

The home of life

Authors

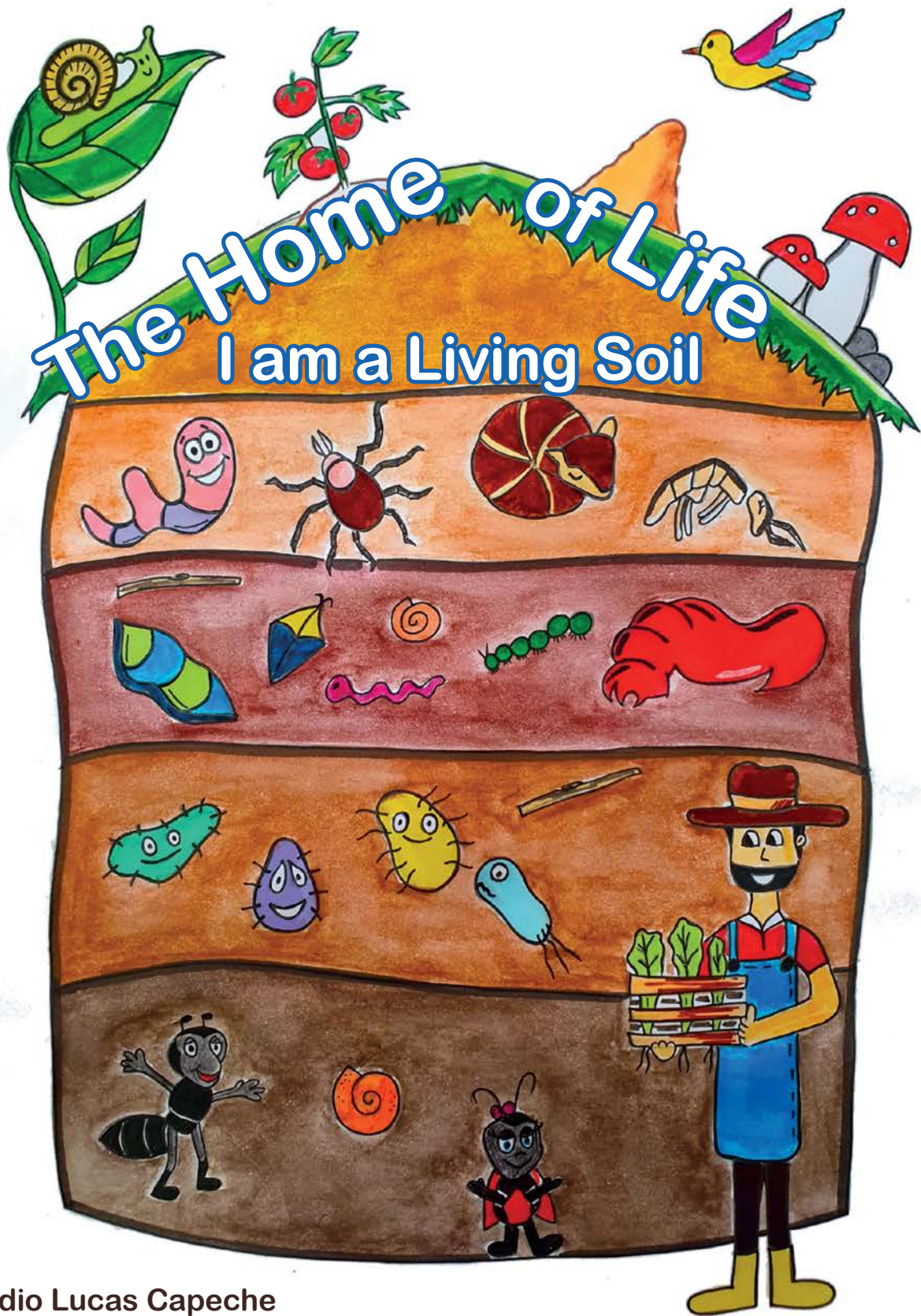
Julia Stuchi is a forest engineer, holding an M.Sc degree in Tropical Agroforestry as well as a doctorate in Biodiversity and Agroecology. Since 2011, she has worked at the Brazilian Public Agricultural Research Corporation (Embrapa providing knowledge exchange in environmental education, agroecology and public policies for the sustainable management of soil and water.



