The Translocation of the Golden Lion Tamarin

(Snatches from the PPT presentations of Cecilia Kierulff, Biologist, Brazil)

Between 1994/1998 - six groups (42 individuals) were captured and translocated. Groups were released in União Farm (Federal Railway Network) with 3,200 ha (2,400 covered by forest) – the best lowland forest found during the survey. There was no native population in the release site and there was no supplementation (hard release). Groups have been monitored since they were released – triangulation and habituation.

Processing and re-capture
The entire group was captured, transported to the release site, processed and released together next day. The tamarins were monitoring with radio-telemetry. The groups were re-captured every six months to change the radio-collar.

Results
The translocated populations exhibited similar survivorship and reproduction rates in comparison to the native population in Poço das Antas, a good, natural population. Emigration, immigration and movements after release were common following translocation. The adults and subadults dispersed but the reproductive couples remained coherent.

Total Population in 2005 (10 years) more than 200 Golden Lion Tamarins in more than 29 groups (monitored) from the original 42 individuals and six groups.

Why we think Success !!
The translocated population in 2005 was more than 200 individuals in 30 groups.

In 1998 the União Farm was transformed into a Federal Biological Reserve of 3,200 ha. to protect the Golden Lion Tamarin population.

The status of the GLT has been downgraded from Critically Endangered (CR) to Endangered (EN) according to the IUCN criteria and categories.

Factors and/or procedures which increase the success of translocations
These methods led to success ... Cecilia followed methods after studying over 34 references and more than 15,000 animals translocated of 227 species.

Primary factor affecting success is habitat quality, including enough food, sites for reproduction, predation, competition, overhunting etc. If habitat is suitable the species should settle, survive and reproduce. Second most important factor is that the ecology and behaviour of species must be understood to provide minimal requirements for establishment of a new population. The number of animals and the type of release will depend on the characteristics of the animals – territorial, live in social groups etc (specific protocols).

The release of a species will be followed by unusual movements, which are a consequence of an expected disorientation caused by sudden translocation to a non-familiar new area. Sometimes a soft release helps to improve the habitat quality and the adaptation of the species at the release site.

Results of Evaluation to reintroduce/translocate (Kleiman 1992)
Condition of the Species
1. Need to augment the size or genetic diversity of wild population. Yes
2. Available stock. Yes
3. No jeopardy to wild population. Yes
Environmental Condition
4. Causes of decline removed. ?
5. Sufficient protected habitat. ?
6. Unsaturated habitat. Yes
Biopolitical Condition
7. No negative impact for locals. Yes
8. Community support exists. Yes
9. GOs and NGOs are supportive/involved. Yes
10. Conformity with all laws/regulations). Yes
Biological and Other Resources
11. Reintroduction technology known/in development.
12. Knowledge of species biology. Yes
13. Sufficient resources exist for program. ?

First steps
1. Convince everyone that the translocation of the isolated groups was important and urgent! When the urgency of a translocation surpasses the risks.
- License from International Committee for management and Conservation of *Leontopithecus*. and Brazilian Environmental Agency.
2. Find a good team!!
3. Confirm the presence of the groups using play-back.
4. Find financial resources
5. Look for Release site
- Release site within the historic distribution of the species.
- Reasons for extirpation/extinction addressed.
- The site was distant from the other native population (risk of diseases).
- The size was enough to translocate all groups (number of groups based on the size of GLT territory ~60 hectares).
- The forest was preserved (and protect).
- No native population at the release site (ecological impact of density).

The rest of her presentation goes into great detail of how to capture, process, transport, release and monitor. The final Report of the training will include her entire presentation.

We hope this tidbit will just suggest some of the care and planning that has to go into a translocation and why translocation of wild to wild is a better option that captive or rehab animals.