

Marine Devotional:
The Bible and The Ocean



A ROCHA
MARINE
CONSERVATION
PROGRAMME

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Introduction

This guide brings together the reflections and experiences of students and staff who have been involved in A Rocha's marine science programme as well as friends of the programme who have sought to think about the ocean and their faith.

It seeks to foster further biblical reflection and writing on the ocean.

The writings reflect the views and experiences of the individual authors who come from diverse denominations and cultures.

We hope that this devotional guide will deepen your relationship with God and help you think about how the Bible applies to issues of the environment and conservation.

Some of the writing focuses on the ocean and some applies more generically to the wider environment.

What is creation care? Well, it is not about a theory of origins; the principles apply whatever you believe on that subject. And it is not just a Christianized version of conservation. It all starts with a loving Creator and encompasses the entire biblical teaching on God's relationship and our relationship with all creation.

Theologians sometimes talk about God's book of Words (the Bible) and His book of works (the world around us). Only the former is authoritative, but we gain so much insight into God through the latter. Science is a process or methodology for studying the natural world, God's book of works. Psalm 111:2 says '*Great are the works of the Lord; they are studied by all who delight in them.*' You may delight in the beauty of coral reefs, beaches and mountains. Perhaps not so much delight will be taken in mosquitoes! As you experience and learn about the ecology of the area you are called to and people's interaction with it, by holding the Word of God in your other hand, you will, through the Holy Spirit, be able to begin to get a grasp at just how wide and deep and long and high is the love of God.

Pray that God would open the eyes of your heart to see Him clearly through the things he has made – including each other. Note that the writings reflect the views and experiences of the individual authors

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Inductive Bible study: Marine Conservation in Genesis 1:20–31

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

Marine conservation in the Bible? While the Bible does not use those words directly, it does speak to this topic. Come explore what the Bible has to say.



Genesis 1:20–31

²⁰ And God said, "Let the waters bring forth swarms of living creatures, and let birds fly above the earth across the firmament of the heavens." ²¹ So God created the great sea monsters and every living creature that moves, with which the waters swarm, according to their kinds, and every winged bird according to its kind. And God saw that it was good. ²² And God blessed them, saying, "Be fruitful and multiply and fill the waters in the seas, and let birds multiply on the earth." ²³ And there was evening and there was morning, a fifth day. ²⁴ And God said, "Let the earth bring forth living creatures according to their kinds: cattle and creeping things and beasts of the earth according to their kinds." And it was so. ²⁵ And God made the beasts of the earth according to their kinds and the cattle according to their kinds, and everything that creeps upon the ground according to its kind. And God saw that it was good. ²⁶ Then God said, "Let us make man in our image, after our likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the earth, and over every creeping thing that creeps upon the earth." ²⁷ So God created man in his own image, in the image of God he created him; male and female he created them. ²⁸ And God blessed them, and God said to them, "Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth." ²⁹ And God said, "Behold, I have given you every plant yielding seed which is upon the face of all the earth, and every tree with seed in its fruit; you shall have them for food. ³⁰ And to every beast of the earth, and to every bird of the air, and to

everything that creeps on the earth, everything that has the breath of life, I have given every green plant for food." And it was so. ³¹ And God saw everything that he had made, and behold, it was very good. And there was evening and there was morning, a sixth day.

Reflection and application

1. What words are used to describe the creation of sea creatures in verses 20–23?
2. What picture does this put in your mind? Describe it or perhaps even draw it.
3. Why are 'great sea monsters' singled out in this passage?
4. Did you notice in Verse 22 that God blessed the living creatures of the sea? What might this mean?
5. What does this passage tell us about how God intended the sea to function?
6. What words would you use to describe the state of living creatures in the sea right now?
7. In Gen 1:26–30, what words and phrases are used to describe the creation of people?
8. What do the phrases 'in His image' and 'have dominion over' mean? How do you think they are inter-related?
9. If God was involved in a marine conservation project, what might He be doing?
10. What are the implications for a Christian working in marine conservation?
11. Think of or research one marine conservation issue in your location. How can you work towards Gen 1:20–23?

Reflections

The cross is for all creation

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

One of the most important passages for understanding God's heart for all creation is Colossians 1:15–20. Read through this below, paying particular attention to the small words like for, by, and especially all.

¹⁵ The Son is the image of the invisible God, the firstborn over all creation. ¹⁶ For in him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things have been created through him and for him. ¹⁷ He is before all things, and in him all things hold together. ¹⁸ And he is the head of the body, the church; he is the beginning and the firstborn from among the dead, so that in everything he might have the supremacy. ¹⁹ For God was pleased to have all his fullness dwell in him, ²⁰ and through him to reconcile to himself all things, whether things on earth or things in heaven, by making peace through his blood, shed on the cross.

A number of important principles come out of this:

- Christ was there at the beginning – in Him all things were created.
- Not only are all things created through Him, but they are for Him! The earth is not a stage for our lives but created specifically for Jesus.
- In Jesus all things hold together. There is activeness about it, if the spirit were removed from the earth, it would all fall apart.
- All things are reconciled to God on the cross – not just our hearts.

Albert Einstein was famous for his thought experiments. This is when you run with an idea and see where it leads you. Often if the idea is a good one, it continues to make sense no matter how far you extend it, if not, then there are likely some problems. Re-read the passage again, specifically entertaining the thought that this passage isn't just about humans. Try this thought experiment and see where it takes you.

Reflection and application

1. Does it seem reasonable to you that this passage applies more broadly than to our lives?
2. If so, what are the implications that on the cross all things are reconciled to Christ?
3. Can you think of some specific ways in which you can participate in that reconciliation? (cf 2 Cor 5:18–21)

The 'Community of Creation' in Psalm 104

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

Have you seen the new Jurassic World (2015) movie? One of its messages is that humans need to be humble in the face of ferocious dinosaurs. One of the scientists in the movie gives an example of the horrors of every day predation that we often overlook of a cat hunting a mouse. The punch line is that now, humans are the mouse and dinosaurs the cat – and we don't like it!

