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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

30th meeting
Strasbourg, 6-9 December 2010

EUROPEAN CHARTER
ON RECREATIONAL FISHING AND BIODIVERSITY

- Final -

*Document prepared by
Mr Scott Brainerd*

The Standing Committee is invited :

- To examine, and possible adopt the draft recommendation concerning the draft charter
- In the context of the examination above to discuss whether to incorporate in the Charter the 2 Principles set out in the Appendix:
 - Principle 7: ensure that harvest is properly utilised and wastage avoided
 - Principle 10: minimise avoidable suffering.

EUROPEAN CHARTER ON RECREATIONAL FISHING AND BIODIVERSITY

- Final-

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30 September 2010

1. INTRODUCTION

1.1 Recreational angling in Europe

Fishing is an age-old activity throughout Europe and the world. Originally a form of subsistence and sustenance for early Europeans, it has evolved over time into an important consumptive activity with both commercial and recreational aspects. For the purposes of this document, we will focus only on recreational fishing, which precludes any form of commercial marketing of the catch (see Appendix 3.1 for definition¹). A variety of gear and methods are used in recreational fishing including hook and line (i.e. angling), long-lines, nets, pots, traps, projectile fishing, hand fishing and "pêche à pied".²

Recreational fishing (and particularly angling) is an important activity in Europe, with positive societal, economic and environmental effects. Angling is the best documented form of recreational fishing, and it was estimated in 2003, that there were at least 25 million recreational anglers in Europe^{3,4}. It was estimated that 8-10 million went saltwater fishing and more than 20 million went fresh-water fishing.⁵ In 2006 it was estimated that spending on equipment, fees, lodging and travel amounted to 19 billion Euros⁶ in the EU27. The total number of recreational fishers in the expanded EU and European Economic Zone, and their spending are likely to exceed these estimates appreciably. In comparison, the commercial fishing industry in Europe generated 37 billion Euros in 2003⁴. The European Fishing Tackle Trade Association (EFTTA) estimated that over 5 billion Euros were expended on tackle trade and manufacturing in Europe alone, with ~52,000 jobs directly or indirectly benefited by this expenditure⁷. With the inclusion of local tackle shops EFTTA estimates that ca. 99,000 jobs depend on tackle manufacturing and sales in Europe⁸.

It should be noted, however, that while the economic potential of recreational fisheries is considerable, this aspect is not always appreciated or understood by political decision makers. There is therefore a pressing need for more socio-economic data on the recreational fishing sector in Europe to enable Member States to fulfill their obligations with regard to the Common Fisheries Policy⁹. Data are also needed as part of the valuing of ecosystems and ecosystem services, which was made a key component of the post-2010 strategy. It is believed that monetary figures will help

¹ See Appendix 3.1 for definition of terms used in this document.

² It should be noted that some national and EU legislation does not clearly distinguish between recreational and other kinds of fishing. One example is the EU's revised Control Regulation COUNCIL REGULATION (EC) No 1224/2009 of 20 November 2009 (Art 55), "recreational fisheries" and the definitions in Art 4(28). Some countries allow sales of fish from certain non-licensed fisheries. This is arguably a violation of EU legislation, which equates recreational fisheries with non-commercial fisheries (Art 4(8)). The "marketing" of catches from these fisheries is prohibited (Art 55(2)). Demarcation between recreational and commercial fishing gear is likewise unclear.

³ http://www.eaa-europe.org/fileadmin/templates/eea/docs/Nautilus-paper_Jan2003_EN.PDF

⁴ <http://www.eaa-europe.org/index.php?id=14>

⁵ http://ec.europa.eu/maritimeaffairs/pdf/greenpaper_brochure_en.pdf

⁶ Kenward, R. and Sharp, S. 2008. Use Nationally of Wildlife Resources across Europe (UNWIRE). Pp. 117-123 in Manos, B. & Papathanasiou, J. GEMCONBIO: Governance and Ecosystem Management for Conservation of Biodiversity. Aristotle University of Thessaloniki, Greece (EC FP6 Contract #028827).

⁷ Cowx, I. G. & Arlinghaus, R. 2008 Recreational fisheries in the 21st century: towards a Code of Conduct. Pp. 338-351 *In* Aas, O. (ed) Global Challenges in Recreational Fisheries. Wiley-Blackwell. 376 pp.

⁸ <http://www.facenatura2000.net/conference%202009/2.10.Kappel.pdf>

⁹ http://ec.europa.eu/fisheries/cfp_en.htm

increase popular recognition of the value of biodiversity and healthy ecosystems, which is crucial to create the political will for action¹⁰.

In 2000, Austria successfully tested a design by European Anglers Alliance (EAA) for socio-economic survey across all Europe's sea and freshwater recreational fisheries, RECFISH¹¹. More recently, "Methodologies for assessing socio-economic benefits of European inland recreational fisheries", were endorsed by the European Inland Fisheries and Aquaculture Commission (EIFAC) at its 26th session in Zagreb, Croatia, in May 2010¹². However, funding is currently lacking for a pan-European series of surveys necessary to monitor trends over time and regions.

Most European countries have instituted freshwater license programs and about half of coastal countries have also introduced saltwater fishing licenses. Freshwater fishing in particular is regulated extensively in most European countries¹³. License fees are used, to varying degrees, by government agencies to fund management and conservation activities related to recreational fishing. However, some of these fees are sometimes used for other purposes to which recreational fishers generally object¹⁴. License schemes vary from one country to another; in many countries recreational fishing organisations are represented on special boards that decide how these funds should be allocated. In the Netherlands, the government has delegated the authority to sell freshwater fishing licenses to the national angling association¹⁵. Such schemes arguably provide greater incentive for recreational fishers to buy licenses that directly benefit their organisations and activities.

1.2 The Bern Convention and its relevance to recreational fishing

The Convention on the Conservation of European Wildlife and Natural Habitats (hereafter referred to as the Bern Convention¹⁶) was signed in Bern, Switzerland in 1979 and came into force on 1 June 1982. It aims to conserve wild flora and fauna species (including fish) within States, and emphasises the need for cooperation in the conservation of species and habitats across national borders, with emphasis on endangered and vulnerable species (including migrants) and their habitats. Its 50 Contracting Parties have committed themselves to enact appropriate legislation and administrative measures for the conservation of the indigenous species of fauna and flora and their habitats. The Bern Convention is the primary international treaty governing biodiversity conservation and management in Europe, and provides the foundations for this *Charter*. Articles 7 and 8 of the Bern Convention even allow for the exploitation of protected species listed in Annex III after taking into consideration some specific requirements. It is also notable that banned killing methods mentioned in Annex IV under "freshwater fish" and "crayfish" apply to commercial as well as recreational fishing.

The Birds¹⁷ and Habitats¹⁸ Directives of the EU provide a legal framework within which the provisions of the Bern Convention are enshrined¹⁹. These Directives fully recognise the legitimacy of the consumptive and recreational use of fish and other wildlife species, while regulating these activities to certain species and provides a legal framework for the management of hunting and fishing to be implemented through Member States legislation. Use of fish stocks and wildlife resources, if conducted in a sustainable manner, can positively contribute to the conservation of wild populations and their habitats.