Claudio Capeche is an agronomist and holds an M.Sc degree in Soil Science. He has been a researcher at the Brazilian Public Agricultural Research Corporation (Embrapa) since 1990, working with transferring technologies for management and conservation of soils, water and biodiversity, recovery of degraded areas and education in soils. He has also been the coordinator of the Embrapa & Escola program since 1997.

Milena Pagliacci is a Brazilian plastic artist, publicist and art therapist. She studied art in Florence, Italy and frequently participates in art exhibitions and competitions. She is also a visual facilitator in remote and face-to-face events, and teaches classes for adults and children in her atelier in São Paulo.

Embrapa Soils is an international reference for tropical soils and has a mission to enable research, development and innovation in sustainable agriculture, providing ongoing benefits to Brazilian society.




Claudio Lucas Capeche
Julia Franco Stuchi
Milena Pessoa Pagliacci

All living beings need a home to live in. The ground, also called SOIL, is our home.

There are very tiny animals that live at the top and in the soil. They have many different sizes, colors, and shapes.



We are going to show you what we do to make the soil full of life and our planet beautiful and healthy.



Did you know that we are the soil caretakers? And that the soil is the Home of Life of many living beings?

We eat everything that is above and inside the soil! Yummy!!! Our food is a mix of leaves, sticks, plants, fruits and other little pieces... We are the SOIL BIODIVERSITY!

Our food is called ORGANIC MATTER. After we eat, we turn it into very good food for plants called HUMUS. Humus has lots of vitamins for plants to grow strong and healthy.

Nice to meet you! I'm a WORM. My work is very important to make the soil fluffier. Thus, plants can grow better because roots become stronger. I dig many paths in the soil with my mouth!



Hello, I'm a little ARMADILLO BALL. I am a friend of plants because when I help to produce the humus, plants grow more beautiful.



Hey, we are the COLLEMBOLANS. We are a gang of little animals that eat a little piece of everything inside the soil. Then, we help to turn it stronger.



Hi! We are the MITES and we also help to transform organic matter into humus. We leave the soil with a lot of good food for the plants and other animals.



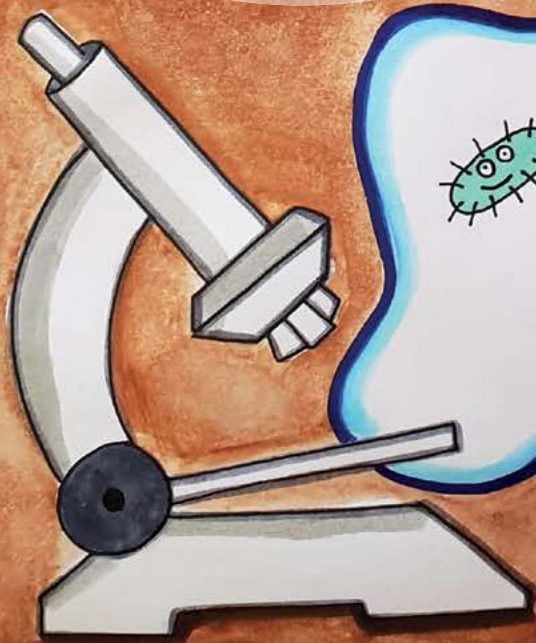
Hello! We are the MICROORGANISMS!

We are very, very, very small and you need the help of a microscope to see us.

We, the FUNGI, when we grow a lot, you can see us without the microscope, like mushrooms. We are the heroes of transformation.

We, the ALGAE, live stuck together on rocks and on trees, forming a community called lichens. We are messengers that indicate when the air is very polluted.

BACTERIA! Some of us make our homes (the nodules) in the roots of the plants called legumes: beans, peas, peanuts... We help these plants by giving them food..



I'm the SNAIL and this is my little friend, the SLUG. We move very slowly from plant to plant. We give rides to fungi, bacteria, and our other tiny friends, so they can go everywhere on the soil!

