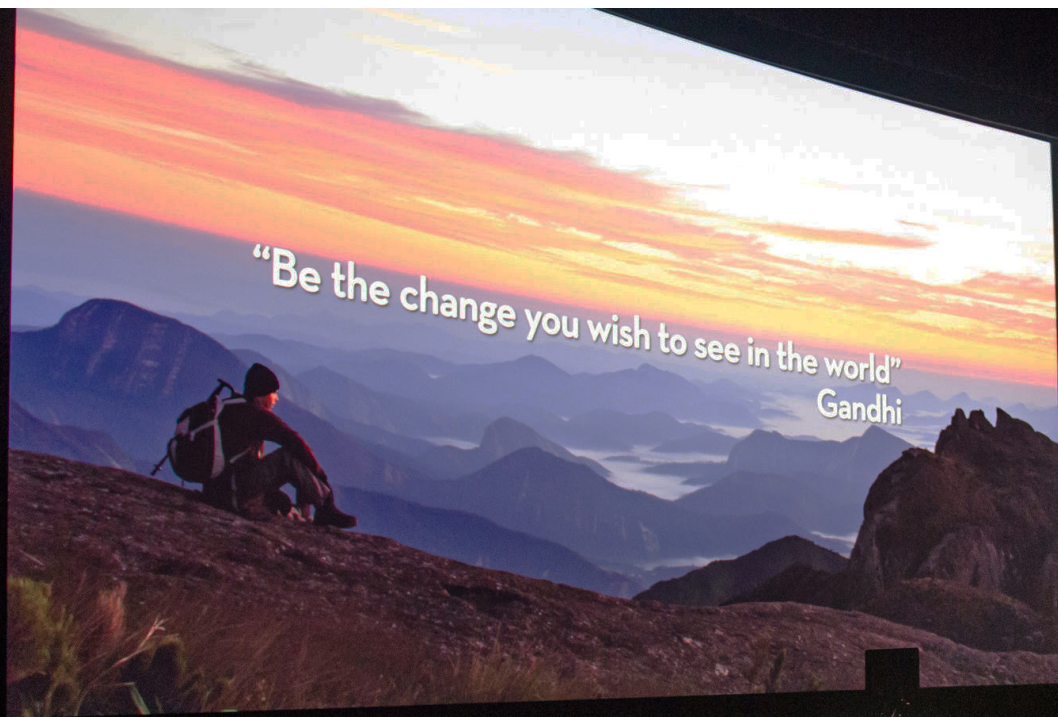

LOVE THY NATURE

Liam Neeson
as the voice of Sapiens

Discussion Guide





WELCOME!

Using This Guide

This discussion guide is intended to support educators in preparing for and following up on a class screening of *Love Thy Nature*. Support materials are intended to facilitate group discussion, individual and collaborative creative exercise, subject based learning and access to resources for further investigation of the topic. Educators are encouraged to adapt and abridge this guide to meet their unique learning objectives and circumstances. This guide is also meant to be used as a workbook – to engage viewers more deeply. Thanks to the nature of electronic documents, students can click and type in the ‘Answer’ sections of the guide, entering as much text as they like—despite the seemingly small space.

And one more thing: have fun!

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ABOUT THE FILM



Love Thy Nature vividly illustrates how we've lost touch with nature and presents a compelling case that reconnecting with the natural world is key to improving personal health and ensuring our survival on Earth.

Liam Neeson provides the voice of Homo Sapiens – our collective humankind – reflecting on how in the past several thousand years we have gradually separated from nature, believing we were meant to transcend and to conquer it. The film traces the disconnect between humans and nature from the agrarian and industrial revolutions to the digital revolution. This disconnect has disrupted billions of years of evolution, leading to a mass extinction of species and threatening the very survival of the human race.

With the help of engaging experts, the film highlights the restorative power of nature and several hopeful new developments. The emerging science of Biomimicry emulates nature's designs, process, and systems – rather than simply harvesting its raw materials – resulting in some of today's most cutting edge innovations. In the medical field, doctors are unveiling new findings on the role of nature in sustaining and healing the human body, and have discovered that spending time in nature can promote physical health, mental acuity, and emotional enhancement.

Traversing the globe, *Love Thy Nature* celebrates the dazzling spectacles of our planet, while also revealing how a deeper connection with nature can transform each of us and inspire us to restore endangered ecosystems, as well as our human family. The film closes with a beautiful montage of

simple ways to make nature a bigger part of our lives.

