**Ecosystem at risk**

Robert Hunziker

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The Southern Ocean is 10 per cent of the world’s oceans. Yet, it is arguably the most significant ecosystem of the planet for marine sea life as well as regulation of CO2 and ocean heat, serving as a buffer to climate change and thereby benefiting the entire globe. It is the final frontier of life support for Earth.

A new scientific research paper is calling for immediate protection of the Southern Ocean: “Climate change and fishing present dual threats.”

Indeed, the Southern Ocean is key to sustaining life on the planet. It deserves special focus and must be protected to stop irreparable damage to a powerful yet fragile ecosystem.

According to the report: “Antarctic waters affect the Earth’s climate, moderate sea level, and play a strong role in global ocean circulation and nutrient cycling. The Southern Ocean disproportionately absorbs global carbon dioxide and heat, thus helping to regulate temperature and buffering global impacts of climate change. The Southern Ocean biosphere also contributes to climate regulation and oxygen production through its primary production of seasonal phytoplankton blooms. In addition, the Antarctic seafloor stores extensive amounts of carbon. Antarctic krill (Euphausia superba) play a critical role both as a central species in the Southern Ocean food web and in biogeochemical cycles, stimulating primary production and influencing the drawdown of atmospheric carbon to the deep sea. A host of seasonally migrating iconic marine mammals and birds depend on the Southern Ocean to supply their energetic needs,” Ibid.

In short, the entire Antarctic inclusive of the Southern Ocean is critical for marine life support across the globe as well as serving as a critically powerful regulatory system of the world’s climate system. Life is simply not the same and probably impossible without it.

Of special concern, krill are the backbone of the Southern Ocean ecosystem as well as considered a “keystone” marine species. This ultra-sensitive food chain in the Southern Ocean is currently threatened by commercial fishing for Antarctic toothfish, served as Chilean Sea Bass at high-end restaurants and krill, which is used as fishmeal and oil supplements. Thus, the food chain is threatened at both the top and the bottom by unsustainable commercial fishing. According to the research team, continuation of present commercial practices will very likely jeopardize this one-of-a-kind ecosystem.

Scientists have appealed to the Commission for the Conservation of Antarctic Marine Living Resources (CCCAMLR) that commences its two-week annual meeting in Hobart, Tasmania, Australia starting October 24, 2022.

According to the scientific team: “Amid the ongoing climate crisis and given the growing evidence that fishing in its current form is jeopardizing the Southern Ocean ecosystems, CCAMLR has the incredible responsibility to take conservation action now.”

As global warming and excessive fishing threaten the sanctity of the Southern Ocean (also known as the Antarctic Ocean) the continent of East Antarctica is acting up once again.

It was only six months ago that Conger Ice Shelf collapsed. It’s the first-ever ice shelf collapse on East Antarctica, which is the coldest and driest location on the planet. On March 14-16 Conger ice shelf suddenly disappeared from satellite photos. It had been there for over a thousand years. All it took was an unusual warm spell and more than a thousand years of solid ice collapsed within only a few days! Little wonder that scientists still remain shaken to this day. East Antarctica has always been considered invincible… until now.

Alas, more trouble has been discovered in the former land of solid ice. According to CSIRO researchers, led by senior scientist Esmee van Eijk: The Denman ice shelf in East Antarctica is melting at a rate of 79.8B tons per year. Studies identified the potential of “unstable retreat.”

“The Denman Glacier is a major drainage of the East Antarctic Ice Sheet, containing an ice volume equivalent to 1.5m of global sea level rise,” Ibid.

Denman is suffering from the same problem as identified by scientists for Greenland, Thwaites Glacier, Pine Island Glacier, and others, which is “warm modified Circumpolar Deep Water fills the bottom of a deep trough leading to beneath the glacier… warm water enters the cavity… carrying sufficient heat to drive high rates of basal melt.”

Conclusion: Because the oceans absorb 93 per cent of the heat produced as a result of human-generated CO2 (burning fossil fuels) blanketing the atmosphere, in turn, warming/heating up the entire planet, Bingo! 93 per cent is absorbed into the oceans. Result: Deep-water currents carry heated water to the base of major ice glaciers and melt the base where ice sheets extend from the land (basal melt). Over time, the ice sheets extending over water break away thereby causing the worst possible event as the entire glacier complex rapidly flows to the sea. End result: Miami under water.

The world’s two major ice sheets Greenland and Antarctica have been solid for thousands of years, until now. This is a tragedy unfolding right before everybody’s eyes, and scientists are reporting it as it happens. Why the world isn’t on alert to stop fossil fuels may be the most important question of the 21st century? (Instead, huge expansion of fossil fuels is scheduled thru 2030.) Why aren’t world leaders appointing scientists and engineers to an ad hoc special world commission to do whatever is required to stop a process that is destined to flood every one of the 136 port cities of the world, each with a population of over one million people? After all, the melting is already at an early stage, but it’s accelerating. “The rate is tripling right now.”

Honestly, the world is horribly distraught, messed up, and entangled in an absurd web of arbitrarily selected stupid political operatives motivated by self-aggrandizement! It’s the same stupid stuff that led to the end of the Roman Empire 1,700-years ago, to wit: (1) loss of traditional values (2) political instability (3) overexpansion and military overspending (4) the rise of opposing foreign forces (5) economic troubles (6) concentration of wealth wrapped around extremely disturbing levels of social inequality.

Sound familiar?

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