THE EU ZOO INQUIRY 2011

An evaluation of the implementation and enforcement of EC Directive 1999/22, relating to the keeping of animals in zoos.

REPORT FINDINGS AND RECOMMENDATIONS



Written for the European coalition ENDCAP by the Born Free Foundation

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ABBREVIATIONS USED

APOS	Animal Protection Ordinance of Switzerland, Tierschutzverordnung 2008
CBD	. Convention on Biological Diversity (1992)
DEFRA	UK Department for Environment, Food and Rural Affairs
EAZA	European Association of Zoos and Aquaria
EEP	European Endangered Species Breeding Programme
ESB	European Studbook
EU	. European Union
IAS	Invasive Alien Species
IUCN	International Union for Conservation of Nature
NGO	. Non-Governmental Organisation
OIE	World Organisation for Animal Health
SMZP	Standards of Modern Zoo Practice, Defra, 2004
WAZA	. World Association of Zoos and Aquariums
WZACS	. World Zoo and Aquarium Conservation Strategy (WAZA 2005)

TERMS USED

Animal: A multicellular organism of the Kingdom Animalia, including all mammals, birds, reptiles, amphibians, fish and invertebrates.

Animal Sanctuary: A facility that rescues and provides shelter and care for animals that have been abused, injured, abandoned or are otherwise in need, where the welfare of each individual animal is the primary consideration in all sanctuary actions. In addition the facility should enforce a non-breeding policy and should replace animals only by way of rescue, confiscation or donation.

Circus: An establishment, whether permanent, seasonal or temporary, where animals are kept or presented that are, or will be, used for the purposes of performing tricks or manoeuvres. Dolphinaria, zoos and aquaria are excluded.

Domesticated Animal: An animal of a species or breed that has been kept and selectively modified over a significant number of generations in captivity to enhance or eliminate genetic, morphological, physiological or behavioural characteristics, to the extent that such species or breed has become adapted to a life intimately associated with humans.

Environmental Quality: A measure of the condition of an enclosure environment relative to the requirements of the species being exhibited.

Ex situ: The conservation of components of biological diversity outside their natural habitats.

Free-roaming Animals: Animals that have been deliberately introduced to the zoo grounds and that are free to move throughout the zoo.

Hazardous Animals: Zoo animals are categorised on the basis of the animal's likely ferocity and ability to cause harm to people (SMZP).

In situ: The conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings.

Not Listed: Species of animal that are not listed on the IUCN Red List of Threatened SpeciesTM, including species that have yet to be evaluated by the IUCN and domesticated animals.

Pest: An animal which has characteristics that are considered by humans as injurious or unwanted.

Species Holding: The presence of a species in a single enclosure. For example, two separate enclosures both exhibiting tigers would be classed as two *species holdings*; while a single enclosure exhibiting five species of birds would be classed as five *species holdings*.

Threatened Species: A species that is categorised by the IUCN Red List of Threatened Species[™] as *Vulnerable*, *Endangered* or *Critically Endangered* (IUCN Red List website).

Wild Animal: An animal that is not normally or historically domesticated.

Zoonoses: Those diseases and infections which are naturally transmitted between vertebrate animals and man.

Zoo: All permanent establishments where animals of wild species are kept for exhibition to the public for seven or more days in a year, with the exception of circuses, pet shops and establishments which Member States exempt from the requirements of the Directive on the grounds that they do not exhibit a significant number of animals or species (Directive 1999/22/EC)

FOREWORD

The EU Zoo Inquiry: Catalyst for Action

Many years ago – too many years – I travelled around Europe, looking at conditions endured by wild animals in zoos. Wherever I turned - France, Italy, Germany, Portugal, the UK, Belgium – what I found was both deeply depressing and completely unacceptable.

Despite grand claims to be educating the public and conserving species, the real output of Europe's zoos (even the most famous and well-known) was pitiful. The return on the billions of Euros generated and spent each year was meagre and the conditions for the animals bore silent witness to how marginalised, neglected and forgotten they were.

Many things have happened since the mid 1980's.

The world has changed: the EU has grown; economic cycles of boom and bust have ebbed and flowed like a monetary tide; the internet has revolutionised the way we explore and interact with our planet and the creatures we share it with. Public expectations concerning the role of zoos in society have also changed. Far greater awareness about the intimate, natural life of wild animals have been brought to our television screens and more recently, to our laptops. Wildlife filmmakers have opened a window into the natural world as never before. If we were ignorant all those years ago, and perhaps believed zoos to be the only place where we could learn about life on earth, we can plead ignorance no more.

We know about the secretive lives of predators such as tigers and lions; the complex structure of elephant society; the plight of Great Apes in their precarious and palm-oil blighted forest kingdoms; the seemingly joyous existence of wild, free-living dolphins; and much more.

Society has moved on but zoos have lagged behind, constantly playing catch-up with public expectations. I did at least hope that by 2012, nearly 3 decades after I started to look at European zoos, things would have dramatically changed – for the better. Imagine my disappointment.

So many of the issues that troubled me in the 1980's remain my concerns today. Of course, conditions in some zoos have improved but, overall, the widespread neglect, deprivation and suffering I saw then still endure today. The *EU Zoo Inquiry* provides incontrovertible evidence that the impoverished quality of public education that was so prevalent all those years ago is still widespread. This report also reveals that the promises of a commitment to conservation made by Europe's many thousands of zoos remains, in far too many cases, just that – a dream.

But there is hope. The *EU Zoo Inquiry* is the right report at the right time. The overwhelming body of information it provides – including evaluation of over 20,000 different enclosures in 200 zoos in 20 Member States and, critically, analysis of zoo legislation in those countries – is the platform that is now needed for real change to take place.

The European Commission, the Member States, enforcement agencies, State Veterinary Services, zoo professionals, NGOs and concerned individuals can now take concerted action to make sure that those who care for animals in zoos have the training and professional skills necessary to deliver the highest possible standards of animal care; that those who choose to go to zoos receive meaningful, valid and motivational information so that they can become contributors to the future protection of wildlife; and that the conservation claims of zoos are openly and rigorously assessed to make sure that they genuinely support the survival of species in their natural habitats.

But while there is much to hope for, we must not fear taking resolute action when it is required. The standards envisaged by the Directive mean there is no room in Europe for 3,500 zoos. There is no room in Europe for zoos that do not deliver the highest possible standards of welfare, education and conservation. Those zoos that cannot or will not make the grade must be closed; humanely, compassionately – but closed.

It is 25 years since discussions first began about the need for a Zoo Directive. The *EU Zoo Inquiry* has delivered the most up-to-date and comprehensive assessment of progress so far but any further delays in addressing the future of Europe's zoos will not just be unacceptable but must not be tolerated.

RECOMMENDATIONS

The decision by the European Commission to develop a Preferred Code of Practice (PCOP) for Zoo Regulation in the European Union is welcomed and is a fitting response to the findings and conclusions of the EU Zoo Inquiry 2011. The following recommendations have been presented to the European Commission to aid their development of the PCOP, but further, are recommended to Member State Competent Authorities to influence and encourage full compliance with legal objectives (consistent with the EC Directive 1999/22), effective enforcement and higher standards in animal care.

A. Improving Implementation

- 1. Review zoo licensing procedures to ensure that all permanent establishments open for seven days or more in a year, and that display any number of wild animal species to the public, are licensed, receive regular inspections and meet all the specified requirements of national zoo legislation and the Directive 1999/22/EC.
- 2. National authorities to establish a centralised zoo database to record all licensed zoos, any establishments exempted from the national zoo law, details of any licensing conditions, records of inspections and licence renewal dates.
- 3. Animal collections should only be exempted from the zoo regulations, as indicated in Article 2 of the Directive, if the species kept are not of conservation significance (per IUCN or equivalent); the species kept are not recognised as having the 'potential to inflict harm' on humans or the natural environment; and the numbers of species and individuals kept are low.
- 4. Establish a zoo advisory committee to assist the Competent Authority in the regulation and operation of zoos and, where appropriate, other captive animal facilities. Individuals on the committee should represent all stakeholders, including representatives of zoo operators, veterinarians, enforcement agencies, government departments, academics, educationalists and NGOs.

B. Effective Enforcement

- 1. Establish a centralised zoo inspectorate, comprised of individuals with expert knowledge of zoo operation, veterinary medicine, animal husbandry and animal care (covering all taxa).
- 2. Review procedures relating to zoo inspections and develop a centralised system of recording the details of all inspection reports and the actions they require to be made. Ensure that all information is held in such a form as to allow proper and transparent scrutiny and comparison. For example, establish a standard zoo inspection form that ensures consistency of application, such as http://www.defra.gov.uk/corporate/docs/forms/cons_man/zoo2.pdf
- 3. All national and local enforcement personnel and veterinarians should be provided with sufficient support and resources to ensure correct interpretation of definitions and a proper understanding of the requirements imposed on zoos. Personnel should be equipped with relevant, regular training and skills pertaining to the care and welfare of wild animals in captivity. Zoo inspectors should assess available resources, advise zoo operators as to how to address any substandard conditions and assess welfare outcomes.
- 4. Through effective enforcement, ensure that all zoos (as defined) abide by the requirements of national zoo laws and deliver minimum standards, and that all existing available penalties are applied to zoos that fail to meet their legal obligations. In the event that a zoo, or part thereof, is required to close, clear written strategies must be in place to guarantee standards of animal welfare are upheld and that animals are relocated to suitable conditions.
- 5. Establish a Guide to Zoo Operation to encourage effective enforcement of and compliance with the national legislation.
- 6. Encourage all zoos to meet the accreditation criteria of, and join, the European Association of Zoos and Aquaria (EAZA). All zoos that are members of EAZA and/or national zoo associations must ensure their compliance with EAZA objectives and membership requirements.

C. Conservation, Education and Research

- 1. National legislation should require zoos to comply with all requirements of Article 3(1) of the Directive, in order to fulfil the conservation objectives of the Directive and World Zoo and Aquarium Conservation Strategy (WZACS).
- Encourage zoo operators, regardless of the type of zoo, to increase their efforts in relation to species' and habitat conservation, particularly by focusing their efforts on local, national or regional Biodiversity Action Plans (WZACS). National authorities should require zoos to set out clear written 'conservation' and 'education' plans as part of the licensing procedure against which progress can be openly evaluated.
- 3. Ensure zoos keep and conserve predominantly nationally protected and European Threatened species rather than non-European species. All Threatened species, particularly European species kept by zoos, should be included in cooperative Species Management Programmes, which involve both *ex situ* and *in situ* conservation programmes.
- 4. Zoo operators, irrespective of the type of zoo, must have an established education department, sufficiently resourced and staffed, to inspire and encourage local and regional awareness about the importance of conservation and to publish an education plan (WZACS).
- 5. Animal presentations and shows (where these are permitted) must focus on the natural or normal behaviours of animals and include informative commentary about the species, its biology, natural habitat and conservation status.
- 6. All zoos should be required to participate in and contribute to scientific research that brings benefits to species conservation, but that does not compromise the welfare and health of the animals. Research undertaken by zoos should be in collaboration with higher education or scientific institutes and be regularly published in recognised scientific publications.
- 7. Competent Authorities should require all zoos to provide an Annual Report setting out their conservation, education and research activities. A revision of this Annual Report should become part of the zoo licensing requirements, thereby ensuring zoos deliver on these obligations.

D. Animal Welfare

- 1. Develop, through an independent scientific body, species-specific standards for the keeping of animals in zoos based on their natural biology that will ensure appropriate animal husbandry. This should include guidance on appropriate environmental enrichment.
- 2. Establish science-based, standardised animal welfare indicators and assessment criteria.
- 3. Ensure that all zoo employees with responsibility for animals have the necessary training, qualifications and experience in animal care.
- Require all zoo operators to adopt and develop a continually evolving environmental enrichment programme, based on best practice, that provides a stimulating captive environment for all animals in their care (WZACS). Further, to develop ethical codes and animal welfare policies to ensure that all activities, such as animal handling, do not cause the animals distress.
- 5. Recognising that certain species are not well-suited to captivity (i.e. as indicated by early mortality, high stress-levels, etc.), phase-out their keeping and support alternative activities to support their conservation.

E. Public Safety

- 1. Encourage all Member State Competent Authorities to address public health and safety issues as part of their zoo regulations, particularly in relation to animal contact.
- 2. Encourage licensing authorities to discourage direct contact between the public and animals in zoos and, in particular, prohibit contact with Category 1 'Greater Risk' hazardous animals (Standards of Modern Zoo Practice, Defra) and those known to harbour zoonoses. Where animal contact is permitted, this should be actively supervised, controlled, and limited, provide the animals with a significant rest period and must not be detrimental in any way to the welfare of the individual animals involved nor misinform the public as to their true nature.

F. Invasive Alien Species

- 1. Ensure zoos are taking the necessary measures both to prevent animal escapes and to deter intrusion into enclosures of indigenous wildlife.
- 2. Ensure zoos review the height and security of perimeter fencing and enclosure boundaries to try to prevent animals escaping from zoo grounds and curtail the apparent surge in animal thefts from zoos.

EC ZOOS DIRECTIVE 1999/22: success, failure – or work in progress?

In 1988, a Report prepared for the European Commission, which studied the conditions in zoos and their legal framework in the different EU Member States, found 'a considerable number that met none of the accepted minimums and could best be described as 'animal slums"¹. This study, undertaken in 1987 by the then Zoo Check Charitable Trust (now the Born Free Foundation), was part-funded by the European Community and identified more than 1,000 zoos in the EU Member States. Amongst other things, findings revealed widespread animal welfare concerns, which included:

- Barren, cramped conditions which prevented the animals from performing their natural behavioural activities, or seeking refuge;
- Enclosures in a poor state of repair, or constructed in such a way as to risk causing injury to the animals;
- A lack of personnel with adequate knowledge to treat and care for sick or injured animals;
- Inadequate or unsuitable diets;
- Animals being kept in inappropriate social settings; and
- Uncertainty as to whether zoos could ever provide suitable environments for wide-ranging species such as polar bears, elephants or cetaceans (whales and dolphins).

The Report and its findings led to the European Commission's proposal for a draft Council Zoo Directive, submitted to the Council and Parliament in July 1991². This proposed framework legislation recognised the role that zoos could play in species conservation, scientific research and education and, further, sought to ensure that animal care in zoos took into consideration relevant behavioural and physiological needs. Despite Parliamentary support, particularly from the Committee on the Environment, Public Health and Consumer Protection³ which had proposed the development of a detailed code of practice for the accommodation and care of animals in zoos, the European Council Directive 1999/22 (relating to the keeping of animals in zoos), did not come to fruition until 1999⁴. The Directive's requirements are set out over two pages. There are no explanatory notes, no code of practice to inform operators or to assist enforcement agencies and there is little incentive for Member States to incorporate additional legal provisions.



Figure 1

Whilst conditions for animals in some zoos have improved over recent years, many animals remain in enclosures that have remained largely the same for over twenty years. This includes the elephant enclosure at Lisbon Zoological Gardens, Portugal.

¹ European Survey of Zoological Collections, William Travers and Richard Straton, August 1988

² OJ C 24, 24.9.1991, p. 14

³ http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&mode=XML&reference=A4-1998-0010&language=EN ⁴ http://europa.eu/legislation_summaries/environment/nature_and_biodiversity/l28069_en.htm





Figure 2

This enclosure for Bornean orangutan (Pongo pygmaeus) at Dudley Zoological Gardens, England, has changed little in 20 years.

It is over 20 years since the last extensive investigation of EU zoos, and exactly ten years since the EC Zoos Directive (1999/22) was implemented in 2002. **Conditions in many EU zoos do not appear to have improved.** There is still extensive evidence of substandard conditions, which compromise or prevent animals' natural behaviours, and doubts continue as to whether zoos can persist in keeping wide-ranging species or continue in any significant measure to conserve global biodiversity.





Figure 3

Living conditions within this enclosure at Zoo du Mont Faron, France, which today exhibits a jaguar (*Panthera onca*), are much the same as when it exhibited leopard (*Panthera pardus*) 22 years ago.

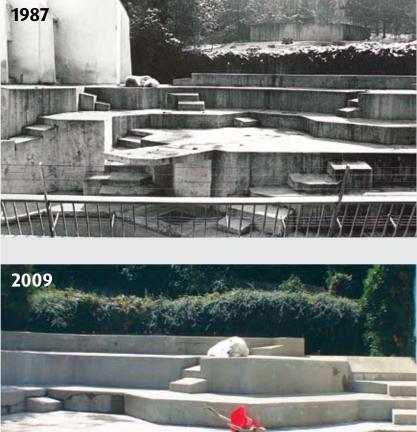


Figure 4

Twenty two years on, this polar bear (Ursus maritimus) enclosure at Mulhouse Zoo in France remains unsuitable for the biological and conservation needs of polar bears.



The EU Zoo Inquiry, fully-funded and initiated by the Born Free Foundation, in association with the European coalition ENDCAP, provides yet more evidence that a far greater commitment is needed to ensure the EC Directive 1999/22 achieves its objectives. Despite the Born Free Foundation's conviction that wild animals do not belong in zoos, in the short to medium term, more training, detailed guidance and improved enforcement will ensure better lives for the many hundreds of thousands of animals currently in EU zoos. We welcome the actions of the European Commission to establish a Preferred Code of Practice on the regulation of zoos and its support for associated training opportunities. Together with the support of the European Parliament, Council of Ministers and European Citizens, we will ensure that zoos have little choice but to fulfil their legal obligations concerning conservation, research, public education and animal care.

Daniel Turner The EU Zoo Inquiry, Project Manager April 2012

Born Free Foundation **ENDCAP** Coordinator

THE EU ZOO INQUIRY 2011 INTRODUCTION AND METHODOLOGY



INTRODUCTION

Council Directive 1999/22/EC ('the Directive'), relating to the keeping of wild animals in zoos, was adopted in 1999. This followed nine years of discussion and negotiation between the European Parliament and the Council, the latter of which was initially reluctant to adopt EU-wide zoo legislation (Parliamentary Report, A4-0010/98). The Directive officially came into force in April 2002, when the then 15 EU Member States were obliged to have transposed the requirements of the Directive into national legislation. At the time, however, ten Member States (Germany, Italy, United Kingdom, Republic of Ireland, Denmark, Greece, Spain, Portugal, Austria and Finland) had failed to meet the deadline and were urged by the then Environment Commissioner to 'quickly' transpose the Directive into their national legislation (European Commission, 29th October 2002). By 2004, the majority of the then EU Member States (n=25) had published their new or amended zoo legislation, whilst Austria, Latvia and Italy officially published their zoo-related laws in 2005 (Eurogroup for Animals, 2008⁵). Implementation in Spain, Austria and Germany faced additional delays due to the specificities of the legal procedures in the regions/federations, which required the transposition of the requirements of the Directive and national law into regional legislation.

The Directive provides a framework for Member State legislation, through the licensing and regular inspection of zoos, to strengthen the role of zoos in the conservation of biodiversity and the exchange of information to promote the protection and conservation of wild animal species. This is in accordance with the Community's obligation to adopt measures for *ex situ* conservation under Article 9 of the *Convention on Biological Diversity* (1992) (CBD website). Member States are also required to adopt further measures that include: the provision of adequate accommodation for zoo animals aimed at satisfying their biological needs; species-specific enrichment of enclosures; a high standard of animal husbandry; and a programme of preventative and curative veterinary care and nutrition. Zoos should also prevent the escape of animals and the intrusion of outside pests and vermin.

From April 2005 (2007 in the case of Bulgaria and Romania), the requirements of the Directive were to be fully implemented and enforced. Findings from subsequent investigations in EU Member States (Spain: InfoZoos 2006 to 2010; EU Zoo Inquiry 2011, Country Reports) have identified that transposition of the Directive into national and, where appropriate, regional legislation had not been fully achieved by nine out of the 21 assessed Member States (2011). Implementation of the Directive's requirements is therefore inconsistent across the EU and enforcement is largely lacking in the majority of EU Member States. National laws often lack detailed provisions relating to educational and scientific activities, guidance on adequate animal care, licensing and inspection procedures, provisions for public health and safety as well as clear strategies for dealing with humane care of animals in the event of zoo closure.

Unlike other EC Directives, Directive 1999/22/EC includes no guidance or explanatory notes and therefore its effective application relies on interpretation, and any guidance provided by the EU Member State Competent Authorities. The majority of Member State legislation provides little more than the minimum, and largely ambiguous, requirements of the Directive, which has led to inconsistencies in its application across EU Member States as a result of different interpretations of requirements, definitions and licensing and inspection procedures. As a consequence, many Member States are failing to ensure the provisions are fully applied by zoos (Eurogroup for Animals, 2008⁵; ENDCAP, 2009; EU Zoo Inquiry 2011) and zoos are largely left to their own devices. Since 2005, the European Commission, which is responsible for overseeing and ensuring the effective implementation of the Directive by Member States, has taken legal action against a number of Member States for non-compliance, most recently Spain (European Commission, pers comm., 22nd June 2011).

