

WG3: Techniques of maintaining endangered breeds in situ.

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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 borders

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.