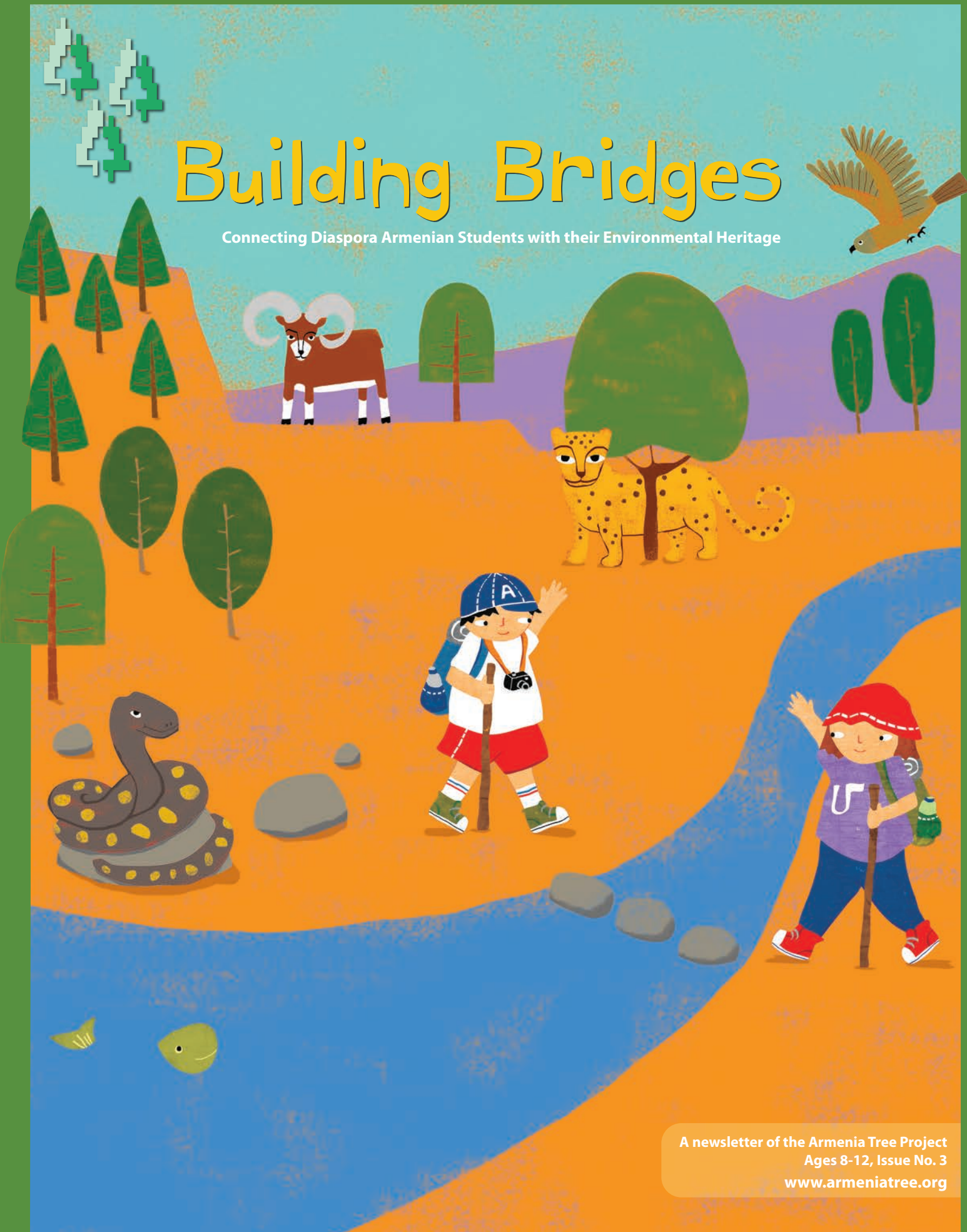


Building Bridges

Connecting Diaspora Armenian Students with their Environmental Heritage



A newsletter of the Armenia Tree Project
Ages 8-12, Issue No. 3
www.armeniatree.org



facts you didn't know about the environment in

1

ATP stands for Armenia Tree Project.

