Hope Matters: Why Changing the Way We Think is Critical to Solving the Environmental Crisis

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Presented April 7, 2024

Introduction of Practices

- Welcome Climate Emotions
 - Allow yourself to feel the angst & anxiety
- Check the Expiry Date on Information
 - Things change, quickly! So keep checking on progress in Climate Solutions
- Immerse Yourself in Solutions Journalism
 - Only 3% of Climate stories are solutions-based, so focus on those publications that highlight solutions
- Get Outside
 - Every moment you can spend outside is a gift
- Notice Resilience of Other Species
 - o There are remarkable stories of resilience and recovery
- Expand What You Measure
 - Track green financing or percentage of vehicles that are EVs
- Create Cultures of Belonging
 - o Lean into Beacon!
- Act from Your Unique Identities
 - Queer brown vegan

Solutions Journalism

- Grist The Beacon Today
- Atlas of the Future
- Solutions Story Tracker
- #Ocean Optimism
- Beautiful Solutions
- BBC's Positive Thinking
- Seeds of Good Anthropocenes
- Project Drawdown

Teresa's suggestions

- What on Earth (CBC)
- Outrage & Optimism
- Clean Energy Review (weekly email)
- Just Give a Think
- Earthshot Prize

Culture of Belonging

- Beacon is here for you! Monthly Envirobee, <u>Earth Month EcoChallenge</u> on Conservation (Team is MetroVan Unis)
- Project Drawdown
- Suzuki Elders
- Unitarian Universalist Ministry for Earth
- CUC and Climate Change, the Ripple Effect Facebook group
- Meg's sessions for climate grief support and preparation for action in the fall
- MetroVan Uni's; Common social action initiative?

Snapshots of Resilience of Other Species

Coral reefs

Coral reefs are naturally resilient ecosystems and have been observed to recover well after mortality events if they are given the chance to and other stressors are reduced.

Marine biologist Stuart Sandin illuminates his work leading the 100 Island Challenge... His team uses large-area imaging and 3-D visualizations to make unprecedented, detailed observations of how coral reefs are faring. While some reefs are struggling, others have been able to adapt in response to changing climate and other human impacts. By decoding nature's incredible capacity for adaptation, these scientists are paving the way for using this new knowledge to aid coral reef recovery.

Coral reef fish

Damselfish can pass on to their offspring the capacity to cope with higher water temperatures. This coping mechanism is more marked if the parents have been exposed to higher temperature water. And a gradual increase in temperature resulted in improved results compared to a rapid increase.

Salmon

Along shorelines, man-made structures such as seawalls that are put up to protect shoreline properties and infrastructure actually exacerbate erosion because they deflect energy from pounding waves to other areas. They also take away key habitat like spawning beaches for forage fish, crucial for the marine food web including Pacific salmon.

In contrast, nature-based approaches using natural substrates and plants beautify shorelines, increase resilience to climate impacts and can be cheaper to build and maintain. They also create habitat for fish and wildlife, filter out pollutants from stormwater before they reach the aquatic environment, and help to store carbon that would otherwise contribute to global warming.

The Resilient Coasts for Salmon Program, a partnership between the <u>Pacific Salmon Foundation</u> and the <u>Stewardship Centre for BC</u> funded from the BC Climate Action and Awareness Fund (Environment and Climate Change Canada), will provide education and training to the public and shoreline professionals, which we hope will result in greater adoption of nature-based solutions on Vancouver Island's East Coast.

Trees after fires

Serotinous cones.

In environments where hot, fast-moving fires are frequent, some pine species have developed very thick, hard cones that are literally glued shut with a strong resin. These "serotinous" cones can hang on a pine tree for years, long after the enclosed seeds mature. Only when a fire sweeps through, melting the resin, do these heat-dependent cones open up, releasing seeds that are then distributed by wind and gravity.

Pandas

The bears are ...recovering in the wild. The most recent estimates indicate that more than 1,800 pandas now live in southwestern China, and their numbers are increasing. That trend prompted the country to announce, in 2021, that pandas are no longer endangered.

Humpback Whales

Some good news in marine life conservation: humpback whales have been removed from the endangered species list, an incredible feat resulting from years of conservation efforts.

Wolves

The wolf population in B.C. is stable to increasing. Grey wolves are not an endangered or threatened species. The estimated median population of wolves is 8,500.

They improve habitat and increase populations of countless species from birds of prey to pronghorn, and even trout. The presence of wolves influences the population and behavior of their prey, changing the browsing and foraging patterns of prey animals (deer or elk) and how they move about the land.

Bison

At one point, it is believed there were tens of millions of them, but due to excessive hunting, loss of their natural habitats, and diseases, their numbers dropped dramatically, almost pushing them to the brink of extinction in the late 19th century. Today, they are (no longer endangered, and) considered "Near Threatened," according to the International Union for Conservation of Nature (IUCN).

Tuna

In today's Red List update, the seven most commercially fished tuna species were reassessed. Four of them showed signs of recovery thanks to countries enforcing more sustainable fishing quotas and successfully combatting illegal fishing.

Tigers

Continental tigers were once found throughout the Russian Far East, northern China, and the Korean peninsula. By the 1940s, hunting had driven the Continental tiger to the brink of extinction—with no more than 40 individuals remaining in the wild. The subspecies was saved when Russia became the first country in the world to grant the tiger full protection.

Today there are an estimated 450 Continental tigers in the wild. They have the largest home range of any tiger subspecies because low prey densities mean they have to search over large areas to find food. This habitat, though, is under serious threat from large-scale illegal logging in the Russian Far East. In 2013, WWF released a report revealing that Russia's forest sector has become deeply criminalized. A lack of law enforcement allows illegal loggers to devastate valuable timber stocks of oak, ash, elm and linden. The overharvesting of these trees limits the supply of pine nuts and acorns—the main food sources for Continental tiger prey.

Sea Otters

Colonization saw settlers hunting the furry west coast creatures to near extinction. But centuries later, conservation has reintroduced them back to the islands. Niisii Guujaaw is the marine planning manager at the Council of the Haida Nation. She says having the sea otters back is a big ecological success. "We have a good understanding on Haida Gwaii that the missing sea otters is a mis-balance in our ecosystem," she told *The Current*'s guest host Nahlah Ayed. "It's exciting to think about bringing more balance back." The highest number the community has seen has been 13 otters, said Guujaaw, citing a 2019 survey. Mostly male, they're arriving from the southern and northern end of the islands.

Bald Eagles

The bald eagle population in the lower 48 states has quadrupled since 2009, researchers said this week, underscoring decades of efforts to protect a species that was once on the brink of extinction.

There were an estimated 316,700 bald eagles in the lower 48 states during the 2019 breeding season, including more than 71,400 breeding pairs, according to a report issued on Wednesday by the United States Fish and Wildlife Service.

Zebra Finches

These Australian birds call to their chicks in the eggs, before they have hatched. If the air temperature is higher than normal, the specific call to the chicks changes the way the chicks develop and improves the chicks' chances of coping with hotter weather.