When you think of 'nature', do you, like many, think of it as something other than us? Are we a part of nature? Surprisingly, perhaps, the Bible gives a resounding 'Yes' to that question. Psalm 104 is one of the key passages, though certainly not the only one, which expounds on this idea that we are creatures. As one theologian Richard Bauckham has termed it – we are part of the 'Community of Creation'.

How does that sit with you? You are probably at this point thinking about our special relationship with God through Christ, only humans being made in the image of God, and as far as we know, the only creature with what most people call a soul. All correct. However, the idea of the Community of Creation is also a biblical concept which is the other side of the coin regarding our human nature. Yes we are special, but we are not God. We are not omnipotent, omnipresent and omniscient, for starters, and never will be. Or else we would be God and that is more like Pantheism than Christianity.

If you have time, read all of Psalm 104. If time is short, here is a portion for thought.

²⁴How many are your works, LORD! In wisdom you made them all; the earth is full of your creatures. ²⁵There is the sea, vast and spacious, teeming with creatures beyond number—living things both large and small. ²⁶There the ships go to and fro, and Leviathan, which you formed to frolic there. ²⁷All creatures look to you to give them their food at the proper time. ²⁸When you give it to them, they gather it up; when you open your hand, they are satisfied with good things.

²⁹When you hide your face, they are terrified; when you take away their breath, they die and return to the dust. ³⁰When you send your Spirit, they are created, and you renew the face of the ground.

Reflection and application

1. Take a moment to reflect on the fact that you are a creature, made by your Creator. Take something nearby into your hand and touch it. Close your eyes and listen. Take a deep breath, what do you smell? Look at your hands in detail. Taste something.
2. How does your creatureliness make you feel?
3. Think now about your special relationship with your Creator. How does seeing yourself as a part of the world God created enhance your relationship with Him?

The cross, creation and excellence

Stan Koster, Ecologist

Colossians 1:15–20

¹⁵He is the image of the invisible God, the firstborn of all creation. ¹⁶For by him all things were created, in heaven and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things were created through him and for him. ¹⁷And he is before all things, and in him all things hold together. ¹⁸And he is the head of the body, the church. He is the beginning, the firstborn from the dead, that in everything he might be preeminent. ¹⁹For in him all the fullness of God was pleased to dwell, ²⁰and through him to reconcile to himself all things, whether on earth or in heaven, making peace by the blood of his cross.

Jesus is amazing, isn't he? He is not only in the image of God, but Paul reminds us that in him all the fullness of God was pleased to dwell. And, Jesus is not only our Saviour, he is our Creator. All things were created through him and for him. Paul also says that Jesus is preeminent. That means that he is the absolute best; unequalled; the most excellent.

If Jesus is the most excellent, it stands to reason that everything in his creation is also excellent. Consider some of the things you see around you; water, a flower, a bird or even grass. It is all excellent because God is about excellence. At the end of each day of creation it says 'and God saw that it was good'. If you were to closely examine a typical flower, it is amazing. It has petals, sepals, a stamen, anthers and more. It is a thing of beauty, and design. After the flower withers and fades, it is transformed into a seed (e.g. wheat), or nut or some type of fruit such as an apple. That too is amazing. When we look at a simple flower, we are looking at one example of the excellence of our Creator. The same can be said of the birds and mammals.

Reflection and application

1. Look around you. What examples of excellence do you see?
2. How might these things remind us of God?
3. Given that the natural things we see represent God's excellence, what should be our attitude toward them?
4. How can putting one's faith in Jesus Christ influence how we view nature?

The groaning of creation

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

*'Oh Beautiful for smoggy skies, insecticided grain,
For strip-mined mountain's majesty above the asphalt plain.
America, America, man sheds his waste on thee,
And hides the pines with billboard signs, from sea to oily sea.'*
— George Carlin

'Water and air, the two essential fluids on which all life depends, have become global garbage cans.'
— Jacques-Yves Cousteau

Those who work as professionals in conservation are increasingly hopeless. There is a strong pessimism that nothing will change and we are playing music as our own Titanic sinks.

What is the source of our problems? Hosea 4:1–3 gives us a clue.

*4 Hear the word of the LORD, you Israelites,
because the LORD has a charge to bring
against you who live in the land:
"There is no faithfulness, no love,
no acknowledgment of God in the land.
² There is only cursing,^[a] lying and murder,
stealing and adultery;
they break all bounds,
and bloodshed follows bloodshed.
³ Because of this the land dries up,
and all who live in it waste away;
the beasts of the field, the birds in the sky
and the fish in the sea are swept away.*

Romans 8 suggests there is hope.

¹⁸ I consider that our present sufferings are not worth comparing with the glory that will be revealed in us. ¹⁹ For the creation waits in eager expectation for the children of God to be revealed. ²⁰ For the creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope ²¹ that the creation itself will be liberated from its bondage to decay and brought into the freedom and glory of the children of God.

Reflection and application

1. What is the source of our earth's problems according to Hosea?
2. Are you hopeful about the state of our planet? Why or why not?
3. What part do we play in it all according to Romans 8?

Beauty and the ocean

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

'From the beauty of the visible things let us form an idea of Him who is more than beautiful.'
Basil of Caesarea

Imagine your perfect beach day. You might be active or just like to lie down and catch some rays. In your imagination, do you picture having to swim around floating plastic bags or lay your towel away from some picnic rubbish people haven't been bothered to pick up? I doubt it. In the UK, the culprit is often a styrofoam box with the remnants of a fish and chips dinner that spoils that perfect seaside moment.

If only we could get out to the open sea, there we would be free from the tyranny of plastic and human rubbish! Alas, if it were only so. If you got on a sailboat in California and went across the Pacific Ocean the thing you would see most besides water would be plastic. Have you ever heard of the Great Pacific Garbage Patch? There are huge areas of the ocean, called gyres, where the water currents flow in a circular pattern. These gyres are accumulating plastics and other debris that have entered the ocean. It is thought that no matter how remote a location on the planet, you will now find plastic there.