After a devastating earthquake in 1988, people in Armenia had to cut trees in cities and villages to keep warm during the cold winter months. In 1994, ATP started planting trees in Armenia to restore the forests that were being destroyed. Go to www.armeniatree.org to learn more !

2

70% of wood that is cut in Armenia is used for heating homes.

If this continues, Armenia could become a desert in about 20 years.



3

Less than 8% of Armenia's forests exist today.

5

ATP teaches the importance of taking care of the environment in EVERY region of Armenia.

4

ATP has planted over **4 million trees** since 1994!

6

ATP plants all kinds of decorative and fruit trees including wild apple, apricot, beech, ash, walnut and poplar.



Armenia

7

The animals on this page appear in the IUCN* Red List, which is an international listing of plants and animals threatened with **extinction**.

*International Union for Conservation of Nature



8



Photo: FPWC / Hrach Ghazaryan

The horns of mature male Armenian Mouflon are curved in almost a full revolution and can reach up to 6 feet in length.

It is estimated that only

5-7 leopards remain in Armenia.

9

11

The home of the Ishkhan, Lake Sevan, is the largest lake in Armenia, and one of the largest high-altitude alpine lakes in the world, at a height of about **6,350 feet above sea level**.

12

The **Armenian Mountain Viper** is collected for its **venom**, which is used as a blood-clotting agent in surgery.



Photo: WWF Armenia/A. Malkhasyan

10

The Caucasian Leopard

can run up to **36**

miles an hour,

leap distances of **20 feet**, jump **10 feet** straight up

and climb

50 feet up a tree.



13



The **Eastern Imperial Eagle** has a wingspan of up to **6.5 feet**.

WE ARE OUR FORESTS



HORNBEAM

ARMENIAN MOUFLON

PINE

POPLAR

Trees are important for many reasons. They help to filter the air and soil, control noise pollution, absorb rain, produce oxygen, provide shade, protect us from strong winds and make communities beautiful.

Forests help keep the air fresh and healthy. Green leaves absorb the gas **carbon dioxide** from the **air**. They use sunlight to change carbon dioxide and water into plant food. When leaves make plant food, they also make **oxygen**. The oxygen then mixes with the air. Most land animals need to breathe in oxygen from the air to stay alive.

The **roots** of trees help hold **soil** in place. When it rains, the roots suck up large amounts of water. When trees are cut down, the rain washes away the soil. This is called **erosion**. Without the roots, all the water runs into the rivers and can cause **floods**.

Deforestation refers to the cutting, clearing and removal of forests. Today many forests have been cut down or damaged in Armenia. **Botanists** agree that we must save the forests that remain. By saving the forests, we can save the **plants** and animals that live there. ATP helps do this by planting trees at three **nurseries** and replanting the hillsides in Armenia. This is called **reforestation**. Go to www.armeniatree.org and click on THE THREAT to learn more about deforestation in Armenia.

FOREST SEARCH!

Find the hidden words and circle them. They can be found in the text above highlighted in bold letters or next to the trees and animals on the page. They may be horizontal, vertical, diagonal and even backwards!

S T M A E B N R O H M L O W
D R A P O E L T V X I L E A
P B E E C H Q W R O Y D K L
O N A F L O O D S M I B B N
I X U T O K Y P O X X R U U
W P Y R Q R E R O S I O N T
M L P G S F E I G A H A S H
O A O L E E D S C V K B N N
U N P M Q N R E T Y U A R H
F T L L O I P I R A K J S H
L S A B E P I N E A T M T B
O N R R R E W Q E S O I O A
N A I R Z C P B S M T I O S
C W B O T A N I S T S N R N

WHERE'S THE KEY?

If you need help with this, or any other activity in this newsletter, go to www.armeniatree.org/buildingbridges to download the answer key.



