

Our Best-selling Wonders of Creation Series is getting even better!

The series is being developed with an enhanced educational format and integrated with a unique color-coded, multi-age level design to allow ease of teaching the content to three distinct grade levels.



**BUILDING
MEMORIES**

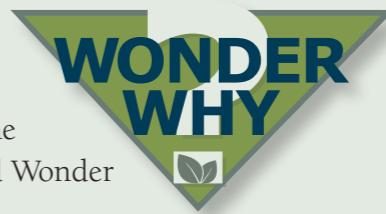
How to use this book

The Ecology Book has been developed with three educational levels in mind. These can be utilized for the classroom, independent study, or homeschool setting. For best possible comprehension, it is recommended that every reader examine the text on the off-white background. More skilled readers can then proceed to the green sections as well. Finally, the most advanced readers may read through all three sections. Look for the following icons and special features throughout the book:

- > Level 1
- > Level 2
- > Level 3

Level One

- Text on off-white background
- 5th to 6th grades
- The basic level is presented for younger readers and includes the Building Memories and Wonder Why segments.



WHO
WHAT
WHERE
WHY
HOW

THE BIG FIVE

Each chapter addresses the who, what, where, why, and how of important ecological and historical information. This information may be found on any level.

Level Two

- Text on green background
- 7th to 8th grades
- This middle level delves deeper into ecological issues related to today's environmental concerns, utilizing Words to Know and practical applications.

Words to know

These words found throughout the upcoming chapter present a quick glimpse of important concepts coming up.

Level Three

- Text on blue background
- 9th to 11th grades
- This upper level incorporates concepts and theories related to all subject matter included in the text, as well as unique information within the Dig Deeper sections.



Look in the pages of the history of ecology at the men who have influenced the world in the realm of ecology with these level three insights.



Make a Difference!

Watch for ways you can make a difference in your home or community. It is a joy to give back when you can!

“...I mean only that a wrong attitude toward nature implies, somewhere, a wrong attitude towards God...”

— T.S. Eliot

Chapter 3

The Dominion Mandate

Did you know that some people blame Christians for the bad things that have been done to our earthly habitat? Some think that the Bible teaches that it is okay for people to dirty the water or kill living things at any time for any reason. This is not true. The truth is that God blessed Adam and Eve in Genesis 1:28 and gave this earth and all of His creatures as gifts to be cared for. God wants us to guard and protect His creation by being good stewards. This means that we love one another and that we wisely care for the land and its creatures. What is very special about all of this is that God wants us, with the help of His Holy Spirit, to be like Him. Yes, people from all walks of life have done horrible damage to God’s creatures and their habitats. However, this behavior is not encouraged in the Bible. Rather, this behavior is a result of those who walk in sin and who are in disobedience to God. Are you up to the challenge? Will you be one of God’s guardian stewards?

- > Level 1
- > Level 2
- > Level 3

WHO
WHAT
WHERE
WHY
HOW

THE BIG FIVE

Who was given the dominion mandate?
What is citizen science?
Where can I find information about helping with real scientific research in ecology?
Why is an understanding of the dominion mandate crucial to biblical stewardship?
How is biblical stewardship an important component of our relationship with Christ?

Words to know

Dominion mandate
Stewardship
Organism
Protocols



What Is Biblical Stewardship?

In Genesis 1:28, God said to them, “Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that moves on the earth.”

If God made us to rule, what does that mean? What does this rulership look like? God’s command to have dominion and subdue creation has been misunderstood. It is true that people have used this verse as a justification to harm many ecosystems on the planet. However, this is not what it teaches. The Hebrew for having dominion and subduing carries the meaning of being in charge. The word steward comes from the Old English word *stigweard*, which means “guard of the hall.” The word implies that a steward is responsible for taking care of something for someone else.

We are created in the image of our Maker, and He has designed us to be the caretakers and protectors of His creation. When we put this all together — ruling, subduing, having dominion, and stewarding — it is like a forester who uses an ecosystem approach to a timber stand. An ecosystem approach means that the forester uses her knowledge about the relationships that make a forest ecosystem what it is. She takes charge of the trees in a way that they can be used as needed resources to help people. At the same time, trees are taken in a way that the forest will continue to produce new trees for generations to come. In this manner, the forest steward exercises a kindly and charitable dominion that balances the use of timber for market while maintaining the important and healthy relationships between the organisms, their environment, and the timber. The godly forester is devoted to providing needed resources to people while caring for God’s creation. Should not the church be at the forefront of these worthy activities? Subduing and ruling means that we have the responsibility of bringing increased order, vitality, fruitfulness and diversity to God’s earth.

The Shepherd King Analogy

Throughout Scripture, God gives us beautiful imagery about Himself as our Shepherd, Ruler, and King. He is our model of what true stewardship and dominion look like.

Life for a shepherd was challenging. Hours became days and seasons changed as he braved the elements, keeping a watchful eye on his sheep. It was a life of devotion and self-sacrifice to care for the needs of his vulnerable animals. It took courage and patience, vigilance and compassion.

