



Biodiversity Law & Governance Day 2024

During the CoP16 of the Convention on Biological Diversity in Cali, Colombia

Outline Programme

Advancing the Legal Protection for Biodiversity in Armed Conflict

Saturday, 26 October 2024, 18h00-19h15 CET/CEST (Online)

Chair: Prof Raphaël van Steenberghe

Speakers: Prof Jérôme De Hemptinne & Adv Razy Aman Eddine

Discussant: Dr Mara Tignino

Moderators: Adv Lucía Soto Rincón & Natalia Andrea López Acero

Setting the Scene:

How to Better Protect Biodiversity in Armed Conflict ?

Prof **Raphaël van Steenberghe**
(Chair)

Research Associate
Belgian National Fund for Scientific Research (FNRS)

Professor
University of Louvain (UCLouvain)

Belgium

Topic:

- Unusual?
- Related to the Kunming-Montreal Global Biodiversity Framework
- Armed conflicts have devastating ecological consequences
- See e.g. recent armed conflicts, such as in Ukraine



Research project:

How to better protect environment in armed conflict?

1 – Not from the perspective of international humanitarian law (IHL) itself

→ Focus on international environment law and how it may complement IHL

2 – Not the whole environmental law

→ only biodiversity law (three main conventions)

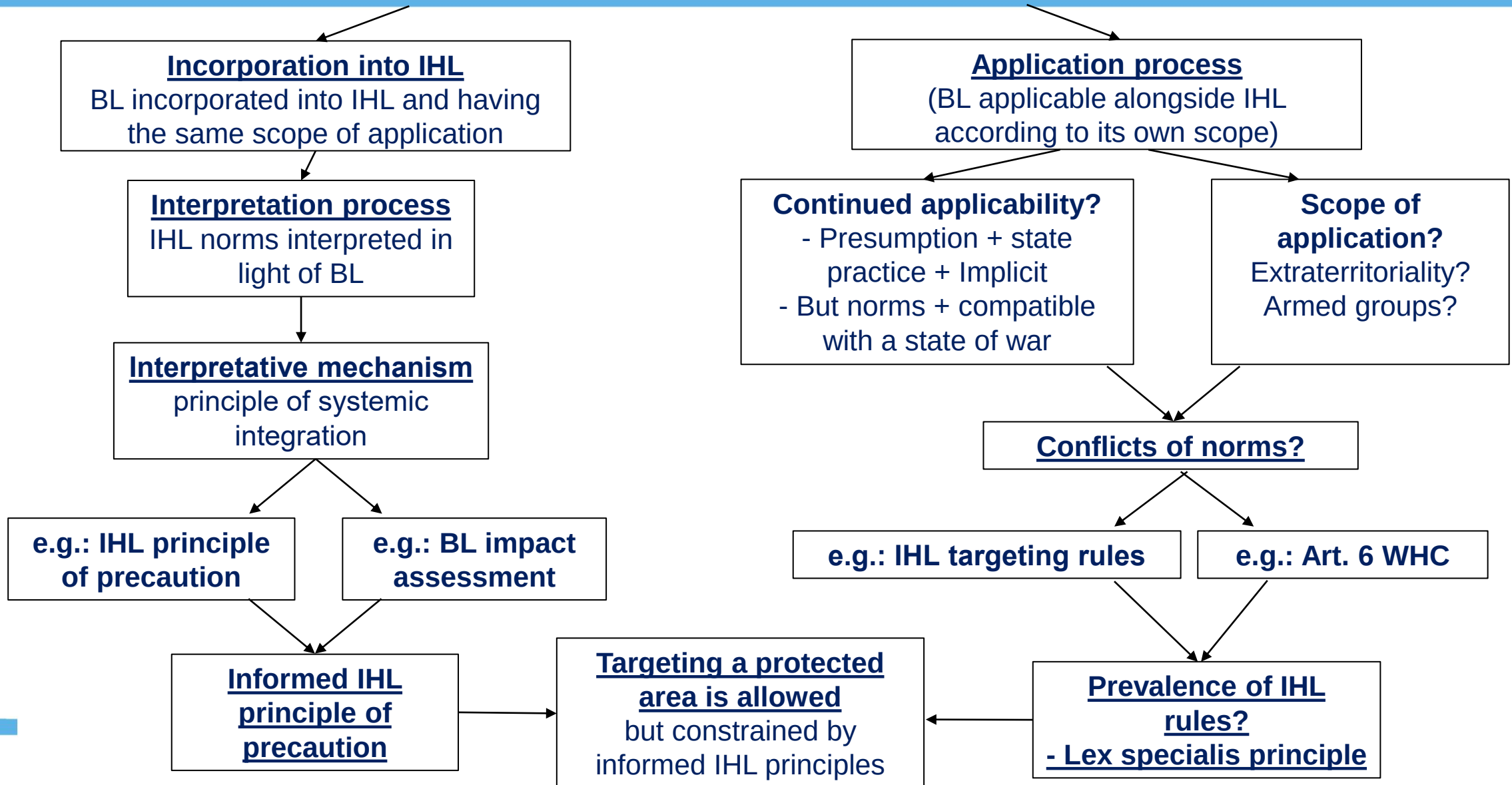
Methodology

Two main processes

1 – Incorporation process through interpretation

2 – Application process

How may biodiversity law (BL) complement IHL?



Presenter's Selected bibliography related to **the interaction between International Environmental Law and International Humanitarian Law**:

Raphaël van Steenberghe, 'The Interplay between International Humanitarian Law and International Environmental Law: Towards a Comprehensive Framework for a Better Protection of the Environment in Armed Conflict' (2023) 20 JICJ 1123.

Raphaël Van Steenberghe, 'International environmental law as a means for enhancing the protection of the environment in warfare: A critical assessment of scholarly theoretical frameworks' (2023) 105 IRRC 1568.

Jérôme de Hemptinne and **Raphaël van Steenberghe**, 'Foreword: The Protection of the Environment During Warfare: An International Environmental Law Perspective' (2023) 20 JICJ 1119.

Contact:

Prof **Raphaël Van Steenberghe**
raphael.vansteenberghe@uclouvain.be

JURI, Place Montesquieu 2/L2.07.01, 1348 Louvain-la-Neuve, Belgium

THE PROTECTION OF **FRAGILE ZONES**

Prof **Jérôme De Hemptinne**
(Speaker)

Assistant Professor
Utrecht University

Researcher
University of Louvain (UCLouvain)

