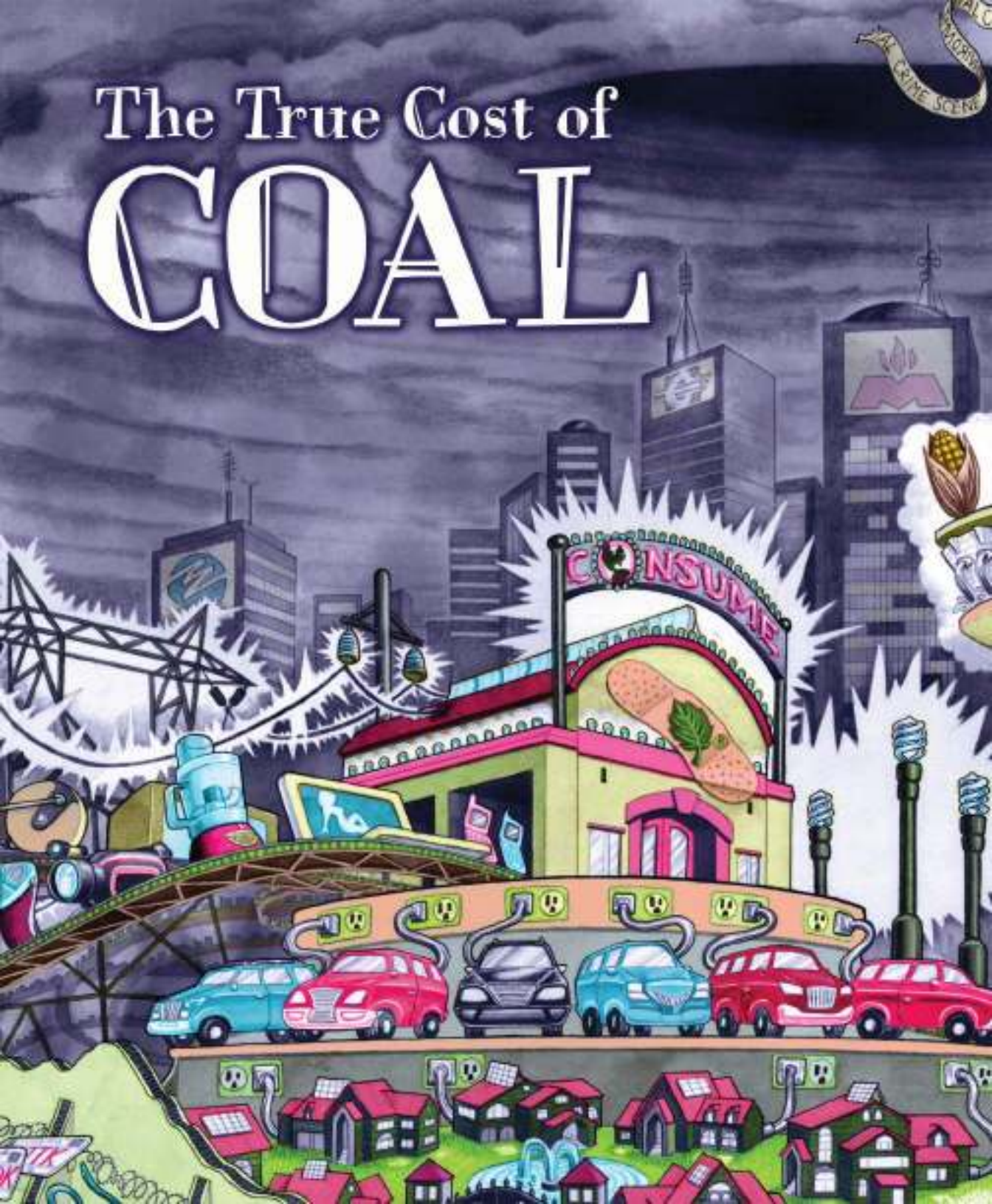


# The True Cost of COAL



This book is a narrative companion to the *True Cost of Coal* graphic, created for a younger audience. The graphic and its accompanying narratives were inspired by the discussions, story-tellings, and song-sharings that have taken place since 2008 between the Beehive Collective and community organizers, activists, and folks in Appalachia whose lives and livelihoods have been impacted by Mountaintop Removal coal mining (MTR). These exchanges of inspiration and information were collaboratively woven together into a tapestry of illustrated graphics, designed to strengthen & support critical reflection and strategic action in defense of the Appalachian Mountains- and the cultural and biological diversity they nurture.

The *True Cost of Coal* is dense with metaphors drawn from the natural world. It is rooted in history, grounded in the grinding urgency of MTR, fuelled by the looming threat of climate change, and guided by the robust, grassroots resistance of everyday Appalachians. It is populated by characters from the mountains- plants and critters under siege, and fighting back! It is a love letter to the resilient, sustainable world that has quietly endured in the hills and hollers all the while, despite the horrors of displacement, the abuses of the powerful, and the onslaught of industrial scale extraction. It is about the better world our communities are envisioning, building, and defending every day, in a million ways.

*To read the full narrative, and view the complete graphic, visit: [beehivecollective.org/beehive\\_poster/the-true-cost-of-coal/](http://beehivecollective.org/beehive_poster/the-true-cost-of-coal/)*

ISBN: 978-1-7770970-0-4



The **Beehive Design Collective** is a wildly motivated, all-volunteer, art-activist collective dedicated to “cross-pollinating the grassroots” by creating collaborative, anti-copyright images for use as educational and organizing tools. We work anonymously as word-to-image translators of complex global stories, gathered through conversations with affected communities.

# The True Cost of Coal

**~a companion rhyming book~**

*by the Beehive Design Collective*

*To our beloved Beatriz Carmen Mendoza, who left this world  
all too early. May her memory always be a blessing, and may  
her drawings always tell the stories of these mountains she  
loved and came to call home.*

*And to all the elders who became ancestors along this  
journey, including Judy Bonds, Larry Gibson, Vickie Terry  
and Miss Carol Judy. They told us where to look for  
the truth and how to call in the magic.*

**Our story begins with  
the creation of coal  
in the ancient marshlands  
and the forests of ole.**

**The plants that lived there,  
never got to decay  
instead their carbon  
got buried away.**











The original people,  
they lived with the land.  
They took from it too,  
but they worked it by hand.

This method did limit  
how much they could take,  
which worked out much better  
for everyone's sake.





**Then the colonists came,  
bringing their baggage.  
They brought disease too  
and did lots of damage.**

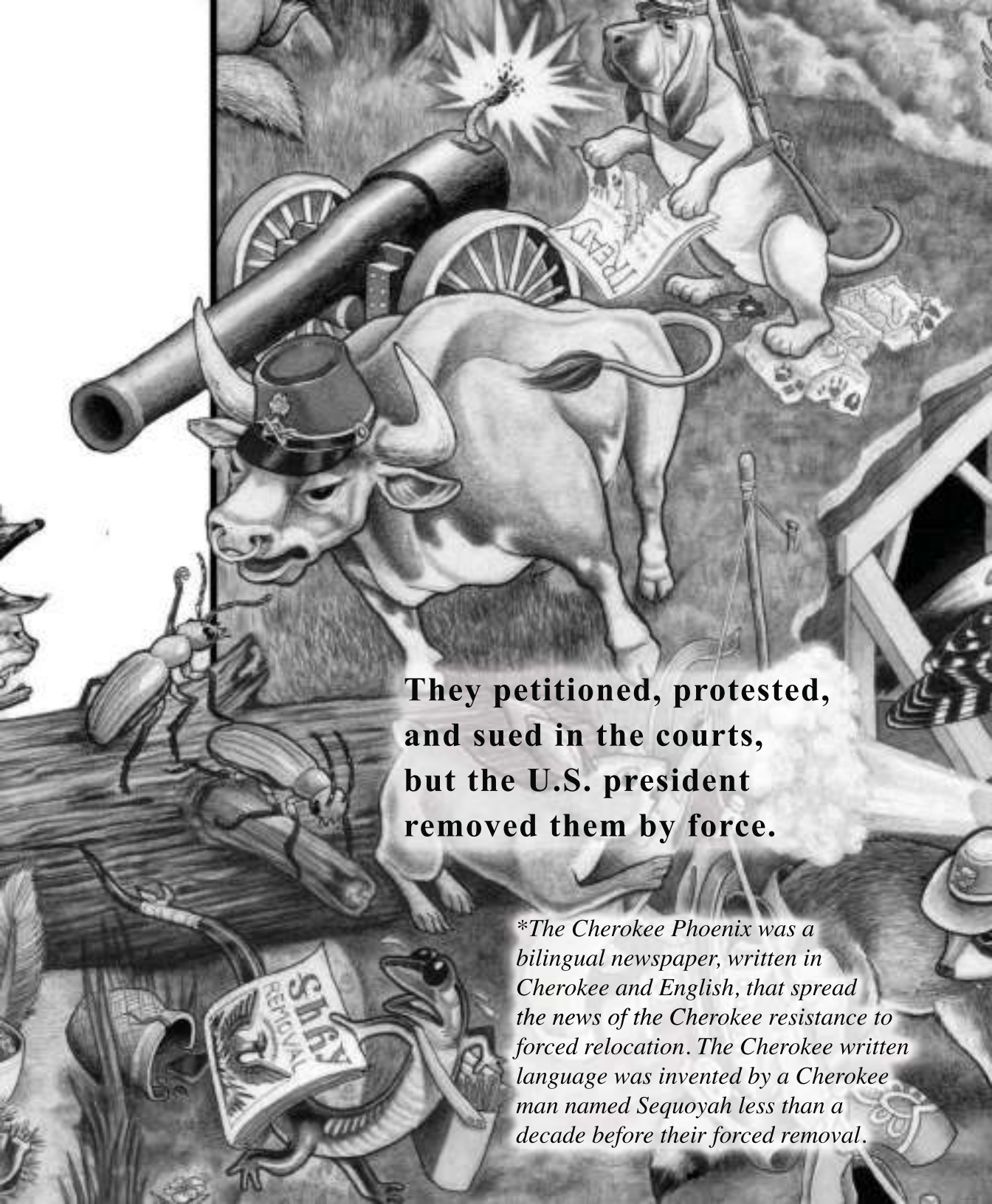


**Treaties were signed by the Cherokee chiefs,  
to keep land for their nation to live on in  
peace.**

**Although the U.S. signed these treaties  
before, the settlers were greedy they still  
wanted more.**

**The treaties they tore, peoples rights they  
ignored, while the Cherokee Phoenix would  
report and record.**





**They petitioned, protested,  
and sued in the courts,  
but the U.S. president  
removed them by force.**

*\*The Cherokee Phoenix was a bilingual newspaper, written in Cherokee and English, that spread the news of the Cherokee resistance to forced relocation. The Cherokee written language was invented by a Cherokee man named Sequoyah less than a decade before their forced removal.*

**They walked through the winter  
with so little food,  
many died on the journey  
they cried as they moved.**

*\* The Cherokee, along with the Choctaw,  
Seminole, Creek, and Chickasaw Nations  
were forced to make a new home in  
Oklahoma, and their trek was known as  
the Trail of Tears.*





