

CALL OF LIFE

FACING THE MASS EXTINCTION

discussion guide



www.calloflife.org

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STUDIOS**
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Please visit
www.CallofLife.org
and
www.Facebook.com/Call.of.Life

A Film by



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How to use this Guide

The DVD contains two versions of *Call of Life* for you to choose from: the 80-minute “Feature” version and a 59-min. “Broadcast” version. The shorter version is designed for broadcast but is included as an option for classroom use or any situation where a shorter running time is preferred. The Broadcast version also includes the option of closed captioning for the hearing impaired.

Both versions of the movie contain the same six chapters. We recommend watching the entire movie at one time but if you prefer to watch the chapters separately, consider combining the shortest chapters 1 with 2, and 5 with 6.

The chapter running times are:

	Broadcast Version	Feature Version
1 – Mass Extinction	5:45	5:45
2 – Does It Really Matter?	12:00	14:30
3 – The Direct Drivers	11:45	12:20
4 – The Hidden Drivers	11:10	24:45
5 – Last Chance	5:45	7:45
6 – Answer the Call	10:30	13:00

- This Discussion Guide is arranged in five sections corresponding to the six chapters of the film (the last section covers two chapters).
- Each section starts with a few questions to consider before watching the movie, then offers some suggestions for discussion after the movie. This material is intended to supplement and expand on ideas presented in the film. At the end of each section are a few more questions for further discussion.

Call of Life was produced by **Species Alliance**, a 501(c)(3) nonprofit organization. Visit calloflife.org and speciesalliance.org to learn more about the filmmakers, and please consider supporting Species Alliance in our mission to raise awareness of the biodiversity crisis and secure a healthy future for all life on Earth.

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Filmmaker's Statement

A great transformation is underway on planet Earth. From the most remote mountaintops to forests, grasslands, and deserts, from river headwaters to the deepest seas, reports from around the globe tell the same story: wild places that have been stable for millions of years are in turmoil. Weather patterns and water sources are being disrupted. Plant and animal species are vanishing faster than ever before. Our cities and farms, our parks, even our backyards are changing in ways we're only beginning to notice, but that are already affecting the health and well-being of our planet and us.

All over the world species are becoming extinct at an astonishing rate—between 1000 and 10,000 times faster than normal. This accelerating loss of biodiversity has become so severe that scientists are calling it a mass extinction event. If current trends continue, experts predict that more than half of all the plant and animal species on Earth will become extinct within the next few decades. Losses of such magnitude, occurring so rapidly, will stress ecosystems to the breaking point and threaten the stability of the Earth's entire biosphere, the web of life itself.

Call of Life: Facing the Mass Extinction is the first feature documentary to investigate the threat to Earth's life support systems from this unprecedented loss of biodiversity. Through interviews with leading biologists, ecologists, social scientists, indigenous leaders, and others, the film explores the causes, the scope, and the potential effects of the mass extinction. But it also looks beyond the immediate causes of the crisis to consider how our cultural and economic systems, along with deep-seated psychological and behavioral patterns, have allowed this situation to develop, continue to reinforce it, and even determine our response to it. *Call of Life* tells the story of a crisis not only in nature, but also in human nature.



Call of Life considers the collective and individual responses that will be needed to mitigate the impacts of the mass extinction, and makes clear the critical choices we have before us. We face the potential of the natural world devastated beyond recognition, with the loss of human life in the billions. Yet we still have time to avert the worst of the losses and save much of the biosphere if we act decisively. The first step is to create broad public awareness of the magnitude and implications of the crisis. Only then can our whole society begin to consider the systemic changes that will be required. In order to save our planet and secure a future for our own species and all species, we need a new worldview. We must recognize that technology alone cannot save us, and business-as-usual is no longer an option. Instead, we need to create fundamental change in our culture, our minds, and our hearts. Unique among all human generations, those of us alive today have been given a great opportunity: one last chance to preserve the vitality and magnificence of the living planet that sustains us, and is our only home.