Belgium

Contents

I. WHY IS THIS TOPIC IMPORTANT?

1. Theoretical reasons
2. Practical reasons

II. HOW IHL COULD PROTECT VULNERABLE ECOSYSTEMS?

1. Scope of application
2. Legal nature
3. Legal framework

III. HOW IEL COULD IMPROVE PROTECTION OF VULNERABLE ECOSYSTEMS?

1. Interpretative role: 'environmentalization' of IHL
2. Direct application role: 'humanitarization' of IEL

IV. CONCLUSIVE OBSERVATIONS



I. WHY IS THIS TOPIC IMPORTANT?

1. Theoretical reasons

Illustration of the limits of IHL regarding environmental protection

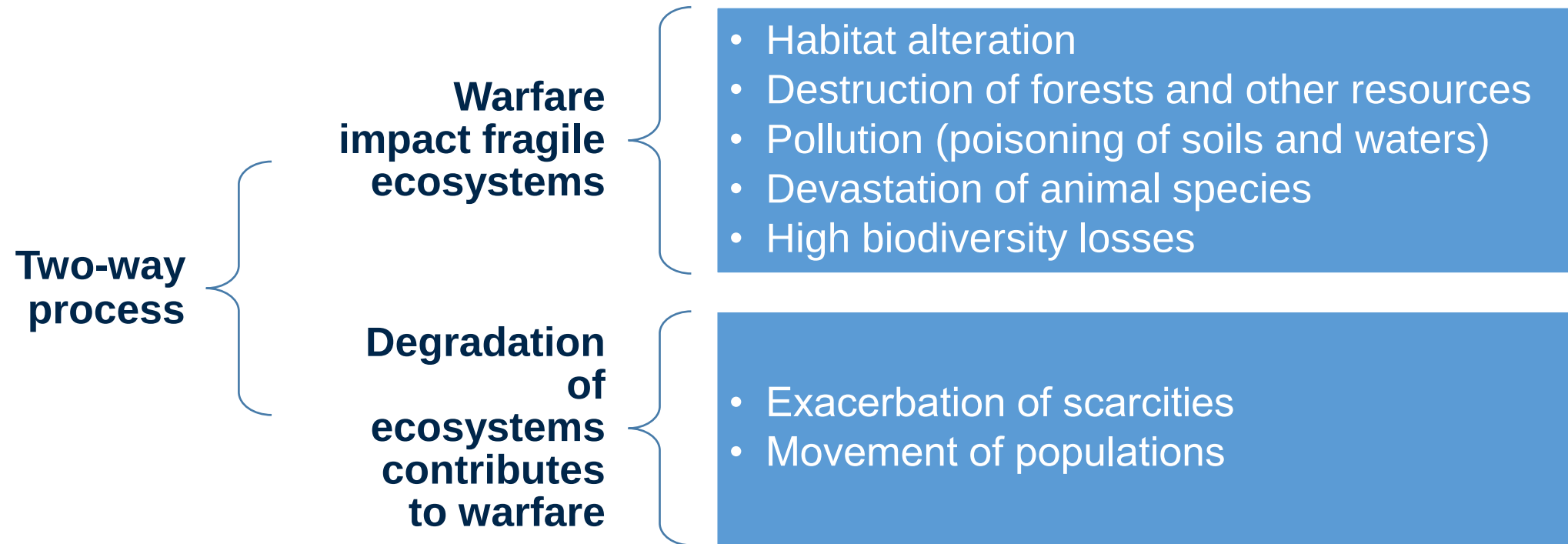
Illustration of the limits of applying IEL during warfare

Illustration of how IHL and IEL could interact through processes of cross-fertilization:

- ° IHL ‘**environmentalization**’
- ° IEL ‘**humanitarization**’



2. Practical reasons



Importance of protected areas (IUCN):

- ‘Protected areas remain the fundamental building blocks of virtually all national and international conservation strategies, supported by governments and international institutions.’
- ‘They provide the core of efforts to protect the world’s threatened species and are increasingly recognized as essential providers of ecosystem services and biological resources; key components in climate change mitigation strategies; and in some cases also vehicles for protecting threatened human communities or sites of great cultural and spiritual value.’
- Several widely ratified IEL instruments contain protected area provisions:
 - [Convention on Biological Diversity](#) (ratified by 196 States) (Art. 8)
 - [Ramsar Convention](#) (ratified by 172 States) (Art. 2)
 - [World Heritage Convention](#) (ratified by 195 States) (Art. 11)

II. HOW IHL COULD PROTECT VULNERABLE ECOSYSTEMS? (Scope of application, legal nature & legal framework)

1. Scope of application

IHL regime of protected zones aims at protecting vulnerable persons:

- wounded and sick members of armed forces ('hospitals and safety zones') (Art. 13 GC I)
- wound and sick civilians ('hospital and safety zones and localities'; 'neutralized zones') (Arts. 14 & 15 GC IV)
- other non-combatant populations ('non-defended localities'; 'demilitarized zones') (Art. 59 & 60 AP I)

IHL regime of protected zones is not designed to protect ecological areas; it could only provide indirect protection to these areas

→ **The general IHL regime of protection of the environment remains in application!!!**

2. Legal nature

In theory:

- No obligation to create protected zones under IHL
- An agreement between belligerents is necessary

In practice:

- When hostilities start belligerents are not keen on negotiating the delimitation and establishment of protected zones
- Before hostilities, identifying the limits of protected zones is complicated by the fact that, by definition, at this early stage, the location of combat operations and of strategic points is still unknown.

→ such zones are rarely created

3. Legal framework

IHL leaves to States (and possibly to armed groups) the entire responsibility of **selecting, delimiting and marking** protected areas (by using a specific sign that must be visibly displayed, especially on their perimeters and limits). [See draft agreements contain in annexes to Geneva Convention I & IV](#)

IHL only proposes a ‘**conservationist approach**’ by which certain areas are completely sealed off from military operations. This mainly entails the respect of the following obligations:

- combatants, weapons and mobile military equipment are removed from these areas
- fixed military installations and establishments are not used within these areas
- acts of hostility do not take place into or in these areas
- any activities in support of military operations are not undertaken in these areas

III. HOW IEL COULD IMPROVE PROTECTION OF VULNERABLE ECOSYSTEMS? (Interpretation & direct application)

1. Interpretative role: 'environmentalization' of IHL

Scope of application:

- IHL has originally been designed to safeguard humans
- Nothing prevents orientating IHL provisions on 'demilitarized zones' and 'non-defended localities' towards more ecological purposes
- These provisions could be interpreted in a **systemic manner** (Art. 31(3)(c) of the Vienna Convention), (that is in light of "other relevant rules of international law applicable in the relations between parties", in particular rules contained in the Biodiversity Convention, the Ramsar Convention and the World Heritage Convention) to create ecological zones



Legal nature:

- Under IHL, there is no obligation to create protected zones.
- However: there is an obligation (Art. 58 AP I; customary law) to take ‘all feasible measures of precaution’ to avoid or minimize collateral damage, including measures of segregation (separation of war-related areas from other (populated) areas)
- The IEL regime (which imposes obligation of conduct to safeguard protected areas) has shown that the only way to effectively safeguard fragile ecosystems is by segregating them from human activities

→ **Interpretated in light of IEL regime, IHL obligation to take ‘all feasible measures of precaution’ could mean automatically segregating them from military activities**

Legal framework

IEL could be used as a source of inspiration when designing IHL zones for:

- Identifying and delimitating protected zones

By using IEL, protected zones could easily be identified and delimited before – or even during – a conflict. Indeed, under several IEL treaties, States are obliged to precisely map and define the perimeters of these zones pursuant to objective criteria ([Art. 8\(a\) Biodiversity Convention](#)), or to ‘listing systems’ ([Art. 2\(1\) & \(4\) Ramsar Convention](#), [Art. 11\(2\) World Heritage Convention](#))

- Conserving and managing protected zones

IEL could also be used to define appropriate measures to conserve and manage protected zones that are adapted to the needs of specific zones

See below

2. Direct application role: 'humanitarization' of IEL

Scope of application:

Temporal scope of application

Principle (ILC): if no specific provision (see [Art. 11\(4\) Word Heritage Convention](#)), environmental instruments keep on applying during warfare

Exceptions: specific provisions incompatible with a state of war. See provisions on good cooperation ([Art. 8\(m\) Biodiversity Convention](#), [Art. 6\(2\) Ramsar Convention](#), [Art. 6\(2\) World Heritage Convention](#))

But: exceptions do not apply:

- in NIAC
- in the relationship with third States
- to incidents which are unrelated to war (damage resulting from industrial activities or from poaching of endangered species?)

2. Direct application role: 'humanitarization' of IEL

Geographical scope of application

Principle: IEL applies within the territorial State

Exception: extraterritorial application of IEL when military operations are conducted abroad? (see extraterritorial applicability of IHL & IHRL: right to adequate standard of living, right to a healthy environment, etc.)

- Full protection (negative & positive obligations of conduct) in case of **occupation** (+ adaptation of local laws)
- Minimal protection (negative & positive obligations of conduct) in case of **invasion**

Personal scope of application

Principle: IEL applies between States

Exception: armed groups that control part of the national territory? (see applicability of IHL & IHRL to armed groups)

Legal nature

Under IHL, no obligation to establish protected areas

Under IEL, obligations limited by a significant caveat: they apply 'as far as possible and as appropriate'

= 'obligations of conduct' (imposing a 'due diligence standard'), rather than 'obligations of result' (guaranteeing a specific outcome without a margin of appreciation).

→ Not purely political nature!!!

