One Example of Science-Faith Synergy:
How We Can Glorify God and Serve Humanity
By Caring for the Earth

Steven Bouma-Prediger
Hope College
Outline

I. Earthkeeping Is Integral to Christian Faith:
   We are earthkeepers called to serve and protect

II. Ecological Literacy: Earthkeepers need to know how the world works

III. Some Examples of Science-Faith Synergy
All creatures great and small

And God said,
“Let the waters bring forth swarms of living creatures, and let the birds fly above the earth across the dome of the sky.”

And so God created the great sea monsters and every living creature that moves, of every kind, with which the waters swarm, and every kind of winged bird of every kind. And God saw that it was good.

Genesis 1:20-21
God’s blanket of blessing

And God blessed them, saying,
“Be fruitful and multiply
and fill the waters in the seas,
and let birds multiply on the earth.”

Genesis 1:22
The goodness
of heaven and earth

God saw everything that he had made, and indeed, it was very good.

Genesis 1:31
To serve and protect

The LORD God took the human
and put him in the garden of Eden
to serve and protect it.

Genesis 2:15
Covenant with creation

I have set my bow in the clouds, and it shall be a sign of the covenant between me and the earth.

Genesis 9:13
Living sustainably

If you come upon a bird’s nest, in any tree or on the ground, with fledglings or eggs, with the mother sitting on the fledglings or on the eggs, you shall not take the mother with the young. Let the mother go, taking only the young for yourself, in order that it may go well with you and you may live long.

Deuteronomy 22:6-7
All creatures praise the Lord

Praise the LORD from the earth,
you sea monsters and all deeps,
fire and hail, snow and frost,
stormy wind fulfilling his command.
Mountains and all hills,
fruit trees and all cedars!
Wild animals and domestic animals,
creeping things and flying birds!
Kings of the earth and all peoples,
princes and all rulers of the earth!
Young men and young women alike,
old and young together!

Psalm 148: 7-12
God’s good future of shalom

For I am about to create a new heavens and a new earth; the former things shall not be remembered or come to mind. But be glad and rejoice forever in what I am creating; for I am about to create Jerusalem as a joy, and its people as a delight. No more shall there be in it an infant who lives but a few days, or an old person who does not live out a lifetime. They shall build houses and inhabit them; They shall plant vineyards and eat their fruit.

Isaiah 65:17-18, 20-21
On earth
Your kingdom come.
Your will be done,
on earth
as it is in heaven.

Matthew 6:10
Creation groaning and waiting

For the creation waits with eager longing
for the revealing of the children of God;
for the creation was subjected to futility,
not of its own will but by the will of the one who subjected it,
in hope that the creation itself will be set free
from its bondage to decay
and will obtain the freedom of the glory of the children of God.

We know that the whole creation has been groaning
in labor pains until now;
and not only the creation but we ourselves,
who have the first fruits of the Spirit,
groan inwardly while we wait for adoption,
the redemption of our bodies.

Romans 8:19-23
Cosmic reconciliation

He is the image of the invisible God, the firstborn of all creation; for in him all things in heaven and on earth were created, things visible and invisible, whether thrones or dominions or rulers or powers—all things have been created through and for him. He himself is before all things, and in him all things hold together. He is the head of the body, the church; he is the beginning, the firstborn from the dead, so that he might come to have first place in everything. For in him all the fullness of God was pleased to dwell, and through him God was pleased to reconcile to himself all things, whether on earth or in heaven, by making peace through the blood of his cross.

Colossians 1:15-20
But we do not want you to be uninformed, brothers and sisters, about those who have died, so that you may not grieve as others do who have no hope. For since we believe that Jesus died and rose again, even so, through Jesus, God will bring with him those who have died. For this we declare to you by the word of the Lord, that we who are alive, who are left until the coming of the Lord, will by no means precede those who have died. For the Lord himself, with a cry of command, with the archangel’s call and with the sound of God’s trumpet, will descend from heaven, and the dead in Christ will rise first. Then we who are alive, who are left, will be caught up in the clouds together with them to meet the Lord in the air; and so we will be with the Lord forever. Therefore encourage one another with these words.
The Day of the Lord

But do not ignore this one fact, beloved, that with the Lord one day is like a thousand years, and a thousand years are like one day. The Lord is not slow about his promise, as some think of slowness, but is patient with you, not wanting any to perish, but all to come to repentance. But the day of the Lord will come like a thief, and then the heavens will pass away with a loud noise, and the elements will be dissolved with fire, and the earth and everything that is done on it will be found.

2 Peter 3:8-10
God’s good future is earthy

Then I saw a renewed heaven and a renewed earth.

And the one who was seated on the throne said, ”Behold, I am making all things new.”

Revelation 21:1, 5
The separation between heaven and earth is overcome.

And I saw the holy city, the new Jerusalem, coming down out of heaven from God.

Revelation 21:2, 10
Evil and its consequences are no more

God will wipe every tear from their eyes. Death will be no more; mourning and crying and pain will be no more, for the first things have passed away.