Does this just spoil a nice day at the beach or a sailboat ride for us or is there a deeper faith issue here? What is the ultimate purpose of beauty?

¹As the deer pants for streams of water, so my soul pants for you, my God. ²My soul thirsts for God, for the living God. When can I go and meet with God? ⁷Deep calls to deep in the roar of your waterfalls; all your waves and breakers have swept over me. Psalm 42:1–2, 7

Psalm 42 expresses our longing for God seen both in his sanctuary and in his creation. It is often when we experience beauty that we have that longing satisfied.

Scripture shows us throughout that beauty is a pointer to the God who is beautiful. The theologian Jame Schafer has developed a model or lens through which we can look at beauty in the world. Initially, we can simply enjoy beauty for our own pleasure. But as the model progresses, we get to the most abstract and spiritually deep aspect of intentionally reflecting on beauty in a way that it helps us to better understand and know God. A number of writers have talked about God's book of Words and His book of works. We can use that idea to help us see that when we interpret creation with the Word of God in hand, it can be a hugely meaningful way to deepen our relationship with God.

Reflection and application

1. Think about an experience with the natural world that drew you deeper into your relationship with God. If you haven't experienced this, why might that be?
2. Imagine you are going on a beach clean-up event. Is there anything Christian about it?

Blessed by being poor

Aline Nussbaumer, Marine Ecologist, A Rocha France

Jesus is describing the hallmarks of those who are in the kingdom of God. And I'd like to explore how these hallmarks should be expressed in the context of how we relate to the whole of creation, and to the oceans in particular.

'God blesses those who are poor and realize their need for him, for the Kingdom of Heaven is theirs.' – Matthew 5:3

Eugene Peterson translates this beatitude as 'You're blessed when you're at the end of your rope.' (*The Message*).

The pressure of living up to all that's expected of us is firstly daunting, then tiring, then frustrating when we realise that it's impossible. We must invest in our work, take care of our relationships, spend time with God, consider how to spend our money, pray more, read more, enjoy life more, be more productive, and be environment-conscious.

Soon enough, we come to the end of our rope.

Being aware of the state of our oceans can lead to these feelings. At the moment, there is fear for the world's coral reefs after some especially bad bleaching events. Due to extreme weather conditions, corals have been under stress. This stress has caused a disassociation between the coral itself and the algae that reside within them, which usually provides the coral with food and colourful appearance. The relationship can be restored if the stressful conditions don't last too long. Otherwise, the coral will not recover.

The challenge of living up to the mandate of looking after the earth and the ocean (Genesis 1:28) can seem vast and intimidating. Jesus is telling us to recognise our inability to live up to all we're supposed to be; to recognise our poverty; that we need him, we need his help, and we need his mercy.

'As for me, since I am poor and needy, let the Lord keep me in his thoughts. You are my helper and my saviour. O my God, do not delay.' King David, Psalm 40:17

THE BLESSING: *The Kingdom of heaven is theirs.* If we are followers of Jesus, who have agreed to make him our King, then we are already citizens of His kingdom. We don't need to earn our place by being awesome environmentalists or evangelists or social activists. We're in! – based on **his** merit.

By recognising our truly impoverished state, we can access the most extravagant of riches.

PRAYER: *Lord, we are unable to follow you as you ask us to, and as you deserve. Help us! We need you. Forgive us when we are proud and think we can earn a place in your kingdom through our own works. Thank you for accepting us in our useless state. Amen*

Our choices matter to the nations

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

Think about the food you ate yesterday or remember a special meal. Where did that food come from? You are on the end of a long chain starting at the place of production, then packaging, then transport and eventually ending up on the grocery store shelf. A long chain of blessing or of cursing (the opposite of blessing).

Take for example tuna. You pull a can of tuna off the shelf in your kitchen and make yourself a sandwich, perhaps never thinking about where it came from. This time, though, you look and see it came from the Maldives. This tiny island chain in the middle of the Indian Ocean is an Islamic Republic. There is not much else on these islands other than sand and coconuts. Maldivians fish for tuna in boats, leaving their villages early in the morning. The fishing methods they use are considered sustainable – they collect baitfish and then use long fishing poles with hooks to catch the tuna. They bring the tuna back to the beach for their family and perhaps sell the extra to a tuna canning factory. Have they been paid a fair price? Are they being exploited so that you can have inexpensive tuna for your sandwich?

After the tuna is sent to the factory, what are the working conditions? In the case of the Maldives, workers are often imported to do this manual labour and work long hours in poor conditions. Or perhaps they work in much nicer conditions than their home countries and send home much needed money to their families. Is it your responsibility to know?

Then there is the transport – how are the sailors treated on the cargo ship? What about the truck drivers who take those cans from the ports to the store? Then there is the guy/gal who bagged your groceries. It can be exhausting thinking of everyone and every process involved in you eating that tuna sandwich.

Genesis 12:1–3

12 The LORD had said to Abram, "Go from your country, your people and your father's household to the land I will show you.

*² "I will make you into a great nation,
and I will bless you;*

*I will make your name great,
and you will be a blessing.^[a]*

*³ I will bless those who bless you,
and whoever curses you I will curse;
and all peoples on earth
will be blessed through you.*

Reflection and application

1. Abraham was called to another place, when his name was still Abram, to be a blessing. How are you blessing others through what you buy, eat, and wear?

Blessing the nations

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

Have you ever said to a stranger 'bless you' after they sneezed? This habit seems to be declining in our society, but sometime a 'bless you' comes out automatically. It can seem like a bit of a throw-away comment – simply being nice to someone. But have you ever thought about what it actually means to bless someone?