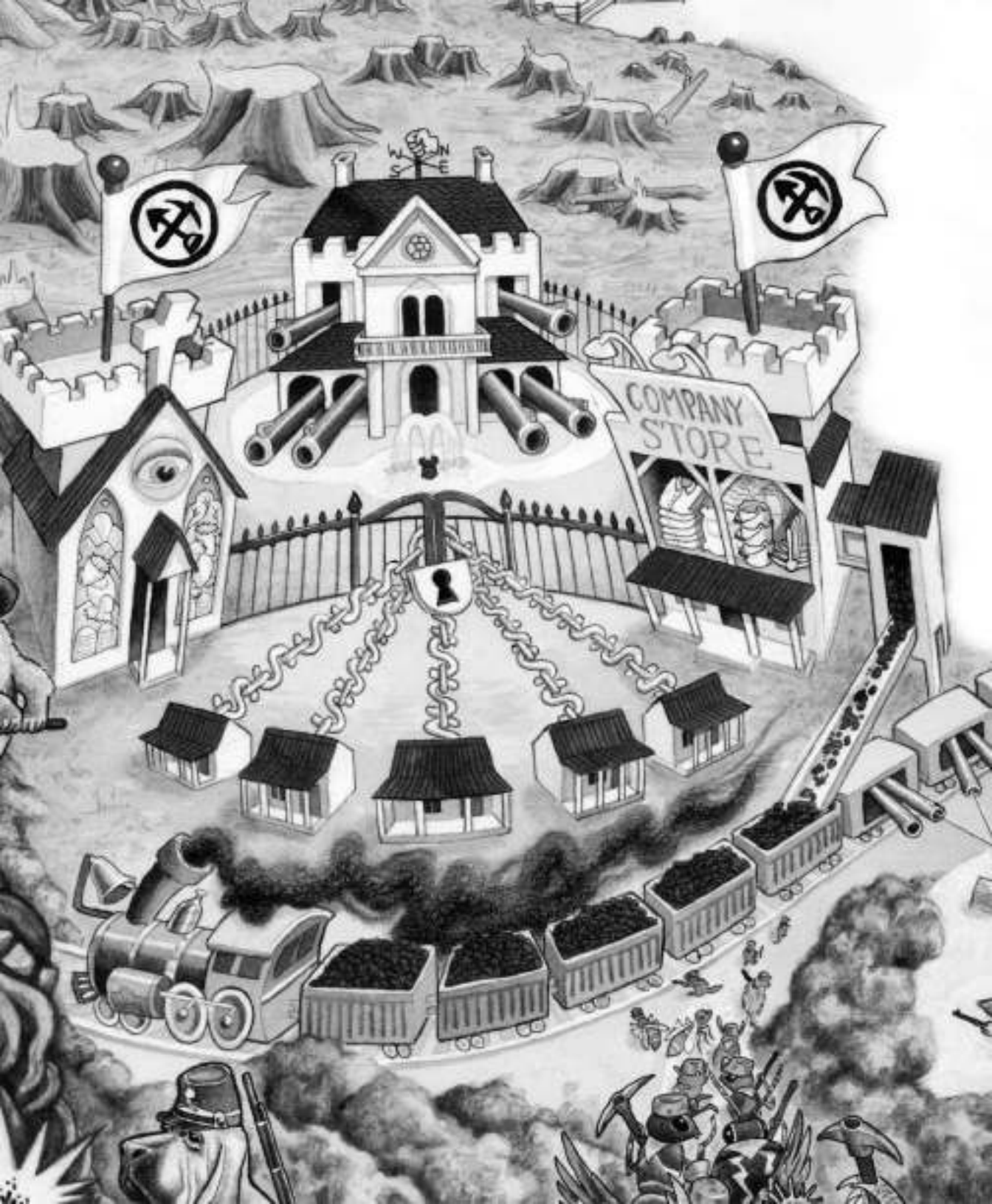


**Their forests cut down,  
train tracks stretched for miles,  
coal, cotton, and lumber  
to make money piles.**

**Wanting homes and employment  
the settlers moved west**









**and got trapped in the company towns  
with their debts.**

**Workers weren't paid in money,  
just company scrip  
that they had to give back  
for their food and their rent.**







**Enough was enough!  
The miners fought back.  
They picked up their guns  
and they launched an attack!**

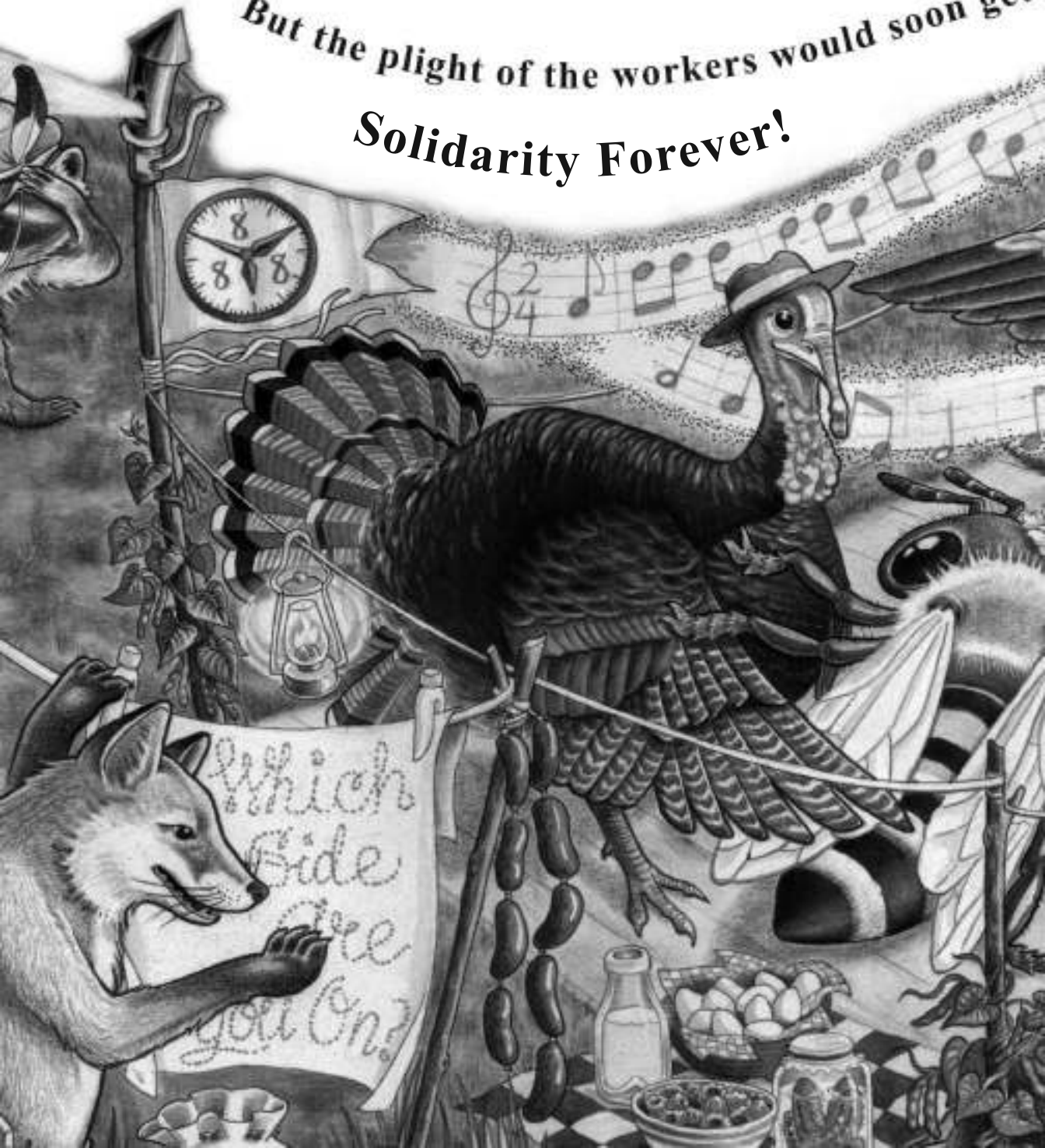
**They wore red bandanas,  
they shut down the mines,  
they went out on strike,  
and they held picket-lines.**

**The government sided with  
bosses, of course,  
and they sent in the army  
to use lethal force.**

*\* One of the largest labor struggles fought in U.S. history, the Battle of Blair Mountain saw over 12,000 miners march on the seat of coal company power in armed resistance to repressive, militarized, and unsafe working conditions. In retaliation, the coal operators summoned the U.S. National Guard to quell the uprising.*

But the plight of the workers would soon get

**Solidarity Forever!**





much better, they sang with their union



**But as soon as things moved  
in the working man's favour  
a monster appeared and  
replaced most their labour.**

**A continuous miner,  
crushed coal and their lives  
so the community as a whole had  
to get organized.**

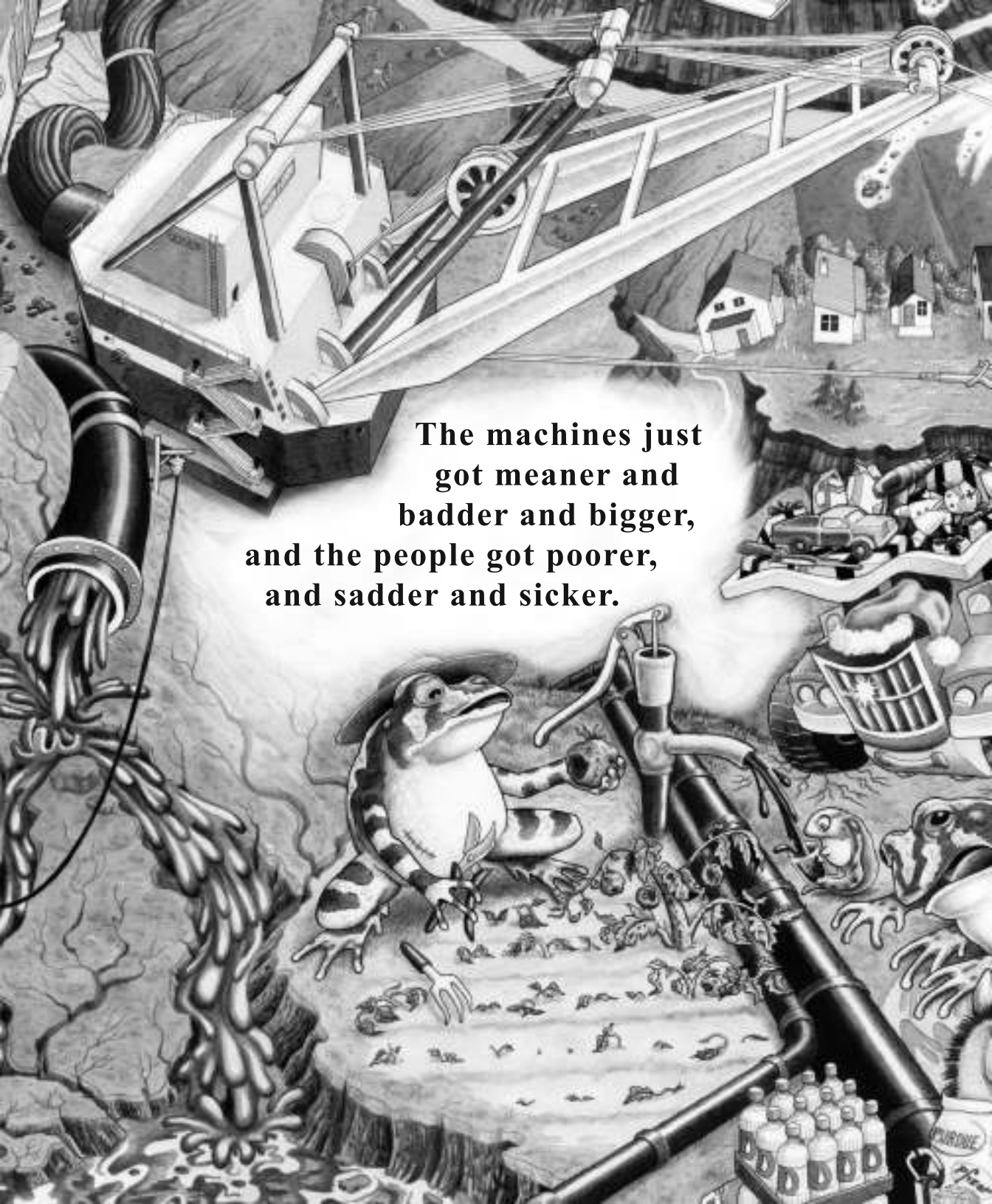
**They picketed and lobbied,  
even broke those machines  
but at the movement's peak  
got sold out by big greens.**

