



# The Iberian Lynx Ex-Situ Programme as an EAZA breeding Programme (EEP)?

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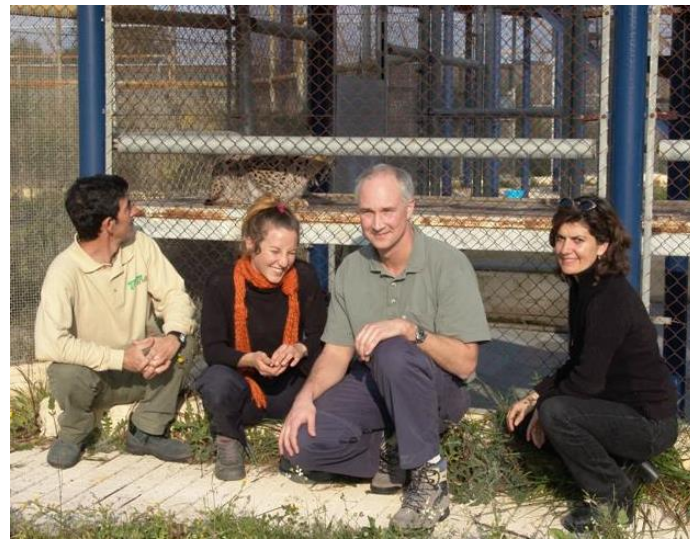
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# Structure of Presentation

- Overview of Personal History with Iberian Lynx (IbLynx) *Ex-situ* Programme
- How does an EEP Work within the EAZA Felid TAG?
- Specific issues of Felid EEPs: Space competition (Eurasian lynxes, Big cats!)
- How do we manage surplus individuals: contraception, separation, old age assessment of cats, and euthanasia/culling



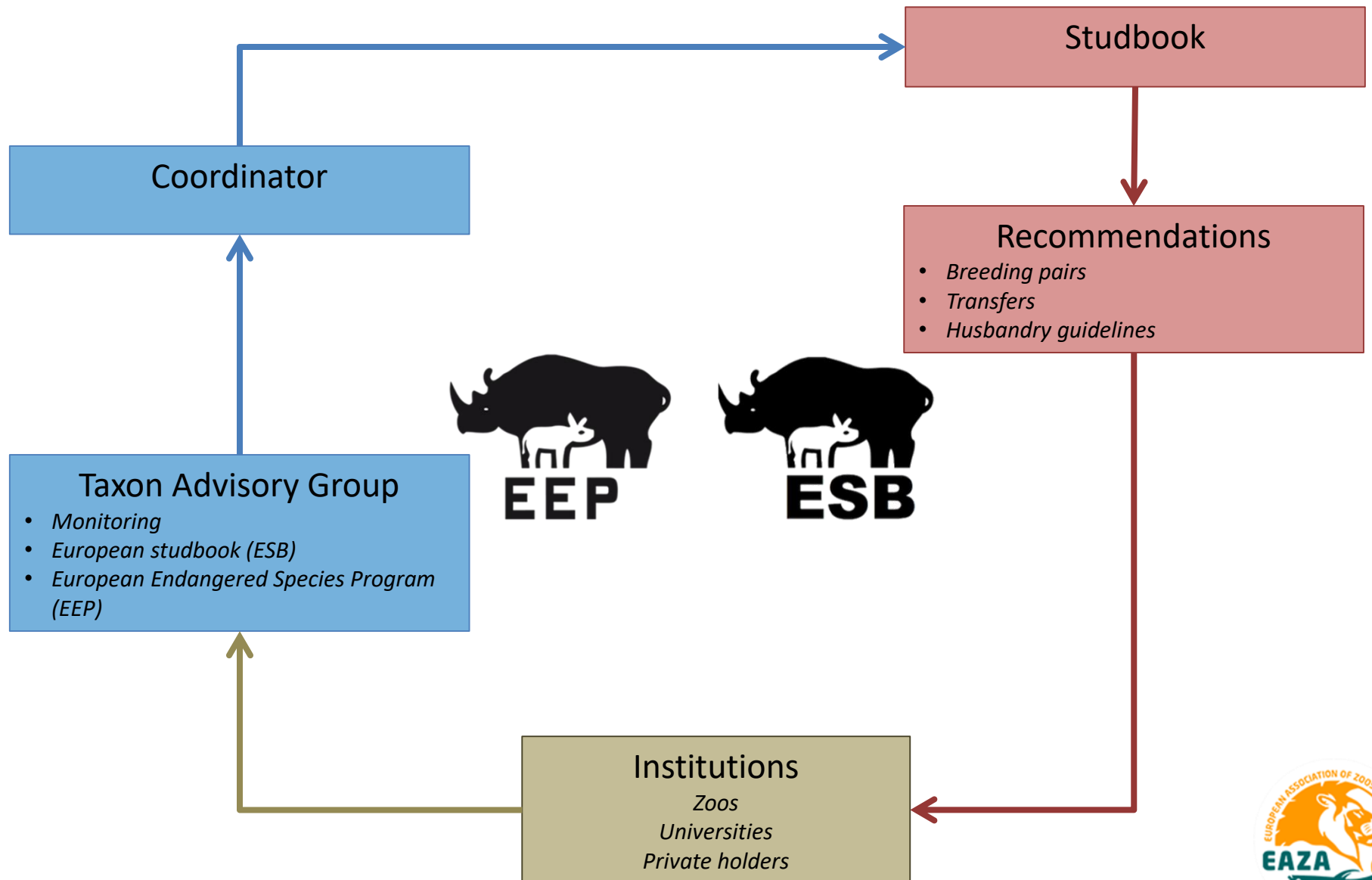
# Personal History with the Iberian Lynx **Ex-Situ** Programme