Legal framework

Principle: IEL imposes the creation of sophisticated frameworks of management and conservation of protected areas (beyond the IHL conservationist approach) which apply before, during and after armed conflicts (restauration and clean up measures)

This IEL regime must be '**humanitarized**': must accommodate military activities

See IUCN classification system based on management objectives: strict nature reserve and wilderness area, national park, natural monument or feature, habitat or species management area, etc.

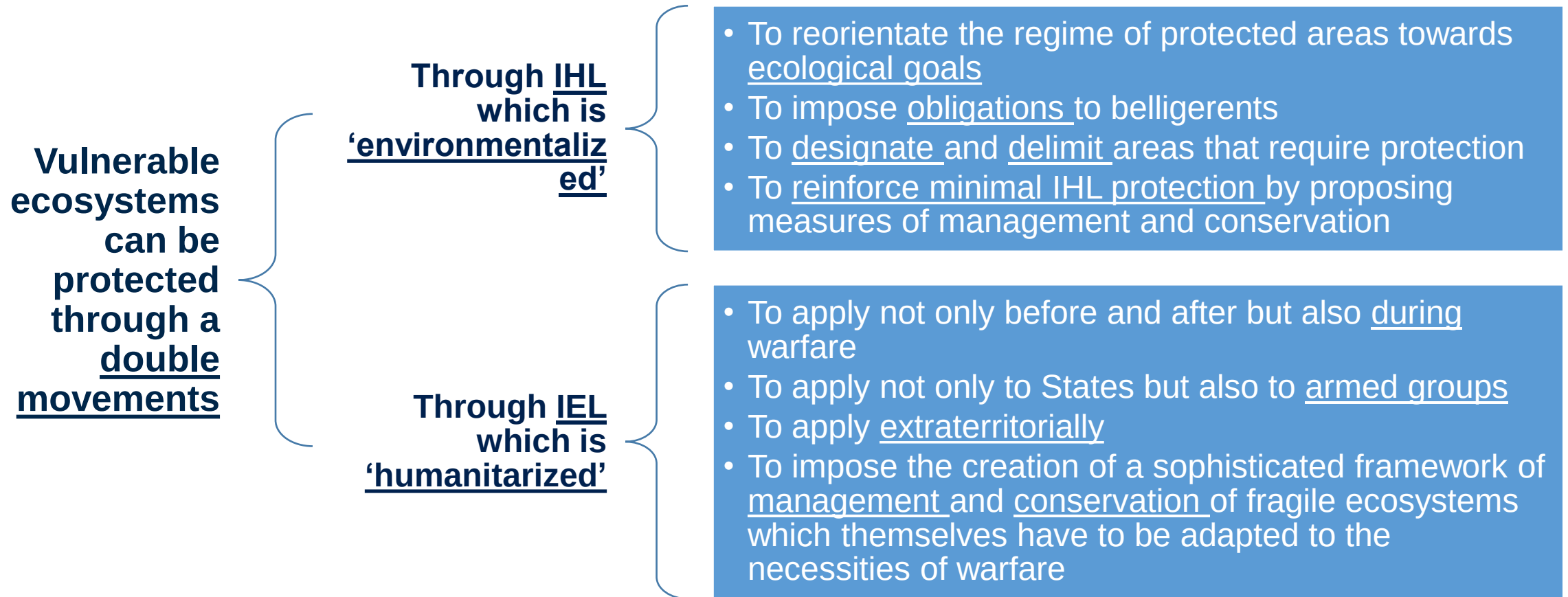
Exception: during warfare, could military operations take place in IEL areas?

→ In theory, contrary to the spirit of IEL conventions (see [Art. 6\(3\) World Convention](#))

→ In practice, States will use force in these areas, especially when armed groups are located therein, or when necessary to protect other interests (preventing trafficking, protecting rangers, etc.)

However: in that case the principles governing conduct of hostilities must be '**environmentalized**': restrictive approach to proportionality, to military objectives and to measures of precaution; decision to attack to be taken at high level of command

IV. CONCLUSIVE OBSERVATIONS



Presenter's Selected bibliography relevant to **Protected Areas**:

Jérôme de Hemptinne, 'Increasing the safeguarding of protected areas threatened by warfare through international environmental law' (2023) 105 IRRC 1392.

Matthew Gillett, 'Animals in Protected Zones'. In Anne Peters, **Jérôme de Hemptinne** and Robert Kolb (eds), *Animals in the International Law of Armed Conflict* (CUP 2022).

Jérôme de Hemptinne, 'Concluding Observations on the Influence of International Environmental Law over International Criminal Law' (2023) 20 JICJ 1287

Jérôme de Hemptinne and Raphaël van Steenberghe, 'Foreword: The Protection of the Environment During Warfare: An International Environmental Law Perspective' (2023) 20 JICJ 1119.

Contact:

Prof **Jérôme de Hemptinne**

jerome.dehemptinne@uclouvain.be

JURI, Place Montesquieu 2/L2.07.01, 1348 Louvain-la-Neuve, Belgium

The Under-recognized Intersection Between Biodiversity Law and International Humanitarian Law within the COP framework

Adv Razy Aman Eddine
(Speaker)

Research Assistant
University of Louvain (UCLouvain)
Belgium

Contents

I. Recognition of Armed Conflict as a Threat to Biodiversity within the COP framework?

II. Challenges Facing the Recognition of Biodiversity Law in Armed Conflict

III. Towards More Effective Recognition of Biodiversity Law in Armed Conflict



I. Recognition of Armed Conflict as a Threat to Biodiversity within the COP framework

Essay

Warfare in Biodiversity Hotspots

THOR HANSON,* THOMAS M. BROOKS,†‡§ GUSTAVO A. B. DA FONSECA,**††
MICHAEL HOFFMANN,‡‡§§ JOHN F. LAMOREUX,‡‡*** GARY MACHLIS,*
CRISTINA G. MITTERMEIER,††† RUSSELL A. MITTERMEIER,† AND JOHN D. PILGRIM‡‡‡

*Human Ecosystems Study Group, University of Idaho, Moscow, ID 83844-1133, U.S.A., email thor@rockisland.com
†Conservation International, 2011 Crystal Drive, Suite 500, Arlington, VA 22202, U.S.A.

take place. The weakening or collapse of sociopolitical frameworks during wartime can lead to habitat destruction and the erosion of conservation policies, but in some cases, may also confer ecological benefits through altered settlement patterns and reduced resource exploitation. Over 90% of the major armed conflicts between 1950 and 2000 occurred within countries containing biodiversity hotspots, and more than 80% took place directly within hotspot areas. Less than one-third of the 34 recognized hotspots escaped significant conflict during this period, and most suffered repeated episodes of violence. This pattern was remarkably consistent over these 5 decades. Evidence from the war-torn Eastern Afrotropical hotspot suggests that biodiversity conservation is improved when international nongovernmental organizations support local protected area staff and remain engaged throughout the conflict. With biodiversity hotspots concentrated in politically volatile regions, the conservation community must maintain continuous involvement during periods of war, and biodiversity conservation should be incorporated into military, reconstruction, and humanitarian programs in the world's conflict zones.

...and period, and most suffered repeated episodes of violence. This pattern was remarkably consistent over these 5 decades. Evidence from the war-torn Eastern Afrotropical hotspot suggests that biodiversity conservation is improved when international nongovernmental organizations support local protected area staff and remain engaged throughout the conflict. With biodiversity hotspots concentrated in politically volatile regions, the conservation community must maintain continuous involvement during periods of war, and biodiversity conservation should be incorporated into military, reconstruction, and humanitarian programs in the world's conflict zones.