If you start at Genesis and go through Revelation, the words bless or blessing comes through as a prominent theme. We see it right at the beginning, in Genesis, especially in the passages regarding the blessing of Abraham and the promise that his descendants would be a blessing to the nations.

Blessing in Scripture is always both what we might call physical and spiritual. There was very much a sense that God's blessing included good crops, abundant livestock and healthy families. Yet this was always linked as a gift from God and resulted in God's name being exalted and proclaimed. This is not a prosperity gospel, a promise of health and wealth, yet if we think that all God has for us is merely spiritual, then we are missing important biblical teaching on his good plans for our world now, which includes our physical lives. Hebrew thought was much less dualistic than our western thought, which is so influenced by Greek philosophy and medieval European writing and art.

This is where most people would quote Acts 1:8 – and perhaps you want to look that verse up. But let's take a look at Psalm 67:1–5.

¹ *May God be gracious to us and bless us
and make his face shine on us—
² so that your ways may be known on earth,
your salvation among all nations.*

³ *May the peoples praise you, God;
may all the peoples praise you.
⁴ May the nations be glad and sing for joy,
for you rule the peoples with equity
and guide the nations of the earth.
⁵ May the peoples praise you, God;
may all the peoples praise you.*

Reflection and application

1. What are some of the results of God blessing us, based on this psalm?
2. Can you identify ways you have passed on blessing?

The Creator of the seas and all that is in them

Dr. Rebecca Watson, Cambridge University

It is easy to forget that we human beings are not the be-all and end-all of God's magnificent creation. From one perspective we are simply creatures in it. From another perspective we are unique in being made in the image of God (**Genesis 1:27**). However, both the beauty and abundance of marine life and the biblical passages concerned with the sea show that the oceans and the life in them are of intrinsic value to the Creator. Perhaps the best passage illustrating this is from **Psalm 104**.

*There is the sea, vast and spacious,
teeming with creatures beyond number – living things both large and small.*

*There the ships go to and fro,
and Leviathan, which you formed to frolic there.*

*All creatures look to you
to give them their food at the proper time.*

*When you give it to them, they gather it up;
when you open your hand, they are satisfied with good things.*

*When you hide your face, they are terrified;
when you take away their breath,
they die and return to the dust.*

*When you send your Spirit,
they are created,
and you renew the face of the ground.*

This psalm illuminates the idea of the diversity and wise creation of God's own creatures by reference to the sea, which teems with innumerable and varied life, 'living things both small and great'.

The Bible contains traditions that present Leviathan, a great sea creature or 'dragon', as the enemy of God's people and as inimical to God's wise order in creation. This psalm then presents an extraordinarily divergent perspective. Far from being threatening to the created order, Leviathan has deliberately been placed in the sea as part of that order, in accordance with God's wise plan.

From God's perspective, Leviathan is not a terrifying beast, but an innocent playful creature, made to enjoy the great, wide sea. Various English terms are used to translate the word given here in the NIV as 'frolic', but the important element is the idea of playfulness, celebration and enjoyment.

In **Proverbs 8:30–31**, wisdom is said to 'delight' in God's creation, but here the frolicking Leviathan is doing the same thing. The storm-waves that highlight human vulnerability in the vast alien environment of the sea are a perfect playground for great sea creatures such as Leviathan, at home in the habitat they were created to enjoy.

Too often people have seen themselves as the pinnacle of God's creation. The creatures of the sea remind us that God takes delight in his creation irrespective of the presence of humans in it. For most of human history we have at best 'dabbled our toes' in the great

waters of the ocean, but have remained largely unaware of the beauty and complexity of the ocean's life, which has nevertheless been a delight to its Creator.

God takes pride and pleasure in aspects of creation that we may not even be aware of. As Shakespeare so eloquently put it, through Hamlet's words to Horatio, 'There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy.' Our human understanding and knowledge are limited and it is good to remember that!

Stepping back from our own immediate concerns, we see that God as Creator is much more profligate in his creating, as the abundance of life in the sea shows, and has concerns with his creation and plans for it that transcend what we can imagine. Even creatures that appear ugly or horrifying still have their place, along with other life that we can recognise as exquisitely beautiful. This puts us in our place and reminds us that our whole experience of, and perspective on life, may be too human-centred, too focused on terrestrial life, thus missing the grandeur of who God is and what He has created.

'The Earth is the Lord's and everything in it,' says **Psalm 24:1**, including the oceans and sea creatures, and is not ours to do with as we wish. If people claim to love God, then a degree of humility is called for in how we live on the planet we share with the rest of his creatures, from microscopic life through to Blue Whales. The challenge is to become aware of the richness of God's creation, and aware that it is important to him and was not solely created for human beings to exploit.

One giant problem, and a solution to dwarf it

Aline Nussbaumer, Marine Ecologist, A Rocha France

Le Bourget, Paris, December 2015. The hive of worldly activity. At the entrance, I'm handed an apple. Organic, of course. I weave my way through the flags of many nations towards the doors, caught in a crowd of trendy young people. That's when I realize – they've all got badges and I don't. Wrong entrance. I work my way around the venue, to the back, to a temporary marquee behind closed gates, where common people without badges are waiting to be let in.

On 4 December I had the opportunity to attend a conference. The purpose: advance the oceans and climate change agenda at COP21. Attending were presidents and politicians, and many speakers from a variety of important organizations, all there to advocate the focus on oceans within the climate change negotiations. The emphasis was very much on protecting the services for us humans against threats associated with climate change. Concerns on sea level rise eating away at people's land, with whole islands potentially being underwater in my lifetime. Worries about fisheries and food security. Threats to the very oxygen that we breathe, with very little on protecting biodiversity.

The following day, A Rocha put on a conference in Paris to encourage Christians to think and act on climate change issues. There was a strong focus on social justice and the call for Christians to care for God's creation. All of God's creation.