- Advised between 2003 and 2005 on 4 visits, two initial ones with Dr. Urs Breitenmoser, co-chair of IUCN SSC Cat SG.
- Discussions with Astrid Vargas early on, for managing the Iblynx *Ex-situ* population under similar aspects as an EEP.
- Attendance and presentations of different IbLynx *Ex-situ* staff at EAZA Annual Conferences, Felid TAG Mid-year Meetings: Astrid Vargas (Madrid 2006), Antonio Rivas (Valencia), Rodrigo Serra (Belfast ).



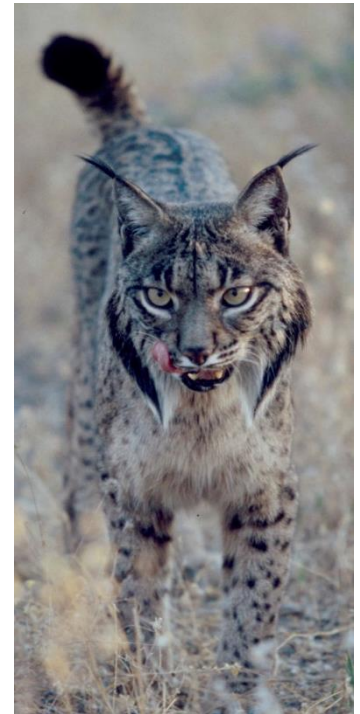
# EAZA (European Association of Zoos and Aquaria) breeding programmes



# Iberian Lynx EEP



- Would be special, as there are differences to a „normal“ EEP in terms of ownership of IbLynxes. These are probably government or local government owned
- High political profile and national pride, which leads to emotional reactions on individual lynxes' fate.
- Strong gearing towards producing ample numbers of suitable lynxes for release back to nature. Thus only limited breeding restrictions, however an accumulation of post-reproductive, health affected, over-represented individual lynxes, taking up valuable high quality space needed for breeding and training.
- What are the possible solutions for these specific problems?





# Tough Competition of IbLynx with Eurasian Lynx



- To free space for keeping increasingly more Iblynx in EAZA institutions outside of the Iberian Peninsula one must consider:
- Tough Competition with our „own“ Eurasian Lynx, which both serves an ambassador and in future an important role for reintroductions and reinforcements of recovering wild Eurasian Lynx populations

