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TERRESTRIAL MAMMALS AND CMS

(*Paper commissioned by the CMS Secretariat from the Scientific Councillors focal points for Terrestrial Mammals Concerted Actions*)

Introduction

1. The world is confronted with a massive and unprecedented loss of biological diversity, a crisis characterised by extinction rates of the order of 0.001/year, which, extrapolated to the level of resolution available for previous episodes (0.1 to 1 MY), leads to a loss at least comparable to that of the most severe extinction crises of the past (Simberloff, 1984; Wilson, 1992, 2002; Ramade, 1993). This crisis is of human origin, and humans have the power to alter its course. In spite of the consensus generated by this observation among all informed witnesses, conservation biologists, deciders, media, the catastrophic erosion of the natural heritage is not reversed, halted or even seriously slowed down. More and more scientific facts are accumulated to document the demise of species and habitats, but action to prevent this demise does not follow on a sufficient scale. Laudable targets are set for reversing or altering the downward trends but measures of sufficient amplitude to make those targets credible are not yet in place.

2. This widening gap between awareness and action is explained in part by the magnitude of the task and the difficulty of conducting it in the face of conflicting interests. Yet it is also exacerbated by the failure of the actors of conservation to deliver a clear, legible and engaging message (Orr 2003). The public at large is now at last more conscious of the complex phenomenon of climate change than of that of biodiversity losses, probably because of the universal nature of the manifestations attributed to climate vicissitudes, but also because of the emotional content that has been successfully woven into the perception of their potential effects.

3. Conservation biologists may have made the error of replacing the simple and universally attractive message of preserving a heritage that is a fundamental part of human culture and human civilisation, a major inspiration of human endeavour both in arts and science, by an "economists' message" which emphasizes ecosystem services and sustainable development. This, more fashionable approach, fails to draw sufficient attention to population growth and space consumption, the main factors of heritage loss and heritage degradation. It focuses on a purely utilitarian value of biological diversity, instead of recognising its cultural, aesthetic and emotional values. The doctrine that these values are difficult to explain and promote to people who are struggling to survive is unpersuasive. Except for the direct effects of population growth, most of the damage to the natural heritage is done by developed

societies or at their instigation. These developed societies have considerable potential for cultural preoccupations if their attention is not diverted to artificial monetary objectives.

4. What is needed is to re-emphasise the natural heritage itself and its explicit benefit to people in terms of cultural values and quality of life. We need less economics, less monetary obsession, less scientific pusillanimity, more emotion, more vision, more appeal to people's instincts. The World Charter for Nature, unanimously adopted by the General Assembly of the United Nations in 1982, recalls that "Civilisation is rooted in Nature, which has shaped human culture and influenced all artistic and scientific achievements, and living in harmony with nature gives man the best opportunities for the development of his creativity, and for rest and recreation". Its fundamental principles are that "Nature shall be respected and its essential processes shall not be impaired" and that "Ecosystems and organisms, as well as the land, marine and atmospheric resources that are utilised by man, shall be managed to achieve and maintain optimum sustainable productivity, but not in such a way as to endanger the integrity of those other ecosystems or species with which they coexist". Its implementation requires that "The principles set forth in the World Charter for Nature shall be reflected in the law and practice of each State, as well as at the international level" and that "acting individually, in association with others or through participation in the political process, each person shall strive to ensure that the objectives and requirements of the Charter for Nature are met". It is time all of us, individuals, NGO's, institutions, governments, supranational and international authorities, remember and begin to heed this remarkable and inspiring text, which we unanimously adopted a quarter of a century ago.

5. Like others, we regard preserving and restoring the global megafaunal heritage as an essential component of a nature conservation policy that is more proactive, more attractive, more optimistic, more capable of generating enthusiasm, feeding dreams and enlisting support, one that "offers an alternative vision for twenty-first century conservation biology" (Donlan et al. 2005).

