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HUMAN HEALTH AND THE
ENVIRONMENT: TIME FOR A NEW
APPROACH TO ENVIRONMENTAL
LAW

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TOPICS

- Loss of biodiversity
- EU measures to halt the loss of biodiversity
- EU progress in halting the loss of biodiversity
- Natural resources law and environmental law
- EU law and biodiversity
- EU environmental law
- Protecting human health and the environment
- Reasons for focus on human health
- Does environmental law protect biodiversity?
- Can the emphasis on human health be changed?
- New approaches

LOSS OF BIODIVERSITY

- 'Earth is experiencing a huge episode of population declines and extirpations, which will have negative cascading consequences on ecosystem functioning and services vital to sustaining civilization. We describe this as a "biological annihilation" to highlight the current magnitude of Earth's ongoing sixth major extinction event'
 - Conclusion followed research of populations of nearly half of the known species of terrestrial vertebrates (27,600 species) between 1900 and 2015
 - 32% were found to have decreased in population size and range
 - More detailed research of 177 mammal species indicated
 - All had lost at least 30% of their geographic ranges
 - Over 40% had experienced population declines of at least 80%

Gerardo Ceballos, Paul R. Ehrlich and Rodolfo Dirzo, 'Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines', Proceedings of the National Academy of Sciences (published online 20 July 2017)

LOSS OF BIODIVERSITY

- Recognition of loss of biodiversity is not new
 - “The worst thing that can happen – will happen [in the 1980s] – is not energy depletion, economic collapse, limited nuclear war, or conquest by a totalitarian government. As terrible as these catastrophes would be for us, they can be repaired within a few generations. *The one process ongoing in the 1980s that will take millions of years to correct is the loss of genetic and species diversity by the destruction of natural habitats.* This is the folly our descendants are least likely to forgive us”

Paul and Anne Ehrlich, *Extinction; The Causes and Consequences of the Disappearance of Species* (Random House, 1981)
(quoting E.O. Wilson, Harvard Magazine (January-February 1980) (emphasis added))
 - Book is dedicated
 - ‘To *Homo sapiens*, which through the extinction of others endangers itself’

EU MEASURES TO HALT THE LOSS OF BIODIVERSITY

- EU began measures to halt the loss of biodiversity in the mid to late 1990s
- 1998: Communication from the Commission on a European Community biodiversity strategy
 - Aim: 'to anticipate, prevent and attack the causes of significant reduction or loss of biological diversity at the source' in order to halt biodiversity loss and to ensure that species and ecosystems, including agro-ecosystems, are in a satisfactory conservation state
- 2001: Commission published four biodiversity action plans to support its biodiversity strategy
 - Conservation of natural resources; agriculture; fisheries; and integration of biodiversity into policies, programmes and projects implemented through economic and development co-operation

EU MEASURES TO HALT THE LOSS OF BIODIVERSITY

- 2001: Council adopted the Sustainable Development Strategy
 - Included target of halting the loss of biodiversity in the EU by 2010
- 2002: Sixth Community Environment Action Programme
 - Also included a target of halting the loss of biodiversity in the EU by 2010
- 2005: Commission submitted a revised Sustainable Development Strategy
 - Reiterated 2010 target for halting the loss of biodiversity in the EU
- 2006: Council adopted the Revised Strategy
- 2008: Commission stated that it was 'highly unlikely' that the EU would even come close to meeting the 2010 target unless EU and Member States made intensive efforts to do so
- March 2010: Council conceded failure to reach the 2010 target
- NB: 2002: Contracting parties to the Convention on Biological Diversity (CBD), including the EU and its Member States, adopted a goal to reduce the rate of global biodiversity loss significantly from the 2002 level by 2010; also failed