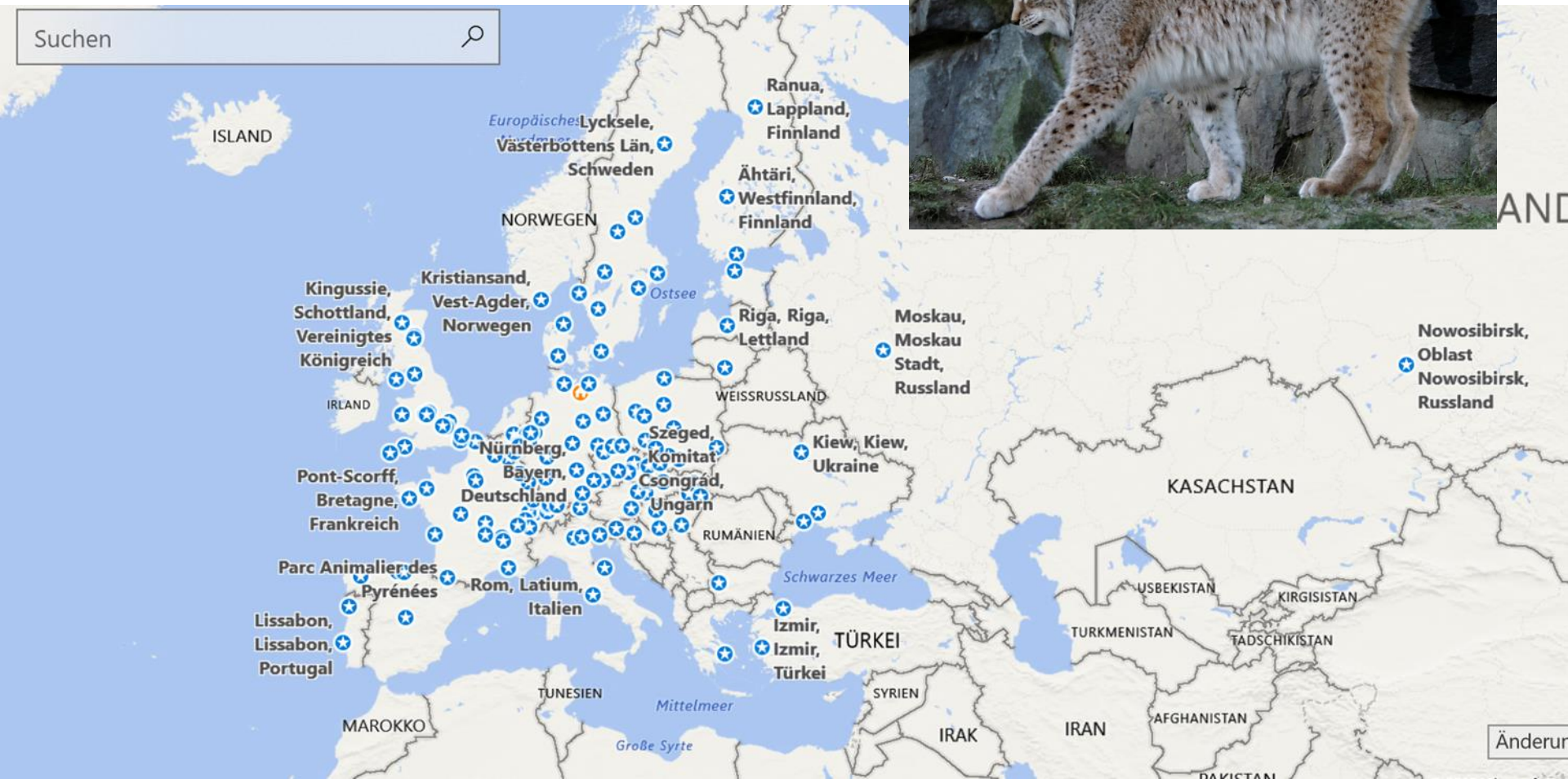
# Example of the competing Eurasian Lynx

- In 2002 the EAZA established a European studbook for Eurasian lynx.
- Several subspecies are represented within the European zoo population.
- An assessment by the EAZA Felid TAG (Taxon Advisory Group) suggested to focus on breeding of Northern Lynx *Lynx l. lynx* and Carpathian Lynx *Lynx l. carpathicus* as the only sustainable populations. Prominent subspecies in Europe.
- no captive population of the Balkan Lynx *L. l. balcanicus* exists.
- All other subspecies, hybrids and specimens of unknown origin have been pooled in a phase-out-population to provide space for these two subspecies.