I Conservation status and ecological role of large mammals

6. The megafauna, the assembly of large vertebrates that occupies a region, a biome or a continent, is the component of biological diversity that has suffered and suffers the most in the course of the extinction crisis that we are living. This is entirely predictable. Indeed large space requirements, dependence on complementarity of habitats and K-selected reproductive strategies are among the main factors of vulnerability of organisms. These are common characteristics of large vertebrates. Large vertebrates are thus highly sensitive to reduction, fragmentation and degradation of habitats, and, in addition are often affected by direct harvesting, disturbance and competition pressures.

7. The depletion of large vertebrate assemblies has serious ecological consequences for biomes, as these assemblies include keystone species, both large grazers and top predators that are capable of shaping the evolution of ecosystems, their vegetation and the communities of smaller animals they support. These keystone species, which have a disproportionate effect on their environment relative to their abundance (Paine, 1995), are essential, particularly in open habitats, in preserving or promoting overall richness and diversity and preventing take-over by successful, exogenous or endogenous, invasive species, the "pests and weeds"(Primack, 1993; Fletcher and Robbie, 2004; Donlan et al., 2005).

8. Large grazers are also essential auxiliaries of site management. They provide the most effective means to preserve, manage or restore many sites that have been shaped by their past presence or by now obsolete agro-pastoral activities and which, in the absence of diversified

grazing and browsing, would revert, through natural vegetation evolution, to habitats with lower nature conservation value.

II Cultural significance of large mammals

9. Large mammals are an essential part of the cultural heritage of mankind, entirely comparable to the greatest monuments and the most important repositories of knowledge. Their disappearance leads to a considerable impoverishment and loss of originality of local patrimonial values. They are the organisms whose affective and cultural perception is the most vivid, as exemplified by the place they take in the world of toys, of decorations, of objects, of films, of literature, and their pivotal importance in the attraction of tourism.

10. Mankind's special relation with other species of large mammals has existed at all periods of human cultural and social evolution. As a result mammals are by far the animal group most closely linked to the cultural heritage. They have been an essential source of inspiration for traditions, myths and artistic expression in many cultures, particularly of the steppes and semi-deserts, and their prominence in artistic testimonies is totally out of proportion with their representation in local faunas.

11. This link is particularly vivid in the arid belt of Eurasia and northern Africa which is bestowed with one of the greatest cultural heritages in the world, testimony to events that have uniquely shaped the history of mankind. The sites that hold the first signs of sedentary village life and use of domesticated plants are in Syria and neighbouring areas. Urban life and writing were born in Iraq and neighbouring Iran. The first archaeological traces of sheep, goat, cow, horse domestication are in Syria, Iran, Anatolia or Ukraine. Most of these processes were intimately tied to the megafauna and its significance is superbly illustrated by Mesopotamian and Iranian monumental sculpture, by Mesopotamian, Iranian and Indus glyptic, by Saharan rock art, by the vivid animal art of the great steppe cultures of Central Eurasia, by the rich Roman mosaics of Syria and Tunisia.

12. The link is strong also, however, in Boreal and Nemoral regions, where whole cultures and socio-economic systems have been based on ungulates, such as Bison in North America and Reindeer in northern Eurasia, and where animals like the Red Deer, the Brown Bear or the Wolf have had and have a potent symbolic value in many cultures and civilisations. Even in tropical rainforests where the megafauna is less visible and less prevalent in terms of biomass, the symbolic value of animals such as the Jaguar, the Forest Elephant or the Sloth Bear, is considerable.

III. Migrations

13. Many large terrestrial mammals undertake short- or long-distance seasonal migrations, latitudinal, altitudinal or, sometimes, longitudinal in response to temperature cycles, rainfall patterns, or, in the case of predators, the migrations of ungulates they prey on. The amplitude of the movements range from a few kilometres to more than 2000 km in, for instance, Eastern African ungulates, northern cervids or Tigers, and may involve very large numbers of animals. The migrations of Gnus and associated ungulates in Africa, those of Mongolian Gazelles in steppic Asia are among the most spectacular natural spectacles on earth.

