

# **Ecocide: From Living Earth to Barren Planet bibliography**

From destabilised climatic patterns, devastated forests, eroded soils and drained aquifers to the unusually severe and frequent fires, floods and storms that have ravished many parts of the planet, there is mounting evidence that humanity is beginning to face a crisis of unprecedented proportions. It is not a matter of this or that individual trend, be it the accelerating extinction of lifeforms, fears about future food supplies or the coming downturn in the ready availability of cheap fuel. Rather it is the cumulative impact of a variety of destructive transformation of the Earth wrought by just one species, humankind.

Other issues such as terrorism, street crime, job losses or house prices may grab the headlines but the threat to the Earth's life-support systems is the fundamental issue of our times. Those apologists for the current social order who talked about the "end of history" might turn to be right after all... but in the completely opposite way to what they smugly envisaged.

According to the 2007 *Global Environmental Outlook* from the United Nations Environment Programme, for example, "humanity's very survival' is at risk". This was a study produced by almost 400 scientists, all experts in their fields, whose findings were subjected to review by another 1,000 of their peers. The threat to other forms of life is even more dire and urgent as a veritable massacre of the world's once rich diversity of flora and fauna rages yet more destructively. Headlines like the following are now quite common: "collapse of ecosystems likely if plunder continues" (*Guardian*, Oct. 25, 2006), "two-thirds of world's resources used up" (*Guardian*, March 30, 2005), and "we are past the point of no return" (January 16, 2005, *Independent*).

## **Bookmark**

Humanity's Ecological Footprint is over 23% larger than what the planet can regenerate. In other words, it now takes more than one year and two months for the Earth to regenerate what is used in a single year. Instead of living off income, humankind is liquidating its 'capital stock'. Humankind uses some 50 per cent of the world's freshwater supply and consumes around 42 per cent of the world's plant growth. The carbon dioxide concentration in the atmosphere has increased by nearly 30 percent since the beginning of the Industrial Revolution while more atmospheric nitrogen is fixed by humanity than by all natural terrestrial sources combined.

The fundamental issue facing global society at the start of the 21<sup>st</sup> century is,

## **Clear and present dangers**

then, whether it will make it safely to the end of the next century. Overriding all else and interacting with most social and economic problems is the already parlous and worsening state of the very web of life. Its decline will bring to nought each and every human accomplishment.

There are many symptoms of this most fundamental of challenges. Some have been mentioned already but others equally threaten to undermine the

very basis of civilised living, not least the comparatively 'quiet' but no real less real and fast growing threat from soil depletion and nutrient depletion. Meanwhile, deforestation continues to strip a once verdant Earth, while chemical contaminants have become all pervasive.

Such disasters have happened in the geological past. This time, it is happening due to one species, humankind. Past human 'own goals' were limited due to the small size of human populations and the limited power of human technology. Specific localities were indeed trashed - North Africa, the once 'Fertile Crescent' and so forth - but there were always other places to which people could migrate and from which they could tap resources.

Human impacts on the environment used to be local, reversible, & escapable through migration. Now they are typically global, irreversible, and inescapable. As the following bibliography demonstrates, ecological ruination is endemic across the world. The novelty of the present situation is the sheer number of problems, the rate at which many seem to be worsening and the way they occur in just about every part of the globe. Many receive limited news coverage: damage from acid rain to the seas, salinisation, siltation, the on-going eutrophication of waterways, and lowered water tables. Others such as forest fires, landslides and floods are routinely discussed as if they were 'acts of God' when, often, they are human-caused. Once all these 'time bombs' are taken into account, it should be clear that the overall prognosis would not be altered if global warming were to be shown to be the figment of overheated imaginations,

Nowhere is now safe. Humans have transformed ecosystems in every part of the planet, to the immediate cost of other species and to the longer term unsustainability of human society itself. Few areas remain contaminated by human-generated pollution. Even the world's highest mountain, Everest, has rubbish dumps polluting its lower slopes while agrochemicals now contaminate the bodies of creatures in the remote polar regions. In early 2008, a soup of plastic waste, nicknamed the "trash vortex" and reported to be the size of the USA, was floating in mid-Pacific.

In terms of specific resources, the age of cheap oil is fast drawing to a close, though growing water shortages may prove more disastrous. A growing number of wars, be it in Central Africa or the Middle East, have a struggle over increasingly scarce resources and living space at their heart. The most direct price is being paid by wildlife whose numbers and diversity are rapidly shrinking on a scale not seen since the last Ice Age, mainly to human destruction of their habitats. But human assaults on the environment have been rightly compared to a boomerang: their effects will return to devastate human society as well.

It is no longer a matter of collapse in some distant future. The web of life is unravelling now; yesterday's possibilities such as human-caused climatic change and toxic overload have become today's actualities. Civilisation may not collapse tomorrow but the point has been reached where the reversal of environmental and social decline is becoming progressively harder while odds against successful remedial action also lengthen. Time is now running out.

### **A many-headed monster**

This 'sustainability crunch' is much misunderstood, however. Part of the pervading ecological myopia may be reinforced by linguistics. The very word 'environment' invites its own marginalisation. It can be taken to mean

everything around an individual, not just air, water, soil and so forth but also bad housing, poor schooling, unsatisfactory domestic circumstances and the like. It can mean just about everything...and therefore nothing much in particular. Sight is thereby lost of the critical issue: the Earth's life-support systems.

There is also much ignorance, even in environmentalist circles, about the workings of the web of life and the nature of the threat to it. One instance came in the late 60s when fears were raised about 'resources running out'. The much bigger issue is the ecological side-effects of resource production and consumption, from field, plantation, quarry and mine to manufacture, use and final disposal, with transportation and waste along the way. That said, the end of the cheap oil era will dramatically disrupt the dominant lifestyle and push up food prices, while, in many areas, water resources are being dangerously depleted.

More recently, the problem has been overwhelmingly defined in terms of specific pollutants. Actually the deeper problem is pollution overload as a total synergistic effect. No matter how perceived, pollution is also seen largely in terms of direct threats to human health. Understandable though this may be, it can lead to unwarranted attention being paid to comparatively trivial issues like fluoridation, at the expense of more serious ones such as eutrophication and acidification. Similarly too much emphasis is given to carbon emissions from power plants and vehicle exhausts, downplaying other sources of climatic disruption such as paddy cultivation, cattle grazing, wetland drainage and deforestation. Misconceptions about the threat from pollution can also lead to false hopes being placed in technological 'fixes' like catalytic converters which, in toto, cause more problems than they solve. End-of-pipe filters and traps are of little use when it comes to 'non-point' pollutants like agrochemicals. Similarly too much emphasis is placed on recycling and not enough on demand reduction.

Even then, the issue is not just pollution, in whatever size or shape, but also environmental degradation. In other words, not just what we humans are adding to ecosystems but also we are 'taking out' as our activities simplify and otherwise degrade the richness and diversity of planet Earth. Many sources of ecological destruction are, in themselves, comparatively clean: forest clear-cutting, grazing, tillage, biomass plantations, hydro-electric schemes and the ultimate form of ecological despoliation, the sterilisation of land by covering with tarmac, brick and concrete.

Thus, contrary to the claim by British environmental economist Michael Jacobs that wool and cotton production has "relatively little environmental impact", quite the opposite is the case. Cotton cultivation has exhausted soils around the world and currently the crop is the single biggest consumer of pesticides. Sheep and goats have denuded one hill side after another. No wonder the great American conservationist John Muir called them four-legged locusts. The British uplands, for instance, are kept in the impoverished state of a wet desert largely because of overgrazing by sheep and, more recently, artificially large deer herds.

The need to take a holistic view of the ecocrisis can be illustrated by Hurricane Katrina and the destruction of New Orleans. Many commentators blamed the disaster on global warming and the overheating of waters in the Gulf of Mexico Yet it was magnified by a host of other factors, all human 'own

goals'. These included the loss of protective soil sediment due to levee construction, exposure of unprotected soil due to canal construction (also a cause of salt water intrusion and ensuing destruction of protective vegetation), increased vulnerability due to subsidence, something exacerbated by wetland drainage and subsequent soil oxidation as well as by geologic collapse due to local oil and gas drilling... and of course urban sprawl and building on inherently vulnerable land. Such contributory factors are all independent of greenhouse gas generation but each played its own malign part.

So the following bibliography tries to cover the full picture of ecological ruination and its consequences (its root causes are explored in another document on this site, *Roads to Ruin*). It explores the many ways the Earth's life-support systems are being undermined. At risk is the 'real wealth' of nations: stable climate, protection from ultra-violet radiation, photosynthesis, pollination, soil protection, waste decomposition, nutrient cycling, plus countless biological and physical checks and balances which restrain destructive excess. Unless humans suddenly became capable of personal photosynthesis, digesting their own wastes and many more such capabilities, their well-being is conditional upon that of the life-sustaining Ecosphere whose well-being must be the litmus test of all other policies.

Unlike specific resources such as individual minerals, for which alternatives may be available, there are simply no human-made substitutes on any significant scale for such 'services'. Without them, humankind has no future. As Paul Ehrlich once observed, whenever you hear someone saying that economics is more important than ecology, you should know that you are listening to an idiot.

## **Earth First**

The history of the Earth is one of evolution towards greater complexity and stability, with in-built checks and balances that help to sustain the whole. Threatening disturbances are either damped down or absorbed, such is the resilience of nature. Individual species may come and go but the ecological whole survives, tapping solar energy to maintain optimum conditions for life. The impact of most species - and of people too for the bulk of their history - has been muted by a variety of limiting factors, which have protected the health and productivity of ecosystems as a whole. Since the dawn of agriculture, however, human land uses and technologies have transformed the Earth's surface. However, unlike the patterns of diversity and succession characteristic of evolution, human-created changes have created grossly simplified, short-life and unstable environments.