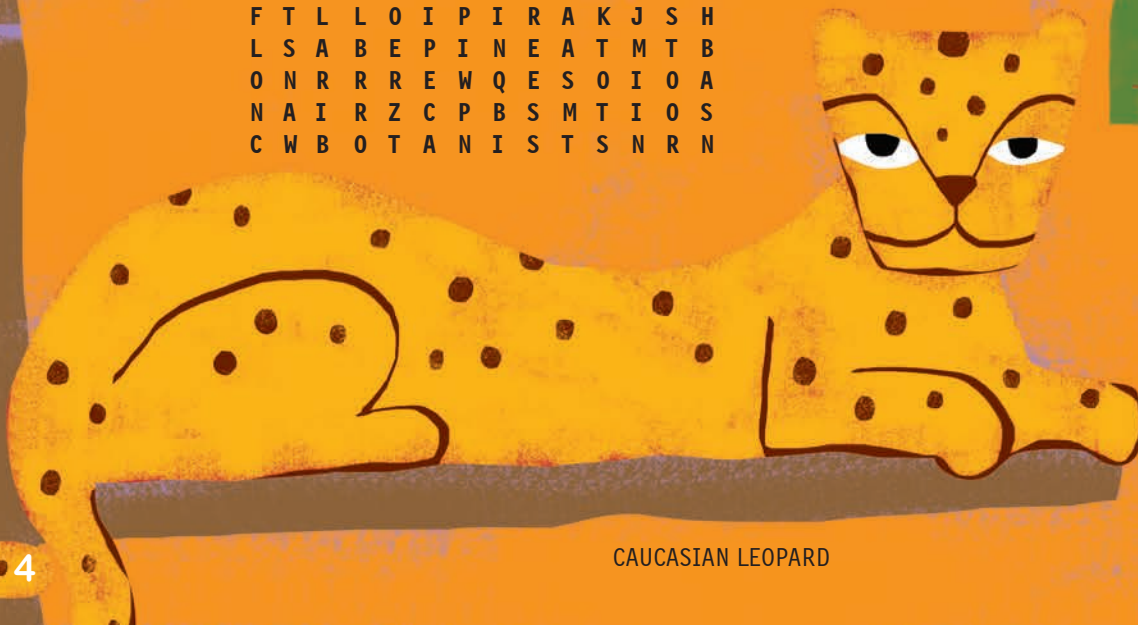
OAK



ASH



BEECH



CAUCASIAN LEOPARD

ANIMALS WITHOUT A HOME

Plants and animals are found everywhere on earth—in the air, on the land, underground, and in the water. Every living thing belongs to a particular kind of place, called its habitat. When people cut down trees to make way for roads and farms or when they use harmful chemicals that enter into the environment, they damage these habitats and destroy the **wildlife** that lives there.

Many plants and animals have disappeared completely from Earth. That is, they have become **extinct**, like the dinosaurs. Sometimes this happens naturally. But many species are now extinct because of humans. Destruction of habitat is the biggest threat to wildlife. It has made animals, such as the Armenian **Mouflon**, the Armenian Mountain **Viper**, the Caucasian **Leopard**, the Eastern Imperial **Eagle** and the Sevan **Trout** in Armenia, become endangered. You can learn more about endangered species in Armenia at www.caucasus-naturefund.org.



EASTERN IMPERIAL EAGLE



DID YOU KNOW?

The eagle supports the shield in the coat of arms of the Republic of Armenia. It represents power, courage, patience, wisdom, and nobility.

COOL FACT!

The nest of the Eastern Imperial Eagle is a huge structure, about 5 feet in diameter and 2 feet in thickness. Nest materials such as sticks, dry grasses and small green branches are carried by both adults, but the female arranges the interior. It takes 10-15 days to build the nest and the same nest is used for several years.



ARAM

MARAL

SCRAMBLED ANIMALS!

Unscramble the words below.

Hint: They are highlighted in bold letters in the text above.

NTCEIXT

LEIDIWLF

AELEG

UTORT

AOPLDER

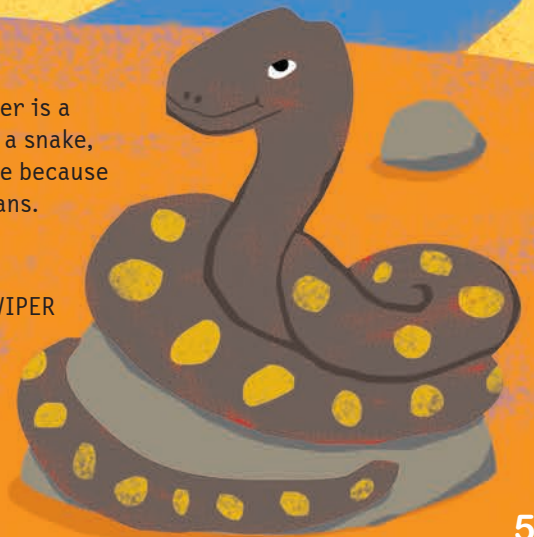
EVRPI

FUOMOLN

STOP!