Feedback from the EU Member State Competent Authorities identifies the total number of zoos (as defined) in the EU to be at least 3,000 (and evidence from the EU Zoo Inquiry suggests it is considerably higher). Hundreds of unlicensed and unregulated, but operational zoological collections have been identified and many Member States do not maintain a central record of zoos. Some zoos are affiliated with national and international zoo associations, which are largely membership-focused entities, and whilst they often demand higher standards, these zoos should not be regarded as

representative and are in the minority. For example, no more than 8% of the total number of zoos in Europe are members of the European Association of Zoos and Aquaria (EAZA). Member zoos are usually expected to do more than comply with national legislation: for example, EAZA member zoos are expected to comply with the *EAZA Minimum Standards for the Accommodation and Care of Animals in Zoos and Aquaria*, but there is evidence to suggest that Member zoos are not regularly accredited to ensure they meet these additional standards - a reality acknowledged by EAZA itself (EAZA, 2011⁶).

The findings of the 20 country investigations in EU Member States, which formed part of the EU Zoo Inquiry 2011, have revealed that many zoos in the EU are substandard and are failing to comply with the Directive. Furthermore, Member State enforcement agencies, State veterinarians and zoo operators lack knowledge and expertise about how to comply with the zoo operation requirements and ensure captive wild animals are provided with appropriate conditions. As a consequence, conditions in zoos often fail to adequately provide all their animals with their spatial, physical, physiological and behavioural needs (as required by Article 3(3) of the Directive) and natural behaviours are compromised or prevented. This Project Summary identifies and assesses the current situation in the majority of EU Member States, highlights the issues requiring attention and provides recommendations with regard to how implementation and enforcement of national zoo laws can be improved.

The commitment made by the European Commission, largely as a result of the evidence presented by the EU Zoo Inquiry 2011, to establish a Preferred Code of Practice for zoo regulation is to be welcomed. This Project Summary is likely to aid in its production.

METHODOLOGY

Between March 2009 and December 2010, an assessment of 200 zoological collections in 20 EU Member States was made as part of an evaluation of the level of implementation and enforcement of European Council Directive 1999/22/ EC. The project included an evaluation of national laws pertaining to zoos in each EU Member State compared to the requirements of the Directive, an analysis of the implementation and enforcement of those laws and an assessment of the status and performance of randomly-selected zoos in each Member State.

A Zoo Assessment Protocol was developed and tested to ensure consistency in data collection (www.euzooinquiry.eu). For certain Member States (England, France, Germany, Republic of Ireland, Italy, Malta and Portugal) individual, locally-fluent investigators were contracted to undertake the work. In other Member States (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia) a single investigator from the UK, collected and analysed the data.

Implementation and enforcement of Member State legislation

Data were collected and evaluated through:

- Completion of a questionnaire by the Competent Authorities in each Member State
- Informal interviews with the Competent Authority
- Reviewing national zoo legislation

Status and performance of zoos

Using the definition of a zoo in the Directive⁵, a variety of zoological collections was assessed including: traditional zoos, safari parks, aquaria, dolphinaria, aviaries and terraria. In some cases, national legislation did not use the Directive's definition, which may have lead to inconsistencies in application. Where this was the case, any variance was noted, but zoos, *as defined by the Directive*, were nevertheless included in the project to maintain consistency.

Zoos were selected for evaluation using two methods: A. For those Member States with large numbers of zoos, 25 zoos were randomly-selected (France, Germany, Italy and England). B. For those Member States (n = 16) with a small number of zoos, between three and ten collections were selected, dependant upon the total number of zoos in the country and their accessibility. Zoos were identified by referring to Government records (if these exist), using online resources, published media and information from local NGOs.

Data were collected using a video camera which recorded a complete overview of the structure and content of each zoo, including: all enclosures; all visible animals; signage; public education facilities; any talks, shows or interactive animal handling sessions; public/animal contact and security issues. Additional information was collected from the zoo website and literature that was, occasionally, provided by the zoos themselves. Data collection was undertaken without the prior knowledge of the zoo management and therefore only areas accessible to the general public were recorded. Thus, for example, off-show areas, food preparation and storage rooms, quarantine and veterinary facilities were not included.

Data were analysed using a Zoo Assessment Protocol that had been developed and refined during an assessment of zoos in Spain (InfoZoos 2006 - 2010) and which took into consideration the requirements of the Directive, national law and the *EAZA Minimum Standards for the Accommodation and Care of Animals in Zoos and Aquaria* (available on the EAZA website and referred to in the preamble of the Directive). Information and guidance was also drawn from the UK Standards of Modern Zoo Practice 2004 (SMZP) and Zoos Forum Handbook. The Zoo Assessment Protocol was adapted for each Member State dependent upon the specific requirements of national law.

The analysis was separated into the following sections:

- A. General Zoo Information.
- B. Conservation Commitment.
- C. Public Education.
- D. Evaluation of Animal Enclosures.
- E. Animal Welfare Assessment.

Further details of the assessment methodology are available at **www.euzooinquiry.eu**

All zoos included in the evaluation were asked to complete a Standard Zoo Questionnaire that asked for details of their participation in: European coordinated captive breeding programmes; *in situ* conservation projects; public education; and current research activities. The Questionnaire also sought information relating to levels of staff training, veterinary care, and programmes to provide environmental enrichment and appropriate nutrition.

Resources dictated that the EU Zoo Inquiry 2011 included an assessment of the following EU Member States: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, France, Germany, Greece, Hungary, Republic of Ireland, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovenia and United Kingdom (England only).

The remaining seven Member States were not included in this zoo assessment. Although an additional report focussing on zoo regulation in **Spain** is included in this Project Summary report (page 62).

Since the publication of the EU Zoo Inquiry 2011 Country Reports (available at www.euzooinquiry.eu), all Member States involved in the initial investigations have been asked to provide an update on the actions implemented since the publication of their country report. This information is included in the Country Report Summaries (page 41).

THE EU ZOO INQUIRY 2011 FINDINGS: COMPARATIVE ANALYSIS

The following provides the results from further analysis of data collected from the 20 EU Member States included in the EU Zoo Inquiry 2011 investigations and in addition, unpublished data from all 27 Member States. The aim is to evaluate the level of implementation and enforcement of the European Council Directive 1999/22, relating to the keeping of animals in zoos, across the European Union, to identify common trends in the application of its requirements, to identify any issues requiring attention, and to highlight best practice in the hope that this will be widely adopted to improve standards.

The data used in the analysis and incorporated in the following tables were sourced from Member State Competent Authorities, the selected zoos, expert opinion, published literature and media reports between 2009 and 2011. References are provided where warranted in this report but for the majority please refer to the individual Country Reports at www.euzooinquiry.eu, which also provides details of the method of data collection and analysis. Where new, previously unpublished information is now available, particularly reporting on actions by Member States post-2009/10 investigations, this has been included. The Born Free Foundation and authors of this document have made every effort to ensure that the information provided in this report is correct and complete at the time of writing.

TRANSPOSITION

Council Directive 1999/22/EC ('the Directive'), relating to the keeping of wild animals in zoos officially came into force in April 2002, by which time all Member States (n=15) were required to have transposed the requirements of the Directive into national legislation. In addition, those Member States joining the EU in 2004 (n=10) and in 2007 (n=2) were required to have transposed and implemented the Directive's requirements pre-accession.

By the 2002 deadline, ten of the then 15 EU Member States (Germany, Italy, United Kingdom, Republic of Ireland, Denmark, Greece, Spain, Portugal, Austria and Finland) had failed to transpose and implement the Directive's requirements, which instigated legal action by the European Commission against those countries. Since 2002, the European Commission, which oversees the implementation of all EC legislation, has reportedly opened 24 infringement procedures against Member States for failing to comply with the Directive (European Commission, pers. Comm., 24 November 2011) (e.g. Spain (2007), Italy (Infringement Procedure No.2007/2179) and Portugal⁷). The case against Spain which is focused on the implementation of the Directive in specific Autonomous Communities, is on-going (European Commission, pers. comm., 27th March 2012).

Findings^{*} from the evaluation of national legislation and Standard Member State Questionnaires of the 20 selected Member States (EU Zoo Inquiry 2011) revealed that, at the time of the investigation, eight Member States (Austria, Belgium, Cyprus, Estonia, Greece, Hungary, Poland and Slovenia) had not fully transposed the requirements of the Directive into their respective national law. This includes an apparent:

- Incorrect interpretation of Article 1 of the Directive (*'the role of zoos in the conservation of biodiversity'*). The national law in Austria, Belgium, Cyprus, Estonia and Latvia has failed to adopt this objective.
- Incorrect interpretation of Article 2 of the Directive (the definition of a 'zoo') in the national zoo law of Estonia, Hungary, Greece, Poland and Slovenia.
- Inaccurate and sometimes incomplete interpretation of Article 3 of the Directive (*'requirements applicable to zoos'*) in the national zoo legislation of Cyprus, Estonia, Poland, Portugal and Slovenia.
- Omission of the requirement of Article 4(2) of the Directive to undertake an on-site inspection of the establishment to check compliance, before opening to the public in Austria, Belgium, Cyprus, Poland and Slovenia.
- Omission of the requirement of Article 4(4) of the Directive to undertake an on-site inspection of the establishment to check compliance, before granting a licence renewal or where the Conditions to the licence have significantly changed in Belgium, Czech Republic, Estonia, Poland and Slovenia.
- Omission of the requirements of Article 6 of the Directive concerning zoo closure and the implementation of contingency plans for the animals in national law in Belgium, Cyprus, Malta and Slovenia.

Since the EU Zoo Inquiry 2011 investigations and the subsequent publication of the Country Reports⁸, some Member States have chosen to amend the national legislation to address identified contraventions of the Directive. This includes Cyprus, which according to the Competent Authority, has already made significant changes to Regulation 81/2002 to ensure zoos are inspected to assess and confirm compliance before licencing is approved, Article 10 of 81/2002, 'requirements applicable to zoos', is now consistent with those of Article 3 of the Directive; and that establishments not meeting the requirements have since been closed, or wild animals relocated (Permanent Representative of Cyprus to the EU, pers. comm., 16th March 2012). Similar actions are expected in Estonia, Greece and Poland (see pages 48, 51 and 58).

^{*} Analysis of data collected from EU Member States and interpretation of national zoo legislation. See Country Reports for more detail. *www.euzooinquiry.eu

Member State		Was the Directive transposed by the deadline (April 2002)?	Primary objective of the National Zoo Legislation and if compatible with Directive (conservation of biodiversity)?		Compliance of 'requirements applicable to zoos' with Art 3 of the Directive
<u>2011 Data (EU Zo</u> Austria	po Inquiry investigations) Regulation on the Minimum Requirements for Zoos 491/2004 (as amended by BGBI II No. 30/2006)	No (2005)	Protecting animal welfare and principles in animal husbandry. Not compatible.	Compliant	Compliant
Belgium	Royal Decree 10/08/1998 (Arrêté royal relatif a l'agrement des parcs zoologiques (SG(1999)A/ 06453). (And Ministerial Orders for Mammals Birds and Reptiles in zoos)	Unknown. National zoo legislation has not been amended since implementation in 1999	Protecting animal welfare and principles in animal husbandry. Not compatible.	Compliant (however does not stipulate number of days open to the public)	Compliant
Bulgaria	Biological Diversity Act (SG 77/09.08.2002 Amended) implemented through Regulation No. 1 (SG 43/26.05.2006) and Regulation No. 6 (SG 105/2.12.2003 amended SG 44/12.07.2009)	Implemented 2006 (entry into the EU in 2007)	Conservation of biodiversity	Compliant	Compliant
Cyprus	Animal Protection and Welfare (Keeping Wild Animals in Zoos) Regulation 81/2002		1) Protection of health and welfare of animals; 2) Prevention of animal escape; 3) Protection of animals and visiting public; 4) Education of public. Not compatible.	Compliant	Not compliant
Czech Republic England	The Zoo Act No. 162 (18/04/2003) The Zoo Licensing Act 1981 (as amended)	Yes No (2003)	Conservation of biodiversity Conservation of biodiversity and care of animals	Compliant Compliant	Compliant Compliant
Estonia	Government Regulation No. 237 for the licensing of zoos (19/09/2003) (amended 01/02/2009); Government Regulation No. 245 for the planning and building of zoos and for the keeping of zoo animals (08/07/2004) (amended 01/10/2007)); Animal Protection Act	Implemented 2004 (entry into the EU in 2004)	Protecting animal welfare and principles in animal husbandry. Not compatible.	Not compliant (no mention of wild animals or any exemptions related to circuses or pet shops)	Not compliant
France	Arrêté 25/03/2004; Le Code de l'environnement; Le Code Rural	No (2004)	Conservation of biodiversity	Compliant	Compliant
Germany	Federal Nature Conservation Act (Bundesnaturschutzgesetz vom 29/07/2009)	No (2004)	Conservation of biodiversity	Compliant	Compliant
Greece	Greek Presidential Decree 98/2004 (no. 69 A 03.03.2004); Ministerial Decision (Gov. 396/21.3.2007)	No (2004)	Conservation of biodiversity	Not compliant (since Ministerial Decision in 2007)	Compliant
Hungary	Joint Decree n.3/2001 (II.23) Regulation on the Establishment, Operation and Maintenance of Zoos and Animal Shelters KOM-FVM-NKOM-BM (amended by Joint Decree 13/2003 (IX.9) enacted by the Animal Protection Act 1998 XXVIII	Implemented 2001 (entry into the EU in 2004)	The protection and welfare of animals and conservation of biodiversity	Not compliant	Compliant
Ireland	Irish European Communities (Licensing and Inspection of Zoos) Regulations 2003, S.I. no. 440/2003	No (2003)	Conservation of biodiversity	Compliant (although is not references in the national law)	Compliant
Italy	Legislative Decree 21 March 2005 n.73; (and Ministerial Decree n.469 (06/12/2001) concerning facilities that keep <i>Tursiops truncatus</i>)	No (2005)	Conservation of biodiversity	Compliant	Compliant
Latvia	Cabinet of Ministers' Order No. 1033 (09/11/2010) for the 'Requirements for holding wildlife in a zoo and the zoo's requirements for the establishment and registration' enacted by the Animal Protection Law (12/09/1999) (last amended 16/12/2010)	Implemented 2001 (entry into the EU in 2004)	Protecting animal welfare and principles in animal husbandry. Not compatible.	Compliant	Compliant

Requirement that zoo inspection takes place before licence granted	Requirement that zoo inspection is necessary on the extension of, or on changes to the Conditions of the licence	 A) Inclusion of penalties if non- compliance identifed B) Inclusion of closure protocol C) Animals' welfare assured on closure 	National legislation exceeds requirements of the Directive?
No	Yes	A) Yes; B) Yes; C) Yes	Yes (Minimum Standards for the keeping of animals in zoos)
No	No	А) Yes; В) No ; C) No	Yes (Minimum Standards for the keeping of animals in zoos)
Yes	Yes	A) Yes; B) Yes; C) Yes	Yes (Minimum Standards for the keeping of animals in zoos)
No	Yes	A) Yes; B) Yes; C) No	No
Yes Yes	No Yes	A) Yes; B) Yes; C) Yes A) Yes; B) Yes; C) Yes	Yes Yes
Yes (although few zoos have been inspected)	Νο	A) Yes; B) Yes; C) Yes	No
Yes	Yes	A) Yes; B) Yes; C) Yes	Yes
Yes	Yes	A) Yes; B) Yes; C) Yes	No
Yes	Yes	A) Yes; B) Yes; C) Yes	No
Yes	Yes	A) Yes; B) Yes; C) Yes	Yes (Minimum Standards for the keeping of animals in zoos)
Yes	Yes	A) Yes; B) Yes; C) Yes	No
Yes	Yes	A) Yes; B) Yes; C) Yes	Yes
Yes	Yes	A) Yes; B) Yes; C) Yes	Yes

Member State	National Zoo Legislation	Was the Directive transposed by the deadline (April 2002)?	Primary objective of the National Zoo Legislation and if compatible with Directive (conservation of biodiversity)?	the Directive	Compliance of 'requirements applicable to zoos' with Art 3 of the Directive
Lithuania	Wildlife Protection Act (WPA) (06/11/1997 (amended 22/06/2010); Government Order No. 298 (04/06/2002); Government Order No. 346 for the standards for the keeping of wild animals in zoos (27/06/2002)	Implemented 2002 (entry into the EU in 2004)	Conservation of biodiversity	Compliant	Compliant
Malta	Legal Notice 265 of 2003 'The Keeping of Wild Animals in Zoos Regulations' enacted by the Animal Welfare Act, as amended by Legal Notice 426 of 2007; Act V of 2007 and V of 2011)	Implemented 2003 (entry into the EU in 2004)	Conservation of biodiversity	Compliant	Compliant
Poland	Nature Protection Act (amended on 10/06/11); Regulation on the conditions for the husbandry and keeping of respective groups of species in zoological gardens (20/12/2004); Regulation on the Health and Safety in Zoos (10/12/2003)	Implemented 2004 (entry into the EU in 2004)	Conservation of biodiversity	Not compliant	Not compliant
Portugal	Law Decree No. 59/2003	No (2003)	The protection and welfare of animals and conservation of biodiversity	Compliant	Not compliant
Romania	Romanian Act No. 191 (16/04/2002); Ministerial Order No. 1798 (19/11/2007); Ministerial Order No. 16 (7/03/2010)	Implemented 2002 (entry into the EU in 2007)	Conservation of biodiversity	Compliant	Compliant
Slovenia	Nature Conservation Act (06/1999) (last amended 22/04/2004); Decree on zoos and similar facilities (No. 37/2003); Order on living conditions and care of wild animals in captivity (15/11/2001)		Conservation of biodiversity	Not compliant	Compliant for facilities identified as zoos; Not compliant for facilities identified as 'similar facilities'
2012 Data Denmark	Executive Order no. 1023 on the licensing and	No (December 2002)		Compliant	
Finland	inspection of zoos (12/12/2002) Animal Welfare Act (247/1996); Animal Protection Regulation (396/1996)	No (2003)			
Luxembourg	Reglement grand-ducal du 10/02/2003 relatif a la detention d'animaux sauvages dans un environnement zoologique Memorial A no. 27 du 17/02/2003	No (2003)		Compliant	
Slovakia	Act no. 117/2010 Z. amending and supplementing Law no. 543/2002 Z. for Nature and Landscape Protection; Act. 24/2006 Z. for Assessment of Environmental Impact	No (2003)		Compliant	
Spain	Law 31/2003	No (not at Regional level)	Conservation of Biodiversity	Compliant (but states, duration open to the public - 1 day or more)	Compliant
Sweden	Species Protection Ordinance (845/2007)	No (2003)		Compliant	
				1	

Requirement that zoo inspection takes place before licence granted	Requirement that zoo inspection is necessary on the extension of, or on changes to the Conditions of the licence	 A) Inclusion of penalties if non- compliance identifed B) Inclusion of closure protocol C) Animals' welfare assured on closure 	National legislation exceeds requirements of the Directive?
Yes	Yes	A) Yes; B) Yes; C) Yes	Yes (Minimum Standards for the keeping of animals in zoos)
			animais in 2005)
Yes	Yes	A) Yes; B) Yes; C) No	No
No	No	A) Yes; B) Yes; C) Yes	Yes
Yes	Unknown	A) Yes; B) Yes; C) Yes	Yes (Minimum Standards for the keeping of animals in zoos)
Yes	Yes	A) Yes; B) Yes; C) Yes	Yes (Minimum Standards for the keeping of animals in zoos)
Unclear	No	А) Yes; В) Yes; С) No	Yes (Minimum Standards for the keeping of animals in zoos)
		A) Yes; B) Yes	
Yes		A) Yes; B) Yes; C) Yes	Yes (Minimum Standards for the keeping of animals in zoos)
Yes		A) Yes;	
Yes		A) Yes	
No (although Competent	Yes	A) Yes- B) Yes- C) Yes	No

No (although Competent Authority advises that inspection is carried out)	Yes	A) Yes; B) Yes; C) Yes	No
Yes			Yes (Minimum Standards for the keeping of animals in zoos)

IMPLEMENTATION

All EU Member States (25) were required to have implemented the requirements of the Directive (1999/22/ EC) by April 2005 (2007 in Bulgaria and Romania). The implementation of the Directive by Member States is an issue for subsidiarity and although transposition is overseen by the European Commission, it is the responsibility of the Member State to ensure the requirements of the Directive are effectively applied. Directive 1999/22/EC includes no guidance or explanatory notes and therefore effective application relies on the interpretation of, and any guidance provided by, the EU Member State Competent Authority.