Two very different angles on one very huge problem. At COP21, the pressure's on us. We have to save ourselves. We are the heroes and the villains, the culprits and the solution. Imagine what our world leaders must feel, lying in bed at night. They are mere men and women, with the weight of the globe on their shoulders. They are not gods. They are not saviours. Culprits, yes. As am I. But solutions – how could they ever match up to the scale of the implications of climate change? Can they hold the oceans back? Can they multiply fish? Can they act in ways which are completely just and in the interest of the global population?

*Who else has held the oceans in his hand?
Who has measured off the heavens with his fingers?
Who else knows the weight of the earth
or has weighed the mountains and hills on a scale?
Who is able to advise the Spirit of the Lord?
Who knows enough to give him advice or teach him?
Has the Lord ever needed anyone's advice?
Does he need instruction about what is good?
Did someone teach him what is right
or show him the path of justice?*

*No, for all the nations of the world
are but a drop in the bucket.
They are nothing more
than dust on the scales.
He picks up the whole earth
as though it were a grain of sand.
All the wood in Lebanon's forests
and all Lebanon's animals would not be enough
to make a burnt offering worthy of our God.
The nations of the world are worth nothing to him.
In his eyes they count for less than nothing—
mere emptiness and froth. (Isaiah 40: 12–17)*

There is a God who dwarfs the problem. These mere words only hint at his awesomeness. The solution to our problems is Jesus. He alone can save us. He gives us his Holy Spirit which empowers us to bring God's kingdom to Earth. That's where my hope is anchored.

Now all glory to God, who is able, through his mighty power at work within us, to accomplish infinitely more than we might ask or think. (Ephesians 3:20)

This verse has come up at some of the crucial decision points of my life. My imagination is pretty wild, and I spend a lot of time thinking about what God's kingdom coming to earth looks like. Yet there's no way my imagination will ever reach the depths of what God is doing; the beauty of his salvation plan, the awesome purposes and plans he has for his beloved planet. He is moving hearts into action across the world, he is stirring hope. There are people rising, who recognise Him, and depend upon his power. I hope to be counted among them.

Reflection and application

1. What expectations do you feel to protect the environment?
2. How does the knowledge that Jesus is the Saviour of creation – not us – affect your attitude to creation care?

A Rocha Marine Experiences

A spiritual reflection of my time at A Rocha Kenya

Tim Gordon, Lancaster University

I spent 11 weeks working on a voluntary basis as a marine biology intern at A Rocha Kenya, a Christian conservation organization on the Kenya coast between Mombasa and Lamu. During my time at A Rocha I stayed on site at the Mwamba Field Study Centre, along with many other volunteers, interns, guests and staff members, and living in a Christian community of this nature in a culture so different to that of the UK (my home) was an interesting, challenging and formative experience for me.

Each day I worked as part of the A Rocha marine research team. This involved scientific research: a personal project focused on the effect of the jewel damselfish' territorial behaviour on juvenile coral growth rates on the reef. Also practical conservation: beach clean-ups, creating posters for environmental education days, anti-poaching patrols on behalf of Kenya Wildlife Service, organizing and leading snorkelling trips for A Rocha's guests, and designing, writing, filming and producing a video promoting the Watamu Marine National Park, for use by Kenya Wildlife Service, A Rocha, and many other NGOs up and down the Watamu coast. Conservation is something which we are all called to do by God, and as stewards of his creation we are responsible for looking after and protecting the natural world. Scientific research plays a vital role in successful conservation, as in order to best protect an ecosystem we must first understand it and its components as fully as possible. I believe that both the research and the conservation work done by A Rocha Kenya's marine programme are very important, worthwhile and a great witness to stewardship and respect for creation to both Christians and non-Christians in Kenya and all over the world. I felt very blessed to be a small part of A Rocha Kenya's marine programme and learnt a huge amount. I was also very thankful to be able to live and work in a place where God's creation is so accessible and inspiring. The coral reefs which we worked on every day were spectacular, and it was an honour and a pleasure to be able to share this incredible creation with guests, and to work for the preservation of the reef; the experience gave me a new sense of wonder at the natural world and its Creator.

I also grew in my faith hugely from the experience of living and working in a Christian community. Time and again the actions and words of the other Christians made me reconsider the way I live my life and my values. Every Sunday evening we had a short service and a weekly bible study. I also attended several local churches but my experiences there were not always so positive, a reaction very common in Western volunteers. It was also eye-opening for me that several aspects of my faith caused issues with some Kenyan Christians. Although I see it as completely fine to occasionally enjoy a drink with my friends in moderation, many Kenyan Christians see alcohol as evil. These clashes led me to think a lot, both on my own in quiet bible study times in the morning, and also with others in discussions at bible studies and over the dinner table. Should the culture of our country or family affect our faith? At what point do different interpretations of God's word become wrong as opposed to just being different ways of living out the same commands? How can we be honest with ourselves and tell whether our beliefs are entirely biblical or being diluted by the culture we live in?

I was inspired by the work ethic of many people working at A Rocha, both Kenyan and from other cultures. Colossians 3:23 says, 'work in everything as though you work for the Lord', and I saw this being lived out practically. People worked hard but cheerfully, in a way which was responsible and sustainable, and also took a genuine and prayerful interest in their colleagues' work. They knew the importance of their work, and at all times strove to ensure everything they did was in keeping with biblical teaching and helpful to others. This was an example which I attempted to follow in my time at A Rocha, and will try hard to ensure that it is something

which can change the way I work and study on my return to university and holiday jobs in the UK.

Further, I found the response of A Rocha to the horrible events of the terrorist attack on Westgate Mall, Nairobi, very inspiring. It happened while I was spending my last few days at A Rocha and travelling through Nairobi on my way home. Everyone at the centre ensured they were always right up to date with unfolding events throughout the whole weekend, and used their well-informed and up-to-date knowledge to pray constantly for the situation, the people involved and the response of Christians worldwide, praying individually, in small groups and several times as a whole centre group. In a time of real and heart-wrenching crisis, the immediate reaction of the A Rocha team was to turn in complete devotion to prayer; a response that is so visible in Jesus' emotional turmoil before his crucifixion, and one that I could learn a great deal from.

