



SWGS KS5 READING LIST: ENVIRONMENTAL SCIENCE

The purpose of this reading list is to encourage students to read, enjoy and learn beyond the taught curriculum. You can use the resources here to support and to enrich your learning.

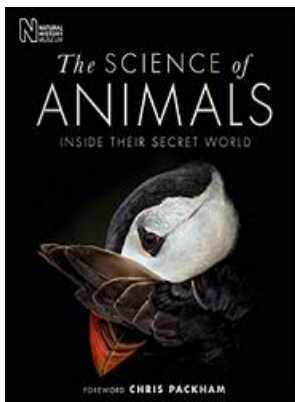
General



Environmental Science A-Level Richard Genn

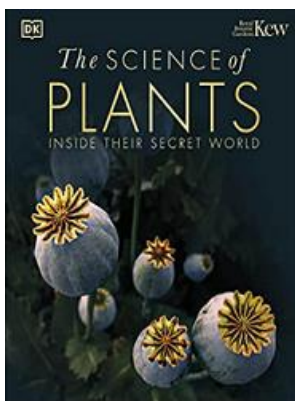
Course content

1. The Living Environment (Paper 2): Conditions for life on Earth; Conservation of biodiversity; Life processes in the biosphere and conservation planning



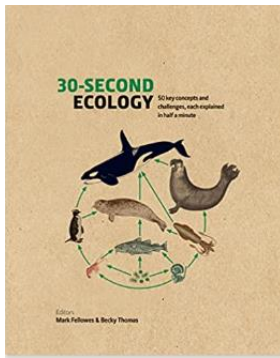
The Science of Animals: Inside their Secret World DK

Species adaptations
Biodiversity
Conservation
Evolutionary Uniqueness
Endemic Species



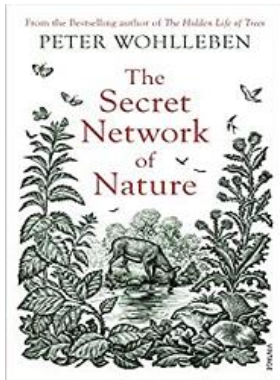
The Science of Plants: Inside their Secret World DK

Species adaptations
Biodiversity
Conservation
Evolutionary Uniqueness
Endemic Species



30-Second Ecology: 50 key concepts and challenges Mark Fellowes, Dr Becky Thomas

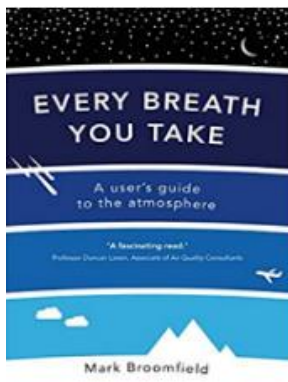
Biodiversity and Conservation
Food chains
Cause and effect
Synoptic Links



The Secret Network of Nature: The Delicate Balance of All Living Things Peter Wohlleben

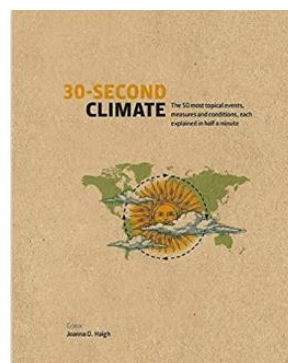
Synoptic links
Conservation and Biodiversity
Symbiotic relationships
Cause and effect

2. The Physical Environment (Paper 1): The atmosphere; The hydrosphere; Mineral resources; Biogeochemical cycles; Soils



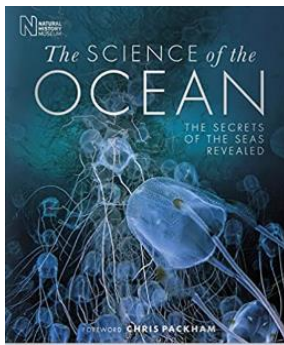
Every Breath You Take: The definitive guide to air pollution and the atmosphere: A User's Guide to the Atmosphere Mark Broomfield

Atmosphere
Pollution
Biogeochemical Cycles



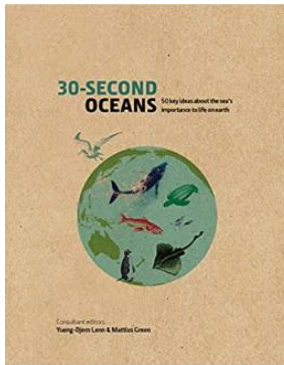
30-Second Climate: The 50 most topical events, measures and conditions Joanna Haigh

