

## UNIT 7 Save the Planet

### A. LOGGING ON

#### 1. GOALS

In this unit:

You will use vocabulary related to the environment

You will practice the use of:

modals of necessity (e.g. We should recycle in order to protect the environment)

*wish* + past (e.g.) I wish we had a program of garbage disposal in my town)

*wish* + past perfect (e.g.) I wish I had known more about our national parks.

#### 2. VOCABULARY

**INSTRUCTIONS:** The following terms are related to the environment. With a classmate discuss which of these terms you are familiar to you, try to provide a definition or an example of each.

global warming	greenhouse effect	ozone layer	endangered species
rainforest	landfill	recycling	organic compost

#### 3. WARM UP

**INSTRUCTIONS:** Read the following definitions. Then drag the terms from the vocabulary exercise above that the definition refers to.

1. Treating things that have already been used so that they can be used again: \_\_\_\_\_  
RECYCLING
2. The problem of the gradual rise in temperature of the earth's atmosphere caused by an increase of gases, such as carbon dioxide in the air surrounding the earth, which trap the heat of the sun. \_\_\_\_\_ GREENHOUSE EFFECT
3. A mixture of decayed plants, food, etc. that can be added to the soil to help plants grow without using artificial chemicals: \_\_\_\_\_ ORGANIC COMPOST
4. An area of land where large amounts of waste material are buried under the earth: \_\_\_\_\_  
LANDFILL
5. The increase in temperature of the earth's atmosphere that is caused by the increase of particular gases, especially carbon dioxide: \_\_\_\_\_ GLOBAL WARMING

6. Located high above the earth's surface, it helps to protect the earth from the sun's harmful rays: \_\_\_\_\_ OZONE LAYER
  7. A group of animals and plants, etc. that may soon no longer exist: \_\_\_\_\_ ENDANGERED SPECIES
  8. A large area of land in tropical parts of the world that it is thickly covered with trees and that is characterized by heavy rain. \_\_\_\_\_ RAIN FOREST
- Adapted from Hornby, A.S. 2000. *Oxford Advanced Learners Dictionary of Current English*. Oxford: OUP.

#### 4. YOUR TURN

1. What is the name of the most famous rainforest in Costa Rica? Monteverde.
2. Do you know of any species that is now in extinction in Monteverde? The golden toad.
3. What percentage of the Costa Rican territory is under protection? 26%
4. What do you know about *Río Azul*, the landfill located in Tirrasas, Curridabat?
5. Where is the waste material in your town or city buried?

#### B. Turn it Up

##### 1. Pre-listening

**INSTRUCTIONS: Listen to the following audio selection. Click on the words that describe the sounds that you hear.**

wind tiger birds trees rain leaves monkeys insects

Source: *Sultry Tropical Rain*. © Outlet Book Company. Inc. 1986.

##### 2. While listening

**INSTRUCTIONS: Listen to the following selection about biodiversity in Costa Rica.**

Costa Rica has one of the major concentrations of biodiversity in the planet. For example, in its 51.100 square kilometers there are 12 life zones which include 12.000 plant species, around 850 bird species, more than 200 mammal species and approximately 300.000 insect species. There are also between 500.000 and 1 million species represented in Costa Rica. The country has at least 5% of the Earth's biodiversity which is found mainly in the tropical rainforest. For this reason, in a tropical country such as Costa Rica, where 60% of its territory is covered by forests, there must be a strong protection policy for the preservation of the natural resources. Of the 40.3% of the forest areas identified nationwide, 16.4% is within the Protected Wild Areas, and the remaining 24% is outside these areas. Contrary to what most people think, the largest part of the forests is not protected.

Adapted from *Opinión Ambiental* 3 (25) 2004, p. 3.