¹⁰ <http://www.eea.europa.eu/pressroom/speeches/trends-and-future-outlook-for-europe2019s-biodiversity>

¹¹ RECFISH presentation on the EAA website: <http://www.eaa-europe.eu/index.php?id=20>

Pioneer survey for Austria in year 2000 (sample size: 5.492): See slide 14 onwards:

<http://www.ebcd.org/Maritime%20Affairs/MARINE%20TOURISM/presentations/EAA.pdf>

¹² Parkkila, K. Arlinghaus, R. Artell, J. Gentner, B.; Haider, W. Aas, Ø. Barton, D.; Roth, E. & Sipponen, M. Methodologies for assessing socio-economic benefits of European inland recreational fisheries. EIFAC Occasional Paper No. 46. Ankara, Turkey, FAO. 2010. 108p.

¹³ Pers. Comm.. Jan Kappel, European Angler's Alliance.

¹⁴ e.g. Portuguese saltwater fishing license funds that are used to supplement the pensions of commercial fishers.

¹⁵ <http://www.sportvisserij nederland.nl/vispas/english/>

¹⁶ <http://conventions.coe.int/Treaty/en/Treaties/Html/104.htm>

¹⁷ http://europa.eu/legislation_summaries/environment/nature_and_biodiversity/128046_en.htm

¹⁸ http://europa.eu/legislation_summaries/environment/nature_and_biodiversity/128076_en.htm

¹⁹ <http://conventions.coe.int/Treaty/FR/Treaties/Word/104-4.doc>

1.3 The need to protect aquatic ecosystems

Protection of ecosystems, habitats and species is essential to ensure the future of sustainable recreational fishing in Europe. Anthropogenic activities can negatively impact aquatic systems and their biodiversity in a variety of ways. These include 1) dramatic changes in water regime; 2) heavy man-made modifications (dams, weirs, canalisation, etc.) which cause habitat loss, fragment waterways or adversely regulate flow; 3) invasions of exotic species²⁰ (including parasites and diseases); 4) climate change; 5) industrial and agricultural pollution including pesticides and herbicides, acid rain, and radioactivity; 6) certain “unsustainable” fishing gear and practices including discard of non-target bycatch of recreational value, as well as dredging and other forms of substrate disturbance; and 7) navigation effects (traffic, pollution, disturbance).

The Water Framework Directive or WFD (*Directive 2000/60/EC*)²¹ together with the Habitat and Bird Directives, including NATURA 2000 are legislative primary drivers for the protection and restoration of aquatic biological diversity in Europe. The WFD sets ambitious goals to be met by year 2015. Annex 5 of the WFD sets criteria for achieving ‘Good ecological status’ and specifies monitoring requirements for habitat and species protection areas in all water bodies. River basin management plans and related programmes or measures are the main tools for achieving the objectives of the WFD.

1.4 Sustainability principles

The definition of sustainable development was formulated by the World Commission on Environment and Development Conference in 1987. It was endorsed under Agenda 21 at the World Summit on Sustainable Development in Rio in 1992, which also launched the Convention on Biological Diversity (CBD). The overall aim of the EU Sustainable Development Strategy, as renewed in 2006²², is “to identify and develop actions to enable the EU to achieve continuous improvement of quality of life both for current and for future generations, through the creation of sustainable communities able to manage and use resources efficiently and to tap the ecological and social innovation potential of the economy, ensuring prosperity, environmental protection and social cohesion”.

Recreational fishing trends are increasing or stable in most European countries^{4,6}. Thus, well managed European recreational fisheries qualify as a sustainable development, an overarching objective of the Treaty of the EU. Nevertheless, although recreational fishing can use ecosystem services less intensively and more diversely than e.g. fish-farming²³ and commercial fishing, there is a need to ensure that all forms of recreational fishing, both by local residents and by tourists, are sustainable relative to ecological, economic, and socio-cultural considerations.

Progress in Europe towards sustainable development must also be viewed in a global context. The Council of Europe member states and EU member states are all Contracting Parties of the Convention on Biological Diversity (CBD). The CBD’s overall objective is to encourage actions which will lead to a sustainable future.²⁴ It has three main goals: conservation of biodiversity; sustainable use of biodiversity; fair and equitable sharing of the benefits arising from the use of genetic resources. Sustainable use of the components of biological diversity is included in 13 of 19 substantive articles. In Articles 1 and 10 of the CBD, the conservation and sustainable use of biological diversity are clearly emphasized as central objectives.

The IUCN developed a Sustainable Use Initiative to help implement the CBD. Following a Policy Statement in 2000: “*The use of wild living resources, if sustainable, is an important conservation tool because the social and economic benefits derived from such use provide incentives for people to conserve them*”, which was adopted at its 2nd World Conservation Congress in 2000,

²⁰ DAISIE, 2009. Handbook of Alien Species in Europe. Invading nature – DAISIE — Springer Series in Invasion Ecology, Vol.3. Springer, Dordrecht, 2009.

²¹ http://ec.europa.eu/environment/water/water-framework/index_en.html

²² <http://register.consilium.europa.eu/pdf/en/06/st10/st10117.en06.pdf>

²³ Kenward, R. E., & Garcia-Cidad, V. 2005. Innovative approaches to sustainable use of biodiversity and landscape in the farmed countryside. Pp 565-589 in UNEP High-Level Pan-European Conference on Agriculture and Biodiversity, Council of Europe, Strasbourg, France.

²⁴ CBD fact sheet <http://www.cbd.int/iyb/doc/prints/factsheets/iyb-cbd-factsheet-cbd-en.pdf>

IUCN arranged regional workshops in Mozambique, Vietnam and Ecuador. These led to a synthesis workshop in Addis Ababa, Ethiopia, after which the 7th CBD Conference of the Parties (COP) in 2004 adopted the [Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity \(AAPG\)](#)²⁵. AAPG were also formally recognised by CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora²⁶) in 2004, at its 13th COP, and in 2006 adopted by the 3rd Meeting of Parties to the African-Eurasian Waterbird Agreement (AEWA).

The AAPG are based on the assumption that it is possible to use biodiversity in a manner in which ecological processes, species and genetic variability remain above the thresholds needed for long-term viability, and that all resource managers and users have the responsibility to ensure that such use does not exceed these capacities. The AAPG emphasise the crucial need for the maintenance and/or recovery of biodiversity in ecosystems to ensure the long-term sustainability of ecological services upon which both biodiversity and people depend. Users and managers at all geographical and institutional levels are encouraged in AAPG to adapt the cross-cutting principles and guidelines pragmatically to best fit local circumstances.

In a parallel process, a Workshop on the Ecosystem Approach held in Malawi during 1998 identified twelve principles/characteristics for managing biodiversity at an ecosystem level, seeking to achieve a satisfactory balance between conservation and development. These “*Malawi Principles for the Ecosystem Approach (MPEA)*”²⁷ were also confirmed at the CBD 7th COP, noting their strong cross-linkage to AAPG. They advocate integrated management of land, water and living resources for promoting the conservation and sustainable use in an equitable way, recognising that humans and their diverse cultures are an integral part of ecosystems.