DIRECTOR'S STATEMENT



Many people ask me why I made this film. I was born in Rio and raised by parents who were nature-lovers. I was a lucky gal: the Rio beaches and the Atlantic forest were my backyard! I was tom-boyish, and the natural world fed my need for adventure, discovery, and wonder. But what was most fun was to share it with friends – climbing trees, jumping in rivers, and searching for monkeys

As an adult – and filmmaker – that desire to share nature with others only grew. But I also started seeing the destruction of the places I called home – runoffs poisoning rivers, fires consuming forests, silence replacing sounds of life. My heart kept breaking in pieces...

I wondered ... how could anyone let this happen? If people loved nature as much as I did, would they still allow its destruction? If millions of species on this planet know how to work with nature, why can't we? These thoughts and feelings became the seed for ***Love Thy Nature***.

Through the transformation of Liam Neeson's character "Homo Sapiens Sapiens," the film invites viewers to fall in love with nature. My wish is that they come to realize that a deeper connection with the natural world won't just ignite a desire to protect it, but will also allow them to experience a new level of discovery, meaning, and fulfillment in their own lives.

Since the time I was that kid running in the forest, I've been nourished, restored, and awed by the natural world. Love Thy Nature is my homage to its magic, power, and genius. And it's my gift to you. I hope it will inform and inspire you, your school, and your community, so that we can help transform and restore our precious world – from the inside out

Wishing you Nature,

Sylvie

ABOUT THE FILMMAKER

Sylvie Rokab is an Emmy nominated, award-winning filmmaker with over 20 years experience as a director, producer, cinematographer, editor and writer. A native of Rio, she was raised by French and Italian parents who were born in Egypt. Fluent in 4 languages, she seeks to inspire a global and diverse audience.

Sylvie started her career editing shows for HBO and Comedy Central and later served as a director of photography on projects for PBS and the Travel Channel. She also directed, wrote, and filmed the Discovery Network series House of Babies

Her new film Love Thy Nature – narrated by Liam Neeson – screened in 140 cities in 16 countries, received 27 awards, and sparked partnerships with groups that help Sylvie advance her mission: to inspire adults, youth, and children to make nature a bigger part of their lives.

KEY CONCEPTS & VOCABULARY



Homo Sapiens Sapiens

Subspecies of Homo Sapiens. In Latin “homo” means “human being” and “sapiens” means wise (present participle of “sapere”). Homo Sapiens Sapiens is a “doubly wise human.”

Evolutionary Wall The idea that a species can reach a limit in its evolutionary journey. In the process of consuming the natural world faster than it can restore itself, humans are hitting an evolutionary wall.

Nature The phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to human creations.

Gaia Hypothesis Also known as Gaia Theory or Gaia Principle, developed in the 1970s by James Lovelock and Lynn Margulis, the Gaia Hypothesis proposes that all organisms and their inorganic surroundings on Earth are closely integrated to form a single, self-regulating complex system, maintaining the conditions for life on the planet. In other words, it suggests that Earth self-regulates like any other single living organism.

The concept’s namesake comes from Gaia, the ancient Greek Goddess of the Earth.

Self-Regulation Individual organisms must maintain a certain range of temperatures in order to survive. They have internal mechanisms in place, such as sweating, or shivering, to help aid this process in case they deviate too far from this range; this is called self-regulation. According to the Gaia Hypothesis, planet Earth also has self-regulating mechanisms that maintain the conditions that are essential to life (such as Earth’s surface temperature, atmospheric composition, and ocean salinity). While a number of scientists in the last few decades have found evidence for this principle, Earth Systems is still a relatively new field of study with much potential for new scientific discoveries in upcoming decades and beyond.

Agrarian Revolution Circa 10,000 BC, when societies of hunter-gatherers transitioned to settled agriculture in wide scale. It’s characterized by the domestication of animals and the cultivation of plants.

Industrial Revolution Time period in the XVIIIth-XIXth centuries when mechanization of manufacturing practices created more goods from less labor. During this time much of the western world's population became more concentrated in the cities and separated from rural lifestyles. The Industrial Revolution also marked the beginning of a long phase of humans extracting natural resources such as fossil fuels, minerals and water from the planet on a massive scale.

Digital Revolution Late XXth century -today. Wide sweeping transition between the use of mechanical and analog electronics to digital technologies. It also marks the beginning of the Information Age.

Biological Revolution This expression has been used in multiple ways. In the context of *Love Thy Nature*, biologist Dr. Dayna Baumeister explains it as a futuristic technological era – in which industries draw inspiration from Earth's organisms to create their most cutting edge innovations. The Biological Revolution is based on the up and coming science Biomimicry.