The Armenian mountain viper is a venomous snake. If you see a snake, stop! The snake will not bite because it avoids contact with humans.

ARMENIAN MOUNTAIN VIPER



DON'T COME IN, THE WATER'S NOT FINE!

FERRUGINOUS DUCK

LESSER WHITE FRONTED GOOSE

BEWICK'S SWAN

ARMENIAN GULL

All animals and plants need a supply of clean water to survive. You may think we have plenty of water, but only a fraction of it is fresh water that we can use. Every day we pour harmful substances into our environment. This is called pollution. When pollutants such as oil and chemical wastes are poured into the water, they are soon carried away by the tides or by the flow of the river and are extremely difficult to remove.

As a river winds its way into the lakes and oceans, many different chemicals may enter its waters. Harmful chemicals may seep out of landfill sites where garbage is buried. Pesticides and fertilizers may drain into it from farmland. Sewage from local towns may be poured in as well. In most countries, sewage now has to be treated before it is emptied into rivers; this is not always the case in Armenia.

The large amount of trash and pollution in and around Lake Sevan endanger Ishkhan, the Sevan Trout. The Sevan Trout is also endangered because of overfishing and overdevelopment along the shores of the lake. There is also competition from species that were introduced to Lake Sevan that are not native to the lake such as goldfish, crayfish and the common whitefish that threaten the trout. In addition to all of these dangers, people do not clean up their trash along the lake.

Go to care4sevan.wordpress.com to read more about the pollution in Lake Sevan and efforts to prevent it.

GOLDFISH

COMMON WHITEFISH

CRAYFISH

ISHKHAN

LAKE CLEANUP!

Can you find the 8 objects that do not belong in Lake Sevan?

Oh no!

MAKE A DIFFERENCE: RECYCLE!

People have been creating more and more garbage—partly because there are more and more of us on the planet, and partly because we have more stuff than people ever had before. There are things to throw away now that weren't even invented 100 years ago; plastic bottles, takeout food containers, electronics...

Years ago, people used to leave their organic garbage lying around, this was smelly and unhealthy, but eventually it rotted away. Now lots of things are made of materials that don't rot, like plastic and polyester. So we bury our trash or burn it. Both options can create big problems for the environment and for people too. This is where recycling comes in.

FIND THE DIFFERENCE!

Aram and Maral have been busy recycling in Yerevan. Can you find the 6 differences between their bins?

Recycling means making use of garbage by breaking it down and turning it into something new. Recycling garbage is much better than burying or burning it, but it's even better to reduce the amount you have to get rid of in the first place. We can all be less wasteful by throwing less stuff away while it's still useful. It is also better to reuse things, either by getting them fixed, or by giving them away for someone else to use.

Trees are used to make paper.

Each ton of recycled paper saves 17 trees!!



Go to www.cleanuptheworld.org to learn more about waste and cleanups around the world!

Glossary

Botanist—a biologist who specializes in the study of plants

Deforestation—the removal of trees, most often due to human activity

Ecosystem—a system of living things interacting with their environment

Endangered species—a population that is so small, it is threatened to become extinct

Environment—the conditions surrounding plant, animal, and human communities

Erosion—the wearing away of the surface of the earth due to wind and water movement