The AAPG and MPEA can be summarised together as recommendations for:

1. *Supportive and linked governance at all levels with harmonised regulations that promote societal benefits from conservation and avoid perverse effects.*
2. *Avoidance of adverse impacts within or between ecosystems and of short-termism, especially when faced with inevitable change.*
3. *Transparent and adaptive management along a use-protection continuum, based on interdisciplinary science, monitoring and timely feedbacks.*
4. *Encouragement of economic/cultural incentives with sharing of benefits (and costs) especially at the local level, while avoiding waste.*
5. *Decentralisation of management to an appropriate bio-economic scale, especially to empower, hold accountable and access knowledge of local people.*
6. *Education, awareness and inclusion of managers, resource users, and society at large.*

As will be seen, the AAPG and MPEA form the basis of the Principles and Guidelines in section 2 of this document.

1.5 Recreational fishing as a tool for biodiversity conservation

Clearly, the recreational fisheries sector in Europe benefits people as a resource for food, and through providing many cultural ecosystem services, including recreation, education, social and aesthetic pleasures, as well as contributing to provisioning services and motivating maintenance of the supporting and regulating services of ecosystems²⁸. Sustainably managed recreational fishing also can contribute to the conservation of biodiversity, the preservation of rural lifestyles and local economies. In this context recreational fishing can provide strong incentives for conservation through use of biodiversity *sensu* CBD²⁹.

²⁵ <http://www.biodiv.org/doc/publications/addis-gdl-en.pdf> (see Appendix 3.2)

²⁶ <http://www.cites.org/>

²⁷ <http://www.biodiv.org/doc/meetings/cop/cop-04/information/cop-04-inf-09-en.pdf> (see Appendix 3.3)

²⁸ Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Synthesis. Island Press, Washington, DC.

²⁹ <http://www.cbd.int;> <http://www.fao.org/docrep/005/v9878e/v9878e00.HTM>

Aquatic biodiversity is threatened by a wide array of factors. In particular for freshwater and some coastal waters anthropogenic disturbance seems to be the main cause for the decline and extirpation of many aquatic species. In freshwater recreational fisheries non-fishing influences have had, and continue to have, the most dramatic impact on the quality of the recreational fishing experience and fish stocks^{30 31}.

In June 2010 the CBD secretariat released the third *Global Biodiversity Outlook*. The report shows that the nations of the world have individually and collectively failed to meet the 2010 biodiversity target. The five main global drivers of biodiversity loss have not only remained more or less constant over the last decade, but are in some cases intensifying. These drivers include habitat loss, the unsustainable use and overexploitation of resources, climate change, invasive alien species, and point source and diffuse pollution.

The loss of biodiversity continues, as illustrated, by the fact that the nations of the world have individually and collectively failed to meet the 2010 biodiversity target. The COP to the CBD met in Nagoya, Japan in October and adopted a “post-2010” Strategic Plan of the Convention for the period 2011-2020. The plan includes a 2050 biodiversity vision as well as a 2020 biodiversity target and sub-targets. Recently the European Environmental Agency (EEA) emphasized the need for individual Europeans to become engaged in halting the loss of biodiversity³². Communities and individuals must act if nations are to succeed in meeting the 2020 deadline and sub-targets.

Recreational fishers directly contribute to the conservation, enhancement and protection of biodiversity (i.e. fish stocks) and their habitats locally and regionally. They have been at the forefront of many conservation and management efforts regarding fish and aquatic systems in Europe and elsewhere for decades³³. More than 6 million Europeans belong to local angling club and/or a national angling organisation. At the European level, there are ca. 3 million anglers affiliated with the EAA³⁴. Together, these organisations and individuals do much to promote the conservation of fish and their habitats, as well as to develop and promote best practices. These local organisations provide a huge force of volunteers that actively engage in the conservation and restoration of fish stocks and aquatic habitats every year. For example, in 2004 volunteers contributed 900,000 volunteer-days to conservation measures related to fishing in Sweden³⁵.

Recreational fishers have also been instrumental, through their representative organisations, in influencing national legislation pertaining to freshwater conservation in some countries, or fought legal actions against environmental pollution^{36, 37}. Since recreational fishers are numerous in most countries, they provide an important societal sensitivity to issues regarding the health of freshwater ecosystems which is essential for an ecosystem approach to fisheries management and sustainability³⁸.

In rare cases, recreational fishing practices (such as long-lining and gill netting) often in combination with commercial and subsistence fisheries, may be unsustainable when unregulated or

³¹ Cowx, I. G. & Arlinghaus, R. 2008 Recreational fisheries in the 21st century: towards a Code of Conduct. Pp. 338-351 *In* Aas, O. (ed) *Global Challenges in Recreational Fisheries*. Wiley-Blackwell. 376 pp.

³² <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/646&format=HTML&aged=0&language=EN&guiLanguage=en>

³³ Kearney R.E. 1999. Evaluating recreational fishing: Managing perceptions and/or reality. In T.J. Pitcher ed. *Evaluating the benefits of recreational fisheries*. Vancouver, Canada, The Fisheries Centre. pp. 9-14. Arlinghaus, R., & Cooke, S. J. 2009. *Recreational fishing: socio-economic importance, conservation and management*. Dickson, B., Hutton, J. and Adams, W. M. (eds) 2009: *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice*. Blackwell Publishing, 39-58.

³⁴ <http://www.eaa-europe.eu/>

³⁵ <https://www.fiskeriverket.se/sidorutanformenyn/fritidsfiske/fritidsfiske/faktaomfritidsfiske.4.323810fc116f29ea95a80002924.html>

³⁶ Bate, R. 2001. *Saving our streams: the role of the Angler's Conservation Association in Protecting English and Welsh Rivers*. The Institute of Economic Affairs and Profile Books, London.

³⁷ Kirchhofer, A. 2002. The role of legislation, institutions and policy making in fish conservation in Switzerland: past, present and future challenges. In *Conservation of Freshwater Fish: Options for the Future*, eds. Collare-Pereira, M. J., Cowx, I. G., & Coelho, M. M., pp 389-401. Blackwell Science, Oxford.

³⁸ Arlinghaus, R. 2006. Overcoming human obstacles to conservation of recreational fishery resources, with emphasis on Europe. *Environmental Conservation* 33:46-59.

improperly regulated, with notable negative consequences for biodiversity^{39 40 41}. Stocking and/or translocations of non-native fish species (or in some cases hatchery reared native fish species) can directly and negatively affect native fish stocks and aquatic systems through introduction of exotic competitors, predators, diseases and/or parasites. Likewise, removal of fish can adversely influence age and size structure and/or reduce genetic diversity. High fishing mortality can contribute to the collapse of recreational fisheries, and indirectly impact other species, terrestrial and aquatic, through changes in trophic cascades. Human activities in the aquatic environment (including but not restricted to recreational fishing) may adversely impact ecosystems or their components through habitat modifications, nutrient inputs, pollution and trash.

Development in the recreational sector and its interaction with non-fishery-related nature conservation objectives for aquatic biodiversity has the potential to generate conflict. However, a SWOT analysis (2010)⁴² concluded that reconciliation of recreational fisheries and modern conservation perspectives is both possible and desirable as the fisheries quality most often benefits from the address of many conservation problems. To this end sound proposals are needed that will maintain and enhance recreational fisheries while fulfilling important functions for conservation of aquatic biodiversity.

1.6 Ensuring best practises

Over time, management of recreational fisheries in Europe has evolved from that of merely maximizing user benefits to that of conserving fish stocks, addressing user conflicts, as well as incorporating biodiversity, protection and fish welfare issues. There is increasing recognition that recreational fishing constitutes a significant use of inland fisheries in Europe⁴³, and as such, needs to be practiced in a sustainable manner.

