

Grassroots Coalition News



A project of the 501(c)(3) Grassroots Coalition for Environmental and Economic Justice
We are a Global Family. News by and about Climate and Social Justice Activists.

Our Motto: Use it up, wear it out, make it do, or do without.

Our Slogan: The way forward: cycle back to basics.

Our Word: Invincible: Too powerful to be defeated or overcome.

A Celebration of Youth: www.gceej.org. Issue No. 83: December 2021

COP26: Ringside Reflections on the Glasgow Climate Pact

By Rituraj Phukan, Grassroots Coalition VP, India

The Glasgow Climate Pact has been widely described as a compromise, an agreement to do better next year. The pact has kept the prospect of achieving the target of limiting warming to 1.5 C alive by calling on countries to come back next year with increased ambitions. For the first time in the UNFCCC (United Nations Convention on Climate Change) process, there is a reference to phasing down unabated coal power and phasing out inefficient fossil fuel subsidies.

In a Press Release, the UNFCCC attempted to explain the process of climate negotiations and the need for the compromise. "The wide-ranging set of decisions, resolutions, and statements that constitute the outcome of COP26 is the fruit of intense negotiations over the past two weeks, strenuous formal and informal work over many months, and constant engagement both in-person and virtually for nearly two years. The package adopted today is a global compromise that reflects a delicate balance between the interests and aspirations of nearly the 200 Parties to the core instruments on the international regime that governs global efforts against climate change."

Despite covid and security restrictions, protesters thronged outside the Scottish Events Centre during the entire two weeks. The Blue Zone halls and pavilions inside were only accessible to accredited negotiators, observers, and media personnel. On the other side of the river Clyde, the Green Zone with technology exhibits and film shows was located at the Glasgow Science Centre and open to visitors.

At the World Leaders Summit, new pledges and targets were announced for net-zero economies. The People's Advocate for COP26 Sir David Attenborough said that the stability of the climate system that enabled the development of human civilization is breaking and urged world leaders to turn the tragedy into a triumph.

Prior to COP26, developed countries had acknowledged that they had failed to pro-



Photos: Rituraj Phukan

The Action Zone

vide the \$100 billion per year in climate finance pledged to developing countries over a decade back in 2009. During the summit, leaders from the Global South talked about trust, credibility, and accountability, pointing towards the disconnect between pledges and reality and a clear definition of what counts as climate finance.

The \$100 billion per year target is now considered to be inadequate and vulnerable countries had sought at least \$500 billion between 2020 and 2024 with India asking for \$1 trillion by 2030. The Glasgow Pact "urges" developed countries to meet the \$100 billion per year target "urgently and through to 2025." For adaptation, the pact called for developed nations to "at least double their collective provision of climate finance for adaptation" from 2019 levels by 2025.

COP26 saw many disputes over "loss and damage," considered to be the third pillar of international climate policy along with mitigation and adaptation. The G77 nations* along with China had called for a "Glasgow Loss and Damage Facility" through which historical emitters would pay poor countries to remedy the loss and

damage from climate disasters. Countries agreed to operationalize the Santiago Network of Loss and Damage initiated at COP25 by allocating funds "to support technical assistance for the implementation of relevant approaches to avert, minimize, and address loss and damage associated with the adverse effects of climate change in developing countries."

A key outcome of COP26 is the conclusion of the Paris Agreement Rulebook, which will make it fully operational. This will give certainty and predictability to both market and non-market approaches in support of mitigation as well as adaptation.

On the Clean Development Mechanism, the pact says that carbon credits earned by reducing emissions can either be sold to other nations or counted as [their] own climate targets by a country, removing a loophole that led to double counting and corruption.

More than 30 countries and financial institutions signed a statement committing to halting all financing for fossil fuel development overseas and diverting the spend-

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What is the Grassroots Coalition for Environmental and Economic Justice?

Coalition Founders: John and Iona Conner

Editor/Publisher: Iona Conner

Wire Editor: Allen Hengst

Established: September 1990

Web site: www.gceej.org

Board of Directors: Ngo Banfogha, Jeanette Bartelt, David Hunter Bishop, Bill Boteler, Iona Conner, Eric Kifampa, Jussa Nhari Kudherezera, Rituraj Phukan (<https://gceej.org/board-members/>)

Advisory Council: Dan Adams, Robert Burrowes, Fr. Ted Cassidy, Michael Mann, Mariam Nabukeera (<https://gceej.org/advisory-council/>)

Contact: Grassroots Coalition, c/o Iona Conner, P.O. Box 542, Point Pleasant Boro, NJ 08742-9996; grassrootscoalition@pa.net

Our Motto:

Use it up, wear it out, make it do, or do without.

Our Slogan:

The way forward:
cycle back to basics.

Our Word: INVINCIBLE: Too powerful to be defeated or overcome.

Mission of Our Journal

The mission of *Groundswell News* is to be a beautiful, inspiring, uplifting journal which educates and enlightens people about climate change through scientific articles and stories by and about activists who are working to protect life on Earth and preserve natural resources. We are a global family.

What is the Grassroots Coalition?

John and Iona Conner started this non-profit 501(c)(3) organization in 1990. The mission was and remains “dedicated to creating the critical mass of active participants needed to being ecological justice to this Earth by providing information and resources to individuals which encourage and assist them to make lifestyle changes beneficial to the environment and to effectively grapple with local and global environmental concerns.”

Who are we trying to attract?

We hope to reach people who are concerned about global warming and realize that they are part of the problem but don't know what to do. We invite them to sign up for our newspaper. Please tell your family and friends about us.

What are we trying to achieve?

We want to rapidly increase the number of serious climate activists in the world and inspire them through stories from other activists. Our goal is to keep their spirits up, their energy strong, their hearts open, and their eyes bright and alive.

Our Values

This journal is based on love for Earth, all people, all forms of life – plus air, clouds, rain, snow, weather, oceans, forests, etc. We love Nature. We respect everyone and are willing to share our experiences, both good and bad, with others who may profit from them.

Guidelines for Submissions

I do not get directly involved in fundraising. To submit a story, you need to write a regular article about your work and submit it in a Word document with 2 or 3 photos, including captions and photo credits and then email it to me (Iona) at grassrootscoalition@pa.net. If you need funding, mention that in your last paragraph and be sure to give your contact information.

Please email Iona at grassrootscoalition@pa.net for the full Guidelines. I'll be eager to see what you submit. Thanks so much.

Fair Use Law: <https://copyright.gov/fair-use/more-info.html>

Fair use is a legal doctrine that promotes freedom of expression by permitting the unlicensed use of copyright-protected works in certain circumstances. Section 107 of the Copyright Act provides the statutory framework for determining whether something is a fair use and identifies certain types of uses – such as criticism, comment, news reporting, teaching, scholarship, and research – as examples of activities that may qualify as fair use. Section 107 calls for consideration of the following four factors in evaluating a question of fair use:

(1) Purpose and character of the use, including whether the use is of a commercial nature or is for nonprofit educational purposes.

(2) Nature of the copyrighted work.

(3) Amount and substantiality of the portion used in relation to the copyrighted work as a whole.

(4) Effect of the use upon the potential market for or value of the copyrighted work.

Fair Use Logo



Iona's Column: *From My Heart to Yours*

Dearest Global Family,

This is the time of year when families and friends get together to reminisce and celebrate. I want to express my gratitude to everyone who has helped the Grassroots Coalition for Environmental and Economic Justice improve this year.

I am doing fine overall. Many people have been generous and my part-time job is fun because the folks there are fun! It's not as easy as I thought it would be but I have good teachers and a lot of support. Of course the pay is a nice, too, and I remain hopeful that one day I'll manage to get a grant for a salary so I can do this work I love most of all full time without constantly begging.

Your strength has become my strength. All together we are joined in our common cause of building a better future. Even though it seems hard and sometimes hopeless, I aim to have *Grassroots Coalition News* be a constant source of hope and courage as we carry on, each of us in our unique way.

The references I have gotten to include in my proposal are heart-warming and I trust they will also be heart-warming to the people who work at foundations when they read about us.

My main mission now is to help our members in Africa who are devoted to climate and social justice issues get funding for their great work. It's a slow process but I'm sure we will succeed!

May your holidays be joyful and fulfilling.

With Love,

Iona

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People's Climate March

ing to green energy. The Glasgow Break-through Agenda by 35 world leaders was announced for countries and businesses to work together to scale up the development and deployment of clean technologies.

The Global Methane Pledge signed by 103 countries aims to reduce methane emissions by at least 30% by 2030 from 2020 levels, but India, China, and Russia have not signed the pledge. More than 100 entities, including some countries, signed the Glasgow Accord on Zero Emissions Vehicles to phase out new fossil fuel vehicles by 2040.

Two major announcements concerning deforestation were made during the World Leaders Summit at COP26. The Glasgow Leaders Declaration on Forests and Land Use was signed by more than 130 countries promising to “work collectively to halt and reverse forest loss and land degradation by 2030.” The Forest, Agriculture, and Commodity Trade Dialogue was signed by 28 countries “representing 75% of global trade in key commodities” that contribute to deforestation to support sustainable trade.

At Glasgow, besides having a ringside view of the proceedings at the Blue Zone, I was a witness to the anxiety of the youth and anger of the affected communities including indigenous people from all over the world. I listened to Greta Thunberg and indigenous leaders at George Square on the 5th and walked with the protesters in

the cold November rain from Kelvingrove Park to Glasgow Green on the Global Day of Action for Climate Justice, although I returned back to the conference area after some time. Following the People's Plenary on the 12th, thousands of us walked out of the Blue Zone to protest the lack of urgency and intent to deliver climate justice.

“We must accelerate action to keep the 1.5 degree goal alive. Our fragile planet is hanging by a thread. We are still knocking on the door of climate catastrophe. It is time to go into emergency mode – or our chance of reaching net zero will itself be zero,” UN Secretary General Antonio Guterres said in his statement. The Glasgow Pact does not guarantee a 1.5 C limit to warming but it is a strong framework for enhanced and collaborative action. The path to success has many obstacles and COP27 will be another opportunity to overcome these, because failure is not an option.

**The Group of 77 (G77) at the United Nations is a coalition of 134 developing countries, designed to promote its members' collec-*

tive economic interests and create an enhanced joint negotiating capacity in the United Nations. There were 77 founding members of the organization headquartered in Geneva, but it has since expanded to 134 member countries...China does not consider itself to be a member, nor did it when it was generally regarded as a developing country. However, the country supports and financially contributes to G77, and official statements are made with China. Guinea holds the chairmanship as of 2021. The group was credited with a common stance against apartheid and for supporting global disarmament. It has been supportive of the New International Economic Order. It has been subject to criticism for its lacklustre support, or outright opposition, to pro-environmental initiatives, which the group considers secondary to economic development and poverty-eradication initiatives. (https://en.wikipedia.org/wiki/Group_of_77)



Rituraj (right) participates in a panel at Glasgow Kelvin College.



Image: Kiara Worth, UNFCCC

"This COP will go down in history as the COP that killed 1.5 degrees. It is not true that 1.5 degrees has been kept alive...it's not even on life support...It's not one minute to midnight, it's not midnight, it's five past midnight." – Rupert Reed

COP26: History Will Show Glasgow As the Place Where the 1.5°C Goal Went To Die

By Rolly Montpellier, Canada
Below2C: November 17, 2021

History may very well remember Glasgow (COP26) as the place where the 1.5°C goal went to die. COP26 has failed us and the UK's goal to "keep 1.5°C alive" is now just "hanging by a thread" or on "life support" admit UN officials.

*"No more blah, blah, blah. No more whatever the f*** they are doing inside there..."* – Greta Thunberg at COP26 in Glasgow

Glasgow: Where 1.5°C Went To Die

The challenges going into COP26 were enormous. The planet has already warmed by 1.1°C and global emissions continue to spiral out of control. Pre-Glasgow commitments by countries – based on the Paris Agreement – put the world on a 2.7°C

warming trajectory when what is needed to avert the catastrophic effects of climate change is warming no greater than 1.5°C.

A Carbon Brief analysis shows that if countries meet both conditional and unconditional nationally determined contributions for the near-term target of 2030, projected warming by 2100 falls to 2.4°C. Clearly the ratcheting up of global commitment expected after Paris 2015 – a paltry 0.3°C improvement – has not occurred. It's nowhere in sight and the world's climate has deteriorated even further. We are now in a Code-Red climate emergency.

The video "Responses to COP26 YouTube, Nov 13, 2021" at <https://below2c.org/2021/11/history-will-show-glasgow-as-the-place-where-the-1-5c-goal-went-to-die/> laments the failure of COP26 and the UK's aim to "keep 1.5°C alive" with

commentary from Regina Valdez, Dr. Peter Carter, Nick Breeze, Paul Beck, and Rupert Reed.

A Few Excerpts

"We've been told that we have to wait another year for the next COP27 in Egypt before anything can happen." – Peter Carter

"The underlying truth is that COP is not going to save us...after 26 years of climate policy failure, emissions are still rising and we need to find another way." – Nick Breeze

"Maybe incrementally some things are being done but not to the urgency that we demand and require in order to save this planet...the politicians and the world leaders seem to be the last ones understanding the extent of this climate emergency." – Paul Beckwith

"This COP will go down in history as the 1.5°C continued on next page

1.5°C *continued from previous page*

COP that killed 1.5 degrees. It is not true that 1.5 degrees has been kept alive...it's not even on life support...It's not one minute to midnight, it's not midnight, it's five past midnight." – Rupert Reed

"Our governments are not planning to save us... We must mark and narrate this infamous moment in human history, the moment where 1.5 became consigned to history and where it became clear that no one's coming to save us." – Rupert Reed

Proof of Death

"The Glasgow Climate Pact, for all its restrained and diplomatic language, looks like a suicide pact. After so many squandered years of denial, distraction, and delay, it's too late for incremental change," writes George Monbiot in *The Guardian*.

Not surprisingly, the fossil fuel industry was the big winner at COP26. Its 500-plus lobbyists – lurking around the backrooms and the hallways – were able to water down text and block oil producing countries from taking meaningful action. The lack of climate ambition from world leaders has been exploited by the fossil fuel sector during all 26 COPs to date. And this will not change until fossils are banned from future climate summits. But don't hold your breath. The house is rigged and the house always wins.

BOGA (Beyond Oil and Gas Alliance) – only seven countries have joined this new coalition committed to ending oil and gas extraction – Costa Rica, Denmark, France, Greenland, Sweden, Wales, Ireland, and the province of Quebec. BOGA also has associate members such as California, Portugal, and New Zealand.

However, none of the world's biggest producers – the U.S., Saudi Arabia, Russia, Canada – have joined, while the U.K.

(COP26 host) refused to sign on. The core BOGA members account for an insignificant 0.2% of global oil production according to *Climate Home News*.

"But these days, apparently, it is perfectly acceptable to claim you are going all-out to push the 'renewable energy' button while you import oil to refine it, as Quebec does, or import it in a refined state as Costa Rica does, or in the case of Denmark, extract it for sale to others," writes Paret Gallant in *The Financial Post*.

Coal – India's last-minute change to the Glasgow Pact to "phase down" but not "phase out" coal is quite ironic considering the severe smog emergency in Delhi. The thick blanket of pollution is said to have the same effect as smoking 20 cigarettes per day.