Chapter 1 – Mass Extinction

questions

- How many species are alive on Earth today?
- How often do species go extinct naturally?
- What is a mass extinction?
- When was the last mass extinction?
- How do we know a mass extinction is occurring now?
- What's different about the current mass extinction from previous ones?

discussion

• Species arise and go extinct naturally. The general trend, however, during the more than 3.5 billion years that life has been evolving on Earth, has been toward ever greater complexity and diversity, with more new species evolving into existence than there were species going extinct. Now that has changed—the rate of extinction today is vastly greater than the rate of new species appearing, and every day the Earth is less diverse and less complex than it was yesterday.

• No one knows for sure how many species we have on Earth; estimates range from 7 to 15 million or more. Most researchers put the number at around 10 million. The natural extinction rate is said to be about one species per million per year.



• There have been five distinct periods of catastrophic decline in Earth's distant past—when as much as 90% of the species alive at the time suddenly vanish from the fossil record. Scientists refer to these as mass extinction events, and believe that each was triggered by some extraordinary occurrence such as an asteroid impact or a period of unusual volcanic activity. Each of these ancient extinction events took place over many centuries, yet these periods were brief compared to the millions of years the Earth took to recover its diversity after each extinction spasm had finally run its course. The last mass extinction occurred 65 million

years ago when most scientists believe a giant asteroid hit the Earth near the Gulf of Mexico, causing global climate change and leading to the extinction of the dinosaurs and many other species.

• Today, scientists believe that we are entering the 6th Mass Extinction. But unlike the previous five, this one will not take centuries to unfold—in fact, the worst of it could take place in our lifetimes. As scientists begin to realize the severity of the crisis and new worldwide assessments are made, the news is difficult to believe. At least half of all plant and animal species are likely to disappear in the wild within the next 30-50 years, including many of the most familiar and beloved large mammals:

elephants, polar bears, chimpanzees, gorillas and all the great apes, all the big cats, and many, many others. Bird species are similarly imperiled; songbird populations have declined by 50% in the last 40 years. One out of every eight species of plant life worldwide and almost one third of the plant species within the United States already face extinction. Populations of large ocean fish have declined by 90% since the 1950s. All around the world, birds, reptiles, mammals, amphibians, fish, and invertebrates, as well as trees, flowering plants, and other flora, are all in steep decline, and the extinction is progressing much more rapidly than anything we find in the fossil record. Today wild-life populations are declining and species are vanishing faster than at any other time in Earth's history. The rate of extinction today could be as much as 10,000 times greater than the expected natural or background extinction rate. Estimates are that tens of thousands of species are vanishing every year, including many that have yet to be discovered or named.

- Researchers make estimates of the number of species in an area or the number of extinctions that are likely to have occurred there by extrapolating from small sections of habitat where species and populations are carefully studied and counted. Extinction estimates are largely based on the rates of habitat destruction. Scientists are very careful about declaring a particular species



extinct, often waiting years since the last sighting before making a final pronouncement. The most recent large mammal to attain this sad distinction was the Yangtze River Dolphin, declared extinct in 2006.

additional questions

- If we aren't sure how many species there are, how can we know how many are going extinct?
- Can you name any species that have gone extinct in your lifetime?
- Can you name any organizations that are studying or working on the issue of mass extinction?
- What laws and government agencies are in place to protect against species loss?
- What are some of the species you cherish most, and why?

Chapter 2 – Does it Really Matter?

questions

- What is biodiversity?
- What is an ecosystem?
- What are ecosystem services?
- How are ecosystems affected by mass extinction?
- What's the greatest threat to human beings from mass extinction?
- What is an extinction cascade?
- Can a collapsed ecosystem be recovered?

discussion

• Biological diversity, or biodiversity, means simply the variety of living species. This diversity of life forms is essential for a healthy planet because species depend on each other. We depend on many species directly for our basic needs such as food, clothing, fuel, shelter, and medicine, but the complex network of all species is necessary to support those that we depend upon directly.

• An ecosystem is a biological system formed by the interaction of a community of organisms with their environment. Ecosystems are intricately interdependent; species depend on each other for survival in complex and subtle ways that science is only beginning to understand. Every species plays a role in the ecosystem. When one species goes extinct, other species that depend on that one are threatened, and others that depend on those are impacted, and so on, in a cascade or ripple effect that runs through the whole ecosystem. The loss of any species can potentially affect the ability of other species to survive. What's more, a species does not need to become totally extinct in order to have this effect. A severe decline in a species' population can weaken the entire system and be nearly as detrimental to the ecosystem as extinction. As stresses increase, eventually the ecosystem will reach a breaking point, after which total collapse of the system is rapid and irreversible.