Scholar About 20,200 results (0,14 sec)

Warfare in biodiversity hotspots

T Hanson, TM Brooks, GAB Da Fonseca... - Conservation ..., 2009 - Wiley Online Library

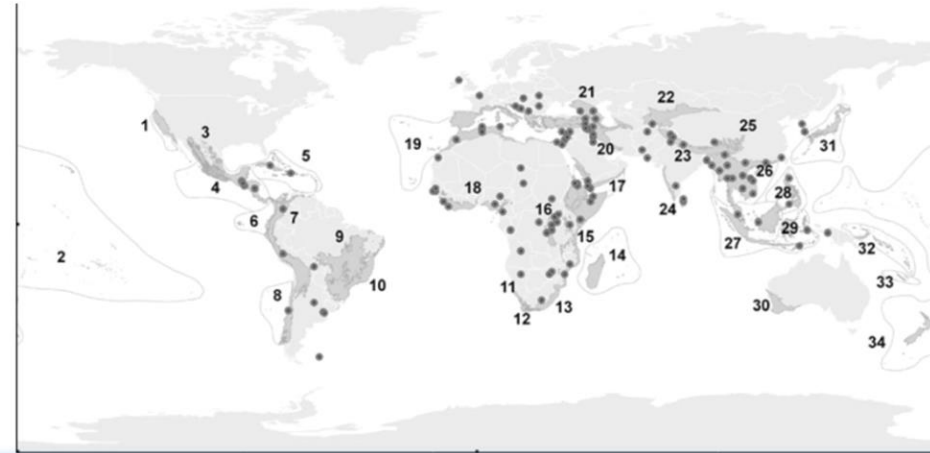
... biodiversity hotspots and the areas of violent conflict from 1950 to 2000 and reviewed the major biodiversity conservation issues associated with warfare... of war in biodiversity hotspots is ...

☆ Save ⓘ Cite Cited by 477 Related articles All 18 versions

Paper submitted March 21, 2008; revised manuscript accepted October 29, 2008.

578

Conservation Biology, Volume 23, No. 3, 578–587



Over 90% of the major armed conflicts between 1950 and 2000 occurred within countries containing biodiversity hotspots

Advancing the Legal Protection for Biodiversity in Armed Conflict 28

CONFERENCE OF THE PARTIES TO THE
CONVENTION ON BIOLOGICAL DIVERSITY
Fifteenth meeting – Part II
Montreal, Canada, 7-19 December 2022
Agenda item 9A

**DECISION ADOPTED BY THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON
BIOLOGICAL DIVERSITY**

15/4. Kunming-Montreal Global Biodiversity Framework

The Conference of the Parties,

*1. Reducing **threats to biodiversity***

TARGET 1: Plan and Manage all Areas To Reduce **Biodiversity Loss**

TARGET 2: Restore 30% of all **Degraded Ecosystems**

TARGET 3: Conserve 30% of **Land, Waters and Seas**

TARGET 4: Halt **Species Extinction**, Protect Genetic Diversity, and Manage **Human-Wildlife Conflicts**

TARGET 5: Ensure Sustainable, Safe and Legal Harvesting and **Trade of Wild Species**

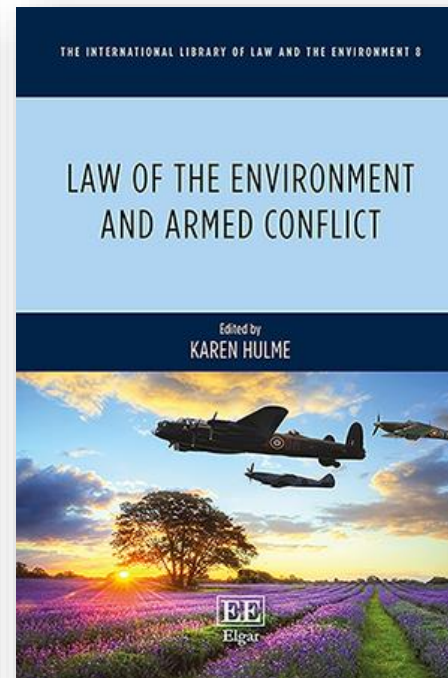
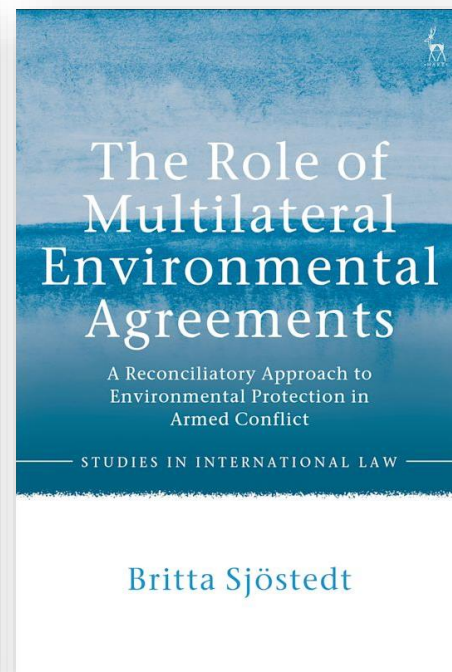
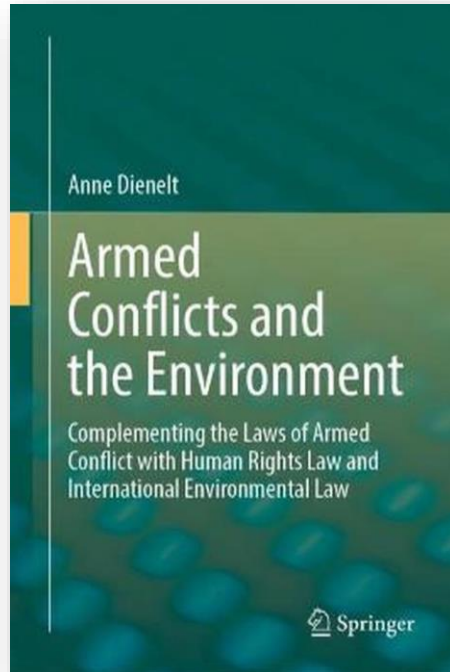
TARGET 6: Reduce the Introduction of **Invasive Alien Species** by 50% and Minimize Their Impact

TARGET 7: Reduce **Pollution** to Levels That Are Not Harmful to Biodiversity

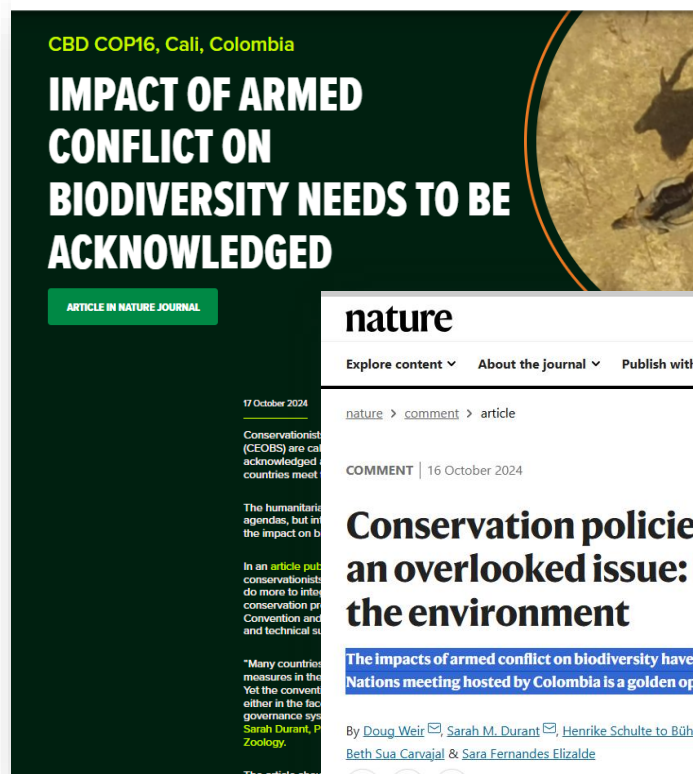
While not explicitly listed among the ‘**threats to biodiversity**’ (Targets 1–7) of Kunming-Montreal Framework, it relates to almost all other threats

Welcoming the submissions by Parties, other Governments, indigenous peoples and local communities, United Nations organizations and programmes, other multilateral environmental agreements,