India and China mine a combined "14 million tons of coal per day, and account for 95% of the new coal-fired power plants brought online over the last decade," reports *The Energy Mix*.

Some Reactions....

"We have sadly seen the hand of fossil fuel interests interfering with that text to water it down with weasel words... This language 'unabated coal,' 'inefficient fossil fuel subsidies' – we've seen it before. We've seen it in the G20 for 12 years – 'inefficient fossil fuel subsidies.' It means nothing." – Catherine Abreu, Executive Director, Destination Zero

"This summit has been a triumph of diplomacy over real substance. The outcome here reflects a COP held in the rich world, and the outcome contains the priorities of the rich world. Not only did developed countries fail to deliver the long promised US\$100 billion of climate finance to poorer countries, but they have also failed to recog-

nize the urgency of delivering this financial support. They claim to want urgency on emissions reductions, yet they continue to expand fossil fuel production within their own borders." – Mohamed Adow, Director, Power Shift Africa

"Despite the science, the energy, enthusiasm, and passion of communities, activists, environmental defenders, and NGOs both in Glasgow and across the world, global leaders at COP 26 have failed to put people and the planet ahead of profits and vested corporate interests." – Seema Joshi, Director of Campaigns, Global Witness

The small gains at COP26 do not make up for its glaring failures. COP26 is leaving the toughest issues for COP27 next year in Sharm El-Sheikh, Egypt, the largest oil producer in Africa.

"If COP27, slated for next year in Egypt, could figure a way to harness hypocrisy to generate electricity, it might well be the last COP the world would ever need." – Paret Gallant

From author Rolly Montpellier: We have a global Climate Emergency! Climate change is the most critical issue of our times – the greatest threat ever faced by humanity. The goal of the Paris Agreement is to keep the global temperature rise well below 2°C above pre-industrial levels. Below 2°C is premised on the Paris Agreement. Because if we don't solve climate change, nothing else matters.

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Source: <https://below2c.org/2021/11/history-will-show-glasgow-as-the-place-where-the-1-5c-goal-went-to-die/>

It's up to grassroots activists now!

WHAT HAPPENS TO ONE HAPPENS TO US ALL.
WE CAN STARVE TOGETHER OR FEAST TOGETHER.

~ Robin Wall Kimmerer ~

<https://sensible-sustainability.com/2020/04/26/all-flourishing-is-mutual/>

IT IS IN COLLECTIVITIES THAT WE FIND
RESERVOIRS OF HOPE AND OPTIMISM.

~ Angela Davis ~

<https://highlights.sawyerh.com/highlights/9NpwLADfwP16W9OnRJI>

10 Ways To Keep Climate Hope Alive

By Rolly Montpellier, Canada
Below2C: November 21, 2021

“The emotional toll of the climate crisis has become an urgent crisis of its own,” writes Rebecca Solnit in *The Guardian’s* The Long Read series. Doing the hard work of confronting the climate crisis requires the right tools to mitigate against the crushing fear, anxiety, and depression that threaten one’s state of mind. Those of us on the front lines of the climate movement need ways to keep climate hope alive. We will be fixing what is broken for the rest of our lives, and still, we will leave much unfinished for our children and grandchildren.

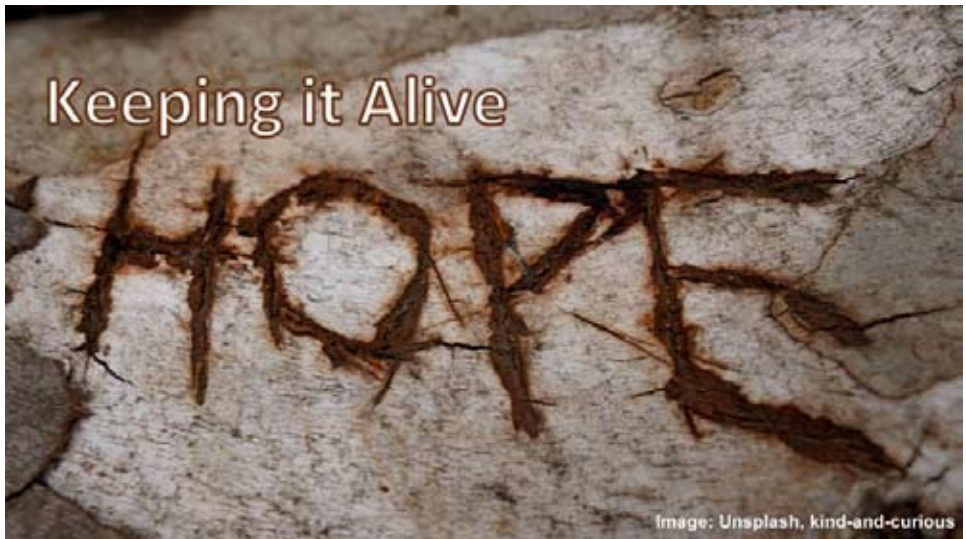
(This post is sourced from *The Guardian’s* Ten Ways to Confront the Climate Crisis Without Losing Hope. You can read the full article by Solnit at <https://www.theguardian.com/environment/2021/nov/18/ten-ways-confront-climate-crisis-without-losing-hope-rebecca-solnit-reconstruction-after-covid>.)

Tools for Keeping Climate Hope Alive

1. Feed your feelings on facts. “One of the curious things about the climate crisis is that the uninformed are often more grim and fatalistic than the experts in the field – the scientists, organizers, and policymakers who are deep in the data and the politics. Too many people like to spread their despair, saying: “It’s too late” and “There’s nothing we can do.” These are excuses for doing nothing, and erase those doing something. That’s not what the experts say.”

2. Pay attention to what’s already happening. “The climate movement – which is really thousands of movements with thousands of campaigns around the world – has had enormous impact.”

3. Look beyond the individual and find good people. “As citizens of the Earth, we have a responsibility to participate... we have the power to affect change, and it is only on that scale that enough change can happen. Individual choices can slowly scale up, or sometimes be catalysts, but we’ve run out of time for the slow. Movements, campaigns, organizations, alliances, and networks are how ordinary people become powerful – so powerful that you can see they inspire terror in elites, govern-



Those of us on the front lines of the climate movement need ways to keep climate hope alive. We will be fixing what is broken for the rest of our lives, and still, we will leave much unfinished for our children and grandchildren. (Rolly Montpellier)

ments, and corporations alike.”

4. The future is not yet written. “People who proclaim with authority what is or is not going to happen just bolster their own sense of self and sabotage your belief in what is possible...the historical record tells us that the unexpected happens regularly.”

5. Indirect consequences matter. “Patience counts, and change is not linear. It radiates outward like ripples from a stone thrown into a pond. It matters in ways no one anticipates. Indirect consequences can be some of the most important ones.”

6. Imagination is a superpower. “This is one of the remarkable things about this crisis...a lot of what we need to give up is poison, destruction, injustice, and devastation. The world could be far richer by many measures if we do what this catastrophe demands of us.”

7. Check the facts and watch out for liars. “Thinking about the future requires imagination, but also precision. Waves of climate lies have washed over the public for decades. The age of climate denial is largely over, succeeded by more subtle distortions of the facts, and by false solutions from those who seek to benefit from stasis.”

8. History can guide us. “To remember that things were different, and how they

were changed, is to be equipped to make change – and to be hopeful, because hope lies in the possibility of things being different. Despair and depression often come from the sense that nothing will change, or that we have no capacity to make that change...the scale of change in the past 50 years is evidence of the power of movements.”

9. Remember the predecessors. “Indigenous leadership has mattered tremendously for the climate movement...a report that came out this summer demonstrated how powerful and crucial Native leadership has been for the climate movement: “Indigenous resistance has stopped or delayed greenhouse gas pollution equivalent to at least one-quarter of annual U.S. and Canadian emissions.”

10. Don’t neglect beauty. “Only when it is over will we truly see the ugliness of this era of fossil fuels and rampant economic inequality. Part of what we are fighting for is beauty, and this means giving your attention to beauty in the present. If you forget what you’re fighting for, you can become miserable, bitter, and lost.”

Rebecca Solnit is a Guardian U.S. columnist, a prolific writer, historian, and activist. <http://rebeccasolnit.net/>

Source: <https://below2c.org/2021/11/10-ways-to-keep-climate-hope-alive/>



Photos Courtesy H4BF

Ongoing training at H4BF's skill training center. (left) Learning the basics. (middle) Learning how to use patterns. (right) Finally sewing a garment together.

Grassroots Coalition Co-VP Hard at Work in Cameroon, Wins UN Award

BIG News us at H4BF

Submitted by Ngo Banfoga, Cameroon

The UN Committee on Non-Governmental Organizations at its 2021 Resumed Session, held from 30 August – 3 September, 7-10 and 17 September 2021, decided to recommend Special Consultative Status with the Economic and Social Council to HOPE FOR A BETTER FUTURE (H4BF)

What is ECOSOC?

The Economic and Social Council is the principal organ that coordinates the economic, social, environmental, and related work of the 14 United Nations specialized agencies, functional commissions, and five regional commissions. It serves as the central forum for discussing international

economic, and social and environmental issues, and for formulating policy recommendations addressed to Member States and the United Nations system.

What is Consultative Status?

Consultative status is an accreditation framework that benefits both the United Nations and the NGOs. As stated by resolution 1996/31: "... Consultative arrangements are to be made, on the one hand, for the purpose of enabling the Council or one of its bodies to secure expert information or advice from organizations having special competence in the subjects for which consultative arrangements are made, and, on the other hand, to enable international, regional, sub-regional, and national organizations that represent important elements of public opinion to express their

views". [ECOSOC resolution 1996/31, part II, paragraph 20]

ECOSOC provides NGOs the opportunity to be heard by a truly global audience and contribute to its agenda. An NGO with consultative status can:

- » Attend international conferences and events;
- » Make written and oral statements at these events;
- » Organize side events;
- » Enter United Nations premises; and
- » Have opportunities to network and lobby.

CONGRATULATIONS TO NGO AND HIS TEAM AT HOPE FOR A BETTER FUTURE CAMEROON!!!

GCEEJ Member Teaches People Solar Cooking



Photo Courtesy Clement Musonda

Notes from Clement Musonda: *"We were happy to receive American friends on 6th November 2021 at our place. It was about our solar cooking project in Zambia. The photos above and below left are from that visit. The U.S. delegation was Marissa and her husband Russell with their projects' collaborators. Our solar cooking project team is Clement, Mr. Salimo and his cousins. Mr Mwaba is the man who was cooking on a solar hybrid stove below. The photographer was a cousin."*



Photo: https://solarcooking.fandom.com/wiki/Clement_Musonda
Clement Musonda attends to a box cooker in 2014.

Clement Musonda is an engineer from Kishahsa, Democratic Republic of the Congo interested in alternative energy sources. He first became involved

with solar cooking in 2010, and has since distributed a number of solar box cookers, and introduced many people to solar cooking.


Since 2014 he has been living in Lusaka, Zambia where he works for Sol Suffit, and promotes solar cooking in the surrounding area.

Other people helping him to promote solar cooking in Africa, and wishing to reduce deforestation and avoid global warming, include Daniel Kadinda, Gaston Kankwende, and Lydia Katuna.

Clement has an interest in solar cooking technology standards, global branding of solar cooking, and consumer rating/certification of solar cookers. His group is also interested in creating relationships with solar cooking partners from the USA and in Europe.

Contact Clement at <http://www.solarcooking.org/>.

‘Whole forests will be saved’: Is solar cooking more than just a flash in the pan?

By Nadia Leigh-Hewitson, *excerpt* 
CNN: October 21, 2021

Submitted by Jeannette Bartelt
Maryland USA

This story was identified by Call to Earth guest editor Rodrigo Pacheco. He is a chef who grows sustainable food at his restaurant and creative permaculture project in Ecuador, and he is a former UN Food and Agricultural Organization Goodwill Ambassador.

From cool, dewy European mountain ranges and humid Central Asian forests to the urban sprawl across North America and the arid landscapes of the African continent, millions of people are cooking with only the sun's rays as fuel.

This culinary magic is known as solar cooking. Instead of burning a fuel source, solar cooking uses mirrored surfaces to channel and concentrate sunlight into a small space, cooking food while producing zero carbon emissions.

According to the World Health Organization, 2.6 billion people around the globe cook their daily meals over open fires. Fuelled with wood, animal waste, kerosene, and charcoal, these fires produce highly polluting smoke and contribute to deforestation, soil erosion, and ultimately desertification – but solar cookers could provide an alternative.

Solar Cookers and Shrinking Forests

Solar Cookers International (SCI) is a non-profit that advocates for the adoption of solar thermal cooking technologies. SCI says it knows of over 4 million solar cookers around the world, which people are using to cook and bake in the direct sun or through light clouds.

One of these people is Janak Palta McGilligan. The 73-year-old is a member of the SCI Global Advisory Council and director of the Jimmy McGilligan Centre for Sustainable Development in Madhya Pradesh, India – which she founded with her late husband in 2010.

In a country where up to 81% of rural communities rely on polluting fuels for cooking, Palta McGilligan noticed people

were being disadvantaged by cooking with firewood from shrinking ecosystems. Their health was impacted and the natural environment surrounding them eroded. “Girls couldn’t go to school because they spent all day collecting wood,” adds Palta McGilligan.

Yet with an estimated 300 sunny days a year, India has a substantial opportunity for using solar thermal energy.

Palta McGilligan introduced solar cookers to these communities, with the Jimmy McGilligan Centre covering all the training costs and 90% of the price of the cookers, both to protect the forests from degradation and to provide equal opportunities for women.

To date, the Centre has trained more than 126,000 people in sustainable practices such as solar cooking, and food curing and dehydrating techniques, as well as using solar thermal energy to heat up an iron to press clothes.

“It is about the environment, but it is also about equality,” she tells CNN. . . .

‘Whole forests will be saved.’

According to international NGO SolarAid, in sunny and arid climates a single solar cooker can save up to a ton of wood annually.

That can add up, with the use of polluting cooking fuels accounting for more than half of global black carbon emissions. Black

carbon is one of the biggest contributors to climate change after carbon dioxide, but it only stays in the atmosphere for days to weeks. In fact, burning wood biomass generates greater CO₂ emissions per unit of energy than burning fossil fuels.

Beyond the carbon cost, the use of biomass fuels can contribute to deforestation of rural regions.

“The planet is at risk,” says Palta McGilligan. “In rural India, we can’t grow trees quickly enough to make up for the wood burnt for cooking.”

She says that alongside training on solar cooking methods, she encourages the planting and nurturing of native vegetation and trees to begin to counteract the environmental impact lifetimes of woodfire cooking has had in rural India.

“The people in the villages are connected to the forests,” Palta McGilligan tells CNN. “They feel sorry the jungles are being lost, they’re sad that there will be no trees. Solar thermal energy is a great relief to them.”

Palta McGilligan has observed the recovery of ecosystems as a direct result of solar cooking being introduced to a village. “Whole forests will be saved by the use of solar cookers,” she says.

Source: <https://www.cnn.com/2021/10/21/asia/janak-palta-mcgilligan-solar-cooking-c2e-spc-intl/index.html>



Photo: Jimmy McGilligan Centre for Sustainable Development

A solar cooker being used to prepare food in Madhya Pradesh, India.