# Eurasian Lynx ESB member institutions

- 158 institutions (most outside IB Peninsula)

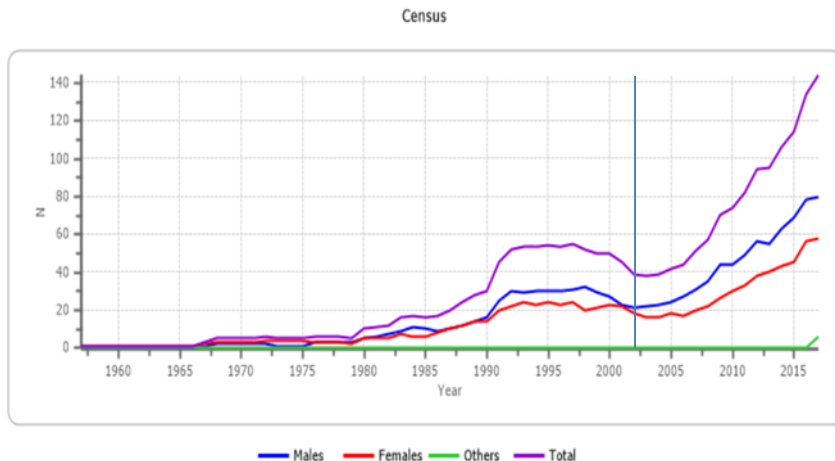




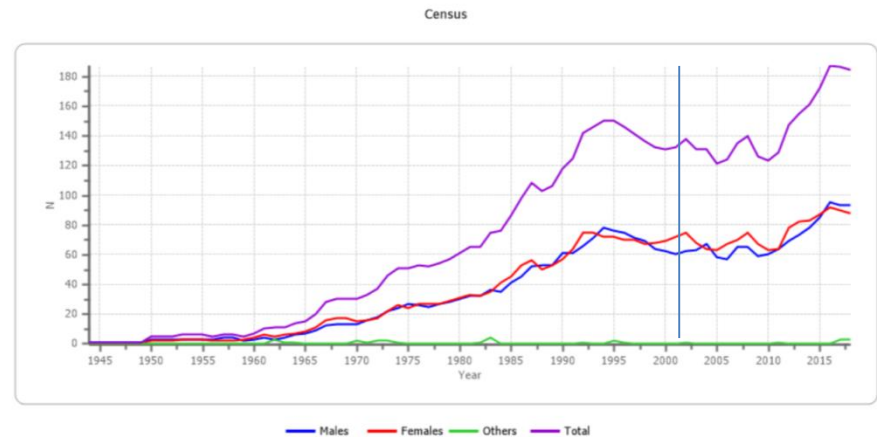
# Eurasian Lynx population trend

- After several years of population growth, zoos have reached their maximum carrying capacity (but still 120 generic lynxes)

Carpathian lynx: 154 in 56 zoos



Northern lynx: 195 in 67 zoos



# Recently : How could these co-ordinated Eurasian Lynxes help Restoration Scenarios?

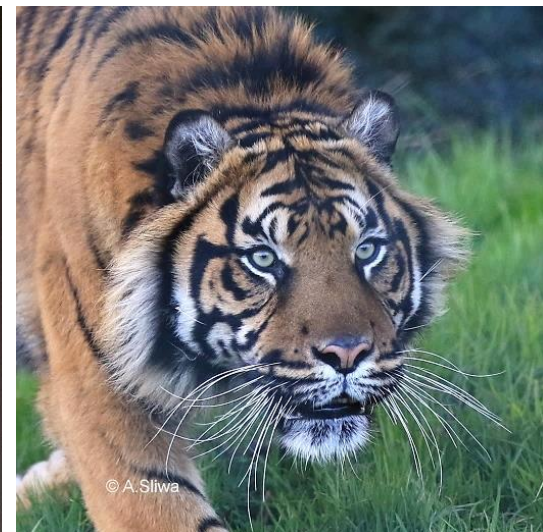
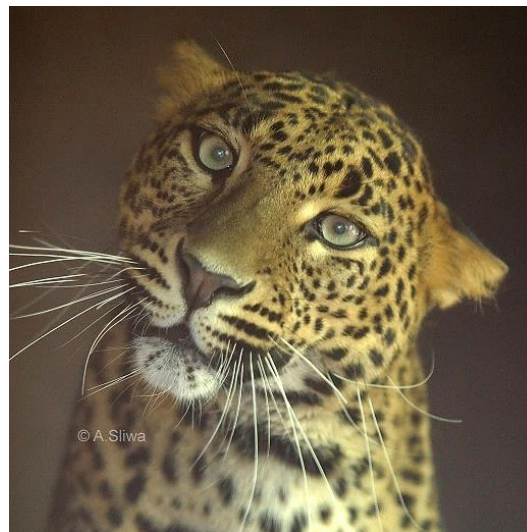
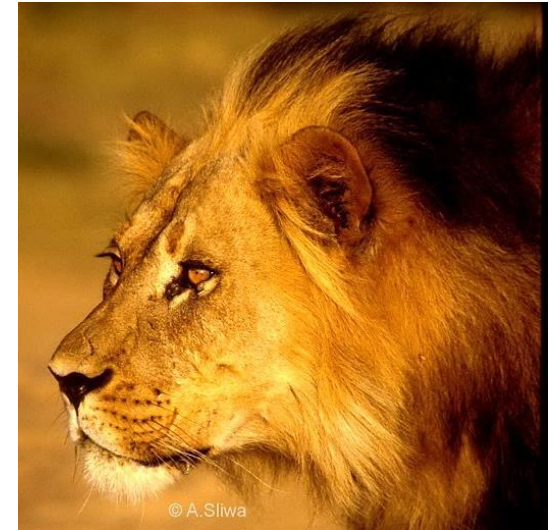
- Scenario 1: to found wild populations – like done
  1. Kampinos NP (PL) 1992-99
  2. Harz Mts. (DE) since 2000
- Scenario 2: to genetically restore existing wild populations (Swiss Alps Lynxes)



