



## **CONCLUSIONS OF THE WORKSHOPS OF THE CONFERENCE ON THE CONSERVATION OF THE EUROPEAN MINK. LOGROÑO. LA RIOJA (SPAIN). 5-8 NOVEMBER 2003**

### **1. "In Situ" Conservation Strategies**

- European mink is declining worldwide within its natural range. We have some hypothesis of this decline (habitat loss, American mink, diseases, ...) but, however, no clear explanations have been identified.
- Status, ecology and conservation needs may vary through out Europe
- The real importance of European mink conservation at a worldwide scale has to be pointed out, in front of other so called "endangered" species.
- Authorities must increase attention and resources for European mink conservation. This is especially true in small population (for example in France). In other case the species will disappear soon.

To avoid the extinction of *Mustela lutreola* it is necessary:

- Monitoring the distribution of the E-mink and the A-mink, specially in adjacent areas
- Research with the final goal of understanding the concrete causes of declining for European mink populations, paying attention to the combination of factors (even for possible synergies).
- Increase the legal conservation status as "Endangered", including always the species within the Ecological Impact Assessment studies.
- Evaluate and reduce local threats and limiting factors for the E-minks such as road mortality, trapping and by-catch, disturbance by people, predation by domestic, feral or wild predators, food, shelter for breeding or resting, rodenticide, .... E-mink habitat can be improved by the re-introductions or natural recovery of beaver.
- Habitat conservation is a necessary, even though not sufficient for securing survival of the species. The habitat must be managed or restored, in order to maintain the riparian ecosystems and to increase the prey (fish, amphibians, etc) and shelter availability for European mink. The watercourse management plans have to take into account the conservation requirements of the European mink.
- About pollution: (a) analyses have to be performed about the pollution levels in the river ecosystems and also in the European mink tissues; (b) water authorities must work to decrease pollution levels.



## Gobierno de La Rioja

- Research on the main habitat features should be undertaken, specially for the more sensitive moments of the biological cycle (breeding, dispersal, ...). Habitat suitability models may help in conserving European mink habitat. Also research on biology, ecology and behaviour (between others) should be done.
- About scale problems: (a) we have to keep in mind area requirements for minimum viable population, (b) habitat fragmentation should be avoided, recovering connectivity of isolated patches, and (c) we must pay attention to the fact that the “European mink habitat” is only a little part of landscape, because of this semiaquatic lifestyle.
- About American mink control: research for new more efficient methodologies should be undertaken in next years. However, (a) trapping barriers should be create to prevent American mink invasion, (b) small American mink populations should be eradicated, and (c) even if it’s impossible to eradicate American mink populations, efforts are encouraged for decreasing its abundance.
- Involvement of relevant stakeholders: water authorities, hunters, fishermen, landowners, fur farmers, country side people, and other.
- Get the necessary attention of local and national of GOs and NGOs, and society, to know the importance of the species, the problems associated and to receive resources (human, economic and material).
- Aleutian diseases and other pathologies must be monitored.
- Avoid the decrease in genetic variability, inbreeding and the population isolation.
- Re-introduction: (a) to create or recover European mink in safe islands (under a wide island concept), (b) their realisation should take in consideration the experiences from this and other similar species (financial and socio-administrative needs being ensured for the whole project).
- Monitoring of the introduced European mink populations in Asia.

### 2. Ex situ strategies for the European mink.

- The general aim of the European captive breeding program has to be defined as follows:  
“Preservation of the genetic diversity of the species.” The Pan-European program may and must consist of regional and/or national programs (eg. French, Spanish, Russian etc.) with different objectives depending upon of specific features of the regional requirements. Such objectives include a range of activities, including education, research, reintroduction, etc. The regional objectives must be in concordance with the general, international, aim.
- The *ex situ* and *in situ* tools have to be regarded as complementary to each other. Yet, considering the rapid decline of wild populations, the *ex situ* tools are of growing importance in securing the survival of the species.



## Gobierno de La Rioja

- Along with the conservation breeding program(s), the development and use of new advanced technologies have to be promoted, such as assisted reproduction and development of a Genome Resource Bank.
- It is important to inform the stakeholders such as range states, regional zoo organizations (eg. EARAZA) and the European Commission on the growing importance of the *ex situ* tools in conservation of the European mink. It is important to realize that a conservation breeding operation involves a long-term commitment, not easily fitting into rapid project-based management approaches.
- The all-European conservation breeding program has to be organized around or into the already existing EEP Program with the involvement of presently participating organizations like, among others, Tallinn Zoo (Estonia), Euronorz (Germany), Pavlov (Check Republic), Thoiry Zoo (France), but also all new or planned effective conservation breeding initiatives in Spain, France, Russia (eg. the state breeding initiative in Tsernogolovka Field Station) and other countries.
- The conservation breeding initiatives have to be organized into a general European framework, while the establishment of regional subprograms is encouraged.
- The establishment of effective information exchange framework is of highest importance in this general action framework. The framework for all the breeding initiative has to be organized in the form of a species committee, with involvement of all active regional breeding initiatives.
- In regard of the question of the number of management units (ESU-s) the workshop has concluded the following:
  - a. For the time being, and following the precautionary principle, the Spanish/French, eastern European, and Romanian populations have be regarded as separate management units.
  - b. Under the eastern European management unit only animals from subspecies, *Mustela lutreola novikovi*, should be incorporated into the program.
  - c. During the next 3-5 years the more thorough detailed studies have to be conducted in order to resolve the following points:
    - Develop new methods to determine more polymorphic *loci* (present ones are not sensitive enough)
    - Conduct comparative morphology studies
    - Study on comparative ethology
    - Study on potential habitat differences (including the species role in riparian ecosystem) between subspecies
    - Look for indications of inbreeding depression in the Western and Romanian populations ( Workshop I)
    - Look for possible effect of outbreeding between the populations.
  - d. After these studies the decision has to be made by the species committee on the future number of management units in breeding operations



### **3. Legal, administrative and management aspects of the E mink**

- Reclassify the European Mink as a priority species in the Habitats Directive and in all the countries, declare the populations as an endangered species.
- Increase the scope of the Sites of Community Interest (Natura 2000). Management Plans experts Bern Convention incorporation
- Ensure the effective implementation of Community Legislation throughout the EU.
- Within the framework of the Bern Convention, draft and implement national conservation programmes which are realistic and achievable in those countries which have signed it.
- In those countries where the public water systems are controlled by regional and national water authorities, make a clear distinction of the areas of responsibility regarding conservation of the habitats and the species, especially those authorities responsible for water use.
- Make clear that the priority is the conservation of the habitat of the European Mink. This implies that the water quality, water courses, woods and other riparian vegetation must be protected and preserved. In this sense, the concept of biological corridors will be promoted as a means of protecting the habitat for the Natura 2000 network.
- Draw up co-ordinated international programmes between all the countries with populations, or potential habitats of the E-mink and seek funding for the implementation of these plans.
- About American mink farms: (a) to establish more effective requirements to avoid escapes, (b) to forbid the establishment of new mink farms within the European mink range, (c) to encourage the already existing farms to substitute mink with other animals, and (d) to remove as soon as possible mink from massive releases.
- To encourage the establishment of an international European mink Working Group and information exchange network.