

ECOSYSTEMS & SPECIES

The Web of Nature

The Foundations of Science

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WORKBOOK

TAN Books
Gastonia, North Carolina

Ecosystems & Species: The Web of Nature Workbook © 2023 TAN Books

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***“Where were you when
I laid the foundation
of the earth?”***

–Job 38:4



CONTENTS

A Note to Parents.....	VIII
Chapter 1: Ecology and Ecosystems: Studying the Organization of Nature	1
Chapter 2: Adaptations: How Organisms Deal with Extreme Temperatures	9
Chapter 3: Adaptations: The Challenges of Water Balance.....	19
Chapter 4: Adapting to the Environment: How Populations Change over Time	27
Chapter 5: Natural Selection: How Populations Evolve and Change	33
Chapter 6: Population Biology: How Population Size Changes over Time.....	39
Chapter 7: Competition: Conflicts, Contests, and Battles in Nature	47
Chapter 8: Exploiting Other Species: Predation, Herbivory, and Parasitism	57
Chapter 9: Teamwork in Nature: Social Groups, Cooperation, and Mutualisms.....	63
Chapter 10: Communities: Food Webs, Connections, and Cascades	71
Chapter 11: Biological Communities and Biodiversity	81
Chapter 12: Ecosystems: Finding Balance within Communities and Environments	87
Amazing Facts about Ecosystems and Species.....	94
Key Terms	99
Answer Key	104

A NOTE TO PARENTS

Thank you for using *The Foundations of Science* series to educate your child about God's wonder-filled world of science! Before diving in, make sure to read these brief notes.

WORKBOOKS' PURPOSE

The workbooks in *The Foundations of Science* series are meant to be a companion to the texts, a simple tool you can use to ensure your child comprehended the material. But it's also supposed to be fun! The exercises should not feel like a test. Consider letting them use the text as they answer questions since we just want them to understand the main concepts and remember some of the things they have learned. (We are not trying to stump them!) Younger students especially may need a little "hand-holding" to get some of the answers, but that's okay, and is even encouraged.

TARGET AGE

The workbook is perfect for middle elementary-aged students, but children as young as first grade or as old as fifth can engage with it. There are enough activities that not every one should be done, and the age of the child can be used to determine which are completed. For example, coloring pages can be used for younger students, while older children may skip those; conversely, younger students may skip some of the personal reflection short answers, while the older ones may be expected not only to answer them but to write good and complete sentences. Please cater the workbook to your family's needs.

TYPES OF ACTIVITIES

Most chapters utilize a substantive activity (Matching, True/False, Short Answer, etc.), along with something fun, such as a puzzle, word search, coloring page, or arts and crafts. There are also some personal reflection exercises, and most chapters include a question or activity that ties what they studied in that chapter back to the Catholic faith.

MY SCIENCE JOURNAL

Every chapter begins with a “My Science Journal” spread. Here the students are encouraged to take notes as they read the text, write down questions they have, and list the most interesting thing they learned in that chapter, or what they enjoyed the most. They can also log things they saw in nature that week (and it does not have to be things that relate to that week’s content). This is highly recommended to complete, as it not only helps them comprehend the content better but allows parents to assign a writing exercise as well.

ANSWER KEY

While many of the exercises are subjective and answers will vary, there are also plenty of objective answer exercises that will require grading. An answer key is provided in the back of the book for your use and convenience. If you like, have a conversation about honesty and integrity with your child as you teach them not to peek in the back.

KEY TERMS AND AMAZING FACTS ABOUT ECOSYSTEMS & SPECIES

The Key Terms and Amazing Facts about Ecosystems & Species found in the text are included here as well. Consider making flash cards with the terms to test your student’s knowledge and retention, and let your child sit and relax as they read the facts; seeing them all at once, rather than buried in the text, may help them remember all the fun things they have learned.

WE ARE HERE TO HELP!

We hope we have provided you with everything you need, but if not, don’t hesitate to reach out to your friends at TAN Books with any questions you might have.



