

Habitats Directive and Climate Change: Can the Law Really Tackle Ecological Dynamics?

International Conference '20 Years of Habitats Directive: European Wildlife's Best Hope?'

Antwerp, 12-13 December 2012



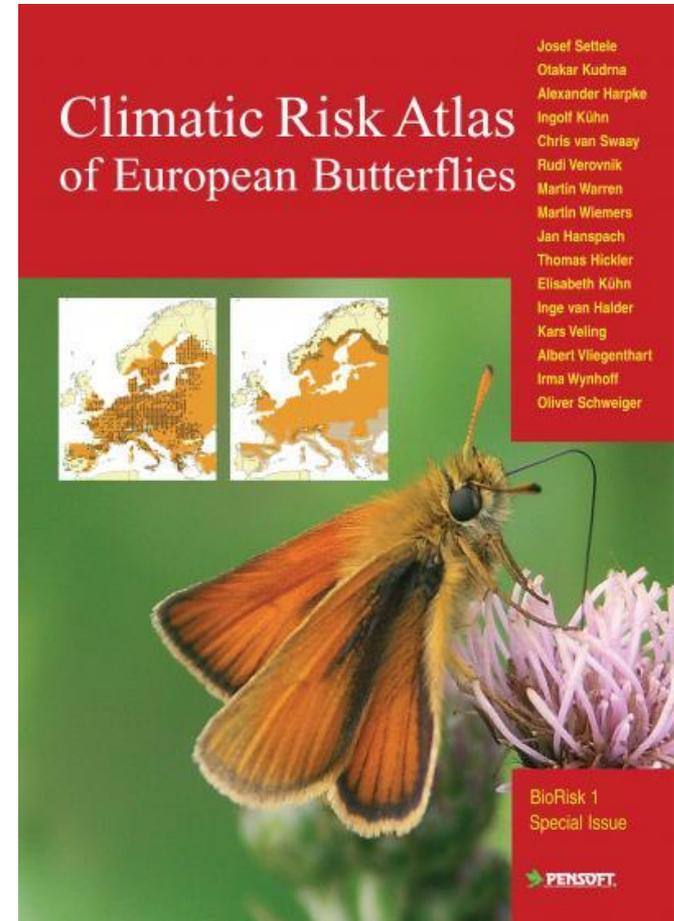
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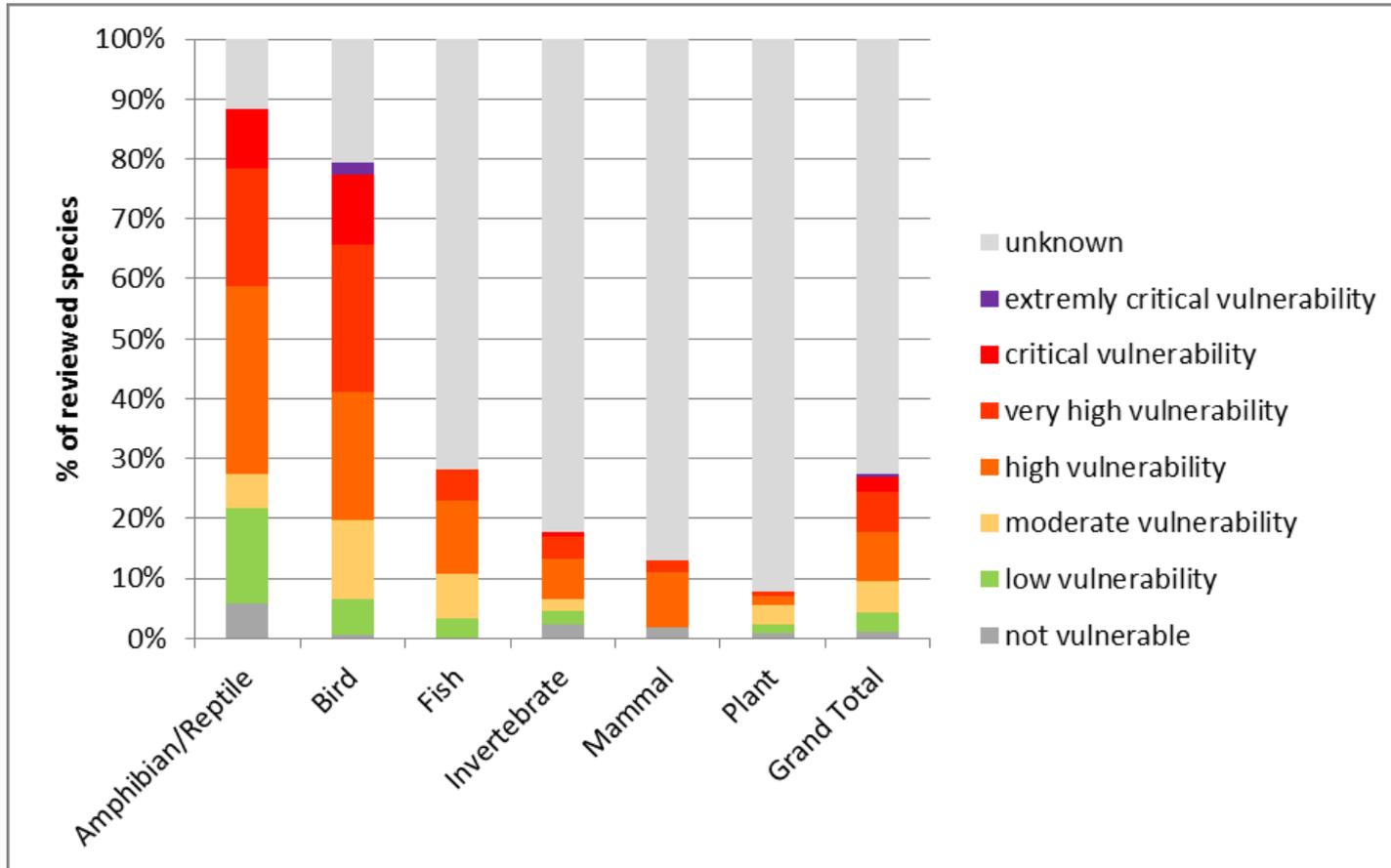
Climate change impacts