Of the 20 selected Member States (EU Zoo Inquiry 2011), 14 have incorporated additional provisions into their national law to amplify and build upon the largely ambiguous requirements of the Directive. In ten Member States, these consist of setting out minimum species-specific standards for the keeping of animals in zoos (page 36), but some Member States have included further provisions relating to scientific research, conservation and public education, as well as public safety (e.g. England, Italy and Portugal). Providing there is effective enforcement of the law, incorporating more detailed provisions into national zoo law should improve interpretation and result in a higher degree of compliance. The remaining six Member States have, however, only applied the Directive, as written.

Findings have identified inconsistencies in the Directive's application amongst EU Member States, which appears to be largely as a result of poor enforcement. However, misinterpretation of requirements, definitions and licensing and inspection procedures were also identified as a problem. Key definitions, such as the definition of a 'zoo', has been misconstrued (e.g. Hungary), there are examples where certain key terminology is not explained (e.g. Ireland) and in many cases, the clause '*do not exhibit a significant number of animals or species to the public*' (Article 2 of the Directive) has been loosely interpreted to mistakenly exempt establishments and jeopardise the objectives of the Directive (e.g. Greece, France, Poland). Together with significant evidence of inconsistent enforcement, large numbers of establishments that should warrant a zoo licence under the Directive appear to have been misidentified. The EU Zoo Inquiry 2011 has identified that there could be approximately 1,000 unlicensed, but operational, 'zoos' (as defined) across the EU Member States; zoos which are quite possibly evading the requirements of the Directive.

Findings* have revealed that, at the time of the investigation:

- Of the 15 Member States that have an expert's advisory body to assist the Competent Authority in animal-related issues, six (Belgium, Czech Republic, England, Lithuania, Poland, Portugal) are are zoo-focused and provide, amongst other things, 'best practice' guidance. Although most are believed to be active, the CEAPZ in Portugal has been inactive since 2007 (Leonor Galhardo, pers. comm., 10th August 2011).
- Five Member States were identified as providing substantial guidance on zoo regulation and compliance (Czech Republic, England, France, Italy and Portugal).
- Austria's zoo classification system has ensured all 'zoos' (as defined) are licensed and meet specific requirements dependent upon the conservation status of the species, in addition to the numbers of individuals or species. This approach is more compatible with the objectives of the Directive.
- Competent Authorities in Bulgaria, Cyprus, England, Germany, Italy, Poland and Portugal do not maintain a national database of zoos. Zoo licences vary from one year duration (Malta) to an indefinite period in Poland, Latvia, Italy, France, Estonia, Czech Republic, Belgium and Austria.

Since the EU Zoo Inquiry 2011 investigations and the subsequent publication of the Country Reports, some Member States have indicated an intention to establish additional guidance to reduce misinterpretation of legal definitions and requirements. Furthermore, the European Commission is to establish, through a multi-stakeholder process, a Preferred Code of Practice for zoos that will, if adopted by the Member State Competent Authorities, improve compliance.

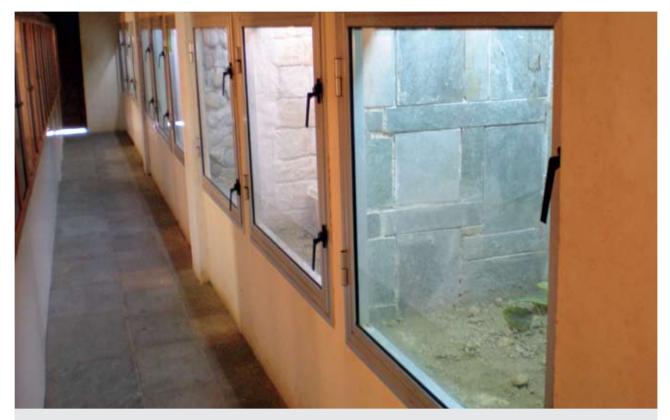


Figure 5

Pafos Animal and Bird Park (Cyprus).

A complete lack of any species information signage was observed for many enclosures, a specific requirement of Article 3(2) of the Directive.



Figure 6

Riga Zoo (Latvia).

Enclosures often lacked suitable features and furnishings to provide the animals comfort, stimulation and an opportunity to exercise and express natural behaviour, a requirement of Article 3 (3) of the Directive.

Member State	Date of implementation of national zoo legislation	Competent Authority(ies)	Government advisory body	Additional guidelines or codes of practice	Use of 'significant animals' option in Art 2, Directive
2011 Data (EU Austria	Zoo Inquiry investigations) 2005	Federal Ministry of Health and nine Provincial Competent Authorities	Animal Welfare Council	No	Facilities within categories A, B and C relevant to taxa, numbers of species and conservation status
Belgium	1999	Federal Public Service (FPS) for Public Health, Food Safety and Environment (governs the Department for Animal Welfare and CITES (DAWC))	Zoos Commission	No	No
Bulgaria	2006	Ministry of Environment and Water, and local municipalities	Interministerial Commission	No	More than 5 specimens of each species
Cyprus	2004	The Department of Veterinary Services within the Ministry of Agriculture, Natural Resources and Environment	None	No	Yes (but no criteria)
Czech Republic	2003	Ministry of Environment	Commission for Zoological Gardens	Guidance on Ministry of Environment website	Facilities with no more than 20 species of mammal and bird
England	2003	Department for Environment, Food and Rural Affairs (Defra) and Local Authorities	Zoo Experts Committee	Standards of Modern Zoo Practice and Government Circulars	Exemptions - under 50 individuals that are neither conservation- significant nor hazardous. Dispensations - dependent on numbers of species kept
Estonia	2004	Ministry of Environment and the Environmental Board in 13 Provinces	Advisory Commission	No	No
France	2004	Ministry of Environment, Energy, Sustainable Development and Sea (DREAL) and the Ministry of Agriculture, Food, Fisheries and Rural Affairs.	National Consultative Commission for Captive Wildlife	Regular 'circulaires' are distributed from DREAL to the Prefectures	Yes (but no criteria)
Germany	2002 (Federal Government)	Federal Ministry of Environment, Nature Conservation and Nuclear Safety; Ministry for Conservation of Nature within each Federal State	None	No	Facilities with no more than 20 animals of any wild species
Greece	2004	Ministry of Environment, Energy and Climate Change	Advisory Committee of the Ministry of Environment	f No	Not defined until 2007 - Ministerial Decision (Gov. 396/21.3.2007)
Hungary	2001	10 regional offices of the Inspectorate for Environmental Protection, Nature and Water Management; representatives of the Animal Health Authority; Ministry of Rural Development	None	No	No
Ireland	2003	National Parks and Wildlife Service (NPWS) within the Department of Environment, Heritage and Local Government	None	Standards of Modern Zoo Practice (UK)	Yes (no clear criteria)
Italy	2005	Ministry of Environment and the Protection of Territory and of the Sea	CITES Scientific Committee	No	Facilities with no more than 10 animals of different species, or one or more IUCN Red Listed species; or one species included in Appendix 1 of CITES; or those containing species requiring specialised care and conditions
Latvia	2005	Nature Conservation Agency within Ministry of Environment; Food and Veterinary Service within Ministry of Agriculture; Regional Environmental Board	Animal Protection Ethics Council	No	No

No. of zoos recognised by Competent Authority (Member State Questionnaire (MSQ)) / Official Database	No. of zoos (from other sources)	A) Duration of zoo licence B) Government-regocognised zoos are all licensed?	No. of additional, unlicensed zoos identifed (EU Zoo Inquiry 2011)
7 (MSQ)	78 (www.at.zoos-info.org)	A) Indefinite period; B) Yes	1 confirmed (however, there are believed to be more)
 42 (MSQ)	N/A	A) Indefinite period; B) Yes	0
20 (MSQ)	N/A	A) 5 years for the first issued licence and for any conditional licence, and 10 years for any subsequent unconditional licence; B) No (3 unlicensed)	1
3 (MSQ)	N/A	A) 5 years; B) No (1 unlicensed)	6
 20 (Database)	N/A	A) Indefinite period (2 years for new applicants); B) Yes	0
300 (Database)	500 (Born Free data)	A) 4 years for new zoos and 6 years for renewed licenses; B) Yes	200
 6 (MSQ)	N/A	A) Indefinite period; B) Yes	2
300 (Database)	233 (Zoonaute website); 417 (Eurogroup 2008); 943 (Les zoos dans le monde); 921 (Code Animal)	A) Indefinite period; B) Yes	Further investigation necessary
Unknown	350 (Eurogroup for Animals); 550 (Association of German Zoo Directors); 859 (www.zoo- infos.de)	A) Decided by each Federal State; B) N/A	4 (Sachsen State); 3 (Thüringen State)
1 (MSQ)	N/A	A) 5 years; B) Yes	At least 14
14 or 15 (MSQ)	N/A	A) 4 years; B) Yes	0
10 (Database)	N/A	A) 5 years (although usually granted for a 3-year period); B)Yes	17
68 requiring license; 19 exempt (MSQ)	N/A	A) Indefinite period; B) No (63 unlicensed)	0
2 zoos and 15 "animal collections" (MSQ)	N/A	A) Indefinite period; B) Yes	Unknown

	Date of implementation of national zoo legislation	Competent Authority(ies)	Government advisory body	Additional guidelines or codes of practice	Use of 'significant animals' option in Art 2, Directive
	national 200 legislation		aavisoly body	or codes of practice	טייניטו זוז אונ 2, טוופכמעפ
Lithuania	2002	Ministry of Environment	Zoo Inspection Commission	No	Faciities with no more than 10 species of wild animal and not more than 50 animals and pose no threat to wildlife and the conservation of biodiversity
Malta	2003	Veterinary Regulation Directorate of the Agriculture and Fisheries Regulation Department of the Ministry of Resources and Rural Affairs	Council for Animal Welfare	No	No
Poland	2004	Directorate General of Environmental Protection within the Ministry of Environment	Zoos Council	No	Facilities with no more than 15 species and together not more than 50 specimens of reptiles, birds and mammals
Portugal	2003	Directorate General of Veterinary Medicine, Regional Director of Agriculture on behalf of the Ministry of Agriculture, Rural Development and Fishieries in consultation with the Insitute of Nature Conservation and Biodiversity	Zoo Ethics and Monitoring Commission	Yes	Facilities with no more than 150 individual animals
Romania	2007	Ministry of Environment and Sustainable Development; National Environmental Protection Agency; National Sanitary Veterinary and Food Safety Authority	None	No	No
Slovenia	2003	Ministry of Environment and Spatial Planning	Expert Council for the Protection of Animals	No	Facilities with no more than 6 species of large mammals or 20 other mammal species; 6 species of owls or birds of prey or 20 other bird species; 10 species of amphibians or reptiles; 20 species of fish, cephalopods or higher crustaceans; 100 species of butterfly or 100 species of other invertebrates
2012 Data					
Denmark	2002	Ministry of Justice	Council for the Keeping of Exotic Animals		No
Finland	2003	Ministry of Agriculture and Forestry; Regional State Administrative Agency		Yes	No
Luxembourg	2003	Administration des Services Veterinaires		No	No
Slovakia	2003	Ministry of Environment	Commission for Zoological Gardens		Facililties with no more than 30 individual mammals from 15 different species and 50 individual birds from 14 species
Spain	2003	Ministry of Environment and Rural Affairs. Plus, 17 Regional Governments of Spain	Working Group on Zoos	'El parque zoologico un Nuevo aliado de la biodiversidad' (2010)	No
Sweden	2003	County Administrative Boards	Swedish Environmental Protection Agency and Board of Agriculture		Facilities with no more than 7 species with a relevant number of specimens of each species (not including mammalian species)

No. of zoos recognised by Competent Authority Questionnaire (Member State (MSQ)/ Official Database)	sources)	A) Duration of zoo licence B) Government-regocognised zoos are all licensed?	No. of additional, unlicensed zoos identifed (EU Zoo Inquiry 2011)
2 (MSQ)	N/A	A) 4 years; B) Yes	3
3 (MSQ)	2 (International Animal Rescue Malta)	A) 1 year; B) Yes	1
23 (MSQ)	"Many facilities" (Dr. Sergiel)	A) Indefinite period; B) No (11 unlicensed by national zoo legislation)	1
20 (MSQ)	N/A	A) 6 years; B) No (3 unlicensed)	3
33 (MSQ)	N/A	A) 10 years; B) No (8 unlicensed)	1
4 'zoos' and 7 'similar facilities' (MSQ)	N/A	A) Not exceeding 10 years (for 'zoos') and not exceeding 5 years (for 'similar facilities'); B) Yes	0
Unanswered	N/A	A) Indefinite period; B) N/A	N/A
 Approximately 15 (MSQ)	N/A	A) Indefinite period; B) Yes	N/A
1 (MSQ)	N/A	A) Indefinite period; B) Yes	N/A
4 (MSQ)	N/A	A) 4 years; B) Yes	N/A
Approximately 100 (MSQ)	130 (InfoZoos)	A) 1 year; B) Yes	1 (InfoZoos)
49 (MSQ)	N/A	A) Unknown; B) Yes	N/A

ENFORCEMENT

Despite the national law of some Member States exceeding the provisions of the Directive, findings indicate that across all assessed EU countries enforcement of the requirements of the Directive is inconsistent and, in some cases, none existent. Enforcement agencies and veterinarians involved in the inspection of zoos appear to be largely inexperienced and under-resourced, often failing to undertake the required regular inspections, to penalise non-compliance (as required by Articles 4(3), 5 and 8 of the Directive), and seemingly to permit unlicensed or non-compliant zoos to remain operational. As a result, few of the 200 zoos assessed in the 20 EU Member States met all their legal obligations, whilst the larger zoos, often zoo association-affiliated, appear to have been left to their own devices, with little or no intervention by the enforcement authorities.

Article 7 of the Directive requires the Member State to identify the Competent Authority. However, in the majority of countries this has proven to be complicated as competences are often shared between government departments. For the most part, responsibilities are shared between the Ministry of Environment (conservation matters) and Ministry of Agriculture (veterinary authorities). Potential conflict of interests, limited resources and poor communication between government departments has inevitably resulted in limited enforcement. For example: in Italy, three Ministries - 'Environment', 'Health' and 'Agriculture' - are involved in the regulation of zoos, only five zoos had been granted a licence and over 60 are believed to be operational but unlicensed. In Estonia, discussions between the Competent Authorities revealed that few zoo inspections had ever taken place. In Greece, no zoo inspectorate existed.

Only six Member State Competent Authorities refer to zoo inspection criteria and procedure in the national legislation or any accompanying guidance. Few have a structured and centralised system of reporting. In the majority of circumstances, licensing procedures lack transparency and appear to be left to the discretion of the enforcing authority. In Germany, for example, the Federal law states that the regularity of the inspection is at the discretion of the Federal State Government. The majority of Member States assessed enforce zoo regulation nationally (n=12 MS), as opposed to through a regionally (or local) enforcement agency (n=8 MS) and the regularity of zoo inspection varies from annually (n=11 MS) to not specified (Estonia, France and Germany).

A further concern is the apparent inexperience of many veterinarians in fundamental and applied animal welfare science. Confirmed by an evaluation of European veterinary facilities⁹, the ability for veterinarians to assess captive wild animal welfare, identify indicators of poor welfare and effectively treat the condition is questionable. The European Commission, in conjunction with the Federation of Veterinarians of Europe (FVE), is providing workshops for veterinarians and practitioners on the welfare of 'wild animals in captivity'¹⁰.

In addition to the above, findings^{**} have revealed that, at the time of the investigation:

- There is little indication that enforcement is comprehensive and effective.
- Fourteen of the 20 Member State Competent Authorities indicated that further training to improve the knowledge and expertise of the enforcement agencies would be welcomed.
- Enforcement personnel and veterinarians involved in the inspection and regulation of zoos usually lack the regular training and skills necessary for the care and welfare of wild animals in captivity.
- Few Member States provide regular training for their zoo inspectorate.

Since the EU Zoo Inquiry 2011 investigations and the subsequent publication of the Country Reports, some Member States have indicated an intention to organise national or regional training of enforcement agencies, veterinarians and zoo operators in 2012 (e.g. Bulgaria, Portugal and Romania).

¹⁰ http://www.animalwelfare-education.eu/

⁹ Federation of Veterinarians of Europe (FVE). (2009). Animal Welfare Training in European Veterinary Faculties. Poster Presentation.

^{**}Analysis of data collected from EU Member States, national zoo legislation and selected zoos. See Country Reports for more detail.

Table 3 Enforcement

Member State	National or regional enforcement	Zoo inspectorate	Regularity of inspections (MSQ)	Identified inspection criteria and procedures	Opinion by Competent Authority, as to whether zoo inspectorate are adequately trained	A) Ineffective enforcement identified B) Opinion by Competent Authority that further training is necessary
2011 Data (EU Z Austria	oo Inquiry investigations Regionally	Veterinary Officials of the District Administrative Authorities	Annually	No	Yes	A) Yes; B) No answer
Belgium	Nationally (at time of investigation)	Department for Inspection of Animal Welfare and CITES and Veterinary Services	Annually (but dependent on resources and complaints)	No	Yes	A) Yes; B) Yes
Bulgaria	Nationally	Regional Inspectorates of Environment and Water	Annually	No	Partially	A) Yes; B) Yes
Cyprus	Nationally	Primarily Department of Veterinary Sciences	Every 6 months	Yes	No	A) Yes; B) Yes
Czech Republic	Nationally	Commission for Zoological Gardens and regional veterinary services	Every 2 years	Yes	Not answered	A) N/A; B) Not answered
England	Regionally	Secretary of State Zoo Inspectors and Local Authority-appointed experts	Formal inspection every 3 years (within 6-year term). Informal inspection every year excluding formal insepction year	Pre-inspection audit and inspection report (Appendix II of SMZP)	No (past Government reports have highlighted a need for more guidance, and additional training for Licensing Authorities)	A) Yes; B) Yes
Estonia	Nationally	The Food and Veterinary Board, the Environmental Inspectorate and police prefectures	Inconsistent (and a lack of clarity)	No	No	A) Yes; B) Yes
France	Regionally	DREAL-appointed officers and the Department of Veterinary Services within the Prefectures	Inconsistent (and a lack of clarity)	No	N/A	A) Yes; B) N/A
Germany	Regionally	Decided by each Federal State	"Regularly"	No	Not answered	A) Yes; B) Not answered
Greece	Nationally	None	Annually (not taking place)	No	N/A	A) Yes; B) Yes
Hungary	Regionally	Inspectorate for Environmental Protection, Nature and Water Management and Veterinary Authorities and Municipalities	Every 4 years (but at the discretion of the regional authorities)	No	Yes	A) Yes; B) No
Ireland	Nationally	Ministry of Environment, Heritage and Local Government- appointed inspectors	Annually	Inspection report (Appendix II of SMZP)	Yes	A) Yes; B) No
Italy	Nationally	Zoo Inspection Commission including experts from the of Health and Ministry of Agriculture and Forests	Annually	No	No	A) Yes; B) Yes
Latvia	Regionally	Inspectors from the Food and Veterinary Service and the Regional Department of the Nature Conservation Agency	Annually	No	Partially	A) Yes; B) Yes
Lithuania	Regionally	Zoo Inspection Commission and the State Food & Veterinary Service	At least every 4 years	Yes	Yes	A) Yes; B) Yes
Malta	Nationally	Government-appointed veterinary officers and/or Animal Welfare Officers, and Environmental Protection Department	Annually	No	Yes	A) Yes; B) Yes
Poland	Nationally	Regional Directorate for Environmental Protection, an NGO, the Zoos Council, the General Directorate for Environmental Protection, and the Veterinary Services.	At least every 3 years	No	Yes	A) Yes; B) Yes
Portugal	Nationally	Ministerially-appointed representatives of the Directorate General of Veterinary Medicine, the Institutute of Nature Conservation and Biodiversity	Annually, however official inspections are undertaken at last every 3 years	Yes	Yes	A) Yes; B) Yes
Romania	Regionally	Representatives from the Environment Protection Agency, the National Environmental Guard and the Sanitary Veterinary Authority	Biannually	No	No	A) Yes; B) Yes

Member State	National or regional enforcement	Zoo inspectorate	Regularity of inspections (MSQ)	ldentified inspection criteria and procedures	Opinion by Competent Authority, as to whether zoo inspectorate are adequately trained	A) Ineffective enforcement identified B) Opinion by Competent Authority that further training is necessary
Slovenia 2012 Data	Nationally	Government-appointed inspectors from the Ministry of Environment and Spatial Planning, and Veterinary Services	Annually	No	No	A) Yes; B) Yes
Denmark	Nationally	Regional Veterinary and Food Administration, Council for the Keeping of Exotic Animals	Annually		Not answered	A) N/A; B) Not answered
Finland	Nationally	Regional State Veterinary Officers, local authorities	Annually		Yes	A) N/A; B) Maybe
Luxembourg	Nationally	Administration des Services Veterinaires	Biannually		Yes	A) N/A; B) Yes
Slovakia	Nationally	State Veterinary and Food Administration, State Nature Conservancy	Every 2 years		Yes	A) N/A; B) Yes
Spain	Regionally	Regional Competent Authority	Dependent on regional authority			A) N/A; B) Yes
Sweden	Regionally	County Administrative Boards	Varies (annually but can be a several-year interval)		Yes	A) N/A; B) Yes

COMPLIANCE

A total of 200 randomly-selected zoos were assessed against 'the requirements applicable to zoos', Article 3 of the Directive, together with any additional requirements specified by national legislation of the 20 nations evaluated.