**Rather than stopping  
the mechanization,  
these green groups just pushed  
for mere regulation.  
Mountains got destroyed  
even more than before,  
and those miners they couldn't  
find work anymore.**



*\* In the 1970's, "Big Green" groups such as the Sierra Club and Environmental Policy Center used their lobbying power to push for regulation of Mountain Top Removal mining, rather than an abolition bill. This resulted in the passage of the Surface Mining Control Reclamation Act (SMCRA), which the Big Greens celebrated, but coalfield residents and regional environmental groups called a "blatant travesty" and "betrayal". This legislation worked to legitimize strip mining, and made the goal of abolition unattainable.*





**The machines just  
got meaner and  
badder and bigger,  
and the people got poorer,  
and sadder and sicker.**

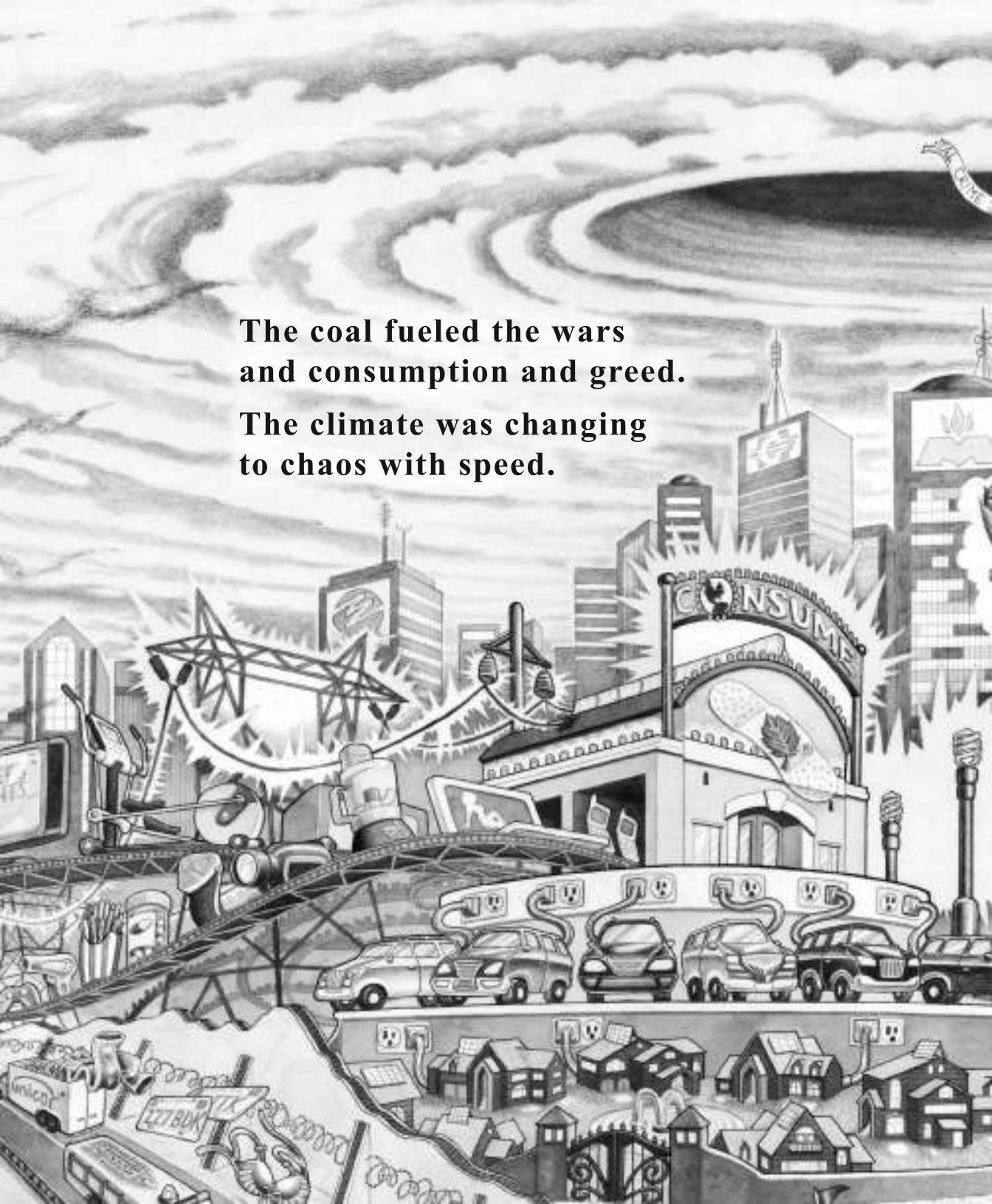






**The coal fueled the wars  
and consumption and greed.**

**The climate was changing  
to chaos with speed.**



**But the rich just got richer,  
coal smoke filled the sky.  
They made inside deals  
that would keep profits high.**