The scale of human activity is now progressively decreasing the self-renewing, self-regulating and self-repairing capacities unique to the Earth's ecosystems. It does so many ways: each and every time more old-growth forests are felled, more monocultures planted, bigger herds of domesticated animals grazed, more wetlands drained, more waterways channelled and dammed, more mines dug, and more land buried beneath concrete and tarmac. Sometimes, the destruction happens on a large scale, for example the destruction of rainforests to make way for cattle ranches and mines. More often, however, it is the cumulative consequence of a myriad of otherwise insignificant developments, from new housing estates and hospitals to new marinas and ski resorts.

As the 'steady-state' economist Herman Daly once put it, 'overdevelopment' occurs when human numbers and artefacts grow "so large to the total environment that they obstruct the natural ecological processes which form the biophysical foundations of wealth. (They) become a cancer which kills the total organism". Global overwarming, water shortages, eroded soil, depleted fisheries are all but symptoms of that lethal sickness. Overdevelopment is the only one appropriate term to describe a situation in which just one single species, humankind, has taken over some 40% of net primary productivity (some estimates put the figure higher). In other words, so much of the real economic cake is being consumed by Homo Rapiens that, if not reduced, it can only destroy the very 'bakery' on which all living, not just economic activity, depends: ecocide indeed.

It is not unreasonable now to compare the dark cloud looming over the human prospect - and that of myriad other species - to those of the two World Wars of the 20<sup>th</sup> century. The impacts are likely to be much more severe, pervasive and long lasting. The difference between human conflict and confrontation between people and planet is that the former tended to be obvious and immediate while the latter are indirect and longer term.

The danger might be likened to that of the *Titanic*. It needed to start changing course well before the icebergs but left it too late and sank. Before then any danger was denied while the passengers in the main got on with enjoying life. For the time being all might seem well but 'business-as-usual' is propelling the ship of human society towards ruin. This has of course happened in the past but, then, collapse was local. Today few places are likely to survive unscathed.

As one commentator once put it, "modern industrial civilisation, as presently organised, is colliding violently with our planet's ecological system...We must make the rescue of the environment the central organising principle for civilisation. (This) means embarking on an all-out effort to use every policy and program, every law and institution, every treaty and alliance, every tactic and strategy, every plan and course of action -to use, in short, every means to halt the destruction of the environment and to preserve and nurture our ecological system. Minor shifts in policy, in laws and regulations, rhetoric offered in lieu of genuine change-these are all forms of appeasement, designed to satisfy the public's desire to believe that sacrifice, struggle and a wrenching transformation of society will not be necessary".(The fact that the words are those of former American vice-president Al Gore, whose track record in office fell far short of these sentiments, should not detract from their essential truth).

Of course, in the long run, everything we know is doomed in the sense that if and when the sun explodes (or implodes), life on Earth will be terminated. A giant meteorite might also put pay to all our hopes. But perhaps we have a few million years in which to flourish To do that, the Earth must be at the centre of our thoughts and actions.

*"Articles on ecology generally tend to lead off with lists of disasters... They suggest we have a number of specific problems we must address. We don't. We have The Problem. All ecological concerns are interrelated parts of the problem of perpetuating life on this frail planet, & our approach to them must be holistic. It is absolute folly to continue to pursue piecemeal solutions: when*

*we know full well that the pesticides, the detergents, & the dams are all fouling the same river.” (Denis Hayes). “The bulldozer & not the atomic bomb may turn out to be the most destructive invention of the 20th century.” (Philip Shabecoff).*

## **Ecocide: General**

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See also:

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The **Global Environmental Outlook** from the United Nations Environment Programme @

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[http://news.bbc.co.uk/1/hi/in\\_depth/629/629/7056601.stm](http://news.bbc.co.uk/1/hi/in_depth/629/629/7056601.stm)

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The **Living Planet** reports from the World Wide Fund for Nature @

[http://www.panda.org/news\\_facts/publications/general/livingplanet/index.cfm](http://www.panda.org/news_facts/publications/general/livingplanet/index.cfm)

The **Vital Signs** and **State of the World** series of reports from the Worldwatch Institute @

<http://www.worldwatch.org/pubs/vs/> and <http://www.worldwatch.org/pubs/sow/>

Reports from the **Intergovernmental Panel on Climate Change** @

<http://www.ipcc.ch/about/about.htm>;

Reports from **Global Biodiversity Outlook** @

<http://www.biodiv.org/gbo/>;

IUCN Red List of Endangered Species @

<http://www.iucnredlist.org/>

Global Footprint Network @

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### **Ecocide: Old & New**

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#### **Some early case studies:**

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### **Destruction of Forest Ecosystems: General**

*"Forests precede civilisations, deserts follow them"* (Chateaubriand).

About three-quarters of the world's original forests have been cut, most of that in the past century. Since the 1990s, things have gotten much worse. Forests have been almost completely eradicated in 25 countries, in another 29 the area covered by forest has fallen by more than 90%. 95% of the original forests of the United States are gone, for example. By 1997, 99% of native forests had been destroyed in Nigeria, Finland and India. China, Vietnam, Laos, Guatemala, Ivory Coast, Taiwan, Sweden, Bangladesh, the Central African Republic, the United States, Mexico, Argentina, Burma, New Zealand, Costa Rica, Cameroon, and Cambodia had all lost at least 90%.

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## **Desertification, soil erosion, compaction & denitrification**

It is this general degradation of soil systems and loss of productivity due to human activity that is the issue. Words like 'desertification' with the associated images of advancing sands tend to be a bit misleading and of course it must be noted that non-anthropogenic forces like long-term climate change and especially variations in rainfall) play a major part. But at least humans can take responsibility for their own misuse of the soil, that bedrock which, with fresh water, constitutes the true wealth of nations.

At the same time, the twin forces of overpopulation and wasteful diets means that more is demanded from less which in turn means more land degradation and less production. Already the area of grain cropland per person on the planet has shrunk to a sixth of a football field. Since 1960, nearly one-third of the world's arable land has been lost due to urbanisation, highway construction, soil erosion, salinisation, and water logging of the soil. Worldwide, more than 10 million hectares of productive arable land are severely degraded and abandoned each year" (about 7% of the total per decade). Globally, the annual loss of land to urbanization and highways alone ranges from 10 to 35 million hectares per year, with half of this lost land coming from cropland.

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<http://www.coralreef.org/> ditto.  
[http://www.motherjones.com/news/special\\_reports/coral\\_reef/](http://www.motherjones.com/news/special_reports/coral_reef/) **Mother Jones** special report

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Details of particular disasters can be found via newspaper and magazine archive sites as well as Google using the names of related vessels in the case of oil tankers colliding, sinking or running aground e.g. *Torrey Canyon* (off Cornwall, 1967), *Argo Merchant* (off USA, 1976), *Hawaiian Patriot* (North Pacific, 1977), *Amaco Cadiz* (off France, 1978), *Atlantic Empress* (off Trinidad, 1979), *Exxon Valdez* (Alaska, 1989), *Braer* (off Shetlands, 1993), *Aegean Sea* (off Spain, 1992), *Maersk Navigator* (off Sumatra, 1993), *Sea Prince* (off Korea, 1995), *Sea Empress* (off Wales, 1996), *Nakhodka* (off Japan), *Pallas* (off Denmark/Germany, 1999), *Erika* (off France, 1999), *Treasure* (off South Africa, 2000), *Jessica* (off Ecuador, 2001), and *Prestige* (off Portugal/Spain, 2002).

Many disasters in the Far East go unreported in the mainstream media in Europe and North America.

Oil tankers are the largest self-propelled machines created by humans. The problems are normally blamed on an ageing tanker fleet of thin-hulled vessels, sailing under 'flags of convenience' with badly trained crews. Yet such is the scale of oil movements that disasters are bound to happen with the best ships in the best managed circumstances.

Oil rigs and terminals are also responsible for disastrous spillages as well as routine leakages. Oil pipelines also causes disastrous leakages and fires e.g. Moosqar and Oghara disaster in Nigeria (1998).

A fearful problem is posed by oil and radioactive pollution from sunken warships and submarines, some of whom went to the bottom off otherwise uncontaminated areas in the Pacific during World War 2 but are now breaking apart. There are some eight known submarines, with reactors and nuclear missiles, lost deep in the oceans, the majority Russian Sea, for example:

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[http://www.whoi.edu/redtide/pertinent\\_info.html](http://www.whoi.edu/redtide/pertinent_info.html) resource bank

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Carson, R. (1993, originally 1964). **Silent Spring**. Houghton Mifflin. A classic case study of pollution which helped to launch the modern environmental movement.

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### **Pollution: Guides to Chemical Contamination**

Birkin, M. & B. Price. **C is for Chemicals**. Green Print, 1989. A-Z guide to chemical hazards.

### **Pollution: Chemical Contamination of Land**

Watson, A. (1993). 'Britain's Toxic Legacy: The Silence over Contaminated Land'. *Ecologist*, 23(5): 174-178.

### **Toxic Waste Dumping**

Brown, M., and A. Mikkelsen (1990). **No Place To Hide**. Univ. Calif. Pr. American study of threats to communities from toxic waste.

Bullard, R. (1990). **Dumping in Dixie: Race, Class & Environmental Quality**. Westview

Szasz, A. (1994). **Ecopolulsm: Toxic Waste & the Movement for Environmental Justice**. Univ. Minnesota Pr. Study of how poor communities suffer the most from toxic waste dumping.

Vallette, J. & H. Spalding, eds. (1990). **The International Trade in Wastes: A Greenpeace Inventory**. Greenpeace (USA)

### **Pollution form Specific Chemicals**

Allen, R. (2004). **The Dioxin War; Truth and Lies About a Perfect Poison**. Pluto Pr.