Revelation 21:4
We inhabit a most unusual city

I saw no temple in the city, for its temple is the Lord God Almighty and the Lamb. Its gates will never be shut by day--and there will be no night there.

People will bring into it the glory and honor of the nations.

Then the angel showed me the river of the water of life, bright as crystal, flowing from the throne of God and the Lamb, through the middle of the street of the city. On either side of the river is the tree of life, with its twelve kinds of fruit, producing its fruit each month; and the leaves of the tree are for the healing of the nations.

Revelation 21:22 - 22:2
When we turn the attention of the church to a definition of the Christian relationship with the natural world, we are not stepping away from grave and proper theological ideas; we are stepping right into the middle of them. There is a deeply rooted, genuinely Christian motivation for attention to God's creation, despite the fact that many church people consider ecology to be a secular concern.

Joseph Sittler, *Gravity and Grace*, p. 15
I. Earthkeeping Is Integral to Christian Faith:
We are earthkeepers called to serve and protect

II. Ecological Literacy: Earthkeepers need to know how the world works

III. Some Examples of Science-Faith Synergy
Ecological Literacy

What is ecological literacy?

"The ecologically literate person has the knowledge necessary to comprehend interrelatedness, and an attitude of care or stewardship,” and this must be accompanied by “the practical competence required to act on the basis of knowledge and feeling.” Hence “knowing, caring, and practical competence constitute the basis of ecological literacy.”

(David Orr, Ecological Literacy)
Components of ecological literacy

1. "Broad understanding of how people and societies relate to each other and to natural systems, and how they might do so sustainably.” This presumes knowledge of how the world as a physical system works--knowledge of keystone species and succession, entropy and energy flow, niches and food chains. Ecological literacy, in short, implies a modicum of knowledge about the inextricable interconnectedness of all creatures great and small.
Components of ecological literacy

2. Knowledge of "the speed of the crisis that is upon us." We need to know the vital signs of our home planet—the trends concerning population growth and climate change, soil loss and species extinction, deforestation and desertification, energy use and air pollution. A prescription is only as good as the diagnosis on which it is based. Our attempts to achieve wellness must be based on a sober assessment of the health of the earth.
Components of ecological literacy

3. "Comprehension of the dynamics of the modern world." In other words, we need some understanding of the historical, political, economic, and religious forces that have molded our world. What ideas and social pressures have brought us to where we are today?
Components of ecological literacy

4. "Broad familiarity with the development of ecological consciousness." Of special importance here is explicit attention to ethics and the nature of nature. Are we humans “conqueror of the land-community” or “plain member and citizen of it?” Is the natural world red in tooth and claw or some paradise of harmony?
Components of ecological literacy

5. Development of “alternative measures of well-being” and “a different approach to technology.” For example, Daly and Cobb’s Index of Sustainable Economic Welfare, in contrast to other indicators such as GDP, includes the depletion of nonrenewable natural resources and the costs of water and air pollution in its calculation of overall welfare. And the work of E. F. Schumacher, Nancy and John Todd, Sim VanDerRyn and Stuart Cowan all illustrate how technology can and must be appropriate to the scale and needs of a people and its culture.
Learnings from Ecology

1. Everything is hitched to everything else. All things are interconnected. Everyone is downwind or downstream of everyone else.
   (Principle of interrelatedness)

2. We can never do only one thing. Our actions always have many consequences, some of which we do not know and cannot predict.
   (Principle of multiple effects)
Learnings from Ecology

3. There is no away. Everything goes somewhere. We cannot create or destroy matter; matter merely changes form.
(Principle of matter conservation)

4. We cannot get something from nothing. It takes energy to get energy. We cannot create or destroy energy; we only change it from one form to another. And in energy conversion, entropy or disorder increases.
(Principle of energy conversion)
Learnings from Ecology

5. Everything fills a niche. Every organism has a function within a habitat. Every species adaptively fits a role in an ecosystem.

(Principle of fittingness)

6. Things change. We live in an incredibly dynamic universe. The earth’s living organisms and natural cycles are constantly changing.

(Principle of dynamic systems)
Learnings from Ecology

7. You adapt or die. Individual organisms, populations, and species either adapt to their surroundings or cease to exist.
   (Principle of adaptation)

8. The earth swims in diversity. There is genetic diversity within a given species. There is diversity of individual species of organisms. There is diversity of different kinds of natural systems.
   (Principle of diversity)
Learnings from Ecology

9. There is not always more. Except for the energy income from the sun, the world is finite. We live in a world of limits.
(Principle of limits)

10. The natural world is more complex than we think. Indeed, it is more complex than we can ever possibly imagine.
(Principle of complexity)
I. Earthkeeping Is Integral to Christian Faith:
   We are earthkeepers called to serve and protect

II. Ecological Literacy: Earthkeepers need to know how the world works

III. Some Examples of Science-Faith Synergy
Faith enhances science:

governing interest

and the integration of

social commitment and theory
Science enhances faith:

Christian earthkeeping
informed by
natural science
One Example of Science-Faith Synergy:
How We Can Glorify God and Serve Humanity
By Caring for the Earth

Steven Bouma-Prediger
Hope College