**INSTRUCTIONS: Draw arrows to match the characteristics with their percentages or numbers.**

Territory covered by forests	850-60%
Insect species	500.000 to 1 million-300
Protected areas	40.3%-16.4
Mammal species	51.100-280
Species represented	60%-500.000 to 1million
Unprotected areas	12-24%
Life zones	300.000-12
Identified forests areas	24%-40.3%
Plants species	16.4%-12.000
Percentages of Earths' biodiversity	280-5%
Bird species	5%-850
Country's territory in square kilometers	12.000-51.100 kms

### **3. Post listening**

**INSTRUCTIONS: Read this selection. Then with a classmate summarize the contents in oral form following the cues given at the end.**

#### **A Costa Rican Architect of Biodiversity Law**

As a young man, Jorge Cabrera Medaglia would walk with his friends around one of Costa Rica's rain forests, only a couple of hours' drive from his home in San José. Recalls Cabrera: "I saw tapirs and manatees, and all kinds of birds singing together as if they were part of the same orchestra." Inspired by those wonders, Cabrera became an environmental lawyer whose pioneering legislation on biodiversity is helping keep the orchestra of nature playing in Costa Rica and throughout the rest of Latin America.

Cabrera, who has also taught environmental law at the University of Costa Rica, holds the principle that "the only way to protect the forest is to let people use the forest." This means forming partnerships that link environmental protection with sensible use of biodiversity. Cabrera introduced the theory for the first time in 1996, with former colleagues Roxana Salazar and Alvaro López at Fundación Ambio, to provide ideas and advice on environmental issues. The trio's book *Biodiversity, Politics and Law in the Light of Social Development*, is a reference tool for any country trying to save natural resources.

Adapted from *Time*.



Now, with a classmate summarize the contents of the reading in oral form following the cues.

<b>Who?</b>	Jorge Cabrera Medaglia
<b>Profession?</b>	Environmental engineer
<b>Principle?</b>	The only way to protect the forest is to let people use the forest
<b>Meaning?</b>	Liking environmental protection with sensible use of biodiversity
<b>Colleagues?</b>	Roxana Salazar and Alvaro López
<b>Foundation's objective?</b>	Provide ideas and advice on the environment
<b>Book's objective?</b>	Save natural resources

#### 4. Pronunciation

**INSTRUCTIONS:** Put an accent / ' / on the syllable that gets the strongest stress on the words as you hear them.

biodiversité  
orgánic

mámmal  
spécies

ráinforest  
trópical

térritory  
extínction

envíronment  
résources

## C. System tools

### 1. Warm up

**INSTRUCTIONS : Discuss the following questions with your classmates.**

1. What should we do to convince people not to throw garbage in the streets?
2. Do we need to cut all the trees down in our forests?
3. What must we do to stop the killing of sharks in the Costa Rican Pacific?

### 2. Charts

<b>MODALS OF NECESSITY</b>
<p>The following modals imply necessity, but they can also imply obligation: <i>must, should, need to, have to ought to.</i></p> <p>Examples: We <b>must</b> protect our water reservoirs and wetlands. People <b>should</b> put the garbage away, that is, in the garbage bins, not the streets. The government <b>needs to</b> promote proper collection of garbage in homes. Costa Ricans <b>have to</b> pay taxes for city cleaning but still they always look dirty. Our country <b>ought to</b> remain a biodiversity bastion to stop the smuggling of species.</p>
<p>Notice: (1) Modals of necessity can also imply obligation: <i>I must study hard.</i> (2) The main verb does not take <i>-s</i> in the third person singular. NOT: He must comes. YES: Must he come? (3) <i>Do</i> is not used to make questions and negatives? NOT: Do we should visit InBio? YES: Should we visit InBio? (4) The past tense of <i>must</i> is <i>had to</i>: We <i>had to</i> photograph a rattlesnake from a distance. (5) The negative form of <i>need to</i> is <i>don't need to</i>, which means "It isn't necessary:" You <i>don't need to</i> know the names of all insect species in Costa Rica, just some.</p>

### 3. Practice

**INSTRUCTIONS: Ask a classmate the following questions. Ask him/her to include the modal of necessity in parentheses in the response and the corresponding verb.**

1. Have you called the Ministerio de Energía y Minas about the smell from the landfill in your town? (must call)  
No, but I \_\_\_\_\_ them as soon as possible. (must call)
2. When do bird catchers should bird catchers go hunting for the *mozotillo de montaña*? (should)  
They \_\_\_\_\_ catch this species of birds from November to February only.