CONSERVATION

The aim of the Directive is to ensure all zoos in the European Community contribute to the conservation of biodiversity, including as part of a public education programme. These are activities which are regularly promoted as being at the heart of the 21st Century zoo (WZACS website). Underpinned by the priorities of the Convention on Biological Diversity (CBD), the Directive requires zoos in the EU to adopt measures for the *ex situ* conservation of biodiversity, which to be effective should complement *in situ* measures (CBD; Rees, 2005). Article 3(1) of the Directive requires zoo operators to commit to at least one of four conservation measures. These include their participation in: *scientific research from which conservation benefits accrue to the species; training in relevant conservation skills; exchange of information relating to species into the wild*. These conservation measures are fairly ambiguous requirements and are not supported by any explanation or guidance to ensure the operators understand what is required of them. This is the responsibility of the Competent Authority.

Findings indicate that these key requirements have been adopted by the majority of EU Member States, but to varying degrees. Nine Member States (e.g. Germany) have transposed the above requirements, as written, without further explanation; four have supported each option with guidance (e.g. England); and five EU Member States have required their zoos to comply with three or more of the Directive's options – thereby requiring zoo operators to contribute more significantly to the conservation of biodiversity. Ten Member States have particularly required zoos to protect those species classified as 'endangered' or Threatened (IUCN) (e.g. Lithuania, Portugal).

Evaluation of national legislation in the 20 selected Member States, at the time of the investigation, identified that:

- 19 Member States have included *scientific research* as an option, or specification.
- 19 Member States have included captive breeding and/or species reintroduction as an option, or specification.
- 19 Member States' zoos must promote and educate the public about the conservation of biodiversity.
- 11 Member States have included *training in relevant conservation skills* as an option, or specification (although there is no clarification as to what this means).
- 10 Member States' zoos must, in particular, keep and breed 'endangered' or protected species.
- 5 Member States' zoos must contribute to three or more of the above requirements.
- Some Member States require the zoo to inform the Competent Authority of captive breeding programmes (e.g. Hungary and Czech Republic).

Findings^{***} have revealed that, at the time of the investigation:

- An average of only 13% of species kept in European zoos were classified as Globally Threatened (IUCN Red List of Threatened Species™). Zoos are not prioritising Threatened species over Non-Threatened species.
- An average of 5% of mammalian, reptilian, amphibian, fish and invertebrate species kept in a European zoo were classified as Threatened by the IUCN European Red List of Threatened Species. An average of 9% of avian species kept in European zoos were listed on BirdLife International's 'Birds in the EU – A Status Assessment'. Zoos are not prioritising nationally or regionally Threatened species as might be expected.
- An average of 11% of species kept in European zoos were registered on either the European Endangered Species Programme (EEP) or European Studbook (ESB). An average of 8% of species kept in a European zoo were confirmed as participating in such captive breeding programmes.
- Although performance varied widely, on average, 77% of species holdings in zoos failed to inform the public about the importance of conservation, which is at odds with the requirements of CBD, WZACS and the Directive.

Overall, the findings indicate that the conservation of biodiversity, the key objective of the Directive, is neither sufficiently addressed by national zoo legislation nor sufficiently incorporated into the activities of European zoos. EU Member States are not adequately achieving the expectations of the Directive and should be making far greater conscious effort to implement a conservation programme, incorporating a variety of *ex situ* and *in situ* conservation programmes and scientific research.

Member State	Proportion of species considered globally 'Threatened' on the IUCN Red List	Proportion of species listed on European Conservation Lists (IUCN and BirdLife International) Proportion of total Proportion of total		Proportion of total number of species confirmed as actively participating in Species Management Programmes - ESP & EEP	Proportion of selected zoos confirmed as participating in 'scientific research' (but not necessarily benefitting species	Proportion of selected zoos confirmed as participating in <i>in situ</i> conservation (reintroductions and field projects)
		mammalia, reptilia, amphibia, fish and invertebrates species listed on the IUCN European Red List	avian species listed on the 'Birds in the EU - A Status Assessment' (BirdLife International)		conservation)	
Austria	8%	///////////////////////////////////////		1%	60%	20%
Belgium	15%	4%	6%	11%	33%	33%
Bulgaria	11%			///////////////////////////////////////	0%	0%
Сургиз	8%			0%	0%	0%
Czech Republic	19%	8%	9%	19%	67%	67%
England	17%	4%	7%	13%	40%	72%
Estonia	14%			. 14%	0%	25%
France	17%			. 14%	20%	44%
Germany	16%	3%	6%	7%	52%	32%
Greece	13%	<u> </u>		///////////////////////////////////////	25%	25%
Hungary	9%	6%	9%	8%	33%	50%
Ireland					38%	63%
Italy	15%	5%	7%		16%	8%
Latvia	15%			13%	33%	67%
Lithuania	11%	1%			20%	40%
Malta	4%	9%	30%	0%	33%	0%
Poland	14%	7%	8%	5%	63%	50%
Portugal	21%			12%	50%	40%
Romania			///////////////////////////////////////	0%	40%	0%
Slovenia	7%	9%	5%	5%	33%	33%
AVERAGES	13%	5%	9%	8%	33%	33%

Table 4 Performance in the keeping and breeding of Threatened species across the sample zoos in each Member State. In some cases the data were unavailable.

THE ROLE OF ZOOS IN CONSERVING BIODIVERSITY

The Directive (Article 3) places a strong emphasis on conservation, education and research. Although these objectives may have been transposed into the majority of national zoo legislation across Member States, **findings indicate that the conservation performance of zoos is weak and inadequate and not fulfilling the requirements of national zoo laws, the WZACS, or meeting public expectations.**

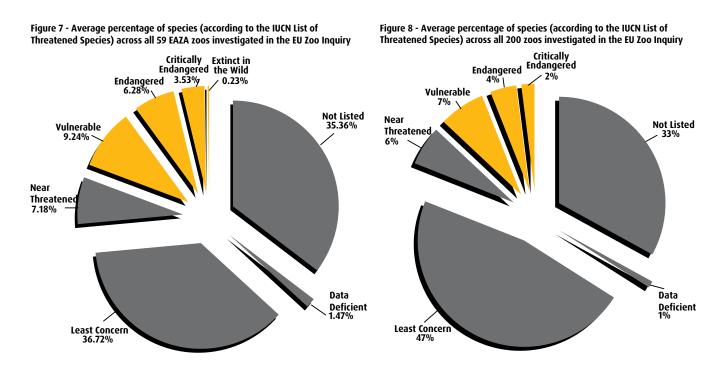
The maintenance of a captive population of wild animals should not, in itself, be considered conservation. Zoos should not be living museums but should, instead, be required to focus on the active conservation of endangered species (a stipulation included in the national legislation in 10 of the 20 Member States). Moreover, there should be no excuse for keeping such species and not involving them in effective conservation programmes¹¹, with the potential for reintroduction into the wild supported by scientific research from which species conservation benefits accrue¹².

Findings of the EU Zoo Inquiry identified that, overall, zoos were not meeting their obligations to the conservation of biodiversity: The majority of species kept by the 200 assessed zoos (which included 59 EAZA member zoos) were of **low conservation significance** (Figures 7 and 8). Of the Threatened species kept:

- The majority of species were globally Threatened, rather than regionally or nationally listed species. Just 5% of species (excluding birds) are listed on the European Red List and there are only 9% of listed bird species (according to BirdLife International);
- Amphibians were under-represented within the Threatened species exhibited at the zoo (~ 3% of all Threatened species), despite being the taxa with the highest proportion of species threatened in the wild, and of the few *in situ* programmes supported by zoos, the majority focused on mammals;

- Participation in captive breeding programmes was minimal, with few examples of 'successful' reintroductions; •
- Scientific research was largely focused on improving the management of species in captivity, not their conservation in the wild.

Overall, zoo association membership is not indicative of higher performance,^{13,14}; although individually, some assessed EAZA-member zoos were contributing to more conservation programmes than non-affiliated zoos.



The EU Zoo Inquiry which assessed 200 zoos in 20 EU Member States, has revealed, once again¹², that the European zoo community is not meeting the key objective of the Directive - the conservation of wild species and habitats. Instead, the inconsistent and frequently poor enforcement of zoo legislation by Competent Authorities and a lack of evaluation of zoo conservation performance have meant that many zoos have been able to avoid their conservation obligations. Unless EU zoos are required in future to publish, and be evaluated against, both their conservation and education plans (as part of the licensing process) it may remain impossible to improve the current situation and ensure that the objectives anticipated in the Directive become a reality.

¹⁷ West C, Dickie L.A. 2007. Is there a conservation role for zoos in a natural world under fire? In: Zoos of the 21st century: catalysts for conservation? Cambridge University Press. P3-11. ¹² Fabregas M. et al 2011. Unravelling the Complexity of the Zoo Community: Identifying the variables related to conservation performance in zoological parks. Zoo Biology 30 p1-16 ¹³McGregor Reid G. 2007. Science in Zoos and Aquariums. Science in Parliament 64, No2 Whitsun. P7.

¹⁴EAZA 2011. EAZA Accreditation Programme Presentation (A. Ruebel).

EDUCATION

The Directive states that zoos should 'promote public education and seek to raise awareness in relation to the conservation of biodiversity, particularly by providing information about the species exhibited and their natural habitats' (Article 3(2)). All EU Member States have recognised the responsibility of zoos to public education, and the contribution this could make to the promotion of conservation of biodiversity. The World Zoo and Aquarium Conservation Strategy (WZACS) stipulates that public education should be an integral component of all activities undertaken by a zoo.

Findings indicate that education has been incorporated into national zoo legislation to varying degrees by the assessed EU Member States. **Eighteen Member States (e.g. Italy) have transposed the above requirements as written, without further explanation;** five have supported the requirement with extra guidance (e.g. England); and seven EU Member States have required their zoos to establish an education strategy and to include a variety of activities aimed at both the public and visiting students. Poland, on the other hand, has only required zoos '*to educate*', offering no indication as to what this should entail and does not require zoos to provide '*information about the species exhibited and their natural habitats*', as particularly stipulated by Article 3(2) of the Directive.

Evaluation of the national legislation of the 20 selected Member States, at the time of the investigation, identified that:

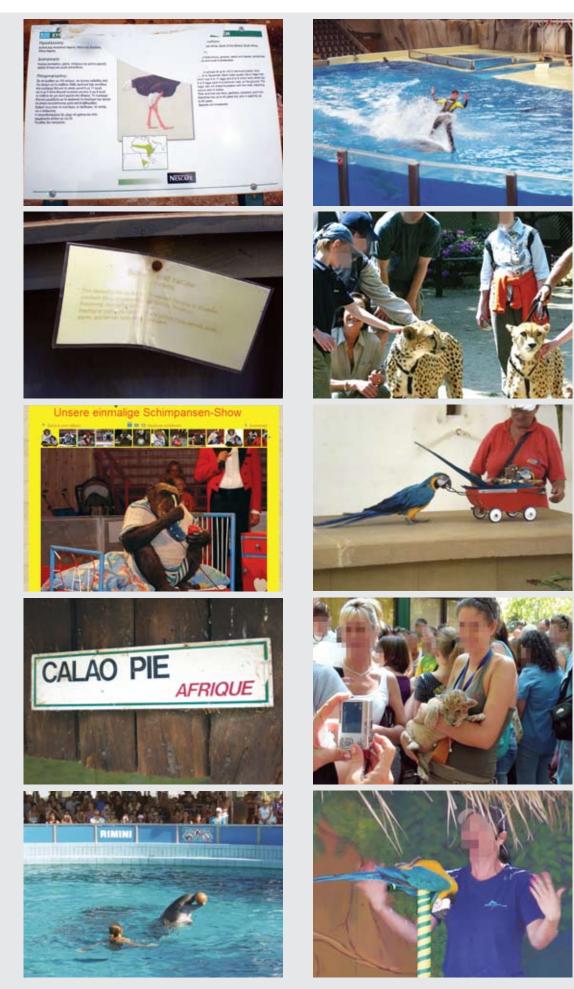
- All Member States require zoos to promote conservation of biodiversity to the public and all, with the exception of Poland, and Portugal where zoos keep less than 150 individuals, are required to provide information about all exhibited species.
- 19 Member States require zoos to ensure all activities at the zoo have an educational focus and purpose.
- 7 Member States require zoos to establish an education strategy, incorporating multiple activities aimed at providing quality education to the public and pre-organised school parties.

Findings^{***} have revealed that, at the time of the investigation:

- An average of 50% of zoos were confirmed as implementing an educational strategy aimed at several target audiences (schools and general public), which included species information signage, species talks and animal presentations, classes for school groups and available teaching aids, some of which may follow the National Curriculum.
- None of the zoos in Bulgaria, Cyprus, or Italy appeared to comply with Article 3(2) of the Directive.
- An average of 49% of zoos promote and encourage animal handling as part of their educational outreach. Many of these animals are classified as 'hazardous' animals (SMZP) or are those that are known to carry infectious disease (zoonoses).
- Animal presentations (i.e. animal encounter sessions, sea lion shows, bird flying, aquarium or dolphinarium presentations, parrot or chimpanzee shows, etc.) are widely-represented in zoos across the EU. On average, 56% of the performances observed in European zoos exhibited animals displaying unnatural behaviour and tricks, often to musical accompaniment.
- Zoos in some Member States promote and encourage public participation in activities such as concerts, firework displays and parties, which have limited educational value and may seriously, compromise animal welfare.

Overall, the findings recognise that whilst the majority of zoos provided and promoted some form of educationfocused activities, the quality and scope of the education programme varied significantly. Professional or school programmes could not be directly assessed, however, of the public presentations and animal shows observed, educational content was often minimal and animal performances focused on entertainment content as opposed to species-specific information and conservation. *Species holdings* information was often absent, but when present, information was often incomplete and in some cases, inaccurate.

^{***} Analysis of data collected from 200 randomly-selected zoos across 20 EU Member States. SEE COUNTRY REPORTS FOR MORE DETAIL.



Findings indicate that quality of and standards in education were poor in the majority of zoos assessed.

ANIMAL WELFARE

The Directive states that zoos should 'accommodate their animals under conditions which aim to satisfy the biological and conservation requirements of individual species, inter alia, by providing species-specific enrichment of the enclosures; and maintaining a high standard of animal husbandry with a developed programme of preventative and curative veterinary care and nutrition' (Article 3(3)). All EU Member States have recognised the responsibility zoos should be taking towards ensuring the protection and welfare of their animals. In five Member States, zoo regulation has been enacted through animal protection legislation, rather than legislation focused on the conservation of biodiversity.

Whilst conserving biodiversity is the key objective of the Directive, it was the desire to keep animals in suitable conditions that initially ignited the support of EU-wide zoo legislation and the Parliament's support in the 1990's for a detailed code of practice. Animal welfare continues to be the driving force for change today. Public expectations no longer find the keeping of animals in deprived, impoverished environments acceptable.

Of the 20 Member States, 13 have exceeded the Directive's basic requirements and have established detailed provisions for animal care, whilst 10 Member States have established species-specific minimum standards for a variety of taxa. The majority of these standards must be implemented together with the general requirements of the national zoo law. However, in Germany, for instance, the existing species-specific standards are only recommended and are not obligatory. Comparative analysis of these mandatory standards in nine Member States (tables 5 and 6) demonstrates a huge range in minimum requirements (e.g. for three adult elephants: minimum outdoor areas range from 375m² (Lithuania) as compared to 3000m² (Austria); whilst for four adult chimpanzees: minimum outdoor areas range from 40m² (Lithuania and Estonia) as compared to 400m² (Austria – for 5 animals). The minimum standards vary significantly and *do not* appear to be based on scientifically-validated standards and may, instead, have been developed in consultation with the national zoo (e.g. as indicated in Estonia, Hungary, Lithuania and Poland).

The assessment of the *environmental quality* of each of the 5,299 randomly-selected enclosures, across the 20 EU Member States, which involved over 70 parameters of the Assessment Protocol (www.euzooinquiry.eu), analysis of any country-specific minimum requirements and evaluation against the standards of the Animal Protection Ordinance of Switzerland, Tierschutzverordnung 2008, identified the following reoccurring issues^{***}:

- Wide-ranging species were housed in small enclosures that did not attempt to meet their spatial needs;
- Species requiring features in order to climb, bathe, dive, fly, or a suitable substrate to dig or burrow in were often housed in conditions where such natural behaviours were compromised or prevented;
- Enclosures generally lacked shelter, opportunities to rest, seek comfort or privacy from public view;
- Birds of prey, including owls, were usually observed tethered by one leg to a fixed 'block' or 'bow', preventing flight, exercise and refuge;
- Poor levels of hygiene were observed in many zoos, which included stagnant drinking and bathing water, an unacceptable build-up of faeces and rotting food, all of which had the potential for the manifestation of harmful pathogens;
- Enclosures were observed in a poor state of repair, which not only placed the animal(s) at potentially heightened levels of distress from a risk of contact with the public, but in some cases, allowed the animal(s) to escape their enclosure into the natural environment, or the invasion of native, pest species into the enclosure;
- The majority of randomly-selected enclosures lacked environmental complexity, varied topography, substrate and suitable environmental enrichment to encourage natural behaviour.

Furthermore, reviewing tables 5 and 6, it is evident that there is variance of the requirement in environmental quality between Member States for these three species. It appears that all the species needs are rarely considered.

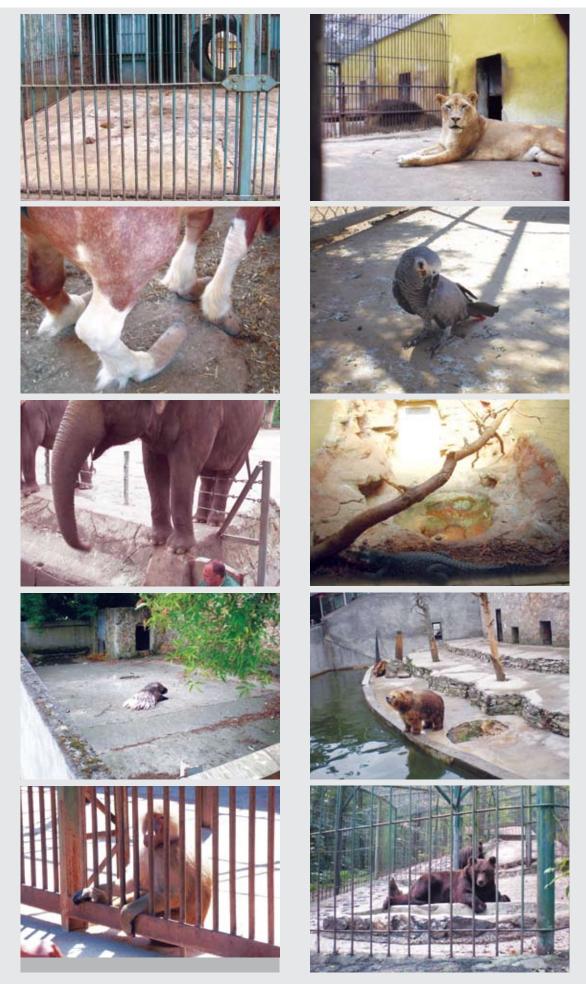
Overall, the findings indicate that whilst national legislation includes the specific requirement of zoos to ensure their animals are kept in appropriate living conditions, requirements vary significantly, particularly concerning established species-specific minimum standards. Standards in the zoos are also varied. Zoos affiliated with zoo associations usually provide more appropriate conditions. Overall, wide-ranging and marine mammal species, in particular, were usually kept in conditions that did not meet the species' spatial, physical, psychological and behavioural needs. Environmental enrichment was found to be lacking in the majority of assessed enclosures within the 200 zoos.