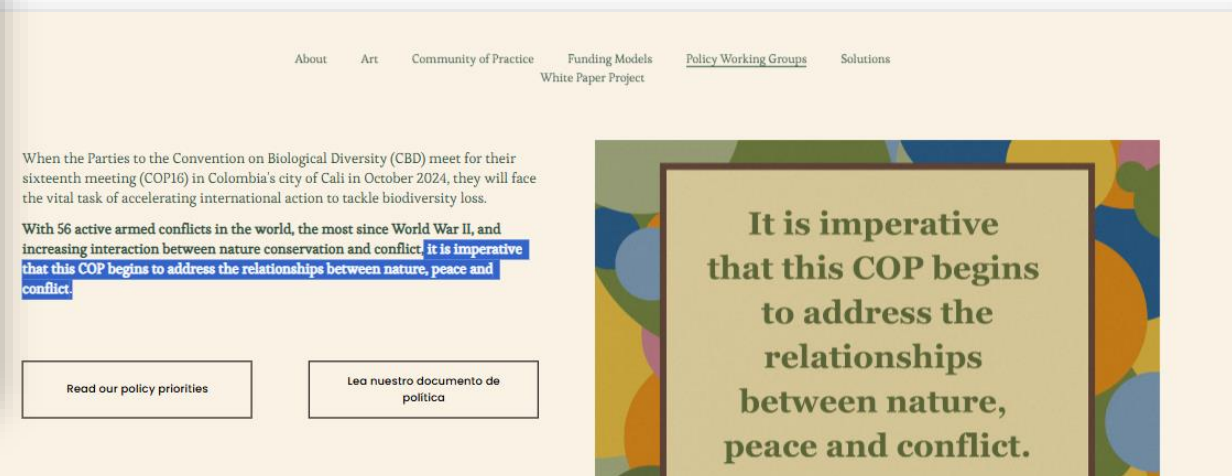
¹ <https://www.cbd.int/conferences/post2020>



With many **academics** thoroughly analysing the protection of the environment in armed conflict

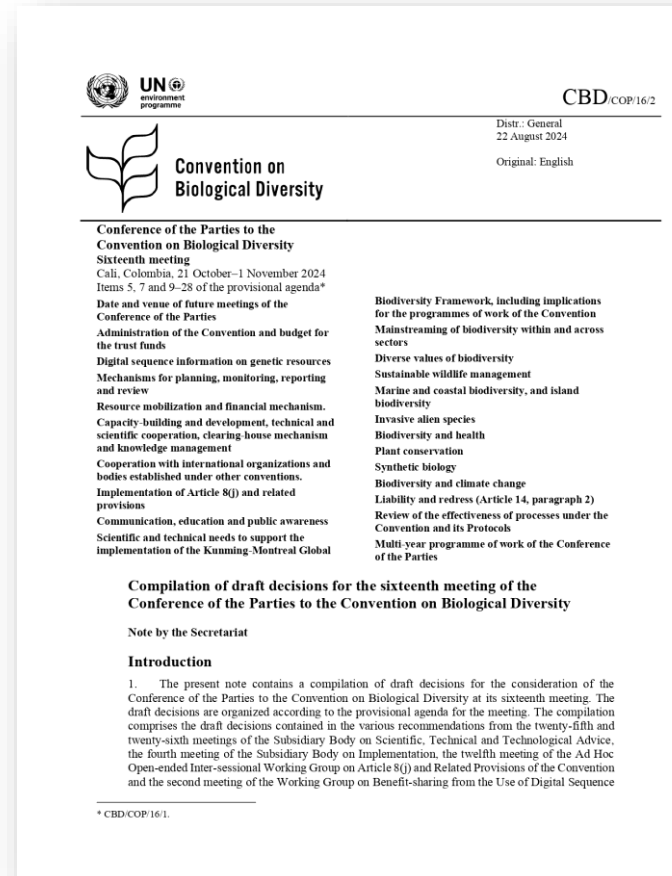


And many activists have recently called once again for bringing the discussion on the impact of armed conflict into **COP 16...**



... but COP 16 agenda makes no mention to armed conflict

... and very rare decisions have raised the topic within the past 15 COPs



CBD/COP/16/2	
<i>Contents</i>	
Items 1 to 4 and 6.....	4
Item 5. Date and venue of future meetings of the Conference of the Parties.....	4
Item 7. Administration of the Convention and budget for the trust funds.....	5
Item 8. Progress on the preparation of targets and updating of national biodiversity strategies and action plans by Parties in line with the Kunming-Montreal Global Biodiversity Framework.....	7
Item 9. Digital sequence information on genetic resources.....	8
Item 10. Mechanisms for planning, monitoring, reporting and review.....	17
Item 11. Resource mobilization and financial mechanism.....	66
Item 12. Capacity-building and development, technical and scientific cooperation, clearing-house mechanism and knowledge management.....	99
Item 13. Cooperation with international organizations and bodies established under other conventions.....	129
Item 14. Implementation of Article 8(j) and related provisions.....	134
Item 15. Communication, education and public awareness.....	152
Item 16. Scientific and technical needs to support the implementation of the Kunming-Montreal Global Biodiversity Framework, including implications for the programmes of work of the Convention.....	163
Item 17. Mainstreaming of biodiversity within and across sectors.....	169
Item 18. Diverse values of biodiversity.....	172
Item 19. Sustainable wildlife management.....	178
Item 20. Marine and coastal biodiversity and island biodiversity.....	181
Item 21. Invasive alien species.....	196
Item 22. Biodiversity and health.....	221
Item 23. Plant conservation.....	245
Item 24. Synthetic biology.....	256
Item 25. Biodiversity and climate change.....	261
Item 26. Liability and redress (Article 14, paragraph 2).....	266
Item 27. Review of the effectiveness of processes under the Convention and its Protocols.....	267
Item 28. Multi-year programme of work of the Conference of the Parties.....	273
Items 29 to 31.....	276

II. Challenges Facing the Recognition of Biodiversity Law in Armed Conflict within the COP framework

- 1. General lack of political willingness to acknowledge restrictions in State's capacity to 'do war'**

**For
instance...**

“The environmental consequences of conflicts have never been more visible and the global biodiversity crisis makes it imperative that we act to reduce and mitigate them,” said Doug Weir, Director at CEOBS.

“Historically, governments have been reluctant to consider peace and security issues in environmental talks, but that is a luxury that a growing number of countries and ecosystems simply cannot afford.”

Zoological Society of London

More generally...

States & armed forces “are generally reluctant to officially take a position [that] this could tie their hands...”

_ Sassoli 2024, p. 71

II. Challenges Facing the Recognition of Biodiversity Law in Armed Conflict within the COP framework

1. General lack of political willingness to acknowledge restrictions in State's capacity to 'do war'
2. **Lack of normative recognition of the application of environmental law instruments in armed conflict**

Under IHL

PART III METHODS AND MEANS OF WARFARE COMBATANT AND PRISONER-OF-WAR STATUS

SECTION I METHODS AND MEANS OF WARFARE

Article 35 — Basic rules

1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.
2. It is prohibited to employ weapons, projectiles and material and meth-

Article 35 — Basic rules

1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.
2. It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering.
3. It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.

that confidence, shall constitute perfidy. The following acts are examples of perfidy:

- a) the feigning of an intent to negotiate under a flag of truce or of a surrender;
- b) the feigning of an incapacitation by wounds or sickness;
- c) the feigning of civilian, non-combatant status; and
- d) the feigning of protected status by the use of signs, emblems or uniforms of the United Nations or of neutral or other States not Parties to the conflict.