Anon (1994). **Chlorine Crisis: time for a global phase-out**. Greenpeace International. Various other studies can be downloaded from:

<http://www.greenpeaceusa.org/toxics/reportstext.htm>

Cook, C. (2005). 'The Spraying of America'. *Earth Island Jnl.*, Spring, 2005, 20(1). Pesticide saturation. Posted @

[http://www.earthisland.org/eijournal/new\\_articles.cfm?articleID=941&journalID=82](http://www.earthisland.org/eijournal/new_articles.cfm?articleID=941&journalID=82)

Dudley, N. (1990). **Nitrates: The Threat to Food & Water**. Green Print.

Glasser, G (2002). 'Death in the Air: Air Pollution from Phosphate Fertiliser Production'. *Synthesis*, Fall, 29. Posted @ <http://www.greens.org/s-r/29/29-18.html>

Harris, T. (1991). **Death in the Marsh**. Island Pr. Selenium poisoning of marshes & ranchlands in USA, partly due to livestock industry.

Karliner, J., et al. (1997). 'The Barons of Bromide: The Corporate Forces Behind Toxic Poisoning and Ozone Depletion'. *Ecologist*, 27(3): 90--98.

Smith, G, et al (1998). 'Fluorides and the Environment: Special Report'. *Earth Island*, 13(3) insert supplement.

### **Pesticide Pollution**

Dudley, N. (1987). **This Poisoned Earth: The Truth about Pesticides**. Piatkus.

Gardner, G. (1996). 'Integrated Pest Management and the War on Pests'. *Worldwatch*, 9(2): 20-27. Apart from a discussion of the future of IPM, Gardner documents the failure of conventional chemical warfare.

Gupta, Y.P. (1986). 'Pesticide Misuse in India'. *Ecologist*, 16(1): 36-39.

Murray, D. (1994). **Cultivating Crisis: The Human Cost of Pesticides in Latin America**. Univ. Texas Pr.

Pimentel, D. & H. Lehman (1992). **The Pesticide Question**. Chapman & Hall.

Simonian, L. (1988). 'Pesticide Use in Mexico: Decades of Abuse'. *Ecologist*, 18(2): 82-87.

Van Den Bosch, R. (1980). **The Pesticide Conspiracy**. Prism. A classic study.

See also:  
[www.pan-uk.org](http://www.pan-uk.org) (Pesticide Action Network)

### **Pollution and Disruption of Hormonal Balances**

Cadbury, D. (1998). **The Feminisation of Nature: Our Future at Risk**. Penguin

Colborn, T., et al. (1996). **Our Stolen Future**. Penguin (USA). More case studies about the poisoning of the world, with focus on 'hormone impostors'.

Dibb, S. (1995). 'Swimming in a Sea of Oestrogens: Chemical Hormone Disrupters'. *Ecologist*, 25(1): 27-31.

### **Radioactive Pollution**

Bertell, R. (1985). **No Immediate Danger**. Women's Press.

Caufield, C.(1989). **Multiple Exposures: Chronicles of the Radiation Age**. Secker & Warburg.

Deere-Jones, T. (1991). 'Back to the Land: The Sea-to-Land Transfer of Radioactive Pollution'. *Ecologist*, 21(1), 1991: 18-23. Radioactive contamination of Irish Sea with specific reference to nuclear industry but with wider significance in terms of the mobility and magnification of pollutants in ecological systems.

Gofman, J. (1981). **Radiation and Human Health**. Sierra.

Gould, J. & B. Goldman (1990). **Deadly Deceit: Low-Level Radiation, High-Level Cover-Up**. Four Walls Eight Windows Pr. The authors, one a former member of American EPA Science Advisory Board, allege large number of illnesses and premature deaths in the USA due to radiation from nuclear industry.

Wasserman, H. & N. Solomon (1982). **Killing Our Own: The Disaster of America's Experience with Atomic Radiation**. Dell.

### **Electro-magnetic Pollution & The 'E-bomb'**

Becker, R. (1990). **Cross Current**. Tarcher.

Brodeur, P. (1977). **The Zapping of America: Microwaves, Their Deadly Risk and the Cover-Up**. Norton. Pioneering critique of the electronic 'smog' with which we are increasingly surrounded. Fears about the danger might be speculative than with more obvious toxic risks but certainly complacency about the issue would be foolish.

Firstenberg, A. (1987). 'Microwaving Our Planet'. *Earth Island*, Summer: 32-33. Focus on cellular phones and other such paraphernalia of the telecommunications revolution

Smith, C. & S. Best. (1989). **Electromagnetic Man: Health & Hazard in the Electrical Environment**. Dent. Controversial & provocative argument that there is a very real timebomb ticking away, not least in our homes & offices, as well as above our heads in the form of electricity pylon lines.

Smith, G. (1998). 'Zapped From Space'. *Earth Island*, 13(3): 29. Impacts of microwave satellite systems.

**On mobile phones and masts in particular, see:**

Scott, S. (1999). 'High anxiety'. *Guardian*, 20/Oct./99. Posted @ <http://www.guardian.co.uk/society/1999/oct/20/mobilephones.guardiansociety.supplement>

Vidal, J. (2000). 'The new forest'. *Guardian*, 30/March/00. The new forests of mobile phone masts. Posted @ <http://www.guardian.co.uk/g2/story/0,,178331,00.html>

### **Pollution: Noise**

Krause, B. (2002). 'The Loss of Natural Soundscapes'. *Earth Island Jnl.*, Spring, 2002, 17(1). Posted @ [http://www.earthisland.org/eijournal/new\\_articles.cfm?articleID=449&journalID=63](http://www.earthisland.org/eijournal/new_articles.cfm?articleID=449&journalID=63)

Kryter, R., ed. (1985). **The Effects of Noise**. Academic Pr. From discos to the drone of overhead aeroplanes, noise is endemic in modern society. It may not be wrecking ecosystems but it is making the lives of millions miserable, damaging physical and mental health. It also has severe impacts on wildlife, with, for example, harmful effects on breeding patterns.

Mahler, R. (2000). "How We Lost Silence". *New Dream Newsletter*, Spring: 8-9.

Martin, A. (2007). 'Quiet Please'. *Guardian*, Jan. 31, 2007. Car horns, sirens, tyre screeching, in-car hi-fi, mobile phones, piped music, pneumatic drills, overhead aeroplanes, Posted @ <http://www.guardian.co.uk/g2/story/0,,2002419,00.html>

Sim, S. (2007). **A Manifesto for Silence**. Edinburgh. In part a survey of the comprehensive and all-pervading assault on peace and quiet.

Smith, J. (1998). 'Silence and Quiet Use'. *Wild Earth*, Spring: 58-59. Even remote areas are under aural assault.

Muzak, 'elevator music', piped music in shops and restaurants and so forth are all part of the assault on peace and tranquillity. For alternatives, see:

<http://www.noisefree.org/index.html> (for a 'noise-free America')

<http://www.nonoise.org/> (noise pollution clearinghouse, American)

<http://www.pipedown.info/>

<http://www.quiet.org/index.htm> ('right to a quiet society', Canadian)

<http://www.superscript.co.uk/tnn/index.html> (website of the Noise network, UK)

### **Pollution: Specific Pollution Disasters**

(also see *Oil Spills*)

Bryan, L. (2003). **Love Canal**. World Almanac Library.

Gibbs, L. (1998). **Love Canal: The Story Continues**. New Society Publishers.

Lapierre, D. & J. Moro (2003). **Five Past Midnight in Bhopal**. Scribner.

## **Light Pollution**

Brown P. and I. Sample (2003). 'The sky you won't see at night'. *Guardian*, 07/10/03. Posted @

<http://education.guardian.co.uk/higher/research/story/0,,1057662,00.html>

Evans, P. (1999). 'Blinded by the light'. *Guardian*, 10/Feb./99. Posted @ <http://www.guardian.co.uk/science/1999/feb/10/spaceexploration.society>

Jha, A. (2007). 'Streetlamps outshine the Milky Way'. *Guardian*. Posted @ <http://www.guardian.co.uk/science/2007/mar/12/spaceexploration.pollution>

Meek, J. (2001). 'Blinding light that hides the cosmos'. *Guardian*, 02/01/01. Posted @

<http://www.guardian.co.uk/science/2001/jan/02/spaceexploration.uknews>

Schwarz, H. (2003). **Light Pollution: The Global View**. Kluwer.

See also:

<http://www.darksky.org/>

<http://members.aol.com/ctstarwchr/>

<http://members.aol.com/copernicanview/>

[http://www.aas.org/~light/pollution\\_bibliography.html](http://www.aas.org/~light/pollution_bibliography.html)

## **'Biodevastation': General Losses of Biodiversity**

There are many reasons to rue the loss of the once rich tapestry of flora and fauna. In some cases it means the loss of specific resources. At other times it simplifies and thereby makes more vulnerable ecosystems as a whole. Yet the deepest reason is that it is a crime against Nature to wipe out our fellow 'passengers' on planet Earth. Even if a plant or animal has no utilitarian value for the human economy, it remain a part of creation and ought to be valued as such. Yet humankind is eliminating other species at a rate that now parallels the destruction wrought by geological events such as ice ages.

The word 'biodiversity' is often used in discussion of this issue. We would prefer 'ecocomplexity' since it carries connotations of structure, not just mere numbers and random interactions. After all, for centuries humans have been adding new species to foreign ecosystems, sometimes with disastrous results for indigenous communities. We also dislike the phrase 'natural world', preferring instead 'the rest of nature', since the former suggests something from which humans themselves are somehow alien. Much as the following literature inevitably draws attention to specific species, it should never be forgotten that the real issue is habitat, the diversity, richness and complexity of ecosystems all of which are being eroded by human activity. In this light it can be seen that farming, forestry have much greater impact on non-human life than, say, manufacturing. That said, Home Rapiens is nothing if not creative in its assault on other creatures, from the trade in animal body parts to the perverse human pleasures (the last flock world's once most numerous species, the passenger pigeon, was destroyed for sport, leading to its extinction a few years later).