Photo: Indigenous Environmental Network

Water protectors stop construction of Energy Transfers Partners' Bayou Bridge Pipeline in 2017.

Report Reveals Indigenous Resistance Disrupts Quarter of U.S. and Canadian Emissions

By Jessica Corbett
Common Dreams: September 1, 2021

Indigenous resistance to fossil fuel projects in the United States and Canada over a recent decade has stopped or delayed nearly a quarter of the nations' annual planet-heating pollution, according to a report released Wednesday.

The greenhouse gas pollution for Turtle Island, the land now known to settler nation-states as North America, totaled 6.56 billion metric tons of carbon dioxide equivalent in 2019 – 5.83 billion metric tons CO₂e for the U.S. and 727.43 million metric tons CO₂e for Canada.

Indigenous Environmental Network (IEN) and Oil Change International (OCI) examined the climate effects of several contentious projects and the impact of Indigenous protests.

As the new report – entitled Indigenous Resistance Against Carbon – explains:

Total Indigenous resistance against these projects on Turtle Island – including ongoing struggles, victories against projects never completed, and infrastructure unfortunately in current operation – adds up to 1.8 billion metric tons CO₂e, or roughly 28% the size of 2019 U.S. and Canadian pollution. Victories in infrastructure fights alone represent the carbon equivalent of 12% of annual U.S. and Canadian pollution, or 779 million metric tons CO₂e. Ongoing struggles equal 12% of these nations' annual pollution, or 808 million metric tons CO₂e. If these struggles prove successful, this would mean Indigenous re-

sistance will have stopped greenhouse gas pollution equivalent to nearly one-quarter (24%) of annual total U.S. and Canadian emissions.

“That 24%, equaling 1.587 billion metric tons CO₂e,” the report notes, “is the equivalent pollution of approximately 400 new coal-fired power plants – more than are still operating in the United States and Canada – or roughly 345 million passenger vehicles – more than all vehicles on the road in these countries.”

The groups not only highlight how Indigenous resistance to polluters' projects has limited greenhouse gas emissions but also explain and emphasize the importance of tribal and Indigenous sovereignty, self-determination, and free, prior, and informed consent.

As IEN Keep It in the Ground organizer Dallas Goldtooth put it, “The numbers don't lie. Indigenous peoples have long led the fight to protect Mother Earth,” he said, “and the only way forward is to center Indigenous knowledge and keep fossil fuels in the ground.”

The new report says at the outset that it “seeks to uplift the work of countless tribal nations, Indigenous water protectors, land defenders, pipeline fighters, and many other grassroots formations who have dedicated their lives to defending the sacredness of Mother Earth and protecting their inherent rights of Indigenous sovereignty and self-determination.”

The report also draws attention to the criminalization of Indigenous land and water defenders, stating that, “[T]he fight

against the Dakota Access Pipeline (DAPL) is a notable example of these threats – what happened in Standing Rock should not be seen as an anomalous incident, but rather a disturbing commonality across Indigenous resistance efforts worldwide.”

DAPL, as the oil pipeline is known, is among several projects included in the report. Other fights include fossil fuel development in the Arctic National Wildlife Refuge, fracked gas pipelines like Coastal GasLink and Mountain Valley, and tar sands projects like Trans Mountain and Line 3 – which opponents are calling on President Joe Biden to block like he did the Keystone XL Pipeline shortly after taking office in January.

“This report is predicated on a simple fact: The world is delving deeper into climate chaos, and we must change course,” according to IEN and OCI. “In parallel to the severe threats Mother Earth is facing from climate change, the rights, well-being, and survival of Indigenous peoples throughout the world are at grave risk due to the same extractive industries driving the climate crisis.”

“The United States and Canada must recognize their duty to consult and obtain consent from Indigenous peoples for all projects proposed on Indigenous lands,” the report says. “In parallel, these settler nation-state governments must recognize that the fossil fuel era is rapidly coming to a close.”

Echoing scientists' and energy industry experts' increasingly urgent warnings, the

Indigenous *continued on next page*

The Falling Cost of Renewable Energy

Submitted by Anders Eklof, Sweden

By Martin Armstrong
Statista: October 29, 2021

The world is still a long way from producing all of its required electricity via renewable sources, but figures covered by Our World in Data reveal that at least when it comes to cost, things are certainly moving in the right direction.

Back in 2010, a megawatt hour of electricity gleaned from solar photovoltaic cost a global average \$378 to generate. That's without the effect of any subsidies which may have been applicable in some areas. By 2019, that cost had tumbled down to just \$68 – cheaper than nuclear and coal and only a little behind the most economically efficient option looked at in this chart – onshore wind. Wind energy, both onshore and offshore, has also seen decreases in costs since 2010, while the more established methods of nuclear and coal have either increased in price or seen only a slight drop.

As described by Our World in Data, this difference in price is crucial for increased and rapid adoption of renewable energy sources going forward, and the effects are already being seen. “It is the relative price that matters for the decision of which type of power plants are built. Did the price decline of renewables matter for the decisions of actual power plant builders in recent years? Yes it did. Wind and solar energy were scaled up rapidly in recent years; in 2019 renewables accounted for 72 percent of all new capacity additions worldwide.”

Source: <https://www.statista.com/chart/26085/price-per-megawatt-hour-of-electricity-by-source/>

Email to the right received with subject line “Some good news” and the following message.

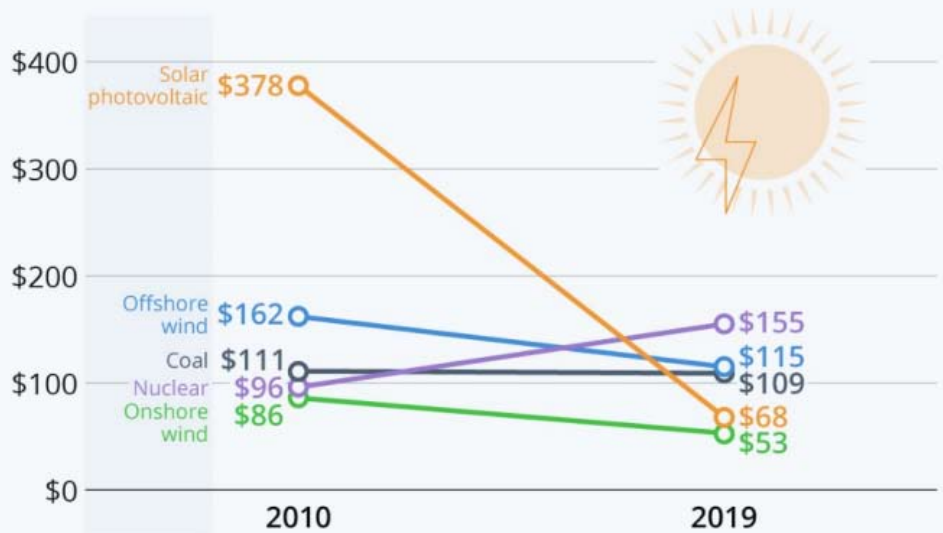
Indigenous *continued from previous page*

report recognizes the “monumental challenge” of phasing out existing fossil fuel infrastructure and declares that, “[O]ur climate cannot afford new oil, gas, or coal projects of any kind.”

OCI U.S. campaign manager Collin Rees said Wednesday that, “Indigenous communities resisting oil, gas, and coal projects

The Falling Cost of Renewable Energy

Price per megawatt hour of electricity, by source*



* Global weighted average of levelized costs of energy (LCOE), without subsidies.
Source: OurWorldinData.org



statista

Hi Iona,

COP26 begins with lots of alarming statements, and I am concerned that, as usual, when all is said and done, more is said than done. It appears that despite the 1.5-degree rise goal set by the Paris agreement, the present trajectory suggests that the world might level out at 2.7 degrees, surely a horrible outcome.

While we can have little faith in politicians, scientists might yet come to our rescue. As the attached graph shows, the per kWh cost of solar and wind power has gone below that of coal and oil, and keeps going down even further at a rapid rate.

There are also good prospects for revolutionary advances in battery technology.

Battery capacity, size, weight, and cost have been the weak points in the use of electricity for all vehicles, heating/cooling, and general mechanical work. At night and with heavy cloud cover, solar panels are useless, and unless there is wind, wind-driven generators will not generate electricity. Thus batteries will be an ever more critical item to fill in the gaps for the power networks.

Regards,
Anders Eklof, Sweden

across their territory are demonstrating true climate leadership. Brave resistance efforts by Indigenous land and water defenders has kept billions of tons of carbon in the ground,” he added, “showing that respecting and honoring the wisdom and sovereignty of Indigenous peoples is a key solution to the climate crisis.”

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Source: <https://www.commondreams.org/news/2021/09/01/report-reveals-indigenous-resistance-disrupts-quarter-us-and-canadian-emissions>

Whither Dangamvura Mountain? Will Mining Destroy It?

By Jussa Nhari Kudherezera, Zimbabwe
November 18, 2021

There are developments currently taking place at Dangamvura Mountain, which we are made to believe are being carried out by a company called Freestone Mining Pvt Ltd, The company will be engaged in quarry mining activities. The entity is reportedly owned and operated by Chinese investors. Manica Youth Assembly (MAYA) is obviously excited when investors choose Mutare, our city, as their investment destination which will improve the local economy.

As MAYA, we commend these investors and further state that in choosing Mutare, Zimbabwe, the investors are obliged to follow the laws of this great country as they set-up their entities. Due process has to be followed, without which problems are bound to arise. All investors should always bear in mind that whenever they set up operations, they must of course get the necessary legal approvals. The Deputy Mayor of Mutare is on record claiming that for Freestone, "Everything was done above board," however, they must get social approval from communities/stakeholders from where they operate which is equally important.

We note the communication issued by Council to the effect that Freestone Mining was operating without a valid Environmental Impact Assessment (EIA) having been done and approved by the Environmental Management Agency (EMA). This position from Council comes after a groundswell of public outcry over the activities of the company, which residents felt were shrouded in secrecy. Because there is no EIA, it makes it difficult for MAYA or any other stakeholder to root for such entities despite all the supposed benefits, if any, because there is no objective means of verification.

For over a week, concerned residents and stakeholders questioned the activities at the quarry site which were proceeding at lightning pace but all they got from Council were muted conflicting positions which did not help in any way in answering the concerns raised by residents.

Concerned residents and stakeholders were especially worried that the mining/quarrying activities directly infringed upon their rights enshrined under section 73 (a) and (b) (111) of the Constitution, which state that every citizen has a right to an environment that is not harmful to their health and wellbeing and "secure ecologically sustainable development ...while promoting economic and social development."

To this end, MAYA remains deeply con-



Photo: www.ouronlyearth.org

Dangamvura Mountains, Mutare, Zimbabwe, October 25, 2020.

cerned by the actions of Freestone Mining, which with absolute impunity and disregard for the law chose to proceed with earthworks at their site without producing an Environmental Impact Assessment as required by the law. The EIA is produced after exhaustive engagement with all stakeholders who may be affected directly and indirectly by the envisaged quarrying activities. It is through an EIA where all can tell whether the quarrying will be a secure, ecologically-sustainable development. An EIA involves consulting the affected communities and there is no record of Freestone ever conducting any meetings with any communities in Dangamvura, Natao/Destiny and road users since the quarrying site is 400 meters (1,312 feet) away from Chimanimani and Dangamvura link roads. There is also a main water pipe less than 100 meters (328 feet) from the site and just 400 meters (1,312 feet) further, there are huge water reservoirs/tanks.

There are many questions regarding the siting of this quarrying site. Will the blasting not affect the water reservoirs and the pipeline? How about the residents of the upcoming Natao/Destiny suburbs just across the road 600 meters (nearly 2,000 feet) away? Blasting does not just cause noise and air pollution but structural damage to buildings. This means that houses that will be put up by Natao/Destiny residents across the road will be on the direct line of fire, posing a real threat to life.

At least, had the company done the EIA, there would be enough information on the mitigation measures the company will employ to reduce these concerns. As MAYA, we condemn this big brother attitude displayed by Freestone of undermining the laws of the country, disrespecting its hosts – the City of Mutare and its residents. This attitude casts a very bad light on the image of our Chinese friends, who of late have been receiving the hard end of the stick for undermining local communities in Mutoko, Dinde (Hwange), Goromonzi,

Uzumba, and Manhize in Chivu. Natural resources should never be a curse for local communities but a source of wealth.

It is this extractivist mentality that must be exorcized from these investors. We are worried by the seemingly 'business as usual' demeanor displayed by our institutions especially EMA and Mutare City Council who stood akimbo while Freestone freely carved open Dangamvura Mountain. Citizens need to trust their duty bearers at all times that they have their best interests covered, not wrecked.

MAYA recommend that Freestone carries out an EIA urgently making sure that all stakeholders can add input into the process. The company also needs to improve on their communication with stakeholders so that everyone is kept informed of their planned course of action to allay their fears. They should be transparent in their operations. Mutare City Council and the Environmental Management Agency (EMA) must exercise their oversight over entities by making sure they operate above board and in sync with set regulations.

There are certain companies that have operated without carrying out EIAs to the detriment of local communities and the environment. It's only a few days after another company was stopped from mining black granite at Kaseke Village, Uzumba because it didn't have an EIA, causing despondency among host communities. These rules were put there for a purpose, that is to protect Communities.

We ask #HowFar Dangamvura Mountain?

Social, economic, and environmental justice in our lifetime!

Fight Inequality because it's iniquity.

Contact MAYA at manicayouthassembly@gmail.com.

Source: <https://manicayouth.org/?p=301>



Photo Courtesy ARS/USDA

Sensors on satellites measure both reflection and emission of electromagnetic radiation from the land using visible, infrared, thermal-infrared, and microwave wavelengths. The data from these sensors provide unique information about water, soil, and plant properties and states.

U.S. Department of Agriculture and NASA Join Forces To Monitor Earth's Water Supply

By Scott Elliott, ARS Office of Communications
Department of Agriculture: October 25, 2021

Scientists with the Agricultural Research Service (ARS, within the U.S. Department of Agriculture) have teamed up with NASA to use satellites to monitor the water cycle on Earth, specifically “evapotranspiration” – the amount of water that enters the atmosphere through evaporation and transpiration from plants. Transpiration occurs during photosynthesis when plants take up carbon dioxide and release oxygen.

That information is especially important for farmers because the data help them get the most from their farms and ranches.

“Evapotranspiration (ET) is an integral part of the water, carbon, and energy cycle of our water, soil, plant, and climate system,” said Bill Kustas, research hydrologist at the ARS Hydrology and Remote Sensing Lab in Beltsville, Maryland. “Most precipitation returns to the atmosphere in the form of ET, which accounts for two-thirds of the global annual average precipitation. Knowledge of ET is critical for monitoring plant and crop water use and stress, loss of water from lakes and reservoirs, and is essential for scheduling irrigation to maintain proper crop growth and development.”

NASA's satellites track plant growth, cover and biomass, land surface temperature, and soil moisture – all key elements to ET and plant health. ARS scientists

develop models from this information to map ET and plant/crop water status so farmers can maintain proper crop growth and development.

How can a satellite collect that type of information from so far away? According to Kustas, sensors on the satellites measure both reflection and emission of electromagnetic radiation from the land using visible, infrared, thermal-infrared, and microwave wavelengths. The data from these sensors provide unique information about water, soil, and plant properties and states.