- Temperature
 - Precipitation patterns
 - Weather extremes
-
- Increased vulnerability
 - Range shifts

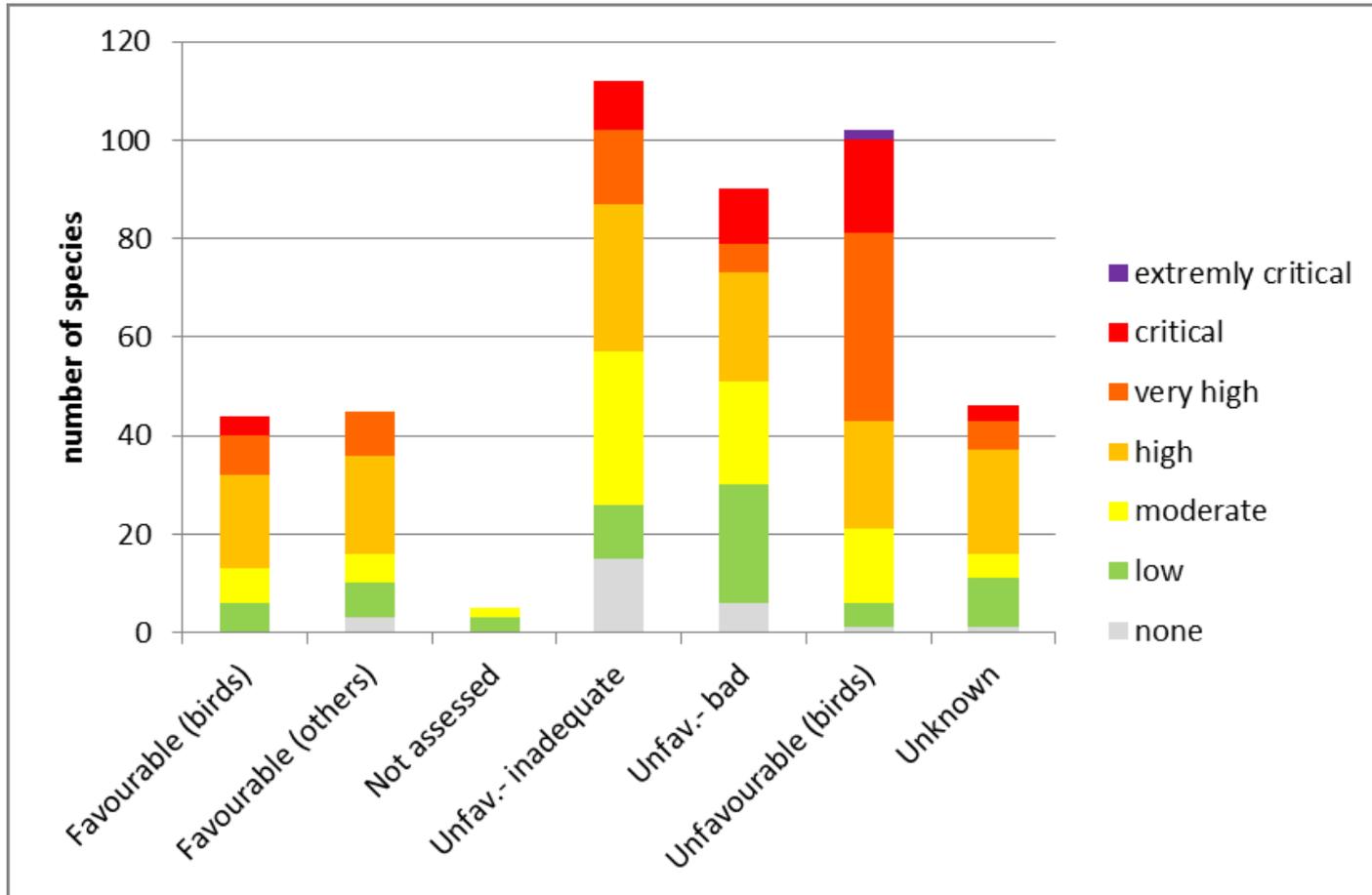


Climate change impacts



Draft Guidelines on Natura 2000 and Climate Change (Supplement) (2012)