Extinct species—a species that is no longer in existence

Habitat—the place where a plant or animal naturally lives or grows

Organic garbage—waste that came from living matter and that can decay

Pollution—the introduction of harmful substances into the environment

Recycling—processing used materials so that they can be used again

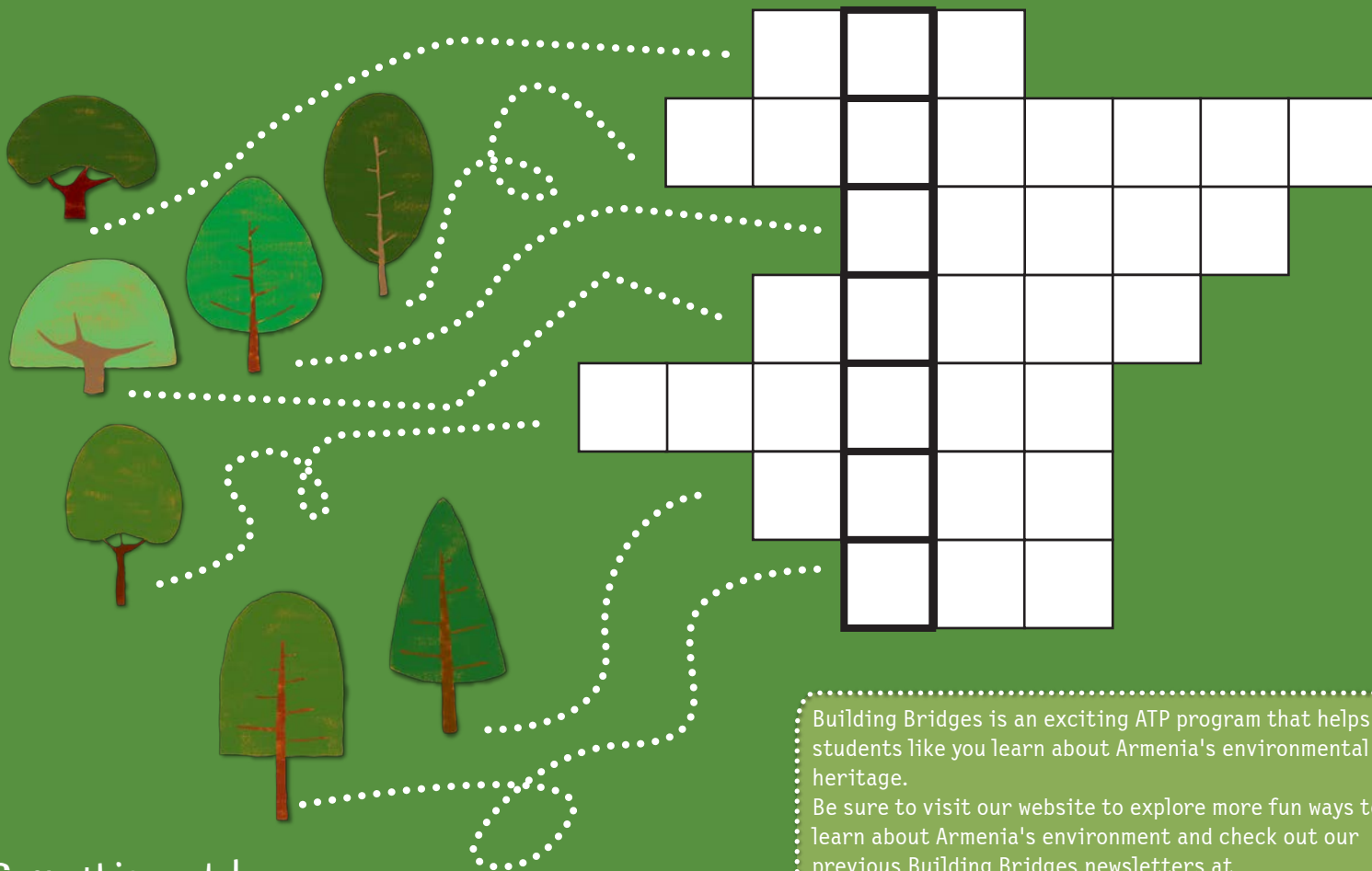
Reforestation—the process of replanting a forest that was once cut down

Species—a word used to categorize living things of the same kind

Tree nursery—where trees are grown from a seed in order to be transplanted to a forest once they have reached the right size

TREE PUZZLE

Search page 4 to find the 7 tree varieties and solve the puzzle!



Scan this code!



Building Bridges is an exciting ATP program that helps students like you learn about Armenia's environmental heritage.

Be sure to visit our website to explore more fun ways to learn about Armenia's environment and check out our previous Building Bridges newsletters at

www.armeniatree.org/buildingbridges.

You can tell students in Armenia about the environment around your home by participating in our interactive blog at www.armeniatree.org/bb/blog.



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Armenia Tree Project 65 Main Street Watertown, MA 02472 (617) 926-8733 (TREE) info@armeniatree.org