EU MEASURES TO HALT THE LOSS OF BIODIVERSITY

- January 2010: Commission submitted four options in a new strategy to halt the loss of biodiversity in the EU
- March 2010: Council committed the EU to the fourth, most ambitious, option
 - Halt the loss of biodiversity and ecosystem services in the EU by 2020, restore them as far as possible, and increase the EU's contribution to avert global biodiversity loss
- May 2011: Commission published the current EU Biodiversity Strategy entitled 'Our life insurance, our natural capital: an EU biodiversity strategy to 2020'
 - Emphasised importance of further work to implement the no net loss of biodiversity objective and called on the need to integrate the strategy into other project areas including the Common Agriculture Policy
- June 2011: Council endorsed the new EU Biodiversity Strategy

EU MEASURES TO HALT THE LOSS OF BIODIVERSITY

- EU Biodiversity Strategy
 - 2020 Headline Target
 - 'Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss'
 - 2050 vision
 - 'By 2050, European Union biodiversity and the ecosystem services it provides – its natural capital – are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human wellbeing and economic prosperity; and so *that catastrophic changes caused by the loss of biodiversity are avoided*' (emphasis added)

EU MEASURES TO HALT THE LOSS OF BIODIVERSITY

- EU Biodiversity Strategy (continued)
 - 'Biodiversity – the extraordinary variety of ecosystems, species and genes that surround us – is our life insurance, giving us food, fresh water and clean air, shelter and medicine, mitigating natural disasters, pests and diseases and contributes to regulating the climate. Biodiversity is also our natural capital, delivering ecosystem services that underpin our economy. Its deterioration and loss jeopardises the provision of these services: we lose species and habitats and the wealth and employment we derive from nature, and endanger our own wellbeing. *This makes biodiversity loss the most critical global environmental threat alongside climate change – and the two are inextricably linked*' (emphasis added)

EU MEASURES TO HALT THE LOSS OF BIODIVERSITY

- EU Biodiversity Strategy (continued)
 - Six targets for 2020
 1. Fully implement the Birds and Habitats Directives
 2. Maintain and restore ecosystems and their services
 3. Ensure the sustainability of agriculture and forestry
 - a. Increase the contribution of agriculture to maintaining and enhancing biodiversity
 - b. Increase the contribution of forestry to maintaining enhancing biodiversity
 4. Ensure the sustainable use of fisheries resources and achieve good environmental status
 5. Help combat invasive alien species
 6. Help avert global biodiversity loss

EU MEASURES TO HALT THE LOSS OF BIODIVERSITY

- September 2011: Commission submitted the Roadmap to a Resource Efficient Europe
 - 'Milestone: By 2020 the loss of biodiversity in the EU and the degradation of ecosystem services will be halted and, as far as feasible, biodiversity will be restored'
 - Stated that tackling the challenges and changing them into opportunities, including halting the loss of biodiversity, would require the EU economy to undergo '*a fundamental transformation within a generation – in energy, industry, agriculture, fisheries and transport systems, and in producer and consumer behaviour*' (emphasis added)
- November 2013: Seventh EU Environment Action Programme; Living Well Within the Limits of our Planet (covers period 2014 to 2020)
 - 'Union has agreed to halt the loss of biodiversity and the degradation of ecosystem services in the Union by 2020, and restore them in so far as feasible, while stepping up the Union contribution to averting global biodiversity loss (recital 11)

EU PROGRESS IN HALTING THE LOSS OF BIODIVERSITY

- By 2015, the Commission recognised that insufficient progress was being made
 - Report from the Commission, The Mid-Term Review of the EU Biodiversity Strategy to 2020
 - 2020 Headline target
 - No significant progress towards the target
 - '2020 biodiversity targets can only be reached if implementation and enforcement efforts become considerably bolder and more ambitious. At the current rate of implementation, biodiversity loss and the degradation of ecosystem services will continue throughout the EU and globally, with significant implications for the capacity of biodiversity to meet human needs in the future'

EU PROGRESS IN HALTING THE LOSS OF BIODIVERSITY

- Mid-Term Review (continued)

Targets

1. Fully implement the Birds and Habitats Directives
 - Progress but at insufficient rate
2. Maintain and restore ecosystems and their services
 - Progress but at insufficient rate
- 3a. Increase the contribution of agriculture to maintaining and enhancing biodiversity
 - No significant progress towards the target
- 3b. Increase the contribution of forestry to maintaining enhancing biodiversity
 - No significant progress towards the target