Climate change impacts

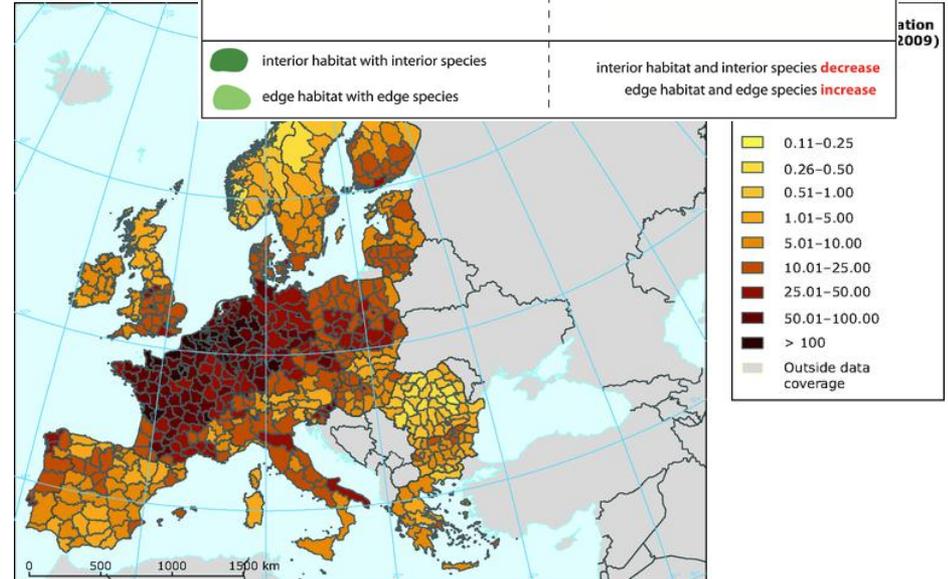
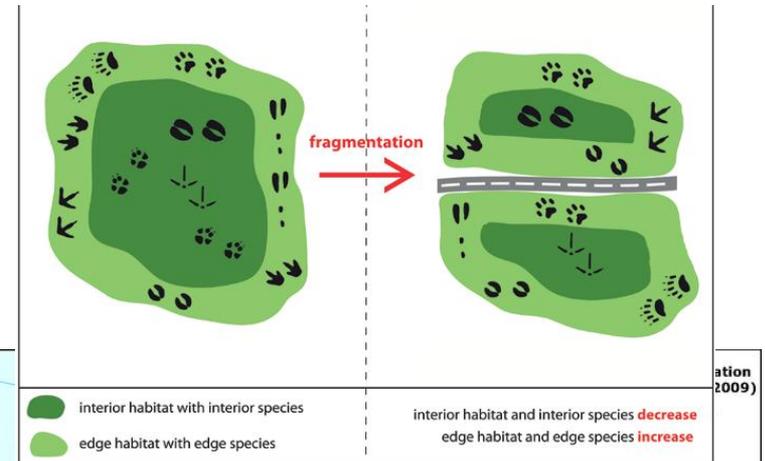
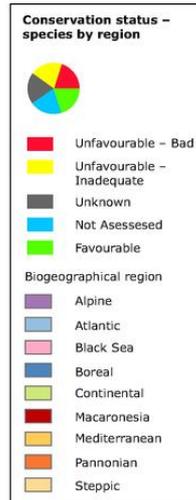
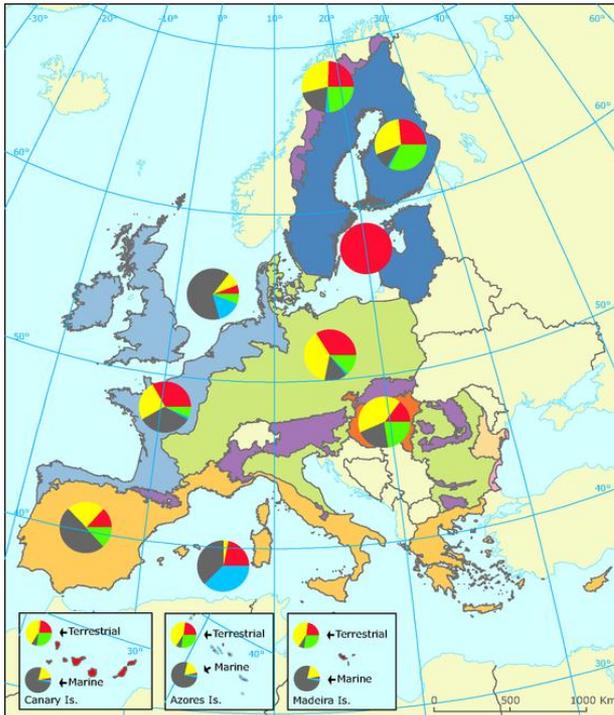


Draft Guidelines on Natura 2000 and Climate Change (Supplement) (2012)

Climate change impacts



- Many populations already vulnerable
- Fragmentation



ation
2009)

Adaptation measures



- Robust populations
- Robust protected areas
- Reduce other (non-climate) threats
- Connectivity (enable dispersal, enable recovery after extreme events)
- Adaptability (conservation objectives, conservation measures)
- Active translocation (assisted colonization / assisted migration)
- ...

Mismatch?



Habitats Directive (1992):

- Climate change (adaptation) not addressed
- Mismatch between Directive and current conservation needs in light of climate change?

Main questions:

- What degree of mismatch?
- How to resolve it? Amendment needed?