Article 55 — Protection of the natural environment

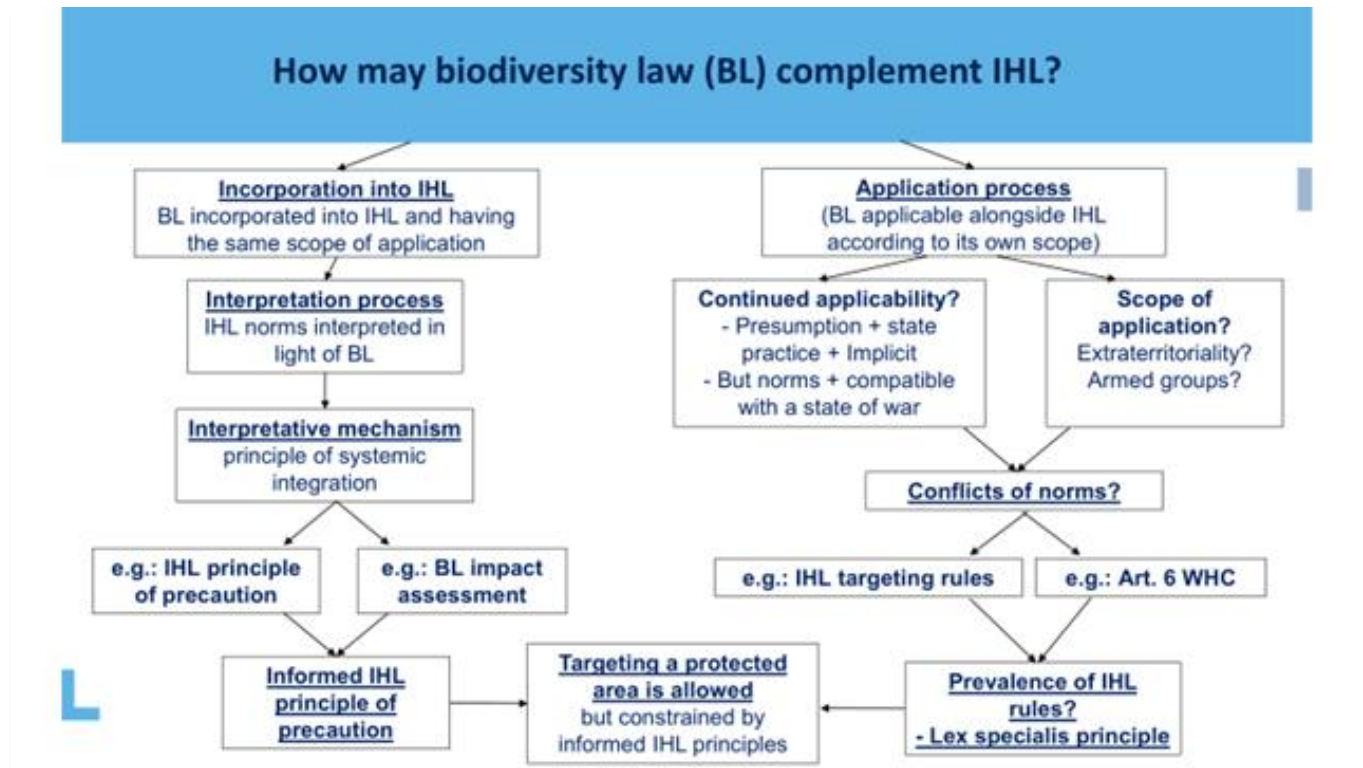
1. Care shall be taken in warfare to protect the natural environment against

Article 55 — Protection of the natural environment

1. Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.
2. Attacks against the natural environment by way of reprisals are prohibited.

the environment at large does warrant protection under from damage of a certain threshold of scale, duration & severity (See articles 35 & 55 of Additional Protocol I to the 1949 Geneva Conventions)

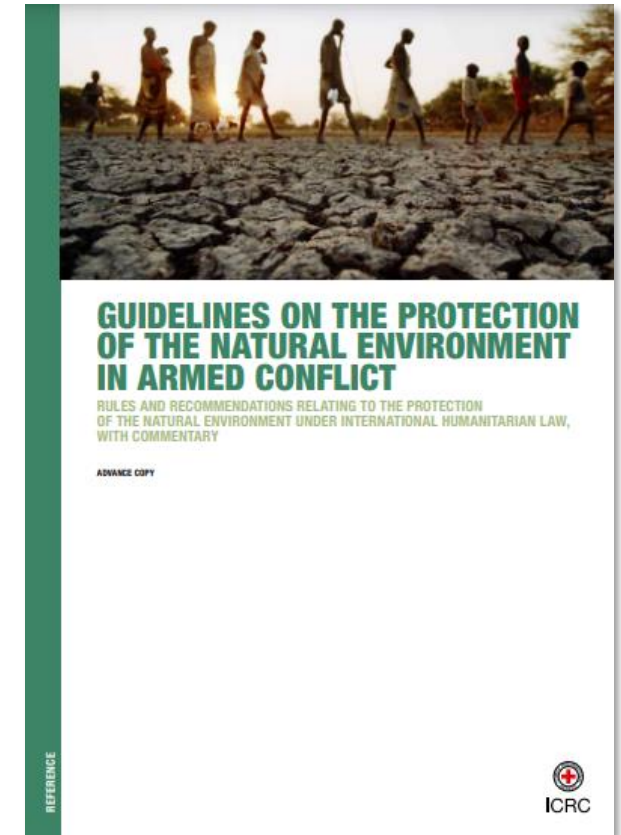
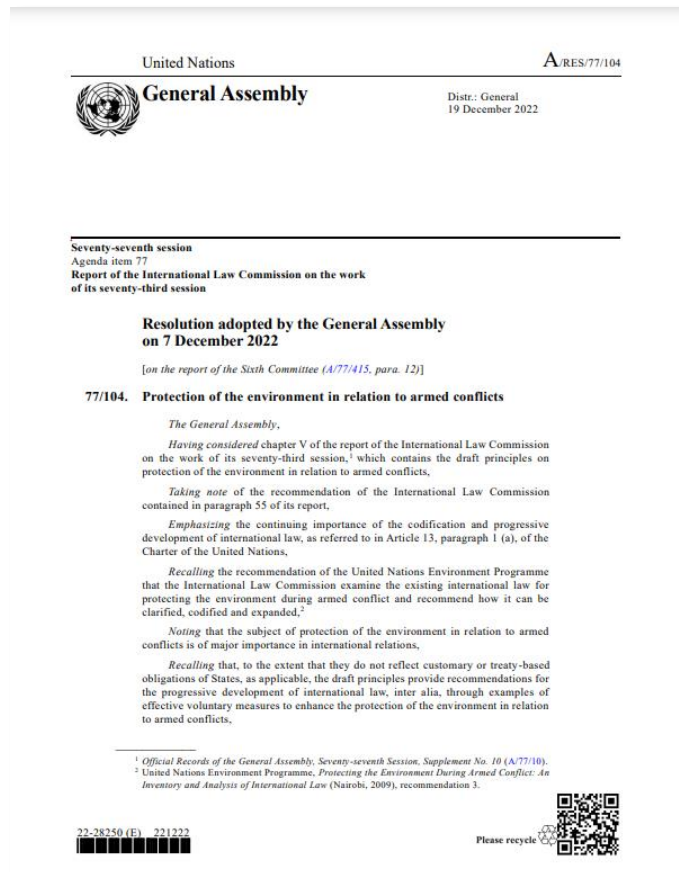
...yet the previously
analysed extent to
which biodiversity law
can complement IHL
remains
underacknowledged,
underexplored, and
underrecognized



For
instance...