EU PROGRESS IN HALTING THE LOSS OF BIODIVERSITY

- Mid-Term Review (continued)
 4. Ensure the sustainable use of fisheries resources and achieve good environmental status
 - Progress but at insufficient rate
 5. Help combat invasive alien species
 - Currently on track with implementation
 6. Help avert global biodiversity loss
 - Progress but at insufficient rate

EU PROGRESS IN HALTING THE LOSS OF BIODIVERSITY

- No Directive or Regulation on protecting biodiversity; only a strategy that includes visions, targets and action points
- Target to halt the loss of biodiversity in the EU refers to three pieces of legislation
 - Birds Directive (2009/147/EC)
 - Habitats Directive (92/43/EEC, consolidated version 1 January 2007)
 - Alien Species Regulation ((EU) No 1143/2014)
- All three pieces of legislation are natural resources law as opposed to environmental law
- Environmental law is not specifically mentioned in EU measures to halt the loss of biodiversity
 - NB: Commission has examined co-ordinated implementation of EU biodiversity, nature, water and marine environment policies but focus is on management of these natural resources not the loss of biodiversity

NATURAL RESOURCES LAW AND ENVIRONMENTAL LAW

- What is the difference between natural resources law and environmental law?
 - Natural resources law
 - Manages natural resources to maximise benefits from them for people and other natural resources
 - Does not typically include the polluter pays principle
 - Environmental law
 - Includes legislation on air, soil and water pollution, chemicals and waste
 - Protects human health and the environment from risks, in particular, risks from chemical pollutants
 - Typically includes the polluter pays principle

EU LAW AND BIODIVERSITY

- Can EU natural resources law halt the loss of biodiversity in the EU?
 - Birds Directive
 - Protects, manages and controls about 500 species of wild birds that naturally occur in the EU including their eggs, nests and habitats, but focuses on about 190 species and sub-species listed in Annex I and Special Protection Areas in the Natura 2000 network
 - Habitats Directive
 - Lists about 200 natural habitats and about 1,000 species with focus on Special Areas of Conservation in the Natura 2000 network; protection extends outside the network, but it is much more limited despite initiatives such as Green Infrastructure
 - Alien Species Regulation
 - Fills a vital gap in protecting biodiversity but limited to prevention and management of the introduction and spread of invasive alien species
- Birds and Habitats Directives are fit for purpose but EU natural resources law is severely limited in halting the loss of biodiversity due to protecting only a small percentage of, albeit rare and vulnerable, species and natural habitats
 - Does not, for example, protect bees and other pollinators

EU LAW AND BIODIVERSITY

- Some other EU laws mention the protection and maintenance of biodiversity
- Examples
 - Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EU)
 - ‘Over the last decade, environmental issues, such as resource efficiency and sustainability, *biodiversity protection*, climate change, and risks of accidents and disasters, have become more important in policy making. They should therefore also constitute important elements in assessment and decision-making processes’ (recital 7) (emphasis added)
 - Marine Strategy Framework Directive (2008/56/EC)
 - ‘marine environment is a precious heritage that must be protected, preserved and, where practicable, restored *with the ultimate aim of maintaining biodiversity* and providing diverse and dynamic oceans and seas which are clean, healthy and productive’ (recital 3) (emphasis added)
- Most EU environmental laws do not mention biodiversity or include measures to protect it

EU ENVIRONMENTAL LAW

- What is the 'environment' that is protected by EU environmental law and how does it differ from 'biodiversity'?
 - Article 191(2) TFEU
 - 'Union policy on the *environment* shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union ...'
 - Term 'environment' is not defined but
 - 'includes human beings, fauna and flora, soil, water, air, climate, landscape, material assets, and natural heritage'
- Ludwig Krämer, EU Environmental Law (Sweet & Maxwell, 8th edition, 2016)
- CBD defines 'Biological diversity' as 'the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems'
- CBD defines 'ecosystem' as 'a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit'

EU ENVIRONMENTAL LAW

- Biodiversity, therefore, consists of living organisms including human beings, fauna and flora; does not include soil, water and air on which they depend for their survival
- EU Biodiversity Strategy and the goal of halting the loss of biodiversity in the EU by 2020 must, therefore, be based on an assumption that EU environmental law adequately protects the 'environment' other than the limited biodiversity protected by natural resources law
- But is this assumption correct?

