biointegrity

Our Mission: To help the world's most global environmental solutions succeed as fast as possible. biointegrity

BioIntegrity began in December 2014. This small enterprise, with a staff of 1, has been working to connect altruistic donors to today's most globally-beneficial responses to climate change and the biodiversity extinction crisis.

So far we have focused on educating people about the importance of **globally-strategic conservation** of the world's most productive ecosystems, Tropical Forests. This approach offers its supporters the most effective way to build a bright, environmental future for all at global scale.

Today's tropical forest ecosystems predate all other living systems on Earth, are our most productive life support systems, are fundamentally tied to the continuation of Earth's temperate climate and biological productivity, are home to at least half of all biodiversity, and more. For at least the last 30 years, however, tropical forests have been destroyed at a rate of roughly 1 acre per second. Now less than 18% of old-growth Tropical Forests are still standing and total canopy size has been reduced about 50% since 1970. It is time to stop and reverse tropical deforestation.

Earth's Tropical Forest system is collapsing now, due to human destruction, and we have even larger concerns. There is 60% less wildlife on Earth than just 50 years ago, fisheries and reefs are also collapsing, global wildernesses have been all but eliminated. Large-scale, wild ecosystems are our only life support systems. We have to turn this around.

BioIntegrity started with my research question, "What's the #1 solution to climate change and the species extinction crisis?" Since 2014 BioIntegrity has led on getting the word out about Tropical Forests being solution priority 1 for our biosphere and climate. We've seen the climate science and activist communities grasp that message and make it their own this year. Now we must up do more. Much more.

In 2020 BioIntegrity will be operating as a start-up nonprofit organization, aiming to garner support for expansion. I'm looking forward to promoting global biospheric solutions to today's global biggest challenges. Let's build a brighter future!



Chris Searles Founder

2019 SNAPSHOT

In 2019 BioIntegrity supporters helped fund numerous community-based, tropical forest conservation projects, including historic efforts in Ecuador, Indonesia, Kenya, Madagascar, and Peru. Note: Totals shown throughout this report include associated donation matches and conservative, research-based estimates on environmental impact.

Acres Protected: +58,000

Trees Protected: +11 million

Species Protected: +8,000

Countries/Projects Assisted: +5

Donations to Rainforest Trust: +380

Forest-stored CO₂ Protected: +11 million tons

Annual CO₂ Sequestration Protected: +58,000 tons

Annual Oxygen Production Protected: +450,000 people

Annual Freshwater Filtration Protected: +1 billion gallons

Indigenous Community Protections Assisted: +200



2019 HIGHLIGHTS

Continuing partnership with **Rainforest Trust**

Our #1 conservation partner since 2015. Thank you, RT!



AllCreation.org

- 4 quarterly issues
- 1 coffee table book

Chris Searles, editor





Strings in the Park

A Concert for a Healthier Planet

- 1.000 attendees
- 20 local sponsors
- 11 local musicians
- 1 guest artist: Kevin Russell
- 4 square miles of the Amazon protected!

#chrisforbio

This 16 week email series featured informal, educational videos on tropical forests, our biosphere, and global-scale "natural climate solutions." Series supporters donated to Rainforest Trust to protect 50 square miles of the Amazon!



Our supporters reached **more** than 250,000 acres of tropical forests protected around the world, since 2014!

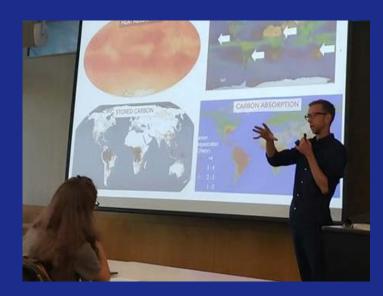


2019 APPEARANCES



Founder Chris Searles gave interviews and presentations about the Amazon fires and the importance of tropical forests at the University of Texas at Austin's Institute of Latin American Studies, Austin Community College, and on television and radio across Austin, TX.











2019 BUSINESS PARTNERS

Our small business partners, since June 2017, have funded protection of more than 50,000 acres of old growth tropical forests!

BioIntegrity Busines		
ECO		
Acres - Protected	50,247.25	
Mature Trees - Protected	10,049,449.20	
Gallons Freshwater Filtered - per year	917,012,239.56	-
Peoples' Annual O2 Supply	386,353.07	O₂

SPECIES		
Critically Endangered Species - Protected	3	CR
Endangered & Vulnerable Species - Protected	34	EN
Microbial Species - Protected	100s of Millions	
Macro Species - Protected	1,000s	

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Tons Carbon Dioxide Sequestration - Protected, per year	48,011.54	(98)
Minimum Equivalent Value in 5kw Rooftop Solar Systems	\$360,086,548.97	E
Tons of Tree Stored Carbon Dioxide - Protected (in ecosystem)	14,569,672.08	CARBON A
Tree Stored CO2 Value, in Vehicle Miles	96,159,835,706.62	MILES

PEOPLES		•
Total Countries Assisted	6	
Indigenous Communities Assisted with Land Rights Protection or Expansion	100+	ŤĨŶ÷
Refugee Communities Assisted with Land Rights Protection or Expansion	6+	İ
Community-Based Economic Development Projects Supported	50+	-





A few of the more than 170 endangered species our donors are helping protect.



