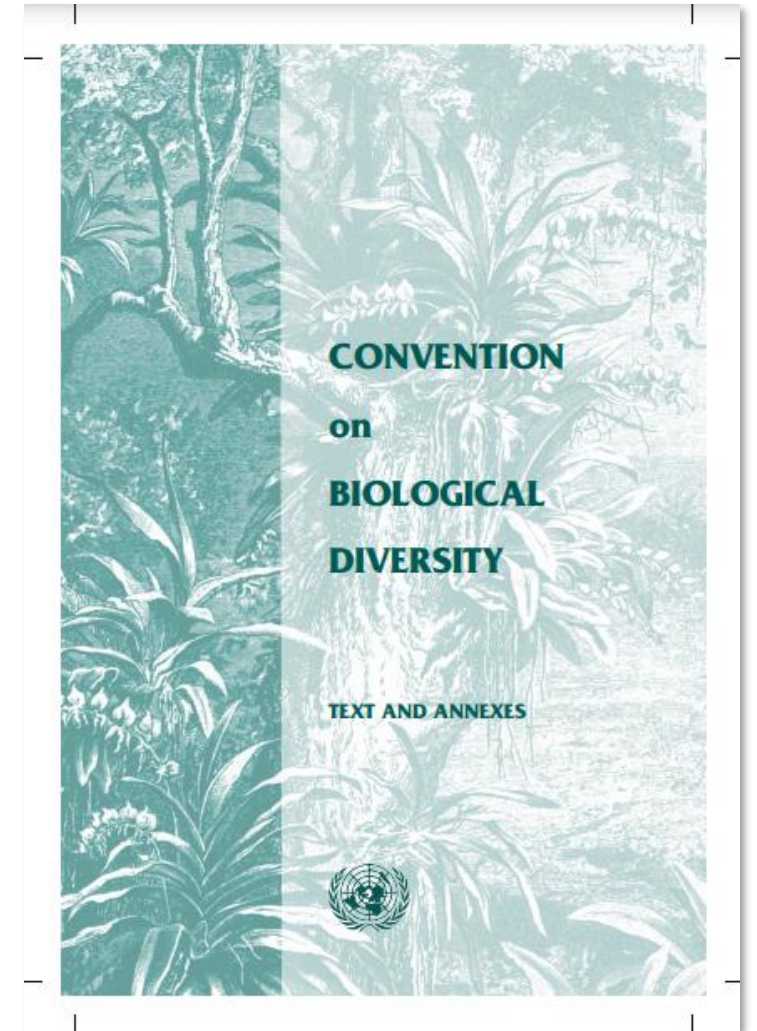
First issues in 1994, the International Committee of the Red Cross (ICRC)'s guidelines were revisited in 2020, containing rules & recommendations **deriving mainly from international humanitarian law**

Similarly, the PERAC principles, adopted by the International Law Commission (ILC) in August 2022, and welcomed by the General Assembly in December 2022, **derive mainly from international humanitarian law**



Meanwhile...

Instruments like the Convention on Biological Diversity, like many others, might lack a clear application clause in armed conflicts...



In fact...

...the scope of the Convention on Biological Diversity may extend beyond its previously defined methodology, meriting thorough still ongoing debate in our research group...

Convention on Biological Diversity

Article
22

RELATIONSHIP WITH OTHER INTERNATIONAL CONVENTIONS

1. The provisions of this Convention shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity.
2. Contracting Parties shall implement this Convention with respect to the marine environment consistently with the rights and obligations of States under the law of the sea.

CONVENTION
on

Article
22

RELATIONSHIP WITH OTHER INTERNATIONAL CONVENTIONS

1. The provisions of this Convention shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity.
2. Contracting Parties shall implement this Convention with respect to the marine environment consistently with the rights and obligations of States under the law of the sea.

Article

17

II. Challenges Facing the Recognition of Biodiversity Law in Armed Conflict within the COP framework

1. General lack of political willingness to acknowledge restrictions in State's capacity to 'do war'
2. Lack of normative recognition of the application of environmental law instruments in armed conflict
3. **Limited capacity among military personnel to understand and implement international environmental and biodiversity laws**

III. Towards More Effective Recognition of Biodiversity Law in Armed Conflict

As such,

The International Law of Armed Conflict team at UCLouvain is preparing an edited volume titled

Practitioner's Guide to the Protection of Biodiversity in Armed Conflict



III. Towards More Effective Recognition of Biodiversity Law in Armed Conflict

The Guide is structured around this set of coherent, synergetic but multidisciplinary rules, tailored to address distinct phases of conflict: preparatory measures, protection during hostilities, and post-conflict obligations.

Its scope is more focused than previous instruments, addressing the protection of biodiversity in particular in armed conflict (as opposed to the general notion of the natural environment—per the ICRC Guide, or the potentially even broader notion of the environment—per the ILC articles)...



III. Towards More Effective Recognition of Biodiversity Law in Armed Conflict

...Nonetheless, its methodology more broadly introduces international environmental law, and the institutionalized biodiversity law, into the interface of analysis..

So far, we have around **25 researchers** from a diverse array of disciplines, geographical locations, and different career stages. The project is expected for completion in 2026 in advance of **COP 17**, and we aim that by clarifying in a practitioner-oriented manner the rules deriving from international environmental law, complementing the law of armed conflict in the aforementioned methodology, this guide would address many of the key challenges towards the recognition of biodiversity protection in armed conflict.



Selected recent bibliography of **key relevance** to the Guide:

International Law Commission, 'Protection of the environment in relation to armed conflicts' (2022) 73 ILC Report 90 UN Doc A/77/10.

International Committee of the Red Cross, *Guidelines on the Protection of the Natural Environment in Armed Conflict* (Advance Copy, ICRC 2020).

Anne Dienelt, *Armed conflicts and the environment: complementing the laws of armed conflict with human rights law and international environmental law* (Springer Nature 2022).

Karen Hulme, *Law of the Environment and Armed Conflict* (EE 2017).

Britta Sjöstedt, *The Role of Multilateral Environmental Agreements: A Reconciliatory Approach to Environmental Protection in Armed Conflict* (Routledge 2016).

Contact the project's coordinator for collaboration, feedback, and to follow its progress:

Adv Razy Aman Eddine

razy.amaneddine@uclouvain.be

JURI, Place Montesquieu 2/L2.07.01, 1348 Louvain-la-Neuve, Belgium

The Protection of Freshwater Ecosystems in Armed Conflict

Dr **Mara Tignino**
(Discussant)

Senior Lecturer
Faculty of Law of the University of Geneva
Switzerland

Background

Freshwater ecosystems are protected under the Biodiversity Convention, the Ramsar Convention on Wetlands and the World Heritage Convention.

E.g.: The delta of the Danube river shared by Ukraine and Romaine is the example of an area protected under the three Conventions.

Consideration should be made not only to the situation of armed conflict, but its pre-phase and post-conflict phase.

See: International Law Commission's Principles on the Protection of the Environment in Relation to Armed Conflicts of 2022 (PERAC Principles).



- Freshwater ecosystems contribute to the provision of food, clean water and food for local communities. The life of many communities, especially indigenous peoples, is dependent on the resources coming from freshwater ecosystems.
- In 2023, IUCN released the first comprehensive assessment of the world's freshwater fish species, revealing that 25% of freshwater species are at risk of extinction. This can be a heavy burden for local communities. Biodiversity and climate change are closely interconnected in this regard. In fact, threatened freshwater fish species are affected by climate change. Decreasing water levels, rising sea levels bringing seawater up to the rivers, increasing variability in seasons and the rising number of dams all affect fish species in rivers and lakes.

Current armed conflicts heavily impact biodiversity

The armed conflict in Ukraine is impacting biodiversity through a range of both direct and indirect means. Landmines and explosive ordnance are creating risks that will last for decades. The biodiversity of Ukraine is very rich including 70,000 species and many of them are rare. Ukraine has 50 wetlands of international importance, protected under the Ramsar Convention, and eight UNESCO Biosphere reserves. Ukraine is also rich of transboundary areas of ecological importance which go across Ukraine's borders, including the Danube Delta, the Dniester basin and the Carpathians mountains.

Environmental impact assessment and precaution within biodiversity protection in armed conflicts

In peacetime, the principles of impact assessment and precaution play a significant role when a State plans economic activities on an international watercourse or a transboundary lake which may affect biodiversity.

The riparian country developing a project, must notify the project to other riparian countries which risk to be affected by a project. Such assessment must contain the technical information necessary to assess the effect of a project by the riparian countries which risk to be affected by a project.

- For example, the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses provides a detailed procedure on notification and affirms that “technical data and information available” should include the results of the environmental impact study.
- The 2010 ruling of the International Court of Justice relating to *Pulp Mills on the River Uruguay* (Argentina v. Uruguay) established the customary nature of obligation to conduct an environmental impact study.
- The environmental assessment technique allows the prevention of uncertain environmental damage. The environmental assessment procedure is based on the precautionary principle, which implies that the absence of scientific certainty does not constitute a sufficient reason to refrain from taking measures aimed at avoiding causing potentially serious or irreversible damage to freshwater habitats and fish species protected under the Biodiversity Convention.

Impact assessment and minimizing adverse impacts within the Convention on Biological Diversity

Article 14 of the Biodiversity Convention requires that States parties introduce environmental impact assessment procedures of proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects.