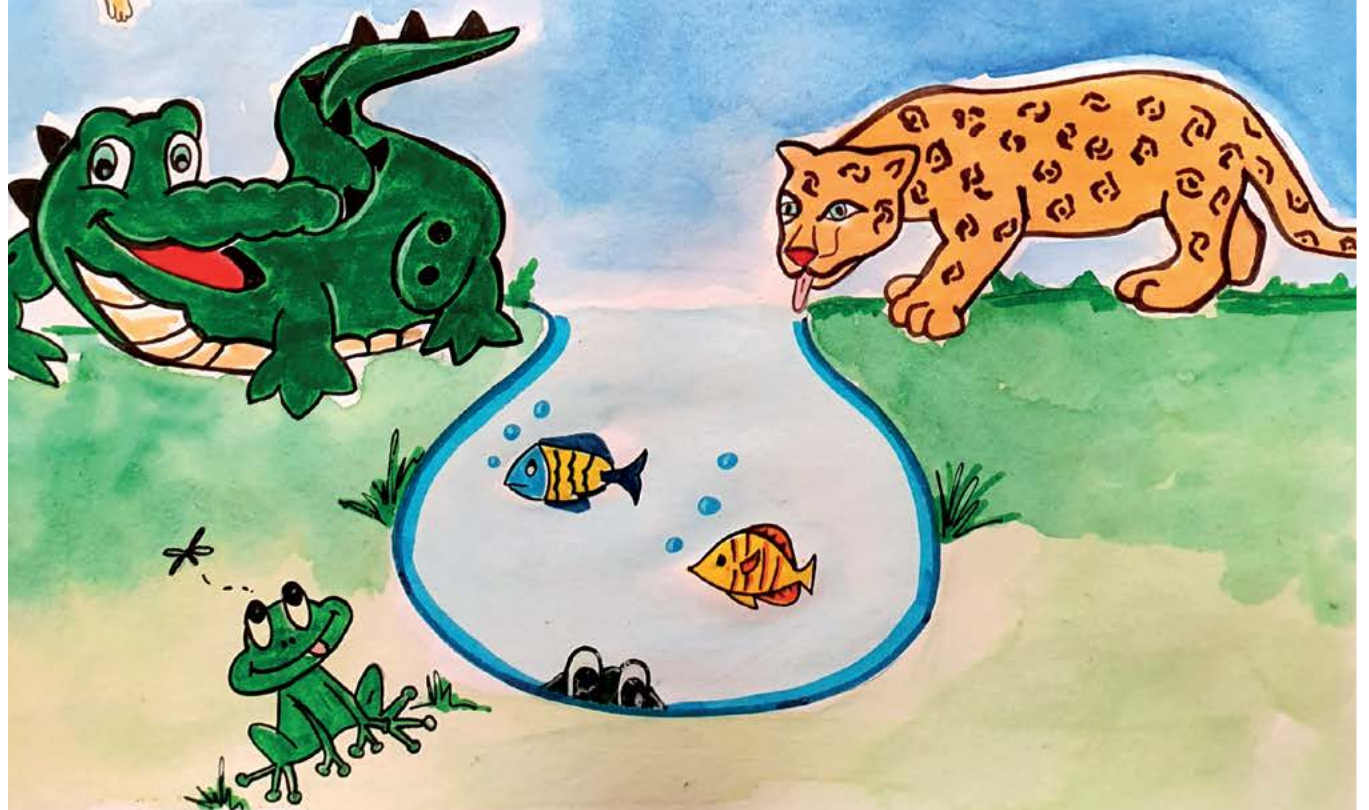
Hi, there! I'm the LAND COCKROACH. We help to transform the organic matter into delicious food for plants. We also make many little holes in the soil, allowing air to enter for the plant roots to breathe.

Hello! We are the gang of ANTS. We work and live together in the anthill. We transport little soil grains from the bottom to the top of the soil, forming little hills. We help the soil to become stronger.

As you could see, the job of our gang is very important because we make the soil softer, full of holes and with very small paths.

This job lets the plant roots breathe and grow better, looking for food and water. It also helps rainwater to enter the soil.

So, inside the soil, the water arrives where the rivers start! All the animals become very happy with all that fresh water that the soil produces in the springs.



With the job and collaboration of all in our gang, the soil gets strong and healthy!

And, since THE SOIL IS THE HOME OF PLANTS, they can grow much stronger to produce the all the food we eat!

Have you ever seen, planted or harvested a corn, tomato, sugarcane, potato, rice, or yam plant?

Have you ever wondered about the work in the soil for you to have delicious food every day? So, whenever you eat, you also grow up and get stronger!



But for our gang to live in peace and take care of the soil, it needs to be protected.

Let's see how!

There are very, very, important people who work hard to take care of the soil, to plant and to harvest food: THE FARMERS!