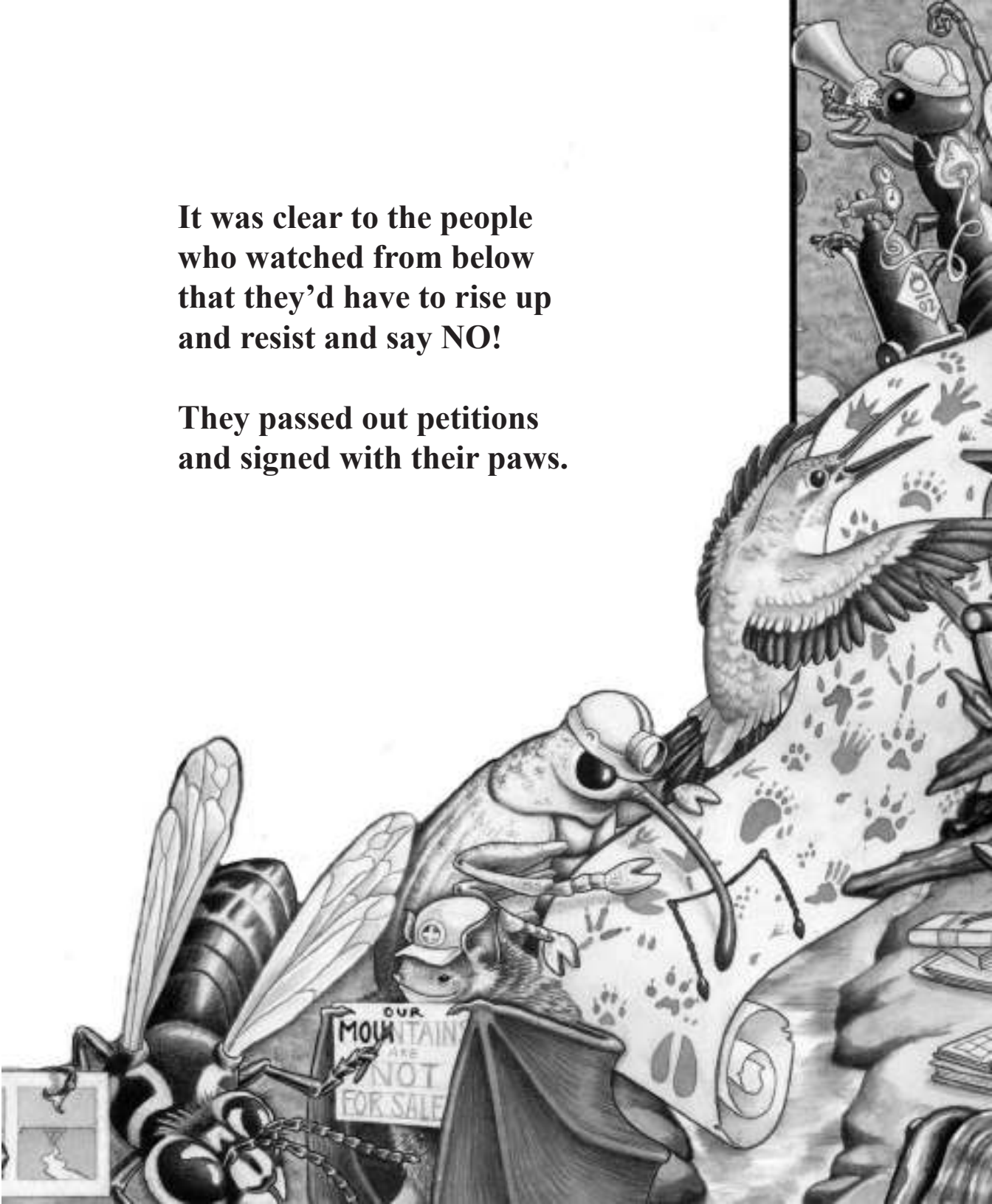






**It was clear to the people  
who watched from below  
that they'd have to rise up  
and resist and say NO!**

**They passed out petitions  
and signed with their paws.**







**They held up the permits  
by studying laws.**

**They tested the waters,  
the coal-trucks they blocked.  
They made painted banners  
and rallied a lot.**













**Some people resisted  
while others rebuilt  
the local economy,  
the soil and the silt.**

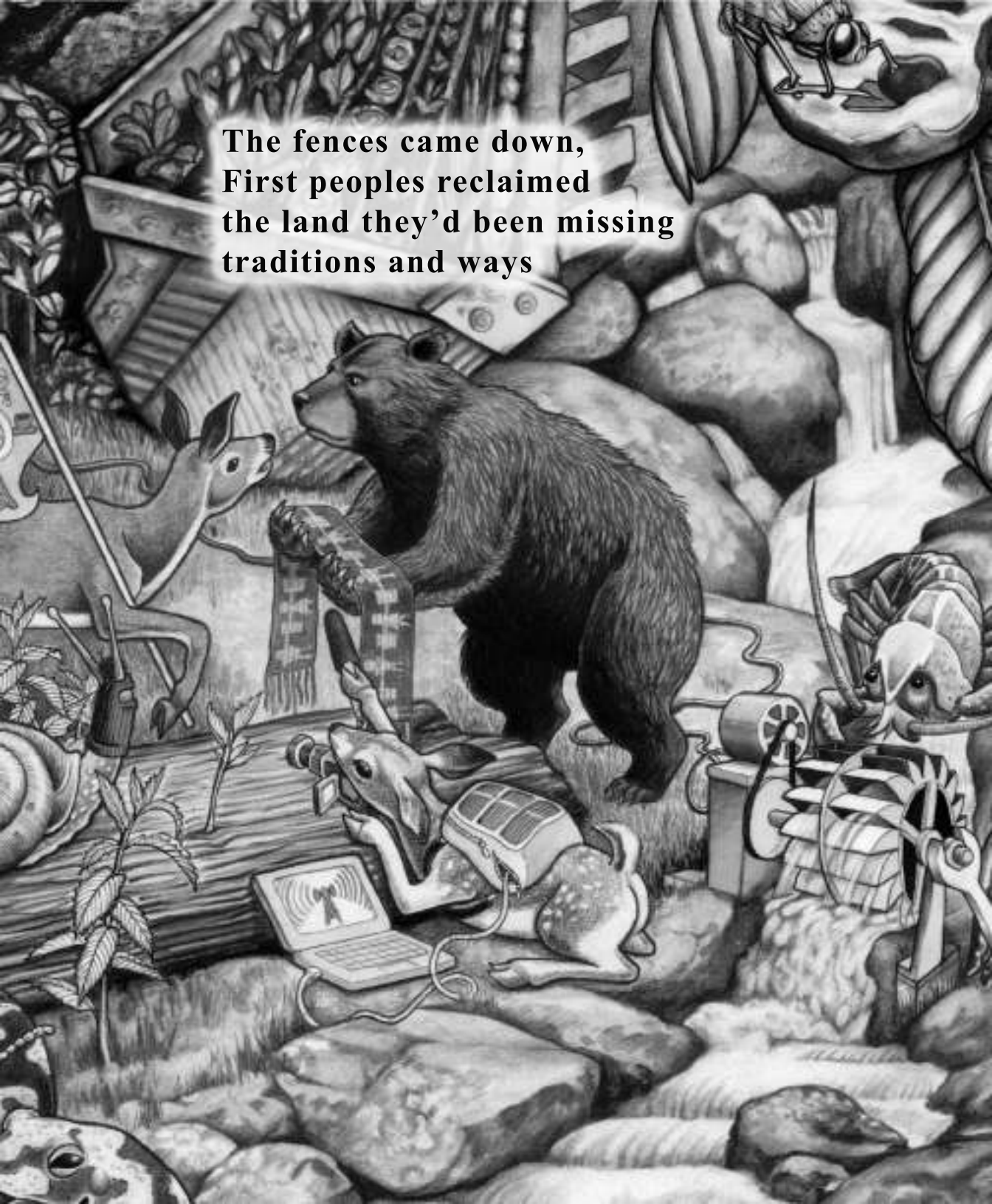
**They cleaned up the toxins  
with mushrooms and plants,  
built kitchens and gardens  
wrote music and danced.**







**The fences came down,  
First peoples reclaimed  
the land they'd been missing  
traditions and ways**





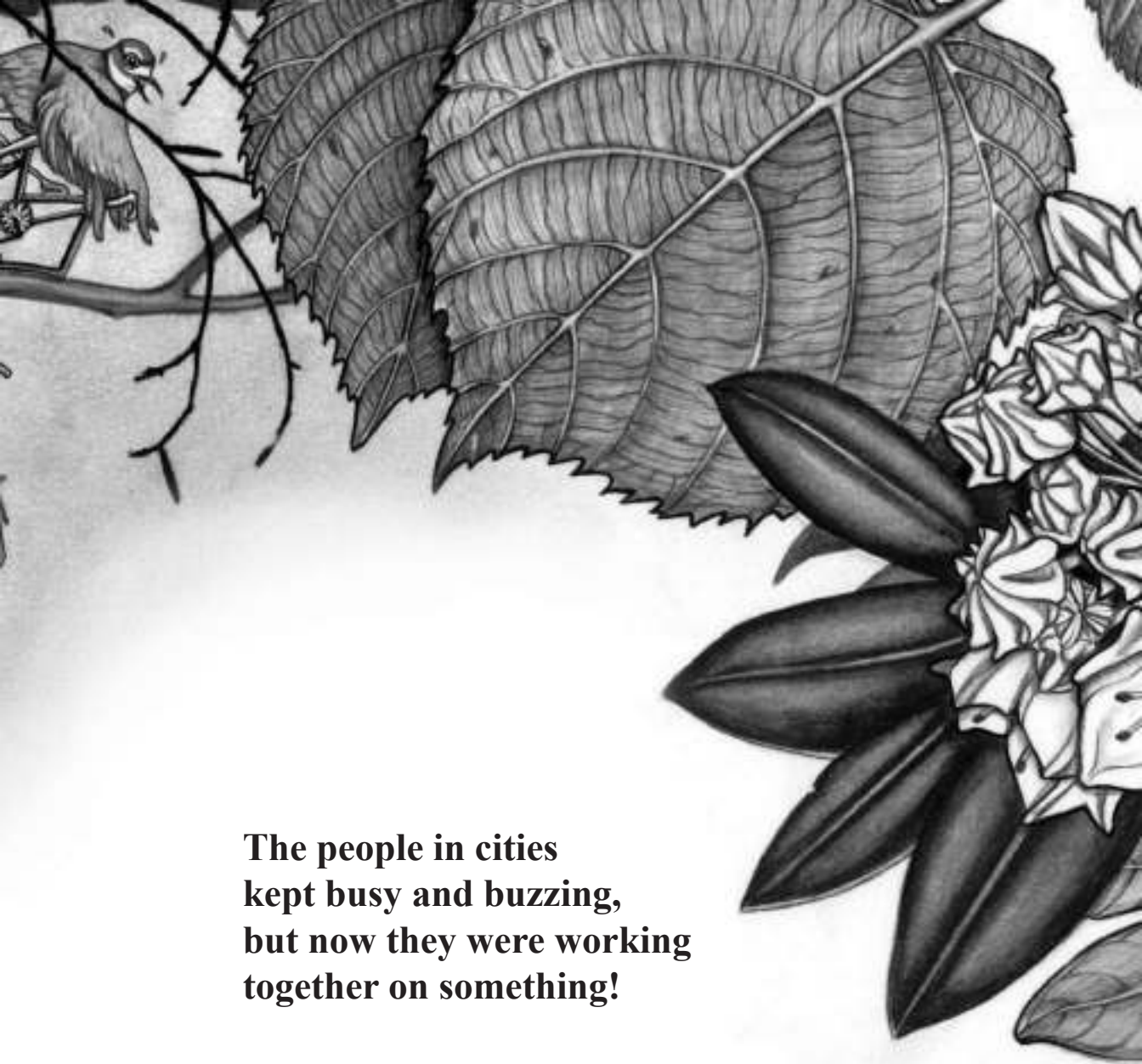


**All peoples united,  
the monster was dead.  
There's wind, sun and currents  
that we use instead!**

**Seeds to be saved,  
rainwater to collect,  
and community was built  
around love and respect.**







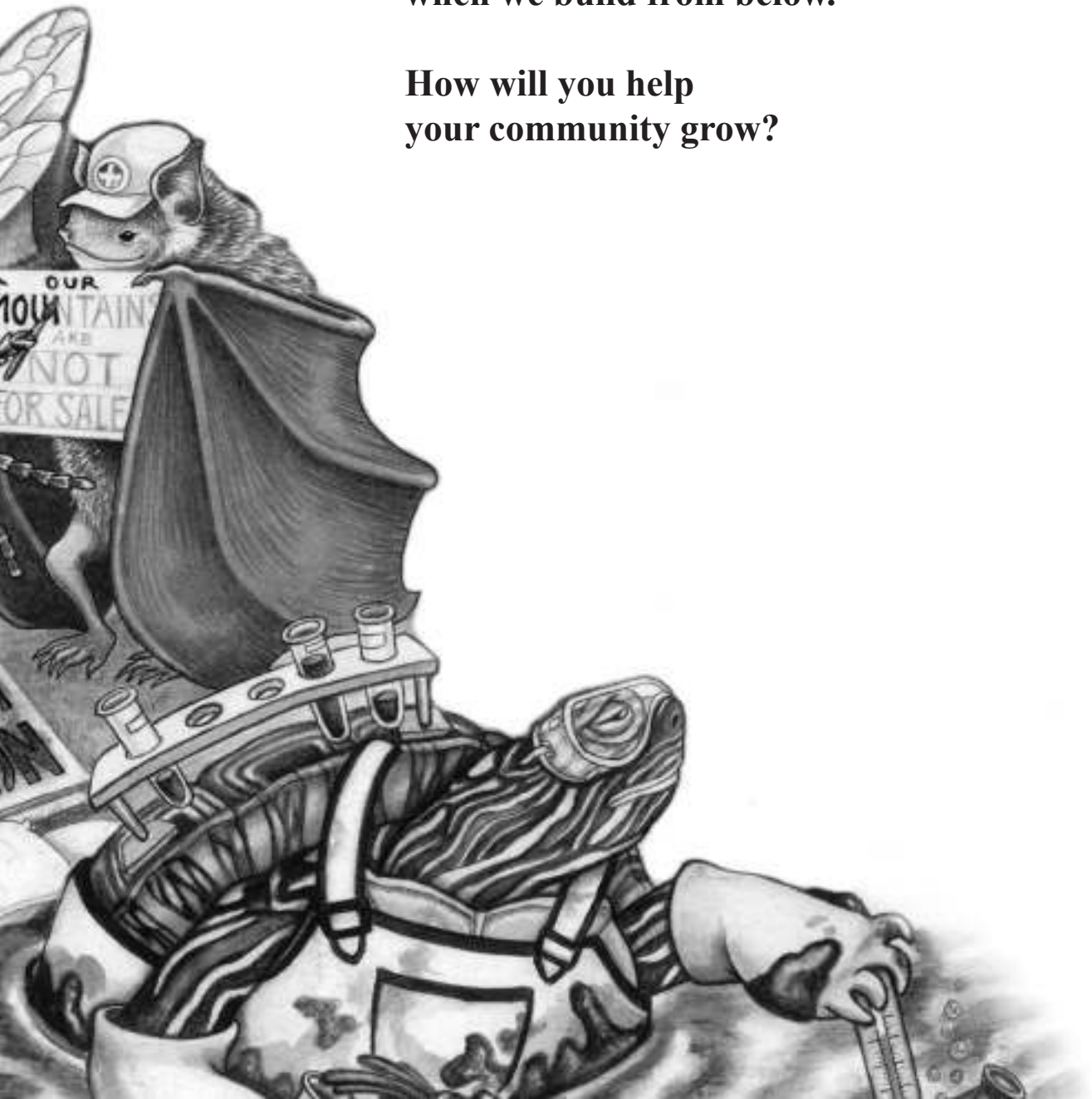
**The people in cities  
kept busy and buzzing,  
but now they were working  
together on something!**