“All plants transpire liquid water into water vapor that cools the plant so it can maintain a temperature range that is optimal for photosynthesis and promote efficient plant growth and development,” Kustas said. “This leads to the production of maximum crop yield.”

If the ET rate is not high enough, the plant will undergo stress. In the worst-case scenario, without any available water, plants wilt and die. Kustas said that farmers can avoid this by irrigating crops, but this can reduce water available for other uses, like municipal use and maintenance of healthy ecosystems. Knowing the actual ET rate helps farmers to better determine how much irrigation is needed to maintain healthy crops while reducing over-application and pumping costs.

Ranchers can also benefit from satellite ET mapping. “Ranchers can better manage

the land's grazing potential by moving herds or reducing herd numbers before overgrazing can affect land health and future productivity,” Kustas said.

“Water, specifically the amount and use of root zone soil moisture or plant available water, is the most critical limiting factor in agricultural productivity worldwide,” he said. “ET from satellite remote sensing is particularly important for global food security assessment, especially in water-limited regions that have little data to monitor crop conditions and project future yields.”

The mission of the ARS Office of Communications is to inform the Nation of the nature and progress of ARS research through a coordinated, multi-media approach. The Staff creates and disseminates materials to both the mass media and diverse user groups representing consumers, farmers, industry, government, scientists, and educators. The Staff responds promptly and effectively to changing demands for information, so as to inform Congress and taxpayers of the benefits derived from Agency research and speed the flow of new technology to the public and private sectors.

Source: <https://www.ars.usda.gov/oc/dof/ars-nasa-join-forces-to-monitor-earths-water-supply/>

Water Supply continued on next page

Water Supply *continued from previous page*

(right) ARS Hydrologist Bill Kustas (right) and Mina Momayyezi, UC Davis postdoctoral fellow, collect leaf-level photosynthesis and transpiration rates determine vine stress levels. Photo by Nurit Agam D4710-1

(bottom left) Rainbows decorate the sky over one of the vineyard study sites near Lodi, California USA. The research site features a micrometeorological tower that collects standard weather and evapotranspiration data at multiple heights. Photo by Luis Sanchez, D4711-2

(bottom right) Bill Kustas, ARS hydrologist at Beltsville, Maryland USA, checks the position of a water vapor/carbon dioxide (CO₂) sensor on a micrometeorological tower. The instrument measures the exchange of water, energy, and CO₂ between the soil-plant system and the lower atmosphere. Photo by Peggy Greb, D2423-1



WE ARE PARTICIPANTS IN A VAST COMMUNION OF BEING, AND IF WE OPEN OURSELVES TO ITS GUIDANCE, WE CAN LEARN ANEW HOW TO LIVE IN THIS GREAT AND GRACIOUS COMMUNITY OF TRUTH.

~ Parker Palmer ~

<https://twitter.com/gratefulnessorg/status/1211266124932890626>

Biosphere & Regeneration: The Small Water Cycle

By Thorsten Arnold, Canada

The Earth's climate system depends on the regulating function of the biosphere. While fossil fuel emissions must be reduced, I advocate that more attention is given to these biosphere functions: the soil sponge, vegetation and animals, and the small water cycle.

I like an image for poor heat regulation, which especially Canadians understand well. A person is sitting in the cold and freezing. Changes of the greenhouse are like putting on a warmer jacket. Yet, if the person stays put while blood sugar is low, then the person will continue to freeze badly. Even if the jacket could potentially sustain a comfortable body temperature!

Once the person has a snack, stands up and starts moving, the body's temperature regulation kicks in and the person gets cozy. The human body's internal heating system is quite comparable to the biosphere's climate self regulation – just that the biosphere is cooling its climate, it's not warming the body temperature. Temperature regulation requires both attention to the jacket/the greenhouse and to internal regulatory processes. What the snack and movement is to humans, are biosphere functions (healthy soil, vegetation, watershed, and the small water cycle) to the Earth's climate. In my opinion, the climate debate has really neglected the biosphere's self-regulation. I want to educate about this part of the puzzle.

And this is a hopeful message. Humans can regenerate the biosphere and rebuild landscape resilience to climate change. This page offers an overview of topics and formats for biosphere & regeneration talks and seminars that I offer.

A LECTURE SERIES

I offer seven talks about a societal transition to regenerative landscapes, both for general and professional audiences. The first four talks address the scientific basis, “the why.” The latter three talks address the societal dimension, the “how”: management, personal aspects, and community strategic approaches for this transition. I believe that concrete action (the “What needs to be done”) emerges naturally once we understand the why's and the how's (see my blogpost on this at <https://thorstenarnold.com/from-inventing-technologies-that-fix-things-to-fixing-management/>!).

1. Regenerating the Soil Sponge and Watershed Functions: Landscape resilience to climate change depends on functioning watershed functions, especially water retention and storage. A healthy

soil sponge plays a vital role for the water cycle for mitigating floods and droughts. This talk will elaborate the role of the soil sponge for farm and landscape resilience, and how we can regenerate it.

2. The Small Water Cycle – How the Biosphere Self Regulates its Climate: The water cycle is not only governed by global weather processes, but also by the ability of the biosphere to self-regulate. In a changing climate, it is vital to understand and foster these self-regulatory functions with our human management of landscapes. This talk explains the concept of the biosphere's small water cycle and how we can strengthen and regenerate landscape resilience.

3. What is Regenerative Grazing and How Does It Benefit Ecosystem Functions? Planned holistic grazing is one of the most effective ways to restore ecosystem functions and the biosphere's self-regulatory ability. This talk will lay out the basic concepts of planned grazing, and outline how it fits into different types of ecosystems. It will also address questions around ecological impacts of ruminants and meat with different production systems, and opportunities for building a strong local food value chain for regeneratively-produced meat products.

4. What are Regenerative Agriculture and Regenerative Food Systems? This talk explains regenerative agriculture and food systems that foster such production. Basic concepts (e.g. biosphere, soil sponge, planned grazing) are assumed to be known. The talk focuses on regenerative production principles and opportunities to build markets for regenerative products, from direct marketing to wholesaling.

5. What is “Management for Regeneration?” Many audiences are interested in whether one or the other technology is useful for building regenerative food systems. The answer is always: “It depends on how these tools fit into an overall management approach and local context.” This talk will outline the basics of managing for regeneration, at farm and policy level. It will outline a tested planning methodology that fosters regenerative outcomes while avoiding unintended consequences.

6. Personal Development for a Regenerative World: Many people suffer from climate or eco grief, and a sense of powerless-

ness and lack of agency. This talk will lay out approaches to re-discover positivism and hope through regenerative living. This talk offers methods that guide attendees on their journey of personal development within a much-needed societal transition. A transition toward regenerative living within a connected society and a resilient and vibrant ecosystem.

7. Let's Be Strategic About Transformation! History shows that change can happen – often faster than anyone may anticipate. Examples show that an intentional strategy is far more important than resources. This talk uses tested experiences from change makers who have successfully transformed societies peacefully and with very limited resources. The talk provides a step-by-step methodology for designing transitional campaigns. Such a methodological approach greatly improves the chances for success while ensuring that change makers don't over-extend their personal energies.

FORMATS

Each talk takes around 1 hour of presentation, plus ample time for discussion. On request, two topics can be combined for a 90-minute lecture.

Depending on travel, I offer all or some talks in various formats:

- As weekend seminar;
- As two-day seminars, e.g. on two consecutive Saturdays;
- As a weekly series; or
- As a holistic regenerative retreat at a farm (“Barn Academy,” see <https://thorstenarnold.com/barn-academy-regenerative-immersion/>).

All formats, especially the holistic retreat/Barn Academy, can also include a farm tour, physical practice for impact without force that are based on Aikido and Argentine Tango principles, and regenerative meals in community.

Please inquire about costs.

Source: <https://thorstenarnold.com/>
Posted at [biosphere-regeneration-talks/](https://thorstenarnold.com/biosphere-regeneration-talks/)






Photo: Tristin McHugh/The Nature Conservancy

Kelp near Anacapa Island, California USA, in May, 2021.

Scientists Fighting to Save the Ocean's Most Important Carbon Capture System

The population of kelp forests, which help clean the air, has fallen dramatically. That has environmentalists worried.

Submitted by C.B., Pennsylvania USA

By Lucy Sherriff, excerpt 
The Washington Post: July 5, 2021

ANACAPA ISLAND, California USA –

Frank Hurd gently parted the curtains of giant kelp that reached upward through the cold waters of the North Pacific, looking for signs of life.

Kelp forests cover a quarter of the world's coastlines, stretching from Antarctica to Australia, Mexico to Alaska, providing food and shelter for thousands of species, while sucking carbon from the atmosphere. But over the past decade, thanks to warming waters and overfishing, they're disappearing.

On this afternoon, Hurd, a marine biologist at the Nature Conservancy, said he was relieved to find thick kelp canopies surrounding an unpolluted patch off Anacapa Island, part of the Channel Islands National Park in California. But, he says, such refuges are becoming harder to find. "The scale of this problem is dire," Hurd said. . . .


Source: <https://www.washingtonpost.com/climate-solutions/2021/07/05/kelp-forests-destroyed-sea-urchins/>

LOVE ALLOWS US TO FLOW TOGETHER TOWARD A SHARED FUTURE.

~ Adrienne Maree Brown ~

<https://twitter.com/GratefulnessOrg/status/1451876574295478277>



Photo: <https://afar-production.imgix.net/> 

“Come touch the sky.” Climbing to 5,199 meters (17,000 feet), Mount Kenya is the second tallest mountain in Africa. The scenery surrounding this designated World Heritage Site is breath-taking. It is pristine wilderness with lakes, tarns, glaciers, dense forest, mineral springs, and a selection of rare and endangered species of animals, high altitude adapted plains game and unique montane and alpine vegetation. Visitors can enjoy mountain climbing, camping, and caving with the mountain’s rugged glacier-clad peaks providing the perfect backdrop. (<http://www.kws.go.ke/content/mount-kenya-national-park-reserve>)

Melting of Iconic African Glaciers Symbolizes Changes to Earth System

World Meteorological Organization
Geneva, Switzerland: October 19, 2021

Changing precipitation patterns, rising temperatures, and more extreme weather contributed to mounting food insecurity, poverty, and displacement in Africa in 2020, compounding the socio-economic and health crisis triggered by the Covid-19 pandemic, according to a new multi-agency report coordinated by the World Meteorological Organization (WMO).

The State of the Climate in Africa 2020 report provides a snapshot of climate change trends and impacts, including sea level rise and the melting of the continent’s iconic glaciers. It highlights Africa’s disproportionate vulnerability and shows how the potential benefits of investments in climate adaptation, weather and climate services, and early warning systems far outweigh the costs.

“During 2020, the climate indicators in Africa were characterized by continued warming temperatures, accelerat-

ing sea-level rise, extreme weather and climate events, such as floods, landslides, and droughts, and associated devastating impacts. The rapid shrinking of the last remaining glaciers in eastern Africa, which are expected to melt entirely in the near future, signals the threat of imminent and irreversible change to the Earth system,” said WMO Secretary-General Prof. Petteri Taalas in a foreword.

“Along with Covid-19 recovery, enhancing climate resilience is an urgent and continuing need. Investments are particularly needed in capacity development and technology transfer, as well as in enhancing countries’ early warning systems, including weather, water, and climate observing systems,” said Prof. Taalas.

The report is a collaborative product of WMO, the African Union Commission, the Economic Commission for Africa through the Africa Climate Policy Centre, international and regional scientific organizations, and United Nations agencies.

It is accompanied by a story map which highlights the key messages.

It was released on October 19 during the Extraordinary World Meteorological Congress and ahead of the UN Climate Change negotiations, COP26. It adds to the scientific evidence about the urgency to cut global greenhouse gas emissions, step up the level of climate ambition, and increase financing for adaptation.

“Africa is witnessing increased weather and climate variability, which leads to disasters and disruption of economic, ecological, and social systems. By 2030, it is estimated that up to 118 million extremely poor people (i.e. living on less than US \$1.90/day) will be exposed to drought, floods, and extreme heat in Africa if adequate response measures are not put in place. This will place additional burdens on poverty alleviation efforts and significantly hamper growth in prosperity,” said H.E. Josefa Leonel Correia Sacko, Commissioner

Glaciers *continued on next page*

Glaciers *continued from previous page*

for Rural Economy and Agriculture African Union Commission... In sub-Saharan Africa, climate change could further lower gross domestic product (GDP) by up to 3% by 2050. This presents a serious challenge for climate adaptation and resilience actions because not only are physical conditions getting worse, but also the number of people being affected is increasing," she said in the foreword.

Key Messages

Temperatures: The 30-year warming trend for 1991–2020 was higher than for the 1961–1990 period in all African subregions and significantly higher than the trend for 1931–1960. Africa has warmed faster than the global average temperature over land and ocean combined. 2020 ranked between the third and eighth warmest year on record for Africa, depending on the dataset used.

Sea level rise: The rates of sea-level rise along the tropical and South Atlantic coasts and Indian Ocean coast are higher than the global mean rate, at approximately 3.6 mm (.14 inch)/yr and 4.1 mm (.16 inch)/yr, respectively. Sea levels along the Mediterranean coasts are rising at a rate that is approximately 2.9 mm (.11 inch)/yr lower than the global mean.

Glaciers: Presently, only three mountains in Africa are covered by glaciers – the Mount Kenya Massif (Kenya), the Rwenzori Mountains (Uganda) and Mount Kilimanjaro (United Republic of Tanzania). Although these glaciers are too small to act as significant water reservoirs, they are of eminent touristic and scientific importance. Their current retreat rates are higher than the global average. If this continues, it will lead to total deglaciation by the 2040s. Mount Kenya is expected to be deglaciated a decade sooner, which will make it one of the first entire mountain ranges to lose glaciers due to human-induced climate change.

Precipitation: Higher-than-normal precipitation – accompanied by flooding – predominated in the Sahel, the Rift Valley, the central Nile catchment and north-eastern Africa, the Kalahari basin, and the lower course of the Congo River.

Dry conditions prevailed in the northern coast of the Gulf of Guinea and in north-western Africa and along the south-eastern part of the continent. The drought in Madagascar triggered a humanitarian crisis.