Table 5 A comparison of minimum standards for the keeping of Chimpanzee (*Pan troglodytes*) in zoos (of those EU Member States with established species-specific minimum standards).

Member State	Minimum Standards	Minimum Area (m ²) (for four animals)		Additional Requirements
		Indoor	Outdoor	
Austria	Livestock Regulations No. 1 (485/2004) and No. 2 (486/2004)	200 m ² (for 5 animals) An additional 10% of surface area provided with each additional animal.	400 m ² (for 5 animals) An additional 10% of surface area provided with each additional animal	Food specifications Minimum volume requirements Minimum height requirements Minimum temperature requirements Minimum light requirements Retreating/shelter opportunities Climbing opportunities Environmental Enrichment Social groupings
Belgium	Minimum Standards for Mammals, Birds and Reptiles	80 m ² An additional 10 m ² of surface area provided with each additional animal	No data available	Minimum volume requirements Minimum temperature requirements Retreating/shelter opportunities Climbing opportunities
Bulgaria	Minimum Standards for animals in zoos and rescue centres	50 m ² An additional 10m ² of surface area provided with each additional animal	50 m ² An additional 10m ² of surface area provided with each additional animal	Minimum height requirements Minimum temperature requirements Climbing opportunities Retreating/shelter opportunities Environmental Enrichment Social groupings
Estonia	Government Regulation No. 245 (08/07/2004)	40 m ² An additional 8m ² of surface area provided with each additional animal	40 m ² An additional 8m ² of surface area provided with each additional animal	Minimum volume requirements Retreating/shelter opportunities Climbing opportunities
Hungary	Annex to Joint Decree No. 3/2001	100 m ² An additional 10m ² of surface area provided with each additional animal	200 m ² An additional 10m ² of surface area provided with each additional animal	Minimum volume requirements Separation possibilities Climbing opportunities Hanging opportunities
Lithuania	Annex to order No. D1-533/B1-310 (30/06/2011)	40 m ²	40 m ²	Minimum height requirements
Poland	Annex to the Regulation on the conditions for the husbandry and keeping of respective groups of species in zoological gardens (20/12/2004)	28 m ² An additional 20% of surface area provided with each additional animal	140 m ² An additional 20% of surface area provided with each additional animal	Minimum volume requirements Separation possibilities Climbing opportunities Hanging opportunities
Romania	Minimum Standards of Schedule 5, Chapter 2, Section 1 of the Ministerial Order No. 1798/2007	50 m ² An additional 6m ² of surface area provided with each additional animal	200 m ² An additional 20m ² of surface area provided with each additional animal.	Retreating/shelter opportunities Social groupings
Slovenia	Article 19 of Nature Conservation Act (The Order on living conditions and care of wild animals in captivity (15/11/2001))	45 m ² An additional 10m ² of surface area provided enclosure with each additional animal.	45 m ² An additional 10m ² of surface area provided enclosure with each additional animal.	Food specifications Minimum height requirements Minimum temperature requirements Climbing opportunities Social groupings

Table 6 A comparison of minimum standards for the keeping of elephants (*Elephas maximus* and *Loxodonta africana*) in zoos (of those EU Member States with established species-specific minimum standards).

Member State	Minimum Standards	Minimum Area (m²) (for 3 adult females)		Additional Requirements
		Indoor	Outdoor	
Austria	Livestock Regulations No. 1 (485/2004) and No. 2 (486/2004)	300m ² (100m ² per adult bull) For each additional adult female, an additional 10% of the area is required	3000m ² (700m ² per adult bull) For each additional adult female, an additional 10% of the area is required	Constant access to drinking water Food specifications Permanent tethering prohibited Access to outdoor enclosure guaranteed Minimum temperature requirements Separation possibilities Substrate requirements Social groupings Individual housing prohibited Bathing facilities Health checks required
Belgium	Minimum Standards for Mammals, Birds and Reptiles	90m ²	1000m ² An additional 200m ² of surface area provided with each additional animal	Minimum temperature requirements Bathing facilities
Bulgaria	Minimum Standards for animals in zoos and rescue centres	90m ² (50m ² per bull adult)	500m ² (150m ² per adult bull)	Constant access to drinking water Food specifications Minimum temperature requirements Minimum height requirements Separation possibilities Substrate requirements Bathing facilities Social groupings Skin care specifications
Estonia	Government Regulation No. 245 (08/07/2004) (although not all- inclusive)	25m ²	600m ² An additional 100m ² of surface area provided with each additional animal	Bathing facilities
Hungary	Annex to Joint Decree n. 3/2001	30m ² (no. not specified) An additional 30m ² of surface area provided with each additional animal	500m ² (no. not specified) An additional 100m ² of surface area provided with each additional animal	Bathing facilities
Lithuania	Annex to order 0346/2002)	180m ²	375m ²	Bathing facilities
Poland	Annex to the Regulation on the conditions for the husbandry and keeping of respective groups of species in zoological gardens (20/12/2004)	90m ² (50 m ² per adult bull)	450m ² (200m ² per adult bull)	Separation possibilities Bathing facilities
Romania	Minimum Standards of Schedule 5, Chapter 2, Section 1 of the Ministerial Order No. 1798/2007	100m ² An additional 30m ² of surface area provided with each additional animal	1000m ² An additional 300m ² of surface area provided with each additional animal	Social groupings
Slovenia	Article 19 of Nature Conservation Act (The Order on living conditions and care of wild animals in captivity (15/11/2001))	130m ² (50m ² per adult bull)	600m ² (150m ² per adult bull) An additional 100m ² of surface area provided with each additional animal	Food specifications Minimum temperature requirements Minimum height requirements Substrate requirements Bathing facilities



Findings indicate that quality of and standards in animal welfare were poor in the majority of zoos assessed.

PUBLIC SAFETY

Recognising that the Directive is primarily focused on the conservation of biodiversity and public education, it is perhaps not surprising that there is no reference public health and safety. However, with so many activities in zoos focused on direct contact with and the handling of potentially dangerous wild animals, many of which are also potential carriers of infectious diseases, it is surprising that so few Member States have established specific legislation to protect the welfare of the visiting public and zoo employees. Of the 20 Member States, 13 refer to the public safety requirements, and only England and Poland have established specific regulation.

During the zoo visits, the public were observed being encouraged to have direct contact with a variety of taxa. This included birds of prey, reptiles, macaw parrots, sea lions, dolphins, primates, cheetah and elephants. Although the majority of sessions were supervised, the public were never informed of the potential risks and on only a few occasions following animal handling activities, were members of the public asked to wash their hands.

Five Member States have established a list of 'hazardous species' or those deemed dangerous by the authorities which, in some cases, refer to restricting public contact (Appendix 12, SMZP (UK)). However, the vast majority of Member States have no restrictions in place. In Germany, for example, members of the public were observed riding elephants and 'petting' cheetah and in Greece, Hungary and Slovenia, the public could hold common slider (*Trachemys scripta*), a known carrier of *Salmonella. Zoonoses*, or diseases transmissible between vertebrates, are often overlooked in zoos. Animals, particularly wild animals, are thought to be the source of >70% of all emerging infections (Kuiken *et al.*, 2005), yet the majority of zoos provide the public opportunities to hold, stroke, ride, swim-with and even 'kiss' a variety of animals. Many animals harbour potentially harmful, even life-threatening diseases, which should not be overlooked: reptiles and birds can harbour *Salmonella*, numerous bacterial and fungal diseases are associated with marine mammals and primates, with similar genetic make-up to humans, are known to carry lethal diseases. The public should not unknowingly be subjected to such risk.

INVASIVE SPECIES

The invasion and establishment of non-indigenous species in natural environments can cause extreme ecological devastation and cost billions of Euros to address, yet zoos as a potential source for such animals appear to have been largely overlooked. This is despite a number of investigations, including that by Fábregas et al. (2010), which have identified zoos as representing a significant risk by providing pathways for the introduction of Invasive Alien Species (IAS).

Two types of barrier should be in place to prevent the escape of an animal from a zoo into the natural environment. The *enclosure fencing*, which maintains an animal within its enclosure, and the *perimeter fence*, which prevents an escaped animal from leaving the zoo grounds. Both barriers should be secure and of an adequate height and strength to contain the animals.

During the zoo visits, both perimeter and enclosure fencing in zoos was frequently observed to be in a poor state of repair such that it could permit the escape of non-indigenous species into the natural environment. On more than one occasion, animals were seen to leave their enclosures. Furthermore, concerns were also raised about the prevalence of DAISIE-listed IAS species, observed to roam-freely within the zoo grounds.

THE EU ZOO INQUIRY 2011 COUNTRY REPORTS AND UPDATES

The following provides a summary of the key findings from the EU Zoo Inquiry investigations in 20 EU Member States, the specific investigation of EU Dolphinariums and an overview of zoo regulation in Spain, following six years of InfoZoos investigations. Country Reports and the study on EU Dolphinariums can be viewed and downloaded at www.euzooinquiry.eu.

Recognising that some of this information might have changed since the original investigations into legal compliance and zoo performance included in the EU Zoo Inquiry 2011, an update, reporting on the current situation (April 2012), has been included for each of the 21 EU Member States. This information has been gathered through dialogue with each Member State Permanent Representative to the EU, or directly from the Competent Authorities.

AUSTRIA

Of the 78 estimated zoos in Austria, **five** zoos were evaluated against the requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Austrian Regulation on the Minimum Requirements for Zoos ('R491/2004'), enacted through the Austrian Federal Animal Protection Act (Tierschutzgesetz TSchG) 2004/2007 (BGBl. I Nr. 118/2004) (last amended on 24/01/2010) ('TSchG'). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authority, Federal Ministry of Health, information from which was used in the investigation. Key findings were:

- Zoo regulation is incorporated into legislation that promotes animal welfare and principles in animal husbandry. This is different to many other EU Member States which have incorporated the Directive's requirements into legislation that aims to conserve biodiversity.
- Zoos are licensed and regulated by the District Administrative Authorities in the nine provinces of Austria. The results highlighted an inconsistency in the interpretation and application of TSchG and Regulation on the Minimum Requirements for Zoos ('R491/2004') between the different provinces.
- None of the District Administrative Authorities appear to hold a database of licensed zoos. One of the five identified and assessed zoos was unlicensed but operational. This raises the question whether all zoos (as defined) have been properly identified and licensed.
- Whilst some zoos in Austria maintained high standards of legal compliance, results indicated that conditions in some zoos remained substandard and that these zoos were failing to meet their obligations.
- Zoos were making an insignificant contribution to the conservation of biodiversity. The majority of species exhibited in the zoos were of a low conservation priority according to the IUCN Red List of Threatened Species™. Of the Category A zoos included in this assessment, which are required to participate in all conservation measures, only 2% of species observed were listed as being part of European co-ordinated captive breeding programmes (EEPs or ESBs) and only one of the five Category A zoos appeared to participate in, or contribute to, *in situ* conservation.
- Species information was not available to the public for 43% of the exhibited *species holdings* across the five zoos. Of those present, the majority lacked important information.
- Poor enclosure design, a lack of stand-off barriers, unlocked enclosures and a shortage of available zoo staff often placed the public at risk of injury and exposure to disease.
- On average, nine out of ten enclosures did not provide the animals with any behavioural or occupational enrichment opportunities by way of items, specifically toys or feeding devices. Little consideration was given to the essential biological, spatial and behavioural needs of the animals.
- Despite the emphasis on maintaining high standards of animal welfare and husbandry through a multi-level framework of Federal and Provincial enforcement and advisory bodies, **the majority of zoos assessed failed to comply with the appropriate minimum standards for the keeping of wild animals** (Livestock Regulations No. 1 (485/2004), TSchG and No. 2 (486/2004)). In some cases, animal welfare was compromised.

UPDATE 2012:

- Despite numerous attempts to contact the Competent Authority, in order to discuss the outcomes of the EU Zoo Inquiry investigation, no response was received.
- It is not known whether any of the Recommendations presented in the study have been adopted.

BELGIUM

Of the 42 zoos in Belgium, **six** were evaluated against the requirements of the European Council Directive 1999/22/ EC (relating to the keeping of wild animals in zoos) and the Belgian Royal Decree of 10/08/1998, *Arrêté royal relatif a l'agrément des parcs zoologiques* ('RD8/1998'). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authority, the Department for Animal Welfare and CITES within the Federal Public Service for Public Health, Food Safety and Environment, information from which was used in the investigation. Key findings were:

- Belgian zoo law has not been amended since its implementation in 1999, the same year that the Directive was adopted by the EC.
- Whilst Belgian zoo law has incorporated the majority of requirements specified by the Directive, **RD8/1998** makes little reference to the conservation of biodiversity, no mention of the regularity of or procedures for zoo inspections, and includes no details on actions to be taken on the event of zoo closure, particularly with regard to the relocation of the animals. These are all requirements of the Directive.
- The *laissez-faire* approach to zoo licensing, as per Article 2(4) of RD8/1998, appears to permit the *automatic* licensing of establishments as zoos, without the legally required zoo inspection. This may contravene the requirements of Article 4 of the Directive, concerning the licensing and inspection of zoos.
- Zoo inspections appear to be dependent on workload and may take place more in response to notifications and complaints, rather than being undertaken as part of a regular, structured process.
- **Overall, Belgian zoos are making an insignificant contribution to species conservation.** The majority of species exhibited in the zoos were of a low conservation priority and of the 124 observed Threatened species, 42% were confirmed as participating in European Species Management Programmes.
- Public education was poor. The majority of species information did not contain all the required information (Article 23 of RD8/1998), which included the species' conservation status and species' biological characteristics. Only two of the assessed zoos had established an education programme (a requirement of RD8/1998) and the majority of animal presentations involved animals performing unnatural behaviour.
- Due to poor enclosure design, poorly maintained fencing and a lack of zoo staff, the public could come into unsupervised, uncontrolled direct contact with potentially dangerous wild animals, as well as those known to carry disease.
- Further investigation is necessary by the DAWC and the Zoos Commission as to whether the dolphinarium in Boudewjin Seapark is able to meet the requirements of RD8/1998 and the Directive 1999/22/EC.
- On average, 98% of the assessed enclosures did not include any behavioural or occupational enrichment items or techniques such as toys or feeding devices. This may not only violate Article 6 of RD8/1998, but it could also breach Article 4 of RD8/1998 and Article 4 of RD7/2004, particularly in relation to the tethered birds.
- Of the randomly selected enclosures, **39% of enclosures containing mammals, birds or reptiles, failed** to meet all the minimum requirements of the Ministerial Orders 03/05/1999, MO 07/06/2000 and MO 23/06/2004 for appropriate keeping of mammals, birds and reptiles in Belgium.

UPDATE 2012: (DAWC, pers comm., 7th November 2011)

- The Belgian zoo legislation is currently being revised and will include the revision of the minimum standards for the keeping of mammals in zoos, incorporating guidance on environmental enrichment, and standards on the keeping of dolphins.
- The competency of zoo regulation is likely to be the responsibility of each Federal State, rather than the Federal Government. This could result in further inconsistencies in application and enforcement.
- Since the zoo assessments, significant improvements have been made to the Serpentarium.
- Zoo Antwerpen now appears to undertake more conservation-focused projects than reported by the investigation. However, as this is not published information and the Zoo did not respond to the Standard Zoo Questionnaire, this information could not be reviewed. Greater transparency is required.

BULGARIA

Of the 20 known zoos in Bulgaria, **ten** were evaluated against the requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Bulgarian Regulation No.1 (SG 43/26.05.2006) and Regulation No.6 (SG 105/2.12.2003) (amended SG 44/12.07.2009), enacted by the Biological Diversity Act (SG 77/09.08.2002 Amended) ('BDA'). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authority, the Ministry of the Environment and Water, information from which was used in the investigation. Key findings were:

- Zoo regulation is incorporated into legislation that promotes the conservation of biodiversity.
- Municipalities own and operate all licensed zoos in Bulgaria and do not appear to have the same level of commitment as the Ministry of Environment to seek effective implementation and enforcement of the law.
- Not all zoos had been inspected by the Inspection Commission to ensure they meet the legal requirements and penalties had not been accurately imposed. The Competent Authority recognises that the zoo inspectorate require further training in all matters concerning zoo regulation and animal welfare.
- Conditions in all Bulgarian zoos assessed remained substandard. This is believed to be the case in all the zoos in the country. The Competent Authority is aware that improvements are necessary but state that without funding, many zoos will be unable to meet the requirements.
- **Overall, Bulgarian zoos are making an insignificant contribution to species conservation.** Nine of the ten zoos did not appear to participate in conservation activities such as scientific research, cooperative captive breeding programmes or species reintroduction. Of the total observed species in the ten zoos, 12% were classified as Globally Threatened and 7% were listed as being part of European co-ordinated captive breeding programmes (EEPs or ESBs).
- Species information was not available to the public for over half of the exhibited *species holdings* across the ten zoos. On average, 93% of signs did not contain all the best practice criteria (SZMP).
- It would appear that only minimal measures were taken to prevent the escape of non-native animals into the local environment.
- Poor enclosure design, a lack of stand-off barriers and a shortage of available zoo staff often placed the public at risk of physical injury by potentially dangerous wild animals.
- Standards of animal welfare and husbandry, in the majority of enclosures, in all of the selected zoos were poor.
- Nine out of ten enclosures did not provide appropriate environmental complexity, furnishings or any form of behavioural or occupational enrichment to encourage the animals to demonstrate natural behaviours.
- Over 85% of enclosures did not appear to meet the requirements of Bulgarian Regulation No. 6 (23 October 2003) 'minimum requirements and conditions for keeping animals in zoos and centres for treatment and rehabilitation of threatened species'.

UPDATE 2012: (Ministry of Environment and Water, pers. comm., 2nd March 2012 and Bulgarian Agency for Food Safety, pers. comm., 21st February 2012)

- The Competent Authority is continuing to follow the two-year work programme aimed at improving conditions in the country's zoos. This programme was established following the EU Zoo Inquiry investigation.
- One zoo has closed since the publication of the EU Zoo Inquiry report.
- Changes include the reorganisation of the regulation of zoos, in terms of both its administration and implementation.
- There is a current focus on initiating an extensive, multi-level training programme for zoo managers, veterinarians and animal carers with the aim of improving knowledge and expertise and, in the long term, to establish relevant professional qualification through collaboration with the Ministry of Education and Science.
- The Competent Authority is keen to engage with the wider zoo community, NGOs and the public to improve the living conditions for animals in zoos.

CYPRUS

Of the nine zoos in Cyprus, **nine** were evaluated against the requirements of the European Council Directive 1999/22/ EC (relating to the keeping of wild animals in zoos) and the Cypriot law, the Animal Protection and Welfare (Keeping Wild Animals in Zoos) Regulation ('R81/2002'), enacted by Article 32 of Animal Protection and Welfare Act (46(1), 1994; 94(1), 1997; 75(1), 2000). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authority, the Department of Veterinary Services within the Ministry of Agriculture, Natural Resources and Environment, information from which was used in the investigation. Key findings were:

- Regulation 81/2002, has not sufficiently adopted the key requirements of the Directive: notably the active conservation of biodiversity and its education to the public.
- Only one of three government-recognised zoos was licensed. Six additional zoos were identified as unlicensed, but operational.
- Whilst there is an official inspection procedure, enforcement of R81/2002 and the requirements of the Directive appeared minimal. The Competent Authority has recognised that the inspectorate lacks sufficient knowledge and training in all matters concerning zoo regulation and wild animal welfare.
- None of the nine zoos fully complied with the Cypriot Animal Protection and Welfare (Keeping Wild Animals in Zoos) R81/2002. Animals were observed in severely deliberating conditions.
- None of the zoos appeared to participate in key conservation activities such as scientific research, *ex situ* conservation programmes or species reintroduction. Only 5% of species observed were listed as being part of European co-ordinated captive breeding programmes (EEPs or ESBs), although no evidence could be identified that any individual of these species were participating in these European Species Management Programmes.
- Species information was not available to the public for 79% of the exhibited *species holdings* across the nine zoos. On average, 95% of signs did not contain all the best practice criteria (SMZP).
- It would appear that only minimal measures were taken to prevent the escape of non-native animals into the local environment.
- Poor enclosure design, a lack of stand-off barriers and a shortage of available zoo staff often placed the public at risk of injury. Members of the public were easily able to come into direct contact with dangerous species including spotted hyena and hamadryas baboons.
- Many of the enclosures were unhygienic and could pose a risk to the health and well-being of the animals. An unacceptable build-up of excrement was observed in a quarter of all enclosures.
- Nine out of ten enclosures did not provide appropriate species-specific environmental complexity and enrichment. Standards of animal welfare and husbandry in many enclosures in all of the selected zoos were poor.
- On average, 44% of enclosures did not appear to meet the requirements of the Animal Protection Ordinance of Switzerland (APOS).

