



DEPARTMENT OF HISTORICAL STUDIES

AE2035 Archaeology as sustainability science, 15 credits

Arkeologi som hållbarhetsvetenskap, 15 högskolepoäng

Second Cycle

Reading list for AE2035, to be valid from spring semester of 2024

Reading list was confirmed by Department of Historical Studies on 2023-12-11 to be valid from 2024-01-15.

See appendix.

AE 2035 Archaeology as Sustainability Science, 15 HEC (Spring 2024)

Literature

Most of the literature for the course are papers, but with some books marked in bold.

Armstrong, C.G., et al. (2017) Anthropological contributions to historical ecology: 50 questions, infinite prospects. *PLoS ONE* 12(2): e0171883. (26 pp)

Balée, W (2006) The research program of historical ecology. *Annual Review of Anthropology* 35:75-98. (24 pp)

Bradtmöller, M., et al. (2017). Resilience theory in archaeological practice: An annotated review. *Quaternary International* 446, 3–16. (14 pp)

Butzer, K. (2015) Anthropocene as an evolving paradigm. *The Holocene* 25(10), 1539–1541. (3 pp)

Costanza, R., et al. (2007). Sustainability or collapse: What can we learn from integrating the history of humans and the rest of nature? *Ambio* 36(7), 522–527. (6 pp)

Crumley, C.L. (2018) Taking research into action in historical ecology. In: Crumley, C.L., Lennartsson, T, & Westin, A. (eds), *Issues and Concepts in Historical Ecology: The Past and Future of Landscapes and Regions*, 298–313. Cambridge: Cambridge University Press. (16 pp)

Crumley, C. L., et al. (2022) *If the Past Teaches, What Does the Future Learn? Ancient Urban Regions and the Durable Future*, edited by John T. Murphy and Carole L. Crumley. Delft: TU Delft / Faculty of Architecture and the Built Environment. (111 pp) [Available online](#).

du Pisani, J. A. (2006). Sustainable development: Historical roots of the concept. *Environmental Sciences* 3(2), 83–96. (14 pp)

Ellis, E.C., et al. (2018) Evolving the Anthropocene: linking multi-level selection with long-term social–ecological change. *Sustainability Science* 13, 119–128. (10 pp)

Erickson, C.L. (1998) Applied archaeology and rural development: Archaeology’s potential contribution to the future. In: Whiteford, M.B., & Whiteford, S. (eds), *Crossing Currents: Continuity and Change in Latin America*, 34–45. Upper Saddle, NJ: Prentice-Hall. (12 pp)

Feinman, G.M., & Carballo, D. (2018) Collaborative and competitive strategies in the variability and resiliency of large-scale societies in Mesoamerica. *Economic Anthropology* 5, 7–19. (13 pp)

Fisher, C. (2020) Archaeology for sustainable agriculture. *Journal of Archaeological Research* 18, 393–441 (49 pp)

Glaser, B. (2007). Prehistorically modified soils of central Amazonia: A model for sustainable agriculture in the twenty-first century. *Philosophical Transactions of the Royal Society B: Biological Sciences* 362, 187–196. (10 pp)

Guttman-Bond, E. (2019) The ethics of sustainable archaeology. *Antiquity* 93(372), 1666–1668. (3 pp)

Hardesty, D.L. (2007) Perspectives on global-change archaeology. *American Anthropologist* 109(1), 1–7. (7 pp)

**Hassan, F. (2004). *Water and Ethics: A Historical Perspective*. Paris: Unesco. (52 pp)
Available online.**

Hayashida, F. (2005) Archaeology, ecological history, and conservation. *Annual Review of Anthropology* 34, 43–65. (23 pp)

Hegmon, M. (2017) Path dependence. In: Mills, B., & Fowles, S. (eds), *The Oxford Handbook of Southwest Archaeology*. Oxford Handbooks Online. DOI: 10.1093/oxfordhb/9780199978427.013.7 (13 pp)

Hudson, M. J., et al. (2012) Prospects and challenges for an archaeology of global climate change. *Wiley Interdisciplinary Reviews: Climate Change* 3, 313–328. (16 pp)

Isendahl, C. (2008) Applied agro-archaeological research in the Bolivian Yungas. *The SAA Archaeological Record* 8(3), 21–27. (7 pp)

Isendahl, C., & Stump, D. (eds) (2019). *The Oxford Handbook of Historical Ecology and Applied Archaeology*, pp. 581–597. Oxford: Oxford University Press.