As a result, flora and fauna are disappearing at something like 100 to 1,000 times the "background levels" seen in the fossil record. To put in another way, species and populations of microorganisms, plants, and animals are being exterminated at a rate unprecedented in the past 65 million years, some

10,000 times faster than they can be replaced by the evolution of new ones. The 'Living Planet Index, which records abundance of for more than 1,400 species of fish, amphibians, reptiles, birds and mammals, fell by around 30% between 1970 & 2003 alone. A third of all amphibians, a fifth of mammals and an eighth of all birds are now threatened with extinction. A plant or animal species becomes extinct roughly every 20 minutes (see <http://www.conservation.org/English/Pages/Default.aspx?KNC-adwords&gclid=CNqIw96ek48CFQVEMAAodwUhdVw&nointro=true> ). It is largely due to habitat destruction but with pressures like overfishing and poaching a factor too in some cases (estimates are very crude because of human ignorance of the rest of nature)

*"The last word in ignorance is the person who says of an animal or plant: 'what good is it?'...If the land mechanism as a whole is good, then every part of it is good, whether we understand it or not... Harmony with land is like harmony with a friend: you cannot cherish his right hand & chop off his left."*  
(Aldo Leopold)

Brautigam, A. & M. Jenkins (2001). **The Red Book: The Extinction Crisis Face to Face**. IUCN

Browswimmer, F. (2002). **Ecocide: A Short History of the Mass Extinction of Species**. Pluto Pr.

Cracraft, Joel & F. T. Grifo, eds. (1999). **The Living Planet in Crisis**. Columbia UP.

Eldredge, N. (1991). **The Miner's Canary: Unravelling the Mysteries of Extinction**. Prentice Hall Pr.

Eldredge, N. (1998). **Life in the Balance: Humanity & the Biodiversity Crisis**. Princeton University Pr.

Fichter, G. (1995). **Endangered Animals: A Golden Guide**. St. Martin's Pr.

Flannery T. (2001). **Discovering the World's Extinct Animals**. Atlantic Monthly Pr.

Grumbine, E. (1993). **Ghost Bears: Exploring the Biodiversity Crisis**. Earthscan.

Leakey, R. & R. Lewin (1996). **The Sixth Extinction: Biodiversity & Its Survival**. Weidenfeld

Macphee, R., ed. (1999). **Extinctions In Near Time: Causes, Contexts & Consequences**. Kluwer Academic/Plenum Publishers,

Mittermeier, R. et al (2002). **Wilderness: Earth's Last Wild Places**. Cemex.

Mittermeier, R. et al (2004). **Hotspots Revisited: Earth's Biologically Richest & Most Endangered Terrestrial Ecoregions**. Cemex.

Nabhan, G. (1995). 'Do We Care only about Endangered Species, or Are We Ready to Pledge Allegiance to all Levels of Biodiversity.' **Arid Lands Newsletter** 37(Spring/Summer). Posted @ <http://ag.arizona.edu/OALS/ALN/aln37/nabhan.html>

Novacek, M. ed. (2001). **The Biodiversity Crisis: Losing What Counts**. The New Press

Pimm, S. (2001). **The World According To Pimm: A Scientist Audits the Earth**. McGraw-Hill

Reading, R. & B. Miller, eds. (2000). **Endangered Animals: A Reference Guide to Conflicting Issues**. Greenwood Pr.

Reaka-Kudla, M. et al, eds. (1999). **Biodiversity II: Understanding & Protecting Our Biological Resources**. Joseph Henry Pr.

Rothenberg, D. & M. Ulvaeus, eds. (2001). **The World and the Wild**. Arizona UP

Terborgh, J. (2004). **Requiem For Nature**. Shearwater Books.

Woodruff, D.S. (2001). 'Declines of Biomes & Biotas & the Future of Evolution.' **Proceedings of the National Academy of Sciences** 98(10):5471-5476.

See also:

Jowitt, J. (2007). 'One in Four Mammals Under Threat'. **Observer**, Sept. 9<sup>th</sup>, 2007. Summary of 2007 IUCN 'Red List'. Posted @ <http://www.guardian.co.uk/environment/2007/sep/09/conservation>

Radford, T. (2004). 'The Decline of Species'. **Guardian**, 19/03/04: 1. Lead story of impending mass extinction but typical of media coverage in that no link is made to news reported elsewhere in the same newspaper e.g. predictions of huge increase in USA population or of need for a 100,000 new houses to be build each year in the UK (sic) or of the recent UK Budget and its boast of increased economic output, all of which are directly linked to the squeezing out of other forms of life on a finite planet. Of course, alongside such stories are the adverts extolling readers to consume more and more. Posted @ <http://www.guardian.co.uk/science/2004/mar/19/taxonomy.science>

See also:

<http://www.wwf-uk.org/core/wildlife/endangeredspecies.asp>

### 'Biodevastation': General Causes

Ehrlich, P. (1988). 'The loss of diversity: Causes & Consequences'. In Wilson, E, ed. **Biodiversity**, Nat. Academic Pr.

Foreman, D. (2002). 'Causes & Processes of Extinction'. **Wild Earth**, Spring: 2-4.

Woodwell, G., ed. (1990). **The Earth in Transition: Patterns and Processes of Biotic Impoverishment**. CUP, 1990.

### 'Biodevastation': Specific Causes

The human assault on the diversity of other species is nothing if not varied. Here are some of the forms this onslaught is taking.

Ellis, R. (2005). **Tiger Bone and Rhino Horn: The Destruction of Wildlife for Traditional Chinese Medicine**. Island Pr.

Fuller, E. (2002). **Dodo: A Brief History**. Universe.

Huck, P. (2007). 'Don't fence Me In.' **Guardian**, Nov. 21, 2007. How security walls and fences, in this the Arizona-Mexico, devastate local biodiversity through the disruption of wildlife movement patterns. Posted @ <http://www.guardian.co.uk/environment/2007/nov/21/guardiansocietysupplement.conservaion>

Jha, A. (2007). 'Warming could wipe out half of all species'. **Guardian**, Oct. 24, 2007. Posted @ <http://www.guardian.co.uk/environment/2007/oct/24/climatechange.scienceofclimatechange>

Lovegrove, R. (2007). **Silent Fields: The Long Decline of a Nation's Wildlife**. OUP. Part of this chronicle of the long-term destruction of British biodiversity is the story of the Preservation of Grain Act of Henry V111 which incited a veritable holocaust of birds and animals in 16<sup>th</sup> century England and Wales.

Malcolm, J. R., et al. (2006). 'Global Warming & Extinctions of Endemic Species from Biodiversity Hotspots.' **Conservation Biology** 20(2): 538–548. Summary posted @ <http://ec.europa.eu/environment/integration/research/newsalert/pdf/21na1.pdf>

Townsend, M. (2004). 'Sex antics of UK tourists scare turtles to death'. **Observer**, 01/08/04. Drunken British tourists are invading last havens of loggerhead turtles. Posted @ <http://www.guardian.co.uk/environment/2004/aug/01/travelnews.conservation.andendangeredspecies>

Townsend, M. (2004). 'Boys will be girls -eventually'. **Observer**, 18/07/04. 'Gender-bender' chemicals are causing a whole series of mutations, birth defects, hormone imbalances & lowered sex drive amongst non-human forms of life ...and it must be assumed that it is not doing humankind much good either. Posted @ <http://www.guardian.co.uk/environment/2004/jul/18/food.wildlife>

The following focus on wildlife in North America, the world's richest region in conventional economic terms. Their evidence exposes the great lie that we need more economic growth to create more monetary wealth to fund conservation. The opposite is true: the greater the human consumption of land, energy & other resources, the less there is for other species. Only the contraction of the total human economy can 'pay for' the richness & diversity of non-human nature.

Flannery T. (2001). **The Eternal Frontier: An Ecological History of North America & Its Peoples**. Atlantic Monthly Pr.

Matthiessen, P. (1987). **Wildlife In America**. Viking.

Wilcove, D.S. (1999). **The Condor's Shadow: the Loss & Recovery of Wildlife In America**. Freeman.

Mowat, F. (1989). **Sea of Slaughter**. McClelland-Bantam.

Another great myth is that it is the current economic system, capitalism, that is the root cause of wildlife destruction. Certainly, capitalists can live with the overhunting of one species since they can move their capital into the exploitation of other wildlife resources. The system provides inadequate checks on such overexploitation. Yet anthropogenic extermination of the world's flora & fauna predates capitalism & indeed the rise of class societies after the dawn of agriculture. Indeed, at times, there is evidence of a 'biophobia' with quite mindless levels of destruction that defy even capitalist rationality. This history must be addressed if we are to find some sustainable modus vivendi with other species.

Lovegrove, R. (2007). **Silent Fields: The Long Decline of a Nation's Wildlife**. OUP. A chronicle of the long-term destruction of British biodiversity much of which predates modern times.

Martin, P. & R. Klein, ed. (1984). **Quaternary Extinctions: A Prehistoric Revolution**. University of Arizona Pr.

Ward, P. (1997). **The Call of Distant Mammoths: Why The Ice Age Mammals Disappeared**. Copernicus.

One other myth is that conservation and (reformed) economic development can be combined. See:

Oates, J. (1999). **Myth & Reality In The Rain Forest: How Conservation Strategies Are Failing In West Africa**. University of California Pr. A regional study that explodes the myth that 'sustainable development' (or 'greened growth') can be made to march hand in hand with serious wildlife conservation.

