Plankton: An Environmental History of Oceanic Biomass, 1850–2020 Ariane Tanner

What is the origin of life? How do we feed the world? How can we produce alternative energy resources or stop global warming? Since the beginnings of scientific plankton research, around 1850, the tiniest watery organisms have always been the targets of big questions, and were equally supposed to deliver solutions to massive problems. Due to the fact that phytoplankton forms the base of the food chain for all other oceanic organisms – be they zooplankton, fish, or whales – and additionally provides fifty percent of the available oxygen in the atmosphere, investigations of the floating creatures are also directed to our evaluation of prosperity on land.

Plankton also fuels our greed and fears. It reproduces quickly, but the dark side of that fast growth is the phenomenon of algae blooms, where the plankton reaches a critical mass, absorbing all nutrients in certain locations and causing so-called dead zones. The contradiction between the scientific fascination of the blooms, and the destruction they cause, raises questions of control or optimum use. These promises of perfectibility accompany all imaginitive possibilities related to the life cycles of plankton.

Using sources from scientific papers, images of pelagic organisms, popular magazines, and science fiction movies, this project shows the hopes and dreams clinging to that biological material have been informed by the changing historical context in highly industrialized countries, and how we – through looking at the different scientific, technological, and cultural practices related to plankton – can discover how the human–ocean relation has been imagined, and how it has changed over time.