Tipping points
EGE
GCC



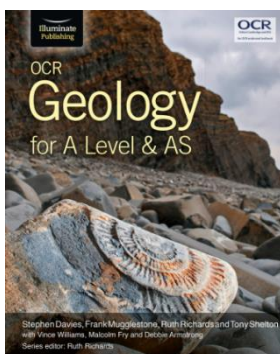
The Science of the Ocean: The Secrets of the Seas Revealed DK

Hydrosphere
Ocean Currents
ENSO
Thermohaline Circulation



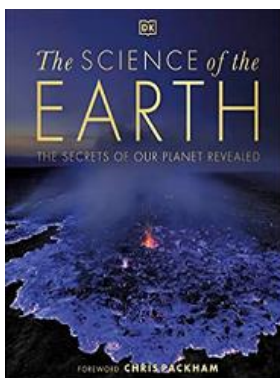
30-Second Oceans: 50 key ideas about the sea's importance to life on earth Mattias Green

Ocean currents
ENSO
Thermohaline Circulation



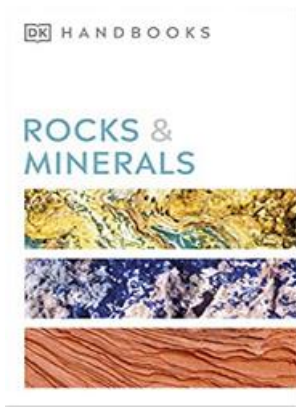
OCR Geology for A Level & AS Steven Davies et al

Lithosphere
Mineral resources
Geology
Plate tectonics



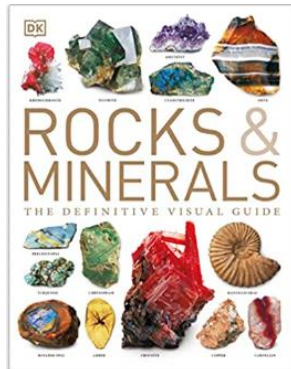
The Science of the Earth: The Secrets of our Planet Revealed DK

Geology
Minerals
Plate Tectonics
Lithosphere



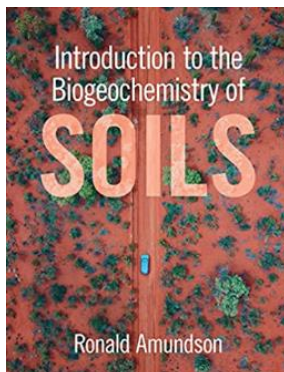
Rocks and minerals (DK Handbook)
Chris Pellant and Helen Pellant

Lithosphere
Minerals
Geology
Rock formation
Mineral uses and extraction



Rocks and Minerals: The Definitive Visual Guide
Ronald Bonewitz

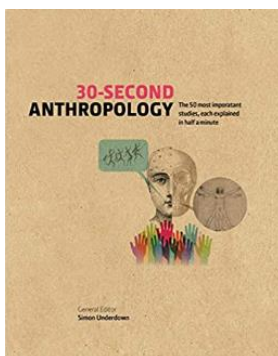
Lithosphere
Minerals
Geology
Rock formation
Mineral uses and extraction



Introduction to the Biogeochemistry of Soils
Ronald Amundson

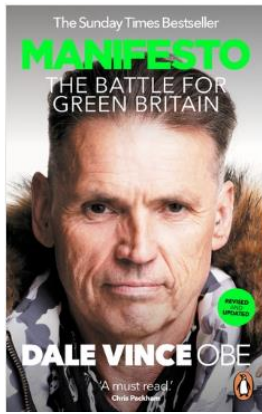
Biogeochemical Cycles
Soils

3. Energy Resources (Paper 1): The importance of energy supplies in the development of society; The impact of features of energy resources on their use; The sustainability of current energy resource exploitation; Strategies to secure future energy supplies



30-Second Anthropology: The 50 most important ideas in the study of being human
Simon Underdown

Anthropology
Energy



Manifesto: The Battle for Green Britain Dale Vince, John Robb

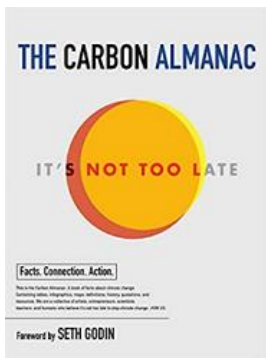
Energy
Economy
Sustainability

4. Pollution (Paper 1): The properties of pollutants; How environmental features affect the severity of pollution; Strategies to control pollutants based on their properties and features of the environment



Understanding Environmental Pollution Marquita K. Hill

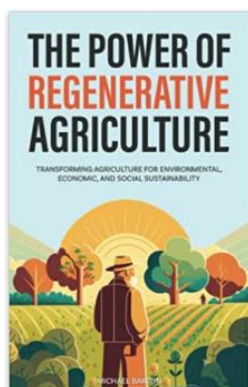
Pollution
Synoptic Links
Cause and Effect



