

Energy and Nature

Ecology and Conservation Studies Society, Birkbeck Free Lecture series

Spring 2017: six Friday evenings, 10th February to 17th March, 18:30 to 20:00. Lecture Theatre B34, Birkbeck, University of London, Torrington Street.

Much of our energy use involves the generation of “greenhouse gases” and the resulting climate change is harming nature, from the loss of sea ice for Polar Bears to the bleaching of coral in the tropics. As climate changes, species die out in places that become unsuitable and colonise newly available places, but not all are able to do this. These effects are predicted to be large, but our use of energy can also have more direct effects. Air pollution from fossil fuel use can harm sensitive plants, so changing vegetation composition and the habitat for other species. Strip mining of coal and oil shales can scar the landscape, and oil spills can harm sea life. Chernobyl and Fukushima led to large scale evacuation, but we cannot evacuate the wildlife. Sustainable energy requires substituting fossil fuels with sources more directly generated from the sun, such as wind, biomass, solar thermal and photovoltaics. It’s not enough to act locally whilst we trade with others who have not changed, so we need to account for the consequences of local consumption and trade, not just of production. Even then, sustainable energy sources can affect nature; do we want huge monocultures of biomass crops or equally large solar arrays?

10th February: Bioenergy and biodiversity. David Howard, Director Centre for Sustainable Energy, Centre for Ecology & Hydrology, Lancaster Environment Centre.

17th February: Effects of pollutants from road traffic on natural habitats and risk to nature conservation sites. Richard Smithers, Knowledge Leader: Ecosystems, Ricardo Energy & Environment, Harwell.

24th February: Evolution of lichen based bio-indication methods in response to changing air pollution. Dr Holger Thüs, Natural History Museum.

3rd March: Fracking and ecosystem impacts. Tom Oliver, Associate professor of landscape ecology, University of Reading

10th March: Renewable electricity and wildlife. Dr Lucy Wright, Principal Conservation Scientist, RSPB.

17th March: Long-term recovery from the Torrey Canyon oil-spill - interactions with climate change and other impacts. Prof Stephen Hawkins, National Oceanography Centre, University of Southampton and Lankester Fellow at the Marine Biological Association.

A reading list, will be available later. To receive this, please email ecssoc@gmail.com, consult the website <http://www.bbk.ac.uk/geds/our-research/ecss/free-public-lectures>, or pick up a copy at one of the lectures.

The free public lectures are in a series hosted by GEDS, Birkbeck University of London. They are suitable for those who may be considering, or undertaking, university courses in ecology, biological conservation or related subjects. They will interest environmental and ecological practitioners, natural historians, wildlife organisations and others with similar interests.

The lectures are supported by GEDS, Birkbeck University of London and would not be possible otherwise. They are organised and promoted by the Ecology and Conservation Studies Society.