PROTECTING HUMAN HEALTH AND THE ENVIRONMENT

- Many, if not most, environmental laws, as opposed to natural resources laws, state the aim of protecting 'human health and the environment'
 - Waste Framework Directive (2008/98/EC)
 - 'first objective of any waste policy should be to minimise the negative effects of the generation and management of waste on *human health and the environment*' (recital 6)
 - Regulation (EC) No 1907/2006 concerning the regulation, authorisation and restriction of chemicals
 - 'purpose of this Regulation is to ensure a high level of protection of *human health and the environment*' (article 1(1))
 - Environmental Liability Directive (2004/35/CE)
 - 'Directive should apply, as far as environmental damage is concerned, to occupational activities which present a risk for *human health or the environment*' (recital 8)
 - Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EU)
 - 'objective of this Directive [is] to ensure a high level of protection of the *environment and of human health*' (recital 41)
 - Directive 2008/50/EC on ambient air quality and cleaner air for Europe
 - Defines and establishes 'objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on *human health and the environment as a whole*' (article 1(1))

PROTECTING HUMAN HEALTH AND THE ENVIRONMENT

- But does protection of the 'environment' have the same force as protection of 'human health'?
- Or is protection of human health from risks to it paramount, with the environment being protected only as it affects human health?

PROTECTING HUMAN HEALTH AND THE ENVIRONMENT

- US environmental law protects human health to a much higher degree than the environment
 - '[L]aws regulating the pollution of air, water, and the land – have the dual purpose of protecting human health and the environment. In most cases ... *these laws will take the protection of human beings as their first concern ... natural resource protection will often end up as a kind of tag-along value, icing on the cake of a regulation otherwise justified by the benefits of improving human health*'
Lisa Heinzerling, 'Reductionist Regulatory Reform', 8 Fordham Environmental Law Journal 459 (1997) (emphasis added)
 - 'Environmental protection serves solely human interests, reflected in thresholds limited to human needs and concerns'
E. Taylor, 'From Environmental to Ecological Human Rights: A New Dynamic in International Law' (1998) 10 Georgetown International Law Review 309

REASONS FOR FOCUS ON HUMAN HEALTH

- Modern era of US environmental law began in the early 1970s following political concerns about environmental degradation in the 1960s
- Reflected traditional concepts
 - Nature was secondary; to be 'improved' by people
 - Areas such as wetlands were perceived to be waste land due to their unproductivity
 - Only reason for the existence of nature was to serve people
 - Wildlife and other natural resources were considered to be property
 - E.g., rule of capture, hunting trophies
 - Basis of environmental law in public health, or general welfare, law concerning risks from water-borne diseases such as typhoid and cholera from drinking water and polluted rivers, smog and unpleasant odours, not protection of the environment
- US Congress enacted separate legislation on air pollution, water pollution, and waste that reflected the polluter pays principle
 - Balance between protection of the environment and costs to industry and commerce
 - Environmental laws were not holistic

REASONS FOR FOCUS ON HUMAN HEALTH

- Concept of nature existing to serve people is also reflected in use of the term 'human environment'
 - National Environmental Policy Act of 1969
 - Requires federal agencies to prepare environmental impact assessments for 'major Federal actions significantly affecting the quality of the *human environment*' (42 USC s 4332(2)(C)) (emphasis added)
 - Declaration of the UN Conference on the *Human Environment* (Stockholm 1972)
 - 'To defend and improve the *human environment* for present and future generations has become an imperative goal for mankind – a goal to be pursued together with, and in harmony with, the established and fundamental goals of peace and of worldwide economic and social development' (Paragraph 6) (emphasis added)
 - Term 'human environment' was intentionally not defined due to potential that definition could be 'unduly restrictive' and would delay the Declaration