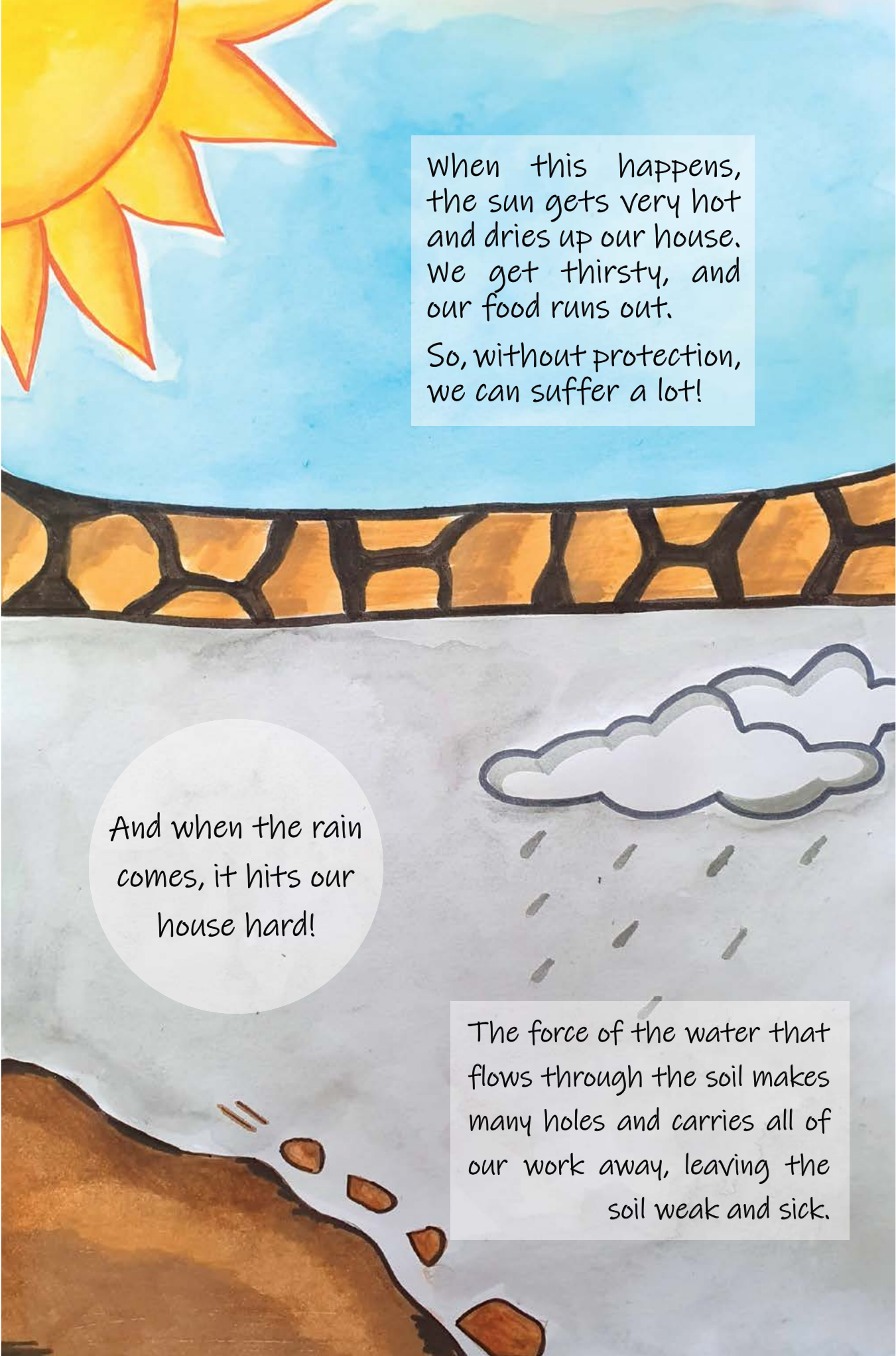
It is very important that farmers help take care of THE HOME OF LIFE, that we call SOIL.



So, whenever farmers plant something in the soil, it's not recommended to:

- Set fire to the top of the soil, because fires kill all our gangs and plants, and leave everything lifeless.
- Turn and make holes in the soil, because it messes with our house and our work.
- Leave the soil without plants, trees, or without our dear organic matter (dry leaves and sticks, remember?)





When this happens,
the sun gets very hot
and dries up our house.
We get thirsty, and
our food runs out.

So, without protection,
we can suffer a lot!

And when the rain
comes, it hits our
house hard!