2014-2019 IMPACT SYNOPSIS

266,139 ACRES PROTECTED

1 Uncontacted Tribe Protection Assisted

16 Countries Assisted

26 Forest Conservation Projects Assisted

9 Ethnic Refugee Protections Assisted

402 Indigenous Communities Protections Assisted

+55,000 Indigenous Peoples' Land Rights Protections Assisted

+25,000 Plant, Animal & Insect Species Protections Assisted

Billions Microbial Species Protections Assisted

174 Endangered Species (CR, EN, VU) Protections Assisted

+53 million Trees Protected

+500,000 Large, Old Growth Trees Protected

+230,000 Tons Annual CO2 Sequestration Protected

+75 million Tons Tree-stored CO2 Protected

+2 million People's Annual Oxygen Production Protected

+4.8 Billion Gallons Annual Water Filtration Protected

1,465 Donations to Rainforest Trust and Saving Species



Projects We've Supported



Globally Strategic Conservation

Since December 2014, BioIntegrity supporters have donated just \$135,211.70 to **protect, restore, and reconnect** critically important old growth ecosystems in eight of the world's eight most biodiverse regions, more than 25 projects in 17 countries:

- Central America (Costa Rica)
- South America (Brazil, Colombia, Ecuador, Peru)
- Central & Subtropical Africa (Democratic Republic of Congo, Kenya, South Africa)
- West Africa (Cameroon, Ivory Coast)
- Madagascar (Madagascar)
- Mainland Asia (Nepal)
- Asian Islands / Oceania (Indonesia, Malaysia, Papua New Guinea, The Philippines,

and the Solomon Islands)



Globally Strategic Conservation

Reduce the most emissions
Restore the climate system
Save the most biodiversity
Safeguard life support services
Help the most indigenous people.









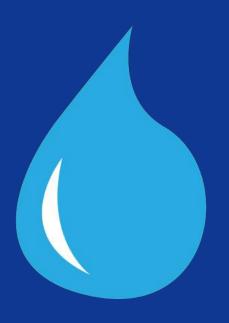




#5) Helping to protect <u>oxygen</u> production for at least two million people per year.

+2,000,000





#6) Helping to protect over4.8 billion gallons of annual freshwater filtration.

+4,800,000,000

#7) Helping protect 412 indigenous and refugee <u>communities</u>.

+400



#8) Helping to protect at least20 Critically Endangered

Species: Sumatran Tiger, Sumatran Rhino, Sumatran Orangutan, Bornean Orangutan, Sumatran Elephant, Helmeted Hornbill, Sunda Pangolin, Chinese Pangolin, Yellow Meranti Tree, Hawksbill Turtle, Bukun Liocichla (bird), Spikenard, Amathole Toad, the Vanikoro Flying Fox, and more.

#9) Helping to protect at least 92 Endangered Species, including our closest genetic relatives.

#10) Helping to protect at least 62 Vulnerable Species and

#11) Helping protect 100s of Endemic Species.







By protecting old growth tropical forests, at an average cost of ~\$1.03 per acre, BioIntegrity supporters have protected an amount of forest-stored Carbon Dioxide (CO2) roughly equivalent to offsetting San Francisco's 2010 community-wide carbon footprint for 13 years.