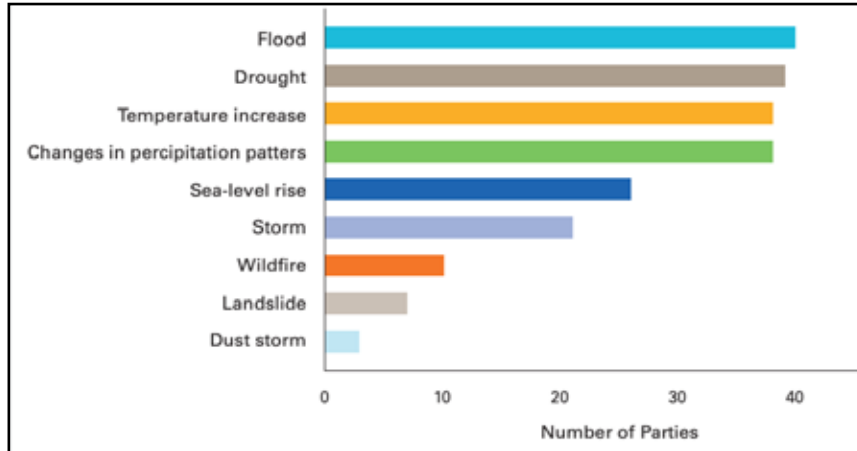


Chart Courtesy WMO

Hazards of greatest concern for the African Region. Source: WMO analysis of the nationally determined contributions (NDCs) of 53 countries in Africa

High impact events: There was extensive flooding across many parts of East Africa. Countries reporting loss of life or significant displacement of populations included the Sudan, South Sudan, Ethiopia, Somalia, Kenya, Uganda, Chad, Nigeria (which also experienced drought in the southern part), Niger, Benin, Togo, Senegal, Côte d’Ivoire, Cameroon, and Burkina Faso. Many lakes and rivers reached record high levels, including Lake Victoria (in May) and the Niger River at Niamey and the Blue Nile at Khartoum (in September).

Food insecurity: The compounded effects of protracted conflicts, political instability, climate variability, pest outbreaks, and economic crises, exacerbated by the impacts of the coronavirus disease (Covid-19) pandemic, were the key drivers of a significant increase in food insecurity. A desert locust invasion of historic proportions, which began in 2019, continued to have a major impact in East and the Horn of Africa in 2020.

Food insecurity increases by 5–20 percentage points with each flood or drought in sub-Saharan Africa. Associated deterioration in health and in children’s school attendance can worsen longer-term income and gender inequalities. In 2020, there was an almost 40% increase in population affected by food insecurity compared with the previous year.

Displacement: An estimated 12% of all new population displacements worldwide occurred in the East and Horn of Africa region, with over 1.2 million new disaster-related displacements and almost 500,000 new conflict-related displacements. Floods and storms contributed the most to internal disaster-related displacement, followed by droughts.

Investments: In sub-Saharan Africa,

adaptation costs are estimated at US\$30–50 billion (2–3% of regional GDP each year over the next decade, to avoid even higher costs of additional disaster relief. Climate-resilient development in Africa requires investments in hydro-meteorological infrastructure and early warning systems to prepare for escalating high-impact hazardous events.

Early warnings:

Household surveys by the International Monetary Fund in Ethiopia, Malawi, Mali, the Niger, and the United Republic of Tanzania found, among other factors, that broadening access to early warning systems and to information on food prices and weather (even with simple text or voice messages to inform farmers on when to plant, irrigate or fertilize, enabling climate-smart agriculture) has the potential to reduce the chance of food insecurity by 30 percentage points.

Adaptation: Rapid implementation of African adaptation strategies will spur economic development and generate more jobs in support of economic recovery from the Covid-19 pandemic. Pursuing the common priorities identified by the African Union Green Recovery Action Plan would facilitate the achievement of the continent’s sustainable and green recovery from the pandemic while also enabling effective climate action.

High-level Launch

The State of the Climate in Africa will be released at a high-level event which will highlight the need for urgent climate action in Africa and for coordination and implementation of weather, water, and climate-related strategic frameworks to support the continent’s socio-economic development.

Prof. Petteri Taalas, WMO Secretary-General, H.E. Josefa Sacko, Commissioner for Rural Economy and Agriculture of the African Union Commission, and Dr. Vera Songwe, Executive Secretary of the United Nations Economic Commission for Africa will make opening statements, followed by a high-level panel discussion.

Source: <https://public.wmo.int/en/media/press-release/climate-change-triggers-mounting-food-insecurity-poverty-and-displacement-africa>



Photo Courtesy Mongabay

Partnering with mining companies raises some thorny ethical issues for the scientists involved. One of the beautiful creatures of the deep who is threatened by deep-sea mining.

'Antithetical to Science': When Deep-Sea Research Meets Mining Interests

By Elham Shabahat
Mongabay via Deep Green Resistance News Service: October 13, 2021

- *The high cost of studying deep-sea ecosystems means that many scientists have to rely on funding and access provided by companies seeking to exploit resources on the ocean floor.*
- *More than half of the scientists in the small, highly specialized deep-sea biology community have worked with governments and mining companies to do baseline research, according to one biologist.*
- *But as with the case of industries like tobacco and pharmaceuticals underwriting scientific research into their own products, the funding of deep-sea research by mining companies poses an ethical hazard.*
- *Critics say the nascent industry is already far from transparent, with much of the data from baseline research available only to the scientists involved, the companies, and [the] U.N.-affiliated body that approves deep-sea mining applications.*

When Cindy Van Dover started working with Nautilus Minerals, a deep-sea mining company, she received hate mail from other marine scientists. Van Dover is a prolific deep-sea biologist, an oceanographer who has logged hundreds of dives to the seafloor. In 2004, Nautilus invited Van Dover and her students to characterize ecosystems in the Manus Basin off Papua New Guinea, a potential mining site with ephemeral hydrothermal vents teeming with life in the deep ocean.

Van Dover was the first academic deep-sea biologist to conduct baseline studies funded by a mining company, an act

considered a “Faustian pact” by some at the time. Since then, more deep-sea biologists and early-career scientists aboard research vessels funded by these firms have conducted such studies. But partnering with mining companies raises some thorny ethical issues for the scientists involved. Is working with the mining industry advancing knowledge of the deep sea, or is it enabling this nascent industry? While there are efforts to disclose this scientific data, are they enough to ensure the protection of deep-sea ecosystems?

“I don’t think it’s sensible or right to not try to contribute scientific knowledge that might inform policy,” Van Dover said. With deep-sea mining, she added, “[W]e can’t just stick our heads in the sand and complain when it goes wrong.”

More than half of the scientists in the small, highly specialized deep-sea biology community have worked with governments and mining companies to do baseline research, according to Lisa Levin, professor of biological oceanography at the Scripps Institution of Oceanography. Collecting biological samples in the deep sea is expensive: a 30-day cruise can cost more than \$1 million. The U.S. National Science Foundation, the European Union, and the National Science Foundation of China have emerged as top public funders of deep-sea research, but billionaires, foundations, and biotech companies are getting in on the act, too.

Governments and mining companies already hold exploration licenses from the U.N.-affiliated International Seabed Authority (ISA) for vast swaths of the seafloor. Although still in an early stage, the deep-sea mining industry is on the verge of

large-scale extraction. Mining companies are scouring the seabed for polymetallic nodules: potato-shaped rocks that take a millennium to form and contain cobalt, nickel, and copper as well as manganese.

Nauru, a small island in the South Pacific, earlier this year gave the ISA a two-year deadline to finalize regulations – a major step toward the onset of commercial deep-sea mining. The ISA is charged with both encouraging the development of the deep-sea mining industry and ensuring the protection of the marine environment, a conflict of interest in the eyes of its critics.

The Metals Company, a mining company based in Vancouver, Canada, formerly known as DeepGreen, recently said that it spent \$75 million on ocean science research in the Clarion Clipperton Zone (CCZ) in the Pacific. The company has established partnerships with “independent scientific institutions” for its environmental and social impact assessments. Kris Van Nijen, managing director of Global Sea Mineral Resources, said, “It is time, unambiguously and unanimously, to back research missions ... Support the science. Let the research continue.”

UK Seabed Resources, another deep-sea mining firm, lists significant scientific research that uses data from its research cruises in the CCZ.

The ISA requires mining companies to conduct baseline research as part of their exploration contracts. Such research looks to answer basic questions about deep-sea ecosystems, such as: What is the diversity of life in the deep sea? How will mining affect animals and their habitats? This scien-

Deep seabed *continued on next page*

Deep seabed *continued from previous page*



Photo Courtesy NOAA/Christopher Kelley

Cobalt-rich ferromanganese crust with batraoidal (bubbly) appearance characteristic of older, thicker deposits.

tific data, often the first time these deep-sea ecosystems have been characterized, is essential to assessing the impacts of mining and developing strategies to manage these impacts. Companies partner with scientific institutions across the United States, Europe, and Canada to conduct these studies. But independence when it comes to alliances with industry is fraught with ethical challenges.

“If deep-sea science has been funded by interest groups such as mining companies, are we then really in a position to make the decision that is genuinely in the best interest of deep ocean ecosystems?” asks Aline Jaeckel, senior lecturer of law at the University of New South Wales in Australia. “Or are we heading towards mining, just by the very fact that mining companies have invested so heavily?”

The Ethics of Independent Science

There’s a risk of potential conflicts of interest when scientists are funded by industry. While mining companies often tout working with independent scientists in company-sponsored research vessels, “having somebody independent on board would be somebody who has presumably no financial affiliation in any way shape or form,” says Levin of the Scripps Institution of Oceanography.

When working with mining companies to

collect baseline data, scientists are compensated through funding, which can be as high as \$2.9 million, for their research labs. Many go on to publish journal articles based on data gathered on company-sponsored ships, advancing science in a relatively unknown realm where access is expensive and sparse.

While knowledge of the deep sea has advanced in recent decades, scientists are still trying to learn how these ecosystems are connected and the impact of mining over longer periods of time. The deep pelagic ocean – mid-water habitats away from the coasts and the seabed – is the least studied and chronically undersampled. There is also a dearth of deep-sea data for the Pacific, South Atlantic, and Indian Oceans, where researchers (and mining companies) are increasingly focusing their attention.

For mining companies, science adds legitimacy, argues Diva Amon, a deep-sea biologist and director of SpeSeas, Trinidad and Tobago. “I think they recognize the value of science in appealing to consumers ... and stakeholders as well.”

While it is common for scientific research to be funded by public agencies, when such funding dries up, scientists may be compelled to seek funding from or collaborate with interest groups. In other scientific endeavors like tobacco research, public health, climate science, and clinical

drug trials, there are policies to manage conflicts of interest, because history is rife with examples of industry influencing the design, outcome and communication of research in their favor. Some argue that even if industry-funded scientists publish research that is methodologically sound, industry influence on a broad scale can bias research results in imperceptible ways that erode trust in science.

Being funded by industry is not an issue if scientists are able to publish their research without restrictions, even if results are negative for the contractor, says Matthias Haeckel, a deep-sea biologist who is coordinating a mining impact project in the CCZ funded by the European Union. “The question is if it’s up to this degree of independency, and that’s difficult to know from the outside ... for me it’s sometimes a transparency issue. It’s not clear what the contracts with the scientists are.”

Deep-sea biologists have published research that does not work in the industry’s favor. A survey of megafauna diversity on the seafloor of the CCZ found that of the 170 identified animals, nearly half were found only on polymetallic nodules that are of interest to mining contractors. The study suggests that the nodules are an important habitat for species diversity.

Deep seabed *continued on next page*

Deep seabed *continued from previous page*

Biodiversity loss associated with mining is likely to last forever on human time scales, due to the slow rate of recovery in deep-sea ecosystems.

For some scientists, the key difference between being funded by an entity like the National Science Foundation versus the industry is control. Mining companies can ask scientists to sign nondisclosure agreements (NDA) because companies in competition are concerned about the details of their sampling programs being made public, says Jeff Drazen, a deep-sea scientist at the University of Hawai'i who is conducting research funded by The Metals Company. While there is a general understanding that scientists are free to publish their research, there can be embargos on when the research is released and requirements for consultation with the contractors.

"Many of them want you to sign an NDA before you can even talk to them. With the current contract we have with The Metals Company, none of our people have signed NDAs, and that was one of the reasons we decided to work with them," Drazen says. "This is a common part of the business world to sign these NDAs – and that is antithetical to science, so that's a cultural shift for most of us academics."

The ISA has issued guidelines for baseline studies, but the decision of what and how much to sample rests on the company and scientists involved. "Scientists have to be careful not to necessarily be driven entirely by what the person funding the research wants," says Malcolm Clark, a deep-sea biologist at New Zealand's National Institute of Water and Atmospheric Research. "We've got to be very objective and make it very clear what's required for a robust scientific project, and not just respond to the perceived needs of the client. Easy to say – very, very difficult to actually put into practice." Clark also sits on the Legal and Technical Commission, a body within the ISA tasked with assessing mining applications.

'Damned if you do, damned if you don't.'

Scientists are still trying to fathom the depths of our oceans, both to understand the sensitive ecosystems that thrive there, and the minerals that can be extracted from polymetallic nodules that have formed over millennia. Less than 1% of the deep sea has been explored. The interest in exploiting ocean minerals is coupled with advancements in scientific research. A study published earlier this year found that deep-sea research languished when this interest in exploitation waned in the 1980s and '90s.

For baseline research, "[I]f this funda-



Photo Courtesy NOAA Office of Ocean Exploration and Research

A cusk eel swims along the seafloor in the area of the Deep Sea Ventures site during Dive 07 of the 2019 South-eastern U.S. Deep-sea Exploration.

mental first-time characterization of these ecosystems is going to be done, it should be done by experts, so there's quality assurance," Levin said in a lecture in 2018 on the ethical challenges of seabed mining. "You're damned if you do and damned if you don't at some level."

There's also the perceived conflict of interest: the intangible effects of working closely with industry representatives, where collecting data means going out together on a research vessel for several weeks at a time.

"We're humans, we're building relationships, and going to sea is a particularly bonding experience because you're out there isolated and working together. I cannot imagine how that kind of relationship will not at some point interfere with scientific judgment," says Anna Metaxas, a deep-sea biologist at the Dalhousie University in Canada, whose research has not been funded by mining companies. It's not the collection of data that Metaxas is concerned about, "it's what you do with the data and how you end up communicating to whom and when."

"What I'm noticing with many PIs [primary investigators] working with mining contractors is that they don't want to bite the hand that feeds them," says Amon. "As a result, they are less willing to speak to the public and the press, which is really unfortunate."

The *Wall Street Journal* reported that according to two people familiar with the matter, Jeff Drazen was facing the possibility of having his funding revoked after publicly criticizing seabed mining. In an interview with Mongabay, Drazen declined

to comment on the matter.

Other prominent scientists who work with mining contractors did not respond to interview requests for this article.

The Trouble with DeepData

Since the ISA started giving out exploration contracts, the data that contractors collected was kept in a "black box" for more than 18 years, hidden from the world with the key in the hands of the contractors, the scientists who conducted this research, and a few people within the ISA. Because academics are involved, some of this data and analysis would eventually become available as peer-reviewed scientific literature.

In 2019, the ISA developed DeepData, a public database where contractors are required to submit the baseline data they collect. But the only data available to the public is environmental data. Resource data, particularly related to polymetallic nodules that are of interest to mining contractors, is off-limits and remains proprietary. The distinction between environmental and resource data is a "gray area," according to Clark. What is deemed confidential is up to the mining contractors and the secretary-general of the ISA.

The nodules, rich in metals such as cobalt and nickel, are a breeding ground for deep-sea octopuses, and home to new species of deep-sea sponges, diverse animals and microbes not found in surrounding waters or sediments. The communities of organisms that rely on these nodules and sediment vary with the abundance of the nodules.

"Miners are going after the components of the habitat," says Craig Smith, a deep-

Deep seabed *continued on next page*

Deep seabed *continued from previous page*

sea scientist at the University of Hawai'i. "But we can't really assess the abundance of that habitat without knowing the abundance of the nodules." In fisheries, for example, industry-sensitive data is aggregated to help with management decisions, but such data is considered proprietary for the nodules.