Biomimicry The word “Biomimicry” can be broken down as “mimicking life.” It takes direct inspiration from the design and function of organisms for adapted use in human-made design and structures. As Dr. Dayna Baumeister says in the film, it is “the conscious emulation of nature’s genius.”

Climate Change The changes in the Earth’s weather patterns. According to NASA, most climate scientists agree that the human expansion of the “greenhouse effect” – warming that results when the atmosphere traps heat radiating from Earth toward space – is a direct cause of the current global warming trend.

Windowless Environments A study by Roger Ulrich published in the journal *Science* shows that patients recover faster from surgeries and need less pain medication when they’re taken to a room with a view of nature in comparison to patients who were taken to a room with a view to

a brick wall. Other studies have shown that participants reduced mental health symptoms such as anxiety and ADHD by being in nature, having a view to nature, or even by simply being in the presence of indoor plants.

Autonomic Nervous System Overdrive A state resulting from constant sensory stimulation, produced by activities such as overly-busy lifestyles, urban congestion, excessive media consumption – which keeps the nervous systems in a state of continuous stress. This constant level of stress can cause numerous mental and physical health problems.

Nature Deprivation (AKA, “nature-deficit disorder”) – Nature-deficit disorder is a concept explored by Richard Louv in his book *Last Child in the Woods* which asserts that many emotional and behavioral problems experienced by children and adults today are rooted in the fact that they do not spend enough time outdoors.

Integrative & Naturopathic Medicine Approaches to medicine that consider the whole body when treating disease rather than just a specific symptom. Integrative medicine typically incorporates the Western scientific method with the Indigenous, and Eastern approaches to medicine.

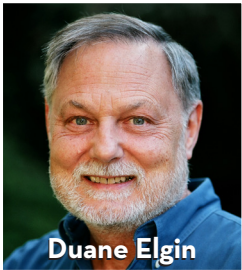
Biophilia Biophilia simply translates to love of life. The concept is that, as a species who emerged from this planet, we have an inherent need to connect to the natural world. Connection to nature stimulates curiosity, peace of mind, vitality, confidence, imagination, curiosity and adventure. Wilderness can also evoke awe and wonder, expansive emotions that help us bring meaning and purpose to our lives.

Awe & Wonder A transcendent feeling of profound admiration in the presence of something greater than one’s self. Recent research suggests that “in the wake of marvel, people feel more connected to their social groups and motivated to act for the greater good. Wonder pulls us together – a counter force to all that seems to be tearing us apart.” (*Psychology Today*, 03/2016)

Urban Agriculture Urban Agriculture is gaining popularity around the world; people are growing food for their families and communities in backyards, on rooftops and in abandoned lots.

Environmental Movement The environmental movement encompasses politics, conservation, science, social justice and economics to create awareness of and protection for the natural world, including human communities.

Social Justice Social justice works to ensure that all people have access to the freedoms and privileges necessary to lead healthy, happy and meaningful lives. The environmental movement is part of the social justice movement because people's health is dependent upon the health of their environment (clean air, pure water, healthy foods, and a livable planet for future generations).



“Technically, our species’ name is Homo Sapiens Sapiens. And to be sapient means to be wise, so to be Homo Sapiens Sapiens means to be doubly wise. Not only do we know; we know that we know.”

Duane Elgin – Social Scientist, NASA Consultant

DISCUSSION TOPICS



THEME: *What is the main point of the film?*

BIOMIMICRY



In the film, Dayna Baumeister, PhD, Co-Founder of Biomimicry 3.8 says:
“When it comes to biomimicry, the conscious emulation of nature’s genius, it is ultimately about recognizing that life creates conditions conducive to life.”

Q Can you think of any examples of biomimicry that you encounter in your daily life?

A

Q Consider the objects you see around you. How might they be improved by copying from nature?

A

NATURE & YOU



“We are completely nature. We breathe the same air that every other animal breathes. There is no separation.”

Jay Harman, Biomimicry Inventor

Q How does nature nourish you on a daily basis?

A

Q How close to nature are the foods that you eat? (Or how processed are they?) Consider your daily, weekly, monthly and yearly routines.

A

Q How much time do you spend in front of a computer, television screen or phone every day?

A

Q How much time do you spend outdoors every day?

A

Q If too little or none, what new habits can you create?

A

Q What is your favorite ecosystem – forests, desert, ocean, freshwater, etc.?