The European Inland Fisheries and Aquaculture Commission (EIFAC) of the United Nations Food and Agriculture Organisation (FAO) was established in 1957 with a core mandate of providing advice on recreational fisheries management and sustainable development in Europe. Currently, EIFAC is comprised of 34 member countries. Due to the magnitude of recreational fishing in Europe, and its perceived ecological and socio-economic value, EIFAC produced a Code of Practice for Recreational Fisheries (*CoP*)⁴⁴. The *EIFAC CoP* was created with the participation of all key recreational fisheries stakeholders in the European region. This was deemed necessary to address the growing demand for an international agreement on good practice in recreational fisheries.

The *EIFAC CoP* describes the minimum standards of environmentally-friendly, ethically-appropriate and – depending on local situations – socially-acceptable recreational fishing and its management. In addition to General Principles (Article 4), the *CoP* contains detailed framework of guidelines pertaining to environmental stewardship and ethics (Article 5), Policy and Institutional Frameworks (Article 6), Compliance and Enforcement (Article 7), Recreational Fishing Practices (Article 8), Fish Welfare (Article 9), Stakeholder Interactions (Article 10), Management (Article 11), Research (Article 12), and Awareness, Education and Training (Article 13).

³⁹ Lewin, W.-C., Arlinghaus, R., & Mehner, T. 2006. Documented and Potential Biological Impacts of Recreational Fishing: Insights for Management and Conservation. *Reviews in Fisheries Science* 14:305–367.

⁴⁰ Lewin, W.-C., McPhee, D., Arlinghaus, R. 2008. Biological impacts of recreational fishing resulting from exploitation, stocking and introduction. In: Aas, Ø., Arlinghaus, R., Ditton, R. B., Policansky, D., Schramm, H.L., Jr., eds., *Global Challenges in Recreational Fisheries*. Blackwell Science, Oxford, 75-92.

⁴¹ Arlinghaus, R., I.G. Cowx. 2008. Meaning and relevance of the ecosystem approach to recreational fisheries management: emphasis on the human dimension. In: Aas, Ø., Arlinghaus, R., Ditton, R. B., Policansky, D., Schramm, H.L., Jr., eds., *Global Challenges in Recreational Fisheries*. Blackwell Science, Oxford, 56-74.

⁴² "Harmonizing recreational fisheries and conservation objectives for aquatic biodiversity in inland waters"; I.G. Cowx, R. Arlinghaus and S. J. Cooke (in press)

⁴³ Arlinghaus, R., and Cooke, S. J. 2009. Recreational fishing: socio-economic importance, conservation and management. Dickson, B., Hutton, J. and Adams, W, M. (eds) 2009: *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice*. Blackwell Publishing, 39-58.

⁴⁴ <http://www.fao.org/docrep/012/i0363e/i0363e00.htm>

In 2008, the *CoP* was endorsed by the 25th session of the EIFAC in Turkey, and is currently being promoted and disseminated by the EIFAC member countries. The *CoP* is based, in part, upon the Code of Conduct for Responsible Fisheries adopted by the FAO Conference on 31 October 1995⁴⁵. This FAO Code of Conduct established non-binding principles and standards applicable to conservation, management and development of fisheries worldwide.

Sustainable use is internationally recognised as a significant tool for the management and conservation of biodiversity⁴⁶. Recreational fishing must therefore be sustainable not only in terms of the ecological environment, but also from the standpoints of economics and socio-cultural acceptance. The long-term viability of recreational fishing as an activity is, indeed, dependent upon it being sustainable in all ways.

1.7 The need for a *Charter on Recreational Fishing and Biodiversity*

This document follows on the 2007 *European Charter on Hunting and Biodiversity*⁴⁷ adopted by the Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979) in November 2007. Through Recommendation No. 128 (2007) “on the *European Charter on Hunting and Biodiversity*”⁴⁸, States Party to the Bern Convention were asked to take into consideration the *European Charter on Hunting and Biodiversity* “and apply its principles in the elaboration and implementation of their hunting policies so as to ensure that hunting is carried out in a sustainable way”. In 2009 they agreed to complement it with a similar instrument to cover recreational fishing activities. The Programme of Activities of the Bern Convention for 2010 therefore included the “Preparation of a Charter complementary to the 2007 *European Charter on Hunting and Biodiversity*, providing Parties with principles and guidelines for sustainable angling activities”.

To this end, the Standing Committee of the Bern Convention decided to create an ‘Ad Hoc Working Group for the Elaboration of a European Charter on Angling and Biodiversity’, with the participation of representatives of Parties to the Convention as well as observer organisations (and including the FAO’s European Inland Fisheries Advisory Commission; the European Angler’s Alliance; the European Angler’s Forum; the European Fishing Tackle Trade Association; the Federation of Associations for Hunting and Conservation of the EU; the International Union for Conservation of Nature; and the French National Fishing Association). The Working Group met at the Council of Europe headquarters in Strasbourg, on 9 April 2010⁴⁹, to review a first draft of the new European Charter. The mandate of the Working Group was to prepare a draft Charter on Angling and Biodiversity for submission to the next meeting of the Standing Committee to be held on 6-10 December 2010. During these discussions it was decided to expand the scope to include all forms of recreational fishing, recognizing that angling is the most widespread form. The present document is the result of the discussions and contributions from the members of the Working Group, as well as from Parties that could not be present at that meeting.

The principles and the approach of the *European Charter on Hunting and Biodiversity* and this document are equally applicable to the governance of other consumptive and non-consumptive uses of biodiversity. The IUCN recognized this at the *World Conservation Congress* at its 4th Session in Barcelona, Spain in October 2008. In its resolution (WWC RES 4.032: *Trust Building for Biodiversity Conservation and Sustainable Use in line with the European Charter on Hunting and Biodiversity*), the IUCN encourages further cooperation between the COE, governments and other stakeholders to prepare guidelines under the same principles for new European charters to promote conservation through sustainable use of other components of biodiversity. Existing global and European policies and rules address many central tenets with relevance to recreational fishing in Europe.

⁴⁵ <http://www.fao.org/fishery/ccrf/en>

⁴⁶ http://intranet.iucn.org/webfiles/doc/SSC/SSCwebsite/Policy_statements/The_IUCN_Policy_Statement_on_Sustainable_Use_of_Wild_Living_Resources.pdf

⁴⁷ Published in the “Nature and Environment” series of the Council of Europe, No. 150, Strasbourg, July 2008.

⁴⁸ See at: http://www.coe.int/t/dg4/cultureheritage/nature/WCD/Rec2007_en.asp#

⁴⁹ See the report of the meeting: doc T-PVS (2010)4, of 13 April 2010.

1.8 Scope

This *European Charter on Recreational Fishing and Biodiversity* (hereafter referred to as the *Charter*) addresses fishing as a recreational form of utilisation and management of freshwater and diadromous fish species in Europe, in accordance with the provisions of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979).

1.9 Purpose

The main aim of the Bern Convention is the conservation of wild fauna associated natural habitats. Fishers can contribute to the fulfilment of this aim through regulating fish populations and caring for their habitats, assisting in monitoring and research, and raising public awareness for conservation issues. Thus, recreational fishers and their activities have an important role to play in the conservation of biodiversity.