3. Tomorrow it's going to be rainy and cloudy, so we will have the annual picnic inside.  
I wish the weather \_\_\_\_\_ hot and sunny. We could have the picnic outdoors.  
WAS
4. Nobody cares about the erosion of the soil in Orosi anymore. They forgot that this rainy season more floods could occur.  
I wish people \_\_\_\_\_ more about the danger of floods in Orosi.  
CARED
5. Quite often we see trucks carrying piles of wood. They are tearing down the mountains, but nobody does anything to stop deforestation.  
I wish I \_\_\_\_\_ something to stop deforestation.  
COULD DO
6. Some bird species face extinction because people catch them all year round.  
I wish people \_\_\_\_\_ birds only when catching is allowed by the law.  
CAUGHT

**3.2. INSTRUCTIONS: Complete the sentences with past tense wishes. Use the verbs in parentheses.**

Alberto, Gonzalo and Manuel regret that they didn't do certain things when they went to Quepos last summer.

1. Alberto is sorry that they were only lying in the sun during the day and partying at night.  
Alberto: I wish we(walk through) \_\_\_\_\_ through the Manuel Antonio National Park.  
had walked
2. Gonzalo is sorry that he didn't practice his English with American tourists.  
Gonzalo: I wish I (speak) \_\_\_\_\_ English with American tourists.  
had spoken
3. Manuel regrets that they didn't take some time to see Damas Island.  
Manuel: I wish we (visit) \_\_\_\_\_ Damas Island.  
had visited
4. Alberto is sorry that he missed the white-faced monkeys playing in the trees.  
Alberto: I wished I (see) \_\_\_\_\_ the white-faced monkeys playing in the trees.  
had seen
5. Gonzalo is sorry that they didn't bring his camera to Manuel Antonio..  
Gonzalo: I wish I (bring) \_\_\_\_\_ my camera to Manuel Antonio.  
had taken
6. Manuel regrets that they didn't spend a good time in Quepos.  
Manuel: I wish we (spend) \_\_\_\_\_ a good time in Quepos.  
had spent

#### 4. Your turn

**INSTRUCTIONS: Read each situation and write a sentence with the modal of necessity given in parentheses. Ask a classmate to read his/her sentence to you. Read yours to him/her. Justify your answer.**

1. One of your friends is going mountain hiking in the Chirripó. It's quite rainy there, and you notice that he/she is not wearing an umbrella. (must)  
THE WEATHER AT THE CHIRRIPO' IS QUITE RAINY. YOU MUST WEAR AN UMBRELLA.
2. Your friend and you are white river rafting at the Pacuare. You notice that you're friend doesn't want to wear a life jacket. He can have an accident if he falls into the water. (should)  
YOU SHOULD PUT ON A LIFE JACKET. YOU CAN HAVE AN ACCIDENT.
3. Your science class is going together with your teacher to visit the University of Costa Rica Lankester Garden in Paraíso, Cartago. . One of your classmates says that he/she is not coming because watching orchids is quite boring. (have)  
YOU HAVE TO COME TO THE LANKESTER GARDEN. THIS IS A GREAT OPPORTUNITY TO LEARN ABOUT NATIVE ORCHID SPECIES OF COSTA RICA.

#### D. Scan it

##### 1. Pre reading

**INSTRUCIONES: Answer the following questions. Work with a classmate.**

1. What percentage of the Costa Rican territory is comprised of wild protected areas? 26%
2. Do you know where these protected areas are located?

Palo Verde:	Bagaces, Guanacaste
Carara:	Jaco Highway, Central Pacific
Hitoy Cerere	La Estrella Valley, Limón
Tapantí	Orosí, Cartago

3. Can you name the 7 types of wild protected areas that exist in Costa Rica?  
Let us help you: one of the types, and actually the most common one, is national parks.  
So, do you name the names of the other 6 types of protected areas?

