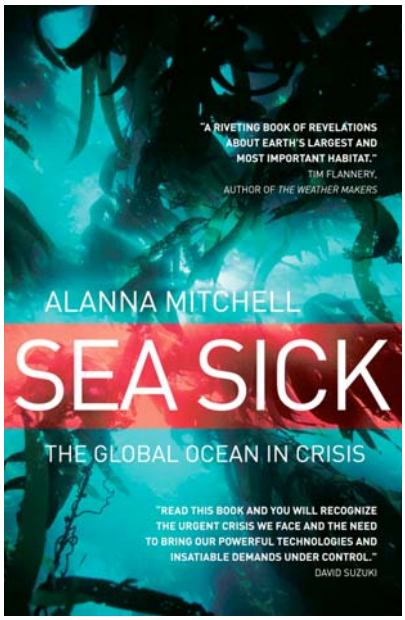

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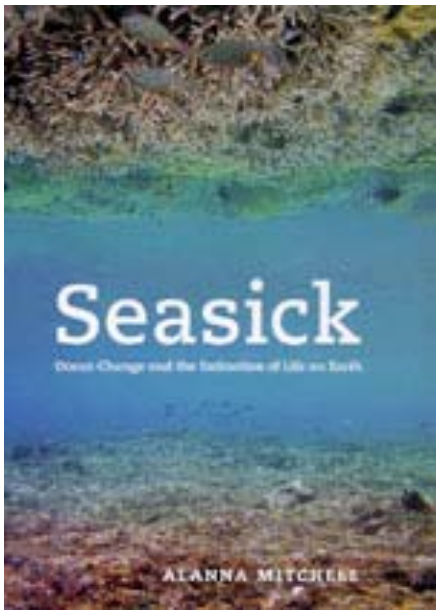

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Chapter 5. READING THE VITAL SIGNS: FECUNDITY

Panama: The Blind Wisdom of the Coral

Being a successful coral means having a superb sense of timing. And not the arbitrary, human-built timing that measures from past to future, but the primeval sort that counts off rhythms. In other words, not progress but pattern. Not the measurement of something fleeting but of a constant.

The corals survive because they understand mysterious signals that come once a year from an alignment of the sun, the earth and the moon. All year these primitive animals, who have neither brains nor eyes nor the ability to move, laboriously store energy to prepare eggs and sperm for the moment

of the spawn. And on that one night a year, between five and seven days after the biggest full moon of summer, at a moment so preordained that it can be measured down to the human minute, billions of them ritualistically send forth all this genetic material into the wide ocean in an ancient pageant designed to make baby corals. It's a once-a-year orgy of group sex.

Humans only figured out in the mid-1980s—during night dives on Australia's Great Barrier Reef—that corals reproduce this way. But ancestors of modern corals have been found in fossil records going back 450 million years and it's a safe bet that some version of this annual rite has been going on in for about that length of time.

Corals sense movements in the universe that humans appear to have forgotten. Viewed through the lens of non-human time, they seem to be the ultimate survivors.

More than survivors, though, they are progenitors. The bony reefs the corals build are the nurseries of the ocean, home to at least a quarter of all known life forms in the sea. Because the planet has far more ocean than land, and because the ocean holds so much life, coral reefs are biologically among the most critical parts of the planet. Yet the coral reefs are also where all the important human-caused threats to the seas intersect. The biggest of these is global climate change, which is affecting ocean temperature, volume, acidity and possibly salinity, and maybe even the structure of the currents in ways

scientists are just starting to calculate. Moreover, overfishing and pollution are harming the ecology of the reefs.

The result is that 20 per cent of world's reefs have already been destroyed and another 50 per cent are in trouble. In the Caribbean, 80 per cent have died in the past three decades. So here in the Caribbean, if the corals are still reproducing,in perishingly hot waters, that will be a sign that the ocean still has some moxie, that it has not fallen into reproductive unconsciousness.

These primitive marine animals have more to teach us. What would we see if we could view the planet not through the linear time of human stories but through the multidimensional time of corals and their ilk? Would we see more clearly, recognise the great dangers we are running? Could we, too, become survivors in the long game of evolution?

I have decided that I need to watch the corals as they spawn in response to the lunar cycle, to look for life in the larger theme of death. And this is how I have ended up arriving in Panama on the night of the biggest full moon of the summer, on day zero in the lead-up to the spawning of the corals.