• Biologically diverse ecosystems provide indispensable ecosystem services, such as purification of the air and water, regulation of the climate, nutrient cycling in the soil, disease control, pollination, and prevention of erosion, to name just a few. We cannot live without these essential services that healthy ecosystems provide, yet we often take these things for granted. Every species is precious and irreplaceable, but the greatest threat to human beings from mass extinction will not be from the loss of any particular species, but rather from the disruption of the ecosystem services on which we, like all species, depend.



- The importance of biodiversity to pharmacology and medical research cannot be overestimated. Approximately 80% of the people in developing countries still get their primary health care from traditional, plant-based medicine, but the vast majority of the drugs used in modern Western medicine also come directly or indirectly from plant sources. One example is Paclitaxel, a derivative of the Pacific Yew tree found to induce remission in certain cancers, which was discovered through a random screening of 35,000 plant samples. The complexity of the Paclitaxel molecule illustrates why such compounds are unlikely to be discovered by chemistry alone.



- Our health is affected in ways large and small by the health of the natural world in which we're embedded, and by our connection and relationship to that world. Studies have shown that hospital patients who had a view of trees from their windows healed faster and required fewer drugs than those who lacked such a view. Other studies have documented the many benefits hospital patients and nursing home residents experience through contact with animals, and groups such as Therapy Dogs International provide pets for that purpose. This research supports what many of us already sense, that our health and emotional well-being are enhanced simply through contact with nature.



- The Earth's biodiversity not only gives us material, life sustaining benefits, but it also gives us the aesthetic and spiritual benefits of a beautiful world that fills us with wonder and awe. Drawing inspiration from nature is an essential part of being human. Without a diverse, abundant natural world, we are left with an impoverished planet that compromises not only our survival, but also our humanity.

additional questions

- Name a species that human beings depend upon directly for clothing, shelter, or medicine. Call it *Species A*.
- Now try to name at least two other species that also depend on *Species A*, and two more species on which *Species A* depends.
- What are some ecosystem services that are often taken for granted? Why?
- Explain how a healthy ecosystem helps to control disease.



Chapter 3 – The Direct Drivers of Extinction

Researchers have identified six primary direct drivers of extinction, any of which can wreak havoc by itself, but in combination with each other and with other social and environmental factors their cumulative effects are devastating. All the direct drivers are solely the result of human activities.

questions

- What are the six direct drivers of mass extinction?
- Which driver has the biggest impact, or threatens the most species?
- What is a dead zone?
- What does over-exploitation mean, and what are some other names for it?
- Which driver magnifies all the others?

discussion

• Habitat loss

Habitat destruction is the single most significant driver of mass extinction, accounting for as much as 80% of the decline in biodiversity. Approximately 70% of the land on Earth has already been turned to human use and an additional estimated 240 acres of natural habitat is being destroyed every hour for agriculture, roads, and urban sprawl.

• Invasive species

Within the last century fossil fuels have allowed humans to become much more mobile than ever before. People and goods now travel easily around the world, and intentionally or inadvertently, plants and animals travel with them. When a foreign species finds itself in a new ecosystem it often has advantages over the native species. There may be fewer predators or other limitations on the invasive species, so it will upset the balance in the ecosystem, crowding out native species and driving them to extinction.



• Pollution

Many of us are all too familiar with the effects of air and water pollution. Humans have traditionally made rivers and bodies of water the dumping ground for our waste. Every year 14 billion pounds of garbage, sewage, and other waste is deposited in the oceans of the world. There is a floating pile of plastic trash the size of Texas in the middle of the Pacific Ocean. Nitrogen based fertilizers needed to feed our ever-growing population contribute one of the most dangerous pollutants to marine life.

Runoff from agricultural fields into streams creates algal blooms and vast dead zones at the mouths of rivers, where nothing can live due to oxygen depletion in the water.