- (1) Wetlands
- (2) Wildlife Refuges
- (3) Biological Reserves
- (4) Forest Reserves
- (5) International Parks
- (6) Absolute Natural Reserves



## 2. While reading

### NATIONAL PARKS: FOUNTAINS OF LIFE!



The objective of national parks is to protect and preserve both unique natural and cultural areas. These parks have amazing features of national and international interest and contain vivid examples of the main areas of the country, for instance, rain, dry and cloud forests, bleak plateaus and wild fauna which sometimes runs the risk of extinction.

National parks are also quite attractive for tourists, and as such, they have recreational and educational use. Most importantly, they preserve water sources because most of them have riverbeds that supply water to cities. They contribute as well to the development of agriculture, the cattle industry and hydraulic systems that greatly contribute to the production of hydraulic energy. The water from national parks saves the country large amounts of money which would otherwise be spent on oil products.

National parks also provide shelter for plant species, prevent soil erosion and clean the air. In addition, national parks protect different types of places—pre-Colombian monuments for example—which possess a great cultural and historical value for Costa Ricans. Many of these places reflect the social, technological and cultural changes that our ancestors experienced.

National parks serve as open-air laboratories and classrooms for both national and international scientists. Their findings help us learn about natural processes and invite us to appreciate Nature and participate actively in her conservation. This is a way to leave a “genetic heritage” to those who will be working with food production in the future.

In sum, national parks are quite beneficial from many points of view. Understandably, environmentalists fight for the conservation of these protected areas. They provide ample grounds for their work, make the country beautiful and admired and give a boost to our economy. Indeed, national parks are the country’s best natural treasure.

Spanish text modified and translated from *Opinión Ambiental*, Año3, No. 25, 2005, pp. 4-5.

**INSTRUCTIONS: Click yes or no to indicate which of the following questions can be answered with information from the above reading on national parks.**

1.  Yes  No What areas do our national parks consist of? yes
2.  Yes  No How many bird species live in our national parks? no
3.  Yes  No How is water from the parks transformed into hydraulic energy? no

4.  Yes  No In what ways do the parks contribute to the country's economy? yes
5.  Yes  No Why are national parks considered open-air laboratories? yes
6.  Yes  No What kind of work do environmentalists carry out in the parks? no

### 3. Post reading

**INSTRUCTIONS: Read the following excerpt from a biography of Chief Seattle Then discuss with a classmate the connection between the quotes by Chief Seattle with today's concern for the care and protection of the environment.**

**Chief Seattle** or **Sealth** of the [Suquamish](#) and [Duwamish Native American](#) tribes, was born around [1786](#) on Blake Island in [Washington state](#), and died [June 7, 1866](#) on the Suquamish Reservation at Port Madison (now [Bainbridge Island, Washington](#)). His father, Schweabe, was a noble of the Suquamish tribe, and his mother was Scholitza of the Duwamish. [Seattle, Washington](#) was named after him.

Chief Seattle was well known for his concern for Nature, the animals, the trees and the land. The following quotes are usually attributed to him:

“You must teach your children that the ground beneath their feet is the ashes of our grandfathers. So that they will respect the land, tell your children that the Earth is rich with the lives of our kin. Teach your children what we have taught our children, that the Earth is our mother. Whatever befalls the Earth befalls the sons of the Earth. If men spit upon the ground, they spit upon themselves.”

“This we know: the Earth does not belong to man. Man belongs to the Earth. This we know: all things are connected like the blood which unites one family. All things are connected.”

“Whatever befalls the Earth befalls the sons of the Earth. Man did not weave the web of life—he is merely a strand in it. Whatever he does to the web, he does to himself.”

## G. Type it up

### 1. Pre writing

**INSTRUCTIONS: Answer the following questions.**

1. What are the major environmental problems in Costa Rica?
2. Is there an organization or institution that cares for environmental problems in your town?
3. What kinds of things is this institution doing to fight pollution, for example?
3. Have you participated in an activity to protect the environment?