Academic debate



- ✓ R. **Sutherland**, O. **Watts** and G. **Williams**, 'Climate Change and the Birds and Habitats Directives: Can They Work Together?', 26(3/4) *Ecos* (2005) 86-94
- ✓ K. **Wheeler**, 'Bird Protection & Climate Changes: A Challenge for Natura 2000?', 13(3) *Tilburg Foreign Law Review* (2006) 283
- ✓ H.E. **Woldendorp**, 'Integratiedebat in het Natuurbeschermingsbeleid', 45/46 *Nederlands Juristenblad* (2007), 2881
- ✓ A. **Cliquet**, C. **Backes**, J. **Harris** and P. **Howsam**, 'Adaptation to Climate Change: Legal Challenges for Protected Areas', 5(1) *Utrecht Law Review* (2009) 158
- ✓ A. **Trouwborst**, 'International Nature Conservation Law and the Adaptation of Biodiversity to Climate Change: a Mismatch?', 21(3) *Journal of Environmental Law* (2009) 419
- ✓ S. **Erens**, J. **Verschuuren** and K. **Bastmeijer**, 'Adaptation to Climate Change to Save Biodiversity: Lessons Learned from African and European Experiences', in B.J. Richardson *et al.* (eds), *Climate Law and Developing Countries: Legal and Policy Challenges for the World Economy* (Edward Elgar, 2009) 206
- ✓ C.J. **Bastmeijer** and K. **Willems**, 'Robuust, Verbonden en... Beschermd. Past een Klimaatbestendig Natuurbeleid met Aandacht voor "Wilde Natuur"-beleving in het Juridische Natura 2000-Jasje?', in C.W. Backes *et al.*, *Natuur(lijk) met Recht Beschermd: Bouwstenen voor een Effectieve en Hanteerbare Natuurbescherming* (Boom Juridische Uitgevers, 2010) 85
- ✓ A. **Dodd**, A. **Hardiman**, K. **Jennings** and G. **Williams**, 'Commentary: Protected Areas and Climate Change – Reflections from a Practitioner's Perspective', 6(1) *Utrecht Law Review* (2010) 141
- ✓ A. **Cliquet**, J. **Harris**, P. **Howsam** and C. **Backes**, 'Response to "Protected Areas and Climate Change – Reflections from a Practitioner's Perspective"', 6(1) *Utrecht Law Review* (2010) 149
- ✓ J. **Verschuuren**, 'Rethinking Restoration in the European Union's Birds and Habitats Directives', 28(4) *Ecological Restoration* (2010) 431
- ✓ A. **Trouwborst**, 'Conserving European Biodiversity in a Changing Climate: the Bern Convention, the EU Birds and Habitats Directives and the Adaptation of Nature to Climate Change', (20)1 *Review of European Community and International Environmental Law* (2011) 62
- ✓ A. **Trouwborst**, 'La Adaptación de la Flora y la Fauna al Cambio Climático en un Paisaje Fragmentado, y el Derecho Europeo sobre la Conservación de la Naturaleza', 2(2) *Revista Catalana de Derecho Ambiental* (2011) 1

Approach



Directive provisions interpreted in light of:

- Directive objectives
- Current conservation needs
- Principles of environmental law
- CJEU jurisprudence
- EU guidance and policy
- International law
 - Biodiversity Convention (CBD)
 - Bern Convention (BC)

International law



- Treaty text, in light of:
- ‘object and purpose’ and
- ‘any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions’
(Vienna Convention on the Law of Treaties)
 - CBD COP Decisions
 - BC Standing Committee Recommendations
 - ...