REASONS FOR FOCUS ON HUMAN HEALTH

- Anthropocentric view of the 'environment' still continues
 - Example
 - Definition of 'biological resources' in the CBD
 - 'genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity'

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- If the main focus of environmental law is protection of human health, can it adequately protect biodiversity?
- Or does environmental law simply legitimise pollution and other damage to the environment and the loss of biodiversity other than protected biodiversity?
 - ‘Environmental law has failed us all. As ecosystems collapse around the globe and the climate crisis intensifies, environmental agencies worldwide use their authority to permit the very harm that they are supposed to prevent’

Mary Christina Wood, *Nature’s Trust: Environmental Law for a New Ecological Age* (Cambridge University Press 2014)
 - ‘[W]e need to re-imagine environmental law, to think bigger and earlier’ and ‘[e]nvironmental law as we’ve come to define it actually legitimates the enormous but largely invisible legal structure making pollution not only possible but inevitable’

Liza Heinzerling, ‘New Directions in Environmental Law: A Climate of Possibility’ 35 *Harvard Environmental Law Review* 263 (2011)

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- 'Environmental law is not "real" law. The US federal legislation enacted between 1969 and 1980 created new procedures and standards for decisions about the use of air, land and water but also formidable, perhaps insurmountable, barriers to the creation of a non-positivist environmental law'

Dan Tarlock, 'Is a Substantive, Non-Positivist United States Environmental Law Possible?' (2012) 1 Michigan Journal of Environmental & Administrative Law 159

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- Does environmental law in the EU and its Member States differ from US environmental law in providing equal protection to the environment as to human health?
 - Modern environmental law in Europe began in the 1970s following political concerns about environmental degradation in the 1960s – as in the US
 - 1971: Commission submitted first Environment Action Programme
 - 1972: Commission submitted revised draft including the polluter pays principle
 - 1973: final programme adopted
 - Member States and the EU adopted separate legislation on air pollution, water pollution and waste to reflect the polluter pays principle – as in the US
 - Environmental law reflects a balance between protection of the environment and costs to industry – as in the US
 - Same traditional concepts of nature existed, and still exist, in Europe as in the US

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- Some EU environmental laws specifically provide greater protection to human health than the environment
 - Environmental Liability Directive
 - Established liability for damage to species and natural habitats protected by the Birds and Habitats Directives and water under the Water Framework Directive (2000/60/EC)
 - BUT defines 'land damage' as '*any land contamination that creates a significant risk of human health being adversely affected as a result of the direct or indirect introduction, in, on or under land, of substances, preparations, organisms or micro-organisms*' (article 2(1)(c))
 - Excludes liability for damage to large areas of forests, grasslands and wetlands unless they are included in the Natura 2000 network

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- *Commission v Germany* (ECJ, Case No 361-88, 1991)
 - Council Directive 80/779/EEC of 15 July 1980 on air quality limit values and guide values for sulphur dioxide and suspended particulates
 - One key aim of the Directive is 'to protect human health and the quality of the environment' (para 2)
 - 'it should be pointed out that the obligation imposed on the Member States to prescribe limit values not to be exceeded within specified periods and in specified circumstances, laid down in Article 2 of the directive, is imposed "*in order to protect human health in particular*"' (para 16) (emphasis added)

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- Industrial Emissions Directive (2010/75/EU)
 - Increased focus on protection of soil and groundwater than in the IPPC Directive
 - *'It is necessary to ensure that the operation of an installation does not lead to a deterioration of the quality of soil and groundwater'* (recital 23)
 - But definition of 'pollution' includes the term 'quality of the environment'
 - *'the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment'* (article 3(2)) (emphasis added)
 - Is protection of the 'quality of the environment' different from protection of the 'environment'?