## 2. Writing

**INSTRUCTIONS:** Write a composition in which you refer to the air pollution in Costa Rican cities. Give details and facts about the problem and offer one possible solution.

## 3. Post writing

**INSTRUCTIONS:** Be prepared to give an informal talk in front of the class. Tell your classmates about the problems and the solutions that you discussed in your composition. Also, be prepared to answer your classmates' questions about your topic.

## F. Logging off

### 1. Team Project for Unit 7

**Objective:** Learn what some people are doing to protect the environment.

**Product:** You are going to give a speech in front of the class in which you are going to talk about “the heroes and heroines of the Earth” and the wonderful things that they are doing in different parts of the world in order to protect the environment. Refer to (1) their country of origin, (2) the projects that they are working on, (3) and the component(s) of Nature that is/are benefiting from their work.

**Dissemination:** Speech in front of the whole class. With a team, you will create and present the project.

<b>Roles</b>	<b>Job Description</b>	<b>Student's Name</b>
Student 1 <b>Leader</b>	Sees that everybody uses English Sees that everybody participates Presents the product	
Student 2 <b>Secretary</b>	Writes information about project	
Student 3 <b>Designer</b>	Designs layout and adds artwork	
Student 4 <b>Assistant</b>	Helps secretary and designer with their work	

### *Steps*

1. Choose roles for each member of your team. Give the project a name.
2. In your group, decide what you are going to do and how you are going to present the information.
3. Create the text for your section according to your role.
4. Create artwork for your section.
5. Put everything together.
6. Present your project to the class.

## 2. Surfing the Net (icon)

Surf the net using

<http://www.time.com/time/reports/environment/heroes/heroessgallery/0%2C967%2Cearle%2Ccoo.html>

to find information about “the green heroes and heroines.” See why they are honored on this website, learn about their causes and get a description of their visions for the planet’s future.

<b>Other Internet Address</b>	http://
<b>Topic</b>	
<b>Information found</b>	

## PAIR UP AND WORK

**Situation A:** You are coming back from Jacó Beach to San José by bus. A boy/girl sitting next to you is constantly throwing garbage (plastic bags, cans of pop and napkins) through the window. Convince this person of the damage he/she is making to the environment. Disagree with the person’s reasons for this behavior.

**Situation B:** You’re coming to San José from Jacó Beach. You are throwing plastic bags, cans of pop and napkins. The person next to you tells you that you are damaging the environment. But you are going to tell him/her two reasons to do this: (1) everybody in this country does the same, and (2) a little garbage is not going to cause the environment any harm.

## CULTURE NOTE

According to a study conducted by scientists and students from the National University at Heredia (UNA), 75% of San José’s air pollution comes from the exhaust pipes of the vehicles that run along the city’s crowded streets. Also, the pollution is concentrated in certain parts of San José during peak hours: the San Juan de Dios Hospital, the Metropolitan Cathedral and Barrio México. The study also showed that air pollution in San José has worsened due to the growing number of vehicles entering the city and the inadequacy of San José’s streets to handle them. The number of cars in Costa Rica has doubled, and it reached nearly 1 million in 2005. Consequently, 45% more petroleum is consumed than 10 years ago—mostly by motor vehicles. The National University air-quality studies programmed has been monitoring pollution levels in San José since 1993 with the help of two monitoring stations.

Adapted from Goodier, R. Growing Number of Cars Increases Air Pollution. *The Tico Times*. 5 Nov 2004, p. 17.