• Climate change

Climate change is finally being recognized by the mainstream culture as a significant threat. Yet as we worry about rising seas and shifting weather patterns we seldom hear what the impact will be on biodiversity. Many species, especially plants, will be unable to migrate to new ranges and unable to survive as the planet warms. Climate change alone could account for the loss of a million species by mid-century. However, it's important to note that if we could somehow solve climate change tomorrow it would not end the extinction crisis; there would still be a mass extinction due to the other drivers.



• Over-exploitation

Also known as over-consumption or over-harvesting, this driver operates in tandem with overpopulation. Right now humans use 50% of all the fresh water available on the planet each year, leaving the other 50% for all other species. Likewise, we use 50% of all the annual production from photosynthesis; that is, we use half of all the new plant growth produced on the Earth each year. We harvest at an unsustainable rate almost everything the planet can produce. We're taking large fish from the oceans so fast that many fisheries have already collapsed and scientists estimate that commercial fishing will be economically unfeasible everywhere—in other words, the fish will be gone—by 2050. Our societies today are far from sustainable and the more of us there are, the more acute the problem becomes. We are literally using up nature.

• Overpopulation

Human overpopulation is the over arching magnifier of all the other drivers. The populations of all species are normally held in check by environmental limitations, but the human species has successfully circumvented those limitations through technology, especially since we harnessed the power of fossil fuels. By using oil to manufacture fertilizers and pesticides we've been able increase food production until our population has grown artificially large. Experts tell us that the optimal human population, using anything like the technologies we have today, might be around three billion. But there are already nearly seven billion of us and it's expected we will reach at least nine billion by mid-century. Already, if everyone alive today used as much energy and as many resources as the average American, we would need four additional Earths to support them. There is already not enough to go around, and the problem will only get worse as the developing world struggles to catch up to the standard of living of the West.

additional questions

- Can you name a species that is common where you live that originally came from another part of the world?
- Name a source of air or water pollution that you see every day. What effect does it have on the ecosystem? What should be done?
- Do you know of any native species in the area where you live that are threatened by global warming?
- How much of the world's fresh water is used by humans every year?
- How large is the global human population expected to be by mid-century?
- Should nations take steps to control or lower their populations? How?
- What will happen as consumption levels in developing regions continue to grow?



Chapter 4 – The Hidden Drivers of Extinction

The mass extinction will not be averted until each of the direct drivers is controlled or eliminated. All the drivers are clearly the result of human behavior, so why do we allow these destructive behaviors to continue? Why do our governments and cultural institutions allow and ignore the destruction? What deep psychological patterns enable and perpetuate these behaviors? What drives the drivers?

questions

- What is the consumer fallacy?
- According to research studies, what makes people happiest?
- How long have scientists been warning about the coming mass extinction?
- Are jobs and the economy more important than environmental concerns?
- What's wrong with the idea of a perpetually growing economy?

discussion

• Consumer Economy

Among the many outmoded and destructive ideas that permeate our culture is the notion that consuming—acquiring more and more things—will make us happy. Our economy hinges on this idea, yet numerous studies have shown that the expected correlation between material possessions and happiness does not exist. Beyond our basic needs, things do not make us happier; rather, happiness comes from our social and family relationships. Yet we



are constantly bombarded with the message that our self-esteem, success, and happiness are all dependent on owning more stuff. We seem to believe that more and more people can simply keep consuming more and more, perpetually. Regardless of the size of our population, an economy based on never-ending growth is not sustainable—there is no such thing as infinite growth on a finite planet.

• Biased Media

Scientists have been warning us about the looming mass extinction for at least 40 years, but we have been slow to listen. In a 1998 survey of biologists and ecologists around the world, biodiversity loss was seen as a more severe threat than global warming, or any other environmental issue. Even now, as more and more researchers worldwide join the consensus and the extinction threat continues to increase, the major media undermine the message by ignoring it. In part, this is because mainstream media is generally corporate-owned, and the message that there are too many of us and that we are over-consuming does not serve the corporate profit motive.