### **'Biodevastation': Scale**

Crist, E. (2002). 'Quantifying the Biodiversity Crisis'. *Wild Earth*, Spring: 16-19.

Sample, I. (2008). 'Wildlife extinction rates 'seriously underestimated'.

*Guardian*, July 3<sup>rd</sup>, 2008. Posted @

<http://www.guardian.co.uk/environment/2008/jul/02/climatechange.endangere dspecies>

### **'Biodevastation' & Agriculture**

Badgley, C. (1998). 'Can Agriculture & Biodiversity Coexist?' *Wild Earth*, Fall: 39-47.

### **'Biodevastation' & Domestication**

Coppinger, R. P. & E. K. Smith (1983). 'The Domestication of Evolution'. *Environmental Conservation*, 18: 283-291. How a few domesticated species of plants and animals are fast replacing wild diversity.

### **'Biodevastation' & Alien Species**

Baskin, Y. (2000). **A Plague of Rats & Rubbervines: the Growing Threat of Species Invasions**. Island Pr.

Bright, C. (1999). **Life Out of Bounds: Bio-invasions in a Borderless World**. Earthscan

Campbell, F. & S. Schlarbaum. **Fading Forests: North American Trees & the Threat of Exotic Pests**. Nat. Resources Defence Council, 1994.

Drake, J., et al (1989). **Biological Invasions: A Global Perspective**. Wiley, 1989. A more academic study of the introduction of exotic species and its effects on indigenous ecological communities

Mooney, H. & R. Hobbs (2000). **Invasive Species in a Changing World**. Island Pr.

Pimentel, D., ed. (2002). **Biological Invasions: Economic & Environmental Costs of Alien Plant, Animal, & Microbe Species**. CRC Pr.

Ruesink, J. et al (1995). 'Reducing the Risks of Non-indigenous Species Introductions: Guilty until Proven Innocent.' *BioScience* 45 (7): 465-477.

Soulé, M. (1990). 'The Onslaught of Alien Species & Other Challenges in the Coming Decades'. *Conservation Biology*, 4(3): 233-239.

Terrill, C. (2007). **Unnatural Landscapes: Tracking Invasive Species**. Arizona UP.

See also:

Ericson, J. A. (2005) 'The economic roots of aquatic species invasions.' *Fisheries* 30(5): 30-33. Posted @ [http://www.steadystate.org/Ericson\\_on\\_Invasive\\_Species.pdf](http://www.steadystate.org/Ericson_on_Invasive_Species.pdf)

Jenkins, P. T. (1996). 'Free trade & exotic species introductions'. *Conservation Biology* 10(1):3 00-302.

### **'Biodevastation' of Plant Life**

Cherfas, J. (1991). 'Disappearing Mushrooms: Another Mass Extinction'. *Science*, 1991: 1458.

Huxley, J. (1991). **Green Inheritance**. Gaia Books

Koopowitz, H. & H. Kaye (1983). **Plant Extinctions: A Global Crisis**. Stone Wall Pr.

### **'Biodevastation': Sea Life in general**

Allsopp, M. et (2007). **Oceans in Peril: Protecting Marine Biodiversity**. Worldwatch Report.

Mowat, F. (1989). **Sea of Slaughter**. McClelland-Bantam. Destruction of marine life along seaboard of eastern North America.

Moyle, P. & R. Leidy. 'Loss of Biodiversity in Aquatic Ecosystems'. In Fielder, P. & S. Jain, eds. *Conservation Biology*. Chapman & Hall, 1992.

Norse, E. A., ed. (1993). **Global Marine Biological Diversity**. Island Pr.

T Steiner, T. (2005). 'Industrial Longline Fishing: A War on Fish. *Synthesis*, 36, Winter. Posted @ <http://www.greens.org/s-r/36/36-01.html>

Horne-Miller, B. & J. Catena (1990). **The Living Ocean: Understanding & Protecting Marine Biodiversity**. Island Pr.

UNEP (2004). **Global Environment Year Book 2003**. United Nations Publications. Feature on the increasing number and size of 'dead zones' in the world's seas, not least due to fertiliser run-off and sewage dumping.

Radford, T. (2005). 'Vital marine species under threat'. *Guardian*. Tuna, marlin, swordfish ... Posted @

<http://www.guardian.co.uk/science/2005/jul/29/biodiversity.fishing>

Wilcove, D. & M. Bean, eds. (1994). **The Big Kill: Declining Biodiversity in America's Lakes & Rivers**. Environmental Defence Fund (Washington).

See also:

[www.panda.org/ endangeredseas/](http://www.panda.org/ endangeredseas/)

### **'Biodevastation': Sea Life, Diseases & Infestations**

Connor, S. (1999). "Marine life being massacred as the world's oceans turn toxic". *Independent on Sunday*, 03/Sept./99.

### **'Biodevastation': Whales**

Day, D. (1987). **Whale Wars**. RKP

Leatherwood, S. & R. Reeves (1983). **The Sierra Club Handbook of Whales & Dolphins**. Sierra Books

William, H. (1988). **Whale Nation**. Jonathon Cape. Part poem plus excellent pictures with many press cuttings and extracts from books, all of which celebrate whales and denounce humanity's abuse of this amazing species.

Stevenson, R. (1997). 'Humans Threaten extinction of Northern Right Whale'. *Wild Earth*, Fall: 28-33.

### **'Biodevastation': Sharks**

Jha, A, (2008). 'Shark species face extinction amid overfishing and appetite for fins. *Guardian*. Feb. 18, 2008. Posted @

<http://www.guardian.co.uk/environment/2008/feb/18/conservation.aas>

Sample, I (2007). 'Death of a predator: big sharks are disappearing - and world's fisheries are suffering as a result'. *Guardian*. Posted @

<http://www.guardian.co.uk/science/2007/mar/30/biodiversity.fishing>

Sample, I (2008). 'Shark numbers crash'. *Guardian*. Posted @

<http://www.guardian.co.uk/environment/2008/jun/12/wildlife.endangeredspecies>

### **'Biodevastation': Dolphins**

Donoghue, M. & A. Wheeler (1994). **Dolphins: Their Life & Survival**.

Blandford. Passionate but erudite portrayal of the on-going destruction of the dolphin family, with many startling pictures

Leatherwood, S. & R. Reeves (1983). **The Sierra Club Handbook of Whales and Dolphins**. Sierra William, H. (1990. **Falling for a Dolphin**. Jonathon

Cape Books.

Morris, S, (2008). 'Trawler fishing blamed for dolphin deaths. *Guardian*, July 7, 2008. Posted @

<http://www.guardian.co.uk/environment/2008/jul/07/endangeredspecies.wildlife>

### **'Biodevastation': Seals**

Busch, B. C. (1985). **The War Against the Seals: A History of the North American Seal Fishery**. McGill's-Queen's UP.

### **'Biodevastation': Turtles**

Chambers, P. (2004). **A Sheltered Life: The Unexpected History of the Giant Tortoise**. John Murray. This gentle giant, the longest living vertebrate, faces demise at the hands of ungentle humankind.

National Research Council (1990). **Decline of the Sea Turtles: Causes & Prevention**. Nat. Academy Pr.

### **'Biodevastation': Sea Life & Fishing Technologies**

90% of the large predatory fish in the oceans have gone since the beginning of industrial trawling.

Berrill, M. (1998). **The Plundered Seas: Can the World's Fish Be Saved?** Sierra Books

Fugazzotto, P. (1997). 'Texas Shrimp Net Massacre'. *Earth Island*, Summer, 1997: 9. Tuna nets are not the only menace in the sea.

Holy, N. (2004). 'Tangled in the Food Web'. *Earth Island*, Spring: 25-30. Impacts on sea birds of modern fishing technologies.

Ovetz, R. (2004). '100,000,000 years old, 10 years left to live'. *Ecologist*, March,; 48-51. Trawling 'longlines' & their destructive impact on leatherback turtles.

Windsor, D. (1997). 'From Pearls to Perils: The Imperilled Freshwater Clams'. *Wild Earth*, Spring, 1997: 31-35.

## **Overfishing**

Berrill, M. (1998). **The Plundered Seas: Can the World's Fish Be Saved?** Sierra Books

Brown, P. & J. Meikie (2000). 'A fisherman's tale of greed and folly'.

*Guardian*, 14/08/2000: 3. Part of a three day series. Posted @ <http://www.guardian.co.uk/environment/2000/aug/14/fish.food>

Grescoe, T. (2008) **Bottomfeeder: How the Fish on our Plates Is Killing the Planet.** Macmillan

Kurlansky M. (2008). **The Last Fish Tale: The Fate of the Atlantic and Our Disappearing Fisheries.** Jonathan Cape

McCully, P. (1991). 'FAO & Fisheries Development'. *Ecologist*, 21(2), 1991: 77-80. Critique of conventional 'development' strategies.

Madeley, J. (1995). **Fish: A Net Loss for the Poor.** Panos.

Various (1995). **Overfishing: Causes and Consequences.** Special double issue of *Ecologist*, 25: 2/3.

Weber, P. (1994). **Net Loss: Fish, Jobs and the Marine Environment.** Worldwatch Institute.

See also:

[www.guardianunlimited.co.uk/fish](http://www.guardianunlimited.co.uk/fish)

[www.msc.org](http://www.msc.org) The Marine Stewardship Council advises on the "best environmental choice".

[www.mbayaq.org/cr/seafoodwatch.asp](http://www.mbayaq.org/cr/seafoodwatch.asp) (run by Monterey Bay Aquarium)

## **'Biodevastation': Wild Salmon**

Kichatowich, J. (1990). **Salmon Without Rivers: a History of the Pacific Salmon Crisis.** Island Pr.