In summary, I was hugely blessed by my time at A Rocha Kenya. I would like to extend massive thanks to the Henry Martyn Trust, the Timios Trust and the Christ's College Travel Bursary Scheme, whose generous financial support made this trip possible.

Welcome to Myeik

Aline Nussbaumer, Marine Ecologist, A Rocha France

It's early morning and everything is hazy. A heavy heat already drapes the town as we make our way to the dock. Today is the day I finally meet the Myeik archipelago: a string of 800 islands off the coast of Myanmar harbouring coral reefs, sea grass beds, mangrove forests and wealths of culture.

The dock rocks with the activity of people loading and unloading boats with fish and supplies. Women crouch with baskets on the planks. Human buzz.

Time for some introductions. Today, I will share a special experience with a group of students from Mandalay University who are celebrating graduation with a holiday down south. Fortunately, they are language students so we can understand each other. Time to get on the boat and wave out of the crowds of tall fishing boats, accessorised with a cross-legged fisherman in his *longi*, string lights draped across the deck.

The archipelago boasts islands dressed in lush forest standing tall out of the tropical waters. It's hard to imagine this place ever being stormy. The colours are inviting, ambiance relaxing. Brochure worthy.

The hum of the motor and roll of waves entices me into the world of my imagination, where there are pirates seeking refuge and rest, explorers slashing their way through forest, beautiful and rare creatures hiding undiscovered.

We stop at our first destination. It's a wooden shack upon a grid of floating planks. In the gaps are nets hanging in the water, holding unlucky fish waiting to be bought by Thai fishing boats. This fish farm belongs to an 85 year old lady. The lines in her face go deep, her back is bent, and her little feet carry her gracefully to the stonefish pen. A young lady and younger boy help her to catch some of the fish. There are several dogs here, too, expertly making their way across their floating home.



These are people of the sea. The sea is their lifeblood. And their fish will be our lunch.

Back on the boat, and we're approaching Marcus Island. The sea is almost the same colour as the sky, and the air holds its breath. Everything seems still. As we approach, some huts become visible through the vegetation and we see that there are people. They are getting well accustomed to visitors.

My toes sink into the wet sand, swallowed and washed. Quick change, grab my mask, snorkel, and temptation drags me in. I giggle into the mouthpiece at the feeling of being weightless and free again.

Under the water is an entire universe. Things start a little murky, but my eyes and ears adjust. This is more precious than any pirate's treasure. A fiesta of life endorses the flat tables of hard

corals: little polychaete worms display their stunning blue fans of tentacles like miniature party hats, and parrot fish perform their 'crunching algae off the coral' act.

Yet amongst the feelings of wonder and delight lurks an uncomfortable shadow cast by the presence of threats arising from humanity's increasing demand on the environment. Destructive fishing methods such as dynamite fishing – where fishermen throw explosives onto the reef and then collect the dead fish amongst the leftover rubble – are already documented in this area. And it is not immune from global scale problems such as ocean warming and changing ocean chemistry.



Even larger than this shadow are the lights of people choosing to be protectors, allies, and defenders of such natural treasures. Coming out of the water, my fingers textured with wrinkles and eyes resistant to the light of the sun, I think about the students, professors, NGO workers, locals, foreigners... all those who I've met who share a deep desire to conserve this heritage. And I think about where my own faith lies, and I am hopeful.

Advent and the ocean

Aline Nussbaumer, Marine Ecologist, A Rocha France



The traditional tunes are crackling through the radio (playing off my laptop...) as Sam (the other intern here with me) and I are spending our last evening at Les Courmettes before heading our separate ways for Christmas celebrations. It's an evening spent rinsing salty snorkelling gear and thinking back over a successful week with other members of the A Rocha team during Mediterranean Marine Week the second.

One of the most fun things about being with the marine team is the opportunity to discuss how the Bible relates to the work we are doing. It was a pleasure to have Bob Sluka's daughter Heather with us (Bob is A Rocha's marine man). She led a devotion on Psalm 24, which opens with the verse:

The earth is the Lord's, and everything in it.
The world and all the people belong to him.

Father Walter, who was hosting us in his flat below St Paul's church, Monaco, pointed out that, in Orthodox theology, the coming of

Christ into the world as human flesh and blood, dust and water, gritty matter, and his walking on this very planet, sets it apart as special. They see this planet as sacred, because:

Jesus walked here.

We see a beauty in creation, and in the ocean, which can inspire us to feelings of awe and wonder. But it's also a damaged creation. After all, not all the sites we visited this week had lush seagrass pastures with swarming fish and delicate sea stars. There was also death: dead, uprooted tufts of seagrass. Litter: large leftovers of human activity smothering the Mediterranean's floor. In Italy, we met a spear-fisher before entering the water who told us there wouldn't be many fish ... 'overfishing'. Sacred, yet broken. Loved by God, yet damaged by the very ones he put in charge of protecting it.

Christ's coming, which we are celebrating, reminds us that 'matter matters'. The ocean matters to God. The creation is special, not so much because of what it is, but because of where it comes from, and because the agent of creation, the one for whom and through whom all things were created, came into it and blessed it, and will restore it.

For everything comes through him and exists by his power and is intended for his glory. All glory to him forever! Amen! **Romans 11:36**



During this second-to-last week before Christmas, I've had the opportunity to experience the extent of man's work in Monaco: the glitz and glam and bazillion sparkle-covered Christmas trees that line the streets. The smart hired vehicle with a malfunctioning alarm that honked at us every time we left it alone, and which Chris (the Mediterranean project coordinator and all-round logistics wiz) had to keep company during our excursions.

And then the works of God: the breath-hold-taking beauty of what's in the ocean. The way in which doors are opening in this A Rocha Mediterranean Marine Project ... Including a potential partnership for a project on microplastics with a research institution on the French coast (so exciting!!!!!!).