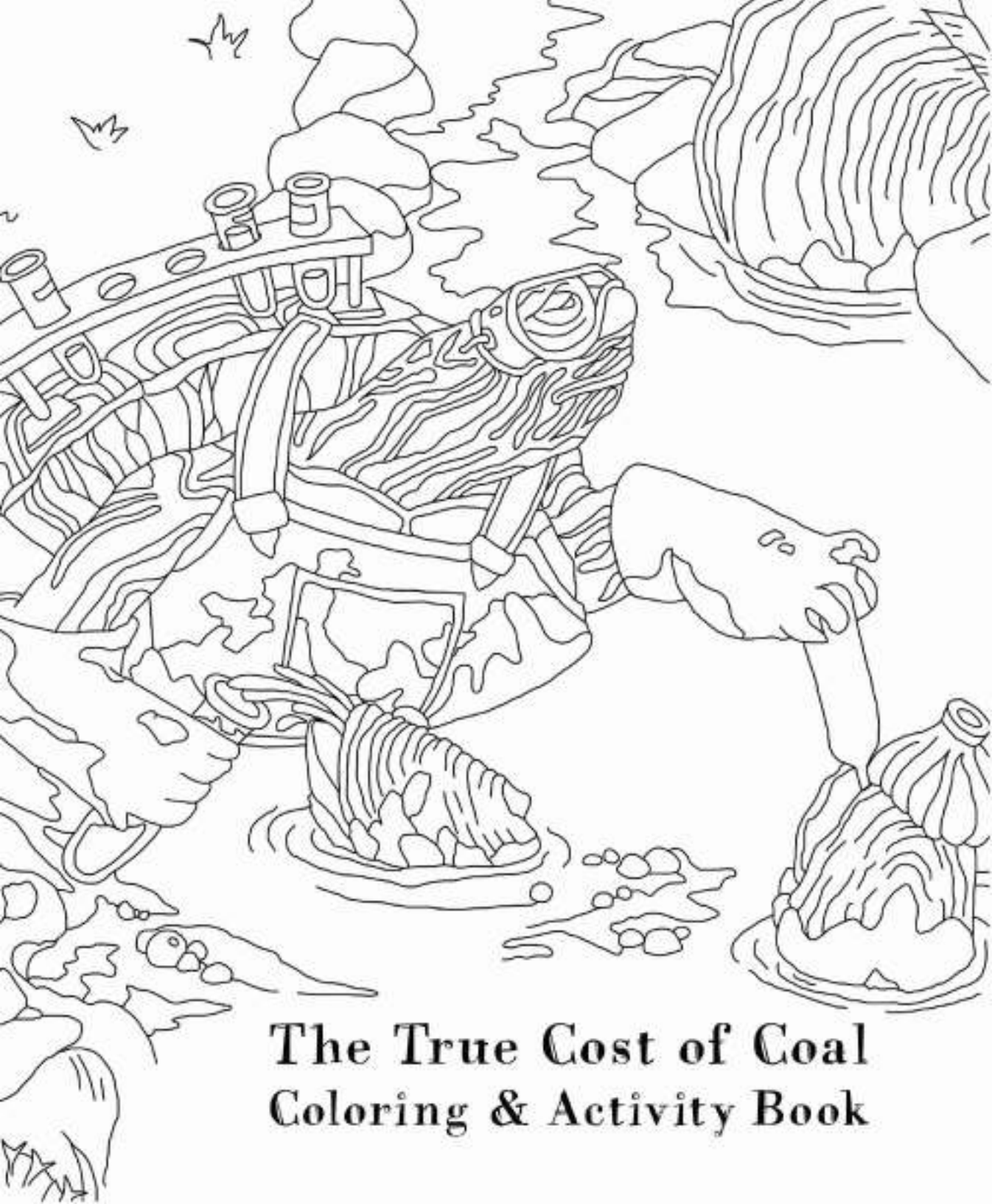
**They built housing collectives,  
made better decisions  
and figured out life  
without coal or emissions.**