• Ineffective Politics, Misplaced Priorities

Our governments and political systems globally, regardless of their ideological differences, are universally shortsighted and self-interested. Politicians look ahead only as far as the next election; they have no incentive to pursue long-term policies that benefit future generations. Even worse are the giant transnational corporations that wield such global power. Publicly-traded corporations are legally mandated to maximize shareholder profit, and in that single-minded pursuit most fail to consider even the well-being of the communities in which they operate, much less the needs of future generations or other species. Even though the economies of nations are grounded in nature and utterly dependent upon stable and functioning ecosystems, time and again governments and businesses alike pursue short-term economic gain at the expense of a healthy environment.

• The Techno-Fix

We humans have been manipulating our environment with technology ever since we learned to make pointed sticks, and by almost any measure we have been amazingly successful. Today in the developed world, fossil fuel technologies allow most people to enjoy a level of health, mobility, and luxury that would have been unimaginable just a century ago. Yet wide swaths of humanity have benefited little from this new affluence. More than half the world's people live on less than \$4000 a year, and many live in conditions that are worse than they were before the Industrial Revolution. Our success has not been without cost—our gains have often come at the expense of other cultures, other species, and the Earth itself. Western civilization holds a long-cherished illusion of superiority. Our technological prowess has led us to believe that we could dominate not only other cultures, but even nature itself. We treat the natural world as merely a collection of resources to be owned and exploited, and believe that a technological fix can be found for any problem. These mistaken ideas are now deeply ingrained in our culture, and lead us to embrace new technologies without asking the right questions about the risks and long-term impacts on the Earth. Technology is essential to our survival, but our over-reliance on and misuse of it has helped to create our environmental problems. And although technology is certainly going to play a part in any solutions, we can be sure that no new invention is going to come along that will somehow make our current culture sustainable or allow us to keep using the Earth in the ways we do now. Every technology requires some use of natural resources, and all such resources are finite. Everything we make or use is ultimately provided by nature, and there are limits to what nature can provide.

• Denial and Dissociation

Scientists confidently predict the decimation of life on Earth, and these dire predictions of can only be averted if we act quickly, but the warnings don't seem to sink in. What keeps us from hearing this information that is so important to our survival? Some of us may deny either the truth or the importance of it. We may tell ourselves that if we're not hearing it unequivocally from the mainstream media, it must not be true. If it was really important they'd tell us, right? Denial may be a coping mechanism to protect us from feeling the weight of the crisis, which could lead to despair. Mass extinction is an unprecedented situation. Nothing in the history of humanity has prepared us for such a possibility. We have no frame of reference for it; perhaps our imaginations even lack the scope to envision such a threat. But in fact, most of us do take it in on some level and we feel the

emotion of it—sadness, anger, powerlessness—but we don't know what to do with those feelings. After all, we still have to live in this society, so we split off, or dissociate, our feelings from our behavior.

Both denial and dissociation are faulty and ineffective methods of dealing with a very real crisis. It is actually through allowing ourselves to experience our feelings and our grief that we can work

through it and bring forth the energy to move into action. This is best done with others to provide mutual support.



• A flaw in our thinking

Humans have evolved over thousands of generations to live in a relatively stable world. We have been equipped by evolution for survival in that world—where, for instance, sudden events were important for us to notice but slower, gradual ones were not. Such patterns of filtering and interpreting our perceptions once

enhanced our survival, but these are obsolete in today's world of complexity and global change. This evolutionary flaw in our thinking may make it difficult for us to distinguish relevant information from the trivial, and yet the ability to make such distinctions is becoming increasingly crucial. The mass extinction is a good example. It's proceeding quietly in the background of our daily lives, so even though it's a formidable threat, it's easy to ignore while we give precedence to more immediate concerns. In order to overcome this "flaw", we must use our natural reasoning ability, and educate ourselves to think and perceive in a new manner—one that facilitates our survival in today's complex environment.

additional questions

- Have you ever heard a report in the major media about the current mass extinction? Why not?
- Which is a bigger threat: terrorism or ecosystem collapse? What could be the results of each?
- List as many as you can of the natural materials required to manufacture a cell phone.
- Could technology provide a solution to the mass extinction?
- Can you imagine an economy that is not based on consumption and growth?
- Do you get your news from the corporate media? Are there any independent news sources you trust to provide a different perspective?
- How can we improve our ability to perceive and deal with long-term threats?
- What incentives do politicians have to address environmental concerns?