Taylor, J. (1999). **Making Salmon: An Environmental History of the Northwest Fisheries Crisis.** Univ. Washington Pr.

Millar, S (2001). 'How the King of Fish is being farmed to death'. *Observer*, 07/01/2001: 16-17. Posted @

<http://www.guardian.co.uk/environment/2001/jan/07/fishing.food>

## **'Biodevastation': Freshwater life (general)**

Wilcove, D. & M. Bean, eds. (1994). **The Big Kill: Declining Biodiversity in America's Lakes & Rivers.** Environmental Defence Fund (Washington).

## **'Biodevastation': Amphibian species**

There is a catastrophic decline in amphibians of all types with nearly 33% threatened with extinction and up to 165 species already gone.

Jha, A. (2004). 'Farewell to the frog?' *Guardian*, 15/Oct/04. Report on 2004 Global Amphibian Assessment. Posted @

<http://www.guardian.co.uk/uk/2004/oct/15/science.environment>

Phillips., K. **Tracking the Vanishing Frog.** St Martin's Pr., 1994. One more sign of the great biological meltdown now underway.

### **'Biodevastation': Bird life**

About one-quarter of the bird species on Earth have been driven to extinction.

Diamond, A. et al (1987). **Save the Birds**. CUP. Encyclopaedic study, with wealth of information plus a strong commitment to bird conservation.

Ehrlich, P. et al (1992). **Birds in Jeopardy: The Imperilled & Extinct Birds of the United States & Canada**. Stanford UP.

Grady, W. **Vulture: Nature's Ghastly Gourmet**. Sierra Books, 1998. How to appreciate a much unloved creature.

Radford, t. (2004). 'Almost half of all Europe's bird species at risk' *Guardian*, 08/Nov./04. Report on studies by RSPB and Birdlife International. Posted @ <http://www.guardian.co.uk/science/2004/nov/08/environment.environment>

Randall, D. (2007). 'World's birds on death row'. *Independent on Sunday*, Aug. 12<sup>th</sup>, 2007. Posted

[http://earthhopenetwork.net/worlds\\_birds\\_on\\_death\\_row.htm](http://earthhopenetwork.net/worlds_birds_on_death_row.htm) . Terborgh, J. (1989). **Where Have All The Birds Gone?** Princeton UP.

Youth, H. (2003). **Winger Messengers: The Decline of Birds**. Worldwatch Report

### **'Biodevastation': Particular Bird Species**

Beans, B. (1997). **Eagle's Plume: The Struggle to preserve the Life & Haunts of America's Bald Eagle**. Univ. Nebraska Pr.

Beissinger, S. & N. Snyder, eds. (1991). **New World Parrots In Crisis: Solutions From Conservation Biology**. Smithsonian Institution Pr.

Eaton, J. (2004). 'Silent Towers, Empty Skies'. *Earth Island Jnl.*, Winter, 2004, 18(4). Destruction of India's vulture populations. Posted @ [http://www.earthisland.org/eijournal/new\\_articles.cfm?articleID=810&journalID=73](http://www.earthisland.org/eijournal/new_articles.cfm?articleID=810&journalID=73)

Evans, P. (2004). 'On a wing and a prayer'. *Guardian*, Society supplement, 14/04/2004: 13. Destruction of India's vulture population. Posted @ <http://www.guardian.co.uk/society/2004/apr/14/environment.environment1>

Vasagar, J. (2004). 'Dying lake threatens flamingos'. *Guardian*, 05/Nov/04. Famous flamingo habitat disappearing due to nearby farming. Posted @ <http://www.guardian.co.uk/world/2004/nov/05/kenya.science>

### **'Biodevastation': Reptiles & Insect life**

Benjamin, A. & B. McCallum (2008). **World Without Bees**. Guardian Books. Given the role of bees in pollination, the decline of honeybee populations a critical development.

Flowers, R.W. (1993/4). 'Endangered Invertebrates & How to Worry about Them'. *Wild Earth*, Winter: 25-31.

McKie, R. (2006). 'Honey, Our Bees are vanishing'. *Guardian*. Posted @ <http://environment.guardian.co.uk/conservation/story/0,,1847288,00.html>

Youth, H. (1997). 'Neglected Elders'. *Worldwatch*, 10(5): 22-29. Reptiles are not very glamorous but are entitled to their share of planet Earth as much as cuddly creatures. But they too are in decline.

See also:

<http://www.pbs.org/wnet/nature/bees/> Film *Silence of the Bees*

### **'Biodevastation': Various land species**

Hummel M & S. Pettigrew (1992). **Wild Hunters: Predators In Peril**. Roberts Rinehart.

Miller, B. et al (1996). **Prairie Night Black-Footed Ferrets & The Recovery of Endangered Species**. Smithsonian

Petersen, D. (1991). **Racks: The Natural History of Antlers & The Animals That Wear Them**. Capra Pr.

Ray, J. et al, eds. (2005). **Large Carnivores & The Conservation of Biodiversity**. Island Pr.

Spragg, M., ed. (1998). **Thunder of the Mustangs: Legend and Lore of the Wild Horses**. Sierra Books

Wuerthner, G. (1995). 'Last Chance for the Prairie Dog'. **Wild Earth**, Spring: 21-25.

### **'Biodevastation': Mammals**

Ehrlich P. & G. Ceballos (2002). 'Mammal population losses and the extinction crisis'. **Science**, 296 (5569); 904-907.

### **'Biodevastation': Bears**

Aldred, J. (2007). 'More bear species threatened with extinction'. **Guardian**, Nov. 12, 2007. Posted @

<http://www.guardian.co.uk/environment/2007/nov/12/conservation.wildlife>

Brown, D. (1985). **The Grizzly In The Southwest: Documentary of An Extinction**. University of Oklahoma Pr.

Chadwick, D. (2003) **True Griz**. Sierra Club Books.

Hooper, J. (2004). 'Italy battles to save last of its wild bears'. **Guardian**, 21/Aug./04. Posted @

<http://www.guardian.co.uk/society/2004/aug/21/environment.italy>

Peacock, D (1990). **Grizzly Years: In Search of The American Wilderness**. Henry Holt.

Wilcox, L. (1998/9). 'Bear necessities: Grizzlies, Wilderness & the Science of Extinction'. **Wild Earth**, Winter: 14-18.

Harding, L. (2007). 'The end of the wilderness: bears starve as poachers pillage Russia's wealth of salmon'. **The Guardian**, 21/Aug./04. Posted @

<http://environment.guardian.co.uk/conservation/story/0,,2108851,00.html>

See also:

<http://www.sierraclub.org/grizzly/>

<http://www.bear.org/>

### **'Biodevastation': Foxes & wolves**

Adam, D. (2008). 'Global warning: Melting ice threatens Arctic foxes'.

**Guardian**, July 15, 2008. Posted @

<http://www.guardian.co.uk/environment/2008/jul/15/climatechange.wildlife>

Brandenburg, J. (1993). **Brother Wolf: A Forgotten Promise**. Northword Pr.

Brown, D. ed. (1983). **The Wolf In The Southwest: The Making of An Endangered Species**. University of Arizona Pr.

Busch, R. (1995). **The Wolf Almanac**. Lyons & Burford.

Elder, J., ed. (2000). **The Return of The Wolf: Reflections On The Future of Wolves In The Northeast**. Middlebury College Pr.

Grambo, R. (1998). **The World of the Fox**. Sierra Books.

Lopez, B. (1978). **Of Wolves & Men**. Charles Scribner.

Mech, D. (1981). **The Wolf: Ecology & Behaviour of an Endangered Species**. Univ. Minnesota Pr.

Phillips, M. & D. Smith (1996). **The Wolves of Yellowstone: The Inside Story**. Voyageur Pr.

Robinson, M. (2005). **Predatory Bureaucracy: The Extermination of Wolves & The Transformation of The West**. University Pr. of Colorado.

Wicker, G. et al, eds. (2005). **Comeback Wolves: Western Writers Welcome The Wolf Home**. Johnson Books.

### **'Biodevastation': 'Bigger cats'**

Bolgiano, C. (1995). **Mountain Lion An Unnatural History of Pumas & People**. Stackpole Books.

Brown, D & C. Gonzalez (2001). **Borderland Jaguars: Tigres De La Frontera**. University of Utah Pr.

Dinerstein, E. (2005). **Tigerland & Other Unintended Destinations**. Island Pr.

Hansen, K. (1992). **Cougar: The American Lion**. Northland Publishing.

Hornocker, M., ed. (1998). **Track of the Tiger: Legend and Lore of the Great Cat**. Sierra Books.

Logan, K. & L. Sweanor (2001). **Desert Puma Evolutionary Ecology & Conservation of An Enduring Carnivore**. Island Pr.

Maehr, D. (1997). **The Florida Panther Life & Death of A Vanishing Carnivore**. Island Pr.

Matthiessen, P. (1978). **The Snow Leopard**. Penguin.

Padel, R. (2006). **Tigers in Red Weather**. Abacus.

Rabinowitz, A. (1991). **Chasing the Dragon's Tail: The Struggle to Save Thailand's Wildlife**. Doubleday. Personal account of conservationist battling against wildlife trade and other threats, with particular reference to the cat family. Tigers are being wiped out in Thailand simply to make Tiger Penis soup.

Seidensticker, J. et al, eds. (1999). **Riding the Tiger: Tiger Conservation in Human-Dominated Landscapes**. CUP. Focus on the tiger with general relevance for wildlife midst the teeming human populations of Asia.

Sinha, V. (2003). **The Vanishing Tiger**. Salamander.

Sunquist, M. & F. Sunquist (2002). **Wild Cats of The World: The Ultimate Reference to Every Species Worldwide**. University of Chicago Pr.