**We all have a role  
when we build from below.**

**How will you help  
your community grow?**





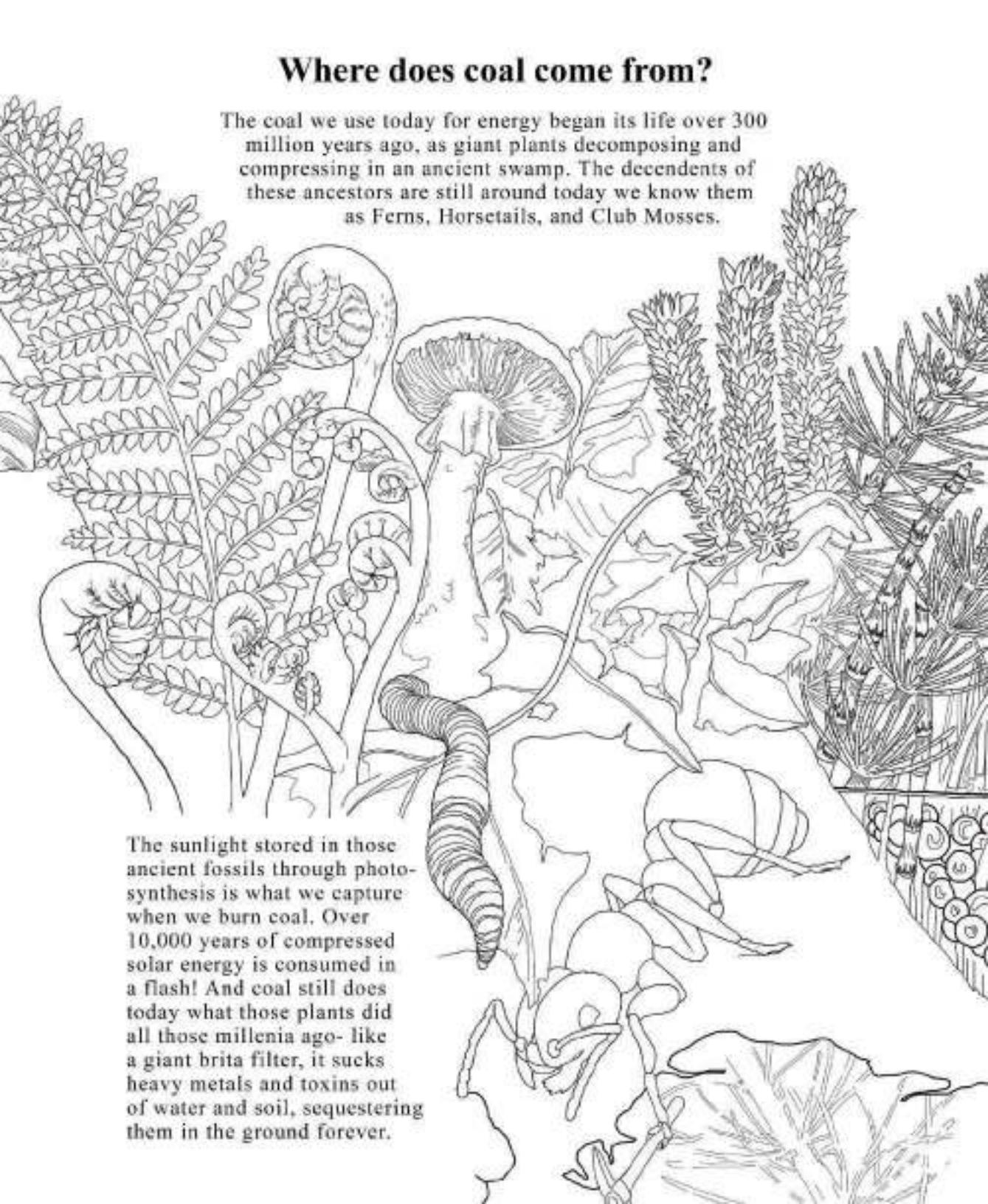
# **The True Cost of Coal**

## **Coloring & Activity Book**

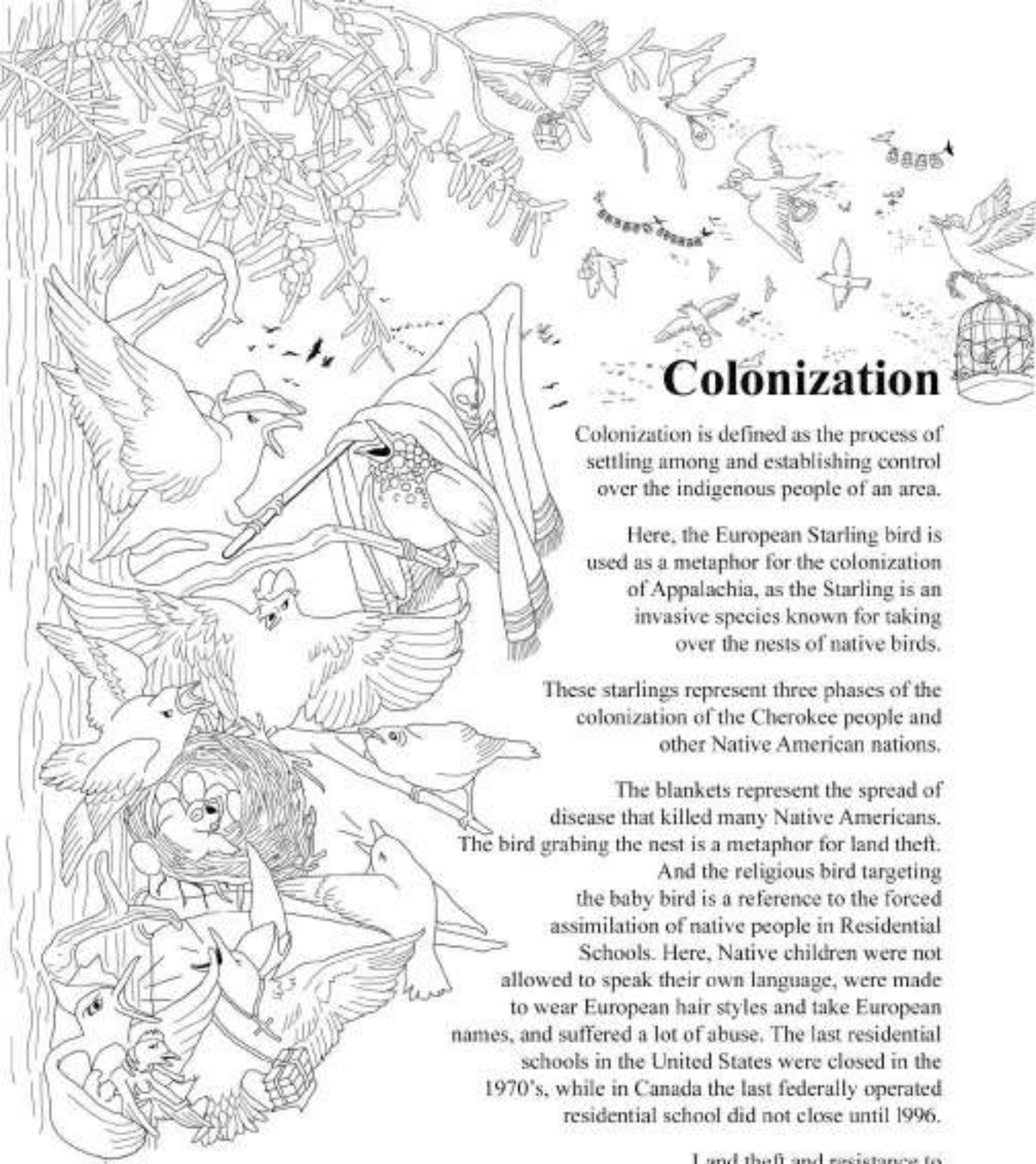


## Where does coal come from?

The coal we use today for energy began its life over 300 million years ago, as giant plants decomposing and compressing in an ancient swamp. The descendants of these ancestors are still around today we know them as Ferns, Horsetails, and Club Mosses.



The sunlight stored in those ancient fossils through photosynthesis is what we capture when we burn coal. Over 10,000 years of compressed solar energy is consumed in a flash! And coal still does today what those plants did all those millenia ago- like a giant brita filter, it sucks heavy metals and toxins out of water and soil, sequestering them in the ground forever.



## Colonization

Colonization is defined as the process of settling among and establishing control over the indigenous people of an area.

Here, the European Starling bird is used as a metaphor for the colonization of Appalachia, as the Starling is an invasive species known for taking over the nests of native birds.

These starlings represent three phases of the colonization of the Cherokee people and other Native American nations.

The blankets represent the spread of disease that killed many Native Americans. The bird grabbing the nest is a metaphor for land theft.

And the religious bird targeting the baby bird is a reference to the forced assimilation of native people in Residential Schools. Here, Native children were not allowed to speak their own language, were made to wear European hair styles and take European names, and suffered a lot of abuse. The last residential schools in the United States were closed in the 1970's, while in Canada the last federally operated residential school did not close until 1996.

Land theft and resistance to colonization continues to this day.

# The Cherokee Written Language

Cherokee was originally a solely oral language. Then, in the 1820's, a man named Sequoyah created a syllabary for his nation's language. A syllabary is like an alphabet, but every character represents a sound instead of a letter. The Cherokee syllabary had a total of 85 characters, and every word that existed in Cherokee was made up of some combination of these 85 different sounds.

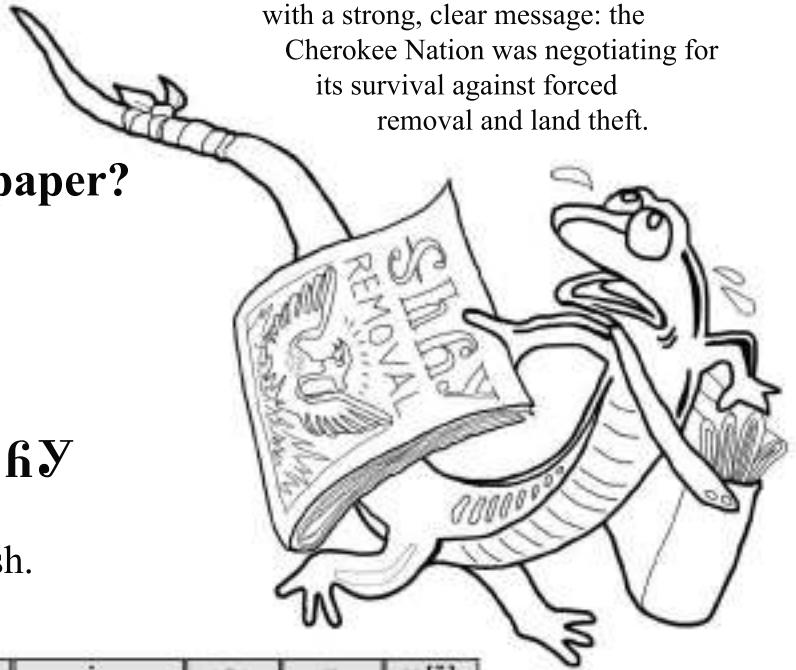
Sequoyah taught the new language to his daughter, and then it spread around the Cherokee nation.

In 1828, less than 8 years after Sequoyah first developed the written Cherokee language, *The Cherokee Phoenix* came out with its first edition. The bilingual newspaper reached Cherokee and white readers alike with a strong, clear message: the Cherokee Nation was negotiating for its survival against forced removal and land theft.

**Can you decode  
the headline on this  
Salamander's newspaper?**

– – – –  
ſ h fi y

The Cherokee word **ᏍᏏᏉ** roughly translates to the word “removal” in English.

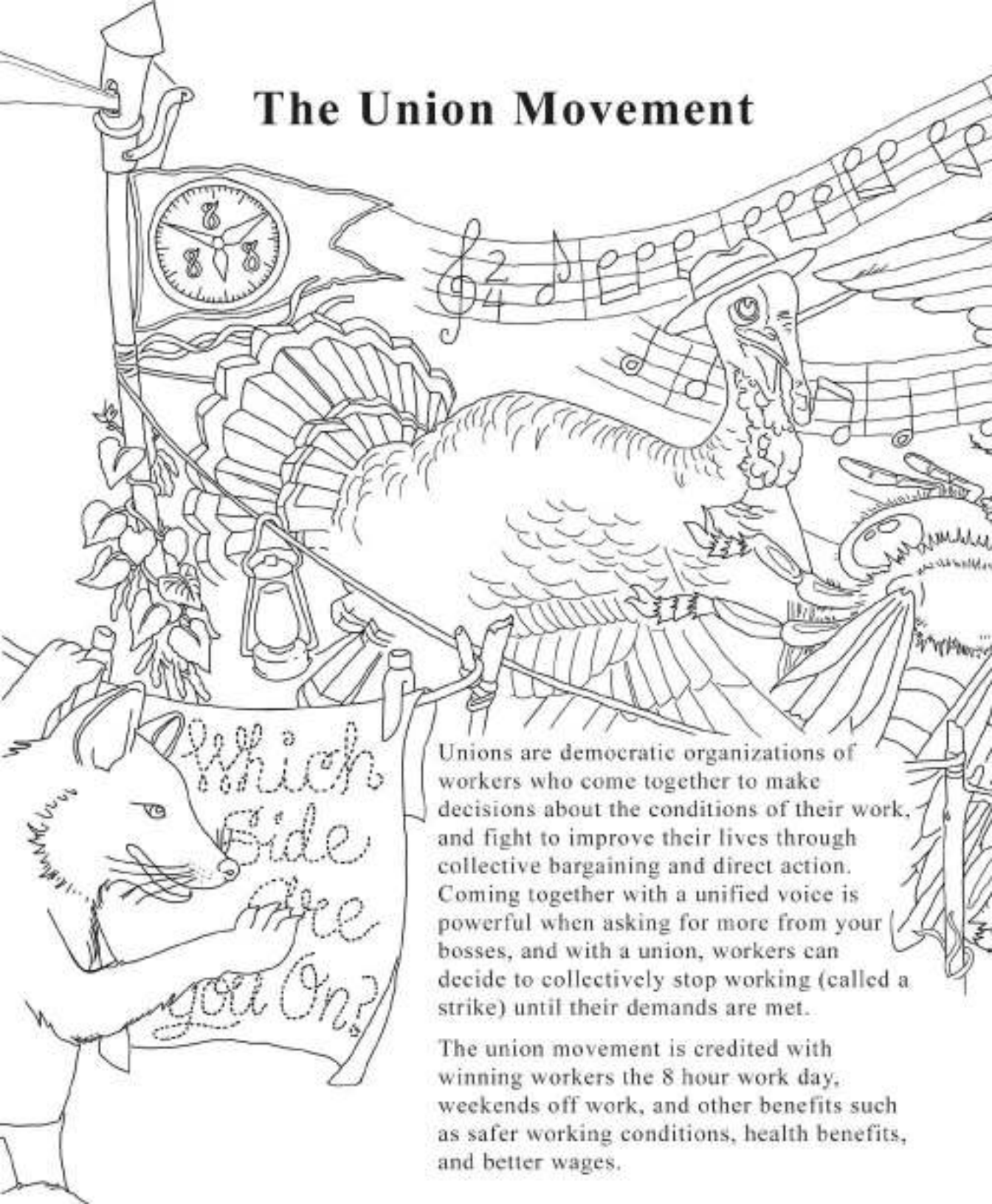


a	e	i	o	u	v [ã]
D a	R e	T i	Ḑ o	Ḑ u	i v
Ḑ ga Ḑ ka	F ge	Y gi	A go	J gu	E gv
Ḑ ha	F he	Ḑ hi	F ho	F hu	Ḑ hv
W la	Ḑ le	P li	G lo	M lu	Ḑ lv
Ḑ ma	Ḑ me	H mi	Ḑ mo	Y mu	
Ḑ na t <sub>h</sub> hna G nah	Ḑ ne	h ni	Z no	q nu	Ḑ nv
T qua	Ḑ que	Ḑ qui	Y <sup>o</sup> quo	Ḑ quu	E quv
Ḑ s Ḑ sa	Ḑ se	Ḑ si	Ḑ so	Y su	R sv
L da W ta	S de t <sub>h</sub> te	Ḑ di Ḑ ti	V do	S du	Ḑ dv
Ḑ dia L tia	L tie	C ti	Ḑ tio	Ḑ tiu	P tiv
G tsa	Y tse	Ḑ tsi	K tso	Ḑ tsu	C tsv
G wa	Ḑ we	Ḑ wi	Ḑ wo	Ḑ wu	Ḑ wv
Ḑ ya	Ḑ ye	Ḑ yi	Ḑ yo	G yu	B yv

