**Reference list for BIOL 416 Terrestrial Ecosystems 2019 – this list will be updated through the course based on your suggestions**

**Recommended journal papers:**

Costanza, R., R. dArge, et al. 1997. "The value of the world's ecosystem services and natural capital." Nature 387(6630): 253-260.

Elser, J.J., and E. Bennett. 2011. A broken biogeochemical cycle.  Nature*.* 478: 29-31.

Foley, J et al. 2011. Solutions for a cultivated planet. Nature. 478: 337–342

Odum, E. 1969. The Strategy of Ecosystem Development. Science 164: 262-270

Rockstrom et al. 2009. A safe operating space for humanity. Nature 461, 472-475.

Ripple, W.J. et al. 2017. World Scientists’ Warning to Humanity: A Second Notice. BioScience, 67(12), 1026–1028. <https://academic.oup.com/bioscience/article/67/12/1026/4605229>

Steffen, W., et al. 2015. The trajectory of the Anthropocene: the great acceleration. The Anthropocene Review, 2(1), 81-98.

Steffen, W., et al. 2015. Planetary boundaries: Guiding human development on a changing planet. Science 347 (6223), 736-748. <http://science.sciencemag.org/content/early/2015/01/14/science.1259855/tab-pdf>

Steffen, W., et al. 2018. Trajectories of the Earth System in the Anthropocene. PNAS 115 (33) 8252-8259.

Tilman, D. et al. 2002. Agricultural sustainability and intensive production practices. Nature 418:671-677.

Tilman, D. et al. 2012. Global food demand and the sustainable intensification of agriculture. PNAS 108(50):20260-20264.

Vitousek PM, Howarth RW. 1991. Nitrogen Limitation on Land and in the Sea - How Can It Occur. Biogeochemistry 13:87-115

Vitousek et al. 1997. Human-dominated Ecosystems – Science 272:494-499

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**Reference Books (I have copies of most of these if you cannot locate them in the library):**

Brady N.C. (2001) The Nature and Properties of Soils. 13th edn. Prentice Hall.

Chapin, F. S., III., P. A. Matson, et al. (2011). Principles of Terrestrial Ecosystem Ecology. 2nd edition. New York, Springer.

Chapin, F.S. III, Kofinas, G.P. and Folke C. (2009). Principles of Earth System Stewardship – Resilience-based Natural Resource Management in a Changing World. Springer.

Coleman, D.C., D.A.J. Crossley, and P.F. Hendrix, Fundamentals of Soil Ecology. 2nd ed. 2004, Amsterdam: Elsevier.

Jacobsen, M. C., R. J. Charlson, et al. (2000). Earth System Science - From Biogeochemical Cycles to Global Change. Amsterdam, Academic Press.

Montgomery, C. (2007) . Dirt: The erosion of civilisations. University of California Press.

Paul, E.A. and Clark, F.E. 2015. Soil Microbiology, Ecology and Biochemistry. Academic Press.

Ponting, C. (2007). A New Green History of the World: The Environment and the collapse of great civilisations. 2nd edition. Penguin.

Schlesinger, W. H. (1997). Biogeochemistry - An analysis of Global Change. San Diego, Academic Press.

Suzuki, D. and H. Dressel (2010). More Good News: Real solutions to the global eco-crisis. Vancouver, Greystone.

Wright, R. (2004). A Short History of Progress. New York, Carroll and Graf.

**Interesting electronic media links:**

Johan Rockstrom on planetary boundaries and transformative change   <https://www.youtube.com/watch?v=RgqtrlixYR4>

Planetary Boundaries research – Stockholm Resilience Centre <https://www.stockholmresilience.org/research/planetary-boundaries.html>

Ecological Footprint <http://www.footprintnetwork.org/en/index.php/GFN/page/personal_footprint/>

Intergovernmental Panel on Climate Change latest report (on the impacts of of global warming of 1.5 °C above pre-industrial levels) <https://www.ipcc.ch/sr15/>

Will we survive this century? TedTalk by Martin Rees who served as Britain’s Astronomer Royal (14 minute talk) <http://www.ted.com/talks/lang/eng/martin_rees_asks_is_this_our_final_century.html>

Surviving progress (2011) <http://www.nfb.ca/film/surviving-progress>

Resilience Alliance <https://www.resalliance.org>

Resilience and Adaptation Program University of Alaska Fairbanks <https://www.uaf.edu/rap/>

**High quality relevant journals:**

[Agriculture, Ecosystems and Environment](http://www.journals.elsevier.com/agriculture-ecosystems-and-environment/)

[Bioscience](http://www.bioone.org/bioone/?request=get-journals-list&issn=0006-3568)

[Ecological Applications](http://www.esajournals.org/loi/ecap)

[Ecosystems](http://link.springer.com/journal/10021)

[Environmental Research Letters](http://iopscience.iop.org/1748-9326/)

[Frontiers in Ecology and Environment](http://www.frontiersinecology.org/front/)

[Global Change Biology](http://www.blackwell-synergy.com/Journals/member/institutions/issuelist.asp?journal=gcb)

[Global Environmental Change: Human and Policy Dimensions](http://www.journals.elsevier.com/global-environmental-change/)

[Issues in Ecology - Ecological Society of America](http://www.esa.org/esa/?page_id=1638)

[Nature](http://www.nature.com/)

[Proceedings of the National Academy of Sciences (PNAS)](http://www.pnas.org/)

[Science](http://www.sciencemag.org/)