Janssen, M.A., et al. (2003) Sunk-cost effects and vulnerability to collapse in ancient societies. *Current Anthropology* 44(5), 722–728. (7 pp)

Kintigh, K.W., et al. (2014) Grand challenges for archaeology. *American Antiquity* 79(1), 5–24. (20 pp)

Lane, P.J. (2015) Archaeology in the age of the Anthropocene: A critical assessment of its scope and societal contributions. *Journal of Field Archaeology* 40(5), 485–498. (14 pp)

Lane, P.J. (2021) Enhancing archaeology's role in addressing grand challenges needs more reflection on known unknowns. *Antiquity* 95(382): 1078–1080. (3 pp)

LeFebvre, M.J., et al. (2022) Archaeology as sustainability science: Perspectives from ancient island societies. *Sustainability* 14: 9689. (17 pp)

Logan, A.L. (2017) Will agricultural technofixes feed the world? Short- and long-term tradeoffs of adopting high-yielding crops. In: Hegmon, M. (eds), *The Give and Take of Sustainability: Archaeological and Anthropological Perspectives on Tradeoffs*, 109–124. New York: Cambridge University Press. (16 pp)

- Logan, A.L., et al. (2019) Usable pasts forum: Critically engaging food security. *African Archaeological Review* 36, 419–438. (20 pp)
- Minnis, P.E. (1999) Sustainability: The long view from archaeology. *New Mexico Journal of Science* 39: 23–41. (19 pp)
- Nelson, M.C., et al. (2016) Climate challenges, vulnerabilities, and food security. *PNAS* 113(2), 298–303. (6 pp)
- Nelson, M.C., et al. (2017) Vulnerability to food insecurity: Tradeoffs and their consequences. In: Hegmon, M. (eds), *The Give and Take of Sustainability: Archaeological and Anthropological Perspectives on Tradeoffs*, 172–197. New York: Cambridge University Press. (25 pp)
- Ortman, S.G. (2019) A new kind of relevance for archaeology. *Frontiers in Digital Humanities* 6: 16. (13 pp)
- Pretty, J. (2008). Agricultural sustainability: Concepts, principles and evidence. *Philosophical Transactions of the Royal Society B: Biological Sciences* 363, 447–465. (19 pp)
- Purvis, B., et al. (2019) Three pillars of sustainability: In search of conceptual origins. *Sustainability Science* 14, 681–695. (15 pp)
- Redman, C.L. (2005) Resilience theory in archaeology. *American Anthropologist* 107(1), 70–77. (8 pp)
- Redman, C.L. (2014) Should sustainability and resilience be combined or remain distinct pursuits? *Ecology and Society* 19(2), 37. (8 pp)
- Riede, F., & Sheets, P. (eds) (2020) *Going Forward by Looking Back: Archaeological Perspectives on Socio-ecological Crisis, Response, and Collapse*. New York: Berghahn. (446 pp)**
- Rockman, M., & Hritz, C. (2020) Expanding use of archaeology in climate change response by changing its social environment. *PNAS* 117(15), 8295–8302. (8 pp)
- Saitta, D. (2020) *Intercultural Urbanism: City Planning from the Ancient World to the Modern Day*. London: Zed. (192 pp)**
- Silva, F., et al. (2022) Developing transdisciplinary approaches to sustainability challenges: The need to model socio-environmental systems in the *longue durée*. *Sustainability* 14: 10234. 20 pp.
- Smith, M.E. (2015) How can archaeologists make better arguments? *The SAA Archaeological Record* 15, 18–23. (6 pp)
- Smith ME (2021) Why archaeology's relevance to global challenges has not been recognized. Also comments by Morrison, Chirikure, Lane, and Croucher, and response. *Antiquity* 95(382): 1061–1087. 27 pp.

Stump, D. (2010) “Ancient and backward or long-lived and sustainable?” The role of the past in debates concerning rural livelihoods and resource conservation in Eastern Africa. *World Development* 38(9), 1251–1262. (12 pp)

Sulas, F., & Pikirayi, I. (eds) (2018) *Water and Society from Ancient Times to the Present: Resilience, Decline, and Revival*. London: Routledge. (402 pp)

Tainter, J.A. (2003) A framework for sustainability. *World Futures: The Journal of General Evolution* 59(3-4), 213-223. (11 pp)

Tainter, J.A. (2006a) Archaeology of overshoot and collapse. *Annual Review of Anthropology* 35, 59–74. (16 pp)

Tainter, J.A. (2006b) Social complexity and sustainability. *Ecological Complexity* 3, 91–103. (13 pp)

van der Leeuw, S., & Redman, C.L. (2002) Placing archaeology at the center of socio-natural studies. *American Antiquity* 67(4), 597–605. (9 pp)

Wiek, A., et al. (2011) Key competencies in sustainability: A reference framework for academic program development. *Sustainability Science* 6, 203–218. (16 pp)

Zalasiewicz, J., et al. (2010) The new world of the Anthropocene. *Environmental Science & Technology* 44, 2228–2231. (4 pp)