·iδ-ol-iu-vδ  
pəɕunouoɪd  
sɪ ʌy ɥɕ

**ANSWER:**

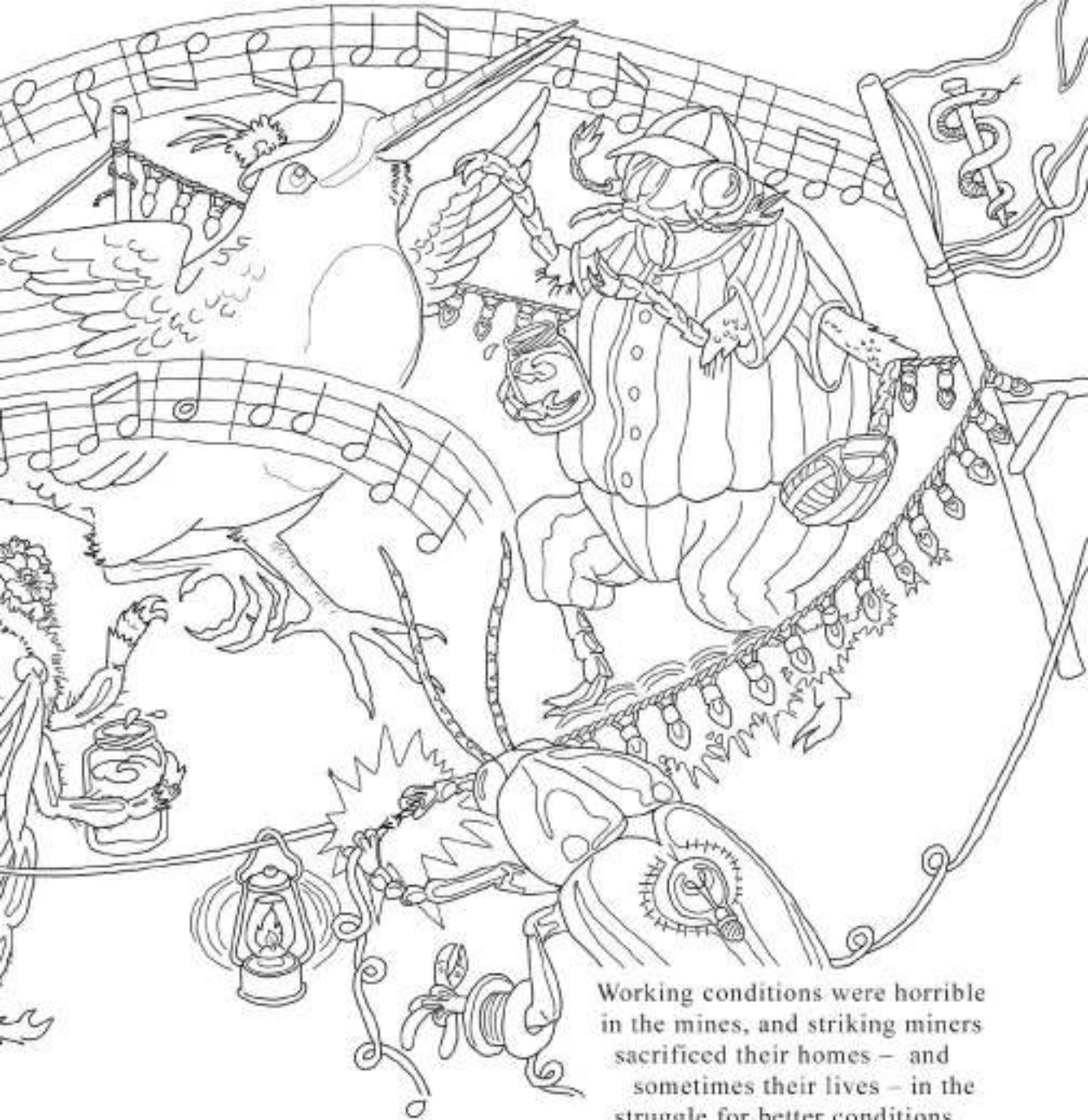
# The Union Movement



Unions are democratic organizations of workers who come together to make decisions about the conditions of their work, and fight to improve their lives through collective bargaining and direct action. Coming together with a unified voice is powerful when asking for more from your bosses, and with a union, workers can decide to collectively stop working (called a strike) until their demands are met.

The union movement is credited with winning workers the 8 hour work day, weekends off work, and other benefits such as safer working conditions, health benefits, and better wages.

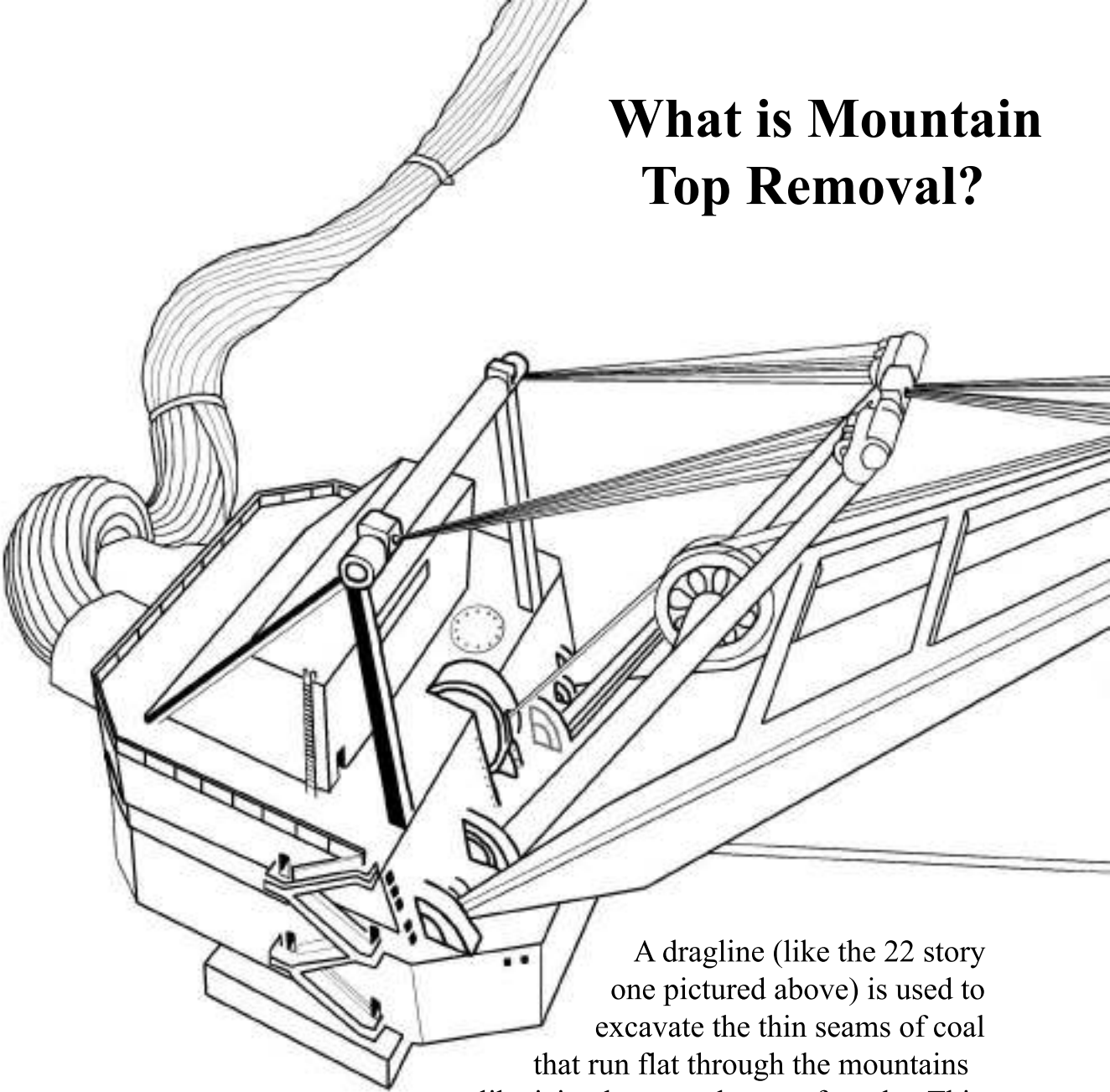




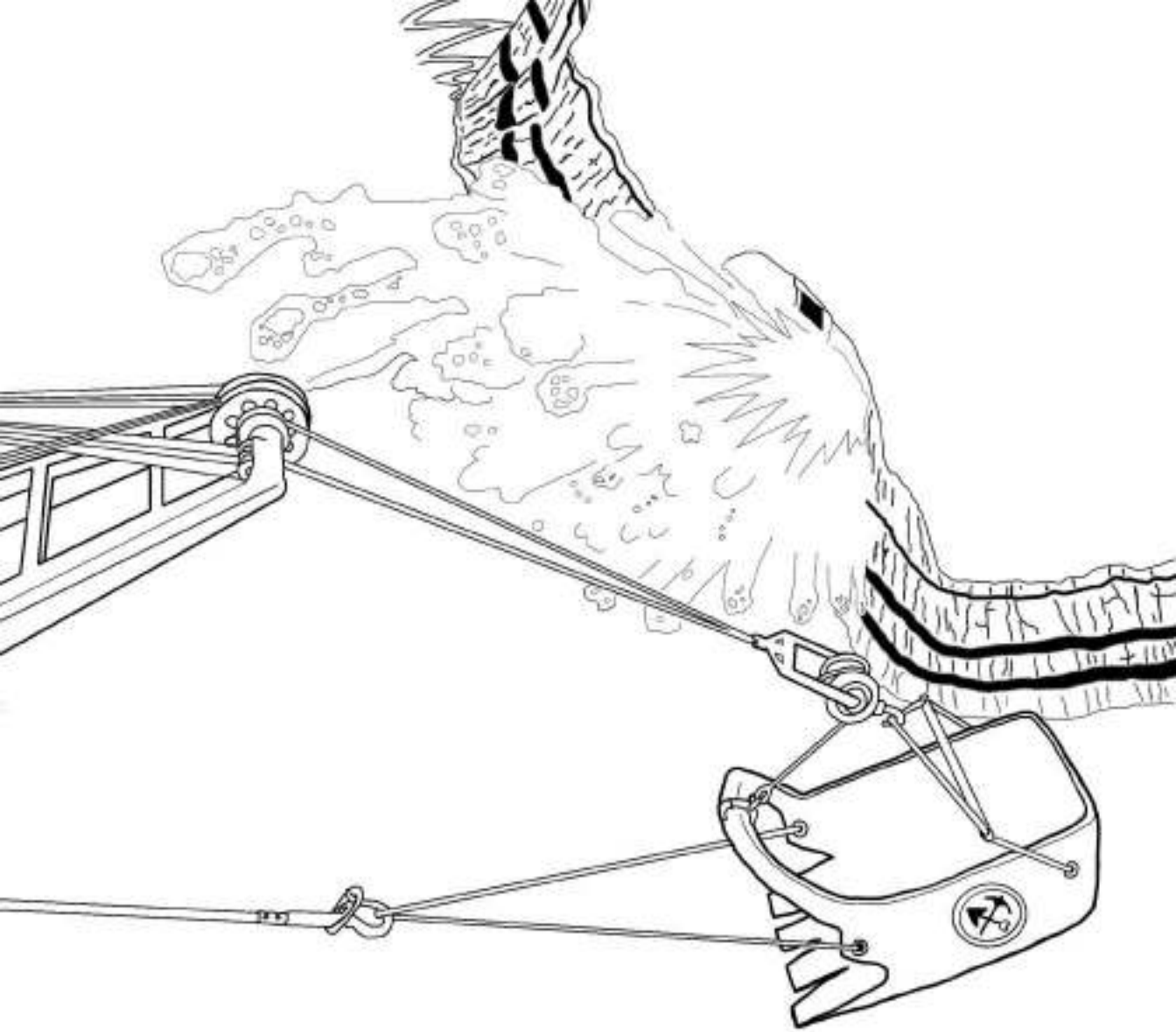
Working conditions were horrible in the mines, and striking miners sacrificed their homes – and sometimes their lives – in the struggle for better conditions.