This *Charter* provides a non-binding set of guidelines for recreational fishers, fishing tour operators, regulators and managers which address common principles and good practices for sustainable recreational fishing in Europe. These principles and guidelines also aim to help fulfil the commitments of European States on conservation through use of components of biodiversity as laid down in the CBD, as advised by the *AAPG*⁵⁰ (see Appendix 3.2) and the *Malawi Principles for the Ecosystem Approach*⁵¹ (see Appendix 3.3).

The principles and guidelines contained herein are meant to compliment and supplement those laid down in the *EIFAC CoP* with an emphasis on biodiversity conservation. There is considerable intentional overlap between the *EIFAC CoP* and the Principles and Guidelines in this *Charter*.

By adopting this *Charter*, the Bern Convention formally recognizes and promotes sustainable recreational fishing as a legitimate use of fish resources and as an important tool in biodiversity conservation.

1.10 Goals

The *Charter* promotes principles and guidelines intended to ensure that recreational fishing in Europe is practiced in a sustainable manner, with a positive contribution to the conservation of biodiversity and the needs of society, including life quality.

1.11 Objectives

The Charter:

- Provides a set of non-binding principles and guidelines for sustainable recreational fishing (including recreational fishing tourism) within the context of conservation of biodiversity;
- Encourages recreational fisher involvement in monitoring, management, and research efforts directed towards stewardship and the conservation of fish and their habitats;
- Promotes forms of recreational fishing tourism that are sustainable and non-detrimental to biodiversity, while providing local communities with socio-economic incentives to conserve and manage native fish and their habitats;
- Promotes cooperation between recreational fishers and other stakeholders in the conservation and management of biodiversity.
- Encourages recreational fisher education, awareness and information measures;
- Promotes best practices to ensure the socio-cultural, economic and ecological sustainability of recreational fishing in the long term.

⁵⁰ <http://www.biodiv.org/doc/publications/addis-gdl-en.pdf>

⁵¹ <http://www.biodiv.org/doc/meetings/cop/cop-04/information/cop-04-inf-09-en.pdf>

EUROPEAN CHARTER ON ANGLING AND BIODIVERSITY

2. PRINCIPLES AND GUIDELINES

The principles and guidelines in this Charter address the role of recreational fishing in the management and conservation of biodiversity. These broad principles include all 12 principles from MPEA (M1-12) and 14 from AAPG (A1-14) grouped into social, ecological and economic focal areas and combinations of these (see Appendix 3.4). These recommendations, which contain the essence of the MPEA and the AAPG, provide a fundament for conserving biodiversity through fishing and other uses of wild resources. They are based upon the internationally accepted standards of sustainability, as well as the *EIFAC CoP*, and are to be treated as advisory and non-binding in nature.

2.1 Principle 1: Favour multi-level governance that maximises benefit for conservation and society.

2.1.1 *Rationale*:

Decisions of importance to habitats and species are influenced by regulatory and financial incentives at several levels, as well as by cultural and social factors. Policies affecting these factors need to be established at the most appropriate geographical level and to remain flexible, in order to accommodate different biological, economic and social conditions and to accommodate adaptive management. Regulations that tend to impose uniformity on culture and leisure create special challenges for those who seek to guide local use of water and wild living resources in order to retain diverse ecological conditions.

2.1.2 *Guidelines*:

Conservation of biodiversity will be enhanced if

2.1.2.1 *Regulators and managers*:

- a) Take into consideration the international, national, regional and local – as appropriate - conservation status of fish populations and their habitats;
- b) For maximum flexibility, encourage the creation of policies and structures that reduce conflicts and create synergies between fishing and other conservation interests, reward best practices (e.g. with subsidies or privileges) and regulate against malpractice;
- c) Ensure that the policies and structures accommodate local cultural demands (i.e. multiple use) and ecological conditions as well as higher-level policy;
- d) Audit for regulatory or other incentives that are detrimental for conservation of biodiversity and remove, neutralise or compensate for them.

- and -

2.1.2.2 *Recreational fishers*

- a) Assist authorities at all levels to develop and to promote incentives for conserving biodiversity through sustainable use;
- b) Strive to attain maximum conservation benefit through fishing at all levels

2.2 Principle 2: Ensure that regulations are understandable and respected

2.2.1 *Rationale*:

Regulations can have costs for conservation as well as for stakeholders. Costs are least when minimal administration is combined with maximum motivation to comply, through easy compliance and reliable detection of non-compliance. Inappropriate (including incomprehensible or non-applicable) regulation may induce negative effects if non-compliance is simple and rewarding, or if the rationale behind these is not understood.

2.2.2 *Guidelines*:

Conservation will be enhanced if

2.2.2.1 *Regulators and managers:*

- a) Formulate regulations such that these are simple, cost effective, flexible, logical and address biological principles, (inter)national policy and the socio-economic context, as well as reasonable stakeholder concerns and expectations
- b) Impose only those restrictions on fishing methods and means which can be justified from the standpoint of conservation and that will be easily understood by recreational fishers and accepted as fair and equitable by other legitimate users of publically-owned fish stocks.
- c) Have transparent regulatory processes which allow for the active participation of recreational fishers and other stakeholders;
- d) Favour targeted law enforcement methods that motivate minimal-effort compliance;
- e) Promote subsidiarity and self-regulation by creating regulations that can be adapted to local governance and enforcement needs;
- f) Facilitate access for recreational fishing as a motivation and tool for conservation

- and -

2.2.2.2 *Recreational fishers:*

- a) Assist in development and acceptance of effective regulations;
- b) Follow and encourage respect for all rules and regulations pertaining to recreational fishing, conservation measures (including protected areas), and private property;
- c) Embrace self-regulation where possible;
- d) Assist in preventing and reporting illegal fishing.

2.3 Principle 3: Ensure that harvest is ecologically sustainable

2.3.1 *Rationale:*

It is important to ensure that any harvest of wild populations is sustainable. The conservation status of species needs to be maintained at levels which are robust enough to sustain harvest. In some cases, limited and sustainable fishing of small populations may also serve to enhance conservation efforts on their behalf. Sustainable use requires information garnered from research and monitoring, and to be regulated through the active use of reliable science and local knowledge.

2.3.2 *Guidelines:*

Conservation will be enhanced if

2.3.2.1 *Regulators and managers:*

- a) Implement adaptive management strategies at sustainable levels relative to ecological limitations and objectives;
- b) Develop management plans with clear objectives that take into account species behaviour and ecology (including predation and seasonal effects), their long-term conservation status and possible effects of harvest strategies and other measures on ecosystems, species populations and society; management plans need provisions to ensure proper implementation, monitoring and updating.
- c) Work to minimise and mitigate negative impacts on fish stocks and/or habitats where possible, and optimise management of ecosystem components to the benefit of biodiversity, recreational fishing and society at large;
- d) Ensure that harvest by resident recreational fishers and fishing tourists is addressed in management plans;
- e) Be aware of compulsory and voluntary release as an alternative or complement to harvest;

- f) Cooperate with recreational fishers to develop and apply methods for simple and effective monitoring and management of populations, habitats and ecosystem services;
- g) Cooperate with neighbouring administrative authorities to properly manage and conserve transboundary fish populations where appropriate;
- h) Develop and implement standardised systems for collecting harvest data for use in adaptive management of fish populations at all appropriate scales;
- i) Resolve conflicts between recreational, commercial and subsistence fishers and manage public fisheries to ensure sustainable use by all sectors.
- j) Recognise that adaptation to human natural and human-induced change is necessary.