14. Other resource-triggered movements include, particularly in arid areas, nomadism (or transhumance) dictated by the occasional occurrence of scarce resources and crisis-year migrations in search of distant forage and water. Crisis-migrations are in some cases just an amplification of more usual seasonal migrations. Recent movements of Mongolian Gazelles

are an illustration of this phenomenon, and of the difficulties it may generate (Baerselman & van de Vlasakker, 2008). Lifecycle movements, in particular linked to immature dispersal, are common, and may reach hundreds of kilometres. In addition, many large mammals have very large home ranges, so that daily cycle movements imposed by the distribution of forage, water and cover may take place over considerable surfaces, with daily displacements of 10-20 kilometres recorded for ungulates, of 15 to 30 kilometres for predators.

15. The seasonal voyages, resource-triggered movements, life-cycle displacements, daily exploitation of large home ranges of most large mammals clearly fulfil the main criteria for migratory status under CMS definitions. Many of these movements take place across national borders, and the species to which the populations that undertake them belong thus fit all the criteria. The considerable loss of range and local extinctions that many species have suffered, and the erection of barriers to migration, has led to the discontinuation of some formerly trans-border migrations. This, however, does not affect the migratory status of the species under CMS (4th CMS COP, Nairobi 1994). In numerous cases, the preservation or restoration of trans-border movements is vital to the survival of particular populations.

IV. Strategic importance of large mammals in natural heritage preservation

16. The presence of large mammals considerably increases the wildlife viewing attractiveness of protected areas. National Parks and nature reserves that hold large mammals have a much higher visitor frequentation than those devoid of it. On a world scale such parks rank among the major attractions, irrespective of the continent on which they are located. Large mammals are particularly adequate as flagship species whose presence in an area guarantees a high level and continuity of conservation effort. In the long term they alone may be able to generate for the areas they inhabit the cultural, affective, social and economical support required for their perpetuation. Nature reserves located in areas of impoverished large mammal diversity are at a strong disadvantage if one compares them to the national parks of Africa, India or North America. Offering to visitors relatively unspectacular plants, insects or even birds restricts the attraction of the sites to a highly motivated public. Re-establishing a megafaunal presence considerably widens the appeal of such sites.

17. Large mammals require large conservation areas. Indeed, large surfaces encompassing a number of different habitats and their ecotones are indispensable to the effective conduct of their life cycle. Thus efforts that target them or at least take them fully into account profit a number of communities of smaller organisms. The presence of keystone species amongst them contributes to the structuring of these communities and generally promotes biodiversity in each of the habitats used. Indeed they prevent take-over at lower tropic levels by successful ubiquitous species. Finally, as the most valuable natural heritage sites often include, particularly in temperate regions, sub-climactic habitats that have been created or maintained by the presence of large herbivores or by extensive agro-pastoral activities, they need to be managed to stop the evolution of the plant-cover towards habitats of lesser nature conservation significance. The management efforts that this process entails are labour-intensive and costly, particularly when they have to be applied to substantial surfaces. Large herbivores have demonstrated their usefulness as a good, and often only realistic, alternative.

18. The megafauna provides an obvious theme through which natural and cultural heritages can be linked and enhance each other's attractiveness. Archaeological sites where essential events and artistic achievements that have marked the evolution of civilisation are situated within or near areas of great natural beauty, in or near unique habitats where the megafauna that inspired their myths and their art and permitted their conquest of new life styles once roamed, in cultural landscapes were unparalleled techniques of coping with the

environment were successfully developed millennia ago. In key areas for the conservation of the megafauna, such as deserts, steppes and their associated mountain ranges, these sites are often scattered over great distances and little visited. In such areas of scattered distribution of sites the combination of several poles of attraction is indispensable to reach a sufficient threshold of socio-economic visibility. The fabulous cultural heritage of the arid zone, for instance, is probably too sparsely distributed to be a major source of revenues. Linking its main archaeological and historical sites with natural sites of unique quality, through the theme of the great mammals, is a particularly promising approach to the revalorization of resources of drylands, first through quality tourism and its immediate by-products, then by the longer-terms notoriety effects it generates.