But this time was also a time of celebration. Here, immigrant miners share stories and songs as they celebrate union victories, like healthcare and the long-awaited arrival of electricity in their community.

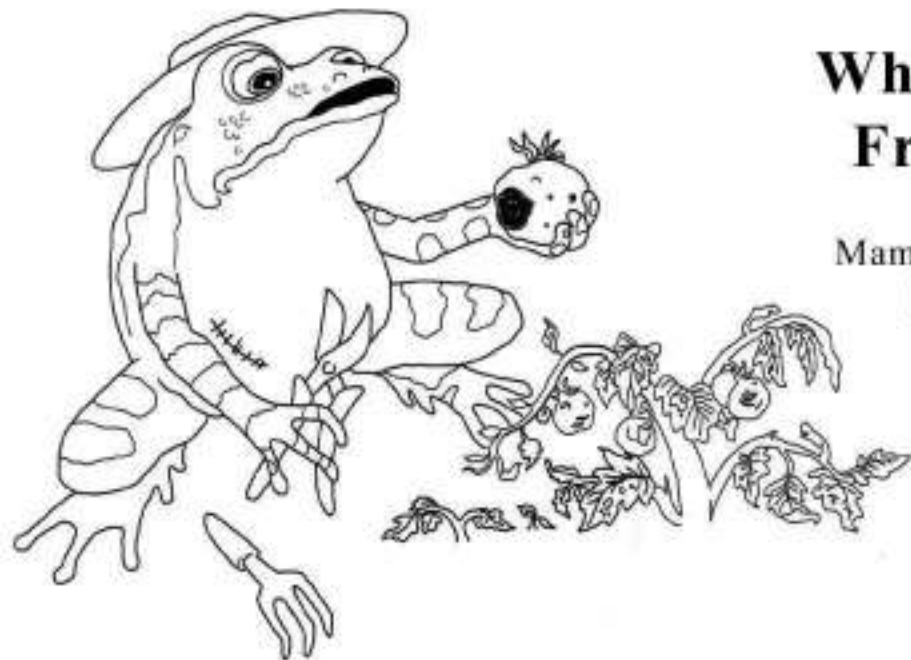
# What is Mountain Top Removal?



A dragline (like the 22 story one pictured above) is used to excavate the thin seams of coal that run flat through the mountains like icing between layers of a cake. This enormous machine only takes a few people to operate, which enabled the coal industry to eliminate the vast majority of the coal jobs in Appalachia. A typical dragline can use up to 6 megawatts of electricity to run – that's enough to power almost 4000 homes!



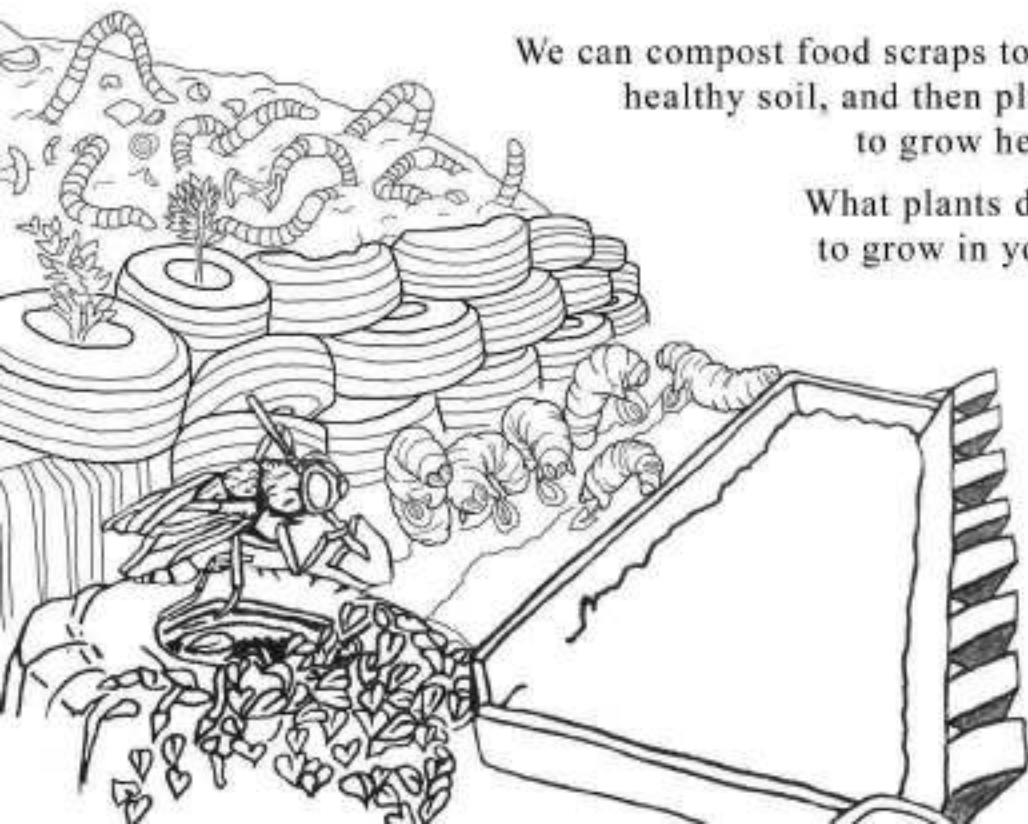
Mountain Top Removal is a type of strip mining that use explosives to blow the tops off mountains. This process destroys the soil, habitat, and critters above. The mountain chunks, called “overburden,” are dumped in nearby waterways, polluting them. The coal seams are then scraped using a dragline machine and the coal is taken away to burn for energy in other cities.



## Why is Mama Frog so sad?

Mama Frog's tomatoes have rotten on the vine, because of the pollution from the mines.

**Let's build her a raised bed garden!**



We can compost food scraps to make new, healthy soil, and then plant gardens to grow healthy food!

What plants do you want to grow in your garden?



# What are some other ways we can help Mama Frog?

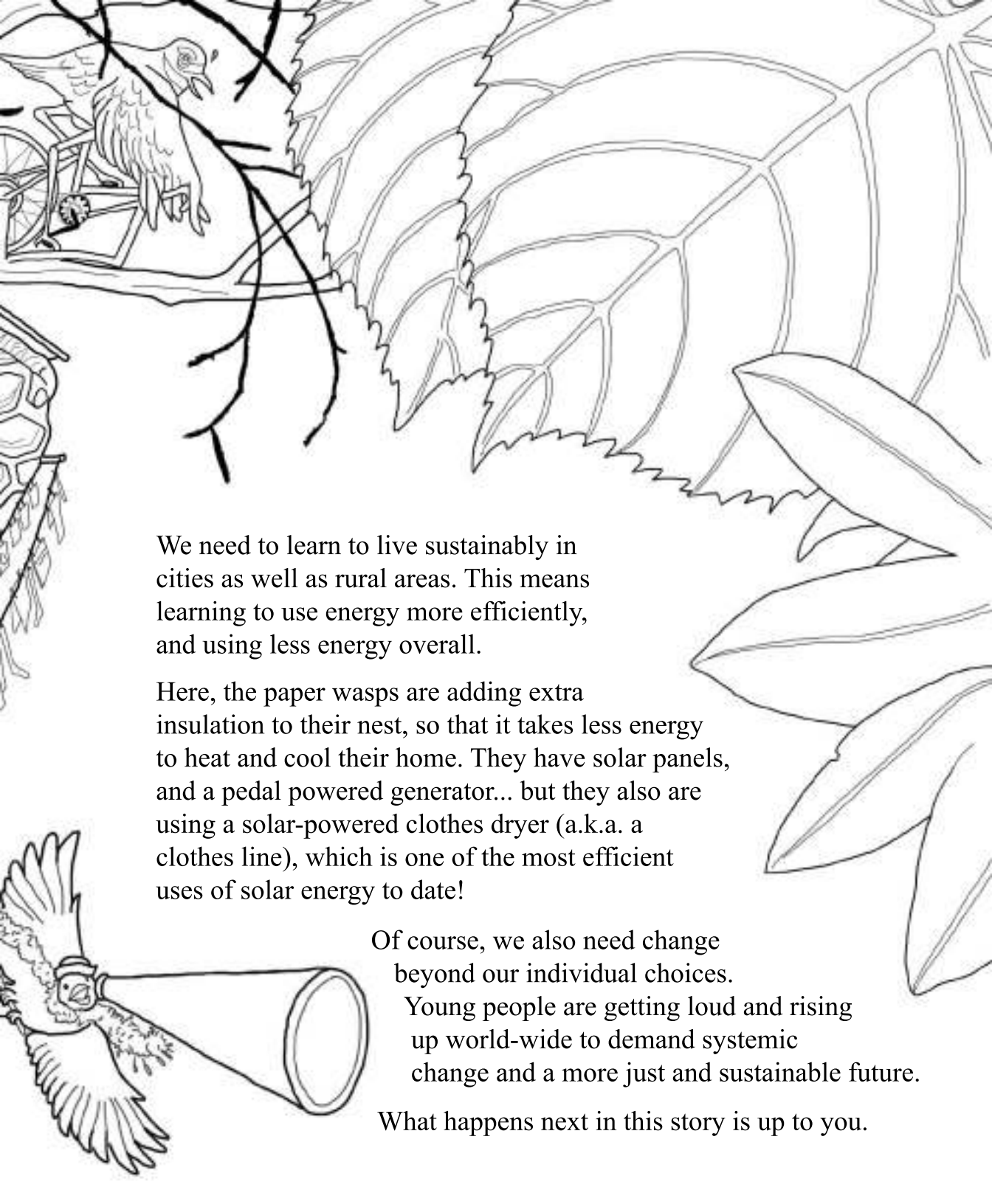
Rain water collection can help Mama Frog gather clean water for her garden.



Planting Cattails,  
Oyster Mushrooms,  
and other species  
can help absorb  
and remove  
toxins from  
the soil!







We need to learn to live sustainably in cities as well as rural areas. This means learning to use energy more efficiently, and using less energy overall.

Here, the paper wasps are adding extra insulation to their nest, so that it takes less energy to heat and cool their home. They have solar panels, and a pedal powered generator... but they also are using a solar-powered clothes dryer (a.k.a. a clothes line), which is one of the most efficient uses of solar energy to date!

Of course, we also need change beyond our individual choices. Young people are getting loud and rising up world-wide to demand systemic change and a more just and sustainable future.

What happens next in this story is up to you.