David, the boy shepherd and psalmist who became Israel's king, wrote:

"The LORD is my shepherd; I shall not want. He makes me to lie down in green pastures; He leads me beside the still waters. He restores my soul; He leads me in the paths of righteousness For His name's sake. Yea, though I walk through the valley of the shadow of death, I will fear no evil; For You are with me; Your rod and Your staff, they comfort me." (Ps. 23:1-4).

The shepherd ruler is a servant ruler. He leads in wisdom so his sheep are guided, refreshed, and encouraged.

When danger comes, the lives of his sheep come first, ahead of his own. His staff was a short wooden club, which had a lump of wood on the end, often filled with sharp objects. It was the weapon he used to defend himself and the sheep. The rod was like a shepherd's crook and was used to catch and pull back any sheep that strayed from the safe path.

At the end of the day, as the sheep were gathered into the fold, the shepherd would hold the rod across the entrance, low to the ground, and every sheep had to pass under it (Ezek. 20:37; Lev. 27:32). This was done so that each sheep could be examined carefully for any injuries it might have received that day. Then the shepherd would tend to them as needed. His rod and staff were truly for their safety and protection, and for those reasons, they brought great security

Jesus is the Shepherd of our souls.

I am the good shepherd. The good shepherd gives His life for the sheep. But a hireling, he who is not the

shepherd, one who does not own the sheep, sees the wolf coming and leaves the sheep and flees; and the wolf catches the sheep and scatters them. The hireling flees because he is a hireling and does not care about the sheep. I am the good shepherd; and I know My sheep, and am known by My own. As the Father knows Me, even so I know the Father; and I lay down My life for the sheep (John 10:11-18).

In those days, the shepherd would lead the flock to make sure that the path was safe, and then the flock would follow. It is absolutely true that the sheep knew the shepherd's voice and would not respond to a stranger. May we always follow our Shepherd's voice and steward His creation as He stewards us.



Reflecting God's Image

Human life is precious, and we were meant to guard it because we are the only beings made in the image and likeness of God (Gen. 1:26–27; James 3:9). Being made in His image does not seem to mean that we look like Him. But it does seem to mean that we are spiritually like God in some things. It might have to do with our character and conduct. He gave us spirits that have been made to live forever. God is Spirit, and we must worship Him in Spirit and in truth (John 4:24). Maybe we have the potential of having similar abilities to think, love, judge, and care for others. Whatever it means, to be made in His image is the reason we must respect and love one another and steward the planet wisely. This means we must protect unborn babies, older people, those who are helpless, and those who cannot speak for themselves (Ps. 82:3–4; Prov. 31:8–9; Isa. 1:17). We also must make sure that our habitats are clean and healthy and encourage others to do the same. After all, we were made so we could be caretakers of each other and the earth for God. Is it not an honor to be given this great responsibility by the Creator?



Be prepared!

Eating snacks and drinking sodas in the car is fun, but don't toss those wrappers and bottles out the window! Trash can harm wildlife as well as create an unsightly mess!

Make sure you keep a small plastic bag in the car at all times to serve as a mobile trashcan when you need it. Or take two, one for recyclables and the other for throwaway items.

O Lord, our Lord, How excellent is Your name in all the earth, Who have set Your glory above the heavens! Out of the mouth of babes and nursing infants You have ordained strength, Because of Your enemies, That You may silence the enemy and the avenger. When I consider Your heavens, the work of Your fingers, The moon and the stars, which You have ordained, What is man that You are mindful of him, And the son of man that You visit him? For You have made him a little lower than the angels, And You have crowned him with glory and honor. You have made him to have dominion over the works of Your hands; You have put all things under his feet, All sheep and oxen—Even the beasts of the field, The birds of the air, And the fish of the sea That pass through the paths of the seas. O Lord, our Lord, How excellent is Your name in all the earth!

Psalm 8



Ecology in Practice: Getting Involved

As an ecology student, there are many opportunities to participate in citizen science projects where you can study specific creatures and/or ecosystems in your area and help real wildlife ecologists do research. Good science involves careful thinking, making good observations, using equipment properly, collecting important data, and following specific directions as to how to collect and record the data. These specific directions are called scientific methods, and each citizen science project will have specific protocols (ways of doing things) to follow. These protocols are important because they allow all researchers to be consistent in collecting data. If different people collected data in any way they wanted, it could affect their understanding of what is really going on in the ecosystem. Wrong conclusions could cause ecologists to steward creation badly, and this must be avoided. Remember that you might be handling these creatures, so do not forget, handle them with care, for they are the Lord's. If you want to learn more about involvement in these types of programs, do an online search for the projects below using the name of the program and the phrase "citizen science."



Monarch Butterfly Research



Bird Monitoring



North American Amphibian Research and Monitoring



Black Bear Education and Hibernation Data



Lady Bug Monitoring



Stream Monitoring and Ecology