Psalm 24 ends with this: Who is the King of Glory? The Lord of Heaven's Armies – he is the King of glory.

Glorious indeed.

So Christmas greetings to you all, and may the message of Christ's coming to planet earth be revealed to us all in a deeper and more awesome way this year.

Peace out.

Marine Biodiversity Sermon

Dr. Robert Sluka, Lead Scientist, Marine Conservation Programme

This is a sermon given at Dorchester Abbey, Oxfordshire, which is about as far as you can get from the sea, in England.

Encounters with animals, a walk along the shore listening to the crashing waves, these can fill us with a sense of awe or wonder. This is one of the purposes of creation. Psalm 111 tells us, 'Great are the works of the LORD; they are studied by all who delight in them. Glorious and majestic are his deeds, and his righteousness endures forever. He has caused his wonders to be remembered; the LORD is gracious and compassionate.' Professor RJ Berry, formerly of University College London and past President of Christians in Science, has called Psalm 111 the research scientist's psalm. We see here the psalmist delighting in God's works and in turn studying them. Other versions use words here such as ponder, to mull over, to think about. This beauty in God's works are called glorious and majestic. Whether pondering, studying God's actions in human history or in creation, they lead us to contemplate God's character and when His works are rightly interpreted through His word, it can lead us to a deeper sense of awe, wonder and ultimately worship of the Creator.

The ocean certainly can inspire awe or wonder. It is, though, quite easy living here in Oxfordshire to forget that we live on an island and that most of our planet is covered with water. Perhaps you haven't been to the sea in some time, can't swim, or haven't been bold enough to brave the chilly waters. But I hope today to inspire you by showing how the sea can fill us with a sense of wonder, help us to appreciate God's beauty, and give us hope for our current marine crisis.

The United Nations proclaimed 2010 to be the International Year of Biodiversity, and people all over the world are working to safeguard this irreplaceable natural wealth and reduce biodiversity loss. Interestingly, the website where I lifted the previous statement follows it by this one 'This is vital for current and future human wellbeing.' While this is true, there is so much more value to biodiversity than simply to meet our needs.

I don't know if you saw recent reports from a project called the Census of Marine Life. This is a ten year project that is concluding this year. This is a huge undertaking, but they are finding startling results. Deep in the sea there are huge numbers of creatures that we never knew existed. 'Census research suggests that, within a particular size interval, more than 20 million types of bacteria live in sea water'. However, a Dr. Baross, one of the researchers, notes: 'The total number of species of marine microbes is likely closer to a billion. Microbial cells in the oceans' water column number roughly 10 to the 30th (called a nonillion; expressed another way: 1,000 x 1 billion x 1 billion x 1 billion) and collectively weigh the equivalent of 240 billion African Elephants. That's 35 elephants of marine microbes per person. Marine microbes are the tiniest cogs essential to planetary functioning. Yet until technological marvels of this millennium (especially high-throughput DNA sequencing) revealed the stunning extent of this microscopic world, it remained largely hidden from humankind.' For all these years of human history, they have been there, living out their lives, unknown to us, and frankly, still unknown to most people on the planet. Why are these creatures there?

When is the last time you walked along a beach in Britain? If you have walked along a cobble beach you may think that our seas are devoid of life. This habitat does not support much life, relatively speaking, and much of what is interesting has washed up from deeper down. Sandy beaches are a bit more biodiverse, if you were to dig into the sand you might find all sorts of interesting creatures, marine worms, shells, and small crab-like animals. Rockpools, if you remember from your childhood, are full of interesting little animals and plants. Yet if you were

to don a mask, and a thick wetsuit, you would enter a world full of colourful and bizarre creatures: sea urchins, sea cucumbers, starfish, eels, seaweeds all mostly unseen by the vast majority of people in our land. Even from shore, high on a cliff top, you can see amazing creatures such as dolphins, porpoises, seals, basking sharks, killer whales and a huge variety of seabirds. Why are these creatures there?

We could, of course, fall back on purely biological mechanisms and say that the evolutionary process is working itself out and this is simply a by-product of the way in which God has chosen to create. However, I want to turn us back to God's word in order to interpret His works.

We don't have time to do this justice, but I want to focus on poor old Job for a moment. You remember his story. A wealthy man, lots of kids, livestock, land, great wife and friends. Satan asks God to test Job and God allows it. Almost all is taken away. His wife and friends tell him to curse God and die, but Job will not. Yet he is, as is understandable, troubled by his misfortune. For 38 long chapters, Job and his friends speak of this misfortune and try to find answers, then what may be some of the scariest words in the Bible addressed to a human occur:

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¹ Then the LORD answered Job out of the storm. He said:

² "Who is this that darkens my counsel
with words without knowledge?"

³ Brace yourself like a man;
I will question you,
and you shall answer me.

What occurs over the next chapters is almost a course in ecology! God asks Job, rhetorically, of course, things like:

'Where were you when I laid the earth's foundation?'

'What is the way to the abode of light?'

'Do you give the horse his strength or clothe his neck with a flowing mane?'

'Do you know when the mountain goats give birth? Do you watch when the doe bears her fawn? Do you count the months till they bear? Do you know the time they give birth?'

'Does the hawk take flight by your wisdom?'

You get the picture. Job responds 'I am unworthy—how can I reply to you?
I put my hand over my mouth.'

At the end of the book, Job speaks of his new understanding of God, repents – turns toward God – and lives out a long and full life.

I find it interesting that God uses creation, biodiversity, if you like, to reveal his character to Job. To show Job things about himself. I think this gives us a hint at some of the overarching reasons for marine biodiversity: they are pointers for us to God. To cause us, like Job, to put our hands over our mouth, be quiet, and revel in God's beauty, His majesty, and be utterly amazed.