A

Q Is there a time of day that you feel most connected to nature?

A

Q Is there a time of year that you feel most connected to nature?

A

Q Can you schedule a trip to your favorite ecosystem this year?

A

Q How much nature is available in your neighborhood? In your town? Are there trees and parks? Bodies of water? How can you help make it greener?

A

“We’re getting away from this idea that nature is all machinery, and looking into the earth as a single living system.”

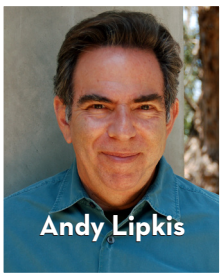
Elisabet Sahtouris, PhD – Evolutionary Biologist



Elisabet Sahtouris



HUMANS ON THE PLANET



Towards the end of the film, Andy Lipkis says:
*“Every species has a role or multiple roles to play
in keeping the whole system functioning...
but we forget to look at the human role.”*

Q What do you think is the role of humans on our planet?

A

Q Give some examples of the positive impact that humans make on our world. What motivates these examples?

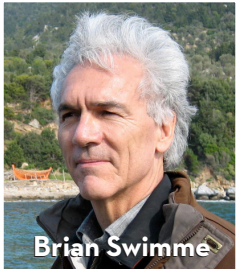
A

Q Now think of some negative impacts humans make. What motivates these examples?

A

Q How might we improve our species' impact on our planet?

A



Brian Swimme, Ph.D., Cosmologist says:

"It seems obvious to me that one of our roles is simply to become astonished with where we find ourselves and really to praise everything around us."

Q

Think back to the last time you were astonished by something in the natural world. Describe the experience.

A

Q

What new insights has the film given you about your own relationship to nature?

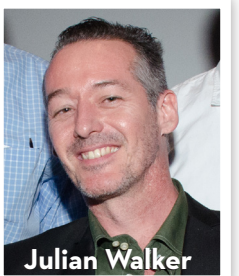
A

Q

What might be an exciting way for you to have a positive impact on nature?

A

ENVISION YOUR FUTURE ...



Julian Walker, Mind-body Healer says:

"We are part of this extraordinary story that's been going on for billions of years. And for the first time, we can look back with self-awareness and say, 'How can I participate?' and 'How can we take responsibility for this planet that we're living upon?'"

Q

Imagine yourself living in an ideal future – 100 years and 500 years from today. Where are you? What do you see?

A

Q

Describe the presence and influence of nature in that future society and in you.

A

A CALL TO ACTION



POST-SCREENING ACTIVITIES

There are many simple activities that you can do on your own to incorporate a greater awareness of the natural world into your daily routine. Here are a few to help get you started:

First thing every morning, open a window or step outside your front door. Take a deep breath of fresh air and invite nature in. What do you see? How do you feel? Start your day cultivating gratitude.

Go for a walk outside every day.

Silence your phone, take in the world around you and simply be.

Keep a daily log of your observations: Take a few deep breaths and tune in to your surroundings. How does the wind feel on your skin? What do you hear? What elements or living beings do you feel most connected to? Where do you see nature's "genius"? Observe textures and colors... where do you see nature's artistry?

Learn about the ecosystem in your region. What animals, plants, and elements are in your area?

Bring plants into your home, learn how to care for them, notice the rhythms of when they are in bloom, their growth patterns, and any other changes you might observe.

At night look up at the sky. Is it cloudy or can you see the stars? The sky has different constellations depending on the time of year, learn them, or pick a single star and watch it travel through the sky throughout the year. Pay attention to the phases of the moon. Is it waxing or waning?

Invite family and/or friends and go on trips to wild areas, such as state or national parks. Turn off your digital gadgets and create fun activities connecting with other people, such as hiking to a mountain top, swimming in a natural pool, catching waves at a beach, sharing stories and jokes, or playing music around a camp fire. Let yourself come alive!

Find outdoor recreation and/or nature groups in your school or neighborhood to join a community of nature lovers. Or form your own group and lead hikes or adventures in your area.

Pursue civic engagement and support leaders who defend human, nature, and planetary health.

Cook healthful organic meals. Take time to notice the colors, feel the textures, and smell the aroma of the foods you cook.

Buy local foods from farmers' markets or co-ops. When grocery shopping, look for the following symbols on packaging—for your own health, the health of communities and the planet:

- Organic
- Non-GMO verified
- Certified Humane—raised & handled (for meat)
- Certified Sustainable (for seafood)
- FSC (Forestry Stewardship Council)
- Compostable
- Recycled
- Fair Trade

Q Why might you choose foods grown organically over foods grown conventionally?