# GLOSSARY

**biodiversity:** a large number of animals and plants which make a balanced environment

**endangered species:** species which are in a situation in which they could be harmed or damaged

**environment:** the natural world in which people, animals and plants live

**extinction:** a situation in which a plant, animal or species no longer exists

**garbage dump:** a place where waste or garbage is taken and left

**global warming/greenhouse effect:** the increase in the temperature of the earth's atmosphere caused by gases such as carbon monoxide in the air surrounding the earth

**rain forest:** dense forest in tropical parts of the world that have a lot of rain

**recycling:** the treatment of things that have been used so that they can be used again

**ozone layer:** a layer of ozone high above the earth's surface that helps to protect the earth from the sun's harmful rays

**waste:** material that is no longer need and is thrown away

## Review of Unit 7

### 1. VOCABULARY

**INSTRUCTIONS:** Put a check mark (✓) in the box to tell what you can see or touch.

<b>ENVIRONMENTAL TERM</b>	<b>I can see or touch it</b>	<b>I cannot see or touch it</b>
Global warming		✓
Endangered species	✓	
Organic compost	✓	
Greenhouse effect		✓
Rainforest	✓	
Ozone layer		✓

## 2. GRAMMAR

### 2.1. INSTRUCTIONS: Write sentences with *I wish* (present).

1. The animals in this zoo live in very poor condition.  
I wish \_\_\_\_\_.  
I WISH THE ANIMALS IN THIS ZOO DIDN'T LIVE IN VERY POOR CONDITIONS.  
I WISH ..... LIVED IN BETTER CONDITONS.
2. Many roads are so full of potholes that tourists find it difficult to get to many attractions.  
I wish \_\_\_\_\_.  
I WISH THE ROADS WERE GOOD/WEREN'T SO FULL OF POTHOLES
3. Many people throw garbage on the beach.  
I wish \_\_\_\_\_.  
I WISH PEOPLE DIDN'T THROW GARBAGE ON TH BEACH.  
I WISH PEOPLE PUT THE GARBAGE IN ITS PROPER PLACE.
4. A lot of air pollution in our cities is produced by buses.  
I wish \_\_\_\_\_.  
I WISH BUSES DIDN'T PRODUCE SO MUCH AIR POLLUTION:  
I WISH THERE WASN'T SO MUCH AIR POLLUTION IN OUR CITIES.
5. Many loggers are cutting trees down indiscriminately.  
I wish \_\_\_\_\_.  
I WISH LOGGERS WEREN'T CUTTING DOWN TREES INDISCRIMINATELY.  
I WISH WE COULD KEEP OUR TREES.

### 2.2. INSTRUCTIONS: Shirley has heard a lot about the Monteverde Reserve, but she has never been there. She makes wishes concerning the place and its fauna and flora. Make sentences using *wish* + the past perfect.

1. Thousands of tourists visit Monteverde today. (visit)  
Shirley wishes she \_\_\_\_\_ years ago when the place was less crowded. HAD VISITED
2. The golden toad cannot be seen in Monteverde today. It got extinct some years ago. (see)  
She wishes she \_\_\_\_\_ the golden toad when it was still visible. HAD SEEN
3. The hotel industry in Monteverde is flourishing, so accommodations are more expensive. (go)  
She wishes she \_\_\_\_\_ to Mondeverde when hotels weren't so expensive.
4. The nearby town of Santa Elena de Guacimal became noisy, and stores abound. (visit)  
She wishes she \_\_\_\_\_ Santa de Elena de Guacimal before the place got so famous.
5. Nowadays there aren't so many Quaker hostels and restaurants in the area. (be)  
She wishes she \_\_\_\_\_ able to try the healthy food made by the Quakers.

# SELF ASSESSMENT UNIT 7

In this unit you have learned vocabulary related to the environment. Rate your comfort level.

## *Skills*

- I know what the meaning of different environmental terms.
- I can understand modals of necessity and use them in sentences.
- I can make wishes in the present and past tenses.
- I can talk identify the sounds of different animals by listening to their call.
- I can refer to biodiversity in Costa Rica by listening to a selection about it.
- I can talk about a famous environmentalist by listening to his biography.
- I can put the stress on the right syllable of some “environmental” words.
- I can answer questions about protected areas of Costa Rica.
- I can identify different national parks of Costa Rica.
- I can refer to the concern of a Native American for the environment.
- I can have write about pollution in Costa Rica and offer solutions.

## *Self reflection*

1. What was the most useful thing you learned in this unit?

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2. How will this help you in real life?

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