19. Support of local actors for conservation efforts can only be durably ensured if a sense of ownership is developed. Large animals, because of their importance in culture, traditions, myths and stories, are particularly adequate to promote this sense of ownership. For this they do not necessarily need to have survived locally but, if restored, they must have a record of past occupation of the area, in biogeographical and ecological conditions that are not too distant from those of today. If components of the past fauna are lost everywhere, so that no adequate material can be translocated, any substitutes proposed must be reasonable counterparts, both in their ecological role and in their overall appearance, of lost fauna, so that the emotional content, the distinctness and the uniqueness of the restored heritage are preserved. Authenticity is a key to cultural identification and cultural identification is essential to public support for what are space-consuming and potentially high-impact efforts.

20. Many of the remaining populations of large mammals are situated in border areas, where human pressure has often been lower. Their survival in those areas depends as elsewhere on the cyclic use of different habitats which may be unevenly distributed on either side of the borders. Conservation of these populations necessitates international co-operation. It may also be an excellent incentive to promote that co-operation and may bring a high-profile illustration of the role, necessity and importance of international conventions in preserving the common heritage of mankind.

21. Protected areas, and in particular large protected areas, are of necessity the cornerstones of megafaunal conservation. They will however seldom be large enough to provide year-round requirements of viable populations of these species, particularly in the case of seasonal or opportunistic migrants. It is thus indispensable to link protected areas by corridors adequate for population exchanges and animal movements. These corridors do not need to have the same level of habitat quality as the protected areas they link. They only have to be suitable for passage and temporary stay at some time of the year. They must for that to be broad and include a diversity of habitats free of intensive use and occupation. They have precisely the qualities that will be needed, in the face of inevitable climate change, to permit the adaptive reaction of communities and their component species. It is clear indeed that unconnected networks of protected areas, even if they are adequate today, will not be capable of supporting the species and communities they had been designed for if these are not free to move in response to temperature and rainfall variations. Freedom of expansion and displacement is without doubt the number one mitigating factor to the perturbations generated by climate change. Climate change per se can be coped with, as it has been in the past, if other components of global change do not hinder adaptation.

22. Finally, through their visibility and diversity, large animals are particularly apt at providing a unifying theme for networks of protected areas. Their high-profile notoriety can make the coherence of networks evident to the public at large. If megafaunal richness is maximised, within limits set by eco-ethological and biogeographical plausibility, its original

populational diversity is preserved, so that elements of the fauna are clearly distinct from one area of the network to another, a strong incentive to visit as many areas as possible can be provided by appealing to the collector's instincts of visitors. This approach, which is very successfully exploited in trophy hunting, can be equally promising in wildlife viewing.

V Socio-economic outcomes and constraints of megafaunal convention and restoration

23. The necessary magnitude of megafaunal restoration projects, their need of space, their potential for conflict generation, makes strong public support indispensable. This support should and can mostly rest on recognition and appropriation of patrimonial values, but it must also be enhanced by tangible benefits. National Parks and nature reserves that hold large mammals can generate considerable revenues from wildlife viewing activities and the side-activities they generate in the domains of accommodation, catering, artisanal development and promotion, transport industries.

24. Beyond wildlife viewing they are for the countries that hold them a considerable source of media interest, a much-exploited vehicle for emblematic and commercial promotion, and an essential element of image building and notoriety. Megafauna-rich sites constitute a magnet that can be combined with historical and indigenous people's values to constitute packages of very high attraction potential. National Parks are a major source of revenue in eastern and southern Africa, the part of the world where the megafauna is best preserved. Large nature areas of the Eurasian and North African arid zones have equal possibilities, as do those of temperate and boreal Eurasia and North America, provided an ambitious effort of restoration and promotion is undertaken.

25. In many cases, accommodation of large mammals is compatible with traditional agro-pastoral land exploitation. Traditional activities such as extensive nomadic or semi-nomadic cattle-raising can be supported through the same initiatives that support the wildlife and both can profit from each other and from a common promotion. This may in many cases be the optimal wise use of, in particular, steppe and desert areas, in the respect of their natural and cultural heritage as well as of traditional ways of life and of land use which have often proved more effective than imported technologies (e.g. the proposed Termit TinToumma Protected Area, an initiative of the Niger government strongly supported by CMS and its partners).