The Carbon Almanac The Carbon Almanac Network

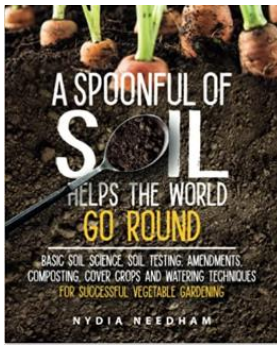
Biogeochemical Cycles
Carbon Cycle
Pollution
Anthropogenic influences

5. Biological resources (Paper 2): Agriculture; Aquatic food production systems; Forest resources



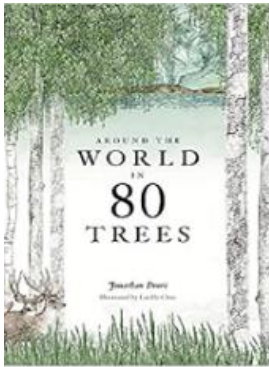
The Power of regenerative Agriculture: Transforming Agriculture for Environmental, Economic, and Social Sustainability Michael Barton

Agriculture
Soils



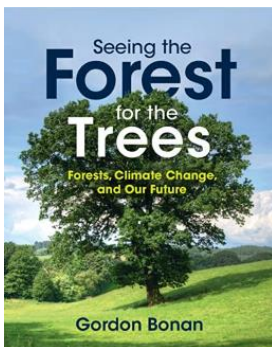
A Spoonful of Soil Helps the World Go Round: Basic soil science, testing, amendments, composting
Nydia Needham

Agriculture
Soils
Crops



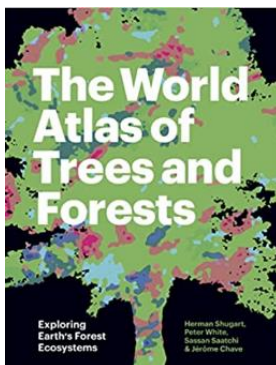
Around the World in 80 Trees: Discover the secret world of trees
Jonathan Drori

Forestry
Biodiversity



Seeing the Forest for the Trees: Forests, Climate Change, and Our Future
Gordon Bonan

Forestry
GCC
Biodiversity



The World Atlas of Trees and Forests: Exploring Earth's Forest Ecosystems
Herman Shugart et al

Forestry
Biodiversity

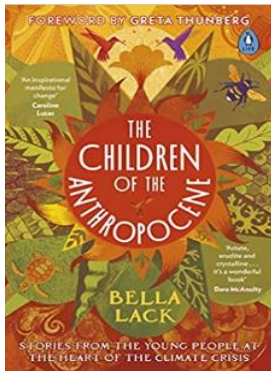
6. Sustainability (paper 2): Dynamic equilibria; Energy; Material cycles; The circular economy



Sustainability for the Rest of Us: Your No-Bullsh*t, Five-Point Plan for Saving the Planet

John Pabon

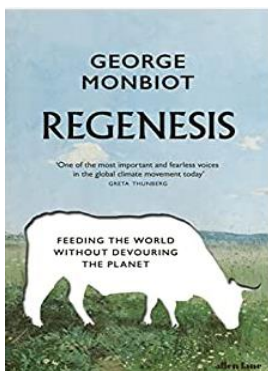
Sustainability
Economy



The Children of the Anthropocene: Stories from Young People at the Heart of the Climate Crisis

Bella Lack

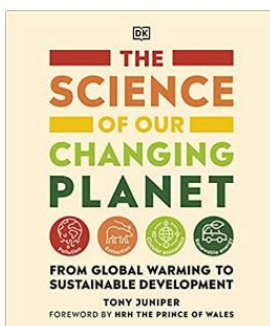
Sustainability
GCC
Ethics



RegenesiS: Feeding the World without Devouring the Planet

George Monbiot

Sustainability
GCC
Agriculture



The Science of our Changing Planet: From Global Warming to Sustainable Development

Toni Juniper

GCC
Sustainability
Tipping points
Carbon cycle

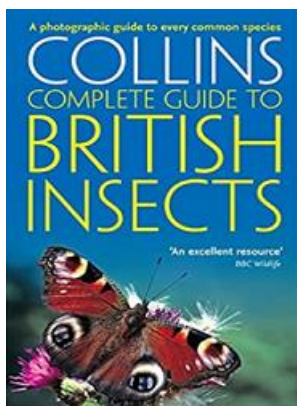


Small World, Big Ideas: Eco-Activists for Change Satish Kumar

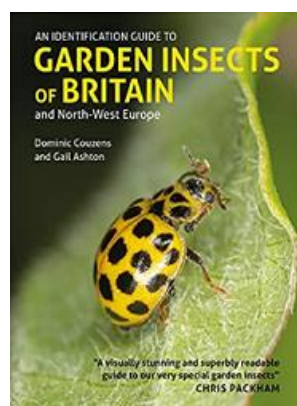
Ethics
Economy
Cause and effect
Synoptic Links