Chapter 5 – Last Chance and Chapter 6 – Answer the Call questions

- What will be the most important factor in determining the future course of life on Earth?
- What are some examples of societies that have undergone rapid systemic change?
- Will stabilizing the human population be enough to avert the mass extinction?
- Can we find a solution to the biodiversity crisis that will work for people everywhere?
- Indigenous cultures often have a view of nature that is radically different from ours. What can we learn from them?

discussion

• We're already on a downhill slide, but it's not too late to mitigate the impacts of the mass extinction if we begin now. We don't have to accept the destructiveness of our culture; other ways are possible. We should envision the kind of world we want to have when we emerge from this crisis. The challenges may seem overwhelming, but we know that societies can change rapidly when enough people become aware of the problems and begin looking for solutions.



• Our technologies are far from powerful enough to control nature, but they're powerful enough to destroy it. The one factor that more than any other will determine the future course of life on Earth is the human mind. Whether or not there will remain such things in the universe as tigers or coral reefs or gorillas is now a matter for the human psyche. We're smart enough to have created this situation and to see the catastrophe coming, are we now mature enough to acknowledge our responsibilities and act to avert it?

• What will it take to motivate the mainstream culture to make the

fundamental changes that are needed? No one can say, but as always the first step is education—the general public is not yet aware of the severity and urgency of the crisis. When enough people are

informed a tipping point will be reached, and when we join together and support each other we will turn our emotional responses and grief into action and overcome our tendencies toward denial and dissociation. When we are motivated, human beings are extremely good at creative problem solving and adaptation—these are precisely the faculties that have powered our success as a species.

- The mass extinction will continue until its drivers are eliminated. To do that we will need to make a radical shift in our relationship to the natural world. Instead of viewing nature as a collection of separate resources to be owned and exploited, we must learn to see it as a single matrix—the common wealth of humanity and the future generations of all species. Many traditional cultures have seen the world this way, and there is much that we can re-learn from indigenous cultures everywhere.
- Achieving the rapid cultural change we need won't be easy, but it's certainly possible, and there are numerous examples of societies and economies that have done so. In just one example, the economy of the British Empire was once heavily dependent on the slave trade, until in 1783 a group of only ten Quakers began speaking out, and within fifty years slavery was abolished throughout the Empire. As anthropologist Margaret Mead famously said, "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has."
- Every choice we make has environmental implications. Whether it's the big life-decisions such as where to live or how many children to have, or the little things like where to eat, shop, or bank, our individual choices matter more than ever before. Make efforts in your own life to lessen your environmental impact. With a little common-sense awareness, there are many ways to conserve, consume more wisely, and reduce your levels of waste. Buy goods and services only from businesses that have good environmental policies. Think about the lifespan of everything you purchase, buy locally-made goods whenever you can, reuse all you can, and recycle. Challenge your friends to a contest of low-impact living—you can conserve in a hundred ways, save money, and have fun doing it!
- We stand at the threshold of a terrific challenge, but also a unique opportunity, and a fantastic adventure—never before has a single human generation had the potential to make such a difference. The decisions we collectively make, or fail to make, in the next few years will affect the course of life on Earth for *millions of years* to come. It's not too late to stop the mass extinction if we rethink our priorities, face our responsibilities, organize, and act. It's up to us—human beings have created this crisis, and only we have the power to stop it.



get started today

- Get involved! Join a local conservation group (or form one) to learn about and protect the species and ecosystems in your area. Organize groups and community events to help:
 - Remove invasive species
 - Restore habitat
 - Pick up trash at parks and beaches, rivers and streams
- Join with other voters to hold government and politicians accountable. Demand that steps be taken to protect and restore your local watershed, and that government at all levels makes the environment its top priority.
- Bring your concern for the environment into every aspect of your life.
 - Initiate conservation and recycling programs at your place of work or school
 - Buy your food from small local growers
 - Avoid using pesticides and fertilizers around your home
 - Promote and use public transit, bicycles, and walking
 - Demand sustainable “green” practices from companies you do business with
- Tell people about *Call of Life* and the mass extinction. Spread the word—work to inform yourself, your family, friends, and community about the great environmental challenges ahead.

additional questions

- What feelings arise in response to this film?
- Of the information presented in the film, what did you know before, and what is new to you?
- Do you disagree with any of the messages in the film? If so, what?
- How has your awareness changed from watching this film?
- What actions can individuals take to motivate cultural change?
- What are you motivated do to help slow the mass extinction?