Biodiversity Convention



CBD COP 2004-08:

- ‘integrate climate change adaptation measures in protected area planning, management strategies, and in the design of protected area systems’
- ‘take measures to manage ecosystems so as to maintain their resilience to extreme climate events and to help [..] adapt to climate change’

Biodiversity Convention



‘cooperate regionally in activities aimed at enhancing habitat connectivity across ecological gradients, with the aim of enhancing ecosystem resilience and to facilitate the migration and dispersal of species with limited tolerance to altered climatic conditions’

Bern Convention



Detailed, comprehensive guidance (prepared by Group of Experts on Biodiversity and Climate Change) in Standing Committee Rec.:

- No. 122 (2006)
- No. 135 (2008)
- Nos. 142 & 143 (2009)
- Nos. 145, 146 & 147 (2010)
- No. 152 (2011)
- Nos. 158 & 159 (2012)

Bern Convention



Legal obligations to take the ‘**requisite** measures’ to keep flora and fauna at healthy levels (Art. 2) and the ‘**appropriate and necessary** legislative and administrative measures’ to ensure habitat (Art. 4) and species conservation (Arts. 5-7)



Aims of Convention & Standing Committee
Recommendations on climate adaptation



Legal obligations to take adequate climate
adaptation measures

EU guidance and policy



- 2007 Guidance on Connectivity (Art. 3 Birds Directive and Art. 10 Habitats Directive)
- 2009 White Paper on Climate Change Adaptation
- 2012 EU Biodiversity Strategy to 2020
- 2012 (Draft) Guidelines on Climate Change and Natura 2000
- EU Strategy for a Green Infrastructure (under development)

Interpreting the Directive



Art. 2: 'Measures taken pursuant to this Directive shall be designed to maintain or restore, at **favourable conservation status**, natural habitats and species of wild fauna and flora of Community interest.'

Interpreting the Directive



Status habitat 'favourable' when, *inter alia*:

- Range 'stable or increasing'; and
- 'structure and functions which are necessary for its **long-term** maintenance exist and are likely to continue to exist for the foreseeable future'.

Interpreting the Directive



Status species 'favourable' when, *inter alia*:

- Species 'is maintaining itself on a **long-term** basis as a viable component of its natural habitats'; and
- 'there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a **long-term** basis'.

Interpreting the Directive



For SACs:

‘Member States shall establish the **necessary conservation measures** [..] which correspond to the ecological requirements of the’ habitats and species
(Art. 6(1))

Interpreting the Directive



For SACs, furthermore:

‘Member States shall take **appropriate steps** to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as [significant] disturbance’

(Art. 6(2))

- Includes avoiding deterioration as a result of climate change (Case C-6/04, 2005)

Interpreting the Directive



Plans/projects which are potentially harmful to SACs:

- Prior 'appropriate assessment'
- If significant harm cannot be conclusively ruled out, project may not be authorized, except under strict conditions

(Art. 6(3)-(4) HD)

Interpreting the Directive



Strict protection Annex IV species:

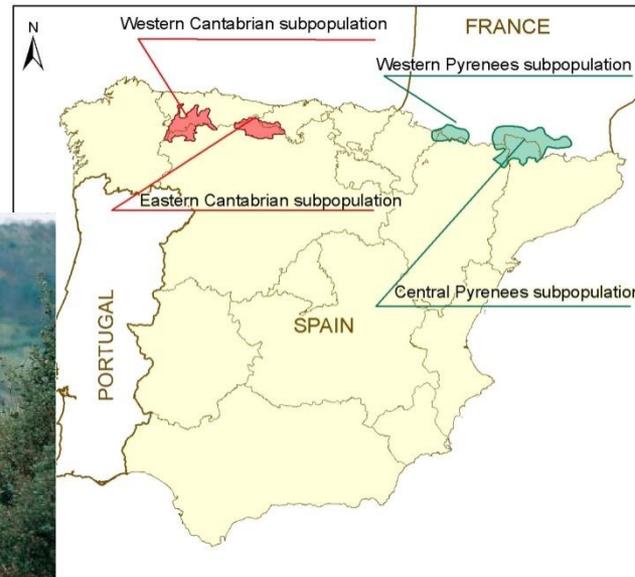
- ‘coherent and coordinated measures of a preventive nature’ (Case C-183/05, 2007)
- Comprehensive and focused set of measures for each species, preferably species protection plan (Id.)