### **'Biodevastation': Elephants.**

Chadwick, D. (1995). **The Fate of the Elephant**. Penguin.

Gordon, N. (1991). **Ivory Knights**. Chapmans. Elephants and the ivory trade.

Hamilton, I. & O.D. Hamilton (1992). **Battle for the Elephants**. Viking Penguin.

Norton, B. (1991). **The African Elephant: Last Days of Eden**. Swan Hill Pr.

Sugal, C. (1997). 'The Price of Habitat'. *Worldwatch*, 10(3), 1997: 18-27. Elephants in a crowded southern Africa.

Watson, L. (2002). **Elephantoms: Tracking the Elephant**. Norton.

### **'Biodevastation': Pandas.**

Schaller, G. (1993). **The Last Panda**. Univ. Chicago Pr.

### **'Biodevastation': Gorillas and other primates.**

Adam, D. (2007). 'World's great apes face disaster, says Leakey'. *Guardian*, 31-May-2007. Posted @

<http://environment.guardian.co.uk/climatechange/story/0,,2091821,00.html>

Anon (2000). 'Humans are Eating Africa Alive' *Earth Island Jnl.*, Winter, 2000-01, 15(4). Bush-meat trade. Posted @

[http://www.earthisland.org/eijournal/new\\_articles.cfm?articleID=52&journalID=43](http://www.earthisland.org/eijournal/new_articles.cfm?articleID=52&journalID=43)

Fitzgerald, K. (1993). 'Troubles in the Mist: Civil War and Overpopulation Cloud Gorillas' Futures. *Wild Earth*, Fall: 40-43.

Fossey, D. (1983). **Gorillas in the Mist**. Houghton Mifflin. Author was subsequently murdered by gorilla poachers.

Peterson, D. (1991). **The Deluge and the Ark: A Journey into the Primate World**. Univ. Chicago Pr. The threat to the ape family

Randerson, J. (2007). 'The edge of oblivion: conservationists name 25 primates about to disappear'. *Guardian*, Oct. 26, 2007. Posted @

<http://www.guardian.co.uk/environment/2007/oct/26/endangered>

Tuxill, J. (1997). 'Death in the Family Tree'. *Worldwatch*, 10(5): 12-21. The global decline of primates.

### **'Biodevastation': Bison.**

Callenbach, E. (1995). **Bring Back the Buffalo**. Island Pr.

Geist, V. (1996). **Buffalo Nation: History & Legend of the North American Bison**. Voyageur Pr., 1996.

Gruenau, D. (1995). **Bison: Distant thunder**. Takarajima Books.

### **'Biodevastation': Terminated.**

Day, D. (1993). **Vanished Species**. Smithmark.

Fuller, E. (1999). **The Great Auk**. Abrams.

Fuller, E. (2003). **The Dodo: Extinction in Paradise**. Bunker Hill.

McClung, R. (1997). **Last of the Wild: Vanished and Vanishing Giants of the Animal World**. Shoe String Pr.

Morrison, S. (1989). **Passenger Pigeon**. Prentice Hall.

Purcell, R. (2001). **Swift as a Shadow: Extinct and Endangered Animals**. Houghton Mifflin.

### **Direct Abuse of Other Creatures:**

#### **'Factory' farming of animals**

We have enslaved the rest of the animal creation & have treated our distant cousins in fur & feathers so badly that beyond doubt, if they were able to formulate a religion, they would depict the Devil in human form." (William Inge)

Duce, C. (1989). **Chicken & Egg: Who Pays The Price?** Green Print.  
Gold, M. **Assault & Battery**. Pluto, 1983. Critique of factory farming.  
Hall, R. (1984). **Voicless Victims**. Wildwood, 1984.  
Johnson, W. **The Rose-Tinted Menagerie**. Heretic Books, 1990. Lifts the top off circuses, 'sea worlds' and the like.  
Martin, A. (1997). **Food Pets Die For: Shocking Facts About Pet Food**. NewSage Pr. Takes the lid off pet foods.

Cases studies of particular practices and farmed animals

Lawrence, F. (2002). 'Fowl Play'. *The Guardian*, 08/July/2002. Posted @ <http://www.guardian.co.uk/uk/2002/jul/08/bse.foodanddrink>

## **Direct Abuse of Other Creatures:**

### **Vivisection**

Langley, G., ed. (1989). **Animal Experimentation: The Consensus Changes**. MacMillan.  
Ryder, R. (1983). **Victims of Science**. National Anti-Vivisection Society  
Sharpe, R. (1988). **The Cruel Deception**. Thorsons, 1988. Attack on the cruel futility of vivisection.  
Townend, C. **Pulling the Wool**. Hale & Iremonger, 1985. Shears the sheep industry.

## **Direct Abuse of Other Creatures:**

### **Zoos & Circuses**

McKenna, V. et al, eds. (1987). **Beyond Bars: The Zoos Dilemma**. Thorsons.  
Norton, B, et al, eds. (1996) **Ethics on the Ark: Zoos, Animal Welfare, and Wildlife Conservation**. Smithsonian Books.

## **Direct Abuse of Other Creatures:**

### **Culls & 'Slob Hunting'**

"Hunting is not a sport. In a sport, both sides should know they're in the game." (Paul Rodriguez). "Wild animals never kill for sport. Man is the only one to whom the torture & death of his fellow-creatures is amusing in itself." (J. A. Froude)  
Jowit, J. & H. Soldal (2004). 'It's the new sport for tourists: killing baby seal'. *Observer*, 03/Oct.04, p3. £650 four day trips to murder defenceless baby seal for fun in Norway. Posted @ <http://www.guardian.co.uk/world/2004/oct/03/environment.conservaion>  
McNally, R. (1994). 'Genetic Madness: The European Rabies Eradication Programme'. *Ecologist*, 24(6): 207-212.  
Peacock, D. (1997). 'Yellowstone Buffalo Slaughter'. *Wild Earth*, Summer7: 6-11. Attack on the allegedly 'necessary culls'.  
Thomas, R. (1983). **The Politics of Hunting**. Gower

## **Ecological Destruction from 'resource wars'**

Deforestation, pollution and direct killing of wildlife and many more forms of degradation stem from various wars being found, often in Africa and Asia, to

control the supplies of certain resources, often strategic minerals but sometimes something as basic as water and particular waterways. Sometimes, the threat comes from major states and their armed forces but, at other times, it is the irregular guerrilla bands set in motion by such struggles over resources. Usually human rights abuses march hand in hand with environmental despoliation.

Ballentine, K. & J. Sherman, eds.,(2003). **The Political Economy of Armed Conflict: Beyond Greed and Grievance**. Lynne Rienner.

Heinberg, R. (2003). **The Party's Over: Oil, War and the Fate of Industrial Societies**. New Society.

Homer-Dixon, T. (2001). **Environment, Scarcity, and Violence**. Princeton UP.

Kaplan, R. D. (2001). **The Coming Anarchy : Shattering the Dreams of the Post Cold War**. Vintage.

Klare, M. (2002). **Resource Wars: The New Landscape of Global Conflict**. Palgrave.

Ovetz, R. (2005). 'Fishing: The New Resource War. **Synthesis**, 38, Fall, 2005. Posted @ <http://www.greens.org/s-r/38/38-03.html>

Renner, M. (2002). **Anatomy of Resource Wars**. Worldwatch Institute.

Perhaps the best way to find material is to search newspaper and magazine archive sites as well as use Google. Below are some suggested issues, with resources being sought: plus area affected.

\* colton (mineral for mobile phones): Congo/Central Africa.

\* copper: Papua New Guinea

\* diamonds: Angola, Sierra Leone

\* natural gas fields: Aceh (Indonesia)

\* oil: Persian Gulf, Central Asia (former Soviet Union states)

\* rubies & sapphires: Kampuchea

\* water ('blue gold'): there is a serious potential for 'water wars' in many areas e.g. Nile (Egypt & countries upstream) the Jordan (Israel, Jordan and the Palestinian people) and the Tigris/Euphrates (Iraq and Turkey).

\* gold: Congo

\* fish: Italy v. Croatia, India v. Sri Lanka, China v. Taiwan

In many areas, tropical timbers are being slashed by loggers working hand in hand with paramilitary groups (often really just armed criminal gangs) while it is easy to foresee governments coming into conflict over dwindling fisheries (as did Britain and Iceland in the 1960s). Crops like opium poppy are both sources of money for fighting destructive war and a resource over which to fight.

### **Devastation by deluge & drought**

One of most devastating of ecological backlashes is the increasing severe and more frequent number of floods, mudslides and snow avalanches. In some river systems, floods are part of a healthy ecology, not least through the redistribution of fertile silt. Wise people would keep away from flood plains. Attempts to control floods by artificial means such as dams and levees often

stoke up problems, bringing more devastating floods in the longer term. The problem is exacerbated by increasingly severe and numerous downpours due to climate change, nature's 'balancing' of the droughts afflicting other areas, and by deforestation and swamp drainage, with their attendant loss of the free life-support service of rain-absorbing vegetation 'sponge'. Warmer temperatures have also destabilised snowfields.

For examples, see:

Abramovitz, J. (2001). **Unnatural Disasters**. Worldwatch Report.

Baines, C. (2000). 'All in the same boat'. *Guardian*, 15/1/2000 Links the floods that have increasingly plagued lowland Britain with a comprehensive failure of rural and urban land use policy. Posted @ <http://www.guardian.co.uk/society/2000/nov/15/communities.guardiansocietysupplement>

Lean, G. (1998). 'The year of the flood' *Independent on Sunday*, 15/11/1998: 26.