UPDATE 2012: (Permanent Representation of Cyprus to the EU, pers. comm., 16th March 2012)

- Following the EU Zoo Inquiry investigation, Regulation 81/2002 has been amended to ensure that: zoos are not automatically licensed; Article 10 of 81/2002, requirements applicable to zoos, are consistent with those of Article 3 of the Directive; and Article 14, provisions for the renewal of a licence, requires that Articles 7, 9 and 10 to be checked before the licence is reissued.
- An action plan has been developed which will address deficiencies regarding the keeping of wild animals in zoos.
- One zoo has closed and various wild animals have been relocated from other zoos to sanctuaries, reducing the total number of establishments exhibiting wild animals to the public in the country from nine to 'three/four'.
- The Competent Authorities have plans to amend the criteria that exempt establishments from requiring a zoo licence, by establishing a threshold of the number of animals or species displayed to the public (following a consultation progress).
- The Competent Authority aims to identify further training opportunities for the enforcement authorities and zoo operators in effective zoo management, animal care, *ex situ* conservation and disease prevention.

CZECH REPUBLIC

Of the 20 zoos in Czech Republic, **six** were evaluated against the requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Zoo Act nr 162 (18/04/2003) ('A162/2003'), enacted by the Nature Conservation and Landscape Act (114/1992) ('NCL'). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authority, the Ministry of Environment, information from which was used in the investigation. Key findings were:

- Adopted by the NCL and A162/2003, the Directive's overall objective, the conservation of biodiversity, has been effectively included. Zoos are encouraged to conserve biodiversity, with a particular emphasis on the preservation of 'protected species', which have been listed by an additional regulation.
- All the Directive's requirements have been effectively incorporated into A162/2003, although it is not clear whether a zoo inspection is required if the zoo significantly changes its licensing Conditions, as is mandated by Article 4(4) of the Directive.
- The Competent Authority appoints zoo professionals with at least 10 years' experience to join the Commission on Zoological Gardens, which advises on the regulation of zoos and the allocation of government subsidies designated for species conservation programmes.
- Unlike the majority of EU Member States, Czech zoos are required to publish an Annual Report providing details of the zoo's species conservation and public education activities. Although it is not clear whether this process is designed to assess the 'success' of these activities.
- Inconsistencies in application of the law call into question the quality, regularity, criteria and procedures relating to the zoo inspection, carried out by the Ministry of Environment and the Commission on Zoological Gardens. Many animals were kept in substandard conditions.
- Findings identified significant variability in zoo activities, and whilst EAZA affiliated zoos complied with more of the requirements than non-affiliated zoos, none of the zoos assessed complied with all of the requirements of A162/2003, particularly in relation to the appropriate animal care.
- Despite the emphasis on the conservation of biodiversity and additional government subsidies aimed at encouraging the keeping and breeding of 'protected' species, zoos did not appear to be making a significant contribution to species conservation. The majority of species (81%) exhibited in the zoos were of a low conservation priority according to the IUCN Red List of Threatened Species[™]. However, the majority of the threatened species kept were included in cooperative Species Management Programmes.
- Notably, allowing the public to feed wild animals, unsupervised, with no control over which species are fed, in what quantity, or what type of food, could have had serious implications for the health and welfare of animal.
- Poor enclosure design, as well as encouraging the public to have supervised or unsupervised direct contact with animals (in all zoos), could have posed a serious risk to the health and welfare of the public and the animals involved. There have been numerous incidents where members of the public have been injured.
- Findings identified that the majority of the enclosures did not adequately provide for the species-specific needs of the animals exhibited. Specifically, enclosures lacked species-specific environmental enrichment, a requirement of Article 3(3) of the Directive, which would encourage natural behaviour.

UPDATE 2012: At the time of going to press, the Country Report on zoo regulation in the Czech Republic had yet to be published.

ENGLAND

Of the 300 officially-recognised zoos in England, **25** were evaluated against the requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos), the Zoo Licensing Act 1981 (as amended) ('ZLA') and the Health & Safety Executive Code Of Practice (Managing Health and Safety at Zoos) ('MHSZ'), taking into consideration the Animal Welfare Act (2006) and the substantial guidance available to Competent Authorities. The Competent Authority, Defra, chose not to complete the Standard Member State Questionnaire, but instead directed the authors to extensive online guidance on zoo regulation and operation. Key findings were:

- **Transposition of the Directive and its implementation at central government level has been largely effective.** This is due to previous experience in zoo regulation, existing knowledge and expertise and an established licensing system and related infrastructure at local authority level.
- **Concerns exist over the accuracy of centrally-held information on zoos.** National authority records list 300 zoos in 168 Local Authorities in England, whilst the Born Free Foundation maintains an annually-updated record of 500 zoos in 222 English Local Authorities.
- The quality and regularity of both Formal and Informal zoo inspections needs further analysis by the national authorities. Numerous investigations have identified that there is inconsistent and ineffective enforcement of the ZLA in England.
- Despite a concerted effort by Defra to support and advise Local Authorities in the implementation and enforcement of the ZLA, it is questionable as to whether Local Authorities have the time, funding and expertise to ensure effective application of zoo legislation in England.
- Overall, the findings of this investigation indicated that licensed zoos in England were not fully compliant with the ZLA. Some zoos met the majority of requirements whilst others were substandard in many respects.
- Overall, English zoos were making an insignificant contribution to Threatened and 'conservationsensitive' species (Annex D, Standards of Modern Zoo Practice ('SMZP')). Of the 1,084 species observed in the 25 zoos, 185 (17%) were Threatened species (IUCN), of which 3.41% were classified as *Critically Endangered*.
- Despite the recommendation that zoos should be able to demonstrate that they encourage research (SMZP), 60% of the zoos investigated were not contributing to scientific research. The majority of identified research related to, or was aimed at, improving the welfare and longevity of wild animals in captivity rather than to benefit conservation.
- SMZP requires zoos to provide information about their conservation measures on request. However only 5 of the 25 zoos completed and returned the Standard Zoo Questionnaire.
- The findings confirmed that 20 of the 25 zoos were implementing an educational strategy although: 72% of species information signage and commentary in animal presentations across the 25 zoos did not include information about species conservation; many did not provide a positive educational message (SMZP).
- Despite being discouraged by SMZP and MHSZ, 21 of the 25 zoos encouraged direct contact between the public and animals. Concerns were raised about associated risks of injury and disease transmission.
- **Environmental enrichment was marginal at the assessed zoos.** Whilst the enclosures usually contained fixed furnishings, the provision of species-appropriate stimuli that promote behavioural and mental activities, were often absent.

UPDATE 2012: (Defra, pers. comm., 13th March 2012)

- Following the two Defra commissioned studies: '*Review of Zoos' Conservation and Education Contribution'* (ADAS, 2010) and '*Review of local authorities implementation of the Zoo Licensing Act 1981 in England and Wales'* (ADAS, 2011) and the EU Zoo Inquiry, Defra, in consultation with the Zoo Experts Committee (Government advisory committee), will be issuing updated Guidance to be circulated to all local licensing authorities in England as a reminder of their obligations regarding the licensing and inspection of zoos.
- Following a Zoo Inspectors' Seminar in November 2011, the Zoo Experts Committee is considering the development of a Good Practice Guide to encourage consistency in zoo inspection.
- In 2012, Defra will be proposing standards for the keeping of elephants in zoos for inclusion in the SMZP.
- Defra has agreed to consider a proposal submitted by the Born Free Foundation for the development of a guide on scientifically-validated, species-specific environmental enrichment zoos in England.

ESTONIA

Of the six licensed zoos in Estonia, **four** were evaluated against the requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Estonian Government Regulation nr.237 (19/09/2003) ('R237/2003') and Government Regulation nr.245 (08/07/2004) (amended 01/10/2007) ('R245/2004'), both enacted by the Animal Protection Act (13/12/2000) (amended 01/01/2011) ('APA'). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authority, Ministry of Environment, information from which was used in the investigation. Key findings were:

- Zoo regulation in Estonia is incorporated into legislation that promotes animal welfare and principles in animal husbandry. This is different to many other EU Member States which have incorporated the Directive's requirements into legislation that aims to conserve biodiversity.
- The APA, R237/2003 and R245/2004 have not recognised the fundamental objective of the Directive to conserve biodiversity. The Estonian zoo law therefore appears to jeopardise the objectives of the Directive.
- The APA, R237/2003 and R245/2004 have not adopted all the minimum requirements applicable to zoos (Article 3 of the Directive), nor the minimum requirements for the licensing and inspection of zoos (Article 4 of the Directive). This infringes the requirements of the Directive.
- None of the Competent Authorities appear to hold a database of licensed zoos. Two additional zoos were identified as unlicensed, but operational.
- Few zoo inspections seemed to have taken place. Following dialogue with the Competent Authority, it is not clear which authority: Environmental Inspectorate or the Veterinary and Food Board is responsible for zoo inspection. Results highlighted inconsistencies in the interpretation and application of APA and Government Regulations between the 13 different provinces.
- Whilst some zoos in Estonia maintained higher standards of legal compliance, evidence indicated that conditions in others remained substandard and that these zoos were failing to meet their obligations.
- Estonian zoos were making an insignificant contribution to the conservation of biodiversity. The majority of species (82%) exhibited in the zoos were of a low conservation priority according to the IUCN Red List of Threatened Species[™].
- Species information was not available to the public for 41% of the exhibited *species holdings* across the four zoos. On average, 95% of signs did not include all best practice criteria (SMZP).
- On average, more than 80% of enclosures were not environmentally complex and nine out of ten enclosures did not provide the animals with any behavioural or occupational enrichment opportunities by way of items to encourage natural behaviour.
- The Estonian minimum 'requirements for the keeping of animals in zoos' (R245/2004) failed to adequately provide all animals with their spatial, physical, physiological and behavioural needs.

UPDATE 2012: (Ministry of Environment and Water, pers. comm., 2nd March 2012)

• Following the EU Zoo Inquiry investigation the Competent Authority is preparing the relevant amendments to the Animal Protection Act

FRANCE

Of the estimated 900 zoos in France, **25** zoos were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos), and French laws Arrêté 25/03/2004, *Le Code de l'environnement* and *Le Code Rural*. The Competent Authority, the Ministry of Environment, Energy, Sustainable Development, did not complete the Standard Member State Questionnaire. Therefore, information concerning implementation and enforcement of the national law was identified through extensive research. Key findings were:

- Zoo regulation is incorporated into legislation that promotes the conservation of biodiversity.
- The Competent Authority recognises 300 licensed zoos in France. However, other sources claim numbers to be between 233 and 943 zoos in France. There is a failure to properly identify and license all relevant establishments at the Departmental level, which compromises the Environment Code and the Directive.
- Application and enforcement of the Directive and A25/03/2004 appear to be inconsistent between *Préfectures*. Enforcement of the law is reliant upon the competency of the regional authorities.
- Whilst some zoos in France maintain higher standards of legal compliance, evidence indicated that conditions in others remain substandard and that these zoos were failing to meet their obligations.
- French zoos were making an insignificant contribution to the conservation of biodiversity. Of the 6,714 vertebrate species categorised as Threatened by the IUCN Red List (IUCN Red List website), only 193 (3%) were kept in the selected French zoos.
- Despite specifications for certain zoos to participate in species conservation programmes, overall, only 14% of the total number of species observed in the 25 selected zoos appeared to be actively participating in European Species Management Programmes (EEPs) or (ESBs).
- Less than half (11) of the 25 zoos appeared to contribute (financially or otherwise) to *in situ* conservation programmes. Only five of the 25 randomly selected zoos appeared to participate in in-house research activities.
- Overall, French zoos were not adequately educating the public about the conservation of **biodiversity.** Furthermore, nine of the zoos hosted animal performances, the majority of which presented unnatural animal behaviour and commentary often failed to provide information about species conservation.
- It would appear that only minimal measures were taken to prevent the escape of non-native animals into the local environment.
- On average, one in five zoos placed the public at risk of injury and exposure to disease as a result of poor enclosure design, a lack of stand-off barriers and a shortage of available zoo staff.
- On average, a quarter of enclosures were not suitably environmentally complex. Living conditions for animals in some zoos failed to adequately provide all animals with their spatial, physical, physiological and behavioural needs.

UPDATE 2012:

- The Competent Authority declined to respond to the questionnaire provided.
- It is not known whether any of the Recommendations resulting from the study have been adopted.

GERMANY

Of the estimated 600 zoos in Germany, **25** were evaluated against the requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Federal Nature Conservation Act (Bundesnaturschutzgesetz vom 29/07/2009 (BGBl. IS.2542) ('BNatschG') and Animal Protection Act (18/05/2006) (Federal Law Gazette [BGBl.] Part I pp. 1206 and 1313), amended by Act of 9 December 2010 (Federal Law Gazette Part I p. 1934) ('TschG'). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authorities, Federal Ministry of Environment (Bundesumweltministerium) and five Federal State Ministries (Hamburg, Saarland, Sachsen, Sachsen-Anhalt and Thüringen), information from which was used in the investigation. Key findings were:

- The Directive is incorporated into legislation that promotes the conservation of biodiversity. However, no additional provisions have been incorporated into the law and no guidance has been established to aid its effective application. Zoo regulation is at the discretion of the designated Competent Authority within the Federal State government.
- The Federal Government does not maintain a database of licensed zoos in Germany and the total number of zoos in the country is unknown. According the Federal States, there are a number of zoos that are unlicensed but operational. This undermines the objectives of the Directive.
- Application and enforcement of the Directive, the BNatschG and the TschG appear to be inconsistent between Federal State Competent Authorities. Enforcement of the law is reliant upon the competency of the State authorities.
- Whilst some zoos in Germany achieved higher standards of legal compliance, evidence indicated that conditions in others remained substandard and that these zoos were failing to meet their obligations.
- German zoos could be doing more to contribute to the conservation of biodiversity. Of the 1,601 species observed in the 25 zoos, 238 (15.6%) were Threatened species (IUCN), of which 2% were classified as *Critically Endangered*. Overall, 12% of the total number of species appeared to be actively participating in European Species Management Programmes (EEPs) or (ESBs).
- Species information was not available to the public in 20% of the exhibited *species holdings* across the 25 zoos. On average, 30% of signage contained incorrect or inaccurate information; 42% did not include information about the species' natural habitat; and 79% did not refer to species conservation.
- Overall, German zoos were not adequately educating the public about the conservation of **biodiversity.** Furthermore, six of the zoos hosted animal performances, the majority of which presented unnatural animal behaviour. Commentary often failed to provide information about species conservation.
- There are no legally-binding minimum standards for animal husbandry in zoos. The standards that exist are non-mandatory guidelines.
- Zoos encouraged the public to have direct contact with wild animals, whilst poor enclosure design allowed the public to have unsupervised contact. **Human/animal contact, supervised or unsupervised, could pose a serious risk to the health and welfare of the public and the animals involved.**
- Findings identified that whilst some zoos provided their animals with appropriate conditions, overall over 50% of enclosures did not adequately provide for the species-specific needs of the animals exhibited. Specifically, enclosures lacked species-specific environmental enrichment, a requirement of Article 3(3) of the Directive.

UPDATE 2012: At the time of going to press, the Country Report on zoo regulation in Germany had yet to be published.

GREECE

Of the 15 known zoos in Greece, **four** zoos were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Greek Presidential Decree 98/2004 (no.69 A 03.03.2004 p.2581) (PD98/2004), taking into account the Ministerial Decision (Gov. 396/21.3.2007). The Competent Authority, the Ministry of Environment, Physical Planning and Public Works, did not complete the Standard Member State Questionnaire, therefore information concerning implementation and enforcement of the national law was identified through extensive research. Key findings were:

- Although the national zoo law has correctly transposed the requirements of the Directive, since 2007 and the implementation of the Ministerial Decision (Gov. 396/21.3.2007), Greek zoo legislation has jeopardised the objectives of the Directive.
- Only one government-recognised zoo was licensed. At least 14 additional zoological collections (referred to as 'exhibitions of animals') were identified as unlicensed, but operational.
- Municipalities own and operate many of the unlicensed zoos in Greece and do not appear to recognise the existence of PD98/2004, or their responsibilities towards the animals' care.
- Enforcement of Presidential Decree (PD98/2004) and the requirements of the Directive appear minimal. According to the Competent Authority, there is no established zoo inspectorate, and authorities lack knowledge and expertise in zoo matters. None of the four zoos assessed, including the licensed zoo, fully compiled with PD98/2004.
- **Greek zoos were making an insignificant contribution to the conservation of biodiversity.** Overall, only 13% of species observed were listed as being part of European Species Management Programmes (EEPs or ESBs) and three of the four zoos did not contribute (financially or otherwise) to conservation activities such as scientific research or projects in the wild.
- Species information was not available to the public for half of the exhibited species holdings across the four zoos. On average, 69% of signs did not present information about species conservation (a requirement of PD98/2004).
- It would appear that only minimal measures were taken to prevent the escape of non-native animals into the local environment. In some cases, insecure fencing permitted DAISIE-listed species to escape.
- Poor enclosure design, a lack of stand-off barriers and a shortage of available zoo staff often placed the public at risk of injury and exposure to disease. Transmission of zoonotic disease was overlooked by zoos.
- Many of the enclosures were unhygienic and could have posed a risk to the health and well-being of the animals. An unacceptable build-up of excrement was observed in a quarter of all enclosures.
- Many species were kept in enclosures that failed to adequately provide all animals with their spatial, physical, physiological and behavioural needs. Nine out of ten enclosures did not provide the animals with any behavioural or occupational enrichment opportunities.

UPDATE 2012: (Ministry for Environment, Energy and Climate Change, pers. comm., 2nd March 2012)

- The Competent Authority, now the Ministry for Environment, Energy and Climate Change, is in cooperation with the Ministry of Agricultural Development and Food (Veterinary Service) to establish a special committee to amend the zoo law.
- Following the EU Zoo Inquiry investigation, the Competent Authorities are working to make the necessary changes to the zoo legislation.

HUNGARY

Of the estimated 15 zoos in Hungary, **six** were evaluated against the requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and Joint Decree n.3/2001 (II.23) KÖM-FVM-NKÖM-BM, *'Regulation on the Establishment, Operation and Maintenance of Zoos and Animal Shelters'* (amended by Joint Decree 13/2003 (IX.9)) ('JD3/2001'), enacted through the Animal Protection Act ('APA'). Reference was also made to the Standard Member State Questionnaire completed by the Competent Authority (the Ministry of Rural Development), information from which was used in the investigation. Key findings were:

- Adopted by the APA and JD3/2001, the Directive's overall objective, to conserve biodiversity, has been effectively enacted, however, additional specifications incorporated in the 'zoo' definition: establishments that '...participate in the conservation of endangered species' (Article 3(3), APA) and 'serve to protect the environment and animals' (Article 1, JD3/2001) should be recognised as a zoo and licensed accordingly, could result in the mis-identification of establishments that should warrant a zoo licence under the Directive.
- Inconsistencies in application of the law call into question the quality, regularity, criteria and procedures relating to the zoo inspection, carried out by the regional Inspectorate for Environmental Protection, Nature and Water Management. Many animals remained in substandard conditions, a number of zoo operations failed to meet the legal requirements and penalties for non-compliance (under the APA, JD3/2001 and D8/1999) were not being applied. The exact number of zoos in Hungary remains unknown.
- Findings identified significant variability in zoo activities, and whilst EAZA affiliated zoos complied with more of the requirements than those non-affiliated zoos, none of the zoos assessed complied with all of the requirements of APA, JD3/2001 and D8/1999.
- Despite the specific requirement for zoos to contribute to the conservation of nationally and internationally protected species, in the main, zoos did not appear to be making a significant contribution to species conservation. The majority of species (91%) exhibited in the zoos were of a low conservation priority according to the IUCN Red List of Threatened Species[™] and of the threatened species, minimal numbers were involved in coordinative Species Management Programmes.
- **One quarter of the exhibited** *species holdings* did not have species information available. This does not comply with the requirements (Article 3(3), APA; Article 1(1), JD3/2001).
- Notably, allowing the public to feed wild animals, unsupervised, with no control over which species are fed, in what quantity, or what type of food, could have had serious implications to the health and welfare of animal.
- All zoos assessed encouraged the public to have direct contact with animals. Human/animal contact, supervised or unsupervised, could have posed a serious risk to the health and welfare of the public and the animals involved.
- On average, 59% of the evaluated enclosures met the minimum requirements in the Annex to JD3/2001. Overall, environmental enrichment was absent in 90% of enclosures.