The ocean is there, though, to provide for all creatures, including humans, as anyone who has had a nice fish and chips will attest. It is true that we are taking more out of the sea than can be replenished. Pollution from the land is changing the sea in ways that could have disastrous consequences. And yet, I am hopeful. Why? Because God is much more concerned about this than we are and He has again revealed Himself through His creation through the study of his works. One of my areas of marine biology is called fisheries science. This is the study of marine creatures, how they grow, reproduce and how fishing affects this. We have a long history of fishing the oceans and have made huge changes in the kinds and numbers of fish in Britain's coastal waters. When the removal of these resources has gone unchecked, there has been destruction, waste and consequently, populations have declined. It is estimated that fishermen have to spend 17 times as much effort today to catch the same amount of fish as they did 120 years ago. Four times more fish were being landed in UK ports 100 years ago than today, and catches peaked in 1938. God has asked us to be good stewards. When we are, He has given His creation the ability to be fruitful, to grow, increase and flourish.

There is huge evidence for this, but I want to share with you one bit which you may find interesting. The fisheries in England focusing on the North Sea prior to WWI were in strong decline catches of cod and halibut had plummeted. Dr. Callum Roberts of York University describes this in his book *The unnatural history of the sea*. He says that, 'Throughout Edwardian Britain, shops selling fish and chips were growing in popularity. Covering fish fillets with batter hid a multitude of sins.' The reduction in catches was hidden from the public by substituting a lower quality of fish, but covering them with batter to hide it! When the war came, ships were sunk and also fishermen conscripted to fight. This led to an almost complete stopping of fishing. Once the war was over, the fish populations had grown and multiplied, fishermen had huge catches. But they didn't learn their lessons and were unrestrained, populations plummeted again until history repeated itself and fishing ceased in the North Sea again during WWII. A few lone voices argued that we should be better stewards of this opportunity and restrict fishing to appropriate levels. But again, we were not good stewards of the fruitfulness God created and after several very good years of fishing, catches returned to pre-war levels. Giving the sea a Sabbath showed that when we are good stewards, living out the wisdom God has provided us with both in His word and through studying His works, the incredible abundance, the lavish grace God gives us spiritually, is also observed in His creation. Fish populations are designed to produce huge numbers of young. When stewarded, they can rebuild, grow and thrive.

Biodiversity does reveal God to us, when rightly interpreted through His revealed Word, the Bible. Most appeals for biodiversity conservation rely on its value to us or at times to the poor who do rely on it in ways most of us do not. But I hope that this morning I have given you another reason for acting. When we ponder, study God's creation we can be filled with awe and wonder, marvel at his beauty and be filled with hope because we see aspects of our Maker in His world. My hope for you is that this moves you beyond environmental stewardship for the sake of good citizenship and that it leads you closer to God and ultimately results in worship, of the Creator, not the creation.

So, what is my task for you today? What difficult changes to your life am I going to ask you to make? I want to ask you to do something that may be more difficult that it might first appear. This summer, I want you to get out your bucket and spade, put on your swimming costume and head to the seashore here in Britain. Take a seaside holiday this year, go buy some local fish and chips, and enjoy the beauty and bounty of the sea. Marvel, be inspired, be awed, jump in with a mask if you dare. Read a psalm or perhaps the entire book of Job for your beach reading. Let your experience lead you to worship the Creator.

Creation care books, articles and websites

Essential reading

These are three books which will give you a basic grounding in the Biblical themes and passages related to creation care. There is also ideas and teaching on how this relates to outreach.

- *Planetwise* – Dave Bookless
- *Bible and Ecology* – Richard Bauckham
- *Environmental Missions* – Lowell Bliss
- *Creation Care and the Gospel* – Colin Bell and Robert White (Eds)

Going deeper

These books will help you dig deeper, once you have a basic grounding in creation care theology and practice. Some will be very challenging and you will likely not agree with all that is written, but that is how one grows, by having one's views challenged.

- *The Comforting Whirlwind* – Bill McKibben
- *Earth-wise* – Cal Dewitt
- *For the beauty of the earth* – Steven Bouma-Prediger
- *A Climate for Change* – Katherine Hayhoe and Andrew Farley
- *Hope in an age of despair* – Jonathan Moo and Robert White
- *Laudato Si: On Care for Our Common Home* – Pope Francis

The A Rocha Story

These books give personal accounts of how A Rocha began and grew. It shows how a creation care theology was lived out in community and cross-culturally. A Rocha is one of the leading Christian environmental organizations and distinctively, is actively involved in conservation science.

- *Under the Bright Wings* – Peter Harris
- *Kingfisher's Fire* – Peter Harris
- *Planted* – Leah Kostomo
- *God Doesn't Do Waste* – Dave Bookless

Websites

There are a huge number of websites and blogs by Christians on the environment. Here are a few that will help you get started online.

- www.arochoa.org
- Lwccn.com

Getting involved

PRAY

Join us in praying for marine conservation issues, and for those working to bring God's kingdom of restoration. Follow A Rocha International on Facebook, or check out their website for updates on how A Rocha's marine work is progressing, and how you can pray for it.

DONATE

To marine conservation efforts, including A Rocha International's marine program.

<http://www.arocha.org/en/donate/>

VOLUNTEER

A Rocha have marine activities going on in Kenya, UK and France. Why not come and volunteer with us to help on our existing projects? Or why not volunteer to organise an event to raise prayer and financial support in your community? Contact us for more information at - <http://www.arocha.org/en/opportunities/>

LIFESTYLE

Simple changes to our daily life can alleviate some of the pressure on the marine environment and are a way to express our worship to the Creator of all things. Consider how to reduce, reuse and recycle your waste. A Rocha's Plastics Toolbox has many resources which can help you do this www.arocha.org/plastics-toolbox.

Websites such as <http://www.goodfishguide.org/> can help you to consume seafood in a responsible way. <https://www.beatthemicrobead.org/en/> has lists of products containing plastic microbeads which enter the marine environment. Making effort to reduce your carbon footprint will help to reduce ocean acidification.