Internet

Below is a short list of useful websites—please visit the *Call of Life* site (www.calloflife.org) for more information and many more links to organizations working to protect and preserve life on Earth. While you're there you can sign up to host a community screening, visit our store, or make a tax-deductible donation to support our work. Also please “like” our Facebook page (www.facebook.com/Call.of.Life) to receive updates about the movie.

- **Mass Extinction Underway** is an extensive portal to news and information about the current mass extinction. (www.massextinction.net)
- **The International Union for the Conservation of Nature (IUCN)** publishes the annual Red List of threatened and endangered species. (www.iucnredlist.org)
- **Arkive** is an organization dedicated to photographing biodiversity. Their web site offers a multimedia guide to the world's endangered animals, plants, and fungi. (www.arkive.org)
- **The U.S. Fish and Wildlife Service Endangered Species Program** has a searchable database of endangered species in the U.S. (www.fws.gov/endangered)
- **Population Connection International** believes that stabilizing the global human population is the key to solving many environmental and social problems. (www.populationconnection.org)
- **Green America** works to harness the economic power of consumers to create a socially just and environmentally sustainable society. (www.greenamerica.org)
- **The Transition Network** provides resources to help communities transition to sustainability. (www.transitionnetwork.org)
- **The No Impact Project** grew out of Colin Beavan's “No Impact Man” book and film. You too can reduce your environmental footprint and improve your life. (www.noimpactproject.org)
- **The Endangered Species Coalition** offers a list of ten easy things you can do at home to protect endangered species. (www.stopextinction.org/10athome.html)
- **The Video Project** (www.videoproject.com) is your source for educational films exploring many environmental and social issues. Some titles to consider:

Lords of Nature
 Climate Change and Coral Reefs
 On the Brink: Preserving Endangered Species
 What Would Darwin Think?
 A Simple Question: the Story of STRAW
 Division Street
 Forever Wild
 The Unnatural History of the Kakapo
 One More Dead Fish

Books

Nature's Services: Societal Dependence on Natural Ecosystems

Gretchen C. Daily (Island Press, 1997)

New World New Mind: Moving Toward Conscious Evolution

Paul R. Ehrlich , Robert E. Ornstein, Paul H. Ornstein (Doubleday, 1988)

Life in the Balance: Humanity and the Biodiversity Crisis

Niles Eldredge (Princeton Univ. Press, 2000)

A Language Older Than Words

Derek Jensen (Chelsea Green, 2004)

Psychology and Consumer Culture: The Struggle for a Good Life in a Materialistic World

Allen D. Kanner (American Psychological Association, 2003)

The Sixth Extinction: Patterns of Life and the Future of Humankind

Richard Leakey and Roger Lewin (Doubleday, 1995)

Coming Back to Life: Practices to Reconnect Our Lives, Our World

Joanna Macy (New Society Pub, 1999)

Pass it On: Five Stories That Can Change the World

Joanna Macy (Parallax Press, 2010)

End of the Wild

Stephen M. Meyer, Paul R. Ehrlich , Anne H. Ehrlich (MIT Press, 2006)

The New Consumers: The Influence of Affluence on the Environment

Norman Myers , Jennifer Kent, and Edward O. Wilson (Island Press, 2004)

Mycology in Sustainable Development: Expanding Concepts, Vanishing Borders

Mary E. Palm and Ignacio H. Chapela, (Parkway, 1997)

A Scientist Audits the Earth

Stuart L. Pimm (Rutgers Univ. Press, 2004)

Ecopsychology: Restoring the Earth, Healing the Mind

Theodore Roszak, Allen D. Kanner, Mary E. Gomes (Sierra Club Books, 1995)

Worldviews and Ecology: Religion, Philosophy, and the Environment

Mary Evelyn Tucker (Orbis Books, 1994)

The Future of Life

E.O. Wilson (Vintage Books, 2003)