26. Recreational hunting bearing on the megafauna itself can also bring some of the necessary benefits a variety of actors, including local communities and administrations, and thus be one of the tools of megafaunal restoration promotion. Conversely, its reasoned sustainability may ultimately depend on the success of this restoration. Indeed, the conviction that large mammal populations can and should be returned to numbers high enough over sufficient surfaces to enable keystone role, allow migrations, restore a credible link to the historical heritage, favour recreational viewing, emotional enjoyment and non-destructive appropriation, is at the root of the paradigm of megafaunal restoration. Such numbers and distribution are precisely those that would create the necessary conditions for acceptable, closely regulated, hunting, conditions rarely met by the relictual large mammal populations of today.

27. Hunting, fishing and harvesting activities that target other components of the fauna and flora than the ones for which the protected areas are conceived, are usually compatible with their conservation, provided adequate precautions are taken to avoid disturbance that reduces carrying capacity through augmented flight distances they will usually profit from the perpetuation of wide open spaces that the conservation of the megafauna entails.

VI Obstacles to the preservation of megafaunas and their migrations

28. Habitat use for large vertebrates is coarse-grain, best described at the landscape scale. Space is thus in general the ultimate limiting factor, conditioning year-round and whole-cycle availability of forage and cover. Thus it is in terms of space use that the negative impacts of human activities must be measured. Most damaging are actions that render the space totally unusable for large wild organisms, such as urbanisation and intensive agriculture, or which partition the space, such as communication networks. Conversely, large mammals are often able to co-exist and even thrive alongside more extensive space use, such as extensive or nomadic pastoralism, regulated forestry or moderate harvesting of natural resources. Unfortunately, constantly increasing pressure on space is one of the major factors of the current biological diversity crisis, affecting the whole natural heritage. Its ultimate motors are human population growth and economic development, two phenomena that are intrinsically incompatible with the conservation of the natural heritage if they are allowed to use an ever-increasing amount of space. Short of being curbed, these phenomena must be confined to as small an area as possible if any hope of preserving some of the natural heritage is entertained. Wilson (2002), in his visionary and yet totally realistic "*The future of life*" predicts that if we do not reserve 50% of land surfaces for the exclusive use of wildlife, any hope of preserving biological diversity is futile. This of course entails, as he notes, acceptance of maximum intensification and technological efficiency in the remaining 50% to which economic activities are restricted.

29. With this blueprint in view, we must regard as major impediments to wildlife conservation those structures that occupy or damage an amount of space out of proportion with the economic needs they meet (e.g. Baerselman & van de Vlasakker, 2008). Two classes of endeavours are particularly relevant as obstacles to megafauna restoration over large landscapes, communication networks and energy production. Railways and roads are indispensable and will continue to appear in formerly pristine areas. The space they use, in reasonably populated areas, is comparatively small. However, they render much greater amounts of space unusable by partitioning areas, separating populations into non-viable units and preventing migratory movements. Mitigating measures, centred on effective crossing opportunities, exist and have been tested successfully. Emphasis here must be on research to circumscribe more precisely the desirable characteristics of overpasses and underpasses in relation to regional circumstances and behavioural traits of target species and on a vigorously pro-active implementation of technologies thus defined.

30. Energy production is emerging as an even greater threat on space. The so-called energy crisis and the quest for "renewable" energy sources have encouraged recourse to ever more space-hungry technologies and to an increasingly unsustainable use and abuse of space. The space needed to produce one gigawatt of electricity by solar panels, dams or wind mills is 100 (solar panels) to 1000 (windmills) times that needed by nuclear powerplants, by biofuels it is 10 000 times. Some analysts see a bright future for solar panels and windmills to meet with "renewable" sources the energy needs of unbridled numbers of people. They envisage huge panel fields in the deserts of the planet and wind farms in the steppes. One can easily see what this apocalyptic "sustainable" scenario would do to arid land ecosystems.

VII The role of CMS

31. The development of the Sahelo-Saharan Antelopes Concerted Action has shown that regions of relatively low species richness, harbouring a number of highly emblematic, uniquely adapted species, such as arid lands, are a privileged domain of activity for CMS.