While this provision was drafted with peaceful scenarios in mind, it may become also relevant before, during and after armed conflicts.

Before an armed conflict...

The duty to develop environmental impact assessment procedures and the principle of precaution can contribute to decrease the risks of conflicts. In particular, the inclusion of local communities in environmental impacts assessment procedures and decision-making processes give the possibility to indigenous communities to include their concerns and local knowledge. Environmental impact procedures give the opportunity to indigenous communities to underline how a project may affect or risk to affect habitats and species which are indispensable to their survival. The participation of local communities and indigenous people help in decreasing the risks of conflicts at the domestic level but also at the transboundary level. In the case of projects with transboundary impacts, the Biodiversity Convention encourage the conclusion of bilateral, regional or multilateral arrangements. It also clearly establishes the duties of notification, exchange of information and consultation for the activities which are likely to significantly affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction.



During an armed conflict...

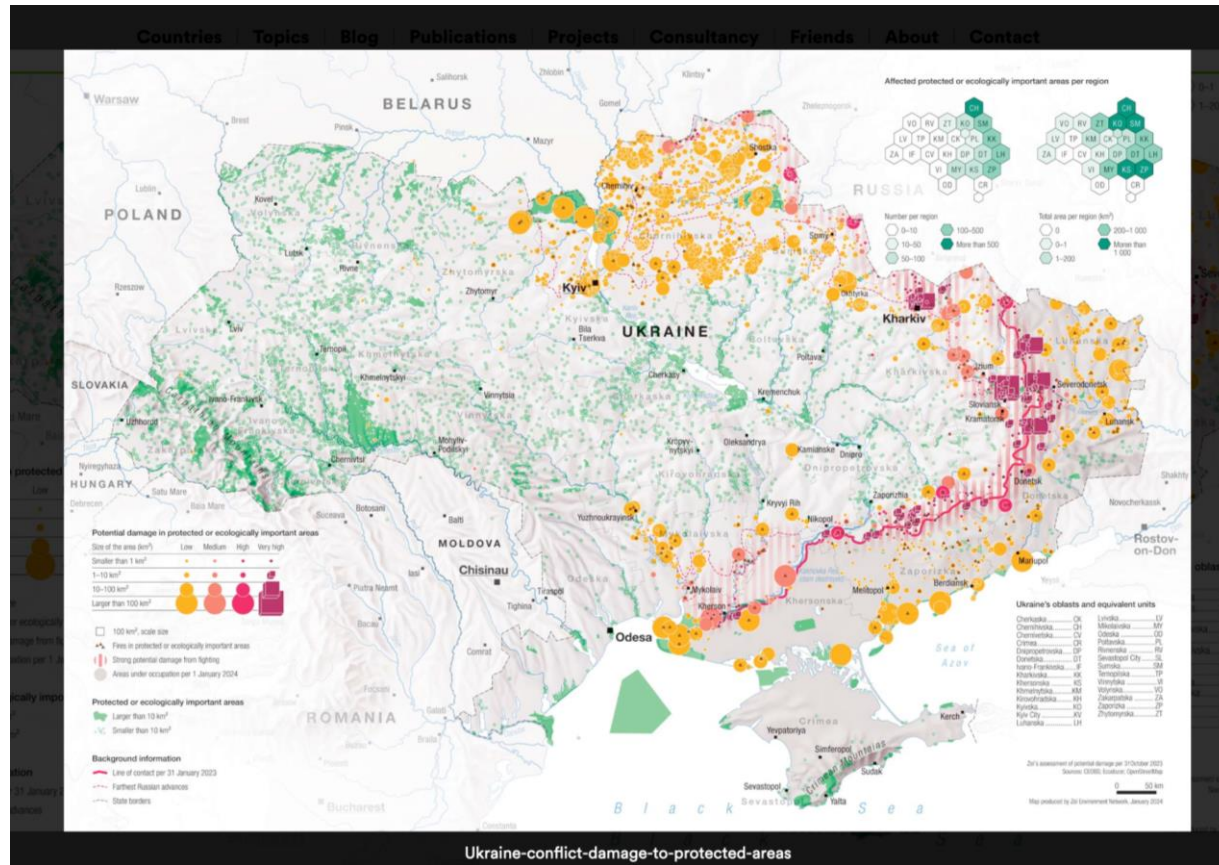
environmental factors need to be included in proportionality assessments carried out by military forces. Precautions measures need also to consider the environment. As already indicated by the International Court of Justice in the 1990s, the environment is not external to the rules on the conduct of hostilities. Biodiversity, or the nature in a larger sense, is in principle a civilian object and must not be attacked. When freshwater ecosystems, or particular elements of the nature such as a forest or a river used for the transport of military troops, meet the criteria of a military objective, there is not a unrestricted license to attack them. The prohibitions against indiscriminate and disproportionate attacks, and the rules on precautions in attack and against the effects of attack must be taken into account by the parties to an armed conflict. In the case of impact to the natural environment caused by a unlawful or lawful military attack, there is also a strict prohibition not to use methods or means of warfare “that are intended, or may be expected, to cause widespread, long-term and severe damage”. Moreover, a party to an armed conflict must not use biodiversity resources, as a weapon and deprive, intentionally or unintentionally, indigenous communities of essential natural resources.

After an armed conflict...

I think there the Biodiversity Convention can really make the difference providing that the Conference of the Parties has the right to make recommendations on the issue of liability and redress, including restoration and compensation, for damage to biological diversity. The COP on Biodiversity could develop guidelines on the issue of international responsibility of States who have caused or are causing damage to the biodiversity because of direct or indirect damage to the nature. For example, in the case of the armed conflict in Ukraine, the COP could help in developing a mechanism for restoration and compensation for the damage caused by the explosion of the Nova Kavokha dam or the negative impacts caused to the natural reserves in the Donetsk and Luhansk oblasts. The image below of the Conflict and Environment Observatory gives an overview of the potential damage in protected or ecologically protected areas in Ukraine.



Recent example...



The rich biodiversity of Ukraine is heavily impacted by the current armed conflict. The loss of species and habitats will be in many cases permanent. While the extent of the harm caused by military operations is still unclear, the development of restoration mechanisms of biodiversity should be a priority for the economic recovery of Ukraine.

Available at: <https://ceobs.org/ukraine-conflict-environmental-briefing-nature/>

For further consideration:

To what extent can the Biodiversity COP address compensation for environmental damage?

Climate change is often mentioned as a potential trigger for conflict, what about biodiversity? To what extent can threats to biodiversity may trigger conflicts?

To what extent can the duty to carry out an environmental impact assessment and precaution play a role before, during and after an armed conflict?

Presenter's selected bibliography related to **the protection of freshwater ecosystems in armed conflict**:

Mara Tignino, Tadesse Kebebew, 'The Legal Protection of Freshwater Resources and Related Installations during Warfare' (2023) 20 JICJ 1191.

Mara Tignino, *Water During and After Armed Conflicts: What Protection in International Law?* (Brill 2022).

Mara Tignino, *L'eau et la guerre: éléments pour un régime juridique* (Bruylant 2022).

Mara Tignino, Britta Sjöstedt, *Water Protection and Armed Conflicts in International Law* (2020) 29 RECIEL.

Mara Tignino, *The Geneva List of Principles on the Protection of Water Infrastructure: An Assessment and the Way Forward* (Brill 2020).

Contact:

Dr Mara Tignino

mara.tignino@unige.ch

Boulevard du Pont-d'Arve 40, 1211 Genève 4, Switzerland

Advancing the Legal Protection for Biodiversity in Armed Conflict

Biodiversity Law & Governance Day

during CoP 16 to the Convention on Biological Diversity

Saturday, 26 October 2024

MANY THANKS!!

to the organizers at the Centre for International Sustainable Development Law, the International Law Association & the academic collaborators

Prof Raphaël Van Steenberghe

Prof Jérôme de Hemptinne

Adv Razy Aman Eddine

Dr Mara Tignino

 uclouvain.be/fr/instituts-recherche/juri/cedie

 [@EDICA UCLouvain](https://www.linkedin.com/company/EDICA-UCLouvain)