7. Research Methods (Paper 1 AND Paper 2): Scientific methodologies; Sampling techniques

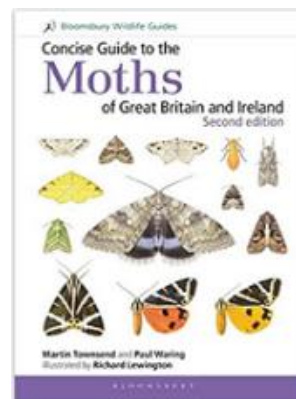
Useful ID Guides:



Michael Chinery



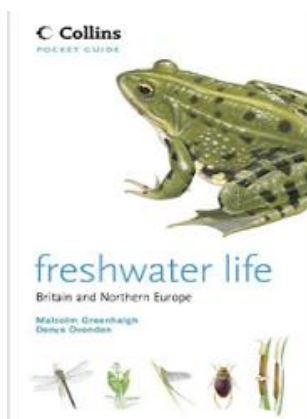
D Couzens & G Ashton



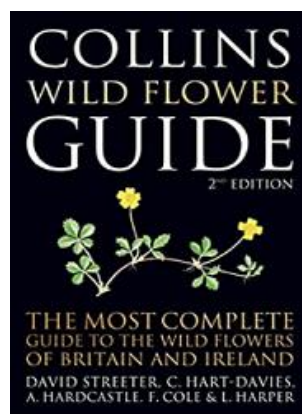
Martin Waring



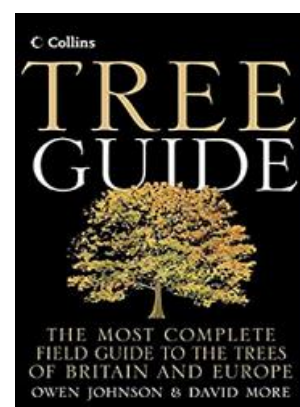
Rob Hume et al



M Greenhalgh & D Ovenden



David Streeter



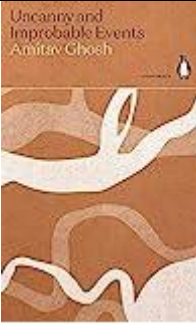
Owen Johnson

Magazines and subscriptions

Magazine	Where to access	Cost
Nature		
Planet Earth		
Biological Sciences Review		
New Scientist		
National Geographic		
Physics World		
How it Works		
OYLA (STEM)		
Catalyst		
Quanta		
Guardian Environment	online	Free
BBC Environment	online	Free

Additional reading

Wilding	Isabella Tree
Where the Wildflowers Grow	Leif Bersweden
Two for joy	Adam Henson
Otherlands	Thomas Halliday
An Immense World	Ed Yong
A Fenland Garden	Francis Pryor
One Summer's Day	Mark Cocker
Climate Change	A Ladybird Book
Life Between the Tides	Adam Nicolson
The New Forest Geology and Fossils	James Barnet
A Sparrow's Life's as Sweet as Ours	Carrie Akroyd & John McEwen
Goshawk Summer	James Aldred
Entangled Life	Merlin Sheldrake
The Cabaret of Plants	Richard Mabey
Silent Earth	Dave Goulson
Working with Nature	Jeremy Purseglove
The Forager's Calendar	John Wright
A Spotter's Guide to the Countryside	John Wright

 What I stand for is what I stand on by Wendell Berry	 Man's war against nature by Rachel Carson	 The last tree on Easter Island by Jared M. Diamond	 A warning from the golden toad by Tim F. Flannery	 The dragonfly will be the messiah by Masanobu Fukuoka
 Uncanny and improbable events by Amitav Ghosh	 The democracy of species by Robin Wall Kimmerer	 Think like a mountain by Aldo Leopold	 We belong to Gaia by James Lovelock	 The world we once lived in by Wangari Maathai
 An idea can go extinct by Bill McKibben	 This can't be happening by George Monbiot	 All art is ecological by Timothy Morton	 There is no point of no return by Arne Naess	 Food rules : an eater's manual by Michael Pollan
 The most dammed country in the world by Dai Qing	 No one is too small to make a difference by Greta Thunberg	 The clan of one-breasted women by Terry Tempest Williams	 Every species is a masterpiece by Edward O. Wilson	 Hot money by Naomi Klein