Such areas often have particularly remarkable arrays of large mammals, for the most part forced by the very nature of the resources they exploit to undertake migrations, often of a complex and atypical nature. For example, migration, seasonal, opportunistic, multi-annual, has been for all times a strategy particularly characteristic of arid lands, developed by many organisms, in particular, large mammals, including man. The Convention has, over the years, acquired a considerable experience in addressing the highly specific requirements of this environment and their fauna. Moreover, it has held a unique position in that field, as most other organisations and funding agencies have preferred to focus on biomes of higher biological diversity, such as tropical forests. The conservation and restoration of unique megafaunas can be a major and ambitious endeavour of the Convention. Its approach must be based on admiration, praise, respect, passion and a desire not to change the nature of the difficult environments they have adapted to but to conserve and enhance their value.

32. In some areas numerous initiatives already exist to preserve the emblematic species that are such an essential element of arid land heritage, painted, carved, sculpted, used, hunted, worshiped by millennia of brilliant civilisations, but also to considerably raise the world awareness of their significance. These goals indeed need the co-operation of many actors. The Convention is well equipped, through its various instruments, to enter into a partnership with all the agents and potential agents of the conservation of the natural and cultural heritage of the regions concerned, as well as with the Range States, and use the federating potential of the international instrument it constitutes to maximize synergies and enhance complementarities.

VIII Structuring of CMS Initiatives

33. The objectives of CMS Initiatives should be, as defined for those already underway:

- to restore the large mammal fauna to a substantial amount of its past magnificence, ensuring at least that the fauna regains a richness and abundance sufficient to ensure its emotional and aesthetic appeal, that keystone constituents of the fauna are in sufficient numbers to enable them to completely fulfil their role and that the major processes that underpin its functioning, and, in particular, eco-ethological interactions and migratory phenomena are able to take place and be enjoyed unimpeded;
- to organize this restoration around a network of secure and adequately protected areas, distributed throughout the region, and holding viable populations of each of the species within all, or at least a large part, of the historical range of each species;
- to link in due course these areas by ecologically adequate corridors, adapted to the needs of each relevant species, to avoid fragmentation of populations and favour large scale migrations;
- to base the needed re-deployment of the fauna on facilitation and encouragement of natural recolonisation whenever possible, on reinforcement or reintroduction with original material otherwise, on use of surrogates only if no original material exists and sufficiently satisfactory surrogates are available;
- to found all these steps on a sound evaluation of historical ranges and past environmental conditions so as to ensure solid cultural, aesthetic and ecological authenticity and credibility to the restored fauna; and
- to promote the restored megafauna as an essential part of the regional heritage, link this promotion closely to the cultural, archaeological, artistic and literary heritage the large mammal fauna has inspired in each of the regions concerned, and insure that these closely associated natural and cultural heritages constitute for the countries, regions and communities concerned a major resource and a pole of attraction, interest and visibility that radiates widely to other assets.

34. Two instruments already exist, the Sahelo-Saharan Antelope Concerted Action and the Central Eurasian Aridland Concerted Action. Together they address the largest and most complex continuous belt of arid lands on earth, comprising an entirely interconnected ensemble of hot deserts, cold deserts, semi-deserts, sub-desert steppes, temperate steppes and cold steppes. These extraordinary biomes and their associated rivers and mountains have seen the earliest manifestation of many endeavours of mankind, the birth of several great civilisations, of urban life, of writing, of alphabets. They are the cradle of most major domestication events. They harbour an inestimable cultural and natural heritage, unique cultural landscapes, prestigious architectural and artistic legacies of civilisations going back over ten millennia, striking signs of past climate changes, impressive testimonies of ingenious, imaginative and ambitious ways to cope with challenging environments as well as catastrophic examples of misuse provoked by irresponsible economic and social models, a fauna and flora of prodigious beauty and fascinating adaptations. The desert, more than any other ecosystem, has, by the very nature of the challenges it provides, generated extraordinarily elaborate responses both by the process of biological evolution and by that of human technological and cultural development. The achievements of these processes can still be admired today in animal and plant species of unique emblematic value as well as in manifestations of traditional cultural know-how. This exceptional heritage is gravely threatened, in part by ignorance of its significance. Deserts have a negative image in dominant socio-economic models, even among organisations concerned with environment and sustainable development. The high value of their biological diversity is mostly that of beta-diversity, reflecting differential diversity, not that of alpha-diversity, measuring local richness. They thus escape the attention of many actors of biodiversity conservation, increasingly focused on centres of species richness, or biodiversity "hotspots". Specific efforts to identify the processes vital to the conservation of their distinctive species and communities are thus necessary, urgent and overdue.