Interpreting the Directive



CJEU, Case C-404/09, 2011 (*Alto Sil*):

Open-cast mining impairing connectivity of capercaillie and brown bear subpopulations within N2000 site violates Art. 6(2).



Interpreting the Directive



Commission Guidance on Art. 6:

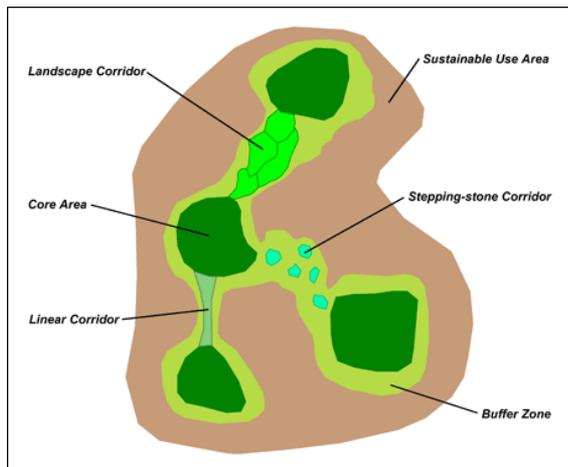
‘Appropriate steps’ Art. 6(2):

- concern species and habitats *in* N2000 sites, but
- ‘may need to be implemented *outside* the SAC, [as Article 6(2)] does not specify that measures have to be *taken* in the SAC’ but that measures must avoid impacts in the areas involved.

Connectivity



- Arts. 3 & 10: voluntary character, but
- Arts. 2, 6 & 12 entail obligations for Member States to provide for adequate connectivity outside/between N2000 sites



Climate-induced dispersal: natural dispersal



- Adaptability inherent in Directive (ecological dynamics not exclusive for climate change!)
 - ✓ Site designation continuous process (Case C-209/04, 2006), objectives adaptable
 - ✓ Guidance on Art. 12 (2007): when species ‘spreads on its own to a new area’, this area ‘has to be considered part of the natural range’
- BC Standing Committee Rec. 142 (2009): interpret term ‘alien species’ as ‘not including native species naturally extending their range in response to climate change’

Climate-induced dispersal: assisted colonization



- Potential obstacles, but not incompatible:
 - Art. 22(b): Member States must ‘ensure that the deliberate introduction into the wild of any species which is not native to their territory is regulated so as not to prejudice natural habitats within their natural range or the wild native fauna and flora’
 - Art. 6(3), although 6(4) probably feasible
- Possibly even mandatory (e.g. Art. 2 & 12)
- Guidance from BC Standing Committee, esp. Rec. 159 (2012)

Adaptation measures



- ✓ Robust populations
- ✓ Robust protected areas
- ✓ Reduce other (non-climate) threats
- ✓ Connectivity
- ✓ Adaptability (conservation objectives, conservation measures)
- ✓ Active translocation (assisted colonization)

All: required by / compatible with Directive

Conclusions



- The Habitats Directive **already obliges** Member States to take adequate climate **adaptation measures**.
- The Directive can accommodate the dynamic approach required, and climate change does **not** necessitate the Directive's **revision**.
- Clear **guidance** is required to avoid confusion and to warrant an adequate and consistent application of the Directive in light of climate change.

Recommendations



- Clearly state and elaborate in relevant guidance (incl. Guidelines on N2000 and climate change) that Habitats Directive obliges Member States to take climate adaptation action.
- In legal instrument on invasive species, make explicit provision for climate-induced dispersal, both 'natural' and artificial (assisted colonization).

Thank you!



This research was financed by the Netherlands Organization for Scientific Research (NWO).

See also:

A. Trouwborst, 'Conserving European Biodiversity in a Changing Climate: The Bern Convention, the EU Birds and Habitats Directives and the Adaptation of Nature to Climate Change', 20(1) *Review of European Community and International Environmental Law* (2011) 62