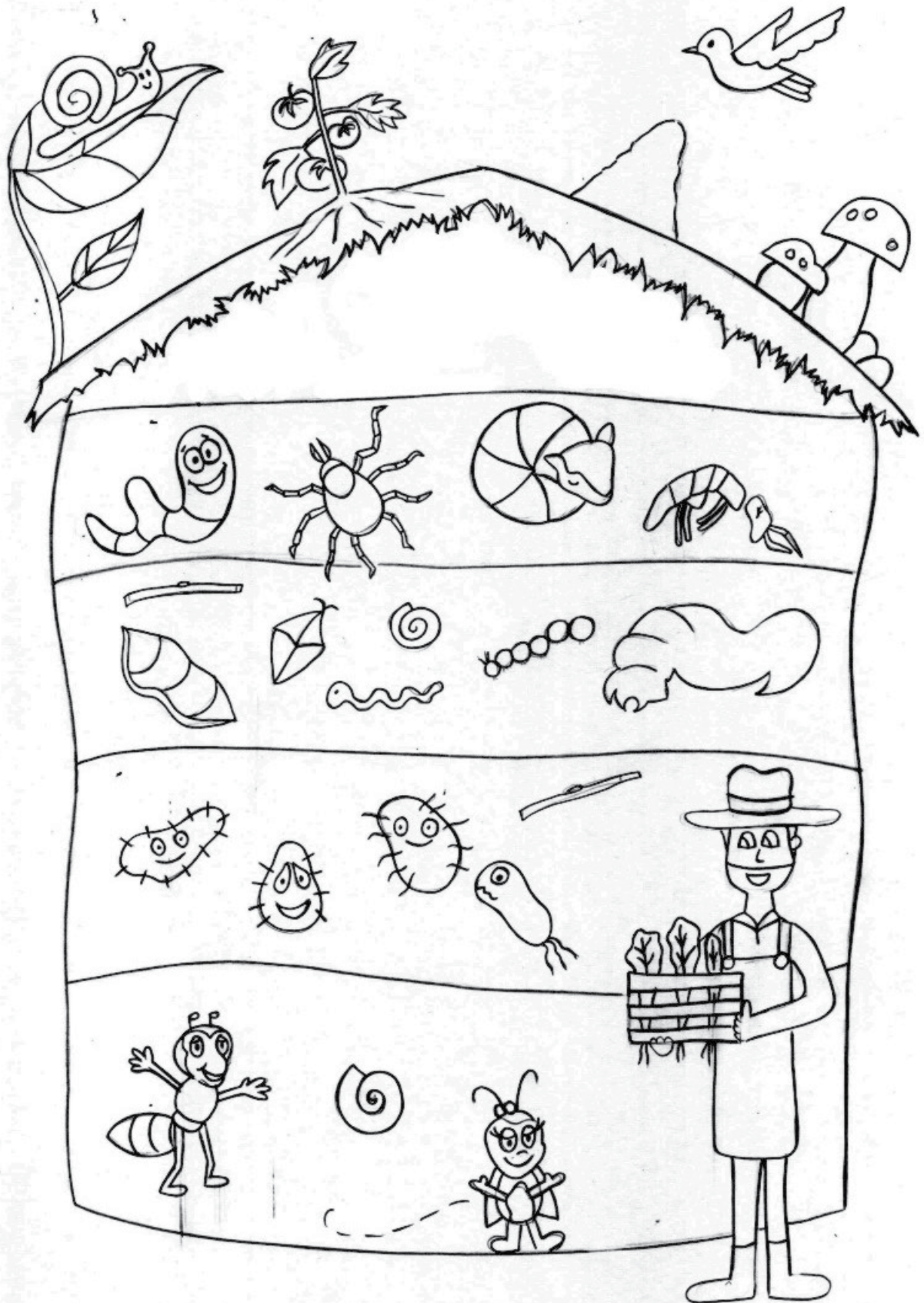
The force of the water that
flows through the soil makes
many holes and carries all of
our work away, leaving the
soil weak and sick.

When farmers take care of the soil, our gang is protected.
THE HOME OF LIFE is thankful and planet Earth is happy!
So our gang, humans, and all other living beings will have
food, water, clean air and much more to live healthier!!!



So, let's all take care of the
Home of Life – the Soil!!

Let's paint!!



This booklet is a simple way to approach, with this very special public, the importance of the beings that are part of the biodiversity of the HOUSE OF THE LIFE (the Soil) for our largest home, the planet Earth. Also, a way to celebrate with the children the World Soil Day (December 5).

**“KEEP SOIL ALIVE,
PROTECT SOIL BIODIVERSITY”**