- and -

2.3.2.2 *Recreational fishers:*

- a) Assist in population monitoring and research;
- b) Work to integrate their activities into the adaptive management of populations and habitats of target fish species;
- c) Recognise and understand the biological role and impact of indigenous predators on fish species and take this into account when participating in their conservation and management;
- d) Ensure that populations of target fish species are kept at optimal levels relative to their habitats and species communities;
- e) Ensure that any fish harvest through recreational fishing is sustainable and non-detrimental to aquatic ecosystems.

2.4 Principle 4: Maintain populations of native species with adaptive gene pools

2.4.1 *Rationale:*

Native species and their habitats (and human livelihoods derived from them) can be adversely impacted by either the 1) introduction of invasive alien species that can adversely impact native stocks; or 2) human selection for traits which may jeopardise the long-term viability of their populations; and 3) artificial barriers to fish movements that can restrict migration, feeding or reproduction.

2.4.2 *Guidelines:*

Conservation will be enhanced if

2.4.2.1 *Regulators and managers:*

- a) Prevent the release, spreading and translocation of invasive alien species that can have significant impacts on native fish populations or the environment
- b) Engage recreational fishers in programmes to remove invasive alien species;
- c) Facilitate the reestablishment of originally indigenous fish species in accordance with IUCN guidelines⁵² and have clear management plans that define their recovery;
- d) Incorporate genetic considerations into management plans;
- e) Seek transboundary cooperation to ensure genetic adaptability of populations;
- f) Monitor the genetic characteristics of species populations of special concern.

- and -

⁵² <http://www.iucnsscrg.org/download/English.pdf>

2.4.2.2 *Recreational fishers:*

- a) Favour re-stocking from appropriate sources but only introduce or reintroduce species in accordance with IUCN guidelines;
- b) Avoid exclusively selecting for specific phenotypic or behavioural traits of individuals which are not representative of the wild species population and that can consequently be detrimental;
- c) Aid scientists and managers in monitoring genetic characteristics of populations.

2.5 Principle 5: Maintain environments that support healthy and robust fish populations

2.5.1 *Rationale:*

Fish species are vulnerable to pollutants and human impacts on their populations and habitats. It is therefore in the interest of all who enjoy or benefit from fish to work together to reduce or mitigate the effects of environmental degradation. There is a need for the continued monitoring of the condition of fish populations and their habitats.

2.5.2 *Guidelines:*

Conservation will be enhanced if

2.5.2.1 *Regulators and managers:*

- a) Develop mutually agreed systems that motivate recreational fishers to help conserve and/or restore habitats and water bodies and their associated fauna, including fish species;
- b) Develop and implement standardised systems for monitoring the health and condition of fish populations, habitats and ecosystems;
- c) Account for possible negative impacts of recreational fishing on other ecosystem services and minimise and mitigate these.

- and -

2.5.2.2 *Recreational fishers:*

- a) Actively contribute to the conservation and restoration of habitats at appropriate scales where feasible;
- b) Work to ensure that their activities support and enhance local environments and habitats;
- c) Use only native aquatic plants for habitat restoration.

2.6 Principle 6: Encourage use to provide economic incentives for conservation

2.6.1 *Rationale:*

Stakeholders can be motivated to conserve wild species and their habitats by recognising their inherent economic value.

2.6.2 *Guidelines:*

Conservation will be enhanced if

2.6.2.1 *Regulators and managers:*

- a) Recognize that private fishing rights holders should be fairly rewarded for providing recreational fishing access.
- b) Encourage exploitation models that provide socio-economic benefits to stakeholders and communities;
- c) Where official fees or taxes are levied, ensure that these are set at reasonable levels to prevent unneeded barriers to participation;
- d) Provide stakeholders and communities with incentives for proper management of biodiversity.

- e) Provide access for recreational fishing and accommodate disabled recreational fishers where possible and desired.

- and -

2.6.2.2 *Recreational fishers:*

- a) Are willing to make reasonable and fair contributions for access and recreational fishing opportunity, as well as the conservation and management of fish and their habitats;
- b) Accept contributory and management structures that favour a fair and appropriate balance for access between resident and non-resident recreational fishers.

- and -

2.6.2.3 *Fishing tour operators:*

- a) Acknowledge and accept that their activities should benefit local economies and stakeholders and thereby enhance conservation efforts;
- b) Accept that their access can be limited, and/or that they can be subjected to higher fees than local resident recreational fishers.

2.7 Principle 7: Empower local stakeholders and hold them accountable

2.7.1 *Rationale:*

With good local knowledge and monitoring, management at the local level is most rapidly adaptive. It also both empowers stakeholders and holds them immediately accountable for meeting requirements of resource users.

2.7.2 *Guidelines:*

Conservation will be enhanced if

2.7.2.1 *Regulators and managers:*

- a) Promote and facilitate decentralised management of species with healthy populations that are stable or increasing at local or regional levels;
- b) Facilitate the empowerment and accountability of local stakeholders, especially fishers, in this decentralised process;
- c) Encourage and support local and national recreational fishing organisations that promote best-practises.

- and -

2.7.2.2 *Recreational fishers:*

- a) Have knowledge regarding fish ecology and conservation practices;
- b) Recognise their role as resource stewards and actively participate in practical management and conservation measures through local or national organisations;
- c) Interact with other interests and local authorities to find best solutions.

- and -

2.7.2.3 *Fishing tour operators:*

- a) Recognise the cultures, traditions and needs of local people (including fisherfolk);
- b) Work closely with local recreational fishers, water and fishery managers and other interests to ensure integration of activities and avoid conflicts

2.8 Principle 8: Encourage competence and responsibility among users of wild resources

2.8.1 Rationale:

For practices to be ecologically and socially sustainable, those using wild resources are advised to be responsible and proficient regarding methods, equipment and species they utilise.

2.8.2 Guidelines:

Conservation will be enhanced if

2.8.2.1 Regulators and managers:

- a) Encourage and facilitate education, training programmes and awareness raising for fishers;
- b) Cooperate with organisations that coordinate fishers to encourage recruitment from both sexes, all ages and backgrounds.

- and -

2.8.2.2 Recreational fishers:

- a) Have sufficient knowledge on the identification, habits and ecology of harvestable fish species as well as protected species that can be confused with these;
- b) Know the laws and regulations governing fishing and the conservation of fish where they fish;
- c) Teach new fishers the skills and knowledge required to be competent and responsible.

- and -

2.8.2.3 Fishing tour operators:

- a) Provide their clients with the information and knowledge they need for sustainable and responsible recreational fishing.

2.9 Principle 9: Encourage cooperation between all stakeholders in management of fish species and their habitats

2.9.1 Rationale:

All stakeholders, including authorities, state agencies, landowners, fishers, other resource users and other conservation interests, can contribute positively to the proper management of biodiversity through cooperation. Such cooperation promotes a synergistic role for sustainable use in broad conservation efforts whereas conflicts waste human resources.

2.9.2 Guideline Conservation will be enhanced if

2.9.2.1 Regulators and managers:

- a) Include all stakeholders in institutional structures to ensure input and dialog.
- b) Encourage public understanding of conservation and economic as well as cultural benefits that can be derived from responsible and sustainable fishing;
- c) Seek opportunities and provide incentives for cooperation between different interests;
- d) Use all possible measures to avoid and resolve conflicts.