UPDATE 2012:

<Waiting for information from the Government.>

REPUBLIC OF IRELAND

Of the 27 identified zoos in the Republic of Ireland, **eight** zoos were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Irish European Communities (Licensing and Inspection of Zoos) Regulations 2003, S.I. no.440/2003 ('R440/2003'), taking into consideration the UK's Standards of Modern Zoo Practice. Furthermore, the Competent Authority, the National Parks & Wildlife Service (NPWS), within the Department of Environment, Heritage and Local Government was asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- The R440/2003 stipulates that all licensed zoos are to comply with the 'required conservation measures', which are consistent with Article 3(1) of the Directive.
- **The Definition of a 'zoo' is not included in the R440/2003.** Although the Competent Authority has stated it is consistent with that of the Directive.
- The Competent Authority had licensed 10 zoos. A further 17 unlicensed, but operational establishments were identified and proposed to the authorities as possibly requiring a zoo licence. These additional establishments had not been previously identified by the Competent Authorities.
- Establishments are exempt from the law if the number of kept animals or species is below a certain threshold and further if they were neither 'hazardous or conservation sensitive'. The R440/2003 has not set a threshold on numbers of animals for the requirement of the licence, nor does it clarify these terms used. This could result in inconsistent application of the law.
- Whilst some zoos in Ireland maintained higher standards of legal compliance, evidence indicates that conditions in others remained substandard and that the zoos were failing to meet their obligations. Regular training of the Ministerially-appointed zoo inspectors was recommended to ensure greater consistency in the application and improved compliance with R440/2003.
- Irish zoos appeared to demonstrate a limited commitment to the conservation of biodiversity and, in particular, Threatened species. Only 14% (n = 67) of the total number of species (n= 468) in the selected zoos were categorised as Threatened (*Vulnerable* (7%), *Endangered* (5%) and *Critically Endangered* (2%)). Only one of the 1,898 Threatened species of amphibia was kept by the zoos.
- Species information was not available to the public for one quarter of the exhibited *species holdings* across the eight zoos. On average, 84% of species signage did not contain all the required criteria (SMZP).
- Two thirds of enclosures did not provide appropriate environmental complexity and nine out of ten enclosures did not provide the animals they contained with any behavioural or occupational enrichment items.

UPDATE 2012: (National Parks and Wildlife Service, pers. comm., 3rd June 2011 and Permanent Representative of the Republic of Ireland to the EU, pers. Comm., 2nd March 2012)

- Following the EU Zoo Inquiry investigation, the Competent Authority investigated the additional 17 establishments identified by the investigation as possible zoos and therefore requiring licensing.
- Since that time, eight further establishments have been identified by the authorities as requiring a licence; five additional licences have been granted and one zoo has closed.
- A work programme established to address the identified issues was forwarded to the European Commission. One task under consideration is to publish guidance to the zoo operators and zoo inspectors.
- The Competent Authority would welcome further training in animal care.

ITALY

Of the 68 estimated zoos (requiring a licence) in Italy, **25** zoos were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos), *the Legislative Decree 21 March 2005 n. 73* (Official Gazette n. 100, 02/05/2005): 'Attuazione della direttiva 1999/22/CE relativa alla custodia degli animali selvatici nei giardini zoologici' (as amended) and, where applicable, the Ministerial Decree n.469 (06/12/2001), concerning facilities that keep Tursiops truncatus. Furthermore, the Competent Authorities, the Ministry of Environment and the Protection of Territory and of the Sea and the Ministry of Health were asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- Many of the requirements applicable to zoos in Italy are more stringent than those required by the Directive. The purpose of LD73/2005 is to strengthen the role of zoos in the protection of wildlife and to maintain genetic diversity (Article 1, LD73/2005).
- Findings indicated that the Italian zoo law was not being effectively implemented and enforced, with significant numbers of zoos remaining unlicensed and unregulated, yet operational. According to the Competent Authority, 5 zoos have been licensed, 21 are in the process of being licensed and at least 39 zoos are unlicensed and unregulated. This does not fulfil the fundamental objective of Article 4 of the Directive.
- Findings concluded that few zoo inspections have taken place, the majority of zoos remain uninspected and many have yet to request an operational licence. Animals remained in substandard conditions, zoos were failing to meet the legal requirements and penalties for non-compliance (under the LD73/2005) were not being applied. This does not fulfil the fundamental objective of Articles 4 and 6 of the Directive.
- Whilst some individual zoos were performing better than others, overall findings indicate that zoos in Italy were failing to comply with their legal obligations of LD73/2005. This does not meet the fundamental objective of Article 4 of the Directive.
- Zoos that exhibited bottlenose dolphins (*Tursiops truncatus*) did not appear to comply with the requirements of MD469/2001.
- Despite the specific requirement for zoos in Italy to contribute to species conservation, particularly those species recognised as *Threatened*, overall zoos appeared to be making an insignificant contribution to the conservation either globally or in Europe of species threatened with extinction. Few zoos were participating in meaningful scientific research and limited numbers of species were engaged in captive breeding programmes and species reintroduction.
- Species information was not available to the public for almost one third of the exhibited *species holdings* across the 25 zoos.
- While all zoos appeared to participate in educational activities, the majority of the animal demonstrations observed showed the animals performing unnatural behaviours, often to music, with an emphasis on entertainment rather than a portrayal of their natural attributes.
- Some zoos were not taking appropriate measures to prevent the escape of non-indigenous animals into the natural environment, which may have posed a threat to both local wildlife and the human population.
- Poor maintained enclosure fencing, a lack of stand-off barriers and a shortage of available zoo staff often placed the public at risk of injury and exposure to disease.
- The environmental quality of the assessed enclosures often failed to take into account speciesspecific needs and lacked environmental enrichment. Species were often housed in unsuitable environments where natural behaviour was compromised or prevented and animals were exposed to potential dangers and stress.

UPDATE 2012: (Ministry of the Environment and the Protection of Territory and of the Sea, pers comm., 5th April 2012)

- A total of eight zoos have obtained an operating licence; 11 establishments have been excluded from regulation; and 14 have been inspected and are currently obtaining a licence.
- The criteria specifying the threshold concerning the numbers of animals being held in order for a licence to be required is being revised.
- The Competent Authorities are interested in guidance specifically about species reintroduction, appropriate keeping of hazardous animals, public health and safety, veterinary care, animal husbandry and species-specific environmental enrichment.
- The Competent Authority intends to improve the role of zoos, and their activities, in relation to the conservation of biodiversity and scientific research.

LATVIA

Of the estimated 18 zoos in Latvia, **three** were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Latvian Cabinet of Ministers' Order No.185 (08/05/2001), enacted by the Animal Protection Law (12/09/1999) (last amended 16/12/2010) and taking into consideration Cabinet of Ministers Order No.1033 (09/11/2010), which has recently replaced No.185. Furthermore, the Competent Authority, the Nature Conservation Agency within the Ministry of Environment was asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- **Zoo regulation in Latvia is incorporated in the Animal Protection Law (APL),** which aims to ensure that all species of animal are protected from harm and neglect.
- Only two of 18 government-recognised zoological collections were licensed. These additional establishments are referred to as 'animal collections' and were believed to be operational.
- Findings highlight inconsistencies in the interpretation and application of APL and Cabinet of Ministers' Order. Zoo inspectors do not appear to have the necessary knowledge and expertise to ensure zoos are meeting their legal obligations.
- Whilst some zoos in Latvia maintained higher standards of legal compliance, evidence indicated that conditions in others remained substandard. All zoos were failing to meet all their legal obligations.
- Latvian zoos were making an insignificant contribution to the conservation of European and global biodiversity. Despite the requirement for zoos to prioritise the breeding of 'endangered species', few species were involved in captive breeding programmes. The majority of species exhibited in the zoos were of *Least Concern* (species of low conservation priority) by the IUCN Red List of Threatened Species[™].
- Zoos were making an insignificant contribution to the conservation of nationally recognised 'endangered species'. Of the 330 species kept by the three zoos, 7% were listed in the Latvian Red Book of protected species.
- The commitment to and standard of public education in the majority of zoos was poor. Overall, almost half the signage for *species holdings* was absent and much of the signage present was either incorrect or did not contain sufficient information about the species (SMZP).
- The public could have come into direct contact with potentially dangerous wild animals and few zoos appeared to recognise the risks and inform the public accordingly.
- Many of the enclosures were unhygienic and could pose a risk to the health and well-being of the animals. Unhygienic conditions were observed in 22% of the randomly selected enclosures.
- On average, more than 76% of enclosures were not environmentally complex and few of the enclosures provided the animals with any behavioural or occupational enrichment items or furnishings. The zoos appeared to have given little consideration to the essential biological, spatial and behavioural needs of the animals.

UPDATE 2012: (Permanent Representation of Latvia to the EU, pers. comm., 20th February 2012)

- The EU Zoo Inquiry had given the Competent Authority, now the Nature Protection Board, a greater understanding of the problems related to the keeping of wild animals in zoos, which has led to proposed amendments of the Animal Protection Law, a change to the zoo definition and improvements to the regulations concerning the requirements applicable to zoos.
- A work programme was established to address the identified issues, many of which have been implemented.
- The Competent Authority would welcome additional training, particularly concerning species-specific husbandry standards and the transportation of animals.

LITHUANIA

Of the five estimated zoos in Lithuania, all **five** were evaluated against the European Council Directive 1999/22 EC (relating to the keeping of wild animals in zoos), the Lithuanian Wildlife Protection Act ('WPA') and Government Orders specific to zoos, No.298 ('0298/2002') and No.346 ('0346/2002'). Furthermore, the Competent Authority, the Environmental Protection Agency within the Ministry of Environment, was asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- **Zoo regulation is incorporated into legislation that promotes wildlife and habitat protection.** This is compatible with the Directive's requirements to conserve biodiversity.
- The findings of this investigation have revealed significant inconsistencies in the application of the Lithuanian zoo law, particularly in relation to the definition and identification of a 'zoo'. The Competent Authority only recognise two zoos, although a further three zoos (as defined), unlicensed, but operational, were identified.
- Zoos were not meeting all their legal obligations, and it is suggested that, without the development of additional explanation, guidance and training opportunities, performance and compliance were unlikely to improve. The zoo inspectorate does not appear to have the necessary knowledge and expertise to ensure zoos are meeting their obligations under Article 8(2) of the WPA, and 0346/2002.
- Despite the legal requirement for Lithuanian zoos to prioritise the breeding of rare species, few species were involved in captive breeding programmes. The majority of species exhibited in the zoos were of a low conservation priority according to the IUCN Red List of Threatened Species[™].
- The commitment to and standard of public education in the majority of zoos was poor. On average, 50% of *species holdings* completely lacked any form of species information signage and 100% of signs did not include all best practice criteria (SMZP).
- Despite legal requirements to prevent the escape of wild animals into the natural environment, three of the five zoos assessed failed to sufficiently secure the animal enclosures thereby potentially permitting animals to escape, placing both the natural environment and the public at risk.
- Poor enclosure design, a lack of stand-off barriers, a shortage of available zoo staff and the fact that some zoos encouraged direct contact with wild animals, often placed the public at risk of injury and exposure to disease. In the majority of instances, the public were not informed of the potential risks.
- Many of the enclosures were unhygienic and could have posed a risk to the health and well-being of the animals. An unacceptable build-up of faeces was observed in a quarter of all enclosures.
- Standards of animal welfare and husbandry in many enclosures in all of the selected zoos were poor.
- On average, more than 94% of enclosures were not environmentally complex and 95% of enclosures did not provide the animals with any behavioural or occupational enrichment items. The zoos appeared to have given little consideration to the essential biological, spatial and behavioural needs of the animals.
- The majority of the randomly-selected enclosures failed to comply with the Lithuanian minimum 'requirements for the keeping of wild animals in zoos' (0346/2002). Moreover, findings suggested that these minimum standards themselves failed to adequately provide all animals with their spatial, physical, physiological and behavioural needs. Lithuanian zoos were not meeting their legal obligation to provide adequate conditions for their animals.

UPDATE 2012: (Ministry of Environment, pers. comm., 16th March 2012)

- Since the EU Zoo Inquiry, the three unlicensed establishments included in the investigation have applied for a zoo licence. Zoo inspections were carried out in February and March 2012 and various inconsistencies with the requirements of the regulation were identified. The Competent Authority has confirmed that licences will not be granted until the requirements are met.
- In December 2011, the Ministry of Environment organised a seminar for zoo operators that included an overview of the requirements of the Zoos Directive and national zoo legislation.
- The Competent Authority would welcome further training for zoo inspectors and veterinarians in fundamental and applied animal welfare.

MALTA

Of the identified zoos in Malta, **three** were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos), the Animal Welfare Act ('AWA'), Chapter 439 (Act nr XXV of 2001, as amended by Legal Notice 426 of 2007; Act V of 2007 and V of 2011) and specifically, Legal Notice 265 of 2003 '*The Keeping of Wild Animals in Zoos Regulations*' ('LN265/2003'). Furthermore, the Competent Authority, the Veterinary Regulation Directorate of the Agriculture and Fisheries Regulation Department, within the Ministry of Resources and Rural Affairs was asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- The Directive has been accurately transposed into the LN265/2003. However, no additional provisions have been incorporated into the law, despite prescriptions in the AWA to do so, and no guidance has been established to aid its effective application.
- At the time of the investigation there were three licensed zoos (according to the Member State Questionnaire) and at least one, identified unlicensed, but operational zoo. The results of this assessment highlight inconsistencies in the interpretation and application of AWA and LN265/2003.
- Zoo regulation and inspection lacks a structured procedure, standardised inspection criteria and transparency. The LN265/2003 lacks legal provision on the licensing and inspections of zoos, which appears to be managed at the discretion of the Director of the Veterinary Services.
- The findings call into question the quality, regularity, criteria and procedures relating to the zoo inspection. Zoo inspections apparently take place each year, yet the zoos were not meeting their legal obligations of LN265/2003, many animals were housed in substandard conditions and penalties for non-compliance (under the AWA and LN265/2003) were not being applied.
- **Despite the specific requirement for zoos in Malta to contribute to species conservation,** findings indicated that the majority of species exhibited were of a low conservation priority according to the IUCN Red List of Threatened Species[™], none of the zoos appeared to undertake scientific research benefiting species conservation, and only one of the 23 species observed appeared to be involved in a 'species propagation programme'.
- Two zoos were identified as taking animals out of the wild.
- Species information was not available for half of the exhibited species holdings across the three zoos.
- Despite a public education programme in two of the zoos, these appeared to exploit the animals and compromise their welfare.
- Zoos encouraged the public to have direct contact with birds of prey, reptiles, macaw parrots, sea lions and bottlenose dolphins. The potential risk of physical injury and disease transmission, particularly zoonoses, was an overlooked risk. There were no apparent measures to protect the public (and zoo employees) in zoos in Malta, despite the obvious potential risks of danger.
- **Poor levels of hygiene were observed in the zoos.** This not only posed a risk to the health of the animals due to the potential build-up of harmful pathogens, but also to public health.
- On average, 97% of the enclosures failed to meet all the minimum requirements of APOS. The zoos surveyed appeared to have given little consideration to the essential biological, spatial and behavioural needs of the animals.

UPDATE 2012: Since the initial visit of the EU Zoo Inquiry, a total of at least 8 zoos have been identified (Permanent Representation of Malta to the EU, pers. comm., 22nd March 2012)

- Since the EU Zoo Inquiry investigation, there have been two further zoo licence applications.
- The Competent Authority would welcome training on animal husbandry and welfare of wild animals.

POLAND

Of the 23 zoos in Poland, **eight** were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos), the Nature Protection Act (amended on 10/06/2011), Regulation on the conditions for the husbandry and keeping respective groups of species in zoological gardens (20/12/2004) ('RZ12/2004') and Regulation on health and safety in zoos (10/12/2003) ('RS12/2003'), and taking into consideration the Animal Protection Act (21/08/1997). Furthermore, the Competent Authority, the Directorate General of Environmental Protection, was asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- **Zoo regulation in Poland is incorporated into the Nature Protection Act** ('NPA'), which provides a legislative framework for the protection of nature, as part of the country's commitment to the conservation of biodiversity.
- At the time of the investigation, NPA (16/04/2004) was the prevailing legislation. However, this has since been replaced by NPA 2011 which, unlike its predecessor, separates relevant facilities into licensed 'zoos' and 'smaller animal collections', irrespective of the species held, but dependent upon the *number* of species and individual animals kept. There are believed to be approximately 11 'smaller' collections that are not regulated under RZ12/2004, one of which is known to keep bears and large felids.
- Overall, the findings from this investigation indicated that licensed zoos in Poland were not fully compliant with the Directive, the NPA, the RZ12/2004 or RS12/2003. Individually, there was a lack of consistency between the zoos, with some meeting the majority of requirements whilst others appearing to be substandard in all parameters assessed.
- The findings call into question the quality, regularity and procedure of zoo inspections. Animals remained in substandard conditions, zoo operators failed to meet the legal requirements, and unlicensed and substandard zoos remained operational. Penalties for non-compliance (under the NPA) did not appear to be applied.
- Despite the specific requirement for zoos in Poland to contribute to the conservation of 'rare' species, through *ex situ* conservation and species reintroduction (Articles 47 and 69(3), NPA), overall, zoos in Poland did not appear to be making a significant contribution to species conservation. The majority of species exhibited (86%) were of low conservation priority.
- Despite an ambiguous requirement for zoos to educate the public about the protection of nature, only those zoos that are Members of EAZA appeared to be undertaking educational activities for both adults and children.
- Polish zoo law does not specify the need for all *species holdings* to have species information, as required by Article 3(2) of the Directive.
- Some of the zoos encouraged the public to have direct contact with the animals, whilst the poor design of some enclosures allowed the public to have unsupervised contact. Human/animal contact, supervised or unsupervised, can pose a serious risk to the health and welfare of the public and the animals involved.
- **Poor levels of hygiene were observed in the majority of zoos.** This not only posed a risk to the health of the animals due to the potential build-up of harmful pathogens, it also posed a risk to public health.
- On average, 69% of the evaluated enclosures failed to meet all the Polish minimum standards. This is despite a significant reduction in the minimum space requirements, resulting from a revision of the Regulation in 2004. The zoos appeared to have given little consideration to the essential biological, spatial and behavioural needs of the animals.

UPDATE 2012: (General Director for Environmental Protection, pers comm., 4th April 2012)

- The Competent Authority intends to amend sections of the Nature Protection Act that concern zoo regulation and operation and, further, to revise the minimum standards for the keeping of animals (RZ12/2004).
- The authorities intend to revise the responsibilities of zoo operators.
- The Competent Authority would welcome training to conduct effective zoo inspection and to improve knowledge in animal welfare.