Tudge, C. (2007). 'Reap As You Sow'. *The Guardian*, July 31<sup>st</sup>, 2007. Impact of 2007 floods on British farming Posted @ <http://www.guardian.co.uk/comment/story/0,,2138081,00.html>

Various (2000). 'Weather crisis' *Guardian* 28/04/2000, including 'Hot, Dry Summer Spells Ruin for Midwest Farms by Julian Borger, 'God's Own Country fights off swarms of locusts' by Christopher Zinn, and 'Walk for water takes longer' by Rory McCarthy. Posted @

<http://www.guardian.co.uk/world/2000/apr/28/julianborger> and

<http://www.guardian.co.uk/world/2000/apr/28/4>

<http://www.guardian.co.uk/world/2000/apr/28/rorymccarthy>

Vidal, J. (1997). 'Dune'. *Guardian*, 12/04/1997, The Week supplement: 1-2. Focus on water shortages in east England.

Vidal, J. (1998). 'Floods: can the misery and mayhem suffered by millions be prevented'. *Guardian*, 19/09/1998: 14-15. Report on Bangladesh.

<http://www.guardian.co.uk/world/1998/sep/19/bangladesh>

See also

<http://www.guardian.co.uk/weather>

## Heavy Weather

Part of the human 'experiment' with Planet Earth is the worsening problem of gale force winds, destructively high waves, and hurricanes, coupled to the problems discussed above and below. The impact of naturally occurring phenomena like El Nino is similarly being exacerbated. Climate change is the driving force but overpopulation and unequal land ownership plus poor building location and design intensify the risk while making the consequences much more calamitous. The insurance industry might be an early casualty of the combination of fire, storm and flood. Usually it is the poor, however, the suffer the worst. If all these problems weren't enough, there is the added menace from civil war and state terrorism, all of which have made refugees of many, many millions

Abramovitz, J. & L. Starke (2001). **Unnatural Disasters**. Worldwatch Institute

Anon (1998). **El Nino – the Child of Change**. WWF Update, no. 35. Anon

(2000). **Unnatural Disasters**. Christian Aid. Emphasises that it is the poor that pay the most.

Anon (annual). **World Disaster Report**. International Federation of Red Cross and Red Crescent Societies

Bunyard, P. (2006). **Extreme Weather**. Floris books

Hulme, M. (2000). 'There is no longer such a thing as a purely natural weather event'. **The Guardian**, Society supplement, 15/03/2000.

Vidal, J (2004). 'The planet goes haywire'. **Guardian**, 27/Aug/2004. Overview of weather disorder in 2004, an increasingly unsettled mix of hurricanes, tornados, thunderstorms, hailstorms, floods, droughts, fires, heat waves, sandstorms, and snowstorms, all of unusual severity and/or location and/or frequency and/or timing. Posted @

<http://environment.guardian.co.uk/climatechange/story/0,,1829257,00.html>

Vidal, J (2007). 'Saturation Point'. **Guardian**, 04/July/2007. Environmental boomerangs behind the flooding that struck England in June-July, 2007, the wettest summer period on record. Posted @

<http://environment.guardian.co.uk/water/story/0,,2118086,00.html>

*For historical perspectives see:*

Keys, D. (2000). **Catastrophe: An Investigation into the Origins of the Modern World**. Arrow. Looks at past, present and, if we do not change our ways, likely future weather-related disasters

Steinberg, T. (2000). **Acts of God: The Unnatural History of Natural Disaster in America** OUP;

*Other recent examples:*

1991; Bangladesh cyclone;

1992: Hurricane Andrew (Florida, USA);

1995; Hurricane Opal (Florida, USA);

1998: Hurricane Mitch (Honduras and Nicaragua); Hurricane George (Caribbean);

1999; Hurricane Floyd (North Carolina, USA); Typhoon York (China); French Christmas gales;

2004: Massive mudslides in SE Brazil; Cyclone Gafilo; Haiti floods; Massive mudslides in Alagoas, NE Brazil, worst floods for 15 years in India, Nepal, Pakistan & Bangladesh; severe floods in China; devastating hurricanes and storms in Caribbean (Ivan, Jeanne etc.);

## **Pyromania**

The Earth is in some place literally burning up due to the increased frequency and severity of forest and bush fires. Of course fire is part and parcel of some ecosystems, with flora and fauna being adapted accordingly. Now one species, humankind is torching areas as diverse as Amazonia, Provence in France, the Australian bush and chaparral areas of California. Most often it is done to clear land for cultivation, grazing and building. Regularly the reason is the carelessness of visitors like holiday trippers and backpackers. Sickeningly, it is also done for the sheer hell of it by mindless morons. The problem is exacerbated by increasingly severe and numerous droughts due to climate change.

For examples, see:

Dudley, N. and J-P. Jeanrenaud (1997). **1997: The Year the World Caught Fire**. WWF.

Pyne, S. (2001). **Fire: a Brief History**. Island Pr.

### **Pyromania: Case studies**

Campbell, D. (1999). 'Losing the battle against forest flames'. *Guardian*, 07/09/1999: 17. Fiery disasters in California...again. Posted @ <http://www.guardian.co.uk/world/1999/sep/07/duncancampbell>

Rowe, M (2000). 'An ecosystem going up in smoke'. *Independent on Sunday*, 13/08/2000: 17. Covers the fires that raged across the northern sub-tropics that year.

Various (2007). 'Greek fires may be treated as terrorism' *Guardian*, Aug. 27<sup>th</sup>, 2007. Posted @ <http://www.guardian.co.uk/world/2007/aug/27/1>

Vidal, J. (2002). 'Living on the edge in Australia's tinderbox'. *Guardian*, 05/01/2000: 16. That year's fires came on top of those of 1997. Posted @ <http://www.guardian.co.uk/world/2002/jan/05/johnvidal>

Vidal, J. (1997). 'When the earth caught fire'. *Guardian*, Weekend section, 08/11/1997: 14-23. The Indonesian conflagration. That year's fires came on top of those of 1996. See also; Pierce, F. (2002). 'Borneo fires' at <http://www.newscientist.com/news/news.jsp?id=ns99992660> with material on the appalling smoke clouds that cloak large parts of S. E. Asia twice in five years.

### **Other recent examples of human pyromania:**

1997-98; Borneo, destroying an area the size of the UK;

1998: Roraima, Brazil; Kharbarovks region, Russia;

1999: Shanxi Province, China;

### **Ecological Destruction as a weapon of war**

Deforestation, pollution and direct killing of wildlife and many more forms of degradation are sometimes used as a weapon of war, including ethnic cleansing and genocide . Perhaps the best way to find material is to search newspaper and magazine archive sites as well as use Google.

Below are some examples.

\* wetland destruction and the assault on the Arab 'marsh' people in the Tigris-Euphrates delta by the Saddam Hussein of Iraq in the 1990s. Also study the regime's burning of oil wells in the first Gulf War of 1991.

\* defoliation of Vietnamese forests by the Americans in the 1960s and early 70s

\* deforestation of suspected Jacobite hideouts in Scotland by the British monarchy in the 18<sup>th</sup> century

### **Boomerangs and Backlashes**

Ecological destruction has rightly been compared to the act of people sitting on the branch of a tree sawing off the very limb on which they are perched. There are no free lunches: Nature will bite back if abused, although it may take many forms: increased storms, floods and avalanches, more frequent and more serious droughts, more serious and more frequent fires, denuded resources, increased prevalence of diseases, reduced effectiveness and side-effects of pesticides, etc.: and happen in times and places other than when the actual first assault took place.

Some case studies can be found in:

Abramovitz, J. (2001). **Unnatural Disasters**. Worldwatch Report.

Arnold, M. (1976). 'Floods as Man-Made Disasters'. *Ecologist* 6(5); 169-172.

Mann, R. (1987). 'Development & the Sahel Disaster; The Case of Gambia'. *Ecologist* 17(2); 84-90.

Monbiot, G. (2000). 'The Dead Zone'. *Guardian* May 19<sup>th</sup> 2000. Case study of Romania. In the aftermath of Communist industrialisation.

Vidal, J. (2000). 'Intensive farming blamed for swollen rivers'. *Guardian*, 09/Nov./00. Posted @ <http://www.guardian.co.uk/environment/2000/nov/09/weather.climatechange>

Wijkman, A. & L. Timberlake (1985). 'Is the African Drought an Act of God or Man. *Ecologist*, 15(1/2): 9-18.

Also symptomatic of the Earth's ailments is the way human-caused disaster like fire are then used to open up new areas for 'development' e.g.

Smith, H. (2007). 'WWF in despair over Greek fire damage'. *Guardian*, Sept. 28<sup>th</sup>, 2007. Posted @ <http://www.guardian.co.uk/international/story/0,,2178862,00.html>

### **Too Little, Too Late**

Finally we are building up a collection of examples of governments and other organisations fiddling around while the planet burns. We will ignore big failures like the package emanating the Kyoto Summit or George Bush's spoiler before the G8 Summit in June 2007. Instead we will concentrate on the little things which evidence the near total failure to face what needs to be done to sustain life on Earth.

- British government's proposed carbon labels on products in shops, a purely voluntary scheme, announced May 31<sup>st</sup> 2007 but to be introduced over the following 18 months. See: <http://environment.guardian.co.uk/climatechange/story/0,,2091722,00.html>
- Britain's first Energy Saving Day (Feb. 28<sup>th</sup>, 2008) had no noticeable effect in the country's electricity usage. See <http://news.bbc.co.uk/1/hi/sci/tech/7270218.stm>
- Nearly one million plastic bags were given away by British government departments in 2007, despite huffing and puffing by various ministers about the resources they waste and pollution they cause. Retailers gave away some 13 billion (sic) in the same year. See <http://www.guardian.co.uk/environment/2008/feb/29/plasticbags.waste>