- and -

2.9.2.2 Recreational fishers:

- a) Seek opportunities to benefit human and fish populations and their habitats;
- b) Actively seek alliances with other local stakeholders.

2.10 Principle 10: Encourage acceptance of sustainable use as a conservation tool by the public and other conservation interests

2.10.1 Rationale

In order to ensure acceptance by society, it is important for all users of fish to communicate the positive benefits of their use for biodiversity conservation and for all stakeholders to work together to raise awareness regarding important conservation issues.

2.10.2 Guidelines

Conservation will be enhanced if.

2.10.2.1 Regulators and managers:

- a) Provide a framework which ensures the long-term acceptance by society of the conservation benefits derived from recreational fishing;
- b) Preserve cultural, historical and aesthetic values related to fish and fishing;
- c) Establish or encourage institutions that organise fishers in activities that create social, cultural and conservation benefits.

- and -

2.10.2.2 Recreational fishers:

- a) a Are sensitive and respectful to local interests and cultures;
- b) Strive to be ambassadors for fishing through good behaviour and practices;
- c) Respect private property and local restrictions;
- d) Raise awareness regarding the benefits of fishing and conservation;
- e) Understand the need for local involvement in all fishing activity, including fishing tourism operations.

3. APPENDICES

3.1 Appendix 1: Terms and concepts

*Best practice*⁵³: planning, organisation, managerial and/or operational practices that have proven successful in particular circumstances in one or more regions in the field and which can have both specific and universal applicability.

*Biological diversity (biodiversity)*⁵⁴: 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. (Article 2 of the CBD).

Catch-and-release: the process of capturing a fish, usually by line and hook (angling), and releasing it alive. This ranges from legally required mandatory release of protected sizes and species to voluntary catch-and-release of fish that could have been retained.

Ecosystem services: ecosystem services are all services humans derive from aquatic ecosystems and fish stocks. They comprise four categories: supporting (e.g. nutrient cycling), regulating (e.g. water quality), provisioning (e.g. fish yields) and cultural (e.g. existence value, spiritual and education dimension; recreational fishing experience) services⁵⁵.

Fish: All native fish species for which recreational fishing is legally permitted in countries that have signed the Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979).

Fisheries Management: The application of science-based and local knowledge in the stewardship of wild fish populations and their habitats in a manner beneficial to the environment and society.

Fisheries managers: Private or governmental agents, including landowners, who are responsible for the practical stewardship of wild fish stocks and their habitats.

Fishing tour operators: Agents or agencies that directly or indirectly provide services (guiding, outfitting, lodging, fishing opportunity) for fisher tourists.

Recreational fishing was defined by the EIFAC CoP as: “*fishing of aquatic animals that do not constitute the individual’s primary resource to meet nutritional needs and are not generally sold or otherwise traded on export, domestic or black markets. The unambiguous demarcation between pure recreational fisheries and pure subsistence fisheries is often difficult. However, using fishing activity to generate resources for livelihood marks a clear tipping point between recreational fisheries and subsistence fisheries. Globally, angling is by far the most common recreational fishing technique, which is why recreational fishing is often used synonymously with (recreational) angling.*”⁵⁶

The *recreational fishing sector* was defined by the EIFAC CoP: “*the entire network of stakeholders involved in or fully or partly dependent on recreational fisheries including amongst others fisheries ministries and agencies, managers, non-governmental organisations (e.g., umbrella angling associations and clubs), anglers, non-angling recreational fishers, tackle shops and tackle manufacturers, bait suppliers, charter-boating industry, recreational boat builders and chandlery suppliers, marina operators and specialised angling and fishing media, recreational fishing tourism and other related business and organisations as well as all other enterprises supporting recreational fisheries including aquaculture operations that produce stocking material or commercial fishing enterprises that sell angling tickets on their waters. A range of other stakeholders and managerial regimes are not included in this definition though they may run or advocate activities and developments that have a direct impact on the recreational fishing quality and the recreational*

⁵³ Taken from EIFAC Code of Practice: <http://www.fao.org/docrep/012/i0363e/i0363e00.htm>

⁵⁴ Derived from Article 2 of the CBD.

⁵⁵ See

http://www.millenniumassessmenten.wikipedia.org/documents/document.765.aspx.pdf/wiki/Ecosystem_services

⁵⁶ EIFAC CoP

*fisheries sector, the sector's viability and growth potential (e.g., hydropower generation, water management, irrigation)."*⁵⁷

Recreational fishers do not sell the fish they catch, nor do they generally rely upon them as a primary source of nutrition⁵⁸. From a socio-economic perspective, recreational fishing can be subdivided into : "Resident fishing" and "Fishing tourism":

- Resident fishing: Resident fishing is conducted by fishers within their country of residence, and most commonly in the area where they physically reside and have fishing rights. Most resident fishers have strong socio-cultural ties to their recreational fishing grounds, and are therefore highly motivated to apply their knowledge on local conditions and traditions when participating actively in, or contributing directly to, the conservation and management of local fish species and habitats. Emphasis is generally placed upon physical recreation, consumption, traditions, and management aspects of recreational fishing. Local resident fishers may hold exclusive rights to their recreational fishing areas or pay reasonable fees to gain access (permits or leases). They usually do not require the services of guides and/or fishing tour operators. Most fishers fall into this category, although many can also be fishing tourists at some point in their lives.
- Fishing tourism: Fishing tourism is defined as recreational fishing conducted by fishers who may sometimes travel considerable distances from their home and/or own fishing areas, and often abroad, in order to visit other areas to fish. They may be well-acquainted with their destination and be familiar with the species they fish. There is, however, a gradient in the degree to which travelling fishers may have socio-cultural links to their fishing destinations. The more exotic and unfamiliar a fishing destination is, the greater the socio-cultural barriers can be. In addition, motivations for fishing by such tourists may place greater emphasis on adventure and souvenirs (e.g. trophies) than is the case for fishers with closer links to the area in which they angle. This can motivate payment of significant sums of money to intermediaries ("fishing tour operators") that organise and facilitate their fishing experiences.

Regulators: Government authorities at all levels with a responsibility for formulating, implementing and enforcing legislation and management policies pertaining to conservation and fishing.

Stakeholders: All those with an interest or share in the conservation and sustainable use of fish, habitats and biodiversity. These include fishers, landowners, managers, other , regulators, scientists and other conservationists with an interest in the conservation and use of biodiversity.

Sustainable use: the CBD defines sustainable use as "the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining the potential to meet the needs and aspirations of present and future generations" (CBD Article 2).

*Aquatic ecosystem*⁵⁹: *a body of water containing a dynamic complex of plant, animal and micro-organism communities and their non-living environment that interact as a functional unit.*

⁵⁷ EIFAC CoP

⁵⁸ <http://register.consilium.europa.eu/pdf/en/09/st13/st13669.en09.pdf>

⁵⁹ Derived from Article 2 of the CBD.