The Systemic Climate Solution

The Systemic Climate Solution

chris.searles@biointegrity.net

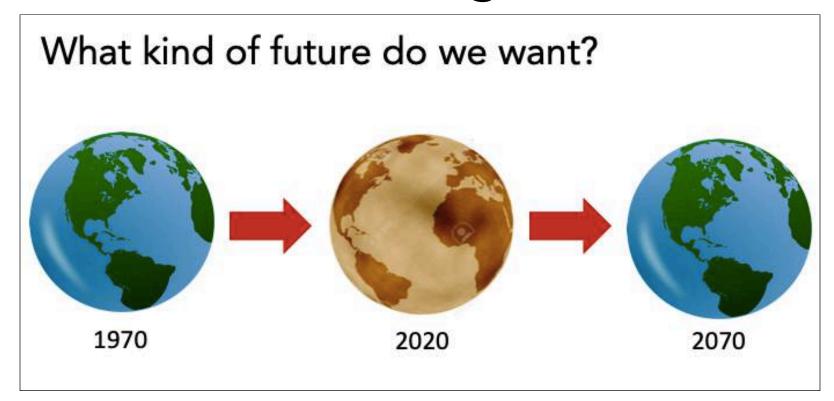
Abstract

Today's two biggest environmental challenges: climate change and biodiversity loss, are in crisis. Since 1970 more than half of Earth's wildlife has been destroyed by rapid human expansion.[1] Scientists recently reported biodiversity loss has reached a "critical threshold around the world"[2] and humans are now living in a state of "eco-recession."[3] More than 70% of humanity currently lives in places where biodiversity loss has been so extreme that the ability of those places to continue providing human life support services is now in question (July, 2016).[4] Despite great leaps in the growth of renewable energy projects[5] and reduced greenhouse gas emissions worldwide,[6] climate change has progressed past the red line.[7] Global average temperature for 2016 was significantly higher than that of 2015--the hottest year ever recorded--a "scale jump" which took the global climate science community by surprise.[8] Suddenly we find ourselves on a fast track to exceeding the allowable maximum of global warming.[9] Meanwhile, coral reefs are descending deeper into a no-return crisis, disappearing faster than probably anyone believed possible just years ago[10] and "conservative" science from 2011 predicts we'll lose 75% of <u>all</u> species on Earth to extinction in less than 250 years.[11] It's highly likely that catastrophic loss of human life and life support system services will take place within the next five to ten years, unless we begin protecting and restoring biodiversity, wilderness, ecosystems, and biological productivity at global to regional scale.

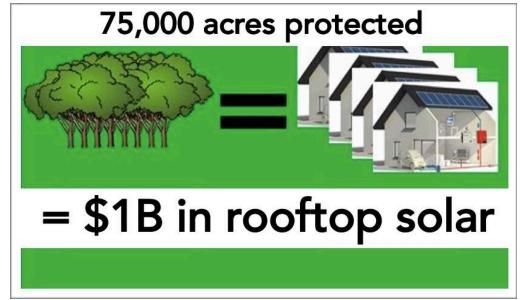
Priority 1: Globally Strategic Conservation. Significant investment in globally strategic ecological conservation and restoration is the only means to stop and reverse today's systemic environmental crises. It is also the most economically efficient and multi-faceted solution. Protecting and restoring Earth's most biodiverse ecosystems would: reverse the global biodiversity crisis; heal significant cooling assets in Earth's climate system; strengthen global life support services and ecological security; help lift the poor out of poverty; proactively and regeneratively address the challenge of feeding a rapidly growing human population; protect developed economies from expensive storms and natural resource collapse, desertification and grand scale entropy; and save lives. Today's global environmental challenges immediately threaten the continuation of our species[12] and life in general but the solution—protecting and restoring Earth's most biodiverse ecosystems, utilizing eco intensive design to solve the global food and poverty challenges, and installing biodiversity resilience buffer zones and corridors in and around the places people live and work, is affordably within reach

BioIntegrity's first 5 years of education and advocacy for Tropical Forests is based-on the research synthesized in this breakthrough paper, **The Systemic Climate Solution** (2016). The paper is one of the first to show the multiplicity of life-, climate-, and culture- determining values contained in Tropical Forests. Please check out the paper here: http://tinyurl.com/systemic-cs.

A few core messages



Ecosystems Are Earth's Vital Organs



IMAGINE WHAT WE CAN DO

Protecting and Strengthening the Integrity of our Biosphere.

It has been BioIntegrity's great pleasure to work with churches, schools, community groups, large and small businesses, artists, individuals, nonprofit organizations, and more, getting the word out on the urgency of protecting and restoring tropical forests. Our central proposition is that the single act of protecting old growth Tropical Forests is more globally beneficial to life and climate than any other action a person can support today. Over the last 5 years, we have shown that globallystrategic deployment of funds to protect tropical forest ecosystems

is easily 1,000X more impactful, per dollar invested, than any

Less than \$500k raised so far.

technological solution. But, we all know there are many, urgent, social and environmental priorities today. Globally-speaking, Tropical Forests are priority 1, but we have come to realize that BioIntegrity's greater role is to help stop and reverse the destruction, fragmentation, and warming of the global biosphere by providing people with useful, actionable information and easy access to best practice solutions providers. Over the next 5 years we will promote a vision of rapid, global, biospheric protection and restoration, which benefits the greater conservation, restoration, and regenerative economies movements and helps securitize our climate and only biosphere. We hope you'll help us rapidly expand our outreach, presentation, and management capacities.

Please visit biointegrity.net for more information.







Contact

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Photo Credits:

BioIntegrity is an extremely small start-up nonprofit, just beginning to seek funding after 5 years of working without income. We will update this document asap with all photographer credits. Please visit our website again in 2020 for the updated doc, thank you very much to all the great artists who have share their works here.



Protecting our planet's most valuable ecosystems.