PORTUGAL

Of the 20 zoos in Portugal, **10** were evaluated against the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos) and the Law-Decree No.59/2003 ('D59/2003'). Furthermore, the Competent Authority, the Ministry of Agriculture, Rural Development and Fisheries, was asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- Zoo regulation in Portugal is incorporated into the Law Decree No. 59/2003 ('D59/2003'), which includes the 'basic principles' for upholding standards in animal welfare and ensuring the conservation of species.
- The Directorate General of Veterinary Medicine (DGV) recognises 20 registered, licensed zoos, however, there are at least three additional zoos in Portugal that are operational but unlicensed. **The European Commission** has previously investigated licensing issues in several zoos in Portugal.
- The results highlighted inconsistencies in the interpretation and application of D59/2003. Findings identified significant variability in zoo activities and compliance, with some zoos not meeting any of the requirements of D59/2003.
- The findings called into question why the activities of the Zoo Ethics and Monitoring Commission (CEAPZ) had ceased. Findings indicated that this Ministerially-appointed, multi-stakeholder entity was vital for effective zoo regulation, operation and performance.
- Overall, the findings of this investigation indicated that licensed zoos in Portugal were not fully compliant with either the Directive or D59/2003. Individually, there was much variance between the zoos, with some meeting the majority of requirements whilst others being substandard in all parameters assessed.
- Overall, zoos in Portugal did not appear to be making a significant contribution to species conservation, with 78% of species exhibited being of low conservation priority. Of the Threatened species exhibited, 57% were participating in European captive breeding programmes. Findings appeared to contravene the requirements of Chapter III, Article 19(2) in the Annex to D59/2003.
- The requirement for only certain zoos (those with >150 individual animals) to display species information signage, as seems to be stated in Chapter I, Article 2(2), D59/2003, appears to contravene Article 3(2) of the Directive. Over a quarter of signage for *species holdings* was absent and of the signage present, 19% were in a poor condition.
- Direct contact between the public and wild animals was encouraged in numerous zoos, most of which required additional payment. Human/animal contact, supervised or unsupervised, could have posed a serious risk to the health and welfare of the public and the animals involved.
- The majority of animal shows, particularly those involving parrots and marine mammals, consisted of animals conditioned to display anthropomorphic and distorted behaviours aimed at entertaining the viewing public, rather than providing an educational experience. Such activities appeared to breach the requirements of D59/2003.
- It would appear that only minimal measures were taken to prevent the escape of non-native animals into the local environment.
- On average, 81% of the evaluated enclosures failed to meet all the Portuguese minimum requirements. The zoos appeared to have given little consideration to the essential biological, spatial and behavioural needs of the animals.

UPDATE 2012: (Directorate General of Veterinary Medicine, pers. comm., 24th February 2012)

- The Competent Authority has plans to amend the zoo law, particularly with respect to clarifying the roles of the relevant authorities, specifically the ICNB and the DGV.
- Since the investigation, a further zoo has been granted a licence, whilst another zoo has been closed.
- The Competent Authority would welcome further training on all aspects concerning zoo regulation

ROMANIA

Of the 33 zoos in Romania, **10** were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos), the Romania Act 191/2002, for public zoos and aquaria, Ministerial Order No.1798/2007, Ministerial Order No.16/2010 and the Ministerial Order for Environmental Protection (Schedule 5, M01798/2007). Furthermore, the Competent Authority, Ministry of Environment and Sustainable Development, together with the National Environmental Protection Agency (NEPA) and the National Sanitary-Veterinary and Food Safety Authority (NSVFSA), were asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- The requirements of the Directive have been incorporated in national law dedicated to environmental protection. Whilst the majority of the requirements are no different to those of the Directive, there are greater provisions concerning programmes relating to conservation, education and scientific research and animal care.
- Of the 33 government-recognised zoos, 21 had been licensed, eight were undergoing authorisation, but were operational, and four were unauthorised, and closed to the public.
- Municipalities own and operate the majority of licensed zoos in Romania and do not appear to have the same level of commitment as the Competent Authorities to seek effective implementation and enforcement of the law.
- Enforcement of Ministerial Order No.1798/2007 and Ministerial Order No.16/2010 appeared minimal, and despite acknowledgement that greater training of the enforcement agencies was required, the Competent Authorities have made significant efforts to improve compliance and the conditions in zoos across the country.
- Poor enclosure design, poor maintenance of fencing, a lack of stand-off barriers and a shortage of available zoo staff often placed the public at risk of injury and exposure to disease. Members of the public were easily able to come into direct contact with dangerous species including brown bears and lions.
- Romanian zoos were making a minimal contribution to the conservation of biodiversity. Only 14% of the total number of species were categorised as Threatened by the IUCN Red List of Threatened Species[™]. No zoos appeared to be actively participating in European co-ordinated captive breeding programmes (EEPs or ESBs).
- Species information was not available to the public for half of the exhibited *species holdings* across the 10 zoos. On average, 74% of species information signage did not include the required information (Romania Act 191/2002).
- Many of the enclosures were unhygienic and could have posed a risk to the health and well-being of the animals.
- Standards of animal welfare and husbandry in the majority of enclosures in all of the selected zoos were poor.
- On average, three quarters of enclosures were not environmentally complex, and four out of five enclosures did not provide the animals with any behavioural or occupational enrichment items.
- The majority of the selected enclosures did not comply with the species-specific minimum standards of Schedule 5, Chapter 2, Section 1 of Ministerial Order No.1798/2007. In 2007, €38 million was invested to upgrade zoos but without monitoring of the allocated funds and a similar investment in increasing knowledge and expertise of the enforcement agencies, little improvement in overall compliance will likely result.

UPDATE 2012: (Veterinary Regulation Directorate, pers. comm., 2nd March 2012)

- Since the EU Zoo Inquiry investigation, there have been two further zoo licence applications.
- Since the EU Zoo Inquiry investigation, the Competent Authorities have identified the need for further training of enforcement agencies and veterinarians. A workshop will be taking place for veterinarians in June 2012.

SLOVENIA

Of the four 'zoos' and seven 'facilities similar to a zoo' in Slovenia, **three** zoos were evaluated against the legal requirements of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos), the Nature Conservation Act (06/1999) (Ur. I. RS, No56/1999) ('NCA'), the Decree on zoos and similar facilities (Ur. I. RS, No.37/2003) ('D37/2003') and the Order on living conditions and care of wild animals in captivity (Official Gazette No.90/2001, 15/11/2001) ('011/2001'), taking into consideration the Animal Protection Act (1999). Furthermore, the Competent Authority, the Ministry of Environment and Spatial Planning, was asked to complete a Standard Member State Questionnaire, information from which was referred to in the investigation. Key findings were:

- The Directive has been accurately transposed into the Nature Conservation Act (06/1999) ('NCA').
- **Findings highlighted inconsistencies in the interpretation and application of NCA and D37/2003.** In particular, one of the 'facilities similar to a zoo', which are not required to comply with the Directive, appeared to have been incorrectly categorised and should therefore be required to comply.
- The keeping of cetaceans in captivity for 'commercial use' is banned. There are no dolphinaria in Slovenia.
- Findings called into question the quality, regularity, criteria and procedures relating to zoo inspections. Although some inspections have been undertaken, many animals remained in substandard conditions, a number of zoo operators failed to meet the legal requirements and penalties for non-compliance (under the NCA and D37/2003) were not being applied.
- Findings identified significant variability in zoo activities and compliance, with 2 out of the 3 zoos not meeting any of the requirements of NCA, D37/2003 and O11/2001. The EAZA Member zoo complied with the majority of requirements.
- Despite the specific requirement for zoos in Slovenia to contribute to species conservation through *ex situ* conservation and species reintroduction, in the main, zoos in Slovenia did not appear to be making a significant contribution to species conservation. The majority of species (93%) exhibited by the three selected zoos were of low conservation priority.
- Species' information was not available for one third of the *species holdings* across the three zoos and, despite a varied public education programme undertaken by the EAZA Member zoo, concerns exist about the value of the sea lion show and the large number of animal handling sessions.
- Zoos were not taking appropriate measures to prevent the escape of non-indigenous animals into the natural environment, which may have posed a threat to both local wildlife and the human population.
- Zoos encouraged the public to have direct contact with wild animals, whilst poor enclosure design allowed the public to have unsupervised contact. Human/animal contact, supervised or unsupervised, could have posed a serious risk to the health and welfare of the public and the animals involved.
- **Poor levels of hygiene were observed in some of the zoos.** This not only posed a risk to the health of the animals due to the potential build-up of harmful pathogens, but also to public health.
- On average, 77% of the evaluated enclosures failed to meet all the minimum requirements of 011/2001. The zoos involved appear to have given little consideration to the essential biological, spatial and behavioural needs of the animals.

UPDATE 2012: (Ministry of Environment and Spatial Planning, pers. comm., 15th February 2012)

- The Competent Authority has welcomed the EU Zoo Inquiry and its findings will be considered in future plans concerning zoo regulation.
- The Competent Authority would welcome training for zoo inspectors and veterinarians on environmental enrichment programmes and is encouraged by the news that the Commission is to develop a Preferred Code of Practice for zoos.

SPAIN

Since 2006, and over a period of six years, the coalition InfoZoos¹⁵, has randomly-selected a total of 54 zoos in 12 Autonomous Communities (Regions) to evaluate their compliance with the requirements of national zoo legislation and those of the European Council Directive 1999/22/EC (relating to the keeping of wild animals in zoos). Established to evaluate the effectiveness and level of implementation and enforcement of national zoo law in the 17 Regions of Spain, InfoZoos has collected information about a number of key aspects of each zoo's operation including: participation in conservation activities; public education; enclosure quality; public safety; and the welfare of the animals. This information were evaluated against the legal requirements of Directive 1999/22/EC and the Spanish Law 31/2003. The findings from the InfoZoos investigations were used to support the Official Complaint against Spain for non-compliance, which was originally made to the European Commission in 2006. This infringement case is on-going (European Commission, pers. comm., 27th March 2012).

The following provides an overview of the implementation of Law 31/2003 and the work of InfoZoos, which formed the basis of the EU Zoo Inquiry 2011:

- The Directive 22/1999 was transposed in Spain through the Law 31/2003. Whilst the Ministry of Environment and Rural Affairs is responsible for the transposition and implementation of the requirements of the Directive, the 17 Regional Governments of Spain are required to enforce the requirements of Law 31/2003 at the regional level. Since April 2004 all Regions were required to enforce the national law and ensure zoos meet, amongst other things, their obligations under the Directive to conserve biodiversity.
- The requirements applicable to licensed zoos in Law 31/2003 do not impose any significant additional requirements other than those required by the Directive. However, the definition of a zoo is different and requires 'any public or private establishment that, independent from the days they are open to the public, have a permanent character and keep live animals of wild species for exhibition' to be licensed and regulated under the law. This wider definition applies to huge numbers of facilities, including hotels, restaurants and public parks that display wild animals.
- Once a zoo is licensed, it is required to be inspected on an annual basis. This is usually carried out by the Environment Department and the Animal Health Department of each Region.
- Regional authorities were slow to implement Law 31/2003, mainly due to a conflict of interest and competence between the Government Departments of Agriculture and Environment. This has since been rectified by four Regions (Valencia, Canaries, Balearics and Extremadura), which have ratified Regional Decrees to clarify and simplify zoo regulation. The remaining Regions are applying the national law. Zoo regulation in Regions: Castilla La Mancha, Castilla León, Cantabria and Murcia is the responsibility of the Department of Agriculture, whilst in the remaining 13 Regions the Department of Environment is the responsible authority.
- InfoZoos investigations in Regions of Andalucía, Castilla la Mancha, Extremadura, the Balearics, Madrid and Comunidad Valencia (2006); Canary Islands (2008); Comunidad Valencia (2009); País Vasco, Cantabria, Asturias and Galicia (2010); and Catalonia and Madrid (2011), have identified that whilst some zoos were meeting some of the requirements, the majority of zoos were failing to meet all their requirements in conservation, education, public safety and animal care of the Law 31/2003. In some cases, zoos may have remained operational but unlicensed (e.g. Castellar de la Frontera in Andalucía).
- In 2007 and 2008, the European Commission sent several notifications to the Spanish Government requesting effective application of Law 31/2003. Seemingly dissatisfied by the response, in June 2009, the case against Spain, for its failure to comply with Directive 1999/22/EC, was sent to the Court of Justice of the European Union in Luxembourg, which was later referred back to the European Commission in January 2010. In September 2011, the Commission sent a further notification of a '260 Letter of Formal Notice against Spain'. At the time of going to press, the response submitted by Spain was being examined by the Commission (European Commission, pers. comm., 27th March 2012).

- The Ministry of Environment has made a concerted effort to ensure compliance with the Directive, undertaking a number of initiatives to encourage an improvement in the understanding and application of Law 31/2003 at the Regional level. This has included, hosting meetings for Regional law enforcement personnel, zoo inspector training and the development of a non-mandatory code of practice for zoo operation in 2007, which has since been revised in 2010 (*'El parque zoologico un Nuevo aliado de la biodiversidad'*). The establish Working Group on Zoos, directed by the Directorate General for Environmental Quality and Natural Environment, with representatives from all the Autonomous Communities, met on 6th March 2012. Apparently some goals regarding the national legislation were agreed (Ministry of Agriculture, Food and Environment, pers. comm., 20th March 2012).
- Investigations into regional enforcement have revealed that since initial enquiries in 2005 there has been a vast improvement in the facilitation of Law 31/2003, with all Regional authorities now having identified a Competent Authority (Article 7 of the Directive) and zoo inspectorate. Despite approximately 15 zoo closures for non-compliance between 2006 and 2011, there are still concerns over regularity, quality and practice of zoo inspections, which warrants further investigation.
- Possible reasons behind the seemingly poor enforcement of the law and consequent failings that should be addressed by the Spanish Competent Authorities, include: remaining conflicts of interest and competence between the Government Departments of Agriculture and Environment (particularly in Catalonia and Castilla La Mancha); misinterpretation of the zoo definition and an accurate identification of zoos; the regularity and quality of zoo inspections and the reporting, recording and monitoring of such inspections, which could be centralised; the limited resources available to the Department of Environment (as compared to the Department of Agriculture), which may affect inspection quality; limited training opportunities for all competent persons; the lack of a centralised zoo database in Spain; and as a priority, the need for a revision of Law 31/2003 to avoid different interpretations of its requirements and provisions in each of the 17 Autonomous Communities of Spain.

UPDATE 2012: (Ministry of Agriculture, Food and Environment, pers. comm., 20th March 2012)

- The zoo guide (*'El parque zoologico un Nuevo aliado de la biodiversidad'*) is currently being translated into English and will be available for wider distribution in May 2012.
- The Competent Authority is planning to develop 'Criteria for Zoos' and additional guidance for licensing, legal requirements and standards in animal care.
- Spain is currently developing a national zoo database, as required by Law 31/2003 and Decree 556/2011, for the development of the Spanish Inventory on Natural Patrimony and Biodiversity. This will identify the exact number of licensed zoos in Spain, which is believed to be approximately 100.

EU DOLPHINARIA

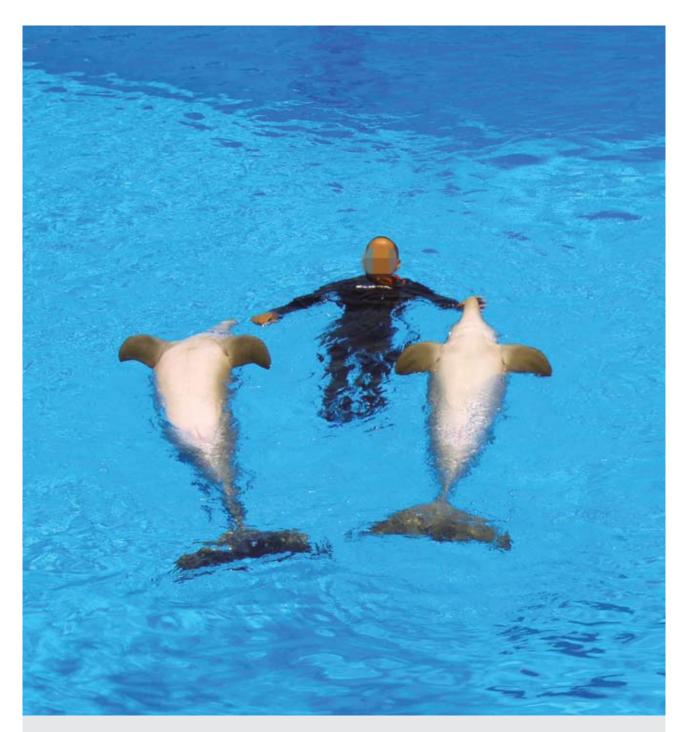
A total of 289 individual cetaceans of six species are kept in **35 dolphinaria in 15 EU Member States** (Belgium, Bulgaria, Denmark, Finland, France, Germany, Greece, Italy, Lithuania, Malta, Netherlands, Portugal, Romania, Spain and Sweden). These include bottlenose dolphins, orcas, belugas, harbour porpoises, a Risso's dolphin and an Amazon River dolphin. All EU Member States but one regulate dolphinaria as zoos under the EC Directive 1999/22, which aims to strengthen the role of zoos in biodiversity conservation. Data were collected from 18 dolphinaria and reviewed together with scientific literature, web-based resources and publicly available information from all EU dolphinaria. Aspects of the operation of these dolphinaria were analysed, including: conservation activities, animal acquisition, public education and safety, and animal welfare. These parameters were evaluated against relevant EU legislation. Key findings were:

- All dolphinaria but one are regulated as 'zoos', and so should take part in conservation, research and education. Bulgaria regulates dolphinaria as circuses and theatrical performances.
- Only Belgium, Finland, Italy, Poland and the UK have specific legislative standards for the keeping of captive cetaceans.
- Only Cyprus and Slovenia ban the keeping of cetaceans in captivity for commercial purposes, whilst Hungary has a ban on dolphin imports.
- **EU dolphinaria were not found to contribute significantly to biodiversity conservation.** The captive bottlenose dolphin population is not self-sustaining. There was no record of species re-introduction from an existing EU dolphinarium. If the number of EU dolphinaria does not decline, more wild-caught dolphins may need to be imported. Wild captures can threaten wild cetacean populations.
- Trade data recorded the import into the EU of 285 live cetaceans during 1979-2008, despite a prohibition under EU CITES Regulation 338/97 on such imports for commercial purposes.
- The websites of just 14 dolphinaria actively promote their involvement in cetacean research; **5.4% of** research at European Cetacean Society conferences involves captive cetaceans.
- All dolphinaria publicly displayed their cetaceans performing tricks and other unnatural behaviour in regular shows. This is discouraged by the European Association of Aquatic Mammals (EAAM).
- **Public education is probably poor.** At the 13 dolphinaria where data were collected, only four displayed species information (a requirement of the Directive).
- In 18 shows analysed at 17 dolphinaria in 10 EU Member States, information on the biology and behaviour of the animals shown was only included on average, in 12% of show commentaries; two shows provided no such information. Seventeen shows failed to tell the public where species are found in the wild; eight failed to say that dolphins are mammals; no show mentioned the conservation status of the species.
- In all, 19 dolphinaria allowed visitors to get close to cetaceans, for photos or for swimming with dolphins. Direct contact between the public and cetaceans risked disease and injury.
- Captive cetaceans cannot behave normally and often show stress or stereotypical behavior which may arise as a consequence of an impoverished environment.
- EU dolphinaria failed to meet the biological requirements of cetaceans and to provide appropriate species-specific enrichment, a key requirement of Directive.

UPDATE 2012:

- The EU Zoo Inquiry Country reports on Bulgaria, Italy, Lithuania, Malta and Portugal have identified that the dolphinaria rarely comply with the 'best practice' guidelines of the European Association of Aquatic Mammals (EAAM), standards which many of these dolphinaria have signed up to.
- Attica Zoological Gardens in Greece imported 11 Black Sea bottlenose dolphins from Lithuania in 2010 without obtaining government authority permissions. Now confiscated by the Greek Government, but housed in inappropriate conditions, they await repatriation to Lithuania.

- The Constansa Dolphinarium in Romania imported three bottlenose dolphins (*Tursiops truncatus*) from China in 2011. These are believed to have been captured from the wild from the notorious Japanese dolphin drives.
- Despite Italy implementing the Ministerial Decree n.469 (06/12/2001), concerning facilities that keep *Tursiops truncatus*, which provides comprehensive guidance on best practice, no dolphinarium in Italy complies with its requirements.





Born Free Foundation

Born Free Foundation is an international wildlife charity, founded by Virginia McKenna and Bill Travers following their starring roles in the classic film *Born Free*. Today, led by their son Will Travers, Born Free is working worldwide for wild animal welfare and compassionate conservation.

Born Free supports and manages a diverse range of projects and campaigns. We embrace both compassion and science in setting an agenda that seeks to influence, inspire and encourage a change in public opinion away from keeping wild animals in captivity, while in the short term working with governments, the travel industry and like-minded organisations to seek compliance with existing legislation and improve the welfare conditions for wild animals currently held in zoos. Via our Compassionate Conservation agenda, we provide protection for threatened species and their habitats across the globe. Working with local communities, Born Free develops humane solutions to ensure that people and wildlife can live together without conflict.

ENDCAP

ENDCAP is a European coalition of 27 NGOs and wildlife professionals from 20 European countries that specialise in the welfare and protection of wild animals in captivity. Working with European Institutions, national governments and experts, ENDCAP aims to improve knowledge and understanding of the needs of wild animals in captivity, uphold current legislation and seek higher standards, whilst challenging the concept of keeping wild animals in captivity. **www.endcap.eu**

EU Zoo Inquiry 2011

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Report Methodology: For full details of methodology and to view the other Reports published as part of this project visit **www.euzooinquiry.eu**

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