A

Q How do the nutrients inside foods enliven and affect your body?

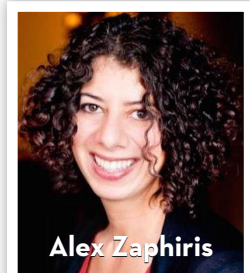
A

Q Do you know which foods have medicinal effects on the body and/or brain?

A

“One of the healthiest things you can do is look at your plate or your salad and include these beautiful colors. Try to include as many different colors on your plate as you can.”

Alex Zaphiris, MD – Integrative Medicine



RESOURCES



NATURE'S CLASSROOM

The National Parks Service has been the steward of the National Parks of the United States since its founding in 1916:

<https://www.nps.gov>

The Children and Nature Network is an organization working to increase children's access and connection to the natural world:

<http://www.childrenandnature.org>

Association of Outdoor Recreation & Education's goal is advancing the profession of outdoor recreation and education:

<http://www.aore.org/>

Pomona College Outdoor Education Center is one of the premier outdoor education programs in the country:

<https://www.pomona.edu/administration/outdoor-education-center>



"Nature for many people is a sacred place. For all the churches and mosques and temples that exist in this world, often when people are mourning, feeling isolated or just feeling bad, what restores them and comforts them truly is Mother Nature."

Jean Shinoda Bolen, PhD – Psychiatrist

ENVIRONMENTAL LEARNING RESOURCES

The Gaia Hypothesis proposes that organisms interact with their inorganic surroundings on Earth to form a complex system that helps to maintain and perpetuate the conditions for life on the planet. More on this topic can be found in many places, but a particularly interesting exploration can be found in a paper from Harvard.edu:

<https://courses.seas.harvard.edu/climate/eli/Courses/EPS281r/Sources/Gaia/Gaia-hypothesis-wikipedia.pdf>

NatureNet.org offers a comprehensive directory of environmental educational resources.

<http://www.naturenet.org/educational-resources/environmental-education/>

BIOMIMICRY

Biomimicry 3.8 is the world's leading bio-inspired consultancy offering biological intelligence consulting, professional training, and inspiration:

<https://biomimicry.net/>

The Biomimicry Institute Increasing the presence of biomimicry in education, “the purpose of the Biomimicry Institute is to naturalize biomimicry in the culture by promoting the transfer of ideas, designs, and strategies from biology to sustainable human systems design.”

<https://biomimicry.org>

STAYING INFORMED

Online news services are a great way to stay informed about how to “*Love Thy Nature.*” Here are a few sites to get you started:

The theme of Ecowatch is “For the love of Earth.”

www.Ecowatch.com

Grist is a leading environmental news site:

<https://grist.org/>

Civil Eats is a great source for information on sustainable agriculture and food systems:

<http://civileats.com/>

The Earth Island Institute, home of the Earth Island Journal, provides in-depth reporting on “News of The World Environment.”

<http://www.earthisland.org/journal/>

Mother Earth News, “the original guide to living wisely,” provides environmental news, gardening tips and much more:

<http://www.motherearthnews.com/organic-gardening/>

GET INVOLVED

There are many ways for you to get directly involved in preserving and restoring the planet. Here are just a few:

Bioneers, “a revolution from the heart of nature,” offers educational resources and community organizing, highlighting “solutions for restoring people and the planet.”

<http://www.bioneers.org>

Earth Day Initiative promotes environmental awareness and community partnerships on Earth Day and throughout the year:

<http://www.earthdayinitiative.org>

Mom’s Clean Air Force is an organization against air pollution, working to fight climate change for future generations:

<http://www.momscleanairforce.org>

TreePeople “inspires and supports the people of LA to come together to plant and care for trees, harvest the rain, and renew depleted landscapes.”

