

## WG3: Techniques of maintaining endangered breeds in situ.

February 9, 2008

**Starting** points and assumptions:

1. breed to be maintained and or rescued is known
2. rescue and arch farms exist
3. arch farms will not (always) be large enough to accommodate the complete breed group: need to operate on the basis of a number of arc farms per breed
4. (having multiple locations is desirable in disease outbreaks)
5. we do NOT restrict ourselves to administrative/regional/national boarders

Thus: we do NOT

1. consider why farms want to become members.
2. who pays for the initial animals rescued
3. legal issues connected

**Deal** with rescue and management separately.

1. Requirements for Arch Farms for Population management:
  - (a) basic principle: all subgroups need to be managed as ONE population by a central breed management (CBM)
  - (b) thus: arch farms are required to accept a central mating/selection plan (MANPLAN) by the CBM
  - (c) need to collect minimum information for this pupose (MinSet) and send to CBM
  - (d) other requirements: animal breeding legislation: what are the mandatory legal requirements?
2. Joining herdbook societies etc.

- (a) existing structure +
- (b) support +
- (c) costs -
- (d) may be limited to areas -
- (e) creates problem of transboundary breeds
- (f) NGO can ignore boundaries

3. ManPlan: pertains to all animals from one breed executed by the CBM

- (a) for conservation: define breeding program
  - i. define population size
  - ii. define sex ratio: check the derived effective population size
  - iii. define generation interval
  - iv. define the maximum use of males (keep family sizes constant)
  - v. do within family selection
  - vi. define, execute and monitor exchange of genetic material (sire rotation)

4. MinData required for executing ManPlan:

- (a) breed, species
- (b) loc
- (c) ID, S, D
- (d) birthdate/year
- (e) sex
- (f) culling

This will require regular reporting to the breed management center (CBM))

5. The Breed descriptions should be done according to EFABIS/DAD-IS

**Rescue** operations:

1. limited red tape: take what you can get
2. if more animals are there, than can be accommodated: pick within healthy and a good cross section.
3. pick as many (unrelated) males as possible
4. (in case of disease FM) not much can be done: prior action required.