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- Article 191(1) TFEU
 - 'Union policy on the environment shall contribute to pursuit of the following objectives:
 - *preserving, protecting and improving the quality of the environment,*
 - *protecting human health,*
 - prudent and rational utilisation of natural resources,
 - promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change'
- Why does article 191(1) not state 'preserving, protecting and improving the environment'?
- Does/could the term 'quality of the environment' imply protection of the environment for the benefit of people? Or for the benefit of people and natural resources, the utilisation of which by people should be prudent and rational?

DOES ENVIRONMENTAL LAW PROTECT BIODIVERSITY?

- EU law thus appears to provide more protection for human health and welfare than the environment – as in the US

CAN THE EMPHASIS ON HUMAN HEALTH BE CHANGED?

- Can environmental law be changed to protect the environment to a greater extent than currently?
- Conflicts and trade-offs between socio-economic interests and ecological interests generally result in the former prevailing
 - '[E]nvironmental law is better understood as a field in which the goal of environmental protection sits in a position of constant tension with countervailing interests and values' because a wide variety of trade-offs and value conflicts are inevitable

Todd S. Aagaard, 'Environmental Law as a Legal Field: An Inquiry in Legal Taxonomy' (2010), 95 Cornell Law Review 221

- Example
 - Political pressure following *Commission v Germany* (ECJ Case No C-57/89, 1991) (*Leybucht Dykes*) resulted in exceptional public interest grounds including economic and social grounds being able to be considered in Birds Directive and subsequently adopted Habitats Directive

NEW APPROACHES

- Include greater protection for the environment in EU environmental law
- But will be difficult
 - 'Over the past thirty-five years, both environmental and natural resources law have struggled to broaden their scope to encompass ecological concerns'

Robert L. Fischman, 'What is Natural Resources Law?' (2007) 78 University of Colorado Law Review 71

NEW APPROACHES

- Focus on protecting human health is often used as a reason to justify controls
- Danger that closer alignment between environmental law and natural resources law without the focus on human health could result in weaker environmental laws
 - 'Conservation is viewed as using government to interfere with private life rather than to protect families and communities. ... Because land parcels set aside for conservation so rarely provide food or shelter, the cause seems to ignore basic human needs. It is easily accused of fostering elitist aims through meddlesome means'
- 'Biodiversity protection excites intense opposition because it counsels the partial subordination of immediate human demands to longer term human and non-human concerns'

Eric T. Freyfogle, *Why Conservation is Failing and How It Can Regain Ground* (Yale University Press 2006)

A. Dan Tarlock, 'Biodiversity Federalism', 54 *Maryland Law Review* 1315 (1995)

NEW APPROACHES

- Include protection of biodiversity in environmental laws when feasible
 - Examples
 - Environmental Impact Assessment Directive
 - Marine Strategy Framework Directive

NEW APPROACHES

- Merge environmental and natural resources laws when feasible
 - Environmental Liability Directive
 - Mixed environmental and natural resources laws by establishing liability for land damage, water damage, and damage to species and habitats protected under the Birds and Habitats Directive
 - But implications of the mix of environmental and natural resources laws was not sufficiently considered resulting in law that has proven difficult to implement
 - Example
 - Threshold for damage to species and natural habitats protected under the Birds and Habitats Directive is linked to their natural ranges; a moving target subject to stochastic variations

NEW APPROACHES

- Use the opportunity of inevitable changes to environmental and natural resources law caused by climate change to realign or re-invent them or adopt new governance mechanisms
 - Climate change affects both environmental laws and natural resources laws
 - Changes in water flows and availability
 - Changes in ranges of species and natural habitats
 - Sea level rise
 - Increased uncertainty

NEW APPROACHES

- Increase public awareness about the consequences of the loss of biodiversity
 - 2015 survey by the Commission on the attitudes of Europeans towards biodiversity found
 - Although the majority of people surveyed had heard the term 'biodiversity', less than one-third knew what it meant
 - Over 9 of out 10 considered the EU should better inform people about the importance of biodiversity
 - First step should be to change the term 'halting the loss of biodiversity' to 'halting the sixth mass extinction'
 - People would better understand what that means, especially due to the extinction of dinosaurs in the fifth mass extinction