ABSTRACT: This film concerns the efforts of five scientists who, over some 50 years, set out to discover the rules by which the natural world works, how ecosystems work. It starts with the classic work of Bob Paine who in 1966 put forward the idea of keystone species - top predators that structure the community both to provide biodiversity and stability in the system. He worked on the intertidal communities off the Washington coast. There follows the work of Jim Estes on the top-down effects of Pacific sea otters, Mary Power on large-mouthed bass in river ecosystems, and John Terborgh on Amazon tropical forests. In all three we see how human interference and exploitation has caused the unraveling of the system, the collapse of the trophic cascade. Finally, we get to my work on the Serengeti. This starts with a collapsed system and documents the self-restoration over some 100 years. This is the message of hope- given enough time and a little help we can repair the damage done. It is not too late if we make the right decisions.

Bio: Professor Anthony R.E. Sinclair was born in 1944 and raised in East Africa before going to Britain for education. He obtained a PhD from Oxford University in 1970. Fascinated by nature in Africa from an early age he began research in Serengeti in 1965 has continued there for 54 years. During this period, he also worked in Australia and then became a professor at the University of British Columbia, Vancouver, Canada where he is now Professor Emeritus. He is a Fellow of the Royal Society of London and the Royal Society of Canada. He was awarded the Aldo Leopold medal from The Wildlife Society, USA, in 2013. He has conducted ecological research on the role of biodiversity in the functioning of many ecosystems around the world including Africa, Australia, New Zealand and Canada. In Serengeti he documented how the ecosystem repaired itself after the catastrophe of the disease called rinderpest in 1890, an example for the rest of the world on how our ecosystems can be restored. This included understanding the role of animal migrations, food shortage and predation for the stability of ecosystems.