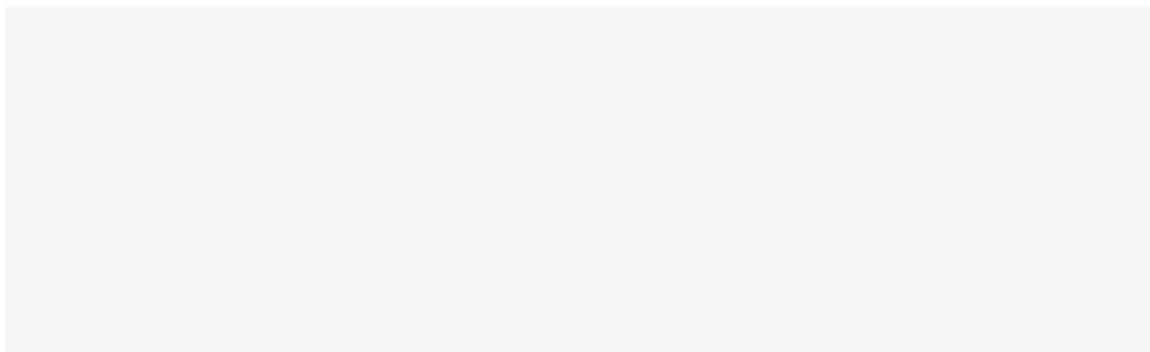
A black and white photograph of a misty landscape. In the foreground, there is a field with some small, bare trees. A river or stream flows through the middle ground, reflecting the trees and the mist. The background is filled with more trees, some of which are partially obscured by the mist. The overall atmosphere is serene and quiet.

CHAPTER

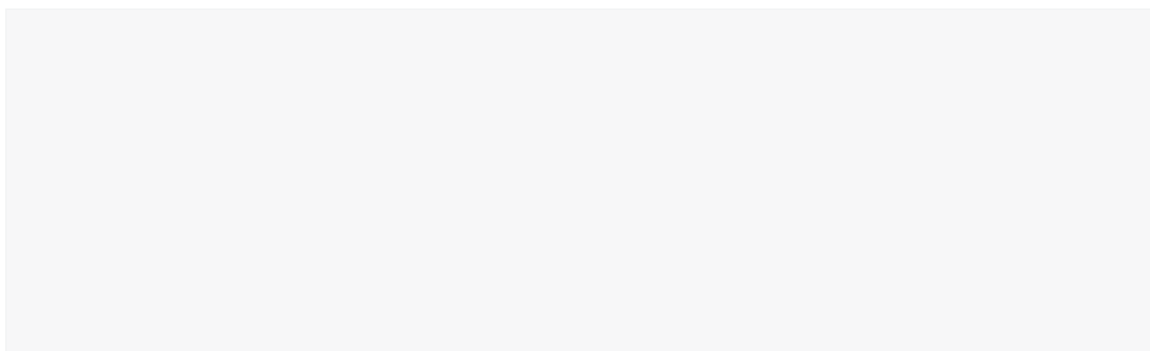
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ECOLOGY AND ECOSYSTEMS
Studying the Organization of Nature

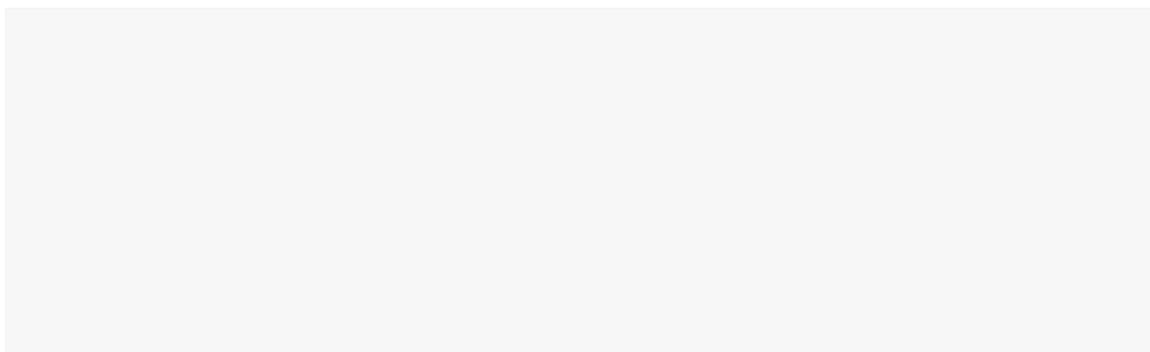
MY FAVORITE PART OF THIS CHAPTER WAS:



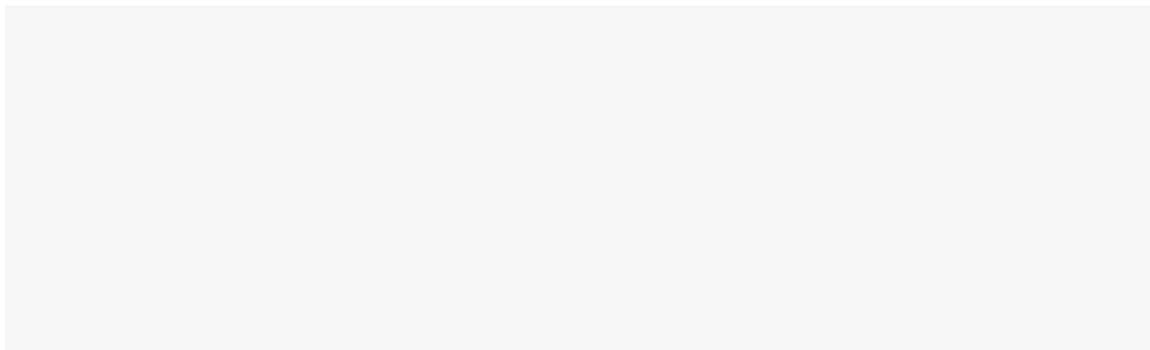
ONE NEW THING I LEARNED WAS:



SOME QUESTIONS I WANT TO ASK ABOUT THIS CHAPTER ARE:



ONE INTERESTING THING I SAW IN NATURE THIS WEEK WAS:



In the box below, define the science of ecology. Explain why this chapter is called “The Organization of Nature.”

NATURE'S LEVELS OF ORGANIZATION

In the text, we learned that ecologists organize nature into levels of organization, from the smallest subset to the largest. Those levels are listed below in random order—put them in order from the smallest to the largest. As you write in each word, have a discussion about what the word means in your own words.

**Biomes, Individuals, Communities, Species,
Populations, Biosphere, Ecosystems**

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

FILL IN THE BLANK

Use the word bank to complete each sentence with the appropriate term.

Populations

Interconnectedness

Ecologists

Predator

Biomes

Species

Population dynamics

Biosphere

Prey

Community

1. Scientists who study ecology are called _____.
2. An animal which hunts another animal is called a _____.
3. An animal that is hunted by other animals is called _____.
4. Ecologists are interested in the _____ of life on Earth.
5. A _____ is the collection of populations of various species that all interact with one another in a particular area.
6. _____ are groups of individuals of the same species within a given area.
7. Each distinct type of organism is called a _____.
8. The study of how populations change over time is called _____.
9. _____ are types of ecosystems found in particular geographic regions; they are often defined by average temperature and rainfall in the area.
10. The entirety of all the ecosystems on Earth forms our planetary ecosystem, or _____.

FAITH AND SCIENCE

Ecologists study the “interconnectedness” of nature. Have a discussion or write in the space provided how we as the Body of Christ are all interconnected. What do we mean by that? Give examples. How does this affect the way you live and make you want to be holy? Finally, talk about how the balance and harmony (the “connections”) we see in nature point to God as the Author of all life.