35. In their present forms these two instruments do not cover the entire arid and sub-arid zone of Eurasia and North Africa, nor, in the case of the Sahelo-Saharan action, the entire megafauna. This complete coverage could be achieved by geographical extension of the Sahelo-Saharan Concerted Action to the horn of Africa, and of the Eurasian Aridland Concerted Action to the Arabian Peninsula, and by thematic extension of the Sahelo-Saharan Concerted Action from antelopes to all large mammals. In addition the two Actions should be comforted by specific commitment documents, first by renewed support of the Conference of the Parties through new Resolutions, then by formal support of Range States, other concerned Parties and action partners, through, for instance, specific Protocols.

36. The most obvious initiative that could be added to these two Concerted Actions is an Atlantic and Northern European Megafaunal Initiative. Such an initiative would complete the coverage of temperate and subtropical Afro-Eurasia. The desirability and usefulness of a CMS initiative in this area has been suggested by the Large Herbivore Initiative group (Cromsigt, 2003), which regards the restoration of large mammal migrations as “an indispensable element of the future Eurasian landscape”. Several ambitious projects already exist in the region (Vera, 1988; Bunzel-Drüke et al., 1994, 1999; Gstalter et Lazier, 1996; Lecomte, 1998; Breitenmoser-Würsten et al., 1998; Yalden, 1999; Kampf, 2000; Bunzel-Drüke, 2001; Vera et Buissink, 2001; Devillers, 2003), in particular in the European Union and in Siberia, and CMS could provide the adequate international instruments for their federation and mutual enhancement.

37. Beyond this, three Initiatives could be considered if deemed appropriate by the Conference of the Parties. A South American Megafauna Initiative would give a framework to our Huemul activities, and may be very appropriate, in spite of few species, because it would take place mainly on the territory of our parties and would involve several threatened species, one of which, the Pampa Deer is a keystone species that may be central to the management of South American grasslands. A Subsaharan African Initiative is an obvious option, which would follow up on the proposals already made at the 4th meeting of the Scientific Council, in may 1993, to consider agreements in favour of Derby Eland, Cheetah, African Elephants, Gorillas and African Hunting Dog (for 2 of those instruments exist or are underway). But we would perhaps be joining a crowded field. Finally a South and South-east Asian Initiative could be an answer to widespread concern about, in particular, Asian Elephants (Borneo included because it is crossed by international boundaries). At the moment, however, we have too few parties. Opening a discussion with the ASEAN countries around such a project might be an interesting approach. We could operate through the ASEAN Centre for Biodiversity, ACB, of which the EU is, jointly with ASEAN, a major partner. A CMS agreement could be part of the implementation of the broad ASEAN Agreement on the Conservation of Nature and Natural Resources, which has a number of megafaunal species in its Appendix I, with obligations very similar to those of CMS Appendix I.

Action requested:

Parties are invited to:

a. consider and discuss the issues raised by this paper;

b. reaffirm their support for the two existing CMS initiatives on terrestrial megafauna through the concerted actions on Sahelo-Saharan Antelopes and on Central Eurasian Aridlands;

c. mandate the Standing Committee, in consultation with the Scientific Council, to review the boundaries of the two existing initiatives, and if justified, to extend them to cover a wider area, and additional migratory mammal species;

d. invite the Standing Committee, in consultation with the Scientific Council, to bring forward proposals, for possible adoption at COP 10, for similar initiatives covering:

   (i) Atlantic and North European megafauna
   (ii) South American Megafauna
   (iii) Sub-Saharan megafauna
   (iv) South/South-East Asia Megafauna

   and to take the paper into account during the inter-sessional review of CMS (2009-2011).

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