The metallic content of these nodules is also a trade secret, though the information could be relevant for environmental assessments. Toxicity from broken-down ores could be created in the sediment plumes or wastewater that's reinjected in the water column as a byproduct of the mining process, potentially affecting fish and other biodiversity. Where exactly in the water column mining companies will discharge the wastewater is also confidential.

Drazen, whose research (funded by The Metals Company) is looking at mining impacts on the midwater column, says the mining process will discharge mud and chemicals. "There's a whole suite of potential effects on a completely different ecosystem above the seafloor. We depend upon the water column ecosystem ... a lot of animals we like to eat ... forage on deep-sea animals," he says. The discharge of metals and toxins over potentially large areas could contaminate seafood. A recent study suggests that elements in discharge waters could spread further than mining areas, affecting tuna's food, distribution, and migration corridors. There is increasing evidence that tuna, swordfish, marine mammals, and seabirds rely on deep-sea fish, and foraging beaked whales could also be diving down to the seafloor in search of food. [Emphasis added.]

DeepData is experiencing teething problems. A workshop to assess biodiversity for the CCZ in 2019 found inconsistencies in the data, making it difficult to synthesize across the CCZ. Different sampling methods can make it difficult to provide a cohesive picture.

"There's still a bit of work in progress with DeepData. But certainly, the willingness is there to have it serving people with appropriate needs," Clark says. "We do still need to be careful of the commercial confidentiality as it relates to the geochemical information in particular."

The ISA did not respond to requests for comment.

An Opaque Decision-Making Body

The structure of the ISA, particularly its de facto decision-making body, the Legal and Technical Commission, is also fraught

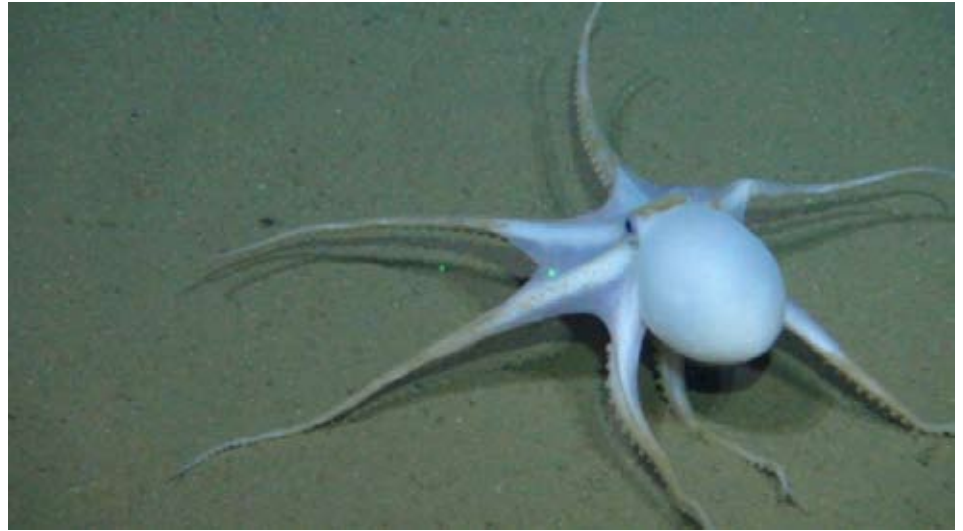


Photo: ROV team, GEOMAR

In September 2015 the ROV KIEL 6000 filmed a new species of deep-sea octopuses in more than 4,000 meters (13,000 feet) depth.

with transparency challenges. The Legal and Technical Commission assesses mining applications, which currently involve exploration contracts for the deep sea, but all of its meetings are held behind closed doors. The commission is composed of 30 experts nominated by their countries – some by governments that also hold exploration contracts – with only three deep-sea biologists on board.

"Even if some mining companies might genuinely fund what might be considered independent science, we still end up with a problem that the decision about whether or not to mine and the decision around environmental management of seabed mining rests entirely on data that is provided by the mining companies," says Jaeckel of the University of New South Wales. "There is a lot of trust placed on mining companies." There is no way to independently verify this data either, because deep-sea science is expensive, she adds. The degree to which companies are accurately reporting the baseline data to the ISA is not clear.

The commission is the only body within the ISA that sees the content of contractor's applications, so the baseline data that contractors submit to be able to monitor impacts are only visible to the commission. There is an audit of the scientific data by the commission which reviews a contractor's confidential annual reports. And then there's public scrutiny of environmental impact assessments by NGOs.

Nauru Ocean Resources Inc., a wholly-owned subsidiary of The Metals Company, is "going to have to produce something really good," says Clark of the company's upcoming environmental impact assessment. Clark is a deep-sea biologist who

was nominated to sit on the commission by New Zealand, which does not hold an exploration contract with the ISA. "Otherwise, the whole industry's potential will be affected because it will taint the view of public and NGOs as to what contractors are doing – are they doing a serious and good job at the underlying research or are they trying to cut corners and push the ISA into making hasty decisions?"

In 2017, the commission approved an exploration contract for the Lost City, a metropolis of hydrothermal vents in the Atlantic Ocean that the Convention of Biological Diversity has recognized as an ecologically or biologically significant marine area that should be conserved. Marine scientists issued an open letter to the ISA to turn to independent scientists when evaluating requests for mineral exploration, and some have long called for open meetings and an independent scientific committee to advise the commission. Scientists are now petitioning for a pause on deep-sea exploitation out of concern about impacts on the marine environment.

That baseline research with industry might enable mining is "a very naïve perspective," adds Smith of the University of Hawai'i. "My gut feeling is that mining will go forward. It would be really wise to just permit one operation to go forward initially and monitor the heck out of it for 10 years. That would make a lot more sense than permitting multiple operations without even knowing what the real footprint will be in terms of disturbance."

Source: <https://news.mongabay.com/2021/10/antithetical-to-science-when-deep-sea-research-meets-mining-interests/>



10 • 08 • 2021

Big Blue Win for the Northeast Marine National Monument

By Melissa Gates

Photo of deep-sea creatures taken October 8, 2021 by Melissa Gates

Big Win for Deep-Sea Bed off U.S. Coast

Surfrider Foundation: October 8, 2021

In a historic move to honor the American tradition of establishing monuments on land and at sea to protect and preserve national treasures, President Biden today issued proclamations restoring protections for three National Monuments, including the unique underwater ecosystem of the Northeast Canyons and Seamounts Marine National Monument.

Protecting special places in the ocean creates opportunities for ocean wildlife, flora, and habitats to thrive and for ecosystems to build more resilience to climate change. Marine national monuments retain the integrity of vibrant, high-functioning ecosystems and keep them intact. Protections on marine monuments help everyone who loves the ocean – from whales to whale watchers and beyond. This is why the Surfrider Foundation and our Northeast Chapters have worked hard under the leadership of coalition allies to establish and promote the protection of this monument.

The Antiquities Act of June 8, 1906, enabled then President Roosevelt to proclaim America's first historic landmarks. U.S. Presidents across the aisle have since used the Antiquities Act to protect many of our nation's most outstanding public lands and waters. The well-known sites, Grand Canyon and the Statue of Liberty, are among those designated for protection under the law.

The Northeast Canyons and Seamounts Marine National Monument was designated by President Obama on September 15, 2016. It is located roughly 150 miles off the coast of Cape Cod in the Gulf of Maine and is home to rare underwater treasures,

including deep sea canyons that plunge to depths greater than 7,000 feet (1,000 feet deeper than the Grand Canyon!) and astounding seamounts, which rise higher from the seafloor than any mountain east of the Rockies. This special area creates unique habitats that support tremendous biodiversity and fragile ecosystems. When left undisturbed and protected, this marine monument has tremendous potential to help restore ocean waters, habitats, and creatures now and into the future.

However, in 2017, former President Trump ordered a review of National Monuments designated by U.S. Presidents since 1996. The move jeopardized protections and integrity for dozens of terrestrial and ocean monument sites, including the California Coastal Monument, Hawaii's Papahānaumokuākea Monument, and the Northeast Canyons & Seamounts Marine Monument that Surfrider chapters worked so hard to designate.

Then on June 5, 2020, amidst a nationwide racial justice uprising following the murder of George Floyd and the raging worldwide Covid-19 pandemic, former President Trump signed a proclamation decimating protections in the Monument.

Fortunately, President Biden included the restoration of protections for America's dialed-back monuments in his list of priority Day 1 Executive Actions.

Following today's historic proclamation, our Northeast Canyons and Seamounts Marine National Monument will once again enjoy necessary protection alongside the terrestrial Bears Ears and Grand Staircase-Escalante National Monuments, restoring not only environmental and historic integrity but also critically important

sacred spaces, helping advance justice for Tribal nations:

"President Biden did the right thing restoring the Bears Ears National Monument. For us, the Monument never went away. We will always return to these lands to manage and care for our sacred sites, waters, and medicines. The Monument represents a historic opportunity for the federal government to learn and incorporate our tribal land management practices. Practices that we developed over centuries and are needed more now than ever. President Biden was right to reinforce the action taken by President Obama almost five years ago. We battled for this Monument because it matters." – Chairman Shaun Chappoose, Ute Indian Tribe Business Committee and BEITC member.

The Northeast Canyons and Seamounts Marine National Monument restoration process will result in:

- President Biden signing a proclamation to restore protections for the monument on October 8, 2021;
- Commercial fishing in the National Monument will once again be prohibited, with fishing for red crab and American lobster to be phased out by September 15, 2023; and
- Consistent with President Obama's Proclamation 9496, recreational fishing in the National Monument may continue.

Today, we rejoice in the restored protections for America's monuments that we have fought hard to win back alongside a robust coalition of allies, on land and at sea.

Source: <https://www.surfrider.org/coastal-blog/entry/big-blue-win-for-the-new-england-marine-national-monument>

My Community Deserves Justice

By Uche Isieke, Rural Watch Africa Initiative, (RUWAI), Nigeria
Resilience.org: January 22, 2021

Many issues facing most rural communities in Africa, especially, land/environmental injustice and infrastructural challenges, are not adequately reported by the mainstream media. A given example was during the 2011 Oka flood disaster which lasted for two years and was never mentioned in any media platform despite the efforts made by the community to get the attention of the government for assistance. Up to date, the affected farmers and farmland have not received any form of compensation or assistance from relevant government and non-governmental organizations to help restore the community's degraded biodiversity.

The cause of the flood was as a result of an overflow from the federal government abandoned Inyishi Dam project, which is a project embarked upon by the federal ministry of water resources.

The impact of the flood was so severe that the only rural bridge that connected the Oka people and her neighbors was submerged by the flood, thereby cutting them off from their neighbors for more than two years.

My community needs justice, please help us secure justice by sharing this through your emails and group to coalition members to support me by signing this petition.

Justice For The Indigenous People of Oka Community Over Their Degraded Land and Livelihoods

Uche Isieke started this petition to Minister, Federal Ministry Water Resources Mr. Suleiman Hussien Adamu and 2 others

In 2011, the Oka rural community in Isiala Mbandu, Imo State, witnessed a flood disaster that affected over 200 hectares (500 acres) of farmlands, destroying their crops, economic trees, bridges/roads, and aquatic lives, which are people's source of livelihoods worth millions of naira.

The disaster lasted for more than two years without any assistance from the Federal Government of Nigeria and its relevant ministries, agencies, and departments (MDAs).

It was never mentioned in the media because the people are poor and could not afford the cost of publicity.

Many poor farmers who invested hugely in farming various crops before the incident



Photo Courtesy RUWAI

Farmland that was submerged during the flood incident which affected many families and livelihoods in the Oka community, southeast, Nigeria.

lost their livelihoods and some died as a result of the shock. Many efforts made to get the attention of authorities proved abortive.

Nine years down the line, the people are still living with the impact, they are yet to receive any form of compensation or have their lands restored. The community's most cherished species and biodiversity have disappeared.

The flood came as a result of a Dam project being constructed at Inyishi which has now become abandoned. The benefiting communities were not consulted and have maintained that the Dam is the least among the people's needs.

As an environmentalist and development practitioner, I am aware that such a project requires a holistic assessment of its social, economic, environmental, and health impacts on humans.

The designers and implementers failed to take into cognizance, these pertinent issues before moving to the site.

I am calling on you, dear friends and change-makers around the world, to please join me by signing this petition to get the attention of the Government of Nigeria, Federal Ministry of Water Resources, Federal Ministry of Environment, National Emergency Management Agency, Imo State Government, and all relevant MDAs to carry out a proper enumeration on farmlands, trees, water bodies, crops, roads, bridges, livelihoods (including families who lost their loved ones as a result of the shock), compensate and restore the community's damaged ecosystems. Oka is

a rural community in Isiala Mbandu Local Government Area, Imo State, Nigeria.

The federal government should visit the community and take inventory of losses and adequately compensate the affected.

The Inyishi Dam project has been abandoned for over 10 years. Again, I am calling on all climate/environmental and social activists and journalists to please use their platforms to help the Oka community, to get #Justice.

Indeed, many such issues facing the poor vulnerable rural communities are not adequately mentioned, making development and justice difficult for the people.

Sign the petition at <https://www.change.org/p/federal-government-of-nigeria-federal-ministry-of-water-resources-nema-ministry-of-environment-justice-for-the-indigenous-people-of-oka-community-over-their-degraded-land-and-livelihoods>

#JustForOkaIndigenousPeople
#JusticeForThePoorAndMarginalized
#EndInjusticesInNigeria
#ClimateAction

Website: www.ruralwatchafrica.org

Email: info@ruralwatchafrica.org; ruwai.africa@gmail.com

Phone: +2347018713011

Donation options: Paypal:https://www.paypal.com/donate?hosted_button_id=DS7LWBE6BZ3T2, through our website or GlobalGiving

Read more: <https://www.resilience.org/stories/2021-01-22/telling-the-story-of-the-digitize-my-community-initiative/>



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Photo: picture-alliance/Balance/Photoshot/P.B. Pickford[®]

According to the Organization for Economic Cooperation and Development, the annual losses of up to \$50 billion (€44 billion) have actually exceeded the amount of development aid given to Africa in the same amount of time.

Africa's Problem With Tax Avoidance

Submitted by Bill Boteler, Maryland USA

By Antonio Cascais [®]
Deutsche Welle (DW): June 17, 2021

Every year African countries lose at least \$50 billion in taxes – more than the amount of foreign development aid. So where is it all going and how can multinational companies be held to account?

NGOs continue to raise the alarm. African countries are being cheated out of billions in tax revenues – mainly by large foreign companies in the energy and resource sectors, but also increasingly by small and medium-sized enterprises, such as safari organizers in countries such as Kenya, Tanzania, South Africa, and even Egypt. According to the Organization for Economic Cooperation and Development, the annual losses of up to \$50 billion (€44 billion) have actually exceeded the amount of development aid given to Africa in the same amount of time. Meanwhile, the United Nations Economic Commission for Africa puts the estimate much higher at \$100 billion.

Particularly concerning is the fact that this money remains urgently missing from the affected countries, says Lisa Gross-

mann of the German-based *Netzwerk Steuergerechtigkeit* (NWSG), a network of NGO's working to tackle tax evasion and shadow economies worldwide.