<https://www.treepeople.org>

The international conservation organization **World Wildlife Fund’s** mission is to conserve nature and reduce the most pressing threats to the diversity of life on Earth:

<http://www.worldwildlife.org>

Greenpeace is a leading peaceful activist organization for global environmental causes:

<http://www.greenpeace.org>

The Wilderness Society is a conservation organization dedicated to protecting wildlands in the United States:

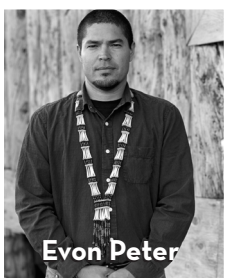
<http://wilderness.org>

The Land Trust Alliance supports conservation efforts and land trusts across the United States:

<http://www.landtrustalliance.org>

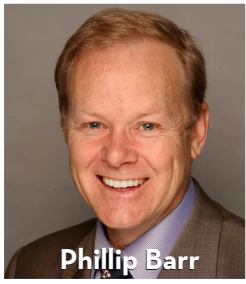
The Sierra Club is nation’s largest grassroots conservation organization, dealing with both community action and policy:

<http://www.sierraclub.org>



“In each day, take one moment to take one breath and understand that that breath brings life into our bodies and that same breath connects us to every other human being on this planet, and to all of creation on this planet.”

Evon Peter – Gwich’in, Alaska Indigenous Leader



“Definitely eating foods as close to their naturally occurring form from when they were in the field for vegetables and fruits is a healthier way to have them because the nutrients, the enzymes, the vitamins are all going to be more present, more intact, and in larger quantities. So, the closer to nature the better, the more organically grown the better.”

Dr. Phillip Barr, M.D.

HEALTHY EATING

Many websites offer tips for eating healthy eating, nutrition and recipes; here are some of our favorites:

US Department of Health and Human Services provide tips and resources for healthful nutrition:
<https://health.gov/healthypeople/objectives-and-data/browse-objectives/nutrition-and-healthy-eating>

Local Harvest helps you find organic grocery stores and farmer’s markets in your area!
<http://www.localharvest.org/>

The Chopra Center’s mission is to “improve the health and well-being of body, mind and spirit.” They offer any healthy recipes and nutrition:
<http://www.chopra.com/nutrition-and-recipes>

The food justice group Just Food provides resources for local farming, urban agriculture, and food pantries:
<http://www.justfood.org>



NATURE AS MEDICINE

Association for Nature & Forest Therapy Guides' mission is to “mobilize health care networks to connect people with nature.”

<https://www.natureandforesttherapy.earth>

The Animas Valley Institute fosters connection between the human psyche and natural world through workshops and training series:

<https://www.animas.org>



Stephen Kellert

“The notion of biophilia is that we have an inherent need to affiliate with the natural world. It has been and continues to be essential to our health, our productivity, and our well-being.”

Stephen R. Kellert, PhD – Social Ecology Scholar, Yale University

Our mission is to use our film to inspire people all around the world to bring nature into their lives.

HOST-A-SCREENING



If you'd like to try something *really different*, join us by sharing ***Love Thy Nature*** with your community and host your own screening! Find details and tools on our [Host a Screening](http://www.lovethynature.com/screenings/) page.

<http://www.lovethynature.com/screenings/>

“Be the change you wish to see in the world.” Gandhi

Notes to Self:

Use this space to record any other ideas you might have for gaining a better balance with nature...for yourself, for your community, for the world?

Voice Talent

Love Thy Nature was narrated by Liam Neeson: <http://www.imdb.com/name/nm0000553/>

Experts & Interviewees

Dayna Baumeister, PhD – Co-Founder, Biomimicry 3.8

<https://biomimicry.net/bios/dr-dayna-baumeister/>

Brian Swimme, PhD – Cosmologist, Professor

<http://www.ciis.edu/faculty-and-staff-directory/brian-swimme>

Stephen R. Kellert, PhD – Social Ecology Scholar, Yale University

<http://branford.yalecollege.yale.edu/stephen-r-kellert>

Duane Elgin – Social Scientist, NASA Consultant

<http://duaneelgin.com/>

Jay Harman – Biomimicry Inventor, Pax Scientific

<http://www.paxwater.com/about-us>

Elisabet Sahtouris, PhD – Evolutionary Biologist

<http://www.sahtouris.com/>

Jean Shinoda Bolen, PhD – Psychiatrist

<http://www.jeanshinodabolen.com/>

Evon Peter – Gwich'in, Alaska Indigenous Leader

<http://www.evonpeter.com/>

Andy Lipkis – Founder - TreePeople

<https://www.treepeople.org/andy>

Julian Walker – Mind-Body Healer

<http://julianwalkeryoga.com/>

Alex Zaphiris, MD – Integrative Medicine

<http://www.360-md.com/contents/team/meet-alex-zaphiris-md-ms>

Philip Barr, MD – Integrative Medicine

<https://www.linkedin.com/in/philip-barr-m-d-97926218>

For full credit list, visit:

<https://lovethynature.com/credits/>

Creation, Layout and Design

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For more information, visit LoveThyNature.com.