

Waters of the World: The Story of the Scientists Who Unraveled the Mysteries of Our Oceans, Atmosphere, and Ice Sheets and Made the Planet Whole

Sarah Dry

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In *Waters of the World*, Sarah Dry profiles the lives of six brilliant scientists from the mid-nineteenth century to the present who made essential contributions to our understanding of how the Earth works, pioneering new theories, instruments, and methods of calculation to unlock the mysteries of the atmosphere, ice pack, and oceans.

The scientists and their major discoveries are covered through engaging backstories and relations of their societal contexts. The quirky Victorians among them worked solo and believed that limitless nature could be tamed once its patterns were revealed. These include the insomniac Alpinist John Tyndall; astronomer-pyramidologist Charles Piazzi Smyth; and the boomerang-chucking mathematician Gilbert Walker, who labored to predict monsoons in British India.

Also included are twentieth-century oceanographer Henry Stommel and meteorologists Joanne Simpson and Willi Dansgaard, who worked on vast projects and in administration-intensive collaborations, wherein military and geopolitical constraints impacted funding and research priorities. The text asserts that there are even more challenges for Anthropocene climate scientists, who face environmental challenges on an unprecedented scale at a time when scientific knowledge is under siege, nonmilitary research is underfunded, and academic life requires loads of administrative paperwork and publications in obscure journals, more so than sharing knowledge with the public.

Dry's assured and fluid prose unravels the complicated concepts across the disciplines that comprise climate science. The interconnected forces that move heat from tropics to poles and that drive ocean and air currents are analyzed in a masterful, entertaining way. It becomes clear that Earth operates as a complex and turbulent machine. *Waters of the World* chronicles how much we have learned, how much we don't know, and how much we need to learn if we are to halt the pace of global warming.

RACHEL JAGARESKI (January / February 2020)

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