3.2 Appendix 2. [Addis Ababa Principles and Guidelines](#)

Practical principle 1	Supportive policies, laws, and institutions are in place at all levels of governance and there are effective linkages between these levels.
Practical principle 2	Recognising the need for a governing framework consistent with international/ national laws, local users of biodiversity components should be sufficiently empowered and supported by rights to be responsible and accountable for use of the resources concerned.
Practical principle 3	International, national policies, laws and regulations that distort markets which contribute to habitat degradation or otherwise generate perverse incentives that undermine conservation and sustainable use of biodiversity, should be identified and removed or mitigated.
Practical principle 4	Adaptive management should be practiced, based on: <ol style="list-style-type: none"> 1. Science and traditional and local knowledge; 2. Iterative, timely and transparent feedback derived from monitoring the use, environmental, socio-economic impacts, and the status of the resource being used; and 3. Adjusting management based on timely feedback from the monitoring procedures.
Practical principle 5	Sustainable use management goals and practices should avoid or minimise adverse impacts on ecosystem services, structure and functions as well as other components of ecosystems.
Practical principle 6	Interdisciplinary research into all aspects of the use and conservation of biological diversity should be promoted and supported.
Practical principle 7	The spatial and temporal scale of management should be compatible with the ecological and socio-economic scales of the use and its impact.
Practical principle 8	There should be arrangements for international cooperation where multinational decision-making and coordination are needed.
Practical principle 9	An interdisciplinary, participatory approach should be applied at the appropriate levels of management and governance related to the use.
Practical principle 10	International, national policies should take into account: <ol style="list-style-type: none"> 1. Current and potential values derived from the use of biological diversity; 2. Intrinsic and other non-economic values of biological diversity and 3. Market forces affecting the values and use.
Practical principle 11	Users of biodiversity components should seek to minimise waste and adverse environmental impact and optimise benefits from uses.
Practical principle 12	The needs of indigenous and local communities who live with and are affected by the use and conservation of biological diversity, along with their contributions to its conservation and sustainable use, should be reflected in the equitable distribution of the benefits from the use of those resources.
Practical principle 13	The costs of management and conservation of biological diversity should be internalised within the area of management and reflected in the distribution of the benefits from the use.
Practical principle 14	Education and public awareness programmes on conservation and sustainable use should be implemented and more effective methods of communications should be developed between and among stakeholders and managers.

3.3 Appendix 3. Malawi Principles for the Ecosystem Approach

1. *Management objectives are a matter of societal choice.*
2. *Management should be decentralised to the lowest appropriate level.*
3. *Ecosystem managers should consider the effects of their activities on adjacent and other ecosystems.*
4. *Recognising potential gains from management there is a need to understand the ecosystem in an economic context, considering e.g., mitigating market distortions, aligning incentives to promote sustainable use, and internalising costs and benefits.*
5. *A key feature of the ecosystem approach includes conservation of ecosystem structure and functioning.*
6. *Ecosystems must be managed within the limits to their functioning.*
7. *The ecosystem approach should be undertaken at the appropriate scale.*
8. *Recognising the varying temporal scales and lag effects which characterise ecosystem processes, objectives for ecosystem management should be set for the long term.*
9. *Management must recognise that change is inevitable.*
10. *The ecosystem approach should seek the appropriate balance between conservation and use of biodiversity.*
11. *The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.*
12. *The ecosystem approach should involve all relevant sectors of society and scientific disciplines.*

3.4 Appendix 4. Relationship between Angling Charter and AAPG/Malawi Principles

Three pillars of sustainability	Addis Ababa/ Malawi	Focus	Number	Principles in this Charter	AAPG/ MALAWI MAP
Socio-cultural	Supportive & linked governance at all levels with harmonised regulations that promote societal benefits from conservation and avoid perverse effects.	General	1	Favour multi-level governance that maximises benefit for conservation and society.	(A1,A3,M2,M4)
		Regulatory	2	Ensure that regulations are understandable and respected.	(A1,A8,A13, M10)
Ecological	Avoidance of adverse impacts within or between ecosystems, and of short-termism, especially when faced with inevitable change. Transparent and adaptive management along a use-protection continuum, based on interdisciplinary science, monitoring and timely feedbacks.	Demographic	3	Ensure that harvest is ecologically sustainable	(A4,A6,A9,M7-12)
		Genetics	4	Maintain wild populations of indigenous species with adaptive gene pools	(A5,A9, M11-12)
		Ecosystem services	5	Maintain environments that support healthy and robust populations of harvestable species.	(A4,A6,A9,M7-12)
Economic	Encouragement of economic/cultural incentives with sharing of benefits (and costs) especially at local level, while avoiding waste.	Economic incentives	6	Encourage use to provide economic incentives for conservation	(A4,M10)
		Waste avoidance	7	Ensure that harvest is properly utilised and wastage avoided.	(A11)
Socio-cultural, Ecological, Economic	Decentralisation of management to an appropriate bio-economic scale, especially to empower, assess and access knowledge of local users.	Local management	8	Empower local stakeholders and hold them accountable.	(A2,A4,A9-10,A12-13, M2,M4,M7, M11-12)
Socio-cultural	Education, awareness and inclusion of managers, resource users and society at large.	Conduct and proficiency of harvesters	9	Encourage competence and responsibility among users of wild resources	(A11)
		Animal welfare	10	Minimise avoidable suffering by animals.	(A14,M1, M12)
		Horizontal trust	11	Encourage cooperation between all stakeholders in management of harvested species, associated species and their habitats.	(A2,A9,A14, M1,M12)
		Social acceptance	12	Encourage acceptance of sustainable and consumptive use as a conservation tool by the public and other conservation interests.	(A12, M14)

Appendix 5

PRINCIPLES INITIALLY PROPOSED BY THE CONSULTANT BUT WITHDRAWN BY THE WORKING GROUP - for information –

2.7 Principle 7: Ensure that harvest is properly utilised and wastage avoided

2.7.1 *Rationale*:

Utilising a renewable resource to the fullest possible extent will maximise the economic incentives for local people as well as indicating respect for the environment and in some cases minimising bio-pollution.

2.7.2 *Guidelines*:

Conservation of biodiversity will be enhanced if

2.7.2.1 *Regulators and managers*:

- a) Encourage the proper handling and processing of harvested fish;
- b) Ensure that fish products comply with standards for health and hygiene.

- and -

2.7.2.2 *Anglers and fishing tour operators*

- a) Properly care for fish meat in order to ensure against wastage and contamination;
- b) Fully utilise other fish products where possible;
- c) Utilise harvested fish in other ways where possible and desirable;
- d) Observe rules of proper hygiene to ensure fish meat quality and guard against detrimental health effects.

2.10 Principle 10: Minimise avoidable suffering

2.10.1 *Rationale*:

For practices to be socially sustainable, avoidable suffering needs to be minimised.

2.10.2 *Guidelines*:

Conservation of biodiversity will be enhanced if

2.10.2.1 *Regulators and managers*:

- a) Adopt rules, regulations and incentives that promote methods and equipment for taking fish that minimise avoidable suffering;
- b) Communicate the need to treat fish with respect;
- c) Recognise and promote best practices.

- and -

2.10.2.2 *Anglers*

- a) Show respect for fish and strive to reduce or eliminate avoidable suffering where possible;
- b) Learn about animal physiology and the most efficient way to kill fish with minimal suffering;
- c) Promote measures which ensure proficiency in the use of fishing techniques and implements;
- d) Do not use capture methods that cause high levels of stress or pain, and/or are highly unselective;
- e) Take care not to disturb species in ways that can have significant and detrimental impacts.