# Tough Competition of IbLynx with other highly charismatic „Big Cats“

- A typical Zoo visitor expects to see:

Lion & Tiger, and one of the larger, spotted cats like i.e Cheetah or Leopard - we have many EEPs





# How to Manage our Felid Populations?



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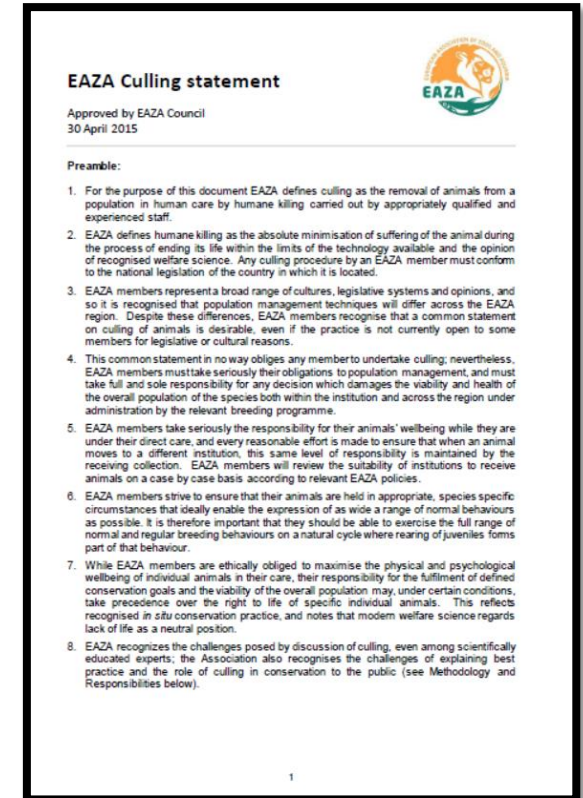
# How to Manage our Felid Populations?

- Keeping sexes separated, in accordance with the largely solitary nature of felids
- Temporal Contraception: hormonal through oral drugs, subcutaneous implants (Reproductive Management Group of EAZA for advice)
- Permanent Contraception: surgically via sterilization or castration.
- Euthanasia due to severe medical issues of individuals or Culling to allow for more space to manage the populations including the allowance of expressing natural behaviours associated with reproduction



# EAZA Culling statement

- The 3-page EAZA Culling statement was approved by EAZA Council on 30. April 2015.
- Provides detailed guideline how to apply, and if a EAZA member is not allowed to perform culling due to contradicting with national legislation, it is urged to still educate the public and support it as a management tool to keep our *Ex-situ* breeding populations healthy



# Excerpts of EAZA Culling Statement 1

## **Culling for maintaining long term population viability**

EAZA and approved non-EAZA institutions can only provide a finite number of suitable enclosure spaces for the rehousing of animals not required for breeding. This therefore limits the number of offspring members are able to suitably house without risk to the viability of the breeding programme. Priority for housing within enclosures should always be given to animals which can play a positive role in the success of the breeding programme, according to the goals set by Regional Collection Plans and/or the EEP Coordinator.

## **EAZA considers culling to be standard operating procedure where:**

The animal poses a serious threat to human safety, e.g. escaped animals (**not applicable in IbLynx**)

**In the opinion of the veterinary staff responsible for the individual animal's health and welfare, the animal is suffering from a disease, detrimental psychological state or severe pain and/or stress which cannot be adequately alleviated.**



# Excerpts of EAZA Culling Statement 2

## **EAZA considers that culling may be appropriate where:**

The only alternative is permanent transfer to accommodation which cannot assure a proper level of welfare for the animal and which cannot be improved within a short interval agreed by the responsible EAZA authority.

The continued presence of an individual animal is unreasonably disruptive to a functioning social group within an individual collection.

**The maintenance of a population's demographic or genetic viability is at risk through the continued presence of one or more individual animals.**

## **Culling as a management tool**

The application of a considered culling policy is appropriate on welfare grounds, at an individual and group level, and helps to mirror species specific population structures. (EAZA) Members are ethically obliged to strike an informed balance between the life of an individual and maintaining the long-term viability of a managed population, and where these obligations are in conflict, the welfare and genetic health of the population both locally and regionally over the long term must take precedence. EAZA considers culling to be one of several appropriate methods for maintaining this precedence.

## **Culling for maintaining welfare and normal and natural behaviours**

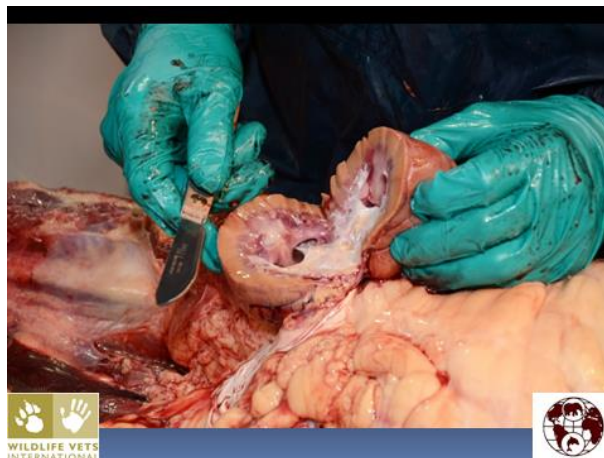
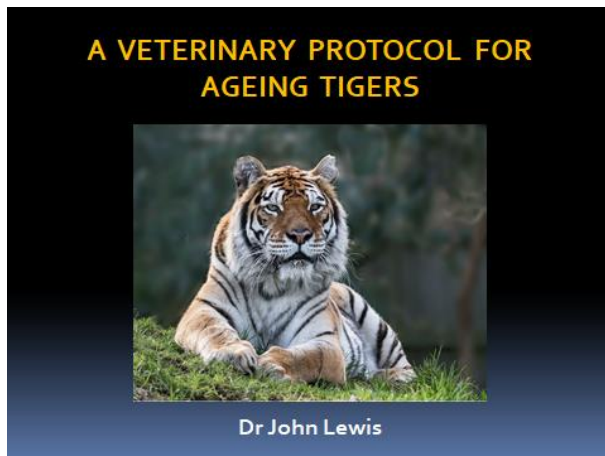
If a female's opportunity to breed and rear offspring regularly is limited .....





# Felid TAG: Discussion on aging cats

- Started discussions 2016, due to space issues with the Tiger EEPs.
- Request on compiling guidelines for zoo veterinarians and decision takers when an individual cat has reached the condition and age for euthanasia



# Felid TAG urges: sending gonads and bodies to research facilities after Euthanasia

- Jennifer Ringleb, IZW Berlin: gonads of all cat species for research and future AI attempts



- Andrew Kitchener, RZSS Museum: reference collection for all felids, particularly important to deposit more material of IbLynxes to further taxonomic and anatomical studies

# So what can EAZA do to help the IBLynx *Ex-Situ* Programme?

- If there is not enough takers within Iberian Peninsula Zoos, please consider others! (La Boissiere, Duisburg, ect.?)
- Possiblilty of lowering some of the enclosure requirements put forth. Tailored to the capabilities of individual IbLynxes (i.e. age, character, medical condition) to be sent there (i.e.lower barrieres, smaller enclosure size)
- Screening by IB Lynx team member to be carried out by more locally living captive exotic cat experts (i.e. Duisburg – myself; La Boissiere – Gregory Breton) ?





So how do we create more space for these ?





Thank  
you!