“The lack of tax revenue has a negative impact, especially in the poorest countries – starting with non-existent transport infrastructure, missing schools or hospitals, and a non-functioning public service,” she told DW.

East Africa: Low Tax Revenue in the Resource Center

Take East Africa, for example. International companies extract gas, coal, or rare earth minerals on a large scale in Tanzania and Mozambique, but they also pay very little in taxes in these countries. In doing so, they rely on subsidiaries in one of the world's many tax havens.

Revelations by the International Consortium of Investigative Journalists show that companies in Africa use internationally proven methods of tax avoidance. Many of the profits made in Africa are officially hidden away in offshore tax havens, where companies only exist on paper. There are few risks involved with this approach and very little bureaucratic effort is put in towards addressing the problem. The author-

ities in tax havens rarely ask unpleasant questions and, above all, impose minimal or no taxes on the companies' profits.

In Mozambique last year, the NGO *Centro de Integridade Publica* published a study which claimed the country has been unable to properly collect taxes for years. In particular, the large international corporations which profit from Mozambique's oil and gas reserves barely fulfill their tax obligations – largely due to the state's inability to accurately review their activities and balance sheets. As a result, Mozambique lost millions of dollars in revenue. Corruption, mismanagement, and weak governance only make matters worse.

Criminal Activity Harming the African Population

Another popular tax avoidance method sees companies spending significantly more on operating costs – such as finding and exploring new deposits of raw minerals – or investing in luxury housing, thus reducing their profits and, in turn, their tax burden.

“When it comes to resources, it's common practice for mining companies to misrepresent their profits, and many of

Tax Cheats *continued on next page*

Tax Cheats *continued from previous page*

the numbers are invented or falsified just to make sure that their tax obligations are very small,” Jörg Wiegartz, a lecturer in political economy at the University of Leeds told DW. The paper trail would be obvious. High ranking government officials in Africa are increasingly being bribed. “The big companies pay them money and in return they are given the protection of the state actor and his authority,” says Wiegartz. “Of course there is also corruption among the authorities who should be investigating cases of economic fraud.” Limited legal resources also mean that sometimes local middlemen are prosecuted instead of the large corporations.

Businesses and Branches Collapse

Experts agree that even the existing tax legislation, which works well on an international level, is actually rather detrimental when it comes to global tax justice. Companies are not yet obligated to outline where they generate their profits and where they pay taxes in each country. Aside from a few scandals which have come to light in recent years, multinational corporations can easily hide their profits away from the public eye, so that tax revenues can be bounced around between rich and poor countries.

“This can change,” says Grossmann. The main requirement of the NWSG network is that multinational corporations must be transparent about where they are economically active and where they generate their profits so that they will ultimately be obliged to also pay their taxes in those countries.

“No one can dispute the fact that Apple has significant economic activity in Bermuda,” says Grossmann. “Just as some European corporations report their profits in the Netherlands or Luxembourg, even though they aren’t economically active in these countries.”



© picture-alliance/abaca/AA/R. Canik

Photo: picture-alliance/abaca/AA/R. Canik

Many multinational companies profit from the mining industry in countries like Kenya and Tanzania

Grossmann says long-term solutions are being considered. “One solution could be to treat the group with its many subsidiaries and branch offices as a single company under tax law,” she says. “That single company’s big tax payments could then be split among the countries where the company is active.” This way, one can determine how many employees work in a particular country, how much turnover it has, and how many resources are consumed.

Going Against Europe’s Double Standard

In Europe too, tax avoidance is not welcome. The European Commission has repeatedly ruled in favor of civil protests which claim that U.S. companies such as Google, Apple, and Amazon do not pay enough taxes. On the other hand, the actions of large European companies operating in Africa aren’t all that different from the actions of U.S. companies in Europe, says Grossmann. Wiegartz agrees: “If we

discover fraud – in tax matters or in other sectors – it shows us that European and German companies have a lot of power in these countries. Otherwise, they would not be able to maintain these practices.”

So how exactly do German companies operate in Africa – and how could small and medium-sized businesses contribute to better tax justice system?

German companies in Africa are not known to cut taxes, says Christoph Kanengiesser, the chief executive of the German African Business Association. “They are known for respecting good governance and promoting local social standards,” he told DW. Their presence is also appreciated by the people and the government. However, companies often found that African countries also have an issue with double standards. “Often their taxation system lacks transparency and they usually try to keep up with the international companies.”

Source: <https://www.dw.com/en/africas-problem-with-tax-avoidance/a-48401574>

COURAGE IS THE MOST IMPORTANT OF ALL THE VIRTUES, BECAUSE WITHOUT COURAGE YOU CAN’T PRACTICE ANY OTHER VIRTUE CONSISTENTLY. YOU CAN PRACTICE ANY VIRTUE ERRATICALLY – KIND, FAIR, TRUE, GENEROUS – BUT TO BE THAT TIME AFTER TIME, YOU NEED COURAGE.

~ Maya Angelou ~

<https://twitter.com/drmayaangelou/status/1315037153446055936>

Africa Urged to Wake Up to Growing State Surveillance Threat

By Kim Harrisberg

Thomson Reuters Foundation: October 20, 2021

From surveillance to censorship, a new report warns Africans to be aware of laws encroaching on their privacy rights.

DURBAN, South Africa – African governments are using new technology and laws to increase surveillance of opposition figures, researchers warned on Thursday, calling for restrictions on the sale of tracking tools and tougher privacy protections.

Existing laws have largely failed to stop state surveillance across the continent, from monitoring academics in Egypt to tracking journalists in South Africa, the African Digital Rights Network (ADRN) think-tank said in a report.

“This report is a wake-up call for everyone on the continent to start paying attention to these issues, to take a stand against them,” said Ridwan Oloyede, an independent privacy researcher in Nigeria who contributed to the report.

Government impunity, weak civil society, laws that protect state spying, and a lack of solid privacy safeguards are the main reasons surveillance is increasing on the continent, ADRN said.

The risk of “digital authoritarianism” – internet control, surveillance, and censorship – is on the rise in Africa, where an earlier ADRN report found the number of internet shutdowns rose to 25 in 2020 from 21 a year earlier.

In the first such comparative analysis of African legal surveillance frameworks, the report compared laws in Egypt, Kenya, Nigeria, Senegal, South Africa, and Sudan to represent a variety of geographical regions and language groups.

In Egypt, for example, the report said the government has used states of emergency and the lack of any surveillance law to justify surveillance abuse.

Since 2013, when then-army chief Abdel Fattah al-Sisi ousted President Mohamed Mursi of the Muslim Brotherhood, there has been a far-reaching crackdown on political dissent in Egypt.

Sisi, president since 2014, says security and stability are paramount and denies there are political prisoners in Egypt.



Photo Courtesy Hope for a Better Future Cameroon

Hope for a better future vocational training institute in Cameroon trains students for many different careers, including graphic design and various computer skills.

In Senegal, government officials have justified new laws that allow them to monitor citizen communication by saying they exist to fight “terrorism, maritime piracy, and transnational organized crime”, according to Human Rights Watch.

‘Digital Authoritarianism’

But even strong buffers against excessive surveillance are not enough on their own, according to ADRN.

Robust privacy laws in South Africa did not prevent the state from abusing its surveillance powers – but an active civil society, independent media, and reputable courts helped rein in the state’s surveillance over-reach early this year, it said.

“Citizens need to be more aware of their privacy rights and of the surveillance activities undertaken by their governments,” said Tony Roberts, a research fellow at the Institute of Development Studies think-tank, who edited the report.

Surveillance can be necessary in mod-

eration “when granted by a court of law to prevent terrorism or serious crimes,” Oloyede told the Thomson Reuters Foundation.

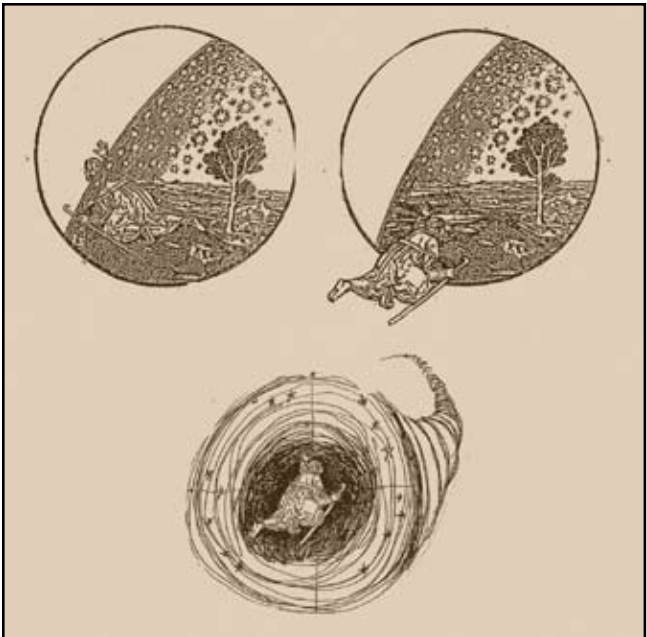
Although mass surveillance is an increasing global problem, the report’s authors said the threat is more severe in fragile democracies with weak legal oversight and low levels of public awareness.

They called for legal reforms, stiff penalties for illegal surveillance, a ban on the sale of surveillance technology to states proven to be violating privacy rights, and greater public awareness to hold government to account.

“My concern is that we are drifting into digital authoritarianism where it is considered normal for our privacy to be violated and somehow the fact that it is happening digitally lets governments off the hook,” Roberts said.

Source: <https://news.trust.org/item/20211020225934-jccq3/>

Samhain, Cosmology, and the Present Moment



Genesis Farm, New Jersey USA
November 1, 2021

Perspectives and why they matter...while looking out, looking in, and looking back...

Dear Friends of the Farm,

The more familiar “Gregorian” calendar, now appropriated by the “Hallmark” calendar has resulted in the traditions of Halloween, All Saints Day, and All Souls Day (celebrated by some cultures as the Day of the Dead) as being fixed. This has resulted in many advantages for the commercial powers of the present culture. Especially in Europe these seasonal events were long ago set as fixed dates.

Prior to the calendars of western civilization, more ancient meanings were inspired by the seasonal changes experienced in the northern hemisphere. Samhain was marked by rituals evolved to guide the safe passage of the “world” through the changes

Earth was experiencing in the mid-time between autumn equinox and winter solstice. At that time, weather, temperature, and longer nights had a significant impact on food and survival.

In regions on the other side of the equator, this mid-point continues to mark the shifting of spring into summer.

For the last decade or so, Genesis Farm has been trying to reinvent our internal calendar to align with the seasonal changes marked by a changing astronomical calendar. Subsequently, we began “opening portals” to seasonal change because these cosmological shifts do not occur at a precise astronomical moment of time. Rather they evolve as a process spanning days and nights of gradual duration. As human members of this bioregion, we were attempting to join the other communities of life which have gradually evolved into the particular “ecosystems” of this region – the microbes

beneath the soil, the vegetation, the birds, the insects, and animals.

Thus, today we will open the portal to Samhain, which will actually occur astronomically on the night of November 6. During this time we will also scatter wildflower seeds for your beloved dead.

During the years when Genesis Farm offered accredited courses in Earth Literacy, we experimented with the famous “flammarion” wood engraving (above) of a man peering through the sky to a more expansive vision of the cosmos. It is a powerful archetypal symbol of the on-going journey of human discovery – a journey which continues in our time, although now it proceeds at breathtaking speed. Because there was and is no infringement of copyright law, we continue to use the image to communicate new perspectives which may offer possibility for transforming some of the distortions contributing to the unprecedented human crises of our time. (https://en.wikipedia.org/wiki/Flammarion_enuvion)

The original engraving depicts a man looking out beyond the boundaries of the known cosmos. It appears quite different from the dominant worldview held by the culture of his time. Actually it generates inconsistencies which will present immense challenges to the beliefs of the individuals and institutions to whom he will try to describe his discovery. It is a powerful metaphor of our time and our generation.

The second image suggests that the deeper we look out into a greater understanding of the “outer world” the more it becomes necessary to see the implications of correcting our ignorance of the world in which we live locally, meaning the specific features and conditions of the bio-regions we inhabit.

The third image suggests that the more we understand the evolutionary story of the Universe itself, the greater corrections we can make to the inadequate understandings many of us hold regarding the meaning and beauty of the whole. Thus, even at this late moment, it could be possible to “reinvent” ourselves and our meaning systems to reflect those “deep time and space” perspectives.

Our own small attempts to do this are grounded in the works and writings of cultural historian Thomas Berry and mathematical cosmologist Brian Swimme.

These perspectives could change everything that legalizes the dysfunction of our present moment...especially now, when the impacts of climate disturbance are beyond our fixing, the seasonal disturbances can no longer be denied, the vast extinctions escalate, and the toxicity of the planet continues unabated.

We can shift more intentionally to protect the fragile remnants of Earth’s communities of being. The ravages of the last several thousand years are suffocating life itself. This behavior is not inevitable. It is not predetermined. We can still join the young and the rebels against extinction. We can resist a techno-zoic future.

Our recent E-news of the past seasonal cycles were created to share with you the voices to whom we looked for truth in the present climate of fake news, surveillance technologies, and the last tantrums of a patriarchal system that is collapsing on its foundations of an inadequate cosmology.

With gratitude and appreciation,

Miriam MacGillis

For the Sisters of St. Dominic
Co-founder and Interim Coordinator
Genesis Farm, Blairstown, New Jersey
<http://www.genesisfarm.org/about/3>



Organic Catnip Toy

Made with and filled with scrap fabric. Plus a half cup of Organic catnip.



T-Shirt Shopping Bag

Made from quality recycled materials with a classic proven design. Machine washable.



Covered Plastic Bottle Dog Toy

Heavy duty fabric pouch with waterbottle toy inside. Dispose when fabric is destroyed.



Ballon Cover

A safe way to play with a ballon. Made from scrap fabric. Inflate until hard. Hand wash&dry.



Tug-of-War Dog Toy

Braided fabric rope, tied in knots. Used as a tug of war toy.



Cloth Car Trash Bag

Hang from stick shift or head rest. Stash your big gulp; children's toys, etc or trash. Machine washable.

[etsy.com/shop/GreenEarthGoodsLLC](https://www.etsy.com/shop/GreenEarthGoodsLLC)

Bright Green Lies: How the Environmental Movement Lost Its Way and What We Can Do About It

By Derrick Jensen, Lierre Keith, and Max Wilbert, excerpt from pages 127-129

We are long out of time to break through our cultural denial about this fact: **No technology is neutral.**

* * *

We have written this book because life has been broken and is now fast draining away through the cracks. The cultures that have done that breaking need to be abandoned and their ruling sociopaths dethroned. Make no mistake, this will require a serious and dedicated resistance movement. It will also require an unsentimental understanding of which human activities constitute that breaking,

Let's step away from this industrial nightmare and turn toward the land. The Oquirrh Mountains rise to almost 10,000 feet above the south end of Great Salt Lake. This is where the Great Basin meets the Colorado Plateau. The intersection of these two great ecosystems leads to an astounding variety of habitats, from exposed alpine tundra to sagebrush and rabbitbrush steppe. Springs nourish aspen and maple forests on cool north-facing slopes. Juniper and piñon pine live on western and southern slopes. Hardy, salt-tolerant wetland plants survive both wet and dry years and thrive near the lakeshore. Mountain lions, mule deer, butterflies, bald eagles, elk, waterfowls, red-backed voles, shrews, black bears, mice, American coots, blackbirds, great blue herons, yellow warblers, hummingbirds, hawks, western grebes, hermit thrushes, minks, ospreys, ruffled grouses, lark buntings, hairy woodpeckers, kingfishers, Bonneville cutthroat troutfish, redbreast shiners, speckled daces, Utah chubs, three species of sucker fish (including the endangered June sucker), and many more call this place home. In the spring and fall, migratory birds visit the area in (for now) still strong numbers.

Wolves and grizzly bears used to live in the Oquirrh Mountains before they were deliberately exterminated. In the winter of 1848,



Oquirrh Mountains, www.bing.com

Mormon colonists undertook a “varmint hunt” and killed as many as 15,000 predators in one month, including bears, wolverines, wildcats, wolves, foxes, minks, eagles, ravens, owls, and other birds.³⁸ The last Utah grizzly was killed in 1923, and wolves were exterminated by the early 1930s.

The mountains removed at the Kennecott Mine site had watched over countless generations of these creatures. Now the mountains themselves are being blasted into dust, then toxified. The creatures who've survived are now refugees on their own land. None of them, for example, can visit the tailings pond, where noisemakers and nets are required to prevent birds from landing on the contaminated surface.

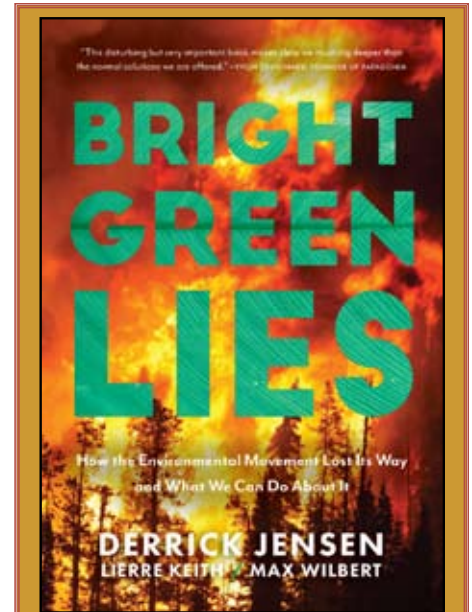
On hillsides and in poisoned ponds around the smelter, only the hardest creatures survive. With every bite, they ingest carcinogens and mutagens they will pass down to their offspring. This is copper production, and it's a nightmare. And it's required for wind power.

According to the Kennecott smelter website, “Environmental stewardship is at the heart of Rio Tinto Kennecott's commitment to sustainable development.... Whenever possible, we prevent, or otherwise minimize, mitigate or remediate any potentially harmful effects of our operations on the environment.”³⁹ But their operations are the harm. There's no kinder, gentler way to blow up mountains and apply an ocean of toxins to the rubble. This is what green energy is made from: the dust of shattered mountains, lakes of acid, and the agony of our winged and scaled kin.

Rare-earth minerals are critical components of wind turbines. Even more than other metals, rare earths are produced only through severe and grotesque environmental harm. Dan Harris writes, on his blog about legal issues in China, that “[T]he rare earth neodymium is required for the batteries used in the engines of most current electric vehicles and in the generators of most wind power turbines.... As a result, the rare earth mining

regions in Inner Mongolia are classified as some of the most polluted regions in the world.... The resulting poverty and health problems for the workers are well known.”⁴⁰

Projections show that wind turbines will likely play a major role in the growth in use of rare-earth minerals worldwide – and could even exhaust supplies completely. One study noted that “demand growth for these metals appears to be ... significant.... This is especially



We cannot continue to wallow in hedonistic consumption and industrial expansion and survive as a species. The environmental debate, Jensen argues, is, because of them, distorted by hubris and the childish desire by those in industrialized nations to sustain the unsustainable. All debates about environmental policy need to begin with honoring and protecting, not the desires of the human species, but the sanctity of the Earth itself. We refuse to ask the right questions because these questions expose a stark truth – we cannot continue to live as we are living. To do so is suicidal folly.

Purchase: \$26.95 via PayPal or \$25.95 check or money order at <https://derrickjensen.org/purchase/#bright-green-lies>, email derrick@derrickjensen.org.

relevant because rare earths are considered critical [for wind turbines].”⁴¹

Footnotes:

38 Twila Van Leer, “Young John D. Lee Helped Lead a Hunting Contest,” *Desert News*, October 22, 1996. 39 “About Us” and “Environment” Pages, Rio Tinto Kennecott. *The Wind Lie* 129

40 Dan Harris, “Rare Earths and Polysilicon. Does China Control Our Green Future?” *China Law Blog*, November 5, 2010.

41 Zimmermann et al., “Material Flows Resulting from Large Scale Deployment of Wind Energy in Germany,” *Resources*, 2013, 2, 303–334. Wind turbines can be made without rare earth metals, but they are far more expensive per unit of energy generated. And since the primary goal of creating wind turbines is to generate profit (and electricity), not to protect the planet, most contain these metals.

Book Review: *Bright Green Future: How Everyday Heroes Are Re-Imagining the Way We Feed, Power, and Build Our World*

By Iona Conner

Some people focus on and write about what's wrong. Gregory Schwartz and Trevor Decker Cohen, on the other hand, focused and wrote about what's right. With open hearts, they state that, "Half of proceeds support community-led initiatives to empower people and planet." And that's a peek of what their book, *Bright Green Future*, is all about.

These two have investigated positive projects around the world and written their stories. Each chapter is followed by questions to encourage the reader to stop and think for a few minutes about what they just read.

One of my favorite chapters is "Industry as an Ecosystem." To give you a taste, here is the first paragraph:

"When we fixate solely on cutting out waste, the outlook for the environment can be discouraging. It seems we'll need a million campaigns to save our planet from discarded items as simple as plastic straws to those as complex as lithium-ion batteries. If we look closer though, we find that ecosystems themselves hold the key to their own preservation. When we learn from the way nutrients are constantly broken down and repurposed in natural systems, we find opportunity everywhere."

The conclusion of that chapter says, "We've spent the last 100 years perfecting the assembly line. It's now time to perfect the *disassembly* line. Nature is able to take extremely complex structures and break them down into the pieces needed for the next generation. For everything we create, we need an efficient solution to break it down and cycle it back into the pieces from which it came. In doing so, we can create value out of nothing, protect the environment from toxic chemicals, and avoid



depleting our precious natural resources."

Then, it's up to the reader to "Keep Exploring" with questions like these:

- What are the broken circles of stuff that I notice in everyday life?
- What treasure do I see ending up in the trash?
- How could my local economy endlessly regenerate all the materials it uses?

Since I personally love this kind of thinking, I inserted the word "home" instead of "local economy" and "I" instead of "it." That makes this train of thought more personable, more actionable. Of course if your home is already in tip-top eco shape, then of course move on to your local economy. Good luck with that!

Another one of my favorite chapters is

about Thunder Valley on the Pine Ridge Reservation in South Dakota. The Indian residents sought systemic change and spent several years meeting with over 3,000 people on the reservation to develop nine bold initiatives for community empowerment. Their goal was to "build an entire 21st-century, Indigenous community from scratch," said Nick Tilsen, the Executive Director. AND THEY DID IT!!!

They taught young people construction and how to build energy-efficient homes with simple materials. The first seven houses were built in a circle with an open space in the middle, replicating ancient Native American camps. The open space in the middle became a community center where the residents chose what would go there – maybe a garden, playground, picnic area, etc. These homes are much nicer than the sub-standard ones the people were living in previously.

In the Keep Exploring section following this chapter are these thought-provoking questions.

- Which individuals or groups in my community have overlooked local knowledge?
- What organizations near me are already working to incorporate many local voices into a vision of the future?

And that, dear reader of mine, is a question I will leave with you. Are YOU working on a vision of the future?

A limited offer for a signed copy of the book is available at <https://www.brightgreenfuture.com/buy-bright-green-future/p/bright-green-future> for \$14.95. The book is also available at https://www.amazon.com/Bright-Green-Future-Everyday-Re-Imagining-ebook/dp/B092FTK6PV/ref=tmm_kin_swatch_0?encoding=UTF8&qid=1636648206&sr=8-1, also \$14.95; Kindle, \$2.99

**WE PLANT SEEDS THAT WILL FLOWER AS RESULTS IN OUR LIVES,
SO BEST TO REMOVE THE WEEDS OF ANGER, AVARICE, ENVY, AND
DOUBT, THAT PEACE AND ABUNDANCE MAY MANIFEST FOR ALL.**

~ Dorothy Day ~

<https://www.passiton.com/inspirational-quotes/6484-we-plant-seeds-that-will-flower-as-results-in>



Do Something Club

JOIN THE DO SOMETHING CLUB NOW

Want to do something for the environment? Join the Do Something Club - forging the future with smaller ecological footprints. This course offers tips on simple living, encourages creative thinking, and helps you save money while leading a more sustainable life. Make new friends via Zoom; share your ideas, experiences, and accomplishments with others; and help make this world a better place. Collectively we will make a difference. Hosted by Iona Conner, a former air pollution inspector in Middlesex County, NJ and former spokeswoman for the NJ Department of Environmental Protection, Division of Hazardous Waste Management, Bureau of Community Relations. Currently Director of the Grassroots Coalition for Environmental and Economic Justice. Publisher of *Grassroots Coalition News*. Contact Iona at dosomething@pa.net.

Consumer Liberation

Our Motto: Use it up, wear it out, make it do, or do without.

Our Slogan: The way forward - cycle back to basics.

Our Word: Invincible - too powerful to be defeated or overcome.

Email Iona at grassrootscoalition@pa.net and she will put you on our email list.

“Every new one makes us stronger,” sings Pete Seeger.



Grassroots Coalition News

Our beautiful newspaper will inspire and encourage you. Learn more at www.gceej.org. Email grassrootscoalition@pa.net to be put on our e-list. \$30 per year if you can afford that. Pay with PayPal using groundswellnews@pa.net or mail to the address on page 2. A project of the 501(c)(3) Grassroots Coalition for Environmental and Economic Justice. Photo <https://www.google.com/search>

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Thank you.



Remember your dreams.



Messages from Our Friends

(For many, English is not their native language.)



Good morning Iona,

Well, this 'first' edition of 'Grassroots Coalition News' (#82) is full of the usual sobering news about the state of our planet combined with evidence that many people are still fighting.

Notably, in the 'sobering' category, is further evidence that mainstream institutions – including governments and the courts – will continue their efforts to defend injustice and destruction. And notably, among those still fighting are those visionary people, including indigenous peoples and children, in diverse parts of the world who continue their inspirational efforts to save us.

Has it ever been otherwise?

Sincere appreciation also to those exceptional individuals, such as Ngo Banfoga of Hope for a Better Future Cameroon, who has worked so diligently to raise the profile of the Grassroots Coalition and its vital work.

Love from Australia,

Robert Burrowes & Anita McKone

Thank you so much for this.

Congratulations on the new job. Wishing you all the best. Stay blessed and I can't wait to read more and also share with my colleagues.

Vinaka ("Thank you") from Fiji.

Josevata Rotidara, Fiji

Thank you Ngo.

As always, sincerely appreciate your committed and fine work on our behalf. And your thoughtful presentation of it too.

The website looks great!

Love from Australia,

Robert Burrowes

Good morning Ngo.

Well, congratulations are indeed in order my friend!

I share Iona's enthusiasm for the recognition of your efforts that this indicates.

Let us hope that H4BF can now more widely inspire others to emulate your efforts.

Love to you and all of your co-workers, from Australia,

Robert Burrowes & Anita McKone

Dear Iona,

Yes, finally – it looks promising for EPA to deal with PFAS.

I just read your October newsletter and want to read it again more thoroughly, since there is so much important information from all corners of the world.

The newsletter and new logo are super. You and your colleagues are providing a great service with the climate, environmental, and social justice news.

Tyla Matteson, Virginia USA

I was, finally, able to read your newsletter in more detail this morning, and I just wanted to express to you how amazingly informative I think it was. I would be very proud to write a future column, that you spoke of. I will be thinking about the content so that I might have it ready to forward it to you before your next publication. You are doing wonderful work my friend, and sister. You have, indeed, made my life a whole lot richer as a result of our meeting up. By the way, is posting your newsletter on my Facebook page permitted? [Answer from Iona: ABSOLUTELY!]

Margie Schneider, Florida USA

Thanks for the update Grandma. I duly appreciate reading the amazing stories.

Once again, thanks for the wonderful job. Do have a wonderful day.

Hanson Gonsia Blayon, Liberia

Morning Iona!

Thank you so much for the kind words! We couldn't have done it without all of the support that you all have given us, and we are so grateful. The article is so awesome, and we are really touched to be included! Looking forward to sharing the farm with you!

All our best,

Joey, Hannah, and Emmylou, Ramblin' Sol Farm, New Jersey USA

Hello Iona.

Thank you very much for the time you have taken to read the call for proposal,

I'm just coming from countryside, where we went to collect information and needs of local communities, surrounding the Virunga National Park

As I have told you we are preparing our delegate to participate to the COP26, so we have to get local communities' recommendations, dealing with our country delegations, and preparing our agenda.

We are also working on the 3rd call for proposal of African Climate Change Fund. We have to present a full proposal after the concept note that has been approved, "Women Empowerment and Climate Resilience Program."

For USAID Forest and Biodiversity support activity, we have worked on the draft but it is French. Our proposal will concern

Messages continued on next page



Submitted by Valerie Stanley, Maryland USA
"These are good! In some Whole Foods stores."

Messages *continued from previous page*

Activities that aim to build local community Climate Resilience and Community Based Natural Resource Management in Virunga landscape in North Kivu province, in Eastern of Congo.

We have some experience of working with USAID, we have worked with a FHI360 (Family Health International) a USA Organization.

I was wondering to give you the address email of this program so you can send them our recommendatio, I mean for any call for project, I mean this can be good.

Thank you and be blessed,
Leon Simwerayi, DR Congo [Iona wrote recommendation and sent it to Leon.]

Awesome, thanks for the *Grassroots Coalition News*, this is good and to Ngo well done brother.

Jussa Kudherezera, Coordinator,
Manica Youth Assembly, Zimbabwe

Hello Friends and Family,

Recently Green Earth Goods, LLC has advertised its products on Etsy. (See page 29.) Please feel free to order these items

from us on the Etsy account. Don't hesitate to contact me if you have questions.

We are part of the Circular Economy, taking scrap fabric from cutting room floors and repurpose them into everyday practical items.

Please forward this to your family and friends. We are ready to grow the business, with your help.

Stay Safe and Well.

For Us All,

Jeannette Bartelt

jmbartelt@gmail.com

Ode to Creation Spirituality

by Rev. Margie Schneider

The Earth is our mother

so, we are her kin,

and the Creator who loves us

dwells there within.

Thru Science and Creation, they say we are one

with the trees, the stars and even the sun.

They say life's a blessing

not just about sin,

that the child inside us

must come out and win.

If we take heed of their wisdom

we will be changed, and we will be healed,

and that is when our gifts are revealed.

For when we are reborn into the truth of it all

we know it's about compassion and not about the fall.

And when we can trust what